



DRAWN UP UNDER THE PATRONAGE
OF H. E. THE MINISTER OF FRANCE IN JAPAN
BY M^r CLIPET.

YOKOHAMA

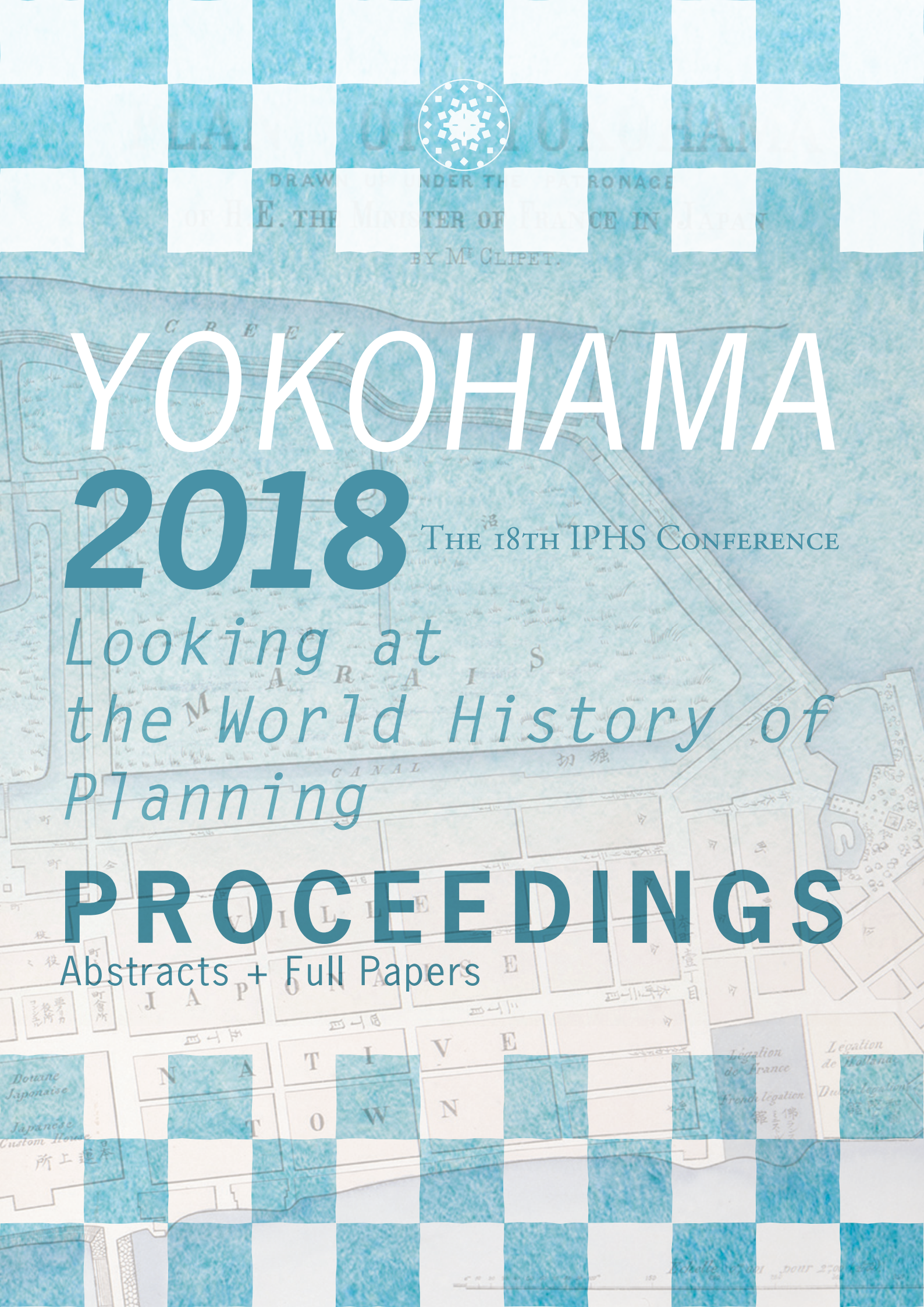
2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

PROCEEDINGS

Abstracts + Full Papers



PANEL NUMBER LIST

GUHP*: Panel Co-Sponsored by the Global Urban History Project

- 1 The Genesis of Yokohama's Strategic Planning Environment: Reflecting on the Contribution of Akira Tamura and His Work
- 2 A Glocal Approach to Urban Design: MAKI Fumihiko, Group Form and East-West Dialogue
- 3 Rethinking the Recovery and Resettlement After Disasters
- 4 Machizukuri and Participatory Planning
- 5 Public Parks in East Asia
- 6 Rethinking of Japan's Oversea Concession
- 7 Planning Community without Planners / **GUHP***
- 8 The Global Petroleumscape in East Asia (East Asian Petroleumscales (Part 1)) / **GUHP***
- 9 At the crossroads of oil flows and international planning exchanges (East Asian Petroleumscales (Part 2)) / **GUHP***
- 10 Planning Modern Shanghai and Tianjin
- 11 Between Empires and Nations: Urban Change in Twentieth Century China and Taiwan / **GUHP***
- 12 Planning History in Modern China
- 13 Foreign Influence in Planning
- 14 Taking possession of the history: reconstructions, allusions and simulacra for urban revival / **Round Table**
- 15 Westernization in East Asia
- 16 History of Urban Conservation
- 17 Living Heritage and Local Community
- 18 Transportation (Railway)
- 19 Planning History of Harbor Cities
- 20 The Anglo Imperial City
- 21 Urban Vision and Planning Heritage
- 22 Comparison of Urban Form Between Asian Cities
- 23 Examining the scope of industrial-oriented global planning history from Asian perspective
- 24 Heritage and Urban Regeneration
- 25 Adaptation and Resiliency of Socialist Planning in Transitional Economies: China, Hungary, Poland, and Russia
- 26 Critical Junctures of Institutional Transformation: Developing theory and cases in planning history
- 27 The Routledge Handbook of Planning History / **Round Table**
- 28 Colonial Planning in Asian Cities
- 29 Transnational Planners and Engineers
- 30 Zoning, Regulation and Guideline
- 31 Sustainable Urbanism and Environmental Planning
- 32 Landscape Design and Nature Conservation
- 33 Water and City
- 34 Transformation and Management of Urban Communities
- 35 Policy, Politics and Planning
- 36 Planning Heritage and Community
- 37 The Global History of Urban Renewal / **GUHP***
- 38 Historicizing the Global City / **GUHP***
- 39 Global Cities, Urban Space, Ethnic Mobility and Intercultural Integration / **GUHP***
- 40 Discussing the Teaching and Design of Planning History Courses / **Round Table**
- 41 History of Regional Planning
- 42 unscheduled
- 43 Garden City and Modern City Planning Movement
- 44 Superblock and Neighbourhood Unit
- 45 New Town
- 46 Planning Practice Between the Late 19th Century and the Early 20th Century
- 47 Post World War II Planning
- 48 Disaster and Resiliency
- 49 Housing Policy, Studies and Design
- 50 Housing Typologies
- 51 European Planning Culture
- 52 Open Spaces in Changing Cities
- 53 Getting Published / **Round Table**
- 54 What Is Happening in Contemporary Cities?
- 55 The Japanese 1919 City Planning Act System in the World History of Planning
- 56 Urbanization and Planning Heritage
- 57 Western Planning in Asian Treaty Ports / **GUHP***
- 58 Planning History and Megaevents: Part 1, Planning, Design and Event Spaces / **GUHP***
- 59 Planning History and Megaevents: Part 2, Olympic Legacy / **GUHP***
- 60 Sites of Exchange: The Confluence of Global Networks and Local Interests in the Planning of Financial Centres / **GUHP***
- 61 Creative Port Cities: Transnational Spatial Practices and Cultural Exchange / **Round Table**
- 62 Surveys and Plans for Japan's Changing Cities: Kon Wajiro, Nishiyama Uzo and Eika Takayama
- 63 Diverse Planning Cultures and Traditions on the Way to a Flood Resilient City
- 64 Looking Back to Chinese Cities in Old Dynasties
- 65 Traditional Settlement and Native Planning Wisdom
- 66 Planning Experiences in Modern China
- 67 Circulating Knowledge in the Cold War Periphery: The Architecture of Public Housing
- 68 Planning Connections through the Iron Curtain: Phases, Themes and Impacts
- 69 Shrinking Planning in the Historical Planning Context / **Round Table**
- 70 Formation and Evolution of Cities
- 71 Professor Michael Hebbert talks English-language publication for international readership: the challenge and the reward / **Round Table**
- 72 The Formation of Planning Historiography Patterns in European and International Writings (19th-20th c.)
- 73 Immigrants, Settlements and Informal Urbanism
- 74 Planning Concept and Urban Design Theory (1)
- 75 Planning Concept and Urban Design Theory (2)

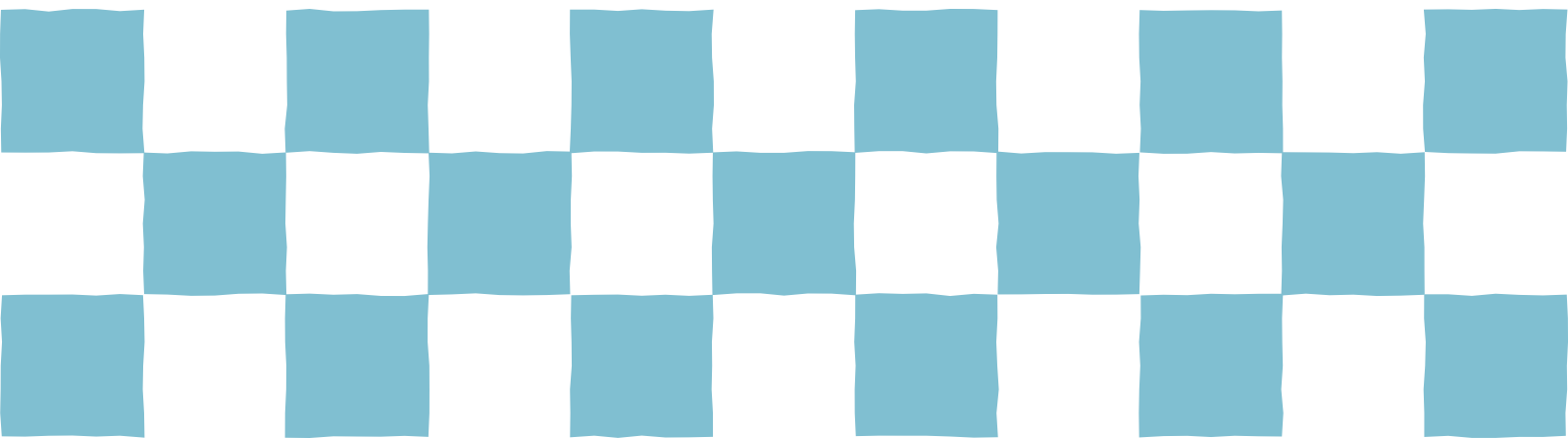


INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

1

**The Genesis of Yokohama's
Strategic Planning
Environment: Reflecting on
the Contribution of Akira
Tamura and His Work**



Profile of Akira Tamura – Yokohama City Planner

Chihiro Tamura (Akira Tamura Memorial - A Town Planning Research Initiative NPO)

This essay is a profile of Prof. Akira Tamura (1926-2010), one of the great city planners of post-war Japan, and a brief study of his accomplishments in Yokohama.

The meaning of the term 'city planner' is somewhat vague, but in post-war Japan officers of the central government. Because the City Planning Act 1919 was not amended as part of the post-war legislative overhaul, the power of the central government remained very strong. This centralised system was well-suited to post-war reconstruction, but did not assist in addressing questions of urban planning which arose with the rapid economic growth from the 1960s onwards.

With the expansion of the Greater Tokyo Area, the population of Yokohama grew rapidly, and its land use was disorganised. The pollution and the lack of infrastructure reached a critical point. Ichio Asukata, elected in 1963 as the new socialist mayor, had to solve these issues. He devised a citizen-centric plan for Yokohama, then approached the planning office at which Tamura was working for assistance.

Tamura had studied at the architectural department at Tokyo University and majored in city planning. After graduation he first worked for the central government, but soon quit due to feeling uneasy about the elitism and sectionalism of the national bureaucracy. Having decided to pursue a career as a city planner as his vocation, Tamura studied in the Law Faculty of Tokyo University to learn a more comprehensive approach to city planning.

Tamura proposed to Asukata a new concept for Yokohama as Japan's "international management centre", rather than a mere satellite to Tokyo. In order to realise the concept, he recommended that six projects be implemented: the redevelopment of the urban central area, the reclamation in the Kanazawa seaside area, the building of the Kohoku New Town, a municipal subway system, highways and the Yokohama Bay Bridge.

According to him, the completion of the six projects would be very costly, but would succeed if Yokohama sought the involvement of both the central government and private developers in the projects.

Tamura was invited to work at the city government and worked in the taskforce under the direction of the mayor. He became the chief planner of city administration; not only striving to realise the six projects, but also introducing guidance to control the development and management of 'urban design'.

As Asukata left the city in 1979, Tamura worked for Yokohama for about a decade. However, his planning vision was inherited by the officers who had been educated by him. Moreover, Tamura's accomplishments have encouraged many planners and officers in other local governments.

After he wrote his Ph.D. thesis on the local development exaction system, Tamura left Yokohama, and lectured on urban policy as a professor. He also authored twenty books and lectured to enlighten the public on city planning issues.

In short Tamura was a leader and pioneer in the field of city planning as an officer of local government, whose achievements are comparable to Daniel Burnham in Chicago in the late nineteenth century.

THE ADOPTION AND ABOLITION OF THE LOCAL DEVELOPMENT EXACTION SYSTEM BY THE CITY OF YOKOHAMA

Toshio Taguchi (Akira Tamura Memorial-A Town Planning Research Initiative NPO)

This thesis intends to explore the rationale behind the adoption and abolition of Yokohama's local development exaction system ("LDE system"). LDE systems were independently and locally formulated by local governments in response to challenges they faced across Japan, and the city of Yokohama provides a leading example of a functional LDE system pursuant to which land developers were required to donate land for public use as a condition of their receiving development approval from the city government. In the mid-1960s, as Japan accelerated towards a period of high economic growth, the central government promoted the implementation of new housing developments by the private sector. These housing developments required unprecedented expenditure by local governments in order to build public infrastructure both inside and outside those development areas. At that time, Japan lacked strong national laws on the control of land use, and the city of Yokohama was uniquely vulnerable to the adverse consequences of unplanned housing developments caused by the huge influx of population from neighbouring Tokyo. In 1968 Ichio Asukata, the then socialist mayor, invited Akira Tamura, a young city planner, to the city administration to solve the town planning issues Yokohama was faced with. Japan's new Town Planning Act of 1968 did not contain provisions authorising the exaction of land. Therefore, Yokohama became the first big city to adopt an LDE system in 1968. Before its formal adoption, the city government had successfully reached an agreement with the Tokyu railway company about its duty to donate land to the public as a condition of its housing developments. Following this example, Tamura extended this concept of reaching agreements to exact public land donations across Yokohama. The terms of land-use exactions were recorded in bilateral agreements prior to development permission being granted. From its inception, the LDE system was used as an administrative guideline which ran the risk of legal challenge by affected developers. Although several lawsuits were filed, most verdicts were favourable towards local governments. However, as the economic situation deteriorated in the early 1990s, the Supreme Court issued verdicts finding in favour of housing developers. After Asukata's term in office, a succession of conservative mayors narrowed and reduced the obligations imposed under the LDE system and finally ended its use in 2004. Nevertheless, using the LDE system, the city government had acquired 307 hectares of public land by the end of the 1993 fiscal year, which was used to accommodate 150 public schools, accounting for 60% of all municipal schools opened between 1968 - 1993. The idea of development exactions persisted for nearly forty years, despite the central government issuing administrative orders to local governments instructing that they not make excessive demands of developers. Tamura wrote his doctoral thesis on this subject in 1981. Since then, no study assessing its aftermath and final abolition has occurred. This study is intended to present some idea of how local initiatives can be implemented independently by local governments in a highly constrained fiscal environment without any support from the central government.

The status and use of soft law in local governments' management of urban development: restructuring the logical framework of administrative guidance on impact fees for housing development in 1970s Japan

Kenji Asakawa (Institute for Global Environmental Strategies, City Taskforce)

The rapid housing development that accompanied the high economic growth starting in 1960s Japan forced local governments to incur significant expenses for investment in public infrastructure. Therefore, many local governments established guidance on impact fees in relation to housing developments, which significantly relieved some of the financial burden on local governments in connection with these developments. However, the lack of binding force behind these guidelines also caused tension between local governments' demands and non-compliant developers. Accordingly, most local governments refrained from implementing such guidelines, perceiving them negatively as stopgap measures to an issue that required the enactment of alternative laws and regulations. However, since both laws and regulations (hard law) and guidance (soft law) prescribe social norms, irrespective of its binding force, hard laws are unnecessary if soft law successfully elicits voluntary cooperation between parties. Moreover, soft law is somewhat superior to hard law in terms of its ability to build solid consensus without binding force. One of the lessons from the Yokohama's experience of using soft law for urban development management is how to achieve such a solid consensus without the availability of legal coercion. From the viewpoint of law and economics, the economic interests of developers of complying with the guidance, that local governments are able to have an impact on, can include: (1) direct and subjective benefits from compliance shared only between the local government and the developers, (2) long-term benefits (if prioritised by the developer), and (3) indirect benefits that may be accrued by demonstrating their compliance with the guidance. In the case of Yokohama, the guidance worked effectively mainly because the administration enhanced (1) intentionally in a favourable environment for (2) although it did not take measures for (3). The developers would therefore recognise the value of such compliance to gain greater profit from higher sales of their residential land. Rapidly growing cities in developing countries face the same dilemma as Japanese local governments did in the past, and they also have similar difficulties in collecting impact fees for public infrastructure investment. Soft law may be a more appropriate solution than legislation, especially in developing countries where the rule of law is weak, since they have greater difficulty developing and enforcing laws when compared to Japanese local governments that have experienced high economic growth. Therefore lessons learned from Japanese local governments, especially the Japanese experience of using soft law for urban development management, including how to achieve such a solid consensus without the availability of legal coercion, could contribute to more effective practice of using impact fees to solve this dilemma in developing countries.

A study of unorthodox town making by Akira Tamura: the transmission of Tamura's vision to younger generations

Atsuhiko Aoki (The University of Tokyo)

The purpose of this study is to clarify how Akira Tamura's "town making" vision was passed down to and utilised by younger generations. Although the Japanese urban planning legislation regulating the control of urban space is largely based on modern Western city planning, its practical application has a strongly centralised and business-centred character (Watanabe 2001: 139). At the same time, however, there is a lack of political and social support for central government-led planning, and the principle of "architectural freedom" in urban spaces leaves planning to the forces of laissez faire market principles. Against this background, a unique contrivance for the control of urban spaces called "town making" emerged at the level of Japanese local government entirely independent from amendments to individual urban planning and building standards laws. According to Koizumi Hideki, an urban engineer, the essence of "town making" is "to create a relationship / framework among citizens and local communities that controls the market instead of the central government" (Koizumi 2001: 236).

As shown in the preceding paper, Akira Tamura talked about urban planning in easy-to-understand terms and attracted a great deal of interest in town making through his books. However, he was not a theorist of urban planning, but instead built his own town making theory through responding to the needs and circumstances of Yokohama city. Akira Tamura's town making theory opened the subject of town making to a wider range of people. Therefore, the question to be asked is, given his fluid and responsive approach, (1) what are the features of Akira Tamura's town making that were passed on and (2) how can they be applied by future town planners? In this paper, I focus on the mutual exchanges between Tamura and members of the study group on town making in Yokohama as a case study to solve these questions.

My conclusion from this study is that Tamura was able to create an approach that made town making universal and inclusive through losing his position at the Asukata-led city government (1963-78). His legacy was not to change the appearance of the city by modifying the built environment, but to think about how individuals should respond to dynamic and fluctuating urban changes. Hence, for those wishing to adopt and continue Tamura's vision, the important question is not what Tamura did, but what Tamura would do. In other words, they should approach problems in town making by internalising Tamura's approach to town making. Consultation with stakeholders and the exchange of views among those who take part in town making is indispensable for that purpose. Too often successful cases of urban planning are praised and standardised. However, from the perspective of Tamura's town making, it is not necessarily desirable to adopt a standardised approach to certain problems. Rather, it is essential to control urban space by creating a relationship / framework among citizens and distinct communities that takes a flexible, "no-fixed-form" approach of the kind adopted by Tamura.



PROFILE OF AKIRA TAMURA---Yokohama City Planner

Chihiro Tamura

*PhD in Chemistry, Akira Tamura Memorial - A Town Planning Research Initiative NPO,
ctamura@chive.ocn.ne.jp*

This essay is a profile of Akira Tamura (1926-2010), and an attempt to locate him in the contemporary history of city planning in Japan. In the 1960s Yokohama faced various urban problems accompanying its rapid economic growth. Ichio Asukata, elected in 1963 as the new socialist mayor, tried to solve them through the local government in an era when the central government's power remained strong. Asukata then met Tamura, who was working for a local planning office, and asked for his assistance. Tamura proposed to Asukata a new concept for Yokohama as Japan's 'international management centre', and the implementation of the Six Spine Projects, including the Minato Mirai 21 development. Asukata decided to invite Tamura to join the city government. Tamura worked for Yokohama city for over a decade, and his planning vision was inherited by the city's officers. Moreover, his accomplishments have encouraged many planners and officers in other local governments. Tamura later lectured on urban policy at university, authored eleven books, and travelled to educate the public on city planning (or 'machi-zukuri'). In short, Tamura was a leader and pioneer in the field of city planning as an officer of local government.

Keywords: city planning, machi-zukuri, Yokohama

1. The Purpose of this Essay

This essay is to profile Akira Tamura (1926-2010), one of the great city planners of post-war Japan, and conduct a brief study of his accomplishments in Yokohama.

His influence on Yokohama's city planning remains powerful to this day. The 'Six Spine Projects', including 'Minato Mirai 21 (the redevelopment in the central portside area of Yokohama for the twenty-first century)', which he planned as a consultant in the mid-1960s and then worked on as a city officer from 1968 to 1981, have been central to Yokohama's development for the last half century since their inception. In 2000, the Architectural Institute of Japan (AIJ) awarded Tamura its Grand Prize for 'the establishment of a theory or technique and its implementation in city planning' (AIJ 2000), which was done in connection with Yokohama. Tamura is the only practical planner in the field of city planning issues to have won the AIJ's Grand Prize, and other recipients have all been academics or architects, such as Kenzo Tange.

Since the middle of the nineteenth century, Japan had been undergoing rapid modernisation, but priority was usually placed on military and industrial development. The system of city planning was 'top-down' from the national government, and this was reflected by the City Planning Act 1919 remaining basically untouched until 1969 in Japan. Local planning originated from central bureaucrats and was approved by the Secretary of State without public participation. While such a centralised system might have been well-suited to immediate post-war physical reconstruction, it became clear that it did not assist in addressing questions of city planning which arose with the rapid economic growth from the 1960s onwards.

With the expansion of the Greater Tokyo Area (Tokyo and its three neighboring prefectures), the population of Yokohama grew rapidly (almost doubling in a decade), and its land use was disorganised. Environmental pollution and the lack of infrastructure reached a critical point. Ichio Asukata, elected in 1963 as the new socialist mayor, had to solve these issues. He devised a citizen-centric plan for Yokohama, then approached the planning offices at which Tamura was working for assistance.

Tamura proposed the 'Six Spine Projects', which were interconnected to develop and maintain the economy and citizens' lives in Yokohama, and advised the city to establish a new organisation called the "Planning and Coordination Section" (which later became the "Planning and Coordination Bureau"), because local organisations were divided by engineering field, which had resulted in sectionalism. Tamura was invited to Yokohama city in 1967, and quickly rose to become chief of the new section. However, even after Asukata and Tamura left Yokohama, the Six Spine Projects were continued by the successive mayors and the local officers, who understood that those projects were necessary for Yokohama.



Tamura went on to become a professor at Hosei University and lectured on urban policy at the Faculty of Law. He also travelled around Japan and contributed to educating the public on city planning issues until his death.

The purpose of this essay is to describe and evaluate Tamura's accomplishments in city planning. Although he is well-known by Japanese planners, there are few studies on his accomplishments as city planner at this stage. Perhaps it is too early to evaluate his contribution as only eight years has passed since his death, but in this IPHS Yokohama conference in 2018, we will try to review his work.



Figure 1: Photo of Akira Tamura sitting at the Dockyard garden of Landmark tower, MM21, Yokohama.

Source: Photographer Hideo Mori, Producer Tadashi Machiguchi

2. Early Life

Akira Tamura was born on 25 July 1926 in Tokyo as the third eldest son in his family, both of his parents being Christians of the non-church movement (Tamura 2009, p. 5). This movement was led by Kanzo Uchimura, an influential thinker in modern Japan and a well-known pacifist of the Russo-Japanese war era.

The Tamura family was not particularly wealthy, but was a typically cultured middle-class Tokyo family before the war.

As a child, he attended a primary school attached to the Aoyama Normal School (now a primary school attached to the Tokyo Teacher's University) and proceeded to the Municipal First Junior High School (now Hibiya High School), both of which remain prestigious schools in Tokyo. Tamura went to school by train, and visited a great



number of places reflecting his broad interests. Such experiences contributed to him becoming an active boy who liked railways, tourism, and geography.

However, he did not advance to the First Higher School (the premier high school in Japan for the elite before the war) in Tokyo, but instead went to Shizuoka Higher School, which took a few hours by train from Tokyo in 1944. He later explained this as because he 'liked to live outside Tokyo to broaden his horizons' (Tamura 2009, p. 130).

The war ended the following year and Tamura entered Tokyo University. He selected the Department of Architecture in the Faculty of Engineering, because architecture might be regarded as a broad field, encompassing arts and social science, rather than other engineering departments.

His graduation thesis was titled 'A Study of the Change of Structure in a Big City'. He joined the office of young Associate Kenzo Tange, who went on to become a world-famous architect. However, as Tange wished to be a master designer like Le Corbusier, Tamura did not totally align with his teacher's vision, whereas Takashi Asada, a staff member in Tange's office at that time, had a greater influence on Tamura. Asada was seven years older than Tamura, and also aimed to be a city planner.

At the time of writing his graduation thesis, Tamura had the goal of becoming a city planner, and it was natural that he would become a bureaucrat in the central government in order to achieve this. He decided to take the examination to become an advanced level of central bureaucrat, and passed it, becoming an administrative official.

Tamura first entered the Ministry of Transportation in 1950. However, he left fifteen months later and was then transferred to other several other ministries, although he also quit each of them 'less than two weeks later' (Tamura 2009, p. 234) because 'I felt uneasy about the elitism and sectionalism of the central bureaucracy' (ibid.).

In addition, Tamura attended the Faculty of Law, Tokyo University, while working as a national bureaucrat. This was because he considered knowledge of law would be necessary to city planning, and he succeeded in attaining a Bachelor of Laws. Then, after giving up the idea of working as a central bureaucrat, he decided to work for a leading life insurance firm, which was headquartered in Osaka.

As real estate was regarded as a good investment when the Japanese economy was recovering in the 1950s, the life insurance firm needed a specialist for real estate development. From this perspective, Tamura seemed eminently qualified because he had majored in both law and architecture. Tamura enjoyed a stable life for nine years, and married his wife Makiko, who was from the same Christian non-church movement.

However, he was not satisfied with his life as a salaried worker. When he was engaged, Tamura told his fiancée that he would leave the firm if he were given the chance (Suzuki 2016, p. 9). He wondered whether there would be a vocation for him elsewhere. He believed his then work in estate development only benefitted his firm, and was not what he wanted to do with his life. He visited Tange, his former teacher, to consult about his future.

Tange advised Tamura to visit Takashi Asada, Tamura's former superior, because he had just opened a consultancy office on city planning (ibid. p. 11).

Tamura visited Asada's office, but could not immediately decide whether to join the consultancy. He began working as a part-time member of staff, coming to Tokyo every weekend (Tamura 2014, p. 4). In January, 1963, Akira Tamura finally decided to leave his life insurance firm, and came back Tokyo to enter 'the Environmental Development Center', Asada's planning office.

In those days the private profession of city planner did not exist in Japan. Although Asada had just opened a planning office, its financial prospects were quite dim. City planning was regarded as the work of central bureaucrats, or a utopian designer such as 'the planning of the Tokyo Bay 1960', which Tange had just released.

It was at that time that Ichio Asukata, elected in 1963 as the new socialist mayor of Yokohama, approached Asada's office to ask for assistance.

3. An Adviser to the Socialist Mayor



The 18th International Planning History Society Conference - Yokohama, July 2018

In the 1960s, the Japanese economy was enjoying high economic growth, which was mainly driven by the heavy/chemical industrialisation and its growth rate continuing to rise by more than 10% annually. In 1968, Japan's Gross National Product (GNP) had come to be ranked the second in the world (Cabinet Office, 2018).

However, that economic growth brought with it urban problems common to big cities. For example, Yokohama, one of the main central cities in the Greater Tokyo Area, faced serious issues: rapid population growth, public pollution and traffic issues.

The population of Yokohama grew from 951,187 in 1950 to 1,788,915 in 1965 (Yokohama city 2010, p. 4), and most new migrants settled in the inland countryside districts. The Japan Housing Corporation and private developers built many new towns, but this led to financial difficulties for the local governments as it was their role to supply the necessary infrastructure such as roads, parks, waterworks, drainage, and schools.

Yokohama also had other problems, such as public pollution. There was a coastal heavy industrial zone (the '*Keihin Industrial Zone*') running along the Tokyo Bay in Yokohama. Those industries discharged significant volumes of waste water and exhaust, causing complex environment problems, although the industries were the cornerstone of the local economy.

The original identity of Yokohama as a port had also been changing. As Yokohama was the biggest port in Japan before the war, it was an international exchange centre for trade and people. Moreover, as the distribution system changed after the war, Yokohama's superiority as an international port had been in decline, although the increasing container loading and unloading caused traffic jams in the city.

It was against this background that Ichio Asukata, a socialist politician from Yokohama well known as a pacifist advocating a "nonalignment policy" for Japan, won the mayoral election in 1963. Asukata's solution to the urban problems was that local government should have the power to devise citizen-centric city planning by itself. Asukata's interest in city planning differentiated him from other Japanese socialists of the era. This was why Asukata went on to win the mayoral election a further four times, and was supported by even conservatives in the city council (Endo, T. 2016, pp. 34-35).

Asukata consulted with Narumi, his young political adviser, and decided to approach Asada to help him with his vision for city planning. Asada agreed and nominated Tamura to be in charge, because Tamura was the premier planner in his office. Coincidentally, Tamura had recently moved into a state-owned residential building near Yamashita Park in Yokohama.

Tamura met Asukata for the first time on a ship sailing around the Yokohama Bay to study the port situation, and they were very much impressed by each other. "Mr. Asukata was a frank man and looked easy to talk to", Tamura recalled (Suzuki 2016, p. 12); and "Tamura pointed out the townscape of the port, and I agreed with his opinion" wrote the mayor later (Asukata 1987, p. 55).

Asukata, Asada, Narumi, and Tamura had several meetings, and decided upon the new concept of Yokohama as Japan's 'international management centre'. Tamura consolidated and evaluated their plans in 'the Report for the Basic Study for the Yokohama's Future Planning' (1964).

According to the report, Yokohama had three faces: a port city, an industrial city and a residential city. These were Yokohama's three identities, which presented key issues in city planning.

The Six Spine Projects were proposed in the report, because the practical forms of the projects had to be implemented as promises to the citizens. There were in fact originally seven projects, but these were reduced to six as two could be consolidated after a careful review within the city government. Thus the Six Spine Projects were proposed to the City Council in February 1965, namely: the redevelopment central harbourside area (later named the '*Minato Mirai Project*'), Kanazawa reclaimed land, Kohoku New Town, highways, underground subway lines, and the Yokohama Bay Bridge across the Yokohama port.

Asukata also tasked Tamura with preparing a pamphlet to report to the citizens, because the mayor wanted to propose the Six Spine Projects to citizens directly, elicit their opinions carefully, and promise to implement the projects. "The pamphlet should be written in a manner that it can be understood by citizens quite easily", Asukata asked Tamura (Tamura 2006, p. 60). The pamphlet was written by Tamura and it took the title 'The City-Making of Yokohama' (1965).



Asukata thought that it was necessary to establish a new section in charge of the Six Spine Projects in the city government, because the projects would require coordination across several bureaus and sections. It was a task force, under the mayor directly, to plan a city and coordinate the various concerned bureaus to implement the projects. About thirty young staff from the various bureaus came to work in this section which was named the "Planning and Coordinating Section". Moreover, Asukata thought this section needed a new leader as a professional city planner, and invited Tamura to be a key figure in the section. Tamura accepted this position and later became section chief. Moreover, when the section was extended to become a bureau, he became its head in the 1970s.

Tamura's war as a city planner/officer in Yokohama for thirteen years had just begun.

4. 'Tamura's War'

Later Tamura wrote about his work in Yokohama in two books, 'Making Yokohama City'(1982) and 'Akira Tamura's War: towards a citizen's government' (2006). In both books, Tamura wrote that his first challenge in Yokohama city was the conflict with the national bureaucracy over the highway route in 1968.

It was planned that the metropolitan highways would be extended from Tokyo to Yokohama at the time, and an overhead route was planned to pass across the center of the city without public inquiry. It was clear that the associated interchange would damage the visual amenity of the port and reduce park area. As Asukata knew the situation, he asked Tamura to negotiate with the central government to change the plan. Tamura visited the Ministry of Construction to meet relevant bureaucrats, including the assistant secretary of the Ministry, and eventually succeeded in having the plan changed. The highway's structure was changed from an overhead highway to one that was half subterranean, and the new interchange was relocated.

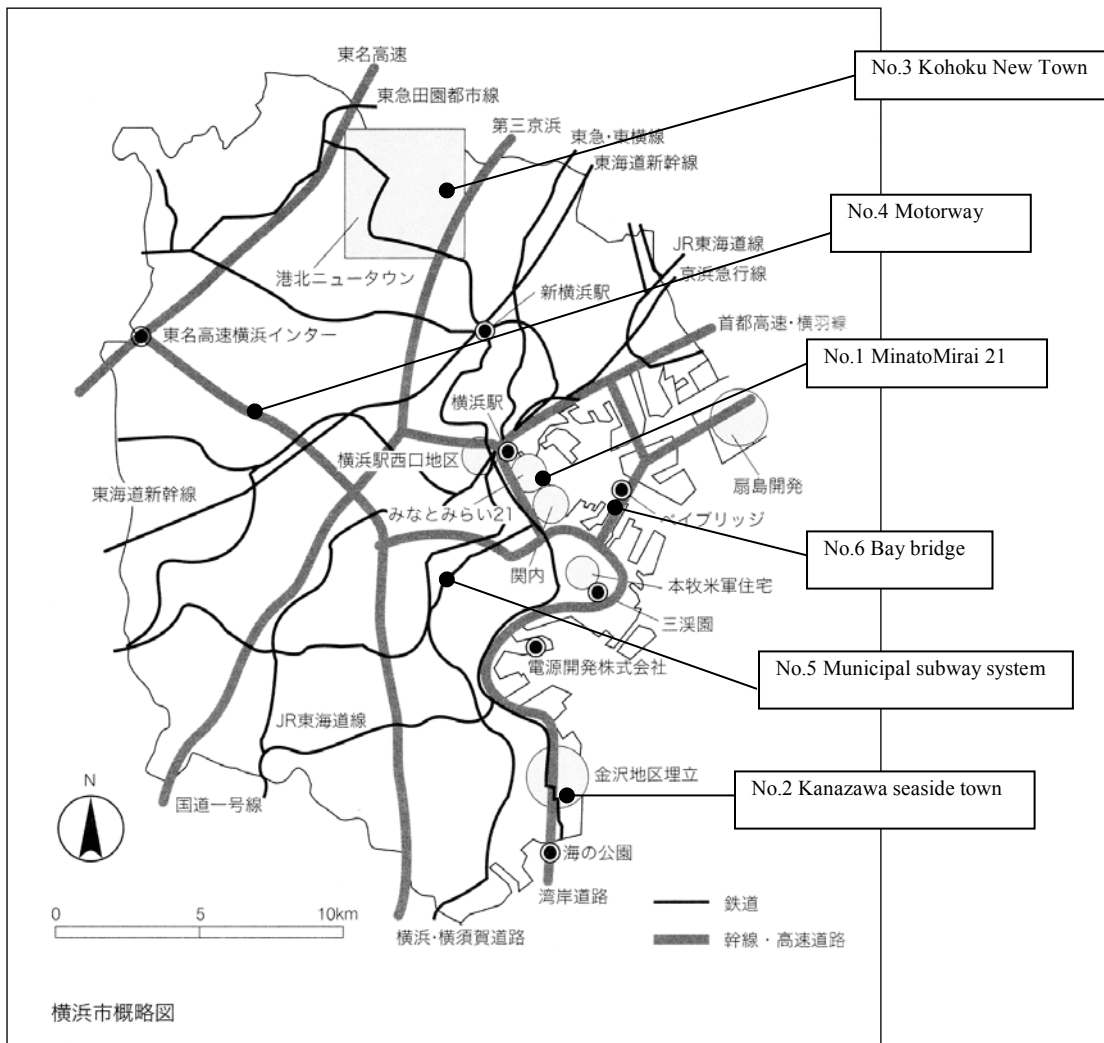




Figure 2: Map of Yokohama and the location of “Six Spine Projects” and the other projects. Base map source: Tamura, Akira. *Making Yokohama city planning work with Tamura*, Gakugei publisher, 2006, page 17

Tamura tackled another problem: the return of development profits from residential development to the local government. Although this was not facilitated by the City Planning Act as it then was, Tamura studied planning laws on betterment levies in advanced nations and even domestic examples. He began by negotiating with the Tokyu Railway Company, a large private developer in Japan, which was developing ‘garden cities’ (although they were mainly residential towns intended to envelop the new railway to the centre of Tokyo) in the north of Yokohama. Tamura successfully persuaded Tokyu to compensate the city for the costs of infrastructure, because good infrastructure was necessary to realise ‘garden cities’ envisioned.

After this success, Tamura extended this concept to an administrative guideline seeking legal agreements to make contributions of land or pay betterment levies prior to development permission being granted. Although some claimed it could be against the law as it then was and there were some lawsuits were filed, most verdicts were favourable towards local governments. The “Local Development Exaction System” continued to be used in Yokohama city until 2004, even under conservative mayors.

Throughout his work, Tamura kept in mind the education of young staff in the Planning and Coordination Section. For example, a large drawing board was put in the centre of the room to encourage staff to meet and stay abreast of what colleagues were doing. He also published a ‘Quarterly Magazine’ to share information about planning and implementation across all officers in the Yokohama city. Moreover, Tamura established the first ‘urban design team’ within a local government in Japan (Kuniyoshi 2015).

He regarded these things as his ‘war’ in his books, which was fought not only against opponents outside of government, but also against internal colleagues in the city government.

However, for Yokohama it goes without saying that his biggest task was the Six Spine Projects, and above all, the central portside urban redevelopment.

As the former central portside district of Yokohama was damaged by air-raid attacks during the war, and most facilities had been condemned by the American army until the early 1950s, its restoration appeared to be an impossible task.

On the other hand, the area around Yokohama station had been restored quickly as the new centre of Yokohama, because of its railway accessibility. As the old and new centres were quite akin to each other, it was hoped that a consolidated and continuous centre could be established, however the space was interrupted the dockyard owned by Mitsubishi Heavy Industries, Ltd.

Asukata and Tamura considered this the most important task among the Six Spine Projects for Yokohama. They visited Mitsubishi to ask for the removal of the dockyard, and showed them the new Kanazawa reclaimed land as a relocation site. Mitsubishi was interested in the city’s proposal, and Mitsubishi Estate Company, the biggest developer in Japan that belonged to the same financial clique, shortly began negotiations with the city.

Yokohama city and Mitsubishi reached an agreement on the removal of the shipyard in 1978. Tamura left Yokohama a few years after this, but the Minato Mirai 21 project went on; the redeveloped area expanded to 186 hectares by combining the neighbouring railway yard, the port areas, and newly reclaimed land. Although the present landscape of the Minato Mirai 21 district is not necessarily the same as the original plan by Tamura, the basic concept has not been changed (Taguchi 2016).

The other five projects were also commenced, and they were almost all completed by the end of the twentieth century.

When Tamura proposed the Six Spine Projects, many people were worried that Yokohama city did not have sufficient funds to complete them. However, Tamura always responded frankly by saying that city government did not intend to build only by itself, but that it would invite other sectors, including the public sector such as Japan Housing Corporation, and the private sector, such as Mitsubishi Estate Co. or Tokyu Railway Company Co., to be involved. It was important that Yokohama city take leadership in these projects, Tamura said (Tamura 2006, p. 60).



Half a century has now passed since Tamura proposed the Six Spine Projects. They have mostly been completed, and some of them have evolved, such as the extension of the subway route. However, it is noteworthy that the Six Spine Projects were able to survive and be implemented by the four mayors following Asukata, none of them being socialists. Moreover, the basic structure of the Six Spine Projects remained unchanged.

This stands in contrast to developments by other local governments along the Tokyo Bay spanning the ‘bubble’ era of the 1980s. Some of them were totally abandoned due to debt, and others remain financial millstones around the necks of local governments. The difference between those projects and Yokohama are the planning policy behind them, and the experience of the officers implementing them.

5. Later Days and Conclusion

Asukata won a fourth term in the election in 1975, and the following year Yokohama city reached an agreement with Mitsubishi on the removal of the shipyard. Everything seemed to be going well, but when the Japanese Socialist Party was decisively defeated in the election in the House of Councillors in 1977, Asukata’s city government was marked to come to a sudden end. The socialists asked Asukata to become the new chairman of the party, and he agreed to leave Yokohama city.

Michikazu Saigo, the successor to Asukata, won the mayoral election backed by both conservatives and socialists in 1978. However, his background was as a central bureaucrat of the ‘Ministry of Internal Affairs’ during the war, and he had an essentially conservative approach. He removed Tamura from his practical duties, and appointed him to a leisurely post.

Saigo also transferred responsibility for the Six Spine Projects from the Planning and Coordination Bureau to other related bureaus, such as the Urban Planning Bureau and the Port Authority. The power of the Planning and Coordination Bureau was reduced, and it was soon annexed by the Finance Bureau. It seems fair to speculate that Saigo accepted the importance of the Six Spine Projects, but thought that they should not belong to a particular individual, such as Tamura.

Instead of remaining idle, Tamura set out to write his Ph. D thesis on the “Local Development Exaction System”, and after obtaining his doctorate, he became a professor of the Faculty of Law of Hosei University. He lectured on urban policy, which he continued to do for fifteen years. His lectures were based on his practical experience in Yokohama, which made a strong impression on his students (Endo, H.).

Moreover, he launched a campaign to increase public awareness regarding city planning by writing books, including ‘Town-Making in Concept’ (1987) and ‘Town-Making in Practice (1995)’. In total, he wrote eleven books during his fifteen years at Hosei University.

From this time, Tamura used the term ‘Town-Making (*Machi-zukuri*)’ instead of ‘city planning’, because the latter sounds somewhat ‘top-down’ from the national bureaucracy, whereas the former conveys the idea of ‘grassroots’ activity by citizens. He also explained that ‘town’ has a more human scale than ‘city’. It was pointed out that Tamura was one of the first academics to begin using the term ‘*Machi-zukuri*’ before it became widespread (Watanabe 2011).

Tamura progressed his education of the public by going on a ‘pilgrimage’ all over Japan, lecturing citizens and local officers. For academics, attendance at such social events is usually the job of members of city planning committees and so on, but Tamura gave priority to citizens directly. Tamura himself supervised study groups on Town-Making in both Tokyo and Yokohama, consisting of citizens and local officers. Moreover, he was engaged in the foundation of the Japan Association of Local Government Policy Studies, which presents the Tamura Akira Award every year.

Tamura died at the age of 84, on 25 January 2010, with his wife at his side in a rest home in Izu, Atagawa district, Shizuoka prefecture. His life was filled with the pleasure he derived from city planning (or town-making) and his wife suggested that his faith in Christianity had a strong influence on him (M. Tamura 2012, p. 10).

In summary, we can tentatively understand Tamura’s achievements in Yokohama’s town planning in terms of three key aspects that drove a paradigm shift in local governance and planning. First, he pioneered the establishment of local initiatives and independent stance. Second, he promoted integrated methods of planning



which utilised all potentially available resources drawn from a variety of stakeholders. Finally, he emphasised the education and development of younger workers and assigned them important jobs that would encourage them to become responsible town planners and managers. Objective and scientific research activities concerned with Tamura's achievements have only been commenced by our organization and other scholarly work is planned to continue for several years to come. Besides his work in Yokohama, Tamura contributed to local Machi-zukuri groups and other local governments around Japan. We hope that we will be able to provide a full account and understanding of Tamura's legacy in this field in the near future.

From the nineteenth to the twentieth century big cities faced urban problems in western countries, and the local planners navigated the challenges of planning cities. Considering Tamura's achievement in Yokohama's city planning, he ranks among the pioneering planners and officers, such as Daniel Burnham in Chicago, in the modern city planning history of Japan.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Chihiro Tamura was the youngest brother of Akira Tamura. He worked as a director of a pharmaceutical laboratory. After retirement, he wanted to study more about human societies as well as the structure of towns and cities where people lived. He studied at a private school, which Akira had established, for about ten years. As Akira's planning activities for Yokohama city were vivid and unique in Japan, after his death many people interested in his field wanted to study more about his ideas or philosophy. Chihiro established this NPO Research Initiative to propagate Akira's vision and ideas.

Acknowledgements

I would like to express my great debt to Mr. Hideki Azuma who helped and assisted me to finalize this paper. I also appreciate the valuable help given from my friends in our research NPO. Regarding the editing of my English, Timothy Gray provided great support for me by reviewing this paper both linguistically and logically.

Bibliography

1. Architectural Institute of Japan: *The Grand Prize of AIJ in 2000*, 2000, <https://www.aij.or.jp/jpn/databox/2000/prize2000.htm>, (inspected on 28/02/2018)
2. Asukata, Ichio. *All Things Are in Flux: Memoirs by Yoshio Asukata*, the Asahi Newspaper office, 1987
3. Cabinet Office. *GDP Statics*, 2018, http://www.esri.cao.go.jp/jp/sna/data/data_list/kakuhou/files/h10/12annual_report_j.html (inspect14/03/2018)
4. Endo, Hiroshi. *The Hosei Years of Akira Tamura*, <https://www.machi-initiative.com> (inspected on 26/02/2018), 2015
5. Endo, Tomoyo. 'How Did a Progressive Local Government Maintain and Stabilize Its Administration?: Urban Regime Analysis of the Asukata Administration of Yokohama City', *Global Urban Studies*, No. 10, 2017
6. Environmental Development Centre. *The Report for the Basic Study for the Yokohama's Future Planning*, unpublished, 1964
7. Kuniyoshi, Naoyuki. '44 years of activities in the urban design team in Yokohama', *Architectural Journal*, No. 1243, 2015



8. Narusawa Hikari. '*Prof. Tamura's Backbone*', Review of Law and Political Sciences Vol. 108-04. 2011
9. Suzuki, Shinji. '*Akira Tamura and His Years*', Some Essays by Akira Tamura, Shunju-sha, 2016
10. Taguchi, Toshio. '*The Process of the Implementation in the Minato-Mirai Development*', AIJ Collected Papers 2016, 2016
11. Tamura, Akira. *Making a City of Yokohama*, Chuou Koron Publishing Co., 1983
12. Tamura, Akira. *Town-Making in Concept*, Iwanami Publishing Co. , 1987
13. Tamura, Akira. *Town-Making in Practise*, Iwanami Publishing Co. , 1999
14. Tamura, Akira. *Akira Tamura's War: Towards the Citizen's Government*, Gakugei Publishing Co. , 2006
15. Tamura, Akira. *An Original Landscape for Tokyo People*, Kobunsha Publishing Co. , 2009
16. Tamura, Akira. '*Speaking of Takashi Asada*', *Asada Takashi---His biography*, edited by Katsu Sasada, Ohm Publishing Co. , 2014
17. Tamura, Makiko. '*A Vocation of My Husband was Machi-Zukuri*', Journal of the Japan Association of Local Government Policy Studies, Vol. 25-1, 2012
18. Watanabe, Shunichi. '*The Logical Structure of the definition of Machi-Zukuri*', Journal of the City Planning Institute of Japan, Vol. 43-3, 2011
19. Yokohama city. *The City-Making of Yokohama*, Yokohama city government, 1965
20. Yokohama city. *The Change of Yokohama's Population*, 2000,
<http://www.city.yokohama.lg.jp/ex/stat/jinko/ayumi/pdf/honbun.pdf> (inspected on 28/2/2018)



THE ADOPTION AND ABOLITION OF THE LOCAL DEVELOPMENT EXACTION SYSTEM BY THE CITY OF YOKOHAMA

Toshio Taguchi

*PhD in Town Planning, Akira Tamura Memorial - A Town Planning Research Initiative NPO,
taggame@jcom.home.ne.jp*

This thesis intends to explore the rationale behind the adoption and abolition of Yokohama's local development exaction system ("LDE system"). LDE systems were independently and locally formulated by local governments in response to challenges they faced across Japan, and Yokohama provides a leading example of a functional LDE system pursuant to which land developers were required to donate land for public use as a condition of their receiving development approval from the city government. Ichio Asukata, the socialist mayor at the time of the LDE system's introduction, invited Akira Tamura, a planner, to the city administration to solve the town planning issues. Japan's new Town Planning Act of 1968 did not contain provisions authorising the exaction of land. Therefore, Yokohama became the first large city to adopt an LDE system in 1968. The LDE system was used as an administrative guideline which ran the risk of legal challenge by affected developers. After Asukata's term in office, a succession of conservative mayors narrowed and reduced the obligations imposed under the LDE system and finally ended its use in 2004. This study presents some idea of how local initiatives can be implemented independently by local governments in a highly constrained fiscal environment without any support from the central government.

Keywords: Development agreements by developers, Autonomy of local governments and their initiatives, Planning and coordination by planners within city administration

1. Pre-history of the Local Development Exaction system

1-1. Position of Thesis

The objective of this thesis is to aggregate and critically evaluate the evolution of the local development exaction system ("LDE system"), which was for a time widely implemented across Japan by local governments¹ as a means of negotiating with private housing developers. Development exaction refers to the donation of land for community facilities and/or the payment of impact fees to establish the infrastructure necessary to support that development. At the time of its conception, municipalities were severely affected by their lack of development control powers and were experiencing financial hardship due to the inappropriate allocation of planning powers² and financial resources from the central government³.

The LDE system was unusual in the context of post-war Japan,⁴ because it was established without endorsement from central government.⁵ The nature of the relationship between local municipalities and central government is disputable: it is officially regarded as an equal partnership, but regarded by many as deeply hierarchical. The legislative process by the central government tends to be delayed and often fails to respond to the needs of local municipalities in a timely manner. This situation, in turn, leads local municipalities to react to urban problems to accommodate citizen's needs even when they lack the necessary legal or financial power vested in them.⁶ This kind of citizen-centred governance taken by administrations is referred to herein as "local initiatives". On one hand, Japanese local governments must act within the national legal framework and obey orders issued from the central government. However, as this framework often contains its own loopholes, some local governments have used their own initiative to find or create some means outside the national legal framework in order to secure and advance citizens' welfare.

The city of Yokohama in the vicinity of the Tokyo metropolitan area is one such example, having been greatly affected by unplanned housing developments. Ichio Asukata, the incoming socialist mayor who had defeated the conservative candidate only narrowly in 1963,⁷ outlined a plan to tackle urban problems and resolve them for citizens, although he could not receive any support from the central government because of his socialist



background.⁸ Asukata named this reformist type of approach “local initiatives without consent [given from the central government]”, which represented a new approach to conducting local administration. Asukata wanted to cultivate a new citizens’ movement from a local up to national level. To achieve this, he needed an able planner with professional integrity, and persuaded Akira Tamura,⁹ a renowned town planner, to join the Yokohama city planning administration in order to implement citizen-centred town planning.¹⁰

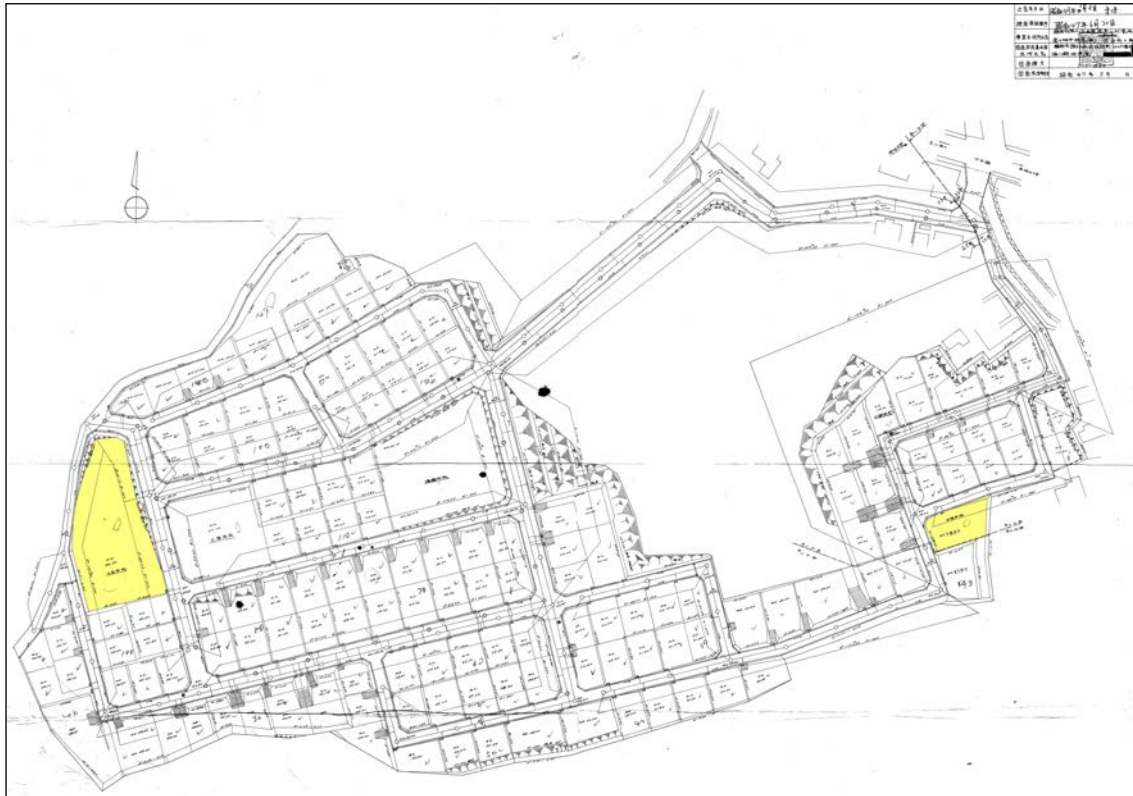


Figure 1: Site map of new housing development at Sakaigi-cho (3.7 hectares of site, planning permission obtained in 1971), Hodogaya ward, Yokohama, with a municipal nursery school on the left, situated on land obtained for community facilities from the developer by LDE system. Source: public information disclosure from the Bureau of Building Control, City of Yokohama

As Yokohama was one of a few specially designated large cities, it was vested with the legal power to permit development applications according to the Town Planning Law 1968,¹¹ an amended version of the 1919 law.¹² Against this background, when negotiating with developers in connection with their development applications, the city administration avoided giving the impression that development exactions would be sought as a legal precondition to making a formal application for development permission. Instead, the city made its own internal rules known to developers as the LDE system. Rather than demanding exactions as part of legal procedures, the city negotiated with developers to reach development agreements, in other words seeking “exactions by agreement”. As precedents to this new form of development agreement, the city signed a unique contract to protect the environment with energy companies which had sought permission to transfer land back to its original land owner, the city of Yokohama, in accordance with a basic agreement signed by both parties, but had to accept a measure to reduce pollutants generated from their power plants in order to exercise their right under the basic agreement. The city had also reached an exaction agreement with Tokyu Railway Company on its enormous housing development in a suburb of Yokohama. From the middle of the 1960s, LDE systems began being introduced all over Japan as a kind of symbol of local initiatives.¹³

Among research papers concerned with LDE systems around Japan, Akira Tamura, who formulated Yokohama’s LDE system in 1968 and managed its operation as the head of the city’s planning office for the next ten years in Yokohama, went on to publish his Ph.D thesis on the subject at Tokyo University. However, apart from Tamura’s work, no other scholars have conducted objective or evidence-based research¹⁴ on Yokohama’s LDE system. Whenever the city administration wishes to establish an important policy, it usually had to formulate a policy-decision paper called a “Municipal policy formulation paper”: the draft is prepared by a junior officer and must later be signed by concerned senior officials and finally the mayor. These policy papers are preserved in



perpetuity by the Public Documents Preservation By-law and are available to the public through the Municipal Information Disclosure By-law. Supplementary documents are frequently appended to these papers, explaining the detailed background and the reasons surrounding the issue under discussion. I have also conducted interviews with concerned retired senior officials¹⁵ of Yokohama city in order to locate appropriate official documents by using their comments as guidelines for document hunting.

1-2. Housing development by Tokyu Railway Company and its development exaction agreement

A huge housing development proposal by Tokyu Railway Company (“TRC”)¹⁶ in suburban Yokohama prompted a move to consider development exactions by local municipalities. Keita Goto, president of TRC, had returned to his old company after a short period of public exile from his official position that had been terminated in 1951.¹⁷ Goto made a new proposal for a housing development in the southwest of the Tokyo region,¹⁸ which covered a large suburban area of Yokohama.

Goto’s proposal was to construct a large-scale housing development along the newly extended railway line connecting Tokyu’s existing line with a station on the Odakyu railway line in the middle of Kanagawa prefecture, which ran through Yokohama. Then the Capital Metropolitan Redevelopment Law was enacted in 1956 by the central government. A new planning control measure to designate the suburban area as a green belt encircling the built-up areas was conceived in order to restrict unplanned expansion of Tokyo. Beyond the green belt, satellite cities with new housing developments were also allowed. It soon became clear that Goto’s proposal fell entirely within the restricted green belt area running between 15 kilometres and 25 kilometres in radius from central Tokyo. In response, Goto prepared a counter-proposal to build a new town on the southwest along the Tama River, which divides Tokyo and Kanagawa. He also proposed a toll motorway plan¹⁹ along which a new housing development was envisaged in parallel with the new railway line. As a result, Goto’s challenge finally succeeded, in that the central government allowed an exception for development within the green belt area, which was a planned housing development within a one kilometre in radius from the nearest train station. In 1960, Goto received official permission to construct his new railway line from Mizonoguchi to Chuurinkan that he had originally applied for. Goto and his company began construction of the new town for a planned 300,000 residents on 2,000 hectares of land, mostly within the city area of Yokohama.

One of the most significant community issues arising from the TRC development was the provision of schools, since they would be necessary facilities for the new residents. According to the Basic Act on Education, all municipalities are responsible for providing opportunities for all residents’ pupils to attend compulsory education at primary and secondary schools. Asukata, the mayor of Yokohama, expressed strong reservations at the negotiations with TRC about telling new residents that the city would not accept new enrolments for existing schools, which had no room to accept new pupils.²⁰ At the 1968 meeting between Asukata and Noboru Goto, son of Keita Goto and the new president of TRC, an agreement was reached to provide the land for nine schools. Asukata wanted to utilise TRC’s model of development exactions to apply all over Yokohama.

2. Genesis of Local Development Exaction system as an independent planning tool by local government

2-1. Fight on five issues by Asukata and Tamura

Despite a rapid population increase accommodated by new housing developments, the new tax revenue accompanying it did not match the costs required to respond by installing new community facilities and infrastructure. During the period from the late 1960s until the mid-1970s, the population of Yokohama was increasing by one hundred thousand annually.²¹ From 1968 until 1973 the increase in the number of pupils was similarly enormous in number: seventy thousand primary students and twenty thousand junior high students annually, which required an additional 47 primary schools and 15 junior high schools to be constructed. As the annual municipal budget²² of 1974 was 253.4 billion yen with 45.6 billion yen allocated for educational expenses, seventy percent of educational expenditure was used purely to construct educational facilities. In 1972 Asukata and Tamura²³ pledged to fight on “five issues caused by the rapid population increase”: environmental pollution, refuse dumping, traffic management, water resource, and exaction of public land. As such, the city had to respond by constructing basic amenities.²⁴



2-2. Designation of urbanised and non-urbanised areas by the newly revised Town Planning Law

According to the Town Planning Act 1968, town planning districts²⁵ are divided into two categories: urbanised areas, in which development is promoted, and non-urbanised areas, in which development is halted for more than a decade. If and when an applicant wants to develop land, he/she has to apply concerned local administration for permission to start development activities. Within urbanised areas, any development of more than 0.1 hectares in size is controlled. Although development in non-urbanised areas is generally prohibited, there is an exemption whereby well-planned housing developments that are larger than 20 hectares can be allowed.

The policy towards the use of the urbanised area designation, according to the advisory report to the Yokohama city planning committee in 1970 supervised by Tamura, reads: "Local administration is required to assume a large burden of political and administrative responsibility when making plans for urban facilities and infrastructure. Therefore, it would not be appropriate to expand urbanised areas too much without any possibility of accomplishing the necessary infrastructure within ten years. An area that is capable of being urbanised in the future should be preserved as a non-urbanised area for a while and then gradually be urbanised with planned development". Within non-urbanised areas, development is as a general rule not permitted for a period and is only possible subject to onerous controls, the report noting: "The notion of having non-urbanised areas has not only the restrictive goal to limit sprawl developments but also the positive goal of preserving these areas for future planned large-scale developments". Even areas affected by unplanned developments should be designated and preserved as non-urbanised areas until specific measures such as land readjustment schemes could be implemented in the future. The final proposal by the Yokohama city planning committee concluded that there would be 12,640 hectares designated non-urbanised area in size, accounting for 30.3% of the whole city area, which, through final negotiations with concerned bodies, was reduced to 10,673 hectares, being 25.6% of whole city area.²⁶ This ensured that, when granting planning permission to change these zones to urbanised areas for the initiation of development in the future, the city could demand greater public contributions from developers, such as the preservation of extra open space for the use of public in addition to the normal requirements under the LDE system.²⁷

3. Process of adoption and abolition of LDE system in Yokohama

3-1. Adoption in 1968 and abolition in 2004

According to the LDE system as adopted in 1968, development is defined as any kind of modification over its land in terms of shape and/or topography for the purpose of construction, and all development, irrespective of its size, is required to follow the LDE system. Exaction of land for public uses is the main theme of the LDE system and falls into two categories: exactions to fulfil a "park obligation" and a "community obligation". Roads, sewerage, drainage, and flood ponds constructed by the developer are transferred to the municipality. Public developers are required to donate land for parks equivalent to more than 4% of its development area, and private developers more than 3%, not less than 150 square meters in size. Land provided to house community facilities must be more than 5% of the whole development area, and the price paid to the developer, albeit only a nominal fee, is fixed at 3,000 yen per square meter for land within that 5%. If and when construction of public utilities outside the development area is necessary, additional construction should be done by the concerned developer.

After a 1972 revision, "development" subject to the LDE system was classified as anything exceeding 0.1 hectares. Density controls were introduced: assuming there would be 4.0 residents per freestanding house, and 3.5 residents per apartment unit. The park obligation was strengthened to require an allocation of at least 3 square meters per planned resident (applicable when this would deliver more than the existing 3% -- 4% exaction), and the community obligation was enlarged to require an additional exaction of .5% of the development area for every 30 residents per hectare (5% of the development area up to 150 residents per hectare)."

After Asukata's departure in 1978, ten years after the LDE system's introduction, a new mayor, Michikazu Saigo, assumed office. He had started his career at the old Ministry of Interior before the war and became the Administrative Deputy Minister of Ministry of Home Affairs after the war. Some provisions of the LDE system were changed in 1980: developments of less than 0.3 hectares, if and when they could not provide a full-sized park of 150 square meters in size, could instead donate the land exacted to fulfil the park obligation to its land for community facilities. Moreover, the community obligation was changed so that, if and when a developer did



not have available land for community use on its development site, the developer could instead purchase part of the land owned by a municipally affiliated land corporation which was legally authorized to buy land in advance for future municipal unspecified uses by a fund borrowing from the banks on normal market interest rates, not from municipal tax revenue, and then sell the land to the city at a nominal fee. Although this method was practical financially, the nexus between development sites and the land targeted by exaction obligations became unclear. In 1984, Saigo made a further fundamental modification to the structure of the LDE system. Any development of less than 0.3 hectares in size and with fewer than a hundred planned residents was allowed to donate 34,000 yen per resident to the Yokohama Municipal Green Foundation²⁸ in lieu of park land. This change caused a further weakening of the nexus between exaction and development sites, because expenses contributed by developers would be used for forest preservation at a different site.

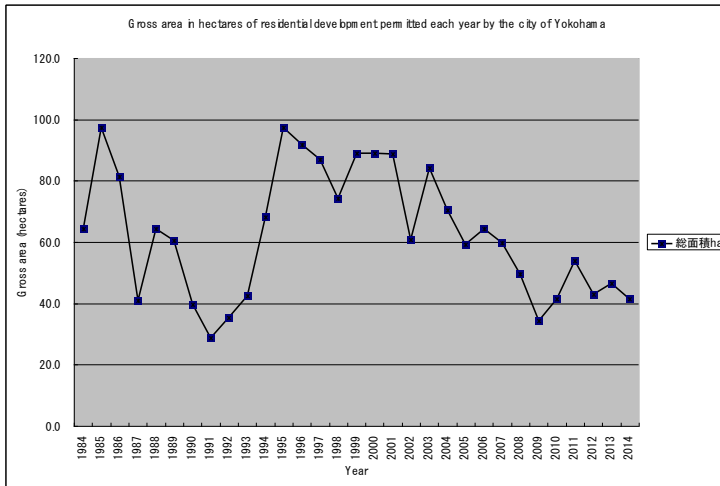


Figure 2: Chart of fluctuation of residential developments since 1984 by total development permitted area. Gross area in hectares of residential development permitted each year by the city of Yokohama. Source: Data from Yokohama’s municipal architectural department, which was in charge of development permission, began being properly recorded and preserved after 1984 to a standard usable for detailed research work.

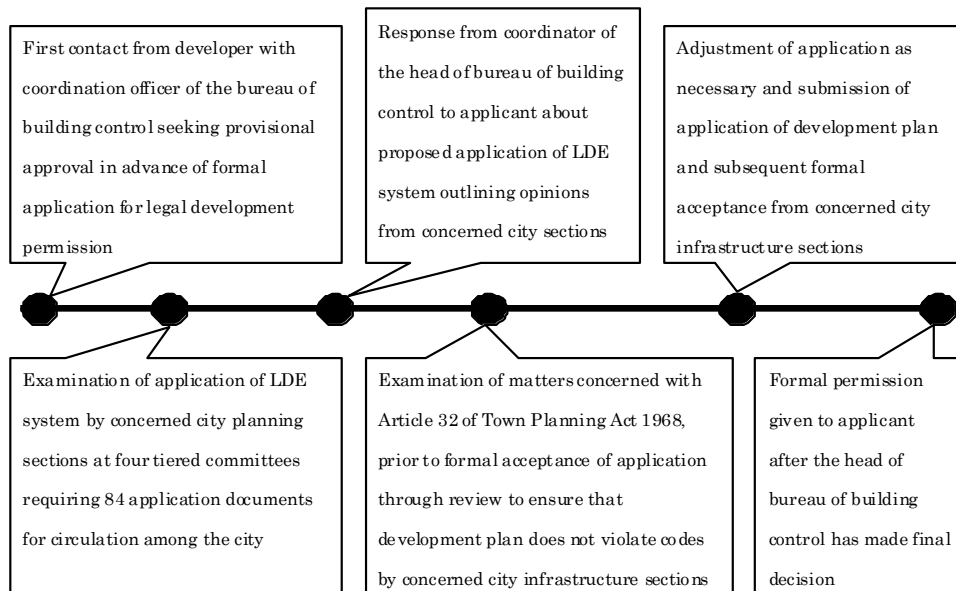


Figure 3: Flow of LDE system application and subsequent formal planning permission

Saigo died in 1990 during his term as mayor. Hidenobu Takahide, his successor, was born in Hokkaido and had become the Administrative Deputy Minister of Ministry of Construction after a career as a technocrat in the civil engineering field. However, the Ministry of Construction was a vanguard against the LDE system. In 1995, Takahide set up a special committee to review the LDE system. The committee determined that the objective of



providing school sites by exaction would be terminated despite praising the impact of the LDE system on the city budget. Regarding the park obligation, it was relaxed to require donation of less than 6% of the whole development area, whereas it had previously been calculated as more than 3% of whole area or 3 square meters per planned resident (whichever was larger).

LDE system of Yokohama	1968	1972	1980	1984	1995	2004
	Adoption	First revision	Second revision	Third revision	Fourth revision	Final revision/abolition
	Mayor Ichio Asukata	Mayor Ichio Asukata	Mayor Michikazu Saigo	Mayor Michikazu Saigo	Mayor Hidenobu Takahide	Mayor Hiroshi Nakata
Developments affected by LDE system (by size)	All residential and non-residential developments	Larger than 0.1 hectares and planned population density of more than 150 people per hectare	Larger than 0.1 hectares and planned population density of more than 150 people per hectare	Larger than 0.1 hectares and planned population density of more than 150 people per hectare	Larger than 0.3 hectares, no planned density metric	LDE system abolished, new city by-law restricting only technical matters without land exaction obligations
Required land contribution for parks ("park obligation") applicable to urbanised and non-urbanised areas	More than 4% of development area for public developers or 3% for private developers, minimum contribution of 150m ² (if calculation would otherwise amount to less)	Revised to add density restriction: more than 3m ² per person and more than 3% for private developer (4% for public developer) of development area, minimum contribution of 150m ² (if calculation would otherwise amount to less)	Any development less than 0.3 hectares can combine its community obligation land into a park lot of 150m ² or planting space in lieu	In the case of a development area less than 0.3 hectares, where there are more than 100 planned residents it triggers the park obligation, where there are less than 100 residents a donation to the city forest fund of 34,000 yen per planned resident can be made. If the park obligation amounts to less than 300m ² of a development area less than 0.3 hectares, payment to city forest fund should be made in lieu of land contribution	Only applied to housing developments, where the maximum contribution would be less than 6% of development area, donation to city forest fund not required. If park obligation area less than 150m ² , developer may contribute planted space or plaza in lieu of park	Within requirements of the Town Planning Act 1968, where a park would amount to more than 150m ² on a development area from 0.3 to 5 hectares. A development of less than 0.3ha requires planted space which is owned by the private owner, and is not a public park
Required land contribution for community facilities ("community obligation") applicable to urbanised and non-urbanised areas	More than 5% of development area, minimum contribution of 150m ² (if calculation would otherwise amount to less)	Housing development up to 150 residents per hectare provides 5% of development area, if planned density exceeds 30 residents per hectare, add 0.5%. Non-residential developments required to contribute 2% of development area. If this would amount to less than 150m ² , supplement to contribute a minimum of 150m ²	If community obligation less than 150m ² , land for community facilities can be used for park land	Non-residential developments contributing to progress of entrepreneurship can be exempted. Maximum land for community facilities can be used for community uses such as garbage depots or bicycle stands: 300m ² for less than 0.3ha of development area, 250m ² for 0.3-0.4ha, 200m ² for 0.4-0.5ha, 150m ² for more than 0.5ha. Within non-urbanised areas enterprise and/or educational-cultural developments can be exempted from park and community obligations	Community obligation to be applied to developments of more than 1 hectare, 3% of development area for residential developments only. Community obligation land not to be used for other substitute uses originated from outside development area	Community obligation to be applied to developments of more than 3 hectares and/or 500 unit apartment housing developments, and to be negotiated with city treasury bureau by a standard of 3% of development area and a land price of 25,000yen per m ²
Other infrastructure installation obligations	Roads, sewerage, flood water ponds within the development site and beyond the site if necessary are built by the developer	As shown on the left	As shown on the left	As shown on the left	As shown on the left	As shown on the left

Figure 4: Chronological list of amendments of local development exaction system

The original vision of the LDE system was fatally undermined and it was tailored to follow the minimum standards of the national town planning law. Land donations for community facilities were reduced to require land donations only for housing developments more than one hectare in size, and equivalent only to 3% of its whole site. Takahide effectively began the process of dismantling the LDE system. At the same time, the central government decided on a new deregulation policy in 1995, the Ministry of Construction issuing a notification commenting that it was the sole responsibility of local governments to provide community facilities on any developments less than 20 hectares in size.

Hiroshi Nakata, a relatively young and liberal politician having been educated at the Matsushita Institute of Government and Management, and who had resigned as a member of the Diet, defeated Takahide at mayoral election in 2002. Although Japan was facing economic stagnation, Nakata made an irrational decision to abolish the LDE system. A new development control by-law strictly based on the national Town Planning Act was introduced in 2004, which effectively replaced Yokohama's LDE system. The development control by-law enacted by the municipal assembly merely set standards as to the technological aspects of construction, and did not contain provision for exaction.

3-2. Evaluation of the LDE system

By the end of the 1993 fiscal year, the total amount of land exacted for community facilities was 307 hectares since the inception of the LDE system in 1968, of which 210 hectares had been used for municipal primary and secondary schools.²⁹ It had provided the sites for 150 schools, which accounted for 60% of the 258 total municipal schools opened in Yokohama since 1968. This shows how important the LDE system was to the provision of educational facilities in Yokohama city.



A further 65 hectares of exacted land was used for other community facilities: nursery schools, local fire stations, and citizen-use facilities, which complied with the original objectives set by the LDE system. However, the remaining 30 hectares was used for resettlement caused by public infrastructure projects which had nothing to do with the original development and its exaction, which posed a problem from a viewpoint of having no direct nexus between the development exaction and the eventual use the land was put to. The value of land acquired to build community facilities from the inception of the LDE system had amounted to 384.6 billion yen by the end of 1993.³⁰

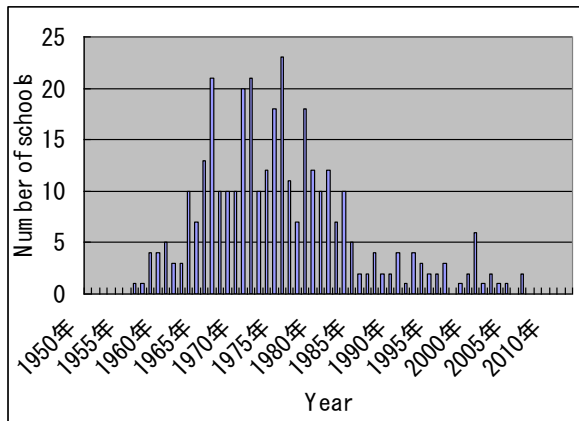


Figure 5: Chart of annual completed construction of Yokohama municipal primary schools. Source: Municipal statistics of Yokohama city 2013

3-3. Integrated planning and coordination method

In 1968, the city of Yokohama established a Supreme Coordination Committee of Urban Issues, whose chairman was mayor Asukata, and which was supported and administered by Tamura of the Planning and Coordination Bureau (“PACB”).³¹ At the committee many subjects concerned with city administration were discussed: the acquisition of public-use land on a large scale, and the policy regarding large-scale developments. The PACB directed by Tamura³² was a special piece of administrative machinery to coordinate sections of city administration horizontally in order to consolidate them into a unified local administration.³³

The effectiveness of the LDE system is attributable to Tamura implementing other control measures in tandem with the LDE system and using them in an integrated way. Designation of urbanised and non-urbanised areas as a tool of development control was strategically carried out. In 1973, the school planning section of the municipal educational committee formulated a “Guideline for apartment housing development” which was used to prevent new housing developments being initiated in areas with a limited capacity of public schools. They designated areas of high primary school enrolment which postponed new housing developments for a period and introduced a prerequisite to obtain permission from the school planning section.

Another innovative control measure introduced by Tamura was a “Special zoning code restricting volume of residential use”, a tactic used to set a limit residential use as a ratio of commercial and/or business districts.³⁴ The Japanese zoning code at a national level defines possible uses in each zone, but an owner of land can use the whole of its property for residential use even in the middle of a commercial and/or business district. After Tamura left office, his restrictive zoning code was immediately abolished and consequently high-rise residential towers started to appear in the middle of Yokohama’s central business district.

3-4. Mounting pressure for relaxation and abolition from the central government

Among lawsuits regarding LDE systems are two widely known cases between local applicants and the Musashino city government: the first law suit³⁵ demanded that Musashino city refund the exaction fees negotiated for an educational facility from an owner/developer of apartment housing, and the second lawsuit³⁶ demanded that Musashino city supply tap water to apartment housing built by a local developer. Musashino city



lost both cases because the court characterised the actions of the municipality as a forced donation, and that its threat to stop the supply of water was not usual exaction by agreement, and moreover an excessive use of administrative force. These verdicts in turn meant that local governments became overly timid in their use of LDE systems.

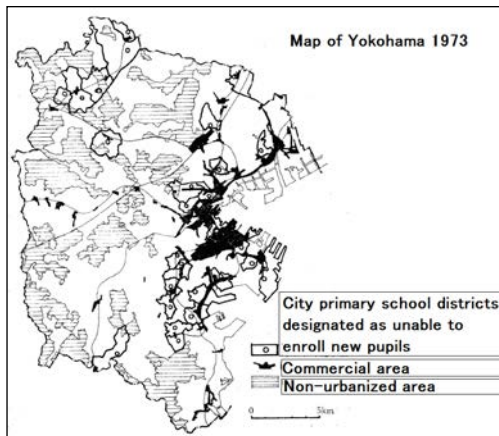


Figure 6: City primary school districts designated as unable to enroll new pupils and non-urbanised areas in the city of Yokohama as of February 1973. Source: Atsushi Naito, *Activity volume v. Facility volume-Challenge to special zoning restricting volume of residential use*, Bibliography 7)

Pressure from the central government to relax or abolish the LDE system gradually increased. Orders issued from both the ministries of construction and home affairs demanded that local governments using LDE mechanisms for exaction be more transparent with developers and citizens alike. It took several decades until the final abolition of the LDE system, since the central government could not prepare other effective measures to control developments in lieu of the LDE system. Finally, in 2003 the Ministry of Internal Affairs³⁷ and the Ministry of Construction and Transport³⁸ issued an ultimatum to local governments to review LDE system as soon as possible, which reflected that developers' tolerance for exaction had been declining due to a sharp decline in land prices. This order brought about the end of LDE systems all over Japan, including in Yokohama.

4. Conclusion

Although the majority of Japanese local governments lost their confidence in local initiatives using the LDE system, some other countries³⁹ still retain similar systems to the Japanese LDE and even Japan has an extraordinary exception still operating in downtown Tokyo. Many high-rise residential towers began to appear in water-front area of Tokyo's Koto ward, where the construction of business and commercial developments accelerated to make it a sub-centre of the Tokyo Metropolis. There soon emerged a shortage of school facilities for pupils of high-rise towers. Koto ward is such a high density area that it lacks suitable school sites. In 2002, the ward government enacted its own by-law which requires housing developers to attend negotiations, and at the same time made an LDE system which requires developers to pay 1.25 million yen per residential unit as an impact fee for community facilities. Until now, no objection has been raised by the central government.

Disproportionality in terms of population demographics exist in Yokohama⁴⁰ between districts neighbouring Tokyo and those further away from Tokyo. When, in 2016, it became necessary in Kohoku district (one of Yokohama's outlying areas) to build a new primary school,⁴¹ municipal expenses were allocated. This budget consisted mainly of municipal tax revenue, with nothing derived from local exaction fees.⁴²

Asukata and Tamura framed the LDE system as a new planning tool correlating to environmental impact fees. To this day, there is no national regulation providing for development exactions. Even if local administration needs support from the central government in order to fund infrastructure related to development, there are no reliable channels to obtain such support. It can be said that there are two kinds of responses to this situation: one is to react independently and courageously to local issues, and the other is to wait for help patiently. The happiness of citizens is greatly dependent upon these reactions. Therefore, it is significant that Asukata and Tamura independently formulated a local response which lasted for almost forty years despite incessant demands



for reform from the central government. Their achievement is worthy of significant praise both from planners and citizens alike.

Bibliography

- 1) Asukata, Ichio. *An overview of city management, Series of study of modern city policy XI*, Iwanami bookshop, 1973.
- 2) Saito, Sakae. *Reconciliation results of housing development issues by the council of Tama suburb development*, Research periodical of the Yokohama city, No. 19, 1968.
- 3) Seki, Hideo.: *An analysis of city institutions, Posthumous articles by Seki Hajime*, 1936.
- 4) Shibamura, Atsuki. *Seki Hajime as a pioneer of urban rationale*, Shouraisha publisher, 1989.
- 5) Tamura, Akira. *Making Yokohama city planning work with Tamura*, Gakugei publisher, 2006.
- 6) Tamura, Akira. *Urban development control by local development exaction system*, Ph.D. thesis at Tokyo University, 1981.
- 7) Naito, Atushi. *Volume of urban activities and related facilities, a challenge toward the residential volume restriction*, Journal of Architecture and building science Vol.88 No.1066, AIJ, 1973.
- 8) Tokyu railways corporation. *Tama country and town development, its 35 years history*, 1988.
- 9) Brad K. Schwartz. *Development Agreements: Contracting for Vested Rights*, 28 B.C. Env'tl. Aff. L. Rev.719 (2001), <http://lawdigitalcommons.bc.edu/ealr/vol28/iss4/13>
- 10) Tao, Ryouusuke. *Negotiation, agreement, and collaboration-a study of American development agreement*, Administrative Law No. 2, pp.66-112, 2013.
- 11) Ohnishi, Hiroshi. *Political parties and bureaucrats of modern cities as part of Yokohama city research*, Yurindo publisher, 2004.
- 12) Nishio, Masaru. *Politics and administration under depopulation and congestion situation*, Year book of politics academy, Japan politics academy, 1977.
- 13) The city of Yokohama, *Municipal policy formulation paper of revision of the LDE system signed by the mayor Saigo*, 1980, <https://www.machi-initiative.com/research-materials/> (Accessed March 10, 2018)
- 14) The city of Yokohama, *Municipal policy formulation paper of community obligation off-site allocation of the LDE system signed by the mayor Saigo*, 1981, <https://www.machi-initiative.com/research-materials/> (Accessed March 10, 2018)
- 15) The city of Yokohama, *Municipal policy formulation paper of revision of the LDE system signed by the mayor Saigo*, 1984, <https://www.machi-initiative.com/research-materials/> (Accessed March 10, 2018)
- 16) The city of Yokohama, *Municipal policy formulation paper of establishment of land coordination taskforce of the LDE system signed by the mayor Takahide*, 1991, <https://www.machi-initiative.com/research-materials/> (Accessed March 10, 2018)
- 17) The city of Yokohama, *Municipal policy formulation paper of revision of the LDE system signed by the mayor Nakata*, 2004, <https://www.machi-initiative.com/research-materials/> (Accessed March 10, 2018)
- 18) The city of Yokohama, *Overview and Statistics of municipal revenue transition by the Treasury Bureau*, specially prepared on request by the author, 2017, <https://www.machi-initiative.com/research-materials/> (Accessed March 10, 2018)
- 19) The city of Yokohama, *A handbook of development control procedures for city planning officers*, 1979, <https://www.machi-initiative.com/research-materials/> (Accessed March 10, 2018)
- 20) The city of Yokohama, *Municipal policy formulation paper of community obligation land transaction signed by the section chief of the treasury bureau*, 1979, <https://www.machi-initiative.com/research-materials/> (Accessed March 10, 2018)

Acknowledgements

Firstly I would like to express my great debt to the city officials, both present and retired, from whom I received help and assistance in the course of searching for relevant information. I also greatly appreciate the valuable advice given from my friends in our research NPO. Regarding the editing of my English, Timothy Gray provided great support for me by reviewing this paper both linguistically and logically.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor



Toshio Taguchi (b. 1952) is an independent scholar working with his research peers in order to aggregate historical data about the modern town planning of Yokohama and provide young scholars and citizens access to archival information. He studied Urban Design in England and met Akira Tamura, an eminent urban planner who remodelled Yokohama. During his early career as a municipal urban designer, he co-organized a voluntary study group of young city government workers. He believes a progressive and inquisitive approach by workers is a necessity when creating independent local initiatives in the course of town-making.

Endnotes

¹ Before Yokohama, both the cities of Kawasaki and Kawanishi had LDE systems, by 1975, they had expanded to 796 municipalities, and reached their zenith of popularity in 1997, when 1,598 municipalities had such systems, accounting for 50% of all municipalities in Japan. Source: The Ministry of Construction, *Yearly statistics of 1997*.

² In general terms, pre-war Japan lagged far behind its Western counterparts in relation to town planning, although it tried very hard to catch up as part of a drive for modernisation. Masao Kanbe, a professor of Kyoto Imperial University, proposed early in 1912 a new land tax legislation based on the English “Betterment” system. The UK’s Housing and Town Planning Act, a world first, was enacted in 1909, which speaks to the public consciousness of town planning issues at that time. However, Kanbe could not get approval for reform from members of the imperial assembly. Instead of that legislation, a form of “user pays” was introduced into the Japanese Town Planning Act 1919. To this day, Article 75 of the Town Planning Law 1968 allows for a form of “user pays” land use, as in principle a beneficiary of land development may be required to pay, namely: “if a person receives a substantial benefit from a public town planning project, central government, prefecture governments and municipalities are vested with the power to require the beneficiary to meet a part of the project costs according to scale of the benefit it receives”. This provision can be used to require property owners in the vicinity of an infrastructure construction site who expect to realise a great benefit from the construction of infrastructure to pay an appropriate portion of its cost. An equivalent provision had existed in Article 6 of the Town Planning Act 1919 which shared the same rationale with its English counterpart in the Housing and Town Planning Act 1909. Japan had applied this provision to a local project in the Osaka construction of the Midosuji boulevard and underground train system in the 1920s by mayor Hajime Seki. The city of Osaka charged landowners along the boulevard for the improvement, however it took decades to recover the costs and left a shortfall in the betterment revenue. Despite the availability of this special provision, land prices in Japan do not reflect the progress of local infrastructure. A housing development that lacks appropriate infrastructure in its vicinity can even be permitted according to the basic building code, with the construction of infrastructure expected to catch up. Due to a lack of public awareness towards environmental improvement, benefits produced by public projects have never been properly assessed.

³ From the post-war reconstruction through Japan’s initial stage of high economic expansion, its central government had promoted housing developments for middle class households in the form of single houses built by private developers and collective housing constructed by public developers. Therefore, the central government was loathe to encourage development controls which would have the effect of tightening the regulatory framework around housing developments.

⁴ The LDE system was a special concept adopted by local governments as an independent local procedure in the absence of central government regulation. The idea was conceived by local leaders, i.e., especially mayors of municipalities in the suburbs of major cities, in order to respond to an influx of new residents and the accompanying need to provide community facilities and infrastructure.

⁵ When Tamura was subsequently summoned to a meeting in 1968 by a high-ranking official of the Ministry of Construction who saw introduction of LDE system an affront that went well beyond the national legal framework, Tamura responded that provisions introduced through the LDE system should have been authorised by national policy and regulations and, for the time being until central government could address those issues, the local government would respond to those issues on behalf of the national government. Tamura conveyed a strong independent stance of local government despite central government opposition.

⁶ The central government introduced a new local tax in 1969 by amending the Local Tax Law, namely “housing development tax”, which has never been used by any local government at all. This tax can theoretically be applied to an area designated by the municipality only within an “urbanised area”. Exaction for installation of new infrastructure at new housing developments is limited to roads of less than 12 meters in width, drainage except for public sewage systems, and parks or pedestrian courts of less than 0.5 hectares. The applicable tax rate is to be fixed by municipal by-law according to degree of benefit. When implementing the tax system, a municipality is required to notify the Minister of Home Affairs for accreditation. This tax seems extremely rigid, which perhaps accounts for its poor (non-existent) uptake in comparison to the LDE system.

⁷ Japan was an undemocratic and overly centralised country prior to World War II. Local political and administrative systems were established according to the doctrines fixated on empire-building, which underlie Japan’s initiation of expansionist warfare and the reason it could not be stopped before widespread devastation occurred. The Ministry of Interior was a stronghold of ruling bureaucrats governing local administration, infrastructure construction, policing, welfare, and the Shinto national religion. All prefectural governors and major municipal mayors were appointed by this Ministry from a shortlist of its top elites, and never elected by citizens. Therefore, the American occupation forces decided to dismantle this organisation with a firm determination to create a democratic Japan. Democracy and decentralisation became two keywords for post-war Japan. Political proponents of socialist ideas appeared after the war from outlaw status during and before the war, though only the first government in the immediate wake of the war, when defeated Japan was in turmoil, was led by a socialist. Old conservatives tried to secure their stronghold against the political actions of socialists. Against this background, Asukata came to local politics in Yokohama city after a career in the national legislature, with a belief that he could change Japan through local government in Yokohama as a mayor together with local people.

⁸ When accepting democracy into defeated Japan, the central government chose a cabinet system in order to sustain its imperial family as head of state. On the other hand, local government is managed directly by the elected mayor. Although local politicians are also directly elected by citizens, local administration is generally directed by the leadership of the mayor. However, mayoral candidates tend to be appointed and funded by a relatively small group of conservative older politicians. This means that post-war local assemblies were neither active for citizens nor progressive in terms of new ideas. Despite the strong conservatism of the political and business community, local autonomy was formally authorised in the new constitution. However, the local administrative system continued to be seen as a branch of the central government, because local politicians proclaimed the importance of close relationships with the central government.



⁹ Tamura was a person who understood perfectly the structure of national ministries and their motivations, and also their limitations, because he had worked for a ministry after his graduation from university. He then moved to the real estate section of the Nihon life insurance corporation which gave him a clear perspective on real estate business and a developer's logic. Another remarkable aspect of Tamura's career was that in 1963 he joined the first private planning consultancy in Japan that had been established by Takashi Asada, producer of the Metabolism Group and manager of the globally renowned architect Kenzo Tange. His well-known consultancy experiences included contributing to several large-scale projects across Japan commissioned from national agencies or local governments. His approach to planning displayed a strong desire for a wider perspective on society, and was never parochial or limited exclusively to the needs of just a local area, but combined ideas from drawn from other countries. When thinking locally, Tamura acted at the same time globally.

¹⁰ In 1964 Asukata requested that Tamura, as an able town planner belonged to a planning consultancy office, propose a comprehensive plan to remodel the urban structure of Yokohama known as the "Six Spine Projects". Based on that work, Asukata had come to trust Tamura, and in 1968 he offered Tamura a post within city management to let him expand his role as the chief planner rather than just as a consultant outside the city's machinery. In 1973, Tamura as chief planner proposed the concept of municipal general hospitals based on private-public partnership: the city bought sites for planned general hospitals and subsidised part of the construction fees for private medical institutions that ran hospitals public use.

¹¹ The Town Planning Act was fundamentally revised in 1968 as a consequence of the advisory report in 1967 of the Land Control Committee of the Construction Ministry.

¹² Nothing had changed in the town planning system of Japan since the pre-war era. The antiquated and overly centralised Town Planning Law enacted in 1919, that had preceded the 1923 Great Kanto Earthquake, continued to be used even after the war. This law was finally and fundamentally revised in 1968 to initiate development control measures and also introduce democratic processes into law enforcement. This came nearly fifty years after the enactment of the law in 1919 and more than twenty three years after the war.

¹³ Eventually, during the early 2000s most LDE systems were abolished because of mounting pressure from the central government. Although Yokohama was a leading example of a successful LDE system, Yokohama's LDE system was likewise abolished in 2004.

¹⁴ In approaching this research, I assumed that to conduct meaningful research on the process of decision making at local municipalities would be difficult, both because of a lack of evidence available and because public servants must obey codes of conduct that prohibit them from speaking about confidential information which they have come to know in the course of their duties.

¹⁵ Although nearly 40 years have passed since Tamura left the city in 1981, many such retired city officials still boast of old stories and their achievements, however these anecdotes are not suitable materials for an objective and scientific research approach when conducting historical analysis of LDE system of Yokohama.

¹⁶ The mother company of TRC was "the Garden City Company" established in 1918 by Eiichi Shibusawa, an eminent Japanese economist. The Garden City Company intended to build the a residential area in Tokyo's hinterlands modelled after Letchworth in Hertfordshire, and in 1923 started development in the current Denenchofu area, which has become one of Japan's most luxurious housing estates.

¹⁷ Local politics and administration went largely unchanged and did not adapt quickly to the American model of democracy. An embargo order (that had been issued in 1946 and 1947 by the Japanese government on the advice of the Allied occupation forces) on hiring persons who had been at the top tier of political and economic communities in the public services, who were regarded as having taken part in the war, ended several years earlier than anticipated. This was because either a shortage of able leaders or the start of Korean War necessitated their return to public service.

¹⁸ Once the restriction on immigration to the Tokyo area after the war was lifted in 1949, the greater Tokyo region started to expand.

¹⁹ The toll motorway project had relatively low construction and maintenance costs compared to the railway system, and was later directly implemented by the central government as the current "Daisan Keihin motorway."

²⁰ TRC initially responded with the view that given that the municipality provided public educational facilities, it would have its residents' pupils go to private schools owned by TRC.

²¹ An overall trend of housing development in Yokohama from 1968 until 2014 can be identified in the data regarding housing plots increase on municipal real-estate tax index. The housing plots within Yokohama city greatly increased from 10,705 hectares of 1968 when LDE system introduced until 15,397 hectares of 1978 when Asukata left the mayor's office. Throughout Michikazu Saigo's time, mayor after Asukata, the rate of housing plots increase gradually levelled out until Saigo died in 1990, Hidenobu Takahide succeeded the mayor's office. Since the latter half of Takahide's term until Hiroshi Nakata decided to abolish the LDE system, the housing development was stable in trend.

²² It may be useful to consider the trends in annual budgets, population figures of Yokohama city and the national economic yearly growth rates: 33 billion yen budget and 1.59 million population when Asukata first elected in 1963, 365 billion yen budget and 2.69 million population when he left the city in 1978, 994 billion yen budget and 3.19 million population in the last year of Mayor Saigo's term in 1989, and 1 trillion and 377 billion yen and 3.46 million population in the last year of Mayor Takahide. Finally, Yokohama had a 1 trillion 345 billion yen budget serving a population of 3.65 million population in the last year of Mayor Nakata's term in 2008. The economic growth annual rate was 9.1% from 1956 to 1973, 4.2% from 1974 to 1990, 0.9% from 1991 to 2012.

²³ A unique aspect of Asukata's approach to resource management was to extensively utilise the concept of private-public partnerships. Tamura explained that public expenditure should mainly be limited to being used for basic community necessities and that other major investment should be managed largely by private financial power with support from the city. As such, the LDE system should be viewed as a kind of private-public partnership activity. The dire financial position of the municipality was remedied by revenue raised through local development exactions. Although Asukata was a leading figure in the Japan Socialist Party, his use of public-private partnerships went far beyond their strict socialist doctrine.

²⁴ In 1973, Tamura as chief planner proposed the concept of municipal general hospitals based on private-public partnership: the city bought sites for planned general hospitals and subsidised part of the construction fees for private medical institutions that ran hospitals for public use.

²⁵ According to the Town Planning Act 1968, town planning districts are designated as the areas which have to be planned, developed, and preserved as a unified entity.

²⁶ It was widely said among the central government and business community, who did not share a desire to preserve the natural environment for citizens, that the whole of Yokohama should have been designated as an urbanised area due to its proximity to Tokyo and its high market value as a residential area.

²⁷ A good example of housing development in a non-urbanised area can be observed in one done by the Keihinkyuko railway company: Kamariya housing development in Kanazawa ward of Yokohama, only 26% of the whole area of 275 hectares, was changed into urbanised area, being developed for housing of 20,000 planned residents, and the rest of which remained as a non-urbanised area, and was used for



public facilities and parks. Its planning permission was initially obtained in 1973 then suspended because of company's economic difficulties until 1978 when it was again permitted by the city.

Source <http://www.keikyuu.co.jp/information/history/chronology/06.html>

²⁸ This foundation was set up in 1984 as an affiliated organization of the city with the objectives of community planting, forest preservation, and promotion of greenery awareness by citizens. As of 2001, it had received a total amount of 1.3 billion yen donated by developers.

²⁹ According to the city of Yokohama, "the Municipal policy formulation paper signed by the mayor regarding the LDE system in 1995."

³⁰ Although a monetary calculation did not appear in the policy paper in 1995, the amount of municipal benefit can be calculated by comparison with the 87.3 billion yen by the end of 1980 which was shown on the other municipal policy formulation paper in 1980 by the city of Yokohama. It is therefore assumed that through exactions, the city benefited by approximately 500 billion yen in total between 1968 and 2004 when the LDE system was finally abolished.

³¹ By the first review of the LDE system of 1972, the development control standing committee ("DCSC") administered by the Planning and Coordination Bureau, directed by Tamura, and development control executive committee ("DCEC") administered by development control section of Architectural Bureau had been established. The DCSC was in charge of large-scale and important development application which needed an executive decision from wider perspective of city administration, and the DCEC as concerned with regular applications.

³² The Planning and Coordination Section had initially been set up by mayor Asukata when Tamura entered the city administration. Although Tamura was the right person to become the head of the Bureau, Asukata placed a well-trained bureaucrat as its head and Tamura as the deputy head. Three years later, when the Planning and Coordination Section was expanded into the Bureau, Tamura became its head.

³³ Tamura named this style of management "independent integration."

³⁴ Although Yokohama has a long history as a trading port opened in 1859, Tokyo has always been the centre of Japan in terms of commercial and/or business activities. Yokohama is mainly used as a residential satellite to Tokyo, even if it has industrial and business districts of a limited size.

³⁵ In 1978 an owner of apartment housing sued the city of Musashino demanding the return of an educational impact fee already paid amounting to 15 million yen. The owner was concerned over the payment of the impact fee since the city abolished the system of impact fee immediately after he/she had paid it. The Supreme Court decided in 1993 that impact fees were not illegal so long as they were paid by agreement, however an impact fee being required as a prerequisite for administrative process of concerned development was deemed an illegal administrative act. Then the Supreme Court returned the case to the Tokyo District Court and two parties, the city of Musashino and the owner of apartment housing, settled the case by paying 23 million yen from the city to the owner. Source: The city of Musashino, *Hundred years' history of Musashino city*, pp. 1029-1038, 2011

³⁶ In 1978 Yamaki Construction Company, headquartered in Musashino city, sued the city of Musashino which had refused to supply municipal tap water to the apartment building which Yamaki had constructed and owned, because Yamaki had progressed the construction without gaining approval from its surrounding residents, which was a prerequisite of Musashino city's LDE system. The Supreme Court determined in 1989 that the refusal to supply municipal tap water was a last resort for the municipality as a measure to compel a concerned developer to obey the rule of LDE system, though the tap water was a basic necessity for residents of apartment housing and therefore the municipality had a responsibility to supply the water to any developments when requested to do. The final verdict was that the mayor of the city forfeited a penalty payment. Source: The city of Musashino, *Hundred years' history of Musashino city*, pp. 1029-1038, 2011

³⁷ The Ministry of Home Affairs was in charge of local government governance, having been allocated much of the responsibility of the enormously powerful pre-war Ministry of Interior.

³⁸ In 2001 as part of reorganization of national ministries, the Ministry of Construction and the Ministry of Transport were consolidated into the Ministry of Construction and Transport.

³⁹ Since early 1980s in the United States lawsuits between local governments and private developers in terms of development exactions have occurred frequently. When giving permission to developers, local governments have required a wide range of exaction such as impact fees for construction of infrastructure and appropriate layout of planned buildings including installation of footpaths or parks on the planned site. State governments gradually began to support local governments' independent efforts through passing State Enabling Acts for development agreements and impact fees. The fundamentals of these Acts derive from police power vested on States as an inherent duty to guard welfare and security of state people. On lawsuits in state and/or federal supreme courts, nexus, a strong relationship between causes and results is always essential. It should be noted that when the central government of Japan tightened pressure to local governments concerning LDE systems, they used rhetoric to justify relaxation of LDE systems by demanding the elimination of obstacles of non-tariff barriers from the U.S. federal government. However, both federal and state governments have supported local municipalities in terms of housing development control. Regarding the case of England, the Community Infrastructure Levy ("CIL") came into force on 6 April 2010 through the Community Infrastructure Levy Regulations 2010, which is a planning charge introduced by the Planning Act 2008 as a tool for local authorities in England and Wales to help deliver infrastructure to support the development of their area. New housing developments which create net additional floor space of 100 square metres or more, or create a new dwelling, are potentially liable for the levy. This new levy was agreed parliament and introduced finally after a long history of trial and error on betterment recapture, following the Uthwatt committee of compensation and betterment in 1942. England had a well-thought rationale for its betterment concept even before Uthwatt, when the Housing and Town Planning Act 1909 proclaimed that local authorities may claim one-half of the increase in value of any property which is increased in value as a result of a town planning scheme. Local authorities in England could exercise discretionary planning power when bargaining with developers for community contributions such as the construction of community facilities or infrastructure. This kind of procedure had been long criticised by developers and land owners, therefore a new development planning regime was needed. The introduction of CIL has increased the certainty of development and was welcomed by developers, however there is a view concerned about the reduction of planning powers of local planning authorities.

⁴⁰ It is estimated that Yokohama city's population will continue to increase until 2019.

⁴¹ A new municipal primary school, for the purpose to sub-divide large enrolment of existing Hiyoshidai primary school in Kohoku ward, is now under construction and will be completed in 2020. This was caused by a large housing development of 5.6 hectares in site and the developer has sold the school site of 9,700 square meters to the city. The city spends 8.3 billion yen for acquisition of land and construction fee with the central government grant of only 760 million yen included.

⁴² There will be no financial allowance left for the reconstruction of existing urban infrastructure, because the social security expenses such as pensions have continued to expand exponentially.



The status and use of soft law in local governments' management of urban development: Restructuring the logical framework of administrative guidance on impact fees for housing development in 1970s Japan

Kenji Asakawa

JD, Institute for Global Environmental Strategies (IGES), asakawa@iges.or.jp

This research aims to analyse the use of administrative guidance such as the local development exaction system for collecting impact fees from developers in connection with housing developments from the viewpoint of “soft law”, as a collection of nonbinding social norms in Japan. It takes a brief look at the history of Japanese administrative guidance on impact fees from 1960s to 1990s, to identify how it contributed to public infrastructure development as a form of soft law in Yokohama. Furthermore, it considers the situation now faced by rapidly growing cities in developing countries and what they may learn facing a similar dilemma to that which confronted Japanese local governments in the past. Finally, it recommends more effective soft law for the management of urban development by cities in developing countries, and identifies challenges, some of which Yokohama experienced and others which it did not, which are likely to arise in developing countries wishing to make use of soft law such as local development exaction systems.

Keywords: soft law, local governments in Japan, urban development management, administrative guidance on impact fees, planning legacy and heritage

Research objectives and introduction: Why local governments needed administrative guidance on impact fees for housing developments yet refrained from using them

This research aims to analyse the rationale behind Japanese local government use and abolition of administrative guidance such as the local development exaction system for collecting impact fees from developers in connection with housing developments in 1960s and 1970s then consider whether similar guidance could be used to address public infrastructure development issues in major cities of developing countries, using Japan's experience in the 1960s and 1970s as a precedent. Insofar as an analogy may be drawn, this research intends to consider how such guidance could work more effectively than it did in Yokohama, which remains one of the model cases of implementing such guidance successfully from the viewpoint of “soft law”, as a collection of nonbinding social norms.

The rapid housing development that accompanied Japan's high economic growth starting in the 1960s primarily advanced in areas adjacent to major cities. This forced local governments, which were legally responsible for the construction and maintenance of public infrastructure, to incur significant expenses investing in such infrastructure. This included space-intensive projects, such as public schools for compulsory education consisting of elementary and junior high schools, and urban parks, which are required to be built both in proportion to the number of school children by the School Education Act, and the dimensions of the housing development in new housing areas, respectively. However, local governments' budgets could not accommodate the sharp increase of expenditure that accompanied such rapid population growth and housing development, since their additional revenue, especially that levied as local inhabitant tax from new residents, would not become available until the housing development for those new residents had been completed and those residents had moved in. In addition, although local governments sought a land value capture method to fund investment in public infrastructure, land readjustment could only provide rather small-scale spaces such as for roads, but was not sufficiently robust to secure space for large-scale infrastructure of the type mentioned above. Miki¹ analysed that the “benefit principle” system under Urban Planning Act could be utilised only for building sewerage because it was difficult to place a concrete value on the benefits realised from other public infrastructure. In order to levy additional local taxation, local governments are legally required to obtain permission from central government for tax not stipulated in the Local Autonomy Act. Furthermore, local governments were required to permit urban development according to the laws imposed by the central government, and Usui² said that they did not have any discretion to take the local situation into consideration when granting development permission. Therefore, many local governments established so-called “administrative guidance” including a local development exaction system (hereinafter called the “LDE system”) to require contributions of land in connection with housing developments, which relieved a significant portion of the financial burden on local governments that would otherwise be caused by these developments.



LDE systems typically stipulated the scope of their applicability and standards setting out the required dimensions of land to be provided for public infrastructure, as in Yokohama (see Table 1). Although it did not have legally binding force on developers, most local governments were able to obtain developers' voluntary compliance and have them contribute a portion of their developed land for free or at a nominal³ price. Developers' willingness to contribute should be seen against the prevailing economic circumstances in which a rapid increase in land prices meant developers could afford to comply, and their early compliance could facilitate cooperation of local governments, especially in the 12 major cities entitled to permit urban development in the early 1970s.

Applicability	All housing development projects*
Land required to be contributed for parks	Equal to or greater than 4% (for a public developer) or 3% (for a private developer) of development area without compensation
Land required to be contributed for public schools for compulsory education	Equal or more than 5% of development area with compensation for their costs, excluding their loss of income

*: From 1972, this was applicable to housing developments with an area equal to or greater than 0.1 ha.

Table 1: The administrative guidance of Yokohama concerning its LDE system in relation to housing development (excerpt). *Chosa Kiho (Quarterly Journal of Policy Studies) (in Japanese)*. [City of Yokohama, 1968] 75-78.

The city of Yokohama was the first major city to establish such administrative guidance since it had been rapidly populated by a large number of commuters to Tokyo, which imposed a severe financial burden for public infrastructure development. As a result, about 60% of land used for public schools for compulsory education, equal to land for 150 schools, was procured and 1.9 times the statutory minimum size of park land was secured from developers during the 25 years up to 1995 as calculated by Toshihiro and Sato⁴ and Taguchi⁵. As Yokohama's success was observed by other local governments, approximately 99% of local governments in Tokyo, 70% of local governments in Japan's three largest urban areas and 46% of all local governments nationwide had established similar guidance by 1996. (see Figure 1)

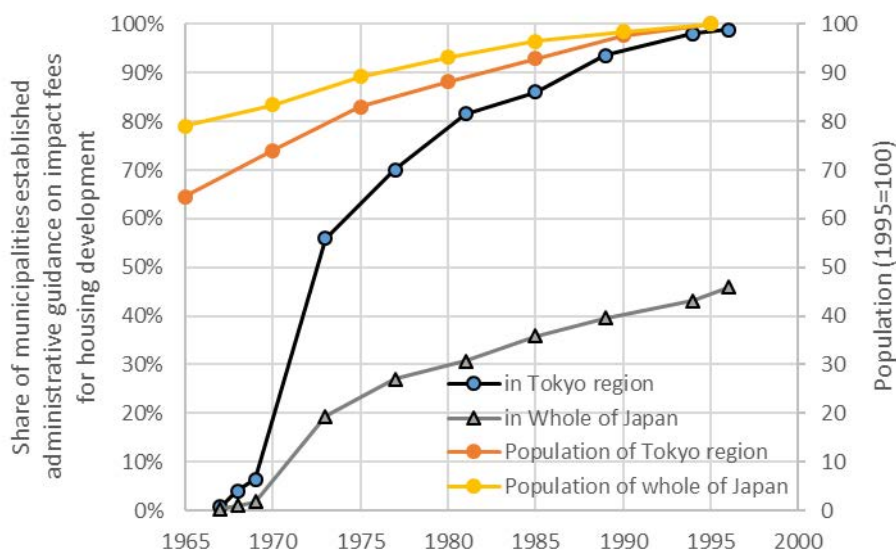


Figure 1: Share of local governments establishing administrative guidance on impact fees for housing developments and population growth. *National census*. [Ministry of Internal Affairs and Communications, 1995], *Takuchi Kaihatsu Yoko no Minaoshi no Pointo (How to revise administrative guidance on impact fees for housing development) (in Japanese)*. [Ministry of Construction, 1997], 8.

However, the lack of binding force behind these guidelines also caused tension between local governments' demands and non-compliant developers. Furthermore, some non-compliant developers brought lawsuits against the local governments to confirm the lack of binding force of the guidance and/or claiming compensation. A few



small and mid-sized local governments lost such cases, as in *Yamaki Kensetsu Kabushiki Kaisha v. the City of Musashino*, [Tokyo Dist. Ct. 1975], since they could not control permits for urban development and abused their discretion to refuse non-compliant developers' requests for access to water supply and/or sewerage infrastructure. Those cases due to local governments' abuse of their discretion using administrative guidance became a source of social criticism and were blamed for raising land prices, and the Ministry of Construction issued 11 official circulars notes from 1982 to 1996 requesting that local governments refrain from imposing their LDE systems on developers. In addition, public demand for housing developments had been moderated by the slow-down in economic growth from the late 1970s, shifting the focus of local governments from "restraining" to "inducing" housing development in order to generate needed revenue from local tax by increasing their local populations. Accordingly, the majority of local governments refrained from implementing such guidelines, perceiving them negatively as stopgap measures to an issue that required the enactment of alternative laws and regulations at a national level, as evaluated by Ministry of Construction⁶.

Re-evaluating administrative guidance by restructuring the logical framework as soft law: How the city of Yokohama implemented it successfully

Even without legal binding force, administrative guidance (soft law) in Japan is considered a social norm in the same manner as laws and regulations (hard law) are, in terms of their common intent to serve the public welfare. The defining characteristic of soft law is a tool to lead people in a specific direction intended by the social norm maker. Therefore hard law is unnecessary where soft law can successfully elicit voluntary cooperation between parties. Moreover, soft law is somewhat superior to hard law in terms of its ability to build solid consensus without binding force, and its flexibility in establishing procedures to address various cases and accommodate changes in the market involving parties. Because of the abovementioned advantages, local governments were able to use administrative guidance to contribute to urban development control through the soft law of the LDE system. Therefore, administrative guidance should be perceived more positively as an effective policy tool.

From the viewpoint of law and economics, a party's obedience of a social norm is understood as based on maximising its own interests, and whether those interests will best be served by compliance with or non-compliance with that norm, considering the benefits and consequences of each option, as explained by Tyler⁷. Regarding the factors considered when one assesses whether to comply with a social norm, Iida⁸ identified sanctions, the necessity of the norm in question and individual morality as major factors that affect parties' decisions regarding the above, and sanctions are one of the most significant factors affecting parties' decision making. Sanctions can be categorised into two types: (1) those imposed by an authority, such as penalties, and which may be accompanied by hard law, and (2) those imposed by society, such as damage to reputation, which may be accompanied by soft law as well as hard law. In terms of this classification, administrative guidance may be regarded as soft law accompanied by sanctions imposed by society, such as the reputational effect⁹.

Yokohama's administrative guidance applied to developers can be considered a model case of an LDE system in terms of eliciting voluntary compliance, which is considered one of the most critical challenges for utilising administrative guidance as soft law. The following discussion addresses why Yokohama was successful.

As mentioned above, it is important to increase the impact on a party's interests in complying with the norm, including the detriment caused by violation, to lend credibility to soft law. According to Fujita and Matsumura¹⁰, the interests consist of the following three types: (1) direct and subjective benefits from compliance shared only between the local government and the developers, (2) long-term benefits (if prioritised by the developer), and (3) indirect benefits that may be accrued by demonstrating their compliance with the guidance.

Regarding (1) subjective benefits, since most developers in Yokohama are private companies, they will comply with guidance where compliance aligns with their economic interests. The economic interests of developers were served by the following in the case of Yokohama. Land in Yokohama had a higher scarcity value for housing development since as Tamura¹¹ said the Yokohama administration allowed a comparatively smaller area for development, approximately only 75% of the whole administrative area, compared to the area in Kawasaki, which is an adjacent city to Yokohama and has topographical characteristics similar to Yokohama, which opened approximately 88%. This enhanced the attractiveness of Yokohama, especially to commuters who continued to work in Tokyo, and created a strong incentive for developers to build housing in Yokohama. Furthermore, since the city of Yokohama was vested with the authority to issue land development permits as one of the government-designated major cities, that fact encouraged developers to comply with the guidance as early as possible in order to swiftly obtain land development permission. In addition, the guidance strengthened the bargaining power of the city of Yokohama by integrating the departments in charge of public infrastructure that normally negotiated individually with developers, since the guidance concerned various sections of public infrastructure, which helped the Planning and Coordination Bureau work as a central authority under the strong leadership of Dr Akira Tamura.



Therefore, the city of Yokohama offered (1) subjective benefits to developers to facilitate voluntary compliance with their guidance as a result.

The (2) priority given to long-term benefits applies to developers who prioritise long-term benefit over short-term gain, and attracts developers seeking long-term benefits through their compliance with norms. Fujita and Matsumura¹² identified the factors that affect the impact of (2) on a party's interests, such as the size of the group or party affected by the norm, as well as its type and degree of homogeneity. In the case of Yokohama, since housing development to be subject to the administrative guidance is predominantly promoted by railway company seeking transit-oriented development which could provide long-term benefits more than the other kind of housing development, the number of major developers prioritising long-term benefits was relatively few, and this factor increased the homogeneity of developers. The public, especially potential buyers of housing real estate, could easily identify each developer individually and this enhanced (3) the reputation effect, discussed below. This meant that developers tended to follow the leading developer, Tokyu Corporation, which fully complied with the administrative guidance since it had been derived from agreement between Tokyu Corporation and the city of Yokohama. Therefore, although the city of Yokohama might have utilised the homogeneity of developers in order to facilitate their voluntary compliance with the norms that the leading developer had already accepted, the feature of homogeneity among parties is not one within the control of a local government, and the city of Yokohama had no power to increase a developers' preference for (2).

Regarding (3) indirect benefits that may be attracted by developers demonstrating their compliance with the guidance, Fujita and Matsumura¹³ explained (3) indirect benefits can be accessed by information about a vendor which can be conveyed only indirectly by demonstrating the differences between vendors to consumers. In the case of administrative guidance, a developer's compliance would indicate that the accompanying public infrastructure has been properly built, and accordingly, the quality of the residential land is guaranteed to an extent, indicating that land meeting the specifications of administrative guidance may be of a higher standard, or that a compliant developer may be expected to develop land for comfortable living. The local government could signal the above to the general public, and the developer would therefore realise value through such compliance by gaining a greater profit from higher sales of their residential land. In addition, as the guidance set specifications on more essential public infrastructure for living, non-compliance with those specifications would cause larger loss due to reputational effects. Although the city of Yokohama at one stage intended to place a notice in a newspaper indicating that an area developed by Tokyu Corporation would not have an elementary school if Tokyu Corporation refused to obey their guidance as Tamura reminisced,¹⁴ they did not take measures to credit compliant developers. Local government might be able to further enhance developers' compliance with administrative guidance if they demonstrated a positive endorsement for compliant developers, such as an accreditation system for housing land meeting the specifications of their guidance.

Applicability to growing cities in developing countries: Implications of LDE systems

Local governments are responsible for providing various kinds of public services. Although the types of services supplied by local governments varies, local governments in Indonesia and Vietnam are responsible for the same kinds of services as those in Japan (see table 1). However, only small budgets are allocated for the services in local governments, for example, local governments in Indonesia spend less than 1/60th of the average expenditure in Japan (see table 2). Considering the decentralisation of authority in developing countries tends to assign local governments to deliver public services at their cost without taxation allocated from central government, many local governments in developing countries cannot afford to supply sufficient public services for rapidly developed housing areas at their own expense, though grants from central government to local governments partly fill the gap, as analysed by Kimura¹⁵.

Country	Planning	Basic education	Basic social welfare	Basic health service	Water supply	Electricity supply	Public transport	Business development support
<u>Japan</u>	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
China	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
India	Yes	Yes	No	Yes	Yes	No	Yes	Yes
<u>Indonesia</u>	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Malaysia	Yes	No	No	No	Yes	No	Yes	Yes
Philippines	Yes	No	Yes	Yes	Yes	No	No	Yes
Thailand	Yes	Yes	Yes	No	Yes	No	Yes	Yes
<u>Vietnam</u>	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes



Table 1 Service delivered by local governments in the Asia-Pacific region, *Decentralization and Local Democracy in the World: First Global Report* by United Cities and Local Governments 2008. World Bank Publications. (Cities, U., & Governments, L. 2008) 67.

Country	Total public expenditure a) as % of GDP b) € per capita	Local public expenditure (local and meso level only) a) % of GDP b) € per capita	Ratio of local public expenses/total public expenses	Tax shares + general grants as % of the total LM income	Local tax revenues (=tax revenues subject to a local tax power) as % of total LM income
Japan	a) 22.9% b) 7,243	a) 12.3% b) 3,903	53.6%	69%	34%
Indonesia	a) 19% b) 189	a) 6% b) 62	33%	70%	<10%
Vietnam	a) 24% b) n/a	a) 11% b) n/a	48%	44%	24%

Table 2 Relative size of local governments' expenditure and income in the Asia-Pacific region, *Decentralization and Local Democracy in the World: First Global Report* by United Cities and Local Governments 2008. World Bank Publications. (Cities, U., & Governments, L. 2008) 68.

Furthermore, it is unrealistic for local governments in developing countries to establish additional local tax independently from central government. In Indonesia and the Philippines, since the variety of the local tax is limited/controlled by national law, they do not have any discretion to establish additional types of local tax. In those circumstances, they cannot increase revenue from the current taxation settings. Therefore, in order to raise revenue they would be greatly assisted by a voluntary LDE system based on soft law, such as the administrative guidance adopted in Japan.

Since soft law can bring certain incentives for land developers even in developing countries, and economic incentives are of major benefit to developers, developing countries may wish to consider the feasibility and effectiveness of a similar LDE system to that implemented by the Yokohama administration, by considering the incentives of (1), (2) and (3) above. Local governments in developing countries could increase the benefits offered to developers under (1), especially those which are vested with the right to issue land development permits as in Yokohama. However, a major part of housing land in developing countries' major cities tends to be developed by foreign developers who decrease the homogeneity of developers and could reduce (2) as a result. However, local governments could learn from Yokohama's experience by making greater use of the reputational benefits such as those in (3) if they successfully launched a labelling and/or certification system that recognised compliant developers.

The way forward: Concluding remarks

Rapidly growing cities in developing countries face a similar dilemma to that experienced by Japanese local governments in the past, and they may likewise be expected to have difficulties in raising capital for public infrastructure investment. This research has considered key taxation and public spending settings in a small number of developing countries for the purpose of exploring whether Japanese local government use of soft law could act as a kind of model. Nevertheless, successful application of soft law in developing countries will require further analysis of enabling environment of those countries for such a soft law, including their differences from Japan, in order to ensure that the implementation of LDE systems can be successful. Subject to that additional analysis, soft law of LDE systems may be a more appropriate solution than legislation, especially in developing countries where the rule of law is weak, since they have greater difficulty developing and enforcing laws when compared to Japanese local governments that have experienced high economic growth. Therefore lessons learned from Japanese local governments, especially the Japanese experience of using soft law for urban development management, including how to achieve such a solid consensus without the availability of legal coercion, could contribute to more effective practice of using impact fees to solve this dilemma in developing countries.



However, local governments in developing countries making use of soft law such as LDE systems would face the other challenges outlined below, some of which Yokohama experienced and others which it did not, but are likely to arise in developing countries.

As Uga¹⁶ identified, Japan's experience was that administrative guidance incentivised¹⁷ developers to scale down the size of their land developments in order to avoid requirements of the guidance that specified minimum sizes in determining its scope of applicability including in Yokohama. Since those local governments never found a satisfactory solution to that issue, it remains one of the big challenges accompanying the use of administrative guidance. In addition, there are the other issues that are faced commonly by local governments in developing countries, such as the governance and institutional capacity of the local governments.

Regarding governance capacity, local governments' direct collection of impact fees from developers would engender a risk of bureaucratic corruption, such as bribery. All taxes, including local taxes, are generally collected by central government, and this provides a safeguard against corruption in local governments that tend to have lower capacity in terms of governance than central government.

Regarding institutional capacity, the city of Yokohama invited professionals to organise the Planning and Coordination Bureau as a central authority for implementing administrative guidance, including Dr Akira Tamura, head of the Bureau, who was directly invited by the Yokohama city mayor of that time, Ichio Asukata. In addition to having their bargaining power boosted by the guidance and institutional reform to establish the Bureau, competent professionals working as tough negotiators brought continued success to their application of their guidance. Since local governments in developing countries still face many issues due to their varying individual capacities, successful application of such guidance would seem more challenging in developing countries.

Soft law can contribute to fundraising for public infrastructure, just as the LDE system did in many Japanese local governments, including Yokohama. As discussed above, it has certain advantages and should be considered as an alternative to legislation from central government. If local governments in developing countries are able to strengthen their capacity sufficiently to implement such administrative guidance, they can learn from the experience in Japan generally, and especially the model provided by Yokohama.

Acknowledgements

I appreciate the input of Dr Toshio Taguchi and the other members of the Akira Tamura Memorial-A Town Planning Research Initiative NPO, who provided me numerous suggestions and feedback on this research topic. I noticed significant improvements in this research through dialogue with members in the last several months. In addition, Mr. Timothy Gray played a key role as proof reader by reviewing this paper with expertise as a professional legal editor.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Kenji Asakawa is a programme manager, and conducts research and investigation on good practices guidance on low-carbon and sustainable city development in Japanese cities to be applied to emerging cities in developing countries. Currently he is also a member of the Akira Tamura Memorial-A Town Planning Research Initiative NPO.

Bibliography

Fujita, Tomokata, and Matsumura, Toshihiro, "*Shakaikihan no Hou to Keizai*" ("*Law and Economics of a social norm*" in Japanese), submitted to the 1st symposium on soft law of interaction between market and nation (2004)

Iida, Takashi, "Hou wo Mamoru Doki to Yaburu Doki" ("Incentives to compliance and non-compliance" in Japanese), *The Japanese Journal of Labour Studies* 57, no. 1 (January 2015)

Kimura, Shunsuke, "Hikaku Seido Kenkyu: Ajia San-kakoku no Tihoubunken to Tihouzaisei" (A Comparative Study of Decentralization and Local Public Finance in Three Asian Countries: Analysis of Local General Revenue of Indonesia, The Philippines and Japan) (in Japanese), *The Hitotsubashi Journal of Law and International Studies* 14 no. 1 (March 2015)



The 18th International Planning History Society Conference - Yokohama, July 2018

Miki, Yoshikazu, *Juekishu Futanseido no Houteki Kenkyu (Legal study on beneficiary liability: in Japanese)* (Tokyo: Shinzansha Publisher, 1995)

Ministry of Construction, *Takuchi Kaihatsu Yoko no Minaoshi no Pointo (How to revise administrative guidance on impact fees for housing development: in Japanese)* (Tokyo: Gyo-sei, 1997)

Shima, Norihisa, A Study on the Development Trend based on Development Permission in Jakarta Special Province, Indonesia, *Journal of the City Planning Institute of Japan* no. 45-3 (2010)

Taguchi, Toshio, interviewed by the author, October 11, 2017.

Tamura, Akira, "*Tamura Akira no Tatakai*" ("*Tamura's struggle with urban development in Yokohama*" in Japanese), (Tokyo, Gakugei Shuppan Sha, 2006)

Toshihiro, Atsutaka, and Sato, Kyoto, "Yokohama administrative guidance on impact fees for housing development" in *Practical Method of City-Planning: A record of ten years of experience of Yokohama City's Bureau of Comprehensive Planning*, ed. Aiko Hasegawa (Tokyo: Kajima Institute Publishing, 1978)

Tyler, Tom R., *Why People Obey the Law* (Princeton University Press, 2006)

Uga, Katsuya, "Yoko Gyosei" ("Administrative guidance" in Japanese), *Jurist* 880 (1987)

¹ Yoshikazu Miki, *Juekishu Futanseido no Houteki Kenkyu (Legal study on beneficiary liability: in Japanese)* (Tokyo: Shinzansha Publisher, 1995), 3.

² Mitsuaki Usui, *Toshi Gyouseihou Seigi (Urban administrative law: in Japanese)* (Tokyo: Shinzansha Publisher, 2014), 427-436.

³ In the case of Yokohama's LDE system, the local government obtained the land for the schools at the cost of developers' procurement without a premium.

⁴ Atsutaka Toshihiro, and Kyoto Sato, "Yokohama administrative guidance on impact fees for housing development" in *Practical Method of City-Planning: A record of ten years of experience of Yokohama City's Bureau of Comprehensive Planning*, ed. Aiko Hasegawa (Tokyo: Kajima Institute Publishing, 1978), 62-63.

⁵ Toshio Taguchi, interviewed by the author, October 11, 2017.

⁶ Ministry of Construction, *Takuchi Kaihatsu Yoko no Minaoshi no Pointo (How to revise administrative guidance on impact fees for housing development: in Japanese)* (Tokyo: Gyo-sei, 1997), 3-20.

⁷ Tom R. Tyler, *Why People Obey the Law* (Princeton University Press, 2006), 3-7.

⁸ Takashi Iida, "Hou wo Mamoru Doki to Yaburu Doki" ("Incentives to compliance and non-compliance" in Japanese), *The Japanese Journal of Labour Studies* 57, no. 1 (January 2015): 19.

⁹ *Ibid.*, 20.

¹⁰ Tomokata Fujita, and Toshihiro Matsumura, "*Shakaikihan no Hou to Keizai*" ("*Law and Economics of a social norm*" in Japanese), submitted to the 1st symposium on soft law of interaction between market and nation (2004): 5.

¹¹ Akira Tamura, "*Tamura Akira no Tatakai*" ("*Tamura's struggle with urban development in Yokohama*" in Japanese), (Tokyo, Gakugei Shuppan Sha, 2006), 174-180.

¹² Tomokata Fujita, and Toshihiro Matsumura, "*Shakaikihan no Hou to Keizai*" ("*Law and Economics of a social norm*" in Japanese), submitted to the 1st symposium on soft law of interaction between market and nation (2004): 6.

¹³ *Ibid.*, 10.

¹⁴ Akira Tamura, "*Tamura Akira no Tatakai*" ("*Tamura's struggle with urban development in Yokohama*" in Japanese), (Tokyo, Gakugei Shuppan Sha, 2006), 140-143.

¹⁵ Shunsuke Kimura, "Hikaku Seido Kenkyu: Ajia San-kakoku no Tihoubunken to Tihouzaisei" ("A Comparative Study of Decentralization and Local Public Finance in Three Asian Countries: Analysis of Local General Revenue of Indonesia, The Philippines and Japan" in Japanese), *The Hitotsubashi journal of law and international studies* 14 no. 1 (March 2015): 85.

¹⁶ Katsuya Uga, "Yoko Gyosei" ("Administrative guidance" in Japanese), *Jurist* 880 (1987): 106-113.

¹⁷ Similar incentives under development permission system in Indonesia was reported by Norihisa Shima, A Study on the Development Trend based on Development Permission in Jakarta Special Province, Indonesia, *Journal of the City Planning Institute of Japan* no. 45-3 (2010): 35.



A study of unorthodox town making by Akira Tamura: the transmission of Tamura's vision to younger generations

Atsuhiko AOKI*

* Member of Akira Tamura Memorial-A Town Planning Research Initiative NPO, Graduate student of the Graduate School of Humanities and Sociology of the University of Tokyo.

a.aoki1021@gmail.com

This thesis intends to assess how Akira Tamura's "Town making" vision has been passed down to and utilised by younger generations, focusing on the experiences of a study group in which Tamura's successors have utilised his vision. Tamura promoted the group as an informal place to convey and understand the essence of town making, and insisted on the importance of flexibility in consideration of stakeholders. This thesis sets out to answer the following questions: (1) what are the key features of Akira Tamura's town making that have been passed on, and (2) how can they be applied by town planners now and in the future? In preparation for writing this thesis, I conducted semi-structured interviews of 4 former Yokohama public officials and referred to documents in the "Akira Tamura archives" of Yokohama city's historical library. This case study demonstrates that Tamura aimed not only to improve the law and revise the planning system itself, but to imbue urban planning with greater fluidity.

Keywords: Development with consideration of stakeholders, Town making and local governance, Planning and coordination within city administration

Introduction

The purpose of this study is to assess how Akira Tamura's "town making" vision has been passed down to and utilised by younger generations. Although the Japanese urban planning legislation regulating the control of urban space is largely based on modern Western city planning, its practical application has a strongly centralised and business-centred character.¹ At the same time, however, there is a lack of political will and social support for central government-led planning, and the principle of "architectural freedom" in urban spaces leaves planning to the forces of *laissez-faire* market capitalism. Against this background, a unique contrivance for the control of urban spaces called "town making" emerged at the level of Japanese local government entirely independent from the amendments to individual urban planning and building standards laws. According to Koizumi Hideki, an urban engineer, the essence of town making is "to create a relationship/framework among citizens and local communities that controls the market instead of the central government doing so"²

As shown in the paper presented by Chihiro Tamura and Toshio Taguchi, Akira Tamura talked about urban planning in easy-to-understand terms and attracted a great deal of interest in town making through his books. In past studies, Tamura has been referred to as just one of the respected intellectuals behind the Asukata-led Yokohama city government (1963-1978) and his actual work and how it impacted on local governments across Japan has not been reviewed.³ However recent studies, which have corresponded to the increasing popularity of town making in Japan, have begun to assess Tamura as a pioneer who understood city planning in the context of local governance issues.⁴

I do not believe Tamura's town making was intended as a theory for controlling built environments. Tamura was not originally a theorist of urban planning but instead built his own town making theory through responding to the needs and circumstances of Yokohama city. As urban engineer Shunichi Watanabe has aptly said, those who try to define "town making" are "basically practitioners—not theorists—who abstract their unique experience to their definition" and "their definition is inductive and lacks deductive discussion based on theory or discipline".⁵ Nevertheless, Akira Tamura's town making theory opened the subject of town making to a wider range of people, which in turn led to a plurality of understandings, making it difficult to precisely define the impact of town making on Japanese urban planning.

Therefore, the question to be asked is, given his fluid and responsive approach, (1) what are the features of Akira Tamura's town making that have been passed on and (2) how can they be applied by future town planners? In this paper, I focus on the mutual exchanges between Tamura and members of the study group on town making in Yokohama as a case study to solve these questions.



Figure 1: Portrait of Akira Tamura

Approach and Data

To conduct this study, I referred to documents in the “Akira Tamura archives” of Yokohama city’s historical library. The data in the archives are preserved in order to remember Tamura’s work. His family offered those documents to the city historical library. Prior to using those documents, I obtained their permission.

I also conducted semi-structured interviews of 4 former Yokohama public officials. All survey respondents were male and started their careers during the Asukata-led city government period (1963-78). The main questions asked respondents to (1) describe their relationship with Tamura, (2) their points of view regarding Tamura’s “town making”. I adapted the actual questions to correspond with the job descriptions and length of service as appropriate. These surveys were conducted on the understanding that their names would be anonymised, in order to elicit frankness and honesty in their responses.

Fluctuation in Tamura’s town making—The practice in Yokohama

Akira Tamura once said:

Urban design became a hot topic in architectural journalism in the early 1960s. However, it ignored the social relationships which are comprised of many stakeholders. In the late 1960s, there were few people who disputed the importance of urban design. However, one objective I had in entering Yokohama city was to make urban design possible in practice.⁶

The city of Yokohama in the late of 1960s existed in an era when urban policies addressing issues related to post-war reconstruction and high economic growth were a top priority of the Asukata-led Yokohama city government. The city government framed their city policy as “Making a city in which everyone would want to live” and had to find new ways to combat the problems caused by drastic industrialisation and urbanisation. Under these circumstances, Yokohama’s Six Spine Projects were launched, mainly by the Planning and Coordination Bureau (“PCAB”) led by Akira Tamura, as an advisor to Asukata. A key advantage of the PCAB was that it made the urban development required for the Six Spine Projects possible by coordinating each of the departments of the city office prescribed in the centralised city planning related laws and regulations. The motif underlying the approach had already been described as a lack of “comprehensiveness” in urban planning in the 1960s. For example, Tange Kenzo had the following criticism:

I do not find any vision for the future in the legal system for urban planning in Japan. It is quite out-of-date. Furthermore, the laws related to urban planning have lost comprehensiveness, lost sight of the system,



reflecting the sectionalism of the government agencies. Hence, urban planning has lost its substance and become just an ideological consolation.⁷

Various discussions being brought into the public domain through vehicles such as the “urban design movement” made the issue of how to ensure urban planning was a more comprehensive process into a lively subject in architectural journalism. Tamura was also actively involved in these discussions. In 1965, Tamura criticised Japanese architects who could only draw “pictures” of urban design:

The problem of urban design has been taken up keenly among architects. They have argued that it is important for architects to commit to further urban planning. But in the majority of the projects, they have only been able to draw pictures of ideal urban planning⁸

Interestingly, in the mid-1960s, Tamura was focused mainly on the physical environment of the city: His views regarding the “coordination” of the actors which were positioned at the centre of the discussion of the town planning had not yet solidified. Tamura said:

Who can solve the urban issues? Politicians, economists, sociologists, lawyers, bureaucrats are given their respective roles and it is necessary that they develop solutions to it. However ultimately, the city is an object constructed by iron and concrete. Thus an important role should be given to the new age urban planner — the general planner.⁹

It seems clear that Tamura envisioned not just that multiple stakeholders would participate in solving urban problems, but also that he foresaw urban planners having more comprehensive skillsets. In short, it appears that Tamura believed in the determinism of physical structures. This is in contrast with his views after he committed to Yokohama. Tamura later described his views in the pamphlet of the PCAB as follows:

Urban planning, as with architecture, deals with space and environment, and plans are shown in the form of pictures and figures. But urban planning is used to change the space and urban environment, and never to realise the picture itself. And if it is merely realised, it is likely that it will have caused problems in the process. Urban planning is not necessarily just about building objects.¹⁰

As can be seen concisely here, Tamura emphasised the importance of flexibility, not just building. In other words, what was important for Tamura was not to improve the law and revise the planning system itself, but to carry out urban planning fluidly. For that purpose, it was necessary to “create relationships and frameworks among stakeholders”. It goes without saying that such changes were made in his practice in relation to Yokohama city. That is, the objective of creating of relationships and frameworks among stakeholders is not only to improve the physical environment of the city but also to capture the city from a comprehensive point of view, and to facilitate collaboration between stakeholders for better development. He also emphasised that the involvement of the local administration is beneficial. My interviews asked the question of how far his flexible theory could be utilised, but for the accommodation by the Asukata-led city government. Naoyuki Kuniyoshi, belonging to the PCAB’s design team, said:

In the 70’s, I felt that the members of the design team of the PCAB didn’t recognise ourselves as members of a government office but as challengers for new age city planning. Thus we didn’t have a long-term vision. I thought it was our job to challenge the city office of Yokohama as much as possible in terms of urban design... While there are some people who criticise Tamura, there are also a lot of people who stand for his work as well. It was an era when various people were professionally maturing under him... But after mayor Asukata left Yokohama, we had no choice but to work more conservatively as an organisation within the agency. So we had to make another strategy for that period. If we had continued to act in the same way as we had before, we would only have been ignored.¹¹

The Asukata-led city government provided a place for experimental urban development. As a result of the end of Asukata-led city government, the establishment of a formal organisation in the city government (the PCAB) also meant a loss of flexibility and pragmatism. However, it is also true that there were staff members who showed enthusiasm and support for cultivating a new approach to urban development that included the practical implementation of a flexible organisation that characterised the approach of the Asukata-led city government and Tamura’s urban design. What did those people learn and inherit from Tamura? I will address this next.

Inheritance of Tamura’s point of view—From the perspective of activities of “Machi-Ken”

One interviewee, who served Yokohama city before Akira Tamura left Yokohama city, had believed that there was no place for Japanese municipalities to practice urban planning as he thought it ought to be practised, and hence he was impressed by Tamura’s urban design, and decided to become involved himself in the planning of Yokohama city.



Originally, I did not think that there was anyone doing such work in Japan, well, I wondered what was good in Japanese urban design. I was looking in Japan for the innovation in local governance seen in the UK at the time... so I was so excited when I saw that Tamura was actually doing something new. It was awesome. It was on that basis that I decided to enter the Yokohama city government too.¹²

In his case, he was originally interested in urban design, and he made the decision to join the Yokohama city government because he saw that such innovative practices could be done even in Japanese municipalities. There were also other staff members who were impressed by Tamura's thought processes and design practice in the development of Yokohama city after entering the city government. Another interviewee, who is a convenor of the "town making research society" (known as "Machi-Ken", and hereinafter referred to by this name), described Tamura's personality as follows.

Mr. Tamura embodied a kind of civic value which I don't myself possess. That is, he was cognisant of how to manage the common interests of various stakeholders, not just of individual or specific interests.¹³

By this, we can see that the key elements of Tamura's town planning were the skilled management of diverse actors, and the refusal to be bound by the determinism of physical structures. Tamura retired in Yokohama in 1982, but in 1980 he received a request from a young member and became an advisor to Machi-Ken. It was an informal study group and a place of interaction between workers, companies, and researchers. Tamura's views towards the activities of Machi-Ken were stated ten years after its founding, when recalled as follows.

"Machi-Ken"... It neither wanted to have expertise nor project anything outside, it had no contracts or officials. It was merely a voluntary study group for inner members of city governments. Also, all the members were very young and comprised a modest study group. To me, as I was retiring, my concern was not only for people who were already in management positions, but also for those who were furthering their expertise in urban development.¹⁴

Tamura seems to have participated quite enthusiastically in the group's activities. Another interviewee, who was a former Yokohama municipal official and a member of the research group, reflected as follows.

Mr. Tamura attended more than 90% of the activities of "Machi-Ken". Enthusiastic, wasn't he? Although he sometimes couldn't attend as he needed to go abroad for business trips, he mostly came and listened to the presentations by young group members, and gave advice to them.¹⁵

Another organiser of the research group, said:

There were plenty of city government departments facing problems, so we contacted the department and requested that the chief or section chief make a presentation about them to the study group. Presentations took about an hour and then discussion lasted about an hour... afterwards we went for a drink. Of course Mr. Tamura came with us. He summarised the presentation of the day and gave advice within 10 to 15 minutes. He spoke very quickly. Come to think of it, attending that study group was my greatest source of knowledge about city planning during my lifetime.¹⁶

To summarise the characteristics of Machi-Ken above, (1) it was a place for young city government workers to share their respective problems, (2) Tamura left it to its autonomous operation by its members, and served as a consolidator, (3) the study group itself functioned as a mediator between city government employees and outsiders. An official of the Building Bureau who was participating in Machi-Ken, described the significance of the study group as follows.

Our common understanding was that every aspect of urban development and town planning had to be approached from a broad perspective. It was important for us to expand our network through the study group, and to improve our individual skills for work... We wanted to secure new participants to expand the network. Therefore, we decided to invite new recruits as well as trying not to use technical terms to make it easy for newcomers to understand our approach to urban development. It was a way to build awareness among those interested in town planning. Indeed, it was a place to cooperate and coordinate.¹⁷

The main axis of Machi-Ken was to acquire broad knowledge on town making. At the same time, however it was a place to expand the network for young city government workers who did not have substantial authority in the city government apparatus. Through the study group, they acquired know-how to implement their own flexible planning style. Of course, there were deviations in terms of how much incentive the participants had to attend, and the research group itself did not have concrete abilities. It depended entirely on the individual skills and consciousness of its members.



Year	Main areas of study	Year	Main areas of study
1980	Overview of town making Assessing the region of Yokohama Participation in the Japan Design convention How to develop the seafront area holistically Recycling industrial waste	1985	about the impact of information technology Considering stakeholders when planning
1981	General planning in Yokohama Expressways in Yokohama Industrial structure Museums and cultural administration What is town making? Green master plan	1986	Department stores and development Town making and restaurants Urban designs now
1982	Participation in The Regional Congress of Local Authorities for Development of Human Settlements in Asia and the Pacific The institution of land use A new transportation system Spatial extent and authenticity Focus on the MM21 area	1987	Is it possible to attract overseas university students? Waterfront observation in Tokyo bay Olympic Games in Seoul All about the Yokohama Exposition
1983	Economic growth of Yokohama Aging population problems Internationalisation and local government Yokohama as a model city	1988	A concept—Yokohama as an art centre Waterfront observation in Yokohama Yokohama Flash (art event) Waterfront development Night life in Yokohama
1984	MM21 and the ship “Nihon-Marū” The Yokohama port and economy One region, one product campaign	1989	Challenges of internationalisation Town making from the perspective of a developer Partnership between Yokohama and overseas cities Town making in the Kanazawa district Soundscapes and town making Town making in Hong Kong
1985	Local government in Asia Railways, roads and airports	1990	Housing, environment and the community Machi-Ken 10 year anniversary forum

Figure 2: The activities of Machi-Ken (1980-90).

However, Tamura promoted the group as an informal place as a place to convey the essence of town making, and kept insisting on the importance of flexibility in the interests of stakeholders. This informal place of discussion itself had great significance. Tamura’s town making theory was reinforced and developed through these discussions, and they have formed the basis for practices followed by younger generations. Whilst it is not a very difficult task to set up projects itself, the question is always who would benefit from the project being considered? Tamura’s approach urges attention to seeking consensus. Therefore, Tamura insisted on the necessity of flexibility at all times. Another of the members of Machi-Ken looks back on the practice of Tamura as follows.



Previously, I thought of urban design as altering the physical environment such as by making plazas or creating blueprints for malls. But, well, afterwards, I got to know how much Tamura had discussed with people in the field and how much he had struggled in the city government office. And then finally I came to understand, “Oh this is what urban design actually is.”¹⁸

The essence of Tamura’s town making which developed from the determinism of physical structures to encouraging the participation of and responding to stakeholders has undoubtedly been transmitted to younger generations. At the same time, however, the problems of Yokohama city could no longer be dealt with in the same manner as during the era of the Six Spine Projects in the Asukata-led city government. In Japan, the local government’s planning documents reflect a change in mood that caused planning staff to “rush into planning and make grand promises that are not possible to deliver upon. This has been pointed out as a problem facing Japanese municipalities. This would not be consistent with Tamura’s intention for town making. With reference to Tamura’s practice, the people who gathered at Machi-Ken thought about their town making and would consider pragmatically how ingenious ideas could be possible in the face of real constraints. Rather than adhering strictly to urban planning instructions given by the government, it was important for them to think flexibly with reference to Tamura’s town making.

From the activities of Machi-Ken, a new type of administrative staff who “do not just carry out policy as a matter of budget execution and desk work, but are adept in policy and legal affairs, and actively go outside the government office to discuss matters flexibly with citizens and business operators”¹⁹ has also arisen. One of the administrative staff states as follows.

I went to meet everyone who was involved in the redevelopment project one by one, listening to various stories and talking about how to transfer that person’s rights altogether. Sometimes drink together. By doing so, we can have a heart-to-heart talk about development.²⁰

However, the current approach to municipal town planning does not necessarily have an appropriate distance sense with citizens. He says as follows.

If a single mistake occurs, then the government becomes extremely concerned that it will spread to the project as a whole. So when you do town making, the distance between government and stakeholders is too far. If you want to improve problems affecting them, then you must enter their world and talk more.²¹

In Japan, when the development of an area is carried out, residents do not necessarily establish the goals and rules for collaboration. Therefore, it is necessary to listen to the interests of actors such as local residents, companies and government, and to coordinate collaborative goals and rules for the various actors. There is now a demand for local government that can act within such agreed requirements and can make remarks in a “way sensitive to residents’ concerns”²² as pointed out by urban sociologist Naoki Yoshihara. Responsiveness to residents’ needs cannot be established only by regulation by individual laws and regulations and municipalities’ planning in advance. Municipalities are formal organisations, and being overly flexible may lead to disorder. But working to create a city certainly requires a great deal of fluidity. Therefore, it is important to secure as much flexibility as possible in the institutional design. Also in the future, it is important to actively consider how to conduct town making by consensus.



Figure 3: Machi-Ken members on a study trip to Taiwan.

Conclusion

My conclusion from this study is that Tamura was able to create a signature approach that made town making universal and inclusive through losing his position at the Asukata-led city government (1963-78). His legacy was not to change the appearance of Yokohama city merely by modifying the built environment, but to think about how individuals should respond to dynamic and fluctuating urban changes. Hence, for those wishing to adopt and continue Tamura's vision, the important question is not what Tamura did, but what Tamura would do.

In other words, they should approach problems in town making by internalising Tamura's approach to town making. Consultation with stakeholders and the exchange of views among those who take part in town making is indispensable for that purpose. Too often successful cases of urban planning are praised and standardised. However, from the perspective of Tamura's town making, it is not necessarily desirable to adopt a standardised approach to certain problems. Rather, it is essential to control urban space by creating a relationship/framework among citizens and distinct communities that takes a flexible, "no-fixed-form" approach of the kind adopted by Tamura.

Bibliography

1. Hashimoto, Kazutaka. *Asukata Ichio and local government reformation: Focusing on Town making and civil governance*. Tokyo: Aoki bookshop, 2000.
2. Koizumi, Hideki. *From urban planning law to town making law: Problems of utilization planning and regulation on land use in 1968 edition of urban planning law and town making ordinance*. Tokyo: The University of Tokyo Press, 2001.
3. Matsumoto, Yasushi. *Urban regeneration and creative city: focusing on the old city center of Yokohama city*. Tokyo: Kuon, 2014.
4. Suzuki, Nobuharu. *Read Tamura's vision now*. Yokohama: Syunpusya, 2016.
5. Tamura, Akira. *City problems and architects*. International architecture 32. Tokyo: Art publishing, 1965.
6. Tamura, Akira. *Create Yokohama city: the pragmatic way of town making*. Tokyo: Chuko bookshop, 1983.
7. Tange, Kenzo. *The point of view toward the laws related to urban planning*. Tokyo: The Tokyo Institute for Municipal Research, 1960.
8. Watanabe, Shunichi. *Concept and function of urban planning*. Tokyo: The University of Tokyo press, 2001.
9. Watanabe, Shunichi. *The logical structure of Town making definition*, Papers on city planning, 673-678. Tokyo: The City Planning Institute of Japan, 2011.



10. Yazawa, Sumiko. *Urban policy formation in large cities and the relationship between administrative and citizen*. Annual report of the local sociology conference. Tokyo: Japan Association of Regional and Community Studies, 1985.
11. Yoshiwara, Naoki. *Logic and Ethics of Town making*. Tokyo: Toshindo, 2009.

Acknowledgements

I would like to thank all the interviewees for their cooperation with the survey for this paper. The NPO members have given me valuable and constructive advice as well. I really appreciate it. Finally I would like to express my gratitude to Timothy Gray for his assistance in reviewing this paper.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Atsuhiko AOKI graduated from the Faculty of Letters, the University of Tokyo (Bachelor of Arts) and completed a Masters of Sociology at the University of Tokyo Graduate School of Humanities and Sociology. Atsuhiko continues to major in urban sociology and is conducting research focusing on the historical relationship between urban growth strategies and municipalities as a factor determining the nature of urban restructuring. Currently, Atsuhiko is interested in continuity and discontinuity in the Yokohama city policy of the Asukata-led city government (1963-78), which has underscored Yokohama's creative city strategy in recent years.

Endnotes

¹ Watanabe, Shunichi. *Concept and function of urban planning* (Tokyo: The University of Tokyo press, 2001), 139.

² Koizumi, Hideki. *From urban planning law to town making law: Problems of utilization, planning and regulation of land use in the 1968 edition of urban planning law and town making ordinance* (Tokyo: The University of Tokyo Press, 2001), 236.

³ Yazawa, Sumiko. *Urban policy formation in large cities and the relationship between administration and citizen*. Annual report of the local sociology conference (Tokyo: Japan Association of Regional and Community Studies, 1985). Also referred: Hashimoto, Kazutaka. *Asukata Ichio and local government reformation: focusing on Town making and civil governance*, (Tokyo: Aoki bookshop, 2000).

⁴ Suzuki, Nobuharu. *Read Tamura's vision now* (Yokohama: Syunpusya, 2016).

⁵ Watanabe, Shunichi. *The logical structure of Town making definition* (Tokyo: The City Planning Institute of Japan, 2011), 676.

⁶ Tamura, Akira. *Create Yokohama city—the pragmatic way of town making*(Tokyo: Chuko bookshop, 1983), 144.

⁷ Tange, Kenzo. *The point of view toward the laws related to urban planning* (Tokyo: The Tokyo Institute for Municipal Research, 1960), 91-92.

⁸ Tamura, Akira. *City problems and architects*. *International architecture* 32. (Tokyo: Art publishing, 1965), 7.

⁹ Ibid.

¹⁰ PCAB pamphlet, undated but believed to have been first issued in 1972.

¹¹ Interview book issued by the Yokohama city university (pp 128-9). The book consists of 20 interviews to those who engaged in city planning in Yokohama. The title: *Works to design cities; 20 interviews of those who engaged in town making in Yokohama and urban design* (supervised by Suzuki, Nobuharu)

¹² The interview on 28, June, 2017.

¹³ The interview on 22, August 2017.

¹⁴ The preface of Machi-Ken 10 years anniversary book

¹⁵ The interview on 24 August 2017.

¹⁶ The interview on 22 August 2017

¹⁷ Ibid.

¹⁸ The interview on 24 August 2017

¹⁹ Matsumoto, Yasushi. *Urban regeneration and creative city: focusing on the old city center of Yokohama city* (Tokyo: Kuon, 2014), 112.

²⁰ The interview on 24 August 2017.

²¹ Ibid.

²² Yoshiwara, Naoki. *Logic and Ethics of Town making* (Tokyo: Toshindo, 2009), 167.



The 18th International Planning History Society Conference - Yokohama, July 2018

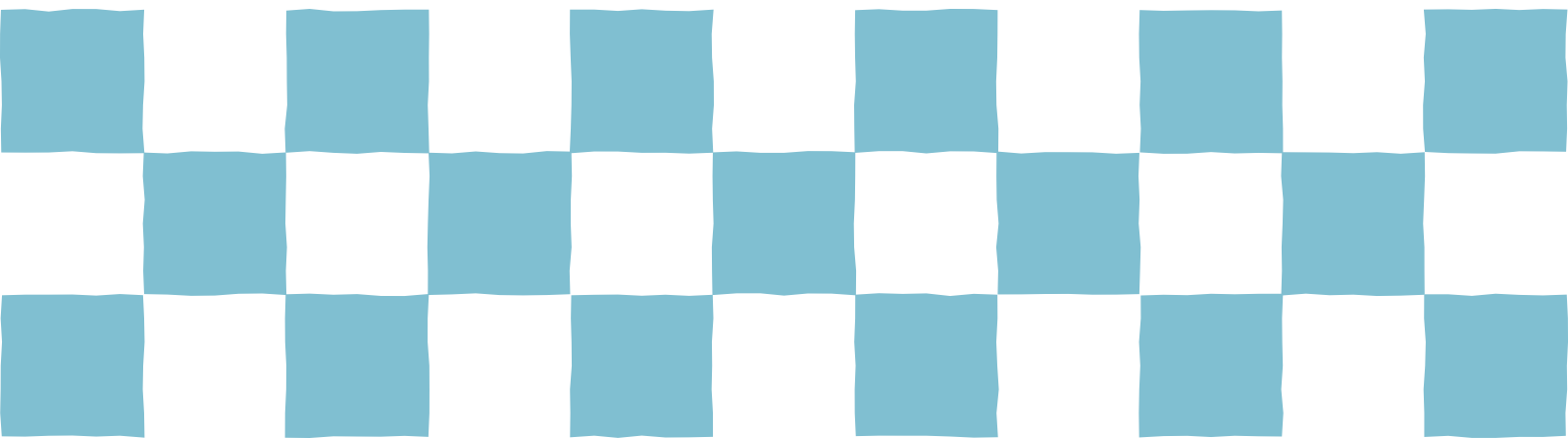


INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

2

**A Glocal Approach to Urban
Design: MAKI Fumihiko, Group
Form and East-West Dialogue**



Where East meets West in Maki's Concept of Collective Form and Urban Design

Ellen Shoshkes (Portland State University)

This paper forms part of a panel examining the cross-cultural exchanges that inspired Japanese architect MAKI Fumihiko's concept of Group Form, and its further evolution as a "glocal" (global and local) approach to humanistic urban design through the work of Maki's students and collaborators.

Both my paper and the panel examine two inter-related and under-studied research questions: the role of Japanese urbanism and urbanists in the transnational exchange of urban planning and design ideas in the twentieth century, particularly in the emergence of urban design as an academic field and professional practice. There is a growing body of research on the influence of Western ideas on modern planning theory and practice in Japan. Much less understood is how the transnational exchange of ideas generated the co-evolution of modern urban planning and design praxis in Japan and the West.

My paper situates Group Form in the larger context of the creative dialogue between Eastern and Western civilization that has been a powerful force in world history, giving rise to the European Renaissance, and to modernist social and artistic movements before World War I. It is widely acknowledged that the opening of Japan to the West in 1868 served as a "mid-wife" for modernism in the West. It is now understood that this was an interactive process involving the co-evolution of utopian modernism in Japan (among other places) and the West. An important conduit for this interactive process was the rise of transnational scholarly communities concerned with urbanism. The evolution of a synthesis of a set of comparable Eastern and Western social-aesthetic ideals formed an important thread in the line of planning thought pioneered by Patrick Geddes. After World War II, the renewal and intensification of East West exchange, notably between Japan and the West, sparked the further evolution of this dynamic synthesis within the new field of urban design that is established at Harvard in the late 1950s, and the inter-related Ekistics movement, led by Greek planner Constantinos Doxiadis.

My paper illuminates this broad theme by focusing on the relationship between Maki Fumihiko and the British planner, educator, and editor Jaqueline Tyrwhitt, from the 1950s through the 1970s. I examine how discourse on Group Form, urban design and ekistics evolved interactively in the context of exchanges within transnational scholarly communities based in Harvard-MIT, Tokyo University and the Graduate School of Ekistics, in Athens.

The findings of this research point to the significance of Tyrwhitt and Maki as intermediaries for the creative dialogue between Japan and the West that inspired the further development of modern utopian realism in urban design and ekistics. This research also opens a transnational perspective on planning history, requiring a dual focus on global and local approaches.

Fumihiko Maki and the Asian Planning and Architectural Collaboration (APAC)

Koon Wee (The University of Hong Kong)

Maki's investigations in group form were an effort to reconcile the homogenizing tendencies of modernization and the imperative to preserve qualities of local places and regions. Maki continued this investigation once he returned to Japan in 1965, through meetings with a group of young modernist architects from different regions in Asia, including William S.W. Lim, Sumet Jumsai, Tao Ho, Charles Correa, and Koichi and Catharine Nagashima. They all knew Jaqueline Tyrwhitt, who encouraged them to form the Asian Planning and Architectural Collaboration (APAC)

This paper examines the work of this group in the context of rapid urban development, intensified density, decolonization and a search for national identity.

Josep Lluís Sert, Fumihiko Maki, and Urban Design

Eric Mumford (Washington University in St Louis)

How did the architect Fumihiko Maki (1928-) develop his approach to urban design in the early 1960s? This paper examines Maki's education, theoretical writings, and early design practice to answer this question. Born in Tokyo, Maki had studied with Kenzo Tange at the University of Tokyo, graduating in 1952, before briefly attending the Cranbrook Academy of Art near Detroit, at time when it was still unusual for a Japanese student to be allowed to study in the United States. After a year of study at the Harvard Graduate School of Design (GSD) with the Spanish architect Josep Lluís Sert (1902-83) in 1953-54, then the Dean there, Maki worked briefly for SOM-New York and for Town Planning Associates. The latter was Sert's New York firm that he had founded in the 1940s with Paul Lester Wiener. Maki then went on to teach design at Washington University in St. Louis (1956-62) and then at the GSD (1962-65)

During this same period, Sert founded the professional discipline of what he called "urban design" at the First Harvard Urban Design conference in 1956, just as CIAM (International Congresses of Modern Architecture), the group of which he was then the President, was ending.

Both Sert and Maki emphasized the importance of designing for pedestrian urban spaces within the conditions of postwar urbanization, which was increasingly auto-centered. As he later explained in his *Investigations in Collective Form* (1964, with Jerry Goldberg), Maki's approach, which he called "Group Form," was intended to respond to the new scale of large infrastructure-related development with open-ended patterns of buildings organized around movement systems. These buildings would retain a consistent image, even as they could be modified or replaced over time. Maki's concepts then influenced Sert's work for academic institutions in the Boston area, such as the Peabody Terrace Married Student Housing complex at Harvard University (1963)

After 1967, Maki then began to apply his ideas to his successful practice in Japan, which continues to the present. This paper examines some of these built outcomes by Sert and by Maki that illustrate their design approaches, which differed radically from much mainstream urban development of the time and later.

Metabolism architects and urban planning and design in Yokohama

Nobuharu Suzuki (Yokohama City University)

Architect / Planner Takashi Asada (1921-1990) was the honorary chairman of the Metabolism Group organized for the World Design Conference in 1960. He proposed '6 Major Projects' as future vision of Yokohama City in 1965 together with Planner Tamura Akira (1926-2010), who joined Yokohama City in 1968 and led the urban planning division. Among the metabolism architects, Fumihiko Maki (1928-) and Masato Otaka (1923-2010) participated in large-scale projects such as Kanazawa Seaside Town and Minato Mirai 21 as well as individual their building projects. This paper examines these projects they involved and influence of metabolism and urban design in 1960's.



INTERNATIONAL PLANNING HISTORY SOCIETY

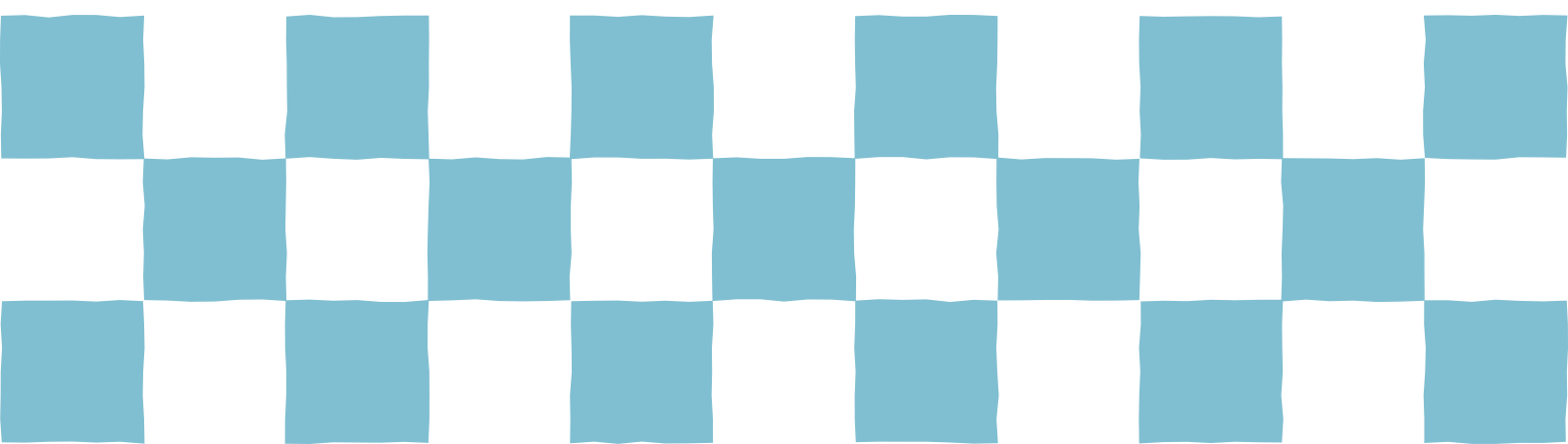
YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

3

Rethinking the Recovery and Resettlement After Disasters



The Role of Residential Buyouts in Post-Disaster Housing Recovery Support: A Comparison of Recent Cases from Japan and the United States

Elizabeth Maly (Tohoku University), Tamiyo Kondo (Kobe University), Michiko Banba (University of Hyogo) and Kanako Iuchi (Tohoku University)

Government purchase of residential property in disaster risk areas is a part of official post-disaster housing recovery support for homeowners in both Japan and the United States. The role of these residential buyouts has become more significant in both countries after recent disasters--the 2011 Great East Japan Earthquake and tsunami in Japan and 2012 Superstorm Sandy in the United States. In both countries, the use of residential buyouts is premised on a similar goal: reducing the impact and damage from future disasters by acquiring properties in hazardous areas.

However, implementation of these policies differs significantly.

In Japan, the acquisition of residential land occurs primarily as part of Collective Relocation for Disaster Mitigation (CRDM) projects, used to move residents from disaster-affected communities to safer locations. CRDM projects include measures to both: 1) acquire land in designated hazardous/affected areas where redevelopment is forbidden; and 2) provide new residential land in safer areas. Although not all affected households participate in both parts, the idea of the project is to move community members collectively. In the United States, where all land buyouts are voluntary and eminent domain is not used to force owners to sell, residential properties are acquired individually. Unlike in Japan, U.S. homeowners participate independently in buyout programs. Without measures to support finding new houses, receiving funds for their property is the end of the buyout program for residents, who then move away on their own.

This paper will discuss the historical context of the use of post-disaster residential buyouts in Japan and the U.S., and trace the application and evolution of these projects in recent disasters. In Japan, CRDM projects were used in the recovery after the 2004 Chuetsu Earthquake, which struck a rural mountainous area in Niigata Prefecture. However, after the Great East Japan Earthquake in 2011, CRDM became one of the main recovery support programs used by municipalities along the Tohoku coast. In the United States, while residential buyouts have been used for several decades as part of the Hazard Mitigation Grant Program, these projects are primarily implemented in areas affected by river floods, not coastal areas. After Hurricane Katrina in 2005, residential buyouts were used as part of the Road Home program supporting housing recovery in the city of New Orleans. Open to any affected homeowner, Road Home led to scattered buyouts throughout the city. After 2012 Superstorm Sandy, various types of residential buyout projects were used by New York State and New York City. These included "enhanced buyouts" which tried to target collective buyouts in certain areas, as well as an "acquisition for redevelopment" option available to homeowners with heavily damaged homes in the flood risk area. Considering the ongoing situation of recovery areas in Tohoku and New York, this paper will explore the various implications of residential buyouts for affected households' recovery and community recovery.

Outcomes of community-based relocating recovery as regards to recovery planning theory from post-disaster recovery to pre-disaster planning - Lessons from Miyagi seashore village

Taro Ichiko (Tokyo Metropolitan University)

1. Introduction

Japan is one of distinguished hazardous countries. That is, therefore planning technology and city planners have played an important role in long-term recovery. In other words, experiences of past disaster recovery in Japan, especially on the Great Hanshin-Awaji Earthquake (1995) and the Chuetsu Earthquake (2004), have provided important knowledge for the recovery planning of tsunami-affected areas in the Great East Japan Earthquake (2011).

At the same time, planning research aftermath of the East Japan Earthquake is also to be developed based on those past case studies.

This paper presents 3 research issues that have been discussed in Japan's recovery planning experience. And then, through a case study by an action research style in Kesenuma, those issues will be considered. It would be found the needs and roles for the planning occupation and notable knowledge.

2. Three issues for long-term recovery of communities

- (1) leadership by local community leaders and empowerment for people who undertake the recovery
- (2) mitigation for future risk and restoring living landscape which were loved and suit for those local life
- (3) planning approach by a local-community and predetermined harmony approach by each victims' activities

3. An action research in Kesenuma

The case study is about a semi-agricultural and fishing village in Kesenuma City, Miyagi Prefecture. The big tsunami destroyed all of houses that 100% of houses were certified the totally collapsed. After about one year from the tsunami, a prefecture office designated the village as a disaster hazard area which is prohibited housing reconstruction. As a result of this, surviving people were forced to relocate for housing recovery. Through evacuee support by voluntary organizations, external planning experts and an architect could be made reliance upon surviving people. An organization established with survivors and those experts and dedicated in a relocating recovery project.

From this case study, we would like to consider the following points;

- 1) Creating an organization that combines leadership and individuality
- 2) Proposing balanced hazard mitigation program respecting to the intention to return to the original tsunami hazard area.
- 3) Empowerment and space design methodology for relocating neighborhood space

4. Conclusion and discussion

I was involved in this case both as a city planner and as a disaster researcher. And then, the role of the planning would be discussed in accordance with both practical planning efforts and the planning theory for long-term recovery of communities.

Sense of dwelling in disaster relocation: social housings and community organizations after the earthquake in 2011 Japan

Izumi Kuroishi (Aoyama Gakuin University)

This study examines two cases of people's displacement in Kesenuma and Rikuzen Takada cities in Japan during the last 6 years from the earthquake in 2011 in order to inquire the factors of the sense of dwelling in disaster relocation. By examining how the relocations of houses impact on people's identity, what kind of social issues arose in the process, and how designing houses integrated with their community planning is essential to create a sense of belongings, it aims to explain how the idea of disaster relocation and social housing system should be reframed to adjust to the contemporary social issues.

In the earthquake and tsunami in 2011, huge number of houses were destroyed; more than ten thousand houses in Kesenuma and four thousand in Rikuzen Takada were destroyed. The Ministry of National Land and Infrastructure and the local municipalities decided a model recovery process of housing as follow: relocate refugees to urgent shelters, then to temporary prefabricated houses, and finally prepare two types of housing support; one is developing hinterland area for their reconstruction of houses, and another is constructing mass concrete or small detached public housing. In order to join to a development of the hinterland, refugees had to form a group, and often were consulted by professional planners and NPOs. Even though the government proposed policies incorporating with resident-oriented methodologies, and constructed many public high rise housings, relocation of refugees from temporary shelter to public housing are still facing problems, and suggesting further difficulties in municipal financial management after the governmental support ends. Japanese social housing and area planning systems in disaster area clearly show their need to be conceptually reconstructed.

The cases in Kesenuma show that the lack of consideration about refugees' sense of communities in their relocation, and the differences of lifestyles between new houses and local traditional ones caused serious problems for refugees. The case in Sumita town of Rikuzen Takada shows opposite; the strong community bond between people from shelters to temporary houses, and the authentic designs of temporary houses helped their settling significantly. On the other hand, in both cities, many of the reconstruction of new towns in hinterland by group of people face with difficulties in financial and community issues.

By comparing these cases, I will explain how people keep striving to maintain their normal lifestyle and local identity, and how it is essential to create mechanisms to sustain and help their reconstruction of community and public space in each stage of their relocations. Particularly, the concept of institutional strict control of social housing needs to be reexamined to allow residents to feel the house of their own. In the era of displacement due to disasters, we need to reconsider the idea of house as the locus for people's identity and to reframe the idea of social housing and urban planning comprehensively and in process-oriented manner.

Characteristics of Institutions of Spatial Planning for Recovery after 3.11

Kubota Aya (The University of Tokyo)

Focusing on spatial planning, the paper deals with institutions for recovery utilized in the disaster area of the Great East Japan Earthquake on March eleventh of 2011. The purpose is to make issues clear for the next disaster. Institutions are described into three groups: 1) established ones between after the World War II and before 2011, 2) enacted as permanent systems after 2011, 3) temporary legislations after 2011. The feature of the first group is bureaucratic initiative with emphasis on public projects, especially civil engineering works by preventing individual voluntary activities. Because being criticized at each recovery occasion, these institutions had been revised many times before 2011 towards enhancement of citizen, including victims, participation and decentralization of authority. Such trends were perceived among enactments after 2011. However, they do not work well actually. Why? As the scale of the Earthquake and Tsunami only come once every thousand years, the damage of 3.11 is unparalleled in the planning history of Japan. The era and the place have been already in the shrinking. The property of the disaster area is very unique and far from ones supposed by the institutor of spatial planning. In the pre-modern age, the territory of each village was naturally decided by concrete jobs to maintain their field and lives. In Japan, those settlements were merged into bigger autonomies on several times. As a result, the planning law is not designed for each settlement. We should recognize the meaning of frequency, degeneracy, territorial range and realities when we consider the future of the disaster area. In addition, the pollution of radioactive is too severe for the national government, local municipalities, local residents and professionals to behave in a desirable way. There should be different recovery methods but we fail to create an effective system at this point. What we can do at disaster sites are to build banking structures, roads, streets, public houses, building lots and sea walls physically. But we are not sure whether those new artificial lands will become a living environment or not. Spatial planners have responsibility to design a physical place which will function as habitat in the near future. How can we establish a new set of institutions for recovery? Following the emergency term immediately after the disaster, local residents, and municipalities should share the understanding of the situations with the support by the national government and professionals. Then they discuss what are resources and risks of their area based on its characteristics and what is the future image of their own territory. After those discussions, some local residents may try their own ideas which make the physical new environment to their own home town. Through investigations, the questions for future recovery planning are as follows: how we can generate value through spaces, how we should set a unit of recovery and connect each other in a wider region, and how we can change the mode from the emergency to the ordinary.

Intentions and transition of inhabitants in Fukushima

Sayu Yamaguchi (Japan Women's University) and Satoko Shinohara (Japan Women's University)

The Eastern Japan Great Earthquake of March 11, 2011 had magnitude (Mw) of 9.0. It was a scale of an earthquake that modern Japan had never experienced before. However, this great earthquake did not just cause damage by collapsing buildings like the Great Hanshin Earthquake. The great tsunami that occurred in the Tohoku coastal area and other areas as well as the accident at the Fukushima Daiichi Nuclear Power Plant also caused unpredicted secondary and tertiary damage, making it an unprecedented situation. As a result of this disaster, prolonged evacuation orders were issued to wide areas, and even six years after the earthquake, there are people who still live in temporary houses because they cannot go back where they used to live.

This paper focuses on Katsuo-mura, Futaba-gun, Fukushima Prefecture and aims to grasp how the dwellings and family structures changed since the Eastern Japan Great Earthquake as well as the reason for these changes. It also aims to clarify what kind of dwelling the people of that place want to live in in the future in order to present valuable information for disaster control measures. For this study, a questionnaire was administered to all the people who used to be residents of Katsuo-mura, Futaba-gun, Fukushima Prefecture located in the distance of about 30 kilometers from the Fukushima Daiichi Nuclear Power Plant before the earthquake. At the time of this investigation, they lived in Miharu-machi, Tamura-gun, Fukushima Prefecture, about 20 kilometers to the inland area from Katsuo-mura, and an order to return to their village, Katsuo-mura, had not been issued yet.

As a result, a family structure such as young generations in their 40's or below living separately for external social reasons like work, entering a school of a higher grade, etc. was found. Originally there were many multi-generation families such as three-generation households and four-generation households in Katsuo-mura. However, after the earthquake, these families changed to small families, and as a result, the number of elderly couple and single households has increased. Asked about their wishes for the future, they expressed their wishes to return to their original large families, but they replied that their households would stay small, unchanged, with their families scattered in the future too. A small number of households increased their members. Those cases were cases in which a spouse started to live together after marriage or a new baby was born.

Intentions as to the future location of their dwellings differ by the age of the members of the household or the areas under the evacuation orders. Many young people want to move to a convenient area without relying on the existing community, but many elderly people want to go back to their original village. Therefore, it was clarified that social contact is a factor to promote migration. It was clarified that many residents want to have a privately-owned house but that there is a small number of people who want to move to a convenient area and choose other types of dwelling.



The Role of Residential Buyouts in Post-Disaster Housing Recovery Support: A Comparison of Recent Cases from Japan and the United States

Elizabeth Maly*, Tamiyo Kondo**, Michiko Banba***, Kanako Iuchi****

* Ph.D., International Research Institute of Disaster Science, Tohoku University, maly@irides.tohoku.ac.jp

** Ph.D., Department of Architecture, Kobe University, tamiyok@people.kobe-u.ac.jp

*** Ph.D., Graduate School of Disaster Resilience and Governance, University of Hyogo,
banba@drg.u-hyogo.ac.jp

**** Ph.D., International Research Institute of Disaster Science, Tohoku University, iuchi@irides.tohoku.ac.jp

After recent disasters in Japan and the United States, government acquisition of residential land has played a larger and increasing role within and in relation to housing recovery support programs. With different historical, legal, and governance contexts, residential buyouts are shaped by the respective policies of each country. Framed by earlier precedents, this paper explains the development and implementation of residential buyout programs used after recent disasters: the 2011 Great East Japan Earthquake and tsunami in Japan and 2012 Superstorm Sandy in New York City and New York State in the United States. Through a comparison of roles of buyout in relationship to other aspects of post-disaster housing reconstruction and recovery support, some similarities are identified in the challenges of implementation, as well as uniquely different issues faced by the affected communities and households in each case.

Keywords: buyouts, land acquisition, housing recover, Great East Japan Earthquake, Superstorm Sandy.

Introduction

Residential buyouts have played significant roles in post-disaster housing recovery programs after recent disasters in Japan and the United States. Both countries had pre-existing programs for acquiring private residential land for disaster mitigation, and precedents for their use in post-disaster recovery. After the 2011 Great East Japan Earthquake (GEJE) in Japan, residential buyouts are being implemented on an unprecedented scale in collective relocation projects in municipalities throughout the tsunami-affected coastal region. After 2012 Superstorm Sandy in the US, various types of residential buyouts were included in housing recovery programs of affected jurisdictions, with unprecedented use in coastal areas.

Within respective disaster recovery policy contexts, this paper compares recent residential buyouts after the 2011 Great East Japan Earthquake and 2012 Superstorm Sandy in New York City and New York State. Situating these case within land and housing reconstruction policies, it explains the development and implementation of buyout programs and considers their varied impacts. After introducing relevant legal framework, precedents, and post-disaster housing recovery programs, the buyout programs are compared based on the following three aspects: 1) goals for mitigation and/or housing recovery; 2) what is included in the buyouts, including the relationship to land as well as housing; and 3) impacts on recovery projects and affected communities.

Although both cases include goals of disaster mitigation and recovery support, legal frameworks, precedents, and relationship to housing reconstruction programs vary significantly. In the U.S., where housing recovery programs focus on support for private property reconstruction, residential buyouts are foremost a property transaction; government purchase of land is one option to support homeowners' recovery. In Japan, where housing recovery policies avoid providing compensation for private property focusing instead on investment for public benefit, buyouts are a conceived as part of a community level project. U.S. buyouts are a stand-alone program; in Japan they are one part of a set of programs dealing with former land and provision of land in new residential areas. In both countries, residential buyout programs with the stated purpose of pre-disaster mitigation are in fact used post-disaster to support recovery projects.

Background of residential buyout programs in Japan

On March 11, 2011, the Great East Japan Earthquake caused massive devastation along Japan's Tohoku coast. Following national government guidelines, local municipalities implement recovery plans with housing reconstruction projects including relocation, support for reconstruction of new private housing areas and public housing. Since the 1995 Hanshin Awaji Earthquake in Kobe, where there was almost no support for private reconstruction, more subsidies have been made available for private reconstruction. However, Japan's approach



to recovery focuses on investment in public infrastructure and community facilities, guided by an underlying principle of even distribution of public support. Whereas direct government investment in the construction of private housing is minimal, government programs provide residential lots. Buyouts in Japan have a dual focus on former/hazardous land and new/safer residential land. The legal basis to justify land acquisition and support for relocation is designation of land as hazardous. Then the government can purchase it and provide new land for relocation. Using Article 39 of Japan's 1950 Building Standards Law,¹ local governments can designate an area as hazardous, which prohibits any future residential use. While intended to promote mitigation by pre-disaster relocation, this law has primarily been utilized reactively – post-disaster – to relocate residents from damaged areas.²

Along with the designation of hazardous land, there are two primary residential relocation programs: one supports groups of residents to relocate collectively, the other the relocation of individual households. The Collective Relocation for Disaster Prevention program was established in 1972, and has been primarily used to relocate residents from isolated areas to safer, more convenient locations.³ For individual households the Relocation of Housing from Hazardous Cliffs program is designed to move individual households at risk of landslide away from steep hillside areas.⁴ Because slope failure risk is localized in small areas, this program supports the relocation of individual households' instead of groups. More flexible without requiring community consensus, it has been used more often than collective relocation programs.⁵

Recent evolution of the use of residential buyouts in Japan

After the 2004 Chuetsu Earthquake, which struck a rural mountainous area in Niigata Prefecture, already facing aging and population decline, Collective Relocation projects were used with provision of public housing to move residents from former mountainous areas to new residential areas in more convenient locations. There is also a precedent for the use of Collective Relocation after a tsunami in 1983, when residents in Okushiri Island in Hokkaido were relocated to higher land away from the sea.

After the Great East Japan Earthquake (GEJE) and tsunami, the national government prepared a menu of 40 types of recovery projects that would be fully funded, including the construction of public housing, land readjustment, and collective relocation. Local municipalities chose which of these projects to include in their town's recovery plan. Collective Relocation was one of the main programs selected by a large number of municipalities, with a total of 321 Collective Relocation projects used by municipalities in Iwate, Miyagi and Fukushima Prefectures.⁶ With up to a third of tsunami-affected land area designated as hazardous,^{7,8} the use of collective relocation and buyouts on this scale has created several challenges for the future of affected communities.

With a strong singular focus on creating new housing sites in high-land areas, there is a lack of flexibility or holistic consideration to support other residents who choose not to join the programs, or to address the physical environment that results. Some choose to stay and repair their houses on site (although hazard zones forbid new construction, repairing and living in existing structures is allowed), resulting in a patchwork of houses and empty lots; others find new land and rebuild on their own outside of government project areas, which can also negatively impact the built environment with low density sprawl.⁹

Although there have been collective relocation projects for disaster prevention purposes in Japan since the early 1970s, past projects focused on relocating people away from remote/hazardous areas, with no need to plan for reuse of acquired lands. After the GEJE, municipalities are left to manage vast amounts of land, with a significant financial burden, and, with depopulation and an aging society, to deal with a lack of demand for a use that would financially justify redevelopment.¹⁰

Whereas former communities included a dense mix of commercial and residential uses, Collective Relocation projects are limited to creating residential land. In a society with an already rapidly aging population, the massive investment in infrastructure to create relocation areas away from city centers and services raises serious questions for long-term sustainability.

The United States land use and housing reconstruction policy context for buyouts

Compared to residential buyouts and relocation projects after the GEJE in Japan, buyouts in the United States have a smaller role, with a different history and relationship to national policies, programs, and federal funding for hazard mitigation and recovery. Residential buyouts after Hurricane Katrina in 2005 and Superstorm Sandy in 2012 had different goals for mitigation and housing recovery and different relationships to federal mitigation programs.

Flood insurance and disaster mitigation



The National Flood Insurance Program (NFIP) plays a key role for determining land use control and flood mitigation in the U.S. Although 90% of U.S. disasters involve flooding, private insurance companies usually exclude floods because of their catastrophic and unpredictable damage,¹¹ resulting in increased costs of government-provided disaster assistance--compensation of loss of private property--in proportion to the number of uninsured homeowners. After several increasingly damaging hurricane and flood disasters, the 1968 National Flood Insurance Act created the NFIP, aiming to reduce flood losses: shifting government spending from disaster assistance to mitigation.¹² On the condition that local governments passed floodplain ordinances, the NFIP provided low-cost government-backed flood insurance to local homeowners; a 1973 NFIP revision required purchase of flood insurance for any federally backed loan. The Act also led to a vast flood-mapping effort; local governments were promised technical information to help them “steer development away from” floodplains.¹³ FEMA creates these flood maps, but the maps do not directly allow or forbid construction. Based on the mapped flood zone, local governments can require certain construction types and elevations; flood insurance premiums are also reduced based on the elevation height.

With subsidized low premiums and multiple large payouts, the NFIP was fiscally unsustainable and deeply in debt after Hurricane Katrina. In response, there was an attempt to modify the program through the Biggert-Waters bill, which would increase premiums over time. Coinciding with post-Sandy housing recovery, the timing of planned implementation of these reforms (especially rising premiums) and significant impacts for affected residents led to strong push-back. Although subsequent legislation slowed the planned increases, rising flood insurance premiums add a significant challenge for residents rebuilding after Sandy.

Hazard mitigation in the US

Administered by the Federal Emergency Management Association (FEMA), the Hazard Mitigation Grant Program (HMGP) is the primary source for federal grants for disaster mitigation, including purchasing land to reduce disaster risk. The HMGP was established by the 1988 Stafford Act,¹⁴ the main law governing disaster response and recovery in the United States, which authorized post-disaster mitigation efforts including acquisition of damaged properties to discourage rebuilding in hazardous areas.¹⁵ After the Great Midwest Flood of 1993, the most damaging flood disaster in U.S. history,¹⁶ the Stafford Act was amended to increase support for relocation projects targeting flood-prone properties, requiring the removal of structures and designation of acquired land in “perpetuity for a use compatible with open space, recreational, or wetlands management.”¹⁷ The HMGP was used for the first time for large-scale buyouts after the Great Midwest Flood, reducing the number of structures in the floodplain by 14,000-20,000.¹⁸ As all US buyouts, participation in HMGP buyouts is voluntary; HMGP requires 100% of homeowners in a designated buyout area agree to participate and forbids redevelopment of acquired land. HMGP can fund 75% of the cost for land acquisition; the other 25% can come from local government funds or recovery funding such as Community Development Block-Grants for Disaster Recovery (CDBG-DR).

Housing recovery programs in the U.S. after Hurricane Katrina and Superstorm Sandy

In recent years Community Development Block Grants for Disaster Recovery (CDBG-DR) from the Department of Housing and Urban Development (HUD) have been the main support for post-disaster housing reconstruction in the United States. These funds are allocated to affected (usually State level) jurisdictions based on detailed recovery projects specified in their Action Plans. As block grants, CDBG-DR funds allow flexibility for jurisdictions to design their own housing reconstruction programs. In late August 2005, Hurricane Katrina caused massive damage in the U.S. Gulf Coast region, including storm surge devastation in Mississippi and long-term and devastating flooding in the City of New Orleans in Louisiana; 80% of New Orleans flooded after levees failed.¹⁹ The largest residential damage in US history, more than 1 million houses were damaged in the region, and 134,000 in New Orleans alone.²⁰

Usually CDBG-DR “funds are used explicitly for repairs or reconstruction” in a rehabilitation model,²¹ but both Louisiana and Mississippi were granted waivers to use a compensation model that “disburses funds directly to homeowners for damages suffered regardless of whether they intend to rebuild”²² for their CDBG-DR-funded programs. While homeowners in both states could receive up to \$150,000 (depending on housing value, damage, and other support received), Mississippi’s program was a simpler compensation program. Louisiana’s program combined compensation and rehabilitation support, and attempts (later revised) to combine CDBG-DR and HMGP funding.²³

Called the Road Home, Louisiana’s CDBG-DR-funded housing recovery program included 3 options for homeowners: 1) rebuild on site; 2) sell and stay in Louisiana; or 3) sell and move outside the state. To encourage homeowners to stay in Louisiana, only 60% of market value was provided for option 3. Road Home had a large buyout component; however, these buyouts were not guided by hazard mitigation principals. Any damaged residential property within the city was eligible and future use was not restricted. Properties were acquired from



scattered sites throughout the city, resulting in a checkerboard pattern of empty lots and a challenge for the City to manage their redevelopment.

In October 2012, Superstorm Sandy caused severe housing damage along the east coast of the United States. Although the words “buyout” and “acquisition” are almost equivalent, in post-Sandy recovery they refer to 2 types of projects. In “buyouts” land is purchased for higher pre-storm values; redevelopment is forbidden. In “acquisitions” land is purchased for lower post-storm values²⁴ and redevelopment allowed.²⁵ Funded by CBDG-DR grants, New York City’s ‘Build it Back’ housing recovery program and New York State’s “New York Rising” housing recovery program both included options for housing repairs, rebuilding, elevation, and property acquisition. These property acquisition programs give an option for homeowners who do not want to rebuild; the use of the acquired property is not limited. In fact, Build it Back called this pathway “Acquisition for Redevelopment” and envisioned the redevelopment of acquired properties by New York City; properties acquired through New York State’s acquisition programs are sold at public auction.

With an early commitment to returning some areas to nature, New York State created and managed a separate HMGP-funded buyout program preserving properties as open space. A 10% bonus was available in areas targeted for “enhanced buyouts,” with an additional 5% bonus for homeowners who relocated within the county.²⁶ As a result of pro-active organizing by local residents, three communities in Staten Island were successfully selected as enhanced buyout areas. In Fox Beach, the first buyout community, the majority of properties were purchased and houses demolished and after several years the land is visibly returning to a natural state similar to the surrounding marshes.

Comparison of recent buyouts

Key differences and similarities between residential buyouts in Japan after the GEJE and U.S. after Superstorm Sandy can be clarified by considering three aspects: 1) goals for mitigation and/or housing recovery; 2) what is included in the buyouts with what relationship to land; and 3) impacts on recovery projects and affected communities.

1. What are the goals for buyouts in terms of both mitigation and household recovery support?

Both Japan and US buyout programs promote disaster mitigation through managed retreat, although acquisition projects in New York and the earlier Road Home were not for hazard mitigation, but homeowners’ recovery support. In Tohoku, the mitigation goal of buyouts is to move housing away from coastal areas, reducing future tsunami damage. The option to sell their land also financially supports residents’ recovery, including for rebuilding housing. New York State buyouts, as in Staten Island, aim to preserve a natural/ buffer zone. Other acquisition programs allow redevelopment instead of preserving open space; these are available to homeowners in the overall flood zone but are not clustered, resulting in scattered sites whose redevelopment will depend on the strength of the local property market. In all cases in Japan and the U.S., buyouts can also be seen as a type of government support compensating homeowners for damaged property. For acquisition projects in New York and properties purchased through Road Home, the goal was not hazard mitigation, but support for homeowners’ recovery.

2) What is included in buyout programs, and with what relationship to land?

Residential buyouts relate to the intersection of policies dealing with housing damage and reconstruction, as well as compensation and provision of land. Residential buyouts in Tohoku are one part of a set of multiple recovery projects within a large-scale implementation of relocation including: (government) designating former land as hazardous; (residents) having the option to sell this land to the government; (government) preparing new residential land areas in higher areas; and (residents) having the option to rebuild on these new lots. In contrast, buyouts in the United States are complete after one transaction--the purchase of privately owned land by the government. Although in the Road Home or enhanced buyouts in New York State, incentives are provided to homeowners to relocate in the state, there is no system to support residents’ finding their next house.

In Japan, buyouts are part of relocation programs which must both secure and prepare new residential lots for residents to rebuild on, and then manage the large amount of publicly-owned land acquired. In the U.S., where government does not strongly control land use, buyouts can result in scattered empty lots; the difficulty of managing (reselling or redeveloping) these lots varies based on local property markets.

3) What is impact of buyouts on the recovery process and post-disaster housing reconstruction?

In Japan, where land targeted for buyouts is designated hazardous and residential construction forbidden, there is stronger control and ability of the government to implement buyout programs. While goals of moving housing away from the coast can be achieved, it is questionable if massive infrastructure investments to carry out these projects are supporting a sustainable long-term future. In the US, although efforts are made to acquire land



strategically to create buffer zones, as buyout programs are voluntary lower density checkerboard land use patterns may result.

Regardless of location, buyouts have a clear benefit for individual households who want to move and can sell their former property above market rate. However, some homeowners are not eligible for the buyout programs because of their property's location or mortgage situation. For places like New York City, residents are unable to afford to buy another comparable house on today's market with the money from a buyout.

Unlike in Japan, where massive land areas have been designated hazardous and targeted for buyouts, buyout programs in the U.S. are restricted to limited areas, depending on political will as several levels of government (state, county, city); after Superstorm Sandy, there are communities who wanted but were not able to get a buyout, as well as counties where this option was not offered.

There are also residents in Tohoku communities who wanted to rebuild in place, but were forbidden to do so after collective relocation was selected. The time needed to implement rebuilding programs led many people to drop out of government programs, rebuild on their own and/or move away. Affected communities face the challenge of forming new communities, whereas in the U.S. residents are scattered.

Conclusion

The character of buyout projects in Japan and the U.S. is quite different. With strong government control in Japan, buyouts are implemented across large areas and connected to large scale creation of new settlements in highland areas. However, the strong focus on relocation projects targeting new areas has led to a lack of integration with other non-project areas. In areas struggling to maintain their population, the time required to complete large-scale projects completely alters the physical landscape and contributes to people's choices not to return. In the U.S., there is less government control to implement large-scale buyouts. Individual household decisions shape the results in buyout target areas, leading to scattered, empty lots. Although recent implementation of residential buyouts represents the divergent nature of housing recovery support in Japan and the U.S., both cases demonstrate limits of buyouts as a contribution to housing reconstruction programs. Looking at these two cases, significant questions arise about the use of buyouts as part of housing recovery; in both the U.S. and the Japanese context, buyout programs require significant improvement if they are to function as a successful support for housing reconstruction of affected people on a large scale.

Acknowledgments

This research was made possible through the support of Kaken Grants-in-Aid # 17H02070 and 16K18202

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Elizabeth Maly is an assistant professor at the International Research Institute of Disaster Science (IRIDeS) at Tohoku University. Her research focuses on post-disaster housing reconstruction and community-based recovery planning –with past and current research in the U.S., Indonesia, the Philippines, and Japan – looking at how housing recovery policies and their implementation can better support local residents' life recovery. She has a Masters of Architecture from the University of Washington-Seattle and PhD in Architecture from Kobe University.

Kanako Iuchi is an associate professor at International Research Institute of Disaster Science (IRIDeS), Tohoku University. Her areas of expertise include disaster management planning, urban and regional planning, and community development in international settings. Her primary research interest is on understanding better planning tools and procedures for resettlement after disasters. She holds a BS from Tsukuba University, an MRP from Cornell University, and a PhD in urban and regional planning from University of Illinois, Urbana-Champaign.

Tamiyo Kondo is an associate professor at the Graduate School of Engineering, Kobe University. She does research on housing recovery, post-disaster recovery planning for the built environment, and housing policy. Her research fields include Tohoku region after the Great East Japan earthquake 2011, Kumamoto Japan after 2016 earthquake, New Orleans after Hurricane Katrina 2005, New York after Superstorm Sandy 2012, Yogyakarta after the Central Java Earthquake 2006 and Mt. Merapi eruption 2010. More detail in https://www.researchgate.net/profile/Tamiyo_Kondo



Michiko Banba is currently an associate professor at the Graduate School of Disaster Resilience and Governance, University of Hyogo. She received Dr. Eng. in Environmental System Engineering from Ritsumeikan University in 2000. Since then, she has held research and education appointments at Research Institute for Earth Science and Disaster Prevention, Policy Research Institute at Ministry for Land, Infrastructure, Transport and Tourism, and University of Hyogo (from 2011). Her research interests focus on: housing recovery process after the large scale natural disasters; land use planning and management for disaster risk reduction; development of disaster resilient community with the public involvement; and assessment of railways by tsunami and planning for escape.

¹ Kanako Iuchi, "Disaster Risk Management and its Relationship to Land Use Geographies Vulnerable to Water-Related Disasters: An Analysis of the Japanese Legislative System," in Greiving, et al, eds., *Spatial Planning and Resilience Following Disasters: International and Comparative Perspectives*, Bristol: Policy Press, 2016, 29.

² Ibid, p. 29.

³ Ibid, p. 29

⁴ Ibid, p. 29

⁵ Ibid, p. 29

⁶ Kanako Iuchi and Robert Olshansky, "Revisiting Tohoku's 5-Year Recovery: Community Rebuilding Policies, Programs and Implementation," in Santiago-Fandino et al, eds., *The 2011 Japan Earthquake and Tsunami: Reconstruction and Restoration.*, Cham: Springer, 2018, 102.

⁷ Tamiyo Kondo, "Compensation or assistance? Law and policy for post-disaster housing recovery in the U.S and Japan. In: Kaneko Y et al (eds) *Asian law in disasters toward a human centered recovery*. Routledge, London, 2016, 185.

⁸ Satoru Masuda, "The Issues for Buffer Zone and Group Relocation Projects," *Disaster Recovery and Revitalization Review*, 5;3, March 2014, 73.

⁹ Tamiyo Kondo, "Planning Challenges for Housing and Built Environment Recovery After the Great East Japan Earthquake: Collaborative Planning and Management Go Beyond Government-Driven Redevelopment Projects" in Santiago-Fandino et al, eds., *The 2011 Japan Earthquake and Tsunami: Reconstruction and Restoration*, Cham: Springer, 2018, 162.

¹⁰ Michio Ubaura, "Urban Planning and Reconstruction after the Great East Japan Earthquake" in Greiving, et al, eds., *Spatial Planning and Resilience Following Disasters: International and Comparative Perspectives*, Bristol: Policy Press, 2016, 74.

¹¹ GAO (U.S. Government Accountability Office) *Overview of GAO's Past Work on the National Flood Insurance Program*. April 2014, 3.

¹² Ibid, 3

¹³ George Haddow et al. *Introduction to emergency management*, 5th edition. Elsevier, Burlington, 2013, 73.

¹⁴ The full name of this law is the Robert T. Stafford Disaster Relief and Emergency Assistance Act, which was an update of the Disaster Relief Act of 1974.

¹⁵ Richard T. Sylvès, "Chapter 15: Federal Emergency Management Comes of Age: 1979-2001," in Clair Rubin, ed, *Emergency Management; the American experience 1900-2010*, 2nd edition. (Boca Raton: CRC Press, 2012), 141.

¹⁶ Ibid, 156.

¹⁷ Ibid, 141.

¹⁸ Ibid, 156.

¹⁹ Alison Plyer, "Facts for Features: Katrina Impact" The Data Center, Aug 26, 2016, 1.

²⁰ Ibid, 1.

²¹ GAO, 2009, 35.

²² Ibid, 11.

²³ Ibid, 15.

²⁴ Other additional support can be provided in the form of "moving expenses" to make up for the difference in property values.

²⁵ Elizabeth Maly et al. "Experience from the United States: Post-Katrina and Sandy," in Banba M. and Shaw, R. eds., *Land Use Management in Disaster Risk Reduction: Perspectives and Cases from a Global Perspective*. Tokyo: Springer, 2017, 93.

²⁶ Ibid, 95

Bibliography

Araki, Y. et. al. "The Great East Japan Earthquake and Tsunami: Lessons for Land Use," in Banba M. and Shaw, R. eds., *Land Use Management in Disaster Risk Reduction: Perspectives and Cases from a Global Perspective*. Tokyo: Springer, 2017.

Boyd A. Chapter 5: long-term recovery planning: goals and policies. In: Schwab JC (ed) *Planning for post-disaster recovery: next generation*. American Planning Association, Chicago, (2014)

GAO (U.S. Government Accountability Office). *Overview of GAO's Past Work on the National Flood Insurance Program*. April 2014.

Haddow, G et al. *Introduction to emergency management*, 5th edition. Elsevier, Burlington, 2013.



HUD (Department of Housing and Urban Development). Current housing unit damage estimates Hurricane Katrina, Rita and Wilma, 2006.

HUD Exchange. Community development block grant disaster recovery program, 2014.
<https://www.hudexchange.info/programs/cdbg-dr/>.

Iuchi, K. "Disaster Risk Management and its Relationship to Land Use Geographies Vulnerable to Water-Related Disasters: An Analysis of the Japanese Legislative System," in Greiving, et al, eds., *Spatial Planning and Resilience Following Disasters: International and Comparative Perspectives*, Bristol: Policy Press, 2016.

Iuchi, K. and Olshansky, R. "Revisiting Tohoku's 5-Year Recovery: Community Rebuilding Policies, Programs and Implementation," in Santiago-Fandino et al, eds., *The 2011 Japan Earthquake and Tsunami: Reconstruction and Restoration.*, Cham: Springer, 2018.

Kondo T. Compensation or assistance? Law and policy for post-disaster housing recovery in the U.S and Japan. In: Kaneko Y et al (eds) *Asian law in disasters toward a human centered recovery*. Routledge, London, 2016.

Kondo, T. "Planning Challenges for Housing and Built Environment Recovery After the Great East Japan Earthquake: Collaborative Planning and Management Go Beyond Government-Driven Redevelopment Projects" in Santiago-Fandino et al, eds., *The 2011 Japan Earthquake and Tsunami: Reconstruction and Restoration.*, Cham: Springer, 2018.

Kondo, T. and Karatani, Y. "Spatial Planning for Housing Recovery after the Great East Japan Earthquake" in Greiving, et al, eds., *Spatial Planning and Resilience Following Disasters: International and Comparative Perspectives*, Bristol: Policy Press, 2016.

Lindell, Michael K. "Recovery and Reconstruction after Disaster," in Bobrowsky, Peter T. (Ed.) *Encyclopedia of Natural Hazards*. Dordrecht: Springer, 2013.

Maly, E. et al, "Experience from the United States: Post-Katrina and Sandy," in Banba M. and Shaw, R. eds., *Land Use Management in Disaster Risk Reduction: Perspectives and Cases from a Global Perspective*. Tokyo: Springer, 2017.

Masuda, S. "The Issues for Buffer Zone and Group Relocation Projects," *Disaster Recovery and Revitalization Review*, 5;3, March 2014, 73.

Olshansky R, and Johnson L. Clear as mud: planning for the rebuilding of New Orleans. APA Planners, Chicago, 2010.

Rubin CB (ed). *Emergency management; the American experience 1900–2010*, 2nd ed. Boca Raton: CRC Press, 2012.

Smith G. *Planning for post-disaster recovery: a review of the United States disaster assistance framework*. Washington, DC: Island Press, 2012.

Sylves, RT. "Chapter 15: Federal Emergency Management Comes of Age: 1979-2001," in Clair Rubin, ed, *Emergency Management; the American experience 1900–2010*, 2nd edition. Boca Raton: CRC Press, 2012.

Ubaura, M. "Changes in Land Use After the Great East Japan earthquake and Related Issues of Urban Form" in Santiago-Fandino et al, eds., *The 2011 Japan Earthquake and Tsunami: Reconstruction and Restoration.*, Cham: Springer, 2018.

Ubaura, M. "Urban Planning and Reconstruction after the Great East Japan Earthquake" in Greiving, et al, eds., *Spatial Planning and Resilience Following Disasters: International and Comparative Perspectives*, Bristol: Policy Press, 2016.

Ubaura, Michio. "Urban Planning and Reconstruction after the Great East Japan Earthquake" in Greiving, et al, eds., *Spatial Planning and Resilience Following Disasters: International and Comparative Perspectives*, Bristol: Policy Press, 2016.

Sense of dwelling in disaster relocation: temporary and public recovery housings after the 2011 earthquake in Japan

Izumi Kuroishi, Ph.D.*

**Professor of the School of Cultural and Creative Studies, Aoyama Gakuin University*

This study examines people's displacement in Kesenuma and Rikuzentakata cities in Japan during the last 6 years from the earthquake in 2011 in order to inquire the factors of the sense of dwelling in disaster relocation. By examining how the relocations of houses impact on people's identity, what kind of social issues arose in the process, and how designing houses integrated with their community planning is essential to create a sense of belongings, it aims to explain how the idea of disaster relocation and social housing system should be reframed to adjust to the contemporary social issues. By comparing cases, I will explain how people keep striving to maintain their normal lifestyle, and how it is essential to create smooth integration between private and public space, and to help their own subjective engagement in the reconstruction of community in each stage of their relocations. In the era of displacement due to disasters, we need to reconsider the idea of house as the locus for people's identity and to reframe the idea of social housing and urban planning comprehensively and in process-oriented manner.

Key words: East Japan Great Earthquake, relocation, temporary housing, public recovery housing, lifestyle, sense of dwelling

Introduction

Seven years after the East Japan Great Earthquake, more than 13,500 people in the damaged areas are still living in temporary housing(kasetsu). After the disaster, the Japanese government proposed the initial funding to build thirty thousand temporary housing in two months, decided a basic strategy for refugees' relocation from a shelter(hinanjo) to a temporary housing, to a public recovery housing(fukkou kouei juutaku) or to a collective town development (shudan iten takuchi), which method were to be designed by each local municipalities. Meanwhile, not only for the scale of the damage but also for the long relocation process, many refugees could not recover their sense of dwelling, which a German philosopher Martin Heidegger suggested as the foundation of man's sense of being. From a larger and social perspective, disaster refugees have been continuously relocated throughout global history. Overall, relocation requires a large restructuring of the urban space, and generates social separation between peoples by disrupting their communal bond.

Even though the knowledges and methods gained through the Hanshin Great Earthquake contributed significantly to the 2011 disaster recovery planning in designing the process of the relocation of refugees with social systems to support their community formation, as the local cultural condition was so different in the northern part of Japan that the habitual issues of housing; socio-cultural and psychological issues and the interrelationship between the special condition and social systems, were hardly examined academically. The relocation and reconstruction of houses after 2011 was a critical turning point, indicating that dwelling and urban planning should be examined with a more social viewpoint.

Therefore, this study aims to examine the internal psychological problems faced by people relocated after the disaster and the impact of these changes on surrounding areas. To this end, we interviewed refugees and their local supporting groups. By referring to the people's voices, this study assesses the issues in architectural and urban planning and management that must be examined for reconstructing the refugees' everyday private sphere, their relationships with surrounding neighboring society, and other social systems that sustain their sense of dwelling.¹

Post-disaster reconstruction

The high disaster magnitude of the Eastern Japan Great Earthquake necessitated a rapid, large scale migration from the evacuation site of the residents to the temporary housing. In Kesenuma City, at least 26,124 houses and 9,500 households were affected by the disaster. Temporary housing provided 3,504 units for 8,288 people, and 4,737 people were allocated to provisional temporary construction for renting private rental housing. In 2015, the number of temporarily housed residents decreased to 7,137, and the collective town planning developed 895 blocks (98%) at 45 sites at the end of 2015. Disaster public housing supplies provided 1,986 houses (92.8%) in 27 districts, completed at the end of 2015. In Rikuzentakado City, Iwate prefecture, the disaster affected 3,368 houses (99.5% of all households), and 2,148 houses were supplied to 51 temporary housing sites. Five hundred and sixty seven units were voluntarily rebuilt from the summer of 2011. Building disaster public construction of 989 houses, and collective town development of 562 houses were completed by March of 2014. Although the temporary housing aggregate started from 2016, 3913 residents are still accommodated in them.²

The governmental and local institutional support systems for this large-scale migration needed continuous readjustment to the changing recovery process. Even though they have recognized the necessity to maintain the existing community in relocating refugees from evacuation shelter to temporary housing, in the places with huge damage, it was necessarily to prioritize the protection of the weak people apart from their original location. In the relocation from temporary housing to public recovery housing, there were difficulties to explain the people about the future lifestyle. Most obvious problem was the difference of the way of housing in these regions from that of urban areas, in which the Japanese housing bureau has established its public housing system. Before the disaster, 87% of residents lived in detached houses, and only a minority resided in mass housing. After the disaster, 62% of the displaced residents wanted to rebuild detached houses, but 34% were prevented from realizing their wishes by economic difficulties. The residents claimed a lack of support for them. Also, in the area lacking the flat undamaged land, most of the public recovery housing have to be built in mass collective style, and on the other hand, the maintenance of the social support for the housings located in remote areas became problematic.

Review of existing studies and research methods

Many architectural planning and technology studies have analyzed the number of needed construction, function and structural durability of temporary housing, and urban planning studies have examined the community space problems in temporary housing villages. However, owing to refugees' traumatic experience of a disaster, it has been extremely difficult to examine their memories of their lost houses and lifestyles, and their psychological experiences during the relocation process. Thus, most of the disaster relocation studies have conducted historical examination of past tsunamis and larger-scale urban policies and planning. Instead, scholars of regional sociology and welfare studies conducted interviews and on-site research actively. The architectural study of temporary housing livability has been difficult for the same reason. Until the report by Reiou Kimura, the author of the present study found no urban planning and regional studies investigating how the relocation of housing influences the existing community and urban structure. Kimura conducted interviews of refugees in the prefectures of Iwate, Miyagi and Fukushima to find most of them relocated more than three times, and felt negative impact on their psychological, health and economic condition, relationship with neighbors, and family's unification.³

Even in the above research, spatial issues, such as the residents' habit and behavioral experiences of their interiors and landscapes, are rarely addressed. However, historical studies by Kon Wajiro and Nishiyama Uzo investigated the lifestyles and behaviors in transforming housing conditions between the 1910s and 1950s, including the period of Kanto Great Earthquake and World War II, using detailed surveys and qualitative plan analysis. The former was based on ethnography and interviews, and the latter adapted statistical typological analysis aiming for a more scientific result. At the risk of compromising scientific relevance, this study takes the former approach. Specifically, it analyzes the sense of dwelling from a small number of interviews. The sense of dwelling comprises the

psychological aspects of the making, memory, and belonging, which is formulated between the sense of privacy and community.

Given the progressive nature of the relocation problem in the afflicted areas, an objective theoretical analysis on the personal and social group situation remains impossible. Therefore, this thesis is limited to the analysis and consideration of research materials. The research mainly reconsiders the implications of disaster relocation and regional transformation through interviews and surveys conducted at four temporary house villages: three in Kesennuma City and one in Sumita Town. The Kesennuma City villages include the Komaba Koen area, with 62 temporary houses built in the city, Senmaya area, with 228 temporary houses built outside the city, and the Niitsuki area with 22 temporary houses built inside the city. The three Sumita Town sites contain different numbers of wooden detached houses (13, 17 and 63). We also conducted surveys and interviews at two public recovery housing sites, one in Kesennuma, the other in Rikuzentakata. (Fig. 1)

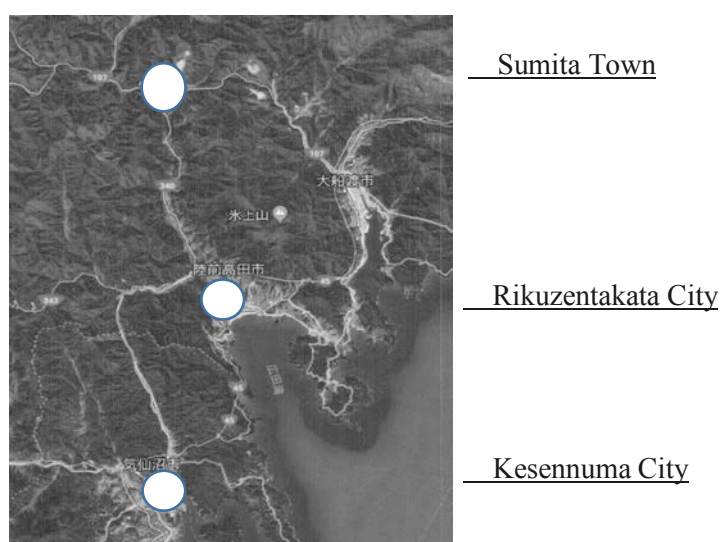


Fig.1. Locations of the interviewed area based on Google map

When interviewing the residents of temporary housing and recovery public housings, we also interviewed the social workers and the collaborators with whom we have previously conducted workshops in disaster areas. To examine their private histories and psychological issues, we informed the targeted residents of our project’s objectives, namely, to reexamine the relocation system and the designs of temporary and public housings. For each one- hour hearing, we prepared questions that probed the characteristics of the lost houses, family structures, previous and current jobs, the neighborhood relationships of each resident, the relocation process from emergency shelter to current house, the period spent in each stage, the planning of the lost house, temporary housing and recovery public housing, and the good and problematic points of each house. We also queried the residents’ reasons for choosing their current house, the most important element of their current house, their communication processes with neighbors in their current house, and how they conceptualize their future houses. The eligible subjects were 10 people in Sumita villages and 15 people in Kesennuma city. Among these, we interviewed 9 people living in two public recovery public housings, and 18 people living in temporary housing. (Table 1)

Temporary housing		Recovery public housing	
-------------------	--	-------------------------	--

Kesennuma Komaba temporary housing v	8	Kesennuma Nango Recovery public mass housing	6
Kesennuma Niitsuki temporary housing	1	Rikuzentakata recovery public housing	3
Kesennuma Senmaya temporary housing	1		
Sumita temporary housing villages	8		
Total	18		9

Table 1. List of the housing locations and the number of interviewees

Interview Examination: Five issues regarding relocation and changes of lifestyle

In order to analyze the changes of living condition through relocation after the tsunami, it is necessarily to examine the three cases separately: from evacuation shelter to temporary housing, temporary housing to public recovery housing, and to self reconstructed housing. For this study aims to examine the basic psychological aspects of housing design, it focuses to the former two cases. There are also two types of public recovery housing: mass and detached, but at the stage of this research, detached housing were not completed in both cities. Thus, this study only examines the mass public recovery housing.

Through the interviews, we identified five processes and problems in the post-disaster relocation patterns of the residents. First, many of the residents experienced problems with their relatives. They initially moved from the evacuation shelter to their relatives' homes, but this situation proved burdensome for both sides in the long term.

The second problem was progressive household separation of the family, imposed by the limited size of the temporary housing and public recovery housing and the location of schools and workplaces. In the damaged area, the household and family system have traditionally consisted of multiple generations. The changes affected these traditional lifestyles.

Third, the limited housing functionality of temporary housing and public recovery housing affected the settlement of residents who operated fishing and in-house commercial businesses before the disaster. Such residents lost their economic independence and communication potentials.

Fourth, owing to the continuity of the communities in evacuation shelter and temporary housing complexes, residents tended to settle easily with many acquaintances and relatives, and often created new communities. In addition, as Sumita town employed an organization that encourages connection among the residents of temporary housing and their existing neighborhood through daily activities. Therefore, the good relationships among the temporary housing residents are easily extendible to the surrounding neighborhood.

Fifth, residents occupying temporary housing in peripheral location are affected by transportation problems. For example, in the former Senmaya temporary housing complex was located away from the town center. Consequently, people without a car reported difficulties in getting to work, hospitals and shops, and needed public support. On the contrary, residents occupying Komaba Koen temporary housing located near the center of the city, were able to build positive relationships with the neighborhood from the beginning.

These five relocation issues can result from three themes; the livability of the spatial character and function of the house, community formations, and relationship with the neighborhood environment. Thus, in the following section, it examines how these three themes relate to the sense of dwelling in temporary housing and public recovery housing, with their residents' voices.



Relocation to temporary housing: its livability and architectural design ⁴

The architectural character and site planning of the temporary housing affected the residents' psychology and lifestyles.⁵ Prefectures constructed temporary housing in accordance with the Disaster Relief Act issued in 1947, sourcing their expenses from the national treasury. Conventionally, members of the standard building group of the Prefabricated Building Association sign an agreement with the prefectures. Because of the enormous number of needed houses after the 2011 disaster, the Ministry of Land, Infrastructure and Transport requested temporary housing from other members of the Prefabricated Building Association, the affiliated association of the Japan Federation of Home Production Organizations, and the Japan Wooden Housing Industry Association. In the Iwate, Miyagi and Fukushima prefectures, scholars and architects experimentally selected local companies to utilize the local resources and create jobs for displaced residents. However, the Prefabricated Building Association's standard building group provided approximately five times more supplies than the other groups, exerting an overwhelming influence on the residents' conditions.⁶

Primarily, temporary housing is constructed on the vacant sites, such as public and state-owned land, and land on which agreement is concluded. Temporary housing mainly aims for the rapid construction of large quantities, so after consultation with each local government, the standard and basic quality specifications satisfying the size, basic budget, and mechanical performance are determined within a short time. The problems depend on the location, local environment and management systems of the temporary housing, and on residents' adaptation to the local lifestyle. All of our interviewees reported problems with storage, bathing, dew condensation around the windows, and mold. Related problems included lack of underfloor ventilation, moisture at the base portion, and gaps around the entrance. Moreover, during summer, heat dissipated from the roof remained in the room. These inadequacies, imposed by insufficient insulation performance, become a heavy burden for refugees who cannot maintain the expense of air conditioners. The condition of temporary housing is also negatively affected by noises. Temporary housing is usually designed in a long terrace-house style, which lacks bulkhead thickness. Consequently, neighboring house noise is transmitted by the steel structural materials.

Most of the refugees had previously live in detached wooden house, so were psychologically distressed by the impairment of their pre-disaster comfort and privacy. Space limitation preclude the maintainance of traditional lifestyle in temporary housing. In the prefabricated temporary housing, the living-room space serves multiple functions, operating as a dining room, a bedroom, and a Butsuma (alter room) with a size of 6 tatami mats. Visiting family cannot stay, and communication with neighbors is prevented by the insufficient entrance space.

These problems of housing performance are directly connected to the residents' habit of living. In the research titled *Housing Revitalization Research in the farming, mountain and fishing areas of Northern part of Japan*, researchers presented two prototypes of house plan: hall and corridor types.⁷ In our current research about the residents' lost houses, these historical types are still remaining in more than half cases, and others are their variations. (Fig.2) Their entrances and kitchens are big enough to have visitors and semi-public activities connecting the resident with local community. The minimum size of temporary housing cannot afford such lifestyle and social relationship.

	Historical local house plans	Refugees' Pre-disaster house plans	Researched Temporary housing	Public recovery mass housing
Hall type				

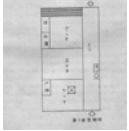


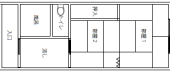
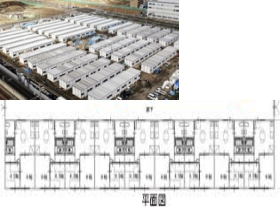


Corridor type				
Combined type				
Urban collective house type				
Long-terrace prefabricated type				
Detached wooden house type				
Collective RC mass housing type				

Fig.2 Typologies of historical local houses, refugees' lost houses and recovery temporary housings based on the interviews with refugees and the

The role of self-construction in “owning” a temporary house

As temporary housing is constructed and operated as a short term rentals, it is unavailable for later renovations. Thus, the space is not easily fitted to individual needs. Particularly in prefabricated mass housing, as the damages caused by nailing are hardly fixed, residents cannot even put a calender on the wall. Our interviews and researches clarified that if residents could alter the space, they would gain a stronger sense of ownership.

In the temporary housing of Sumita, increasing numbers of residents self-constructed the above-mentioned ceiling back-storage, and one resident ingeniously constructed small storage and shelves (Fig. 3). This resident expressed much attachment to his temporary home and a reluctance to leave it. Alterations have extended from interior spaces to the exterior; for instance, entrances have been decorated with flower arrangements, and intermediate areas have been connected with neighboring houses. In the Sumita housing, all units possess a flexible dividing wall, and the layout is freely adaptable to multiple functions, while the entrance and kitchen are relatively large. As the housing plans in this area were traditionally flexible, with tatami mats and sliding shoji, the Sumita temporary

housing appears more suited to the residents' lifestyle than the fixed plane configuration, which allocates an area per number of people.



Fig.3

Spaces and methods for formalizing a sense of community

In the parallel arrangement of mass produced prefabricated temporary housing, the meeting place is often set near the site entrance, and each row of terraced houses faces the back side of another row of terraced houses. This arrangement leaves no space for residents' interactions and communications. To the contrary, in the temporary housing village of Sumita Town, most of the intermediate space between the detached houses is used for purposes such as laundry, tool storage, and planting shelves. Moreover, the large entrance space of each house has facilitated the connection between the inside and outside spaces, like the historical house types, helping residents to communicate with their neighbors. Within the community, such usage of the intermediate space and entrance area has created a warm atmosphere that is shared by everyone. The houses are angled to match the irregular shape of the site, and a small shared space occasionally appears between the buildings. Moreover, as vacant houses in Sumita Town can be utilized as communal meeting places, they provide spaces for daily casual communications. These cases show that the creation of a community space largely depends on the design of entrances, arrangement and management of housing blocks.

Temporary housings are often located on isolated sites, with limited access to social services and mobility through public transportation. In large-scale temporary housing villages such as the Senmaya high-school temporary housing, residents are supported by Kesenuma City, and self-govern their association activities and watching. However, community activities in the temporary housing village are inaccessible to many households, such as single households, and are not usually joined by residents in the surrounding area.

Relocation from temporary to public recovery housing

The impact of relocating from temporary housing to public recovery housings also consists of issues of architectural design, owning relationship and community formation. The housings investigated in the present study contain more than three floors of reinforced concrete. They were built in a single-

corridor arrangement consistent with the prototype public housing in postwar Japan, prioritizing the sunshine direction and ensuring efficient circulation. Thus the problems faced by refugees when relocating from the temporary to public housing excluded the environmental issues of humidity and insulation. Most of the residents had never resided in mass housing, but were satisfied with aspects of the physical environment, such as the sound and heat insulation. However, the high privacy imposed by concrete walls and steel entrance doors tends to isolate the tenants, and residents reported numerous concerns with their neighbors and anxiety about the community. In contrast, there were few complaints on the structure of the temporary housing. Some rooms are divided by concrete walls, others are connected by sliding shoji. This spatial structure is more easily adapted by residents than prefabricated temporary housing.

However, most of the elderly residents expressed their problems in adjusting to the modern lifestyle expected in the public recovery mass housing. They dine on carpets around low tables rather than on chairs around desks. The modern style of eating and sitting in the combined kitchen and dining space is incompatible with the traditional lifestyle. Also, residents on the higher floors perceive the distance from the ground as a separation from society, because their original ground-level houses were closely connected to the surrounding natural and social environment. Even though the official management regulation prohibited self-construction in those houses, residents invented simple renovation methods to domesticate the space. One couple who moved from temporary housing to recovery public housing in Kesenuma reported an inability to settle in their temporary house, but after moving to the public recovery housing and constructing their religious alters of Buddhism and Shintoism, they regarded the house as their own.

Particularly for elderly people, the living qualities of disaster-recovery housing were considered to be closely related to community formation and management methods. Many of our elderly interviewees favored the smaller-scale communities in their previous temporary housing over their current situation in the disaster-recovery public housing. As mentioned above, when discussing the multiple stages and arrangement of community spaces in temporary housings, the community space in the housing complex serves two functions. First, it connects the private internal area with the social external area; second, it provides a social gathering space. When interviewed, the residents in Nango public housing suggested three levels of networks—groups of 3–5 units, horizontal networks on each floor, and vertical networks between the floors—to prevent the isolation of elder residents. Transitions and combinations of different levels of community space are especially important in disaster-recovery housing, because the steel doors create rigid barriers. Methods that expose the atmosphere of the rooms to external corridors are probably required. Such methods would facilitate the creation of a daily gathering space for residents of closely neighboring houses, and a public community space with high accessibility and visibility on a flowline to the ground floor.

Concluding remarks: disaster relocation of housing and urban/regional planning

A disaster destroys the affected area, but recovery buildings such as temporary houses and disaster public housing alter the landscape and social conditions of the area. Consequently, the construction has changed the entire landscape and infrastructure of the area. Also, whereas the construction of disaster public housing is financially supported by the country, its subsequent maintenance is handed to the local municipalities, and forms a significant part of their budgetary responsibility. Therefore, a new flexible management method, enabling a long-term change of community, is urgently required.

After examining the impact of relocation on the refugees' sense of dwelling, we recognized that social and psychological issues are closely interconnected with the physical constructions of the housing units. The research findings emphasize the need for continuing the refugees' habitual lifestyle, such as their living and societal customs, considering their regional needs. In addition, given the aging

population, forming relationships among the housing, the neighboring community, and the municipal social and communication services is more important at each stage of the relocation process than in normal times. Engagement in renovating the living space and creating community spaces can significantly assist refugees in recovering their sense of owning the place. In many instances, the refugees effectively created multiple-layered relationships between their private dwellings and the public/community space, which further elevated their sense of belonging. After post-disaster relocation, the most important problems were isolation from the existing regional space and networks, and the local society, which is closely connected to above issues of belonging. As a French philosopher Pierre Bourdeau claims, a house is a social medium connecting people with surrounding society through his engagement, restructuring the system of public housing, and the relationship between the refugees and their local society should be reconsidered.

Acknowledgement: This study is based on the researches supported by Aoyama Gakuin University ACL Funding, and by the research fund of Lixil Foundation. In the latter research, the author deeply appreciate the contributions by Satoko Shinohara and Mamiko Miyashita as collaborators.

Bibliography

- ABE, Shigenori, “Fukko no okureto hirogaru kakusa-Taikyo semarareru kaestujuutaku nyuukyosha,” *Noson keikaku gakkai ronbunshu*, 2015
- ALDRICH, Daniel P. *BUILDING RESILIENCE: Social Capital in Post-Disaster Recovery*, The University of Chicago Press, 2012
- FUKUMOTO, Yasuyuki., lecture report, “Saigai ni sonaeru machizukuri-Jakusha taiou no shitenkara,” 2016
- KANO, Toru, “Kasetsujutaku no kaizen oyobi kasetujutakuchi niokeru machizukuriteian,” *Saigai koei jutaku seibino kiroku*, Miyagiken Dobokubu fukkoujuutakuseibishitu, 2016
- KASHIWAGI, Shiro, *Hansin Awaji daishinsai niokeru hinanjo no kenkyu*, Osaka Daigaku Shuppankai, 1998
- KIKUCHI, Yoshihiro, NUMANO, Natsuo, “Shinsai ni yoru seikatukoudou heno eikyouto jumin shutaino seikatukenn saikousei (The Influence and Community-based Rearrangement to the Living Sphere Caused by the Earthquake Disaster),” *Nihon Kenchiku Gakkai Taikai kogaishu*, 2014
- KIMARA, Reiou, “Mindsettings of refugees toward recovery“, *The Report of the Recovery Situation of East Japan Great Earthquake*, wrote and edited by the members of Hyogo Shinsai Kinen 21th century Research Bureau, 2017, pp23-35
- KON, Wajiro and Dojunkai, *Housing Revitalization Research in the farming, mountain and fishing areas of Northern part of Japan Vol 3*, Nihon Gakujutsu Shinkokai, Tokyo, 1941, pp63
- MATSUSHITA, Tomoko, “Higashinohon daishinnsai niokeru oukyuukasetujutaku kyokyu heno chiikijigyousha sankakuno kensho,” *Doboku gakkai ronbunshu*, vol69, no4, Jishin Kogaku ronbunshu No. 32
- KUROISHI, Izumi, SHINOHARA, Satoko, MIYASHITA, Mamiko, “Ikinobiru tameno ie,” *Likisil kenkyujo report*, 2016
- OYAKE, Ryo, “Fukko machinamizukuri-machinamizukuri heno shiennno kanouseiwo saguru, Hisaichi niokeru jutakusaikenno kadaito torikumi,” *Ieto machinami*, 66, 2012

TANAKA, Mikito, *Saigai Jakusha to Joho Jakusha*, Chikuma shobo, 2012

YOKOYA, Hiroshi, “Higashi nihon daishinsai niokeru hisaichino jutakuchakkoujoukyouto saigaifukkoujuutakuyuushi riyoushano tokuchounituite,” *Housing Finance*, 2013 winter

YAMAGUCHI, Sayu, “Changes in attitudes to the living environment and housing choice-Research on Housing and neighborhood community formation in Fukushima Prefecture after the Great East Japan Earthquake,” *Nihon Kenchiku gakkai taikai kogaishu*, 2013

YONENO, Fumitake, “Hisaisha ni taisuru jutakukyokyu no genjo to kadai,” “Okyu kasetujutakukara saigaikoueijuutaku nadono kokyuuteki jutakuheno ikouno jittaito kadai,” *Report of kenchiku kenkyujo*, 2016

¹ This study is based on two projects of interviewing refugees about their lost houses. One was conducted in temporary housings in Kesennnuma by the author and her students in 2015. Another is “Ikinobiru tameno Ie,” which was collaborated with Satoko Shinohara and Mamiko Miyahara, and was funded by Lixil Research Fund in 2016.

² Report of the “Okyu kasetu jutaku, minashi kasetu jutaku no hisaisha no jokyo” on the home page of the Iwate prefecture, 30th June, 2015.

³ Reiou Kimura, “Mindsettings of refugees toward recovery “, *The Report of the Recovery Situation of East Japan Great Earthquake*, wrote and edited by the members of Hyogo Shinsai Kinen 21th century Research Bureau, 2017, pp23-35.

⁴ “Kasetu jutakuchi ni mirareru kadai,” Higashi nihon daishinnsai karano fukko ni mukete, by Toshi konsarutanto kyokai, 2015.

⁵ This study examines the case of temporary houses built by the Prefabricated Building Association in Kesennnuma city and local constructor’s buildings in Sumita town.

⁶ The data of the Ministry of Land, Infrastructure and Transport Ministry of 2012,

⁷ Kon Wajiro and Dojunkai, *Housing Revitalization Research in the farming, mountain and fishing areas of Northern part of Japan Vol 3*, Nihon Gakujutsu Shinkokai, Tokyo, 1941, pp63



Intentions and transition of inhabitants in Fukushima

Sayu YAMAGUCHI*, Satoko SHINOHARA**

* *Research Fellow, Japan Women's University, M.S. yamaguchi@meglab.jp*

** *Professor, Japan Women's University, sinohara@jc.jwu.ac.jp*

The Great East Japan Earthquake was a scale of an earthquake that modern Japan had never experienced before. As a result of this disaster, prolonged evacuation orders were issued to wide areas, and even six years after the earthquake, there are people who still live in temporary houses because they cannot go back to the place where they used to live. This paper focuses on Katsurao Village, Fukushima Prefecture and aims to grasp how the dwellings and family structures changed since the Great East Japan Earthquake as well as the reason for these changes. Intentions as to the future location of their dwellings differ by the age of the members of the household or the areas under the evacuation orders. Young generations do not depend on the existing community, and they wish either to go back to their own old village or move to a more convenient place. It was clarified that many residents want to have a privately-owned house but that there is a small number of people who want to move to a convenient area and choose other types of dwelling.

Keywords: The Great East Japan Earthquake, Family type, Dwellings

1. Purpose of research

Wide-scale disasters have been significantly affecting people's homes. This means not only changes of homes but also changes of family units living in homes. Such changes include active ones brought about by families' intentions and also passive ones due to changes of life environment. Changes of homes have been updated by reviews of fire/quake-resistance standards. However, there are few efforts to capture changes of family units to use the findings in future disaster countermeasures.

The Great East Japan Earthquake, which occurred on March 11, 2011, was as massive as magnitude (Mw) 9.0 that modern Japan had never experienced. This huge earthquake is called an unprecedented disaster because it brought about not only damage of buildings due to collapse like those seen after the Great Hanshin-Awaji Earthquake (Note 1) but also unexpected secondary and tertiary damages due to a post-quake massive tsunami hitting the coast of Tohoku region and the nuclear disaster at the Fukushima Daiichi Nuclear Power Station. In response to the nuclear disaster, the government issued a long-term evacuation order to wide regions in Fukushima Prefecture. Even today, seven years after the earthquake disaster, residents who had lived in high-radiation areas cannot return to their hometowns since the evacuation order has not been lifted yet. As temporary houses are basically to provide houses immediately after disasters, the tenancy period is two years in principle. In the two years, the government planned to construct restoration public housing and establish housing subsidy systems. Even now, however, about 3,400 temporary houses are still in use due to reasons such as delays in decisions of construction policies and complexity of supply systems. (Note 2)

In previous research, Tominaga's paper ¹⁾ clarifies the process of evacuation by arranging how evacuees have chosen evacuation sites and temporary housing, the reasons and how to acquire the housing information. Also, TSUKUDA's paper ²⁾ reports the tendency of intention to what evacuees are desired for restoration public housing. However, there are no papers reporting in detail the changes in family structure (increase or decrease in family composition), which is a feature of this research.

In this paper, we take up Katsurao Village, Futaba District, Fukushima Prefecture in order to find how houses and family forms changed after the earthquake disaster and the reasons for the changes and also demonstrate what houses people wish to live in. I hope it'll be a meaningful linkage to the recovery processes or future of the town, such as the number of new house planned, or their housing or related support that would be useful based on the understanding of peoples' future intentions related to housing.



2. Post-quake damage in Fukushima Prefecture

The damage from the earthquake disaster was serious especially in the three prefectures: Iwate, Miyagi, and Fukushima. Looking at Table 1, Miyagi Prefecture saw the most serious human/building damages. The number of missing and dead surpassed 10,000. And the number of completely destroyed house was 82,889 in Miyagi. The reason is that due to its wide low-lying area, Miyagi had a large flooded area caused by the tsunami and a large population within the area as compared to other prefectures. In contrast, Fukushima saw less damage from the tsunami unlike other prefectures. For example, the number of missing and dead was less than 2,000. And the number of completely destroyed house was 21,167 in Fukushima. That said, residents had to evacuate due to the nuclear disaster and contamination of radiation at the Fukushima Daiichi Nuclear Power Station located on the coast of Okuma Town, Futaba District, Fukushima Prefecture. As such, while there were less human/building damages as compared to other prefectures, the number of evacuees within and outside Fukushima Prefecture is as large as 53,960 which is an unusual situation. (Figure 1)

In response to the nuclear disaster, the government set evacuation order areas in 12 municipalities within Fukushima Prefecture immediately after the earthquake disaster. By April 2017, the government reviewed the evacuation order areas 25 times in all. As a result, the three types of areas: difficult-to-return zone, restricted residence zone, and zone in preparation for the lifting of the evacuation order are currently set in seven municipalities. In the difficult-to-return zone, which has the tightest restrictions, annual integral dose may not fall below 20 mSv in five years. This is likely to restrict people from living in the zone for a long period. As such, earthquake disaster reconstruction in Fukushima is expected to be extended for a long period of time as compared to other two prefectures.

Table 1: Status of human casualties and building damage: Author based on data released by Emergency Disaster Security Headquarters, Metropolitan Police Department.

Damage type / Prefecture	Human damage		Building damage		
	Death	Missing	Completely destroyed house	Partially destroyed house	Flood*
Fukushima	1,606	210	21,167	72,947	1,339
Miyagi	9,537	1,308	82,889	155,107	7,796
Iwate	4,673	1,149	18,370	6,558	6

*Figure of inundations above/below floor level

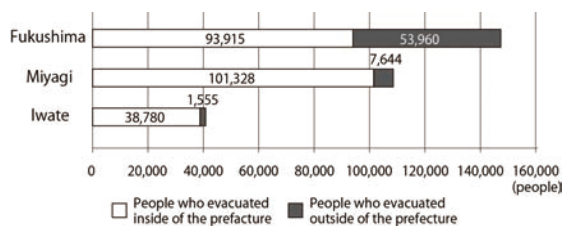


Figure 1: Status of evacuees (in / outside prefecture): Author based on data released by Reconstruction Agency, June 18, 2013.

3. Outline of Katsurao Village and process of evacuation

Katsurao Village is located about 20-30 km northwest of the Fukushima Daiichi Nuclear Power Station. (Figure 2) Its population was 1,531 in 2010 right before the earthquake disaster, which is the smallest one among 12 municipalities that suffered damage from the nuclear disaster. The village boasted its rich nature, where the main industry was the primary industry including the cultivation of leaf tobacco and rice and stock raising.

On March 11, 2011, the day of the earthquake disaster, declaration of a nuclear emergency situation was issued after the earthquake disaster occurred. On the next day, the evacuation order was issued to people within a radius of 20 km from the nuclear power station, which designated an eastern part of Katsurao Village as an evacuation zone. At first, Katsurao Village was going to accept evacuees from other towns and villages closer to the nuclear power station. Seeing the worsening situation of the nuclear disaster, however, the village office decided to make



all the residents evacuate from the evening of March 14. Many residents evacuated staying at various places like gymnastic halls, hotels, and houses of relatives or acquaintances. In June, the village office constructed temporary houses in Miharu Town, Tamura District, Fukushima Prefecture and also opened a branch of the village office there in July. At this point of time, of 1,524 evacuees, 913 evacuees (59.9%) lived in temporary houses in Fukushima Prefecture, 446 evacuees (29.3%) lived in prefecture-rented houses in the prefecture, 34 evacuees (2.2%) voluntarily evacuated within the prefecture, and 133 evacuees (8.7%) evacuated outside the prefecture. In April 2016, about five years later, the village office resumed all the operations at the main office in Katsurao Village. On June 12, the designation of the restricted residence zones and zones in preparation for the lifting of the evacuation order was lifted within Katsurao Village. However, Noyuki District, Katsurao Village is still designated as a difficult-to-return zone. As the present investigation was conducted in March 2015, we were unable to know until when the evacuation order lasts at that time.

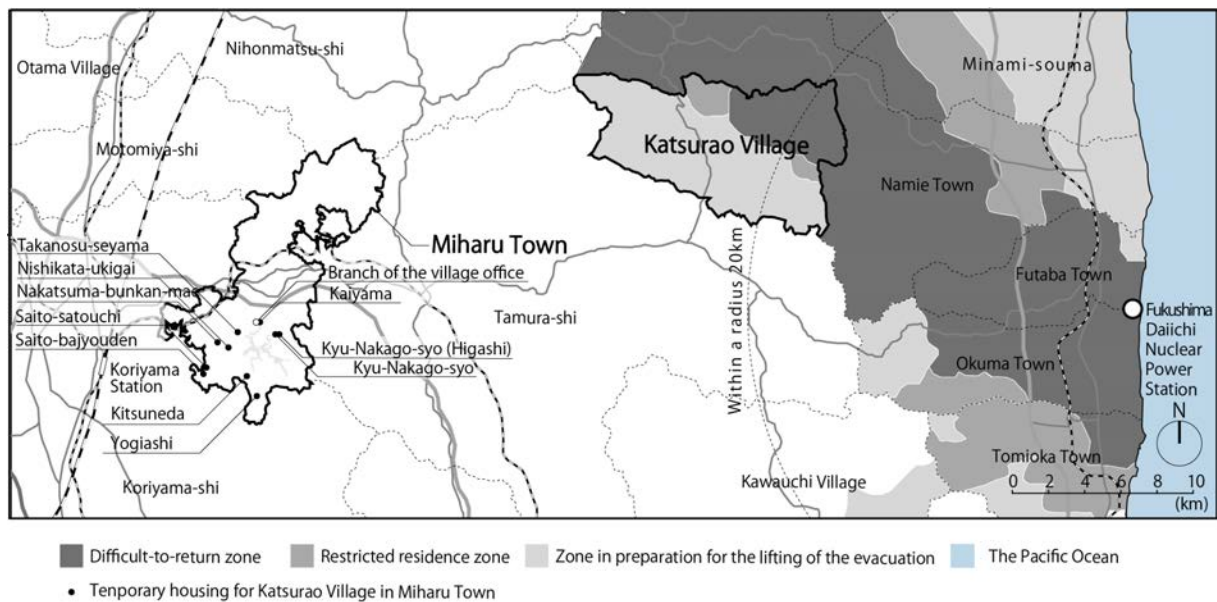


Figure 2: Map of Katsurao Village and Miharu Town, Fukushima Daiichi Nuclear Power Station: Author based on 1) Conceptual diagram of evacuateon direction area since 5th Sep. 2015 released by Fukushima Prefecture , 2) *The Great East Japan Earthquake record book in Katsurao Village* [Katsurao Village, 2015]

4. Outline of investigation

We conducted a questionnaire investigation of houses and household compositions of 456 households whose residence certificates were maintained by the Katsurao Village Office. Among 456 households who distributed questionnaires, 97 households responded, and the response rate was 21.3%. Questionnaires were manually distributed by village office staffs to 390 households living in the temporary housing complex in Miharu Town. For other 66 investigation objects, questionnaires were enclosed with copies of a monthly village letterzine. In the questionnaires, we asked how household members and house forms changed after the earthquake disaster and with whom and where respondents would like to live in the future. We distributed one questionnaire to each household and asked each respondents to give the attributes of the household members as a representative of them so that we can acquire information of all the residents by households.

This is a inventory of questionnaire (extract) below.

A. About your house and living before the earthquake

1) -What parts of district did you live in Katsurao Village?

-The area was difficult-to-return zone or restricted residence zone or zone in preparation for the lifting?

2) What kind of house did you live? (owned detached house / rented detached house / owned apartment / rented apartment / share house / facility for the elderly / the other)



- 3) Whom did you live with? How many people each? (spouse / daughter / son / child's spouse / grandchild / father / mother / grandfather / grandmother / sibling / sibling's spouse / the other (relative or pet))
- 4) What kind of relationship were you with your neighbors? (I didn't know well / just say hello to each other / have a conversation outside / have a conversation in the house / give a present for each other / do something together (work or hobby) / take part in some events together / help each other when you are in trouble) *multiple answers allowed.
- 5) Do you have attachment to Katsurao Village? And why?

B. About your house and living now

- 1) What kind of house do you live now? (temporary housing / detached housing provided by the local government / apartment provide by the local government / owned detached house / rented detached house / owned apartment / rented apartment / the other)
- 2) Whom did you live with now? Please write each parson's information (relationship, age, sex, occupation) in the table.
- 3) If there is a parson who had lived with you before the earthquake and separate now, please write his/her information (relationship, age, sex, occupation, what kind of house does he/she live, where he/she live)
- 4) Has anything changed in your family since you moved current house?
- 5) What kind of relationship are you with your neighbors now? (I know who is live in neighborhood next door / I know who is live in the same building / I know who is live in the same area / just say hello to each other / have a conversation outside / have a conversation in the house / give a present for each other / do something together (work or hobby) / take part in some events together / help each other when you are in trouble) *multiple answers allowed.

C. About your house and living in the future

- 1) What kind of house do you want to live in the future? (owned detached house / rented detached house / owned apartment / rented apartment / share house / facility for the elderly / the other)
- 2) Whom do you want to live with in the future? How many people each? (spouse / daughter / son / child's spouse / grandchild / father / mother / grandfather / grandmother / sibling / sibling's spouse / the other (relative or pet))
- 3) Where do you want to live in the future? And please write the reason.

5. Results

5-1. Changes of age groups since earthquake disaster

The respondents and their household members both had a male-to-female ratio of nearly 50%. Their current ages spread over multiple generations between age 0 and 90s, of which age groups 60s to 80s account for about 60%.

Looking at how age-specific headcounts changed after the earthquake disaster(Figure 3) , all the age groups showed lower headcounts. Particularly, young age groups of 40s or younger showed significant decreases: about 40-60% decreases. Meanwhile, age groups of 60s or older showed just approx. 10% decreases. The reason why the number of persons with unknown ages was as large as 89 before the disaster is that many respondents failed to fill out questionnaires with their ages. However, we were able to guess rough age groups on the basis of their names. (Figure 4) As a result, 45% of them were daughters, sons, and their spouses and 16% were grandchildren and great-grandchildren, which exceeded in all half of the persons with unknown ages. As such, actual decreases in the headcounts of the young age groups must have been greater.

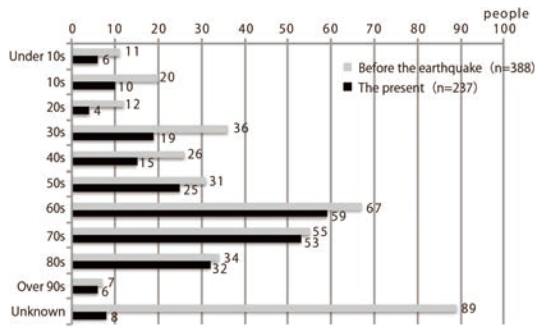


Figure 3: Changes in population by generation

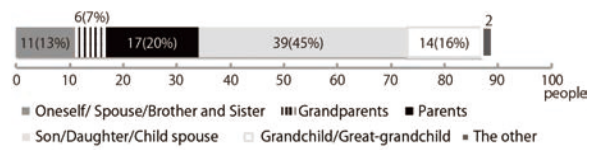


Figure 4: Breakdown of "Unknown" in Figure 3

5-2. Characteristics of changes of family compositions

The graph below shows changes of family compositions after the disaster (Figure 5).

Looking at pre-quake family compositions, there were 18 households of a married couple and an unmarried child(ren), 29 three-generation households, and eight four-generation households while there were four one-person households and 21 married-couple households. That is, there were more multi-generation households than single-generation households. Looking at pre-quake age compositions by family compositions, one-person households and married-couple households had great percentages of elderly persons in their 60-80s. Households of a married couple and an unmarried child(ren), three-generation households, and four-generation households had wide age distributions between children under 10 and 90s. Age groups of 20s or younger belonged only to these three family forms. Speaking of significant changes of family compositions, one-person households increased from four to 16; married-couple households increased from 21 to 36; three-generation households decreased from 29 to six; and eight four-generation households all disappeared.

This indicates that Katsurao Village had been an area with many large families such as three-generation households and four-generation households and young generations had been included in such large families. However, such families were split after the disaster and, as a result, one-person households and married-couple households increased, resulting in small family sizes.

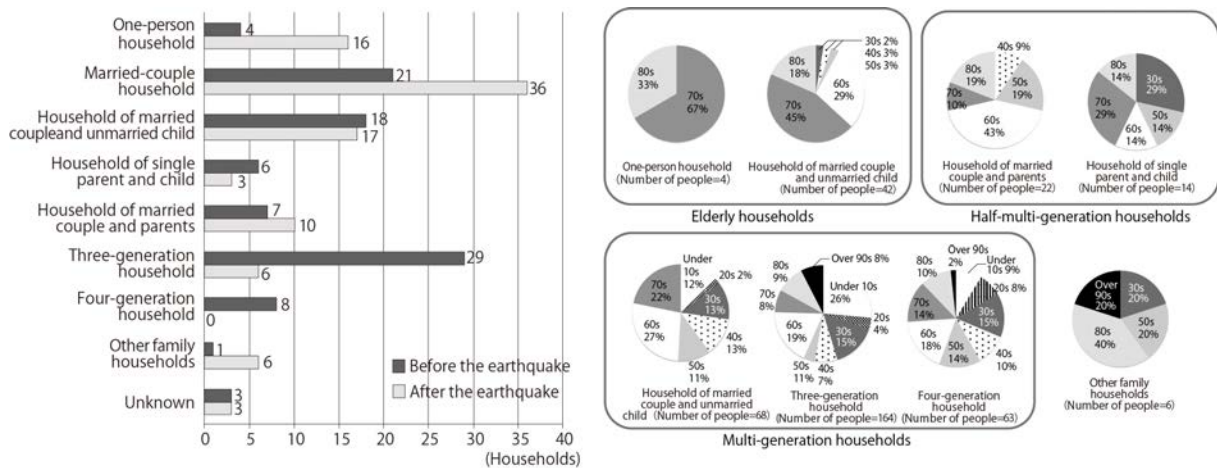


Figure 5: (Left) Changes in family type. (Right) Ratio of age and family type before disaster.

5-3. Characteristics of family compositions in terms of changes

Table 2 shows changes of family size and their intentions for the future. The vertical axis indicates changes of family size and their intentions for future changes. The horizontal axis indicates pre-quake family forms. Table 3 shows excerpts from free descriptions of changes.



Table 2: Changes in family type [pre-quake and current, current and the future]

Changing about the family size		Family type of Pre-quake (Number of people, %)									Subtotal	Total
The past changes from pre-quake to the present		One-person household	Married-couple household	Household of married couple and unmarried child	Household of single parent and child	Household of married couple and parents	Three-generation household	Four-generation household	Other family households	Unknown		
intention for future change												
No change	No change	4	10	4	1	1	0	1	0	0	21 (25.6%)	30 (36.6%)
	Shrink	0	0	1	0	0	1	0	0	1	3 (3.7%)	
	Expand	0	3	1	0	2	0	0	0	0	6 (6.2%)	
Shrink	Expand (larger than pre-quake family)	0	1	2	0	0	0	0	0	0	3 (3.7%)	48 (58.5%)
	Expand (return to pre-quake family)	0	0	2	0	2	6	0	0	0	10 (12.2%)	
	Expand (smaller than pre-quake family)	0	0	2	0	0	4	2	0	0	8 (9.8%)	
	No change	0	2	4	3	0	11	3	0	0	23 (28.0%)	
	Shrink	0	0	0	0	0	3	1	0	0	4 (4.9%)	
Expand	No change	0	1	0	0	0	0	1	0	0	2 (2.4%)	3
	Shrink (return to pre-quake family)	0	1	0	0	0	0	0	0	0	1 (1.2%)	1 (1.2%)
The other		0	0	0	0	0	0	0	1	0	1 (1.2%)	1 (1.2%)
Unknown		0	3	2	2	2	4	0	0	2		
Total		4 (4.12%)	21 (21.65%)	18 (18.56%)	6 (6.19%)	7 (7.22%)	29 (29.90%)	8 (8.25%)	1 (1.03%)	3 (3.09%)	82 (100%)	

Table 3: Reasons for changes in family types [pre-disaster and current]

Category	The contents of change (Age, Sex, Family type of pre-earthquake) ※Excerpt of free description.	
No Change	<ul style="list-style-type: none"> My child and grandchild cannot sleep over with us now because of our small temporary house. (70s, Male, F) My grandmother's dementia got worse rapidly. (40s, Male, K) 	
Shrink	<ul style="list-style-type: none"> We moved from the temporary house to the apartment. (60s, Male, K) My mother living in the temporary house is moving to a care facility due to an accident. (60s, Male, O) My son, his wife, and child moved to another prefecture. (70s, III) 	
	<ul style="list-style-type: none"> My mother died. (60s, Male, K) I got into trouble with others at the temporary house and moved to another temporary house. (50s, Male, K) 	
	<ul style="list-style-type: none"> My oldest son moved to Fukushima for work and grandchild moved to Iwaki for work. (70s, Male, III) My son's family moved from the house provided by the local government to their owned house in the same city. (60s, Male, IV) I live separately due to my child's college education. (40s, Female, III) 	
	<ul style="list-style-type: none"> My son's wife and children moved to an apartment house in Aizuwakamatsu provided by the local government. The two grandchildren come and see us on weekdays. My son visits the Miharu temporary house on weekdays. (60s, Male, III) 	
	Expand	<ul style="list-style-type: none"> We evacuated to the current house and my daughter then started to live with us due to job relocation. So, we were mentally supported and encouraged by her when we were depressed. (60s, Female, F)

[Household type legends]

One-person household : T Household of married couple and unmarried child : K Three-generation household : III Other family households : S
 Married-couple household : F Household of single parent and child : O Four-generation household : IV Unknown : (No described)

A. Households with no family form change

Households with no change of family members accounted for 36.6%. Of them, respondents who chose “No change→No change,” which denotes an intention to make no change to their family compositions, accounted for the highest proportion: 26%. All pre-quake one-person households chose this answer. Besides, about half of pre-quake married-couple households chose this answer. That is, pre-quake small families less changed their family forms and also intended not to change them in the future.

Although their free descriptions were short as there was no change of family compositions, some respondents stated that they now have less family interaction and the elderly's dementia got worse, which suggested changes of quality of life.

B. Households whose sizes decreased

Households that respondents their family sizes decreased accounted for 58.5%, i.e., about 60%. About half of them: 28% intended to make no change to their family compositions. On the other hand, 25.7% intended to expand their family sizes. This percentage is the sum of 3.7% answering “Expand (larger than pre-quake family),” 12.2% answering “Expand (return to pre-quake family),” and 9.8% answering “Expand (smaller than pre-quake family).” As such, households whose sizes decreased broadly have two intentions: to make no change to their household sizes and to expand them.



Katsurao Village had relatively many three-generation households. In the present investigation, likewise, about 30% (29 households) of pre-quake households were three-generation households. Many of these three-generation households belonged to answer categories indicating shrinkage of household sizes. Eleven households chose “Shrink→No change,” which means that family members remain separate after household sizes decreased. This answer was the most common one. Six households chose the second most common answer: “Shrink→Expand (return to pre-quake family).”

Their free descriptions are divided into the following two types: ① Household sizes decrease due to the elderly’s disease or death as seen in the respondents: “My mother living in the temporary house is moving to a care facility due to an accident (Male, 60s, household of single parent and child)” and “My mother died (Male, 60s, household of married couple and unmarried child)” and ② Young families live separately for migration as seen in the respondents: “My son, his wife, and child moved to another prefecture (70s, three-generation household)” and “I live separately due to my child’s college education.” Reasons for living separately contained many social ones such as education and work. Besides, there was an respondent saying that an evacuee started to live separately in another temporary house after getting into trouble with others at the former temporary house. This indicates difficult human relationships at temporary houses.

C. Households whose sizes increased

The number of households that respondents their household sizes increased was just three out of all the households. Their free descriptions tell us that a child living separately started to live with parents temporarily for a work reason.

Besides, there were a few households answering that their household sizes will increase compared to pre-quake sizes despite how their household sizes changed until now. Such households chose any of these three respondents: “No change→Expand,” “Shrink→Expand (larger than pre-quake family),” and “Expand→No change.” Looking at the breakdown, many of households choosing “No change→Expand” and “Shrink→Expand (larger than pre-quake family)” were households of over 50s couple or those living with their parents or child(ren) and, in such households increase the family size with their child(ren) and their spouse, grandchild(ren). Households choosing “Expand→No change” all had a new child(ren) after the disaster. (Note 3)

6. Where evacuees want to live in the future

As respondents to the question “Where do you want to move and live in the future?” “Area of past residence” and “Convenient area” both accounted for 28%, followed by “Area where many acquaintances live” (8%), “Area to which people who had lived in same town moved together” (7%), and “Area close to relative’s home” (6%), totaling up to 21%. Thus, we found that respondents had the following three intentions in nearly equal proportions: returning to Katsurao Village where they lived before the disaster; obtaining a new convenient house; and maintaining human connections with village people, relatives, and acquaintances.

“Other” respondents included ones saying area does not matter as long as the nuclear disaster does not affect life and many respondents wanting a normal life as seen in the actual respondents “Area 30 km away from the nuclear power station because I want to get away from the village (Male, 69yo, unemployed)” and “Any place is OK if I can lead a normal life (Male, 45yo, self-employed).”

According to 5-2, in this survey, the age composed of households was characterized. Households with “One-person household” and “Married-couple household” are large elderly. And “Household of married couple and unmarried child” , “Three-generation household” and “Four-generation household” were multi-generations including the young generation. Focusing attention on the family composition in Figure 6, there are many people who wish for a “Married-couple household” for “Area of past residence”, and “Household of married couple and unmarried child” prefer “Area of past residence” and “Convenient area” are almost the same number There. “Three generations household” have many households desiring “convenient area”. Because of this, many elderly households want to return home to the familiar Katsurao village, and young households tend to select convenient areas for more social activities.



We also analyzed their intentions by pre-quake areas. When we conducted an investigation in 2015, Katsurao Village had three types of evacuation order areas. Noyuki District, which is located at the northeast end of the village, was designated as a difficult-to-return zone; Iwakado District and a part of Hiroyachi District, which are next to Noyuki District, were designated as a restricted residence zone; and the rest was designated as a zone in preparation for the lifting of the evacuation order. As for the respondents: "Return to area of past residence," Noyuki, a difficult-to-return zone, showed a small proportion of such respondents and the same holds for Hiroyachi and Iwakado, a restricted residence zone. This demonstrates that where evacuees would like to live in the future depends on the severity of an evacuation order area.

Before the disaster, owned detached houses accounted for 98% of all houses and almost all residents therefore lived in such houses. As for future houses, 74% of respondents wished owned detached houses and the rest 24% chose other house types: rental detached houses and condominium complex, etc.

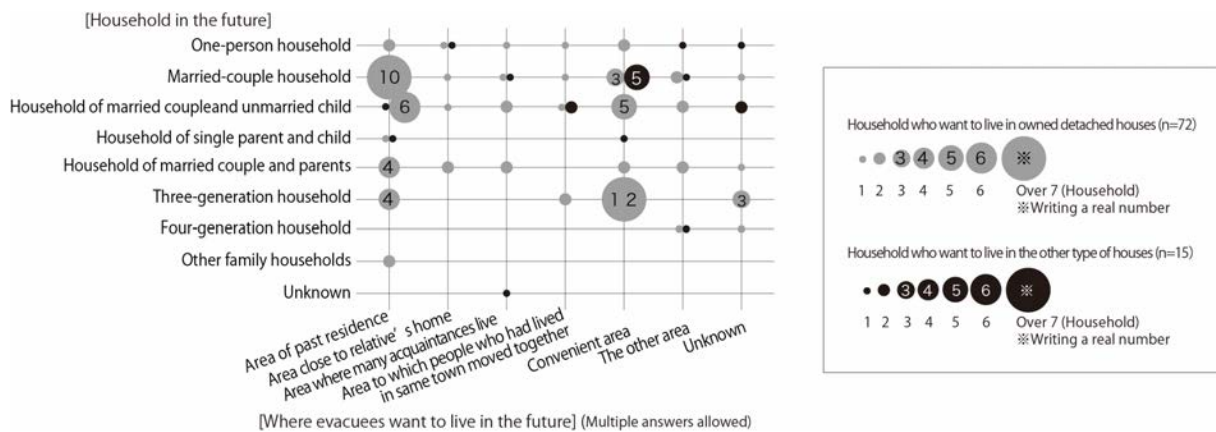


Figure 6: Desired housing type [family type × area]

7. Conclusion

Investigating changes of household forms and future resident areas demonstrated part of disaster victims' actual life.

After the earthquake disaster, particularly young generations up to 40s moved outside the village. This led to decrease of households that had been commonly found in Katsurao Village, i.e., households of three or more generations and households of a married couple and their unmarried child(ren). Besides, we found from increases of one-person households and married-couple households that large households with elderly members split into small households by generations.

One-person households made up of many elderly members and households made up of fewer members such as married-couple households less changed their household compositions and also intended not to change them in the future. Many of such households also hoped to return to their familiar place, Katsurao Village.

We found that where evacuees want to live in the future depends on household members' ages and evacuation order zones where they lived before the disaster. Households with young generations basically hoped to return to the village or move to a convenient area without depending on existing communities such as relatives, acquaintances, and people from the same town. Young generations are associated with many social external factors such as work and college education. These factors seem to promote migration. We also found that such factors cause three-generation households to live separately. As is the case with young households, many of households with elderly generations hoped to return to the village or move to a convenient area. They also intended to move to another place counting on their familiar persons such as their relatives, acquaintances, and people from the same town.



Before the disaster, almost all the residents in Katsurao Village lived in their owned detached houses and many of them hoped to live in owned detached houses in the future. However, a few married-couple households hoped to live in houses other than owned detached houses in a convenient area outside the village in the future.

Many people had to temporarily face changes of household compositions due to preparations to receive evacuees and restrictions on temporary houses. After that, prolonged life as evacuees started to change their individual situations. As a result, they were often no longer necessary to restore pre-quake household compositions. This is because individuals have close relations with environments associated with life stages such as education, marriage, and childbirth, which causes generations in large families to split.

Referencing

1) Ryusuke TOMINAGA, Kazuhiko OKAMOTO, Toshio OTUKI and Kazuhiko NISHIDE, :A study on the place of refuge and refugees' transition processes since disaster occurrence until occupancy of temporary housing, *J.Archit. Plann.*, Vol.79, No.706, 2799-2808, Dec., 2014

2)Haruka TSUKUDA, Kenji YAMANOBE, Yasuaki ONODA, :A study on the change of victims' habitation needs – Based on the registration data for public housing in I City-, Preceeding of AIJ Cnomference in Kanto chapter, 263-265, 2015

Fukushima Prefecture, *The record of the Great East Japan Earthquake and History of Reconstruction*, 2015

Joint Editorial Committee for the Report on the Great East Japan Earthquake Disaster, *Report in the Great East Japan Earthquake Disaster, Building Series Volume 10, Architectural Planning and Design*, 2016.8

Notes

1 The Great Hanshin-Awaji Earthquake is a large earthquake disaster in Hyogo Prefecture on January 17, 1995.

2 According to the Asahi newspaper: March 17, 2018 about 3400 temporary houses are using now.

3 According to the questionnaire, both households have children from 0 to 3 years old now.

Acknowledgements

I would like to thank people of Katsurao Village for their cooperation.



INTERNATIONAL PLANNING HISTORY SOCIETY

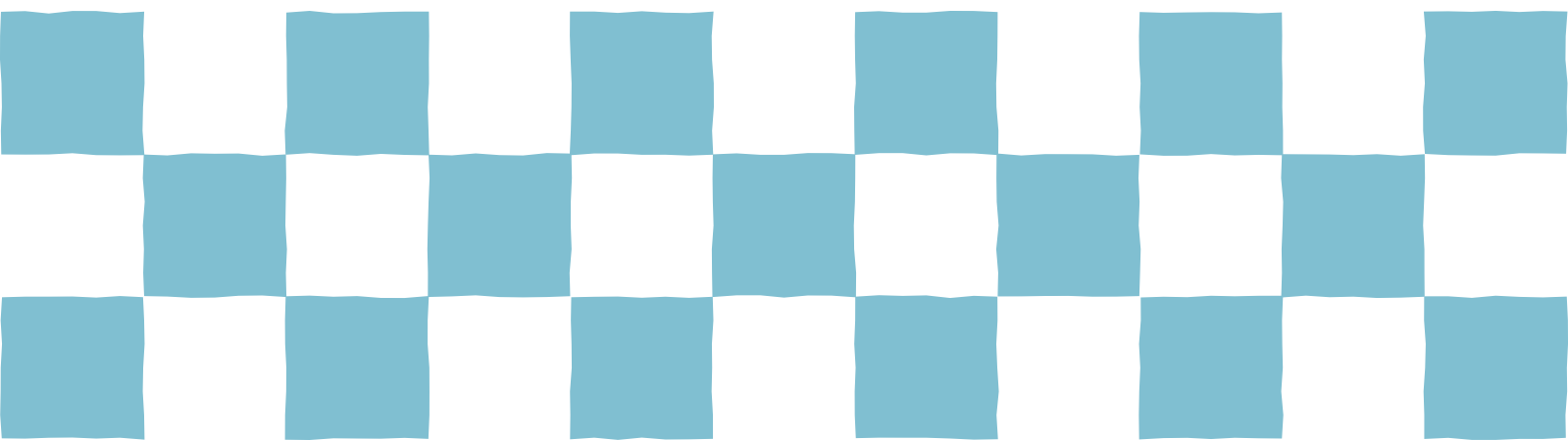
YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

4

Machizukuri and Participatory Planning



Re-generating vitality by participation? - A theoretical analysis on participation and vitality in urban regeneration process

Cinco Hsinko Yu (Delft University of Technology)

This study examines the relationship between public participation and urban vitality. It will employ a theoretical analysis particularly in urban regeneration projects. The broader goals of the study are: 1) What are the institutional characteristics of public participation (PP)? Particularly in urban regeneration projects (URS)? And; 2) What is the theoretical characteristics for urban vitality (UV) and the potential while UV present in URS projects?

It is gradually accepted that planning is neither 'what planners do' nor 'what the planning system decides to do'. Predominantly, in planning practice and planning theory, the argument of public participation is much more fundamental, it is concerning how to make the practice of planning more inclusive and democratic. However, while the planners come across questions in their mind while they are practicing planning process such as: 'How does the character of participatory planning influence the spatial quality'. These common-asked questions need to be solved. Although there is extensive research, has been devoted to developing, assessing and numerous critiques have been made to investigate various tools to make participation more meaningful, the relationship between public participation and spatial quality is still nebulous. To have an operational idea of spatial quality, the idea of urban vitality is applied, the research will later investigate the theoretical character of urban vitality, as a while implementing public participation within the process of urban regeneration project. In the literature of urban vitality, the questions such as 'what is good urban form' and 'what makes or does not make lively urban life' are intensively argued by scholars from diverse perspectives. Nevertheless, with different meanings in different contexts, the concept of urban vitality has become vague, and not yet been defined through research. Henceforward, approaches from diverse professional fields and from the inter-disciplinary perspective should take account of all the factors across the different political system and social-cultural values.

To sum up, the research will attempt to investigate the relationship between participatory planning and urban vitality in urban regeneration process, and to have a better operational definition.

The Four "I"s as Key Concepts in a Re-examination of "Machizukuri" as an Intrinsically Vital Element in Urban Planning for the Post-Urbanization Period - A Methodological Consideration of the Concept of "Machizukuri"

Keiichi Kobayashi (Tohoku University of Art and Design)

"Machizukuri" is a key concept in Japanese urban planning and more than sixty years has passed since the word first came into use. Recently, the word has become so widely used that its meaning is rendered quite vague or ambiguous. This paper intends 1) to rethink the meaning of "machizukuri" and 2) to evaluate ways it can help to address contemporary urban planning issues.

Rethinking the meaning requires a reassessment of the static definitions of the word, which, although mainly intended to distinguish "machizukuri" from statutory urban planning, have resulted in an exclusive character. Since there are only a few isolated examples of successful "machizukuri" in practice, the term remains rooted in idealism. In order to resolve this contradiction, I will examine the dynamics between "machizukuri" and statutory urban planning.

Historically it can be seen that the role of "machizukuri" has been to compensate for areas of incompleteness in the hastily established Japanese urban planning system. The co-existence of "machizukuri" goes right back to the beginning of the statutory urban planning system that was based on the City Planning Law of 1968. Instances of "machizukuri" have managed to develop alongside various phases of planning such as the adjustment process between macro and micro scales, conservation processes in historic or built-up areas, quality control systems, comprehensive management systems for urban planning, and the promotion system for urban functionality.

Furthermore, as there is a reciprocal process of institutionalization between "machizukuri" and statutory planning, it has proved to be an important means of helping solve local planning issues through incrementalism, in contrast to statutory planning's rationalism. That is to say, "machizukuri" has performed as the inspiring avant-garde of a progressive urban planning system in which highly motivated participants collaborate to create a constructive arena.

An examination of the potential of "machizukuri" requires a review of the contemporary situation at the beginning of the post-urbanization period. It can be seen that the ability of planning to reform present conditions is decreasing, which means that we have a responsibility to explore various types of "machizukuri" in seeking ends and means through an incrementalism approach.

This paper pays attention to "vitalization" as a predominant issue in contemporary urban society, and argues that incrementalism is a necessary condition for sustaining the vitalization process. As a result, intentionality, meaning subjectivity in doing something, innovative value creation, and integrity of regional development have emerged as key concepts. Combined with incrementalism as a precondition, I conclude with referring to these as the four "I"s, constituting core concepts for urban planning in the coming period.

The Inclusive Planning Strategy of Divided Nicosia through Home for Cooperation: A Building bridging People for Peace-Building

Huriye Gürdallı (Near East University)

Certain locations in a city have a stronger foundation for cooperative and comprehensive autonomy for the establishment of an urban accommodation through their socio-spatial qualities. They have the capacity and ability to exert independent effects on post-conflict areas more than the vulnerable urban plans and state-level negotiations. Post-conflict divided cities and societies symbolizes a daring experiment when planning is taken into account as a tool of reproduction of space. Urban plans prepared by international agencies, policy makers and private contractors, restorations of buildings have been implemented with limited success unless the role of civil initiative and NGOs are considered within the planning processes. The effect of the community-led initiative can be unpredictable and effective more than the planned. The spatial order in Nicosia, the buildings belonging to Lusignan, Venetian, Ottoman and British Colonial periods, historical city walls, streets ending by barricades, market area along the Green Line on both sides and the squares where significant meeting towards reunification were held yield its overarching socio-spatial experience. The Buffer Zone that physically and socially partitions Nicosia as a United Nations (UN) controlled area between Turkish and Greek Cypriots is at the focus of the communal polarization. Nicosia Master Plan formulated by the professionals from both communities had been able to resist against the protracted political deadlock by producing and implementing projects for the revitalisation of the capital city. The Buffer Zone, reputed as the Dead Zone had been at the focus of this bridging projects at urban and architectural scales. The socio-spatial transformation of the area as a co-product of formally planned and informally interpreted processes made planning experience along the divide of Nicosia unique and valuable among the planning histories of post-conflict divided cities. The Home for Cooperation (H4C) has been a symbol that blurred the lines of the border to become a shared space for Cypriots. The understanding of the ongoing experience through NMP, NVP and H4C may yield understanding for the peace building policies in the post-conflict divided cities. Scrutinization of this planning history made clear that social and cultural aspects of planning are the complementary parts and crucial components of spatial planning and transformation. This paper explores the policy towards comprehensive planning that are being proposed in post-conflict cities that include the collaboration of both parties, the cooperation taken by professionals from both communities before the political consensus is reached. The analysis focuses on the complementary role of the community-led initiative to draw attention to the involvement of cultural and social interaction of the citizens with the help of visual and verbal records centred on activities carried in H4C within the context of divisiveness.



The Four "I"s as Key Concepts in a Re-examination of "Machizukuri" as an Intrinsically Vital Element in Urban Planning for the Post-Urbanization Period

- A Methodological Consideration of the Concept of "Machizukuri"

Keiichi Kobayashi

* *Dr. of Eng., Tohoku University of Art and Design, kobayashi.keiichi@aga.tuad.ac.jp*

This paper discusses the word "machizukuri" and the versatility of its meaning through examining the interplay between "machizukuri" and statutory urban planning over the past sixty years. By tracing the history of the Japanese urban planning system, it can be seen that one role of "machizukuri" has been to compensate for areas of incompleteness in urban planning. As there has also been an institutionalisation process from "machizukuri" to statutory urban planning, the primary role of "machizukuri" has been to provide a constructive arena for collaboration on efforts to improve regional conditions. As "vitalization" has become the definitive issue for urban planning in the post urbanization period, the four "I"s, incrementalism, intentionality, innovative value creation and integrality of regional development, have been abstracted as necessary conditions for a revised and more readily applicable version of "machizukuri."

Keywords: incrementalism, intentionality, innovation, integrality, planning methodology

1. Introduction - the aim of this discussion

"Machizukuri" is a key concept in Japanese urban planning and over sixty years has passed since the word first came into use. The meaning of the word has become diffuse and, as André Sorensen (2002) has stated, "the variety is so great that it is arguable that the term has become a rather vague catch-all that serves more to confuse than to clarify" [1]. The word has come into popular use because of its positive connotations, but denotes no more than any non-specific attempt to improve regional conditions.

At this turning point in urban planning, it is natural to revisit the term and make a critique of its substance; i) what it is, ii) what kind of progression it has taken, iii) what kinds of issues and potential it has. Notwithstanding the opinions noted practitioners and scholars have already expressed with their definitions and historical views, we still require further methodological deliberations and definitions more appropriate to the realities of this period. Professor Shun-ichi Watanabe is a forerunner of this theme and proposed normative dimensions to define the concept based on analyses of prominent planners' definitions [2].

In this paper, I would like to approach the theme through an interpretation based upon the history of city planning institutions in Japan and my own practical experiences [3]. This approach will lead to a conclusion different from preceding explanations. My discussion looks at the reasons why the meaning of the word "machizukuri" has altered over time and why it has become so generalised that it is frequently used to justify any application. I also intend to identify conditions for a practicable "machizukuri" that can be applied to contemporary urban requirements.

2. A review: current trends and a general definition of "Machizukuri"

2-1. Currents and periods

It can be confirmed that the year in which the word "machizukuri" first appeared goes back to 1947, just after WWII [4]. Shun-ichi Watanabe found original uses of the word "machizukuri" in a sampling of journals of various genres concerned with urban matters published between 1945 and 1959. The instances fall within six different domains related to i) a movement for social welfare, ii) democratisation, iii) social organization, iv) administrative merger movement, v) urban planning society, and vi) social science. This shows that the word began to be used simultaneously in random contexts and with a variety of meanings [5].



Professor Shigeru Sato, one of the great promoters of “machizukuri,” wrote a history analysing ideological relationships and influences from abroad, and distinguished three phases in the development of “machizukuri.” He described the first generation, from the 1970’s to the mid-1980’s, as a rising period when the ideology became more distinct; the second generation, from those days until the Great Hanshin Earthquake of 1995, as a period of various practical trials when diverse themes were attempted one after another; and, recently, the third generation, as a period of networks forming to achieve a system of regional management [6]. His historical view is persuasive as it reflects the top runners’ issues in each period. Historical observations of its application and experience over time help us to understand the more tenable types of “machizukuri.”

2-2. Definitions

Professor Shigeru Sato’s clear view of history is the obverse of his explicit definition of “machizukuri.” He defined it as a sustainable movement, i) based on the resources of a region and its society, ii) diverse subjects cooperate in the creation of its networks, iii) incrementally improving the living environment, iv) enhancing the vitality and attractiveness of the town, and v) increasing the quality of life [7].

Professor Yukio Nishimura, also one of the leading authorities of “machizukuri,” interpreted it as a movement encouraging inhabitants to rebuild local communities and commons by overcoming social impoverishment trends caused by modern land-ownership systems. He attached greater importance to practical action than outlining definitions and pointed to confidence, amateurism and voluntarism as prerequisites for promoting “machizukuri” [8].

Although these definitions seem rather idealized, they are persuasive because they represent our perception of the concept of "machizukuri" which has mainly been influenced by successful "machizukuri" movements. The point at issue in these definitions is that they are selective and exclude various incomplete trials.

In order to widen the tolerance, Professor Shun-ichi Watanabe reviewed definitions of "machizukuri," found commonalities among them, and produced a framework for reference that included six variable dimensions, which are: i) actor, ii) activity field, iii) motivation, iv) place, v) time/age, and vi) method, (abstracted from Akira Tamura and Shigeru Sato). In addition, the wide and the narrow (abstracted from the work of Uzo Nishiyama and Akira Sawamura) are variables in each dimension [2].

Though the framework offers practical definitions and is more inclusive of vast trials, the result is still inevitably static since, as with preceding definitions, his purpose was to distinguish "machizukuri" from “non-machizukuri,” especially from statutory urban planning.

Generally speaking, such static definitions are useful for encouraging the understanding of "machizukuri" as a specific movement in history. However, if the goal is to move forward with a new version of “machizukuri” by aggregating various contemporary trials, we must take a different approach to interpreting the substance of the concept or the movement.

3. Pragmatic features and meaning of “machizukuri”

3-1. The contradictory definition of “machizukuri” as anti-urban planning

It must be reasonable that Professor Nishimura attached greater importance to practical action than outlining definitions, as I can recognize speculative definition will be inevitable to be so idealistic, which tone wither us to have an enterprise of “machizukuri,” rather than to be universally applicable.

In part, this is a result of the fact that "machizukuri" started in reaction to urban planning and therefore we need to define it in comparison with or in contrast to urban planning. Shigeru Sato's and Shun-ichi Watanabe's definitions both intended to make a distinction between "machizukuri" and urban planning.

This could turn into pressure to differentiate between "machizukuri" and urban planning, although Yukio Nishimura asserted the need for a practical combination. We can also follow the logic that "machizukuri" may be regarded as elemental urban planning thinking. Both have a common foundation, so planners and academic specialists are able to shift their focus towards practicable “machizukuri” applications.

A constructive redefinition of terms will enable us to better control the direction. We must rethink the relations among the sets of words, as “machizukuri” and "statutory urban planning" are subsets of “urban planning” which is the population set. These subsets are disjointed, since the “machizukuri” subset is a complementary set of “statutory urban planning.”



Viewed from a wider perspective that embraces both "machizukuri" and "statutory urban planning," it is possible to understand the dynamism in Japanese "urban planning."

3-2. Defects of statutory urban planning highlighted in each period.

In order to substantiate the above and to gain a broadly systematic understanding of the varied forms of "machizukuri," it seems advisable to enumerate some of the noticeable deficiencies in the statutory urban planning system. Japan experienced rapid urbanization after WWII and the City Planning Law of 1968 was hurriedly established for the expansion of urban areas. Many failures came about due to discrepancies between the statutory urban planning system and conditions in actual cities, including:

i) The lack of an adjustment process between macro and micro scales.

It was natural for the statutory urban planning system to take a rational approach in providing necessary infrastructure and development areas according to estimates of demand. Based on the act of 1968, road networks and land use were laid out rationally, giving consideration to land conditions and the efficiency of the total system. However, even though this was rational on a macro scale, it could not guarantee rationality on a micro scale. Planning has to be communicative in order to establish workable agreements in each district. At the time, there was no feedback process from the district plan to the master plan. Additionally, planners were probably not able to anticipate how infrastructure and land regulations would impact and change each district's environment, including daily life for residents. In places where environmental problems became intolerable, "machizukuri" was prompted [9].

ii) The lack of a conservation process in historic or built-up areas

At its start in 1968, the urban planning system did not have enough tools or procedures for conserving historic districts, even though it was defined as a comprehensive process of adjustment, development and conservation. Positive local governments and communities initiated trials to conserve historic districts even before the establishment of the national conservation system, as the institution of Preservation Districts for Groups of Traditional Buildings (PDGTB) was not established until 1975 by an amendment to the Law for the Protection of Cultural Properties and the City Planning Law. Such local actions have been called historical "machizukuri" [10].

In spite of the fact that the PDGTB system has been applied in over one hundred designated districts [11], we are still making efforts to conserve various local historical elements that, although not protected by law, are necessary for maintaining the historicity of our daily life space.

iii) The lack of a quality control system in forming urban space

Except for density, what was controlled by the 1968 plan was not the quality but the quantity of urban space and its function. It became apparent that a method of quality control covering all types of districts was necessary to improve city amenities. In Japan, there is usually no height control in urban areas, density control is loose, and building roof shape, colour and design are free. The Townscape Law (Keikan-hou), promulgated in 2004, was expected to be the legal backbone of aesthetic control and conservation in our daily life space. But, as it has become apparent that public endorsement is necessary in order to strengthen or enforce regulation, steady efforts to improve our environments by various implementations arrived at by consensus (called "keikan machizukuri,") are expected [12].

iv) The lack of a comprehensive local government management system for urban planning

The master plan for municipalities was established in 1992 through amendments to the City Planning Law and was intended to act as a countermeasure to the Japanese Asset Price Bubble of the mid-1980's to 1991 [13]. It is quite curious that the master plan came decades after the promulgation of the 1968 City Planning Law. Without a master plan, what can justify or guarantee the efficiency of urban planning?

Prototype master plans had already been tried out in the Toyama City (1966) and Yamagata City (1968) model planning projects. However, until 1992, apart from ministerial guidelines, we did not have the legal institution of a master plan, and local governments were not obligated to clarify their intentions nor inform or consult with citizens [14].

The series of urban design projects in Yokohama City in the 1970's, led by Mr. Akira Tamura, Chief of the Planning and Coordination Department of the city from 1968, showed a clear intent on the part of the local



government as well as some resistance to guidance from the national government. These resulted in improvements to public space and the image of the city, and became famous as Yokohama City's "machizukuri [15]."

v) The lack of a promotion system for urban functionality

As implementations of the 1968 urban planning system comprise project, regulation and guidance, it is apparent that the system functions within a physical construction process. However, the vitalization of cities, especially the commercial function of downtown areas, turned into a major urban challenge in 1990's Japan. Until that time, small and medium-sized retail stores had been safeguarded by law, but pressure from the U.S. and neo-liberalistic social trends provoked a policy change in 1998. Urban planning was expected to protect and boost commercial functions in such areas, however this has still not proved successful. Without any specific means, commercial managers and landowners have had to take action themselves by referencing management theory, in order to change conditions gradually [16]. This incremental approach to promoting commercial functions in downtown areas is also called "machizukuri."

3-3. Dynamism of the concepts

In all of the above categories, we can recognize a process of institutionalisation, meaning that when impromptu "machizukuri" was initiated in resistance to institutions, the next step was the provision from the national government of a subsidiary framework for model projects or new implementations. Local governments then made efforts to adapt the revised framework to their model projects. This process resulted in the establishment of a new institution due to enforced compliance with the amended laws.

In this dynamic between the two sets, "machizukuri" and "statutory urban planning," the later set would assimilate the former. In consequence, static definitions of "machizukuri" were destined to have limited validity.

This process also brings to the fore the antagonistic relationship between incrementalism and rationalism in planning. I am using these two words as defined by Allan G. Feldt on the clarity of ends and means [17]. Incrementalism is the type of planning we should take when ends and means are not clarified. This also happens to be the normal way of doing things, referred to as "muddling through" by Lindblom [18]. "Machizukuri" must adopt incrementalism as its inherent methodology in struggling with planning issues. In contrast, statutory planning cannot help but adopt rationalism as ends and means must be defined, even if only to satisfy appearances for the official position.

Therefore we can regard "machizukuri" as the inspiring avant-garde of a progressive urban planning system in which highly motivated residents and citizens, productive scholars and planners, flexible minded administrators and others collaborate to create a constructive arena. "Machizukuri" may also be regarded as a consequence of the incompleteness of the hastily-started Japanese urban planning system that was set up to manage rapid urban growth in the post war period.

This structural outline explains why the word "machizukuri" is easily used, even by developers. In so far as we are able to take a realistic look at a region, including its communities, we have to be sensitive to its individuality, which obliges us to feel our way forward cautiously through a process of exploration. In this sense, enterprising planning projects always have a feature of "machizukuri."

Therefore, opposition to the incrementalism of "machizukuri" is not rationalism but methodism, which relies heavily on established institutions and loses any passionate interest in solving local planning issues since it is out of touch with the reality of the region.

This turns out to be the main theme of our discussion. What are the core concepts that promote action-research, practical reasoning and flexible construction in planning? Distinct from methodism, these have typically been demonstrated through "machizukuri." The compelling inheritance of "machizukuri" will shape the most appropriate and applicable approaches to the trials of the coming period.

4. Planning conditions at the beginning of the post-urbanization period

The urban planning system in Japan developed as described above, however, from 2008, the Japanese national population began to decrease [19]. At the same time, while there seems to have been a decline in serious disagreement over urban planning, expectations for urban planning also seem to have faded. Due to the decrease in demand for construction, there is a lessened expectation of the ability of planning to reform present conditions.



Under such circumstances, vitalization has come to be a dominant theme for many local cities and municipal master plans show some hope for "machizukuri," meaning positive collective action from residents, landowners and local businesses towards implementation. Nonetheless, it is unrealistic to expect "machizukuri" movements to arise spontaneously.

We have to pay more attention to the concept of vitalization. The increasing decline of commercial functions in downtown areas and increasing numbers of vacant lots and houses on a citywide scale are complex issues reflecting macro scale dynamics. Therefore, in confronting these issues on smaller urban and district scales, rather than wistfully looking back to more manageable times, we have to distinguish viable goals as well as effective means. Furthermore, the concept of vitality is not only concerned with objective conditions, but also with the subjectivity that is formed through interaction between subject and object.

It is apparent that urban planning implementations, until now formulated for urbanization, have limited validity. At the very least, we have to become receptive to new actions and new ways of thinking, recognizing evolved market mechanisms and informational networks, as contemporary society is a more loose integration of autonomous individuals than society in earlier decades.

If we planners sincerely seek to address evolving issues of vitalization under such conditions, it must be with a new type of "machizukuri," that resists the methodism which hangs on in traditional statutory urban planning. Now, I have to ask what the new "machizukuri" will inherit from the implementations of "machizukuri" to date.

5. Four "I"s as substantial concepts inherited from "machizukuri"

5-1. Incrementalism

As already noted, "machizukuri" actions necessarily call for incrementalism. This diverges fundamentally from statutory urban planning that often slides into methodism out of which systems then derive their rationalism.

Incrementalism means to advance with heuristics, i.e., experimentation in searching for ends and means. It also means concern with knowledge construction in an on-going process through which participants can discover, become aware, understand, investigate, react and produce while determining courses of action.

Adopting incrementalism also means flexibility in making the most of the nexus of participants' actions. If productive chains are formed as a consequence of constructive action, it can be called "machizukuri."

5-2. Intentionality

In order to do anything while searching for the ends and means, there must be a subject, whether an individual or a group and, at the same time, the subject must be motivated or willing to do something [20].

At this exploratory stage, relations between the subject and the town are not yet clear and the question is open as to whether the intention is to do something for the town, in the town or with the town. Intentionality in this situation is a type of willingness from which springs the power source for a continuing process of trial and error in discovering relationships within the surroundings. As a result, this drive for interrelation promotes "machizukuri."

The intentionality needs to be reciprocal and not something imposed from any direction. Ideally, this mutual intentionality will encourage each participant to contribute according to their various positions, professions, interests and so on, bringing out their best efforts to make the most of their place.

Planners, including the municipal planning bureau, will naturally tend to investigate the underlying structure and construct a persuasive vision closely according the region, as this would be the approach of rationalism. Even so, if their plans are projected hypotheses or tools with the potential of contributing to the region, they will still support incrementalism. Naturally, there is room for further study on ways of proposing hypothetical ideas or plans to the community in order to foster wider intentionality.

5-3. Innovative value creation

Even though one might assume that any "machizukuri" project would be supported by discrete trials, one of the necessary conditions for the successful development of a "machizukuri" movement is value creation. Any kind of value, economic, social, cultural, environmental, psychological, aesthetic, or other will have a positive influence. Without value creation, the movement cannot be sustained. I would like to use the word "innovative" to encompass "creative," "productive," "constructive" and other conditions to reorganize knowledge structures.



These days, innovation is recognized to be a main driver of productivity and an indispensable factor in economic growth.

Concerning urban planning in this post-urbanization period, as demand for and investment in urban development diminishes; other channels to vitalize local economies or improve the quality of life and environment are required. As the unit of each urban project becomes smaller, we have to make more of each project by stimulating the creation of ripple effects and/or leading collaborative actions [21].

5-4. Integrality of regional development

The concept of integrality I would like to discuss here is a feature of development. As the development unit shrinks, the importance of devising sequences of smaller knock-on developments increases. Assuming that the notion of a region is intrinsic wholeness, following the regional organic theory, a development achieved in some part will influence other parts. I would like to call this integrality of regional development.

It is a long-established custom of architecture to think about mutual relationships between building and urban planning. For example, Professor Sachio Ohtani discussed the responsibility of architectural design to reflect urban conditions, and possibilities of the reverse [22]. More recently, the progressive young architect Masataka Baba and his associates have effected practical collaborations between real estate agent, architect, graphic designer and others to bring about effective progress in vitalizing districts [23].

We have tended to regard spatial, historical and cultural knowledge as the basis for our understanding about the region to be formed. However, such thinking assumes a rationalism by which relations between these constitute the object's context. Rather, as we contribute features to the subjective power of invention, we may find many suggestions for innovations from the spatial (in part or whole), temporal (past and present) and phaseal (economic, social, cultural, environmental and other) relations in order to accomplish the development as a whole.

6. Conclusion

Through this brief review of the history of Japanese urban planning since 1968, I have attempted a reinterpretation of the relationship between "machizukuri" and statutory urban planning, both subsets of urban planning, and the dynamics of the relationship between these that have resulted in the evolution of the urban planning system.

The Japanese statutory urban planning system had its inchoate start in 1968 driven by urgent necessity. For the system to adjust to altered realities, an enterprising and exploratory approach to unprecedented urban issues was necessary, and this became known as "machizukuri."

As the statutory systems were designed to perform under a rationalistic approach, passive municipalities were neither able to make much of the system nor add original devices towards an effective response to changing realities, and they therefore fell easily into methodism. Compounding this misalignment, urban conditions began to change with the onset of the post-urbanization period.

Under such circumstances, it is worth emphasising the recognisable concepts of urban planning that have been distinctly demonstrated in various types of "machizukuri" whose four basic concepts, the four "I"s, are set out here. These may not be limited to four, and the methods and tools developed in these "machizukuri" movements also constitute our planning inheritance, so the discussion is open.

At the very least, we are confronting unprecedented conditions. In order to maximise realities, it is surely helpful to reconfirm the methods or principles we adopt in formulating planning decisions appropriate to each region within its own individual and dynamic conditions.

Acknowledgements

I would like to express my gratitude to Prof. Shun-ichi Watanabe for graciously providing his research papers at my request. I also would like to thank Ms. Patricia MacLeod for her valuable assistance in finalising my English text.



Notes

- [1] André Sorensen (2002) introduced the district plan, land use control and historical protection as the main types of machizukuri from the early 1980's.
- [2] Watanabe,S.J. and Suzuki,C. (2009); Watanabe,Shun-ichi J. (2011)
- [3] The author traced a history of Japanese city planning institutions (cf. Kobayashi, K. (2017))
- [4] Shun-ichi Watanabe (2011) made reference to the first incidence of the word of "machizukuri" in 1947, quoted from Nakajima (2006).
- [5] Shun-ichi Watanabe and et al. (1997)
- [6] Shigeru Sato explained his view of "machizukuri" history in the 2nd chapter of AIJ ed. (2004), Sato,S. and et al. (2017).
- [7] Shigeru Sato explained his definition of "machizukuri" in the 1st chapter of AIJ ed. (2004), Sato,S. and et al. (2017) p.10.
- [8] Yukio Nishimura ed. (2007) pp.1-11
- [9] In spite of much discussion and practical trials toward the establishment of a district plan in 1980, the final statutory planning system does not seem to adequately reflect the results of these preparations. cf. Kobayashi,K. (2017) pp.154-162
- [10] The history of conservation planning in Japan delineated by Nishimura,Yukio (2004).
- [11] 117 districts in 97 municipalities were classified as Important Preservation Districts on Nov. 28, 2017 by the HP of the Agency for Cultural Affairs (http://www.bunka.go.jp/seisaku/bunkazai/shokai/hozonchiku/judenken_ichiran.html)
- [12] The author and associates made a review of the institution of "keikan" (townscape) planning. AIJ ed. (2013) "Keikan Saiko (Re-thinking Keikan),"
- [13] It was the outcome of discussions in the search for stability in the bubble economy. As expected, the master plan's response to the bubble economy was indirect and vague. Its aim was consensus-based land use, stimulating the supply of plots for housing and, in some places, protecting residential function from commercial and business functions.
- [14] Kobayashi,K. (2017) pp.2-34
- [15] Various publications concerning Tamura, Akira's urban design in Yokohama City. cf. Tamura,A. (1983)
- [16] Kobayashi,K. (2017) pp.48-57
- [17] Feldt, Allan G. (1979)
- [18] Lindblom, Charles E. (1959)
- [19] Home Page of Statistics Bureau published a discussion on the onset of population decline in Japan by Tino, Masato <http://www.stat.go.jp/info/today/009.htm>
- [20] Subjectivity is commonly pointed out as a necessary condition for "machizukuri" according to the preceding definitions. But subjectivity of a district will vary with the type of organization. Intentionality is regarded here as the underlying state that produces subjectivity.
- [21] Recently local economies and business administrations have become concerned with "machizukuri." cf. Iida,Y. et al. (2016)
- [22] Prof. Sachio Ohtani was an architect who developed discussions on the interplay between architecture and the city. Ohtani, S. (1986)
- [23] Baba,M. +Open A (2016)

Bibliography:

AIJ (Architectural Institute of Japan) ed. (2004) *"Machizukuri no Houhou" (Method of "Machizukuri") (written in Japanese)*, Maruzen

AIJ ed. (2013) *"Keikan Saiko" (Re-thinking of "Keikan")*, Kajima Institute Publishing Co. Ltd.

Baba, M. + Open A (2016) *Area Renovation - Structure of Change and Localisation (Japanese)*, Gakugei Shuppan

Feldt, Allan G. (1979) Planning Theory, Catanese, Anthony J. and Snyder, James C. ed. (1979,1988) *Urban Planning*, 2nd ed. McGraw-Hill Book Company, pp.43-53

Iida,Y., Kinoshita,H., Iriyama,A., Hayashi,N., and Kumagai,T. (2016) *"Chiiki-Saisei no Shippai Gaku,"* Kobunsha

Kobayashi,Keiichi (2017) *"Toshi-Keikaku Henkaku Ron" (Reform of the Japanese Urban Planning System - A proposal as we enter the Post-Urbanization Period) (Japanese)*, Kajima Institute Publishing Co. Ltd.

Lindblom, Charles E. (1959) The science of "muddling through." Public Administration Review 19, pp.79-88, Scott Campbell and Susan S. Fainstein ed. (1996, 2003) *Readings in Planning Theory*, 2nd ed. pp.196-209

Nishimura,Yukio ed. (2007) *"Machizukuri Gaku,"* Asakura Publishing Company

Nishimura, Yukio (2004) *Urban Conservation Planning (Japanese)*, University of Tokyo Press



The 18th International Planning History Society Conference - Yokohama, July 2018

Ohtani, Sachio (1986) “*Kenchiku-Toshi Ronshu*” (collected papers), Keiso-Shobo

Sato,S., Aiba,S. and Uchida,N. ed. (2017) “*Machizukuri Kyousho*,” Kajima Institute Publishing Co. Ltd.

Sorensen, André (2002) *The Making of Urban Japan*, Routledge

Tamura, Akira (1983) “*Toshi Yokohama wo Tsukuru*” - Practical “*machizukuri*” method, Chuokoron-Sha, Inc.

Watanabe,S.J., Sugisaki,K., Itoh,W., and Koizumi,H. (1997) “Bibliographical Survey on the Word “Machizukuri” or Community Building, 1945-1959,” *Journal of the City Planning Institute of Japan*, vol.42, no.#, pp.43-48

Watanabe,S.J. and Suzuki,C. (2009) “Some Preliminary Discussions toward the Definition of Machizukuri”, *International Symposium on City Planning, 2009*

Watanabe,Shun-ichi J. (2011) “The Logical Structure of the Definition of ‘Machizukuri’” *Journal of the City Planning Institute of Japan*, vol.46, no.3, pp.673-678



INTERNATIONAL PLANNING HISTORY SOCIETY

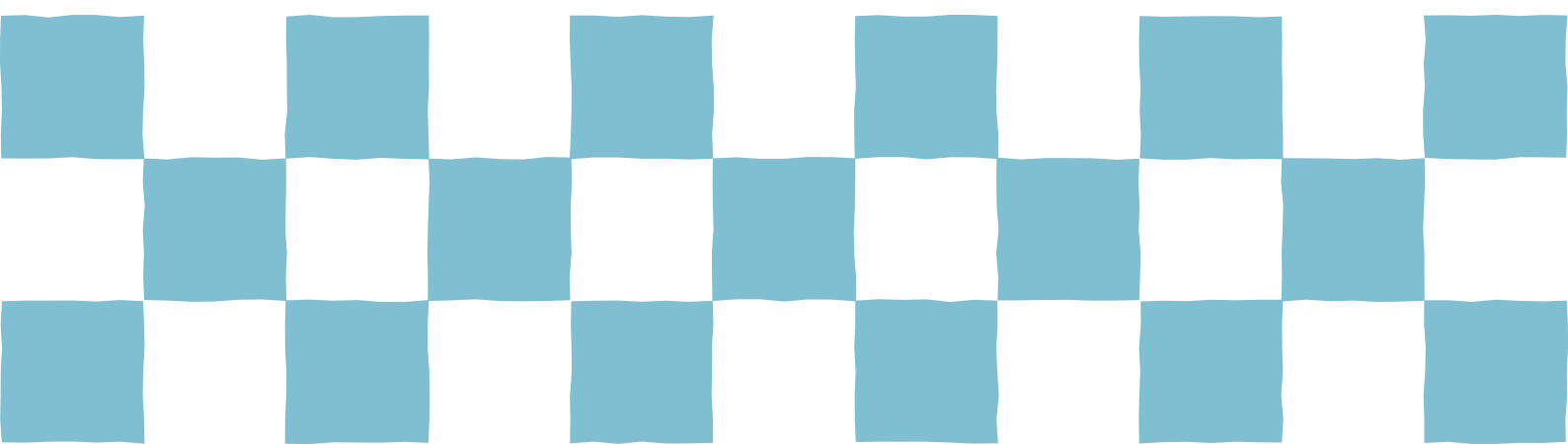
YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

5

Public Parks in East Asia



Contingency and Opportunity: The First Century of Hong Kong's Public Parks

Johnathan Farris (Youngstown State University)

The port city and British colony of Hong Kong had from its inception been characterized by a capitalist ethic and by dense settlement on land hemmed in between hills and sea. In these circumstances, preserving public land for general recreation was rarely prioritized as a primary government goal. Yet in Hong Kong's first century (the 1840s to the 1940s) several public parks came into being with distinct purposes in mind, while other spaces of public recreation were compromised. The history of these parks reveals no overall scheme, but responses to a series of contingencies, each shaped by moments when public interest necessitated preserving open spaces and fostering green spaces for recreation. This paper will harness government records, newspaper articles, travel accounts, and period images to address the informal and contingent way that Hong Kong acquired its early public parks and gardens. After a brief introduction to Hong Kong's development, the paper will turn to the six purpose-built parks of the colony's first hundred years. The development of the Botanical and Zoological Gardens, Hong Kong's oldest public park will introduce how dialogue about public space commenced in the colony. The diverse reasons behind and shaping of Statue Square, the city of Victoria's ceremonial center will follow. Blake Garden, built as an outcome of hygienic measures following a plague outbreak, will follow, and then rounding up the island parks will be the compromised West End Park. Like West End Park, the first attempt at a park on the Kowloon Peninsula, West End Park, was unsuccessful in keeping its original boundaries. George V Memorial Park in Kowloon, the last pre-Second World War park will conclude the discussion. Issues of investment, proximity, and use will be demonstrated as playing key roles in determining the resilience of these spaces. The paper will conclude with brief thoughts of why Hong Kong's early parks were successful and resilient, or ended in a much diminished and compromised state.

Planning a National Park in Lower Yangtze Delta, China -- Taking the 1929 Taihu National Park Plan by Mr. Chen Zhi as a Case

Tianjie Zhang (Tianjin University(Associate Professor)) and Kailai Wang (Tianjin University(Post-graduate))

National Park is an area of countryside, or occasionally sea or fresh water, protected by the state for the enjoyment of the general public or the preservation of wildlife. It not only protects the original state of natural ecology, historical and cultural heritage and natural geomorphology, but also promotes the development of ecotourism industry. The concept of national park planning can be traced back to 1872, when The United States established the Yellowstone National Park as the first in the world. Subsequently in 1916, National Park Service was set up for administration and maintenance. In Asia, Japan was one of the earliest country implementing the planning ideas of national parks. National Park Law was promulgated in 1931, and the first batch of national parks were designated in 1934. The concept of National Parks was also introduced into China. The 1929 Taihu National Park plan by Japan-educated forester and landscape architect Mr. Chen Zhi is the earliest experiment in China. The plan provided detailed suggestions and long-dated insights for the tourism development and ecological protection of the Taihu Lake River Basin.

This paper focuses on the Taihu National Park plan by Mr. Chen Zhi, and analyzes the planning concepts and principles, and uncovers the origins and localizations against the background of National Parks' worldwide spread and diversified practices. Firstly, the research will examine Chen's planning texts. Chen firstly elaborated on the importance of national park construction. Based on the indigenous conditions, Chen made a comprehensive consideration of the landscape pattern and landscape resources at the Taihu Lake River Basin. He brought forward the idea of building scenic forests (fengjinglin) according to his professional knowledge and practice. Besides, Chen also drafted the detailed traffic system and the measures to win public support, which he thought indispensable for the construction.

Secondly, via first-hand archives and documents, the research will examine the education and working experiences of Chen Zhi, a reputed and leading forest scientist and landscape architect in China. In 1919-1922, he ever studied afforestation and gardening in Tokyo Imperial University, under the supervision of Seiroku Honda, the father of Japanese parks. The paper will elucidate the connections among Chen's professional education in Tokyo, the development of National Parks in Japan and further worldwide, and Chen's Taihu Plan in China.

Thirdly, via Taihu Plan, this study will further explore the continuities and changes of traditional Chinese gardening ideas at a regional scale. Then it will compare the long history of Taihu with the national park plan.

Chen's Taihu Plan has made significant influences on the later generations. Via this case study at Lower Yangtze Delta, China, the paper intends to contribute to understanding of National Park planning legacy at worldwide.

The Public Park in Japan: a hybrid landscape form – The contribution of the French school of landscape, in the case of the Yamashita park-

Yoko Mizuma (Research laboratory of the National School of Landscape of Versailles-Marseille)

Subsequent to the 1868 Meiji revolution, the opening of the country was a time of great change in urban planning and in the art of the garden in Japan. Under influences from the West, the layout of towns and the model of the Japanese garden were both diversified and this development was reinforced and accelerated by a new element in the urban space, introduced from abroad, the « public park ».

Two schools of landscaping were pioneers in this trend: the Seiroku Honda school, established at the Imperial University in Tokyo, and the Hayato Fukuba school based in the Shinjuku Gyoen Imperial Garden. The two founders did not share the same philosophy of landscaping: the former was founded on forestry and on town and country planning, inspired by theories developed in Germany, and the latter was based on examples of horticulture and garden design from France: the treatise by Edouard André, “General Treatise on the Composition of Parks and Gardens” (*Traité général de la composition des parcs et jardins*), published in 1879, in particular, exerted a clear influence.

In the present thesis, I will defend the hypothesis that a new type of space appeared: the public park, evolving from the principle achievements of the two schools during the opening up of the country in 1868 and until the 1930s. Using the “comparatist” method, I retrace the traditions of garden design in Japan and in France informed by the study of projects for public parks and gardens in France during the Second Empire, where the French school of landscaping flourished (Parc des Buttes-Chaumont, Parc Montsouris), and I analyse the characteristics of the parks and gardens laid out by the two pioneer landscape gardeners and their followers (Shinjuku Gyoen, Hibiya Park, Hamachō)

I also research the training for landscape gardening and the formats used for transfer of knowledge among horticulturalists.

My research covers both historical and practical aspects. I use the methods of the historian for the consultation of archives and for documentary research; the methods of a landscape gardener for the techniques of surveying and the interpretation of projects. Analysing both French and Japanese parks from various thematic standpoints (paths, planting, water features, project management and layout), I demonstrate the influence of the French school of landscaping on the development of the public park in Japan. I reserve an important place to iconography and to graphics analysis, often hitherto unpublished. Finally, my thesis presents new elements concerning the effects in Japan, in this largely unexplored domain, of the art of gardening in its relation to the public park.

Contingency and Opportunity: The First Century of Hong Kong's Public Parks

Johnathan A. Farris, Ph.D.

Asst. Professor, Youngstown State University, jfarris01@ysu.edu

The port city and British colony of Hong Kong had from its inception been characterized by a capitalist ethic and by dense settlement on land hemmed in between hills and sea. Preserving public land for general recreation was rarely prioritized as a primary government goal. Yet in Hong Kong's first century (the 1840s to the 1940s) several public parks came into being and were resilient, while others were compromised. The history of these parks reveals no overall scheme, but responses to contingencies, each shaped by moments when public interest necessitated preserving open spaces and fostering green spaces for recreation.

Keywords: Public Parks, Public Gardens, Hong Kong, multicultural spaces, colonial environments

Introduction

The port city and British colony of Hong Kong had from its inception been characterized by a capitalist ethic and by dense settlement on land hemmed in between hills and sea.¹ Preserving public land for general recreation was rarely prioritized as a primary government goal. Yet within Hong Kong's first century (the 1842 to 1941) several public parks came into being with distinct purposes, while other spaces of public recreation were side-lined or never developed. This essay stands as the initial scholarly attempt to consider Hong Kong's early parks collectively. The history of these parks reveals no overall scheme, but responses to a series of contingencies, each shaped by moments when official and public interest necessitated preserving open spaces and fostering green environments for recreation.

Hong Kong grew in three phases, first with the awarding of Hong Kong Island to the British in 1842, then with the addition of the Kowloon Peninsula in 1860, and finally with the leasing of the New Territories in 1898. Thus, the origin of Hong Kong's urban development and its densest core is what was traditionally the city of Victoria on Hong Kong Island. The island is mountainous, and the initial urban expansion was therefore along the coastline. Subsequently, the addition of Kowloon also saw the densest development occur in orderly blocks on the flat part of the peninsula, leaving only the most uneven ground undeveloped. Only with the addition of the New Territories was development of somewhat relaxed density possible. Initially the city developed from a governmental core in the districts now known as Central and Admiralty to dense commercial development in Sheung Wan and the West and working class and industrial settlement further to the East. The premium placed on land has always confined the possibilities of leaving open space within the city.

The Botanic Garden

The first public park in Hong Kong, the Botanic Garden (also called the Public Garden and later the Hong Kong Zoological and Botanical Gardens), occupies a sloped site that was otherwise difficult to develop (fig. 1). Although a garden had been proposed as early as 1848, its establishment had been sanctioned in 1856, construction commenced in 1860, and it was finally opened to the public in 1864.² Stretching immediately south from Government House (the Governor's official dwelling) up the slope towards an older government officer's barracks, the site took considerable effort to develop, but the backing of the project seems to have developed in part from its proximity to gubernatorial power, as a reaction to the city's rapid expansion to over one hundred and twenty thousand inhabitants, and from its proximity to the roads ascending the Mid-Levels.³ The Botanic Garden's boundaries were well-marked (its original granite gate posts still survive), and investments with varying degrees of permanence were quickly installed. These included a variety of plantings, in terms of ornamentals in beds, shrubs and trees. In 1866, the Parsee community donated a band pavilion, which below the roofline still exists in its original state.⁴ In 1867, a fountain was commissioned and later installed as a grand centrepiece on the formal terrace below the garden's more elevated picturesque winding paths (fig. 2).⁵ Beds of ornamental plants in the "Gardenesque" manner of John Claudius Loudon et al. were installed around the terraces.⁶ By the early 1870s, when Charles Ford (probably the most important figure in early Hong Kong Park construction) took the superintendent post, garden development was under full swing, with the addition of an orchid house, the importation of exotic plants from all over the empire, the expansion of the staff,

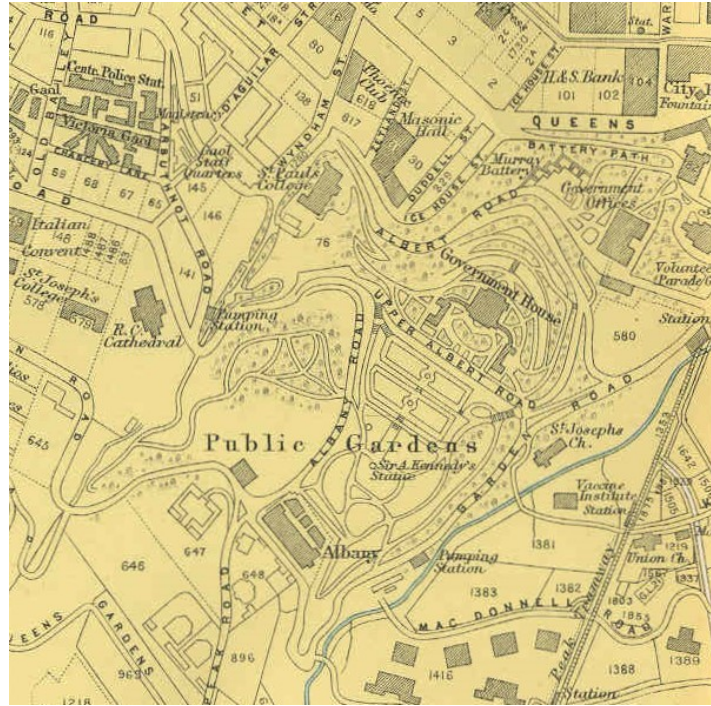


Figure 1: Detail of the Botanic Gardens (here labeled Public Gardens) in the 1914 Directory & Chronicle for China, Japan, Korea, Indochina, Straits Settlements, Malay States, Siam, India, Borneo, the Philippines & c. (map insert of Hong Kong). The original part of the gardens is directly to the southwest of Government House, and the 1870s expansion is to the northwest of them, across Albany Road.



Figure 2: Late 19th or early 20th century photo of the fountain that was the centerpiece of the formal terrace of the Botanic Gardens (albumen print, author's collection). This was a much-publicized improvement (even being reported in the Illustrated London News in 1867). It typified the improvements which could make Hong Kong parks resilient public spaces.

the labelling of plants with both scientific and Chinese names, and the expansion of the garden across Albany Road to Glenealy.⁷ As a site of beauty, learning, and entertainment (brass bands made frequent use of the pavilion throughout the late 19th and early 20th centuries), the Botanic Garden attracted great numbers of visitors, to the extent that in 1903 charging attendance on some days to allow less crowded visits was attempted, but rapidly abandoned.⁸ The Botanic Garden was added to the list of great attractions in Hong Kong, and it is the only park that routinely figured in Victorian and early 20th century travel accounts and guidebooks.⁹ Heavy investment both by the government and the local community led to this site being one of the most visited and celebrated parks. This combined with defined boundaries, clearly visible amenities, and proximity to prestigious neighbourhoods led to the space becoming inviolable and permanently part of Hong Kong identity.

Statue Square

Statue Square (originally dubbed Royal Square, but with its current name in popular use since the early 1920s) became the next major public space to be planned (fig. 3). The square was part of a creation of a large swath of land in the city center, Praya Land Reclamation Scheme of 1889.¹⁰ The scheme for this green space had largely been anchored by a neoclassical pavilion housing a bronze statue of Queen Victoria, erected in honor of her Diamond Jubilee in 1897. Because the reclamation was funded by companies which fronted the old harbor front and that still held harbor rights, the formation of the square necessitated substantial negotiation between the colony's government and the Hong Kong and Shanghai Banking Company, which held the new lots adjacent the city's own (which were in front of the old city hall building).¹¹ In 1901, a settlement between the government and HSBC guaranteed "the site should remain open space for all time," as Sir Thomas Jackson, the bank's chief manager wrote.¹² Probably due to continued new construction of both public and private buildings around the square's perimeter, the completion of the landscape plan did not occur until 1910.¹³ The perimeter of the square was soon lined with important governmental and private buildings in addition to City Hall and HSBC, including the Post Office, the Law Courts, and the Hong Kong Club, making the site the city's new forum. The square acquired its newer moniker with a gradual accumulation of statues from its inception into the Inter-War years. This began with the addition of a statue of the Duke of Connaught in 1902.¹⁴ Subsequently, images of King Edward VII, Queen Alexandra, King George V, and Queen Mary were added, as well as (facing HSBC) Sir Thomas Jackson. After the First World War, the Cenotaph, a veteran's memorial in front of the Hong Kong Club, and on HSBC's side of the square a monument to the sacrifice of the bank's own sacrificed volunteers, were also erected, both unveiled in 1923.¹⁵

Statue Square was not as much a place of public leisure as it was a center of patriotic and ceremonial performance of the colony's membership in the British Empire. Many early photos reveal that the grass, shrubs, and palms that once filled the square were cordoned off from public habitation by iron fencing between stone piers (except for the part around the Cenotaph, considered sacrosanct because of its memorial functions anyway). Indeed, the space was rarely remarked upon in travel accounts, and when it was the results were not necessarily positive. The great assemblage of bronze caused travel writer Mrs. Cecil Chesterton to remark in 1933, "The harbor...is confronted by the most dreadfully undistinguished statues of our late dear Queen, King Edward, his consort, and various hideous bits and scraps of repellent masonry."¹⁶ The second half of the 20th century would be less dedicated with the goals of memorializing empire than its original planners. The Japanese occupation laid waste to the square, and the subsequent opportunities for redesign revolved around a combination of adaptations to new transportation infrastructure and greater public usage for passive recreation. The proximity of this space to both governmental and commercial power, its role in celebrating Hong Kong identity, and early seemingly inviolable legal agreements between the public and private sectors have led to its great resilience.

Blake Garden

Further west on Hong Kong Island, Blake Garden resulted from a public health crisis. In Tai Ping Shan district, once highly congested and occupied by Chinese of modest means, the site for the park was cleared by demolitions that reacted to an outbreak of bubonic plague in the district in 1894. Not until 1903, however, was the space specifically reserved as a public garden, and in 1904 it was given its name after the immediately previous governor.¹⁷ Although no direct link is readily apparent between new sanitary regulations in the city and the design of the park itself, discussion of the park was very much surrounded by a broader discussion of the health value of "external air."¹⁸ In 1904 it was "modeled as a garden, turfed, and partially planted."¹⁹ It was finally opened on August 22nd, 1905.²⁰ A



Figure 3: Statue Square, probably during the first decade of the 20th century when construction was still going on around its peripheries (postcard published by M. Sternberg of Hong Kong, author's collection). The formal arrangement of the square, with the greenspaces cordoned off from public access by railings, was more a place for celebration of empire than leisurely occupation.



Figure 4: Blake Garden, mislabeled as West End Park (early 20th c. postcard published by K.M. & Co., author's collection). There is no evidence West End Park ever had structures in it during the early 20th century, but Blake Garden's pavilions are well documented. The topography and pavilion match Blake Garden as described in the 1922 1:600 topographical map of the neighborhood. Investment in the park's ornamental qualities by both the Botanic and Forestry Department and the local Chinese community insured the park's resilience.



Figure 5: West End Park (early 20th c. postcard published by K.M. & Co., author's collection). The fact that the photographer found nothing but a path, foliage, and steeply sloping topography to record hints at why this site was used as an illegal dumping ground for builder's waste and viewed as a place the government could compromise by reassigning portions of it to the neighbouring St. Stephen's Girls School. Subtle planted green space and neighbourhood investment alone was not as defensible as clearly bounded sites with obvious improvements.

summer house was erected in the garden almost immediately afterwards, funded by donations from Chinese residents in the neighbourhood, and another one was added to the park in 1914.²¹ It is unknown which appears in a mislabelled early 20th century postcard (fig. 4). The 1922 Department of Works survey map of the district shows two pavilions in the northwest corner of the park and another small building in the southeast corner. Early 20th century government reports routinely noted heavy use of Blake Garden by the local residents, and in 1924, there was an additional note that "Increasingly large numbers of visitors now make use of this garden and some difficulty has been experienced with large gangs of youths, who for some time played organized football matches to the great discomfort of the regular and more orderly visitors."²² This predicts the post-war transformation of a great segment of this park into sport facilities. Blake Garden combined governmental hygienic goals with local investment and high usage to prove a resilient public space, that survives today stretching to its original boundaries, albeit with a later 20th century shift in function from passive to active recreation.

West End Park

Various factors compromised another of Hong Kong's early parks, West End Park (fig. 5), a fragment of which still occupies a steeply sloping site above the Sai Ying Pun district of the island. This park came about as the central part of the city was developing suburbs into this area. A 1902 government report reveals that the area was originally set aside in 1898 as part of the Department of Works' redistribution of soil as it extended roads into the area, and with the funding of local residents, the Botanical Departments planting of the area.²³ Maintenance of the park was then left up to the Botanical Department although no additional money was appropriated for that purpose.²⁴ This foreshadows the difficulties the park would face. The only additional expenditure beyond ordinary planting and maintenance (mostly of trees and shrubs) listed for the park before the Second World War was the leveling of a portion of the topography to allow for a playground.²⁵ One of the challenges faced from the park's inception through at least the 1920s was the illegal dumping of building debris.²⁶ The Botanical Department considered it a low priority, noting the park was "little used" in 1906 and referring to it as a "so-called park" in 1908.²⁷ These likely contributed to the willingness to re-allocate West End Park's land in 1916, 1920, and 1926, apparently mostly to surrounding educational institutions

(particularly St. Stephen's Girls College).²⁸ An anonymous 1924 newspaper editorial stated, "I can assure you, Sir, that West End Park is a source of great pleasure to the residents of this district. We count it our lone beauty spot, but authorities seem to have forgotten it..."²⁹ With this history in mind, the observation today that the remaining land which survives still as West End Park is on the most steeply sloping face of the site and difficult to develop for other purposes. The history of West End Park reveals how without dense surrounding habitation, proximity to the prestigious and powerful, intense usage, or structural investment, public parks could fall prey to official convenience and competition from surrounding interests.

King's Park

Even though the Kowloon district had become densely populated by the turn of the century, inclusion of public parks in its development seemed largely an afterthought. Orderly blocks of development marched uninterrupted the tip of the peninsula northward along the flatter west side of the peninsula, which was expanded by new reclamation over time, while shipbuilding and maintenance facilities dominated the east coast of the peninsula. In the center, however, stretched an undeveloped and rather topographically uneven plot of land of around seventy acres, which had been used by the British military as a shooting range. In 1899, Charles Ford, who had been the superintendent of the Botanic Gardens since 1871 and subsequently of the Botanical and Forestry Department, proposed this area be developed as a public park, and it acquired the title of King's Park as a dedication upon the coronation of Edward VII.³⁰ The park was ceremonially opened on August 6, 1902, by Lieutenant Governor Gascoigne and his wife with the planting of a camphor tree, but nothing else was done immediately for the laying out of the grounds.³¹

Already in 1904 (the year after Charles Ford's retirement), however, the plans for this area as an ornamental park began to unravel, as the plan to combine "accommodation for games with a certain level of landscape effect" for the southwestern part of the park had already been compromised by demands for sport fields.³² The Botanical and Forestry Department made continuous attempts to plant the park (presumably around the periphery on the hill occupying the northern end of the park) from the 1900s through the early 1920s, but they were met with challenges from plant theft and the grazing of goats and cattle, indicating that locals did not understand the intended function of the park, and perhaps that its boundaries were not clearly delineated.³³ The final transfer of King's Park into a primarily an area dedicated to sport rather than passive recreation is noted in 1924, "This area has now been laid out by Public Works Department as a sports ground and all flowering trees have been lifted and removed..."³⁴ The government had devised a scheme to lease the lands of the park to private clubs (thereby presumably relieving themselves of the burden of maintenance) by 1925.³⁵ July 1935 topographical maps reveal that the entire southern end of the park had by that point been allocated to the sports facilities of the Y.M.C.A, the Club de Recreio, the Kowloon Indian Tennis Club, the Filipino Club, the Netherland Club, the German Club, the China Light and Power Recreation Club, the Royal Navy Recreation Club, and the Central British School. The northern end of the park, which was undeveloped at this stage, in the later 20th century filled with government and other high-rise residences, leaving only a hill with a water reservoir and a playground area unoccupied. The lack of a distinctive, cordoned-off identity for King's Park led to vulnerability which allowed it to initially be unrecognized by locals and then to be colonized by private (and indeed sometimes other public) interests.

King George V Memorial Park

The last of Hong Kong's public parks of the city's first century was King George V Memorial Park on Kowloon. This park was indirectly a result of the national memorial proposed in 1936 for the recently deceased King in the United Kingdom in the form of the construction, funded through public donations, of playing fields across the country.³⁶ The Governor's executive council, in view of the unlikelihood of finding enough donations to carrying out such large scale works in Hong Kong due to the Depression, promoted instead the idea that they should solicit donations for two public parks (one on the Island and one on Kowloon) with children's playgrounds. The park proposed for the Island would occupy the gardens and yet standing wing of the Civil Hospital and it was not constructed before the Japanese Occupation. The work on the Kowloon side, however, did commence on a rocky site at the junction of Canton and Jordan Roads (although initially the Government was also soliciting suggestions for alternative sites).³⁷ Relieving urban congestion by creating sites of "recreative and hygienic value" was a primary motive behind the choice of both sites.³⁸ Maps from earlier in the century reveal that the Kowloon George V Park occupied in fact a site adjacent where there had early been oil storage tanks. These had been cleared by the mid-1930s, but the Governor's speech (delivered by his administrator) for the opening of the park referred to its previous state as "a dusty, stony wilderness, an eyesore to the passer-by and a home of vagabonds."³⁹ In its 1941 form, designed by Palmer & Turner (then Hong Kong's most prominent architectural firm), this park covered 94,000 square feet and featured a Chinese style gate with bronze doors and a bronze plaque of the king, lawn, seats, and a children's

playground.⁴⁰ The park was characterized as “something done for the greater happiness of the ordinary citizen,” and as having local Chinese from the neighborhood as its primary future users.⁴¹ Within six months, the Japanese occupation would change the way the city functioned, and all parks were under threat in the deprivations which followed. To judge by the post-war redesign and expansion of King George V Park, however, the place was well chosen to suit local needs. The parks survival seemed guaranteed by intense local investment, a substantial on-site monument (the gate), and regular and intensive use.

Conclusion

This survey has examined four largely intact and two compromised parks from Hong Kong’s first century. What it has revealed is that clearly defined boundaries, notable congestion relief, shared community and government investment, visible attractive improvements, and emblems of shared identity (whether that be in terms of articulated Chinese location or imagined Imperial community) all contributed to park resilience. Vague boundaries, lack of construction, or vulnerability to competing private interests could, on the other hand, compromise parks. These are meaningful lessons both to future protectors of public green space in Hong Kong (where it remains threatened by development, as reflected in recent debates about the use of country parks for housing construction) and also to park planners globally.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Johnathan Farris is assistant professor of art history at Youngstown State University. Previously he lived and taught for seven years in Hong Kong. He works on artistic and architectural cultural exchange between Asia and the West, and is the author of *Enclave to Urbanity: Canton, Foreigners, and Architecture from the Late 18th to the Early 20th Centuries* (Hong Kong: Hong Kong University Press, 2016).

Endnotes

¹ This is a bit of a truism, but for a recent iteration of the historical contours of Hong Kong’s urban fabric, see Barrie Shelton, Justyna Karakiewicz, and Thomas Kvan, *The Making of Hong Kong: From Vertical to Volumetric* (London: Routledge, 2011). See also Charlie Q. L. Xue, Han Zou, Baihao Li, and Ka Chuen Hui, “The Shaping of Early Hong Kong: Transplantation and Adaptation by the British Professionals, 1841-1941” in *Planning Perspectives*, Vol. 27, No. 4, October 2012, 549-568.

² For chronologies of the Botanic Garden, see D.A. Griffiths, “A Garden on the Edge of China: Hong Kong 1848” in *Garden History*, Vol. 16, No. 2 (Autumn 1988), 189-198. and D.A. Griffiths and S. P. Lau, “The Hong Kong Botanical Gardens—A Historical Overview,” *Journal H.K.B.R.A.S.* Vol. 26, 1988, 55-76.

³ For a sense of the early exchanges and planning, see D.A. Griffiths, “A Garden on the Edge of China: Hong Kong 1848,” 189-192. and for population figures see William Frederick Meyers, N. B. Dennys, and Charles King, *The Treaty Ports of China and Japan: A Complete Guide to the Open Ports of those Countries, together with Peking, Yedo, Hong Kong and Macao.* (Hong Kong: A. Shortrede and Co., 1867), 17.

⁴ See “Office of Surveyor General Estimate of the Expense Necessary to be Incurred for Public Gardens, Fountains, and Improvements” Ware and Colonial Office: Hong Kong Original Correspondence (National Archives Kew or Hong Kong Government Records Service) CO 129 series, 120, 373. The Parsee community has a long history of philanthropy in Hong Kong.

⁵ *The Illustrated London News*, Dec. 28, 1867, 713.

⁶ Loudon and other garden designers of the second quarter of the 19th century introduced the idea that within the previous tradition of naturalistic English garden design, geometric beds with specimen flowers and other plants should be reintroduced. Following this design strategy, the Botanic Gardens, although partially set within an organic plan, contained discrete formally designed beds that displayed botanical specimens.

⁷ “The First Annual Government Report on the Government Gardens and Tree Planting,” Government Notification No. 15 in *The Hong Government Gazette*, Vol. XIX, 1 February 1873, 33.

⁸ *The Hong Kong Weekly Press and China Overland Trade Report*, June 27, 1904, 474.

⁹ See California Directory Company, *Guest’s Guide to Hong Kong compliments of the Hong Kong Hotel* (Hong Kong: The Hong Kong Hotel, 1920), 18; Thomas Cook & Son, *Information for Travelers arriving at Hong Kong* (London: Thomas Cook, 1919), 19-20; Carl Crow, *Handbook for China* (Hong Kong: Kelly and Walsh Ltd., 1933), 363-4; Lucian Swift Kirtland, *Finding the Worthwhile in the Orient* (New York: Robert McBride & Co., 1926), 218-219; John L. Stoddard, *John L. Stoddard’s Lectures* Vol. 3 (Japan and China) (Boston: Balch Brothers Co., 1897), 244-245. Et al.

¹⁰ For a summary of the Praya Reclamation scheme, see Arnold Wright and H. A. Cartwright, *Twentieth Century Impressions of Hong Kong, Shanghai, and other Treaty Ports of China: Their History, People, Commerce, Industries and Resources* (Lloyd’s Greater Britain Publishing Company, Ltd., 1908), 129. For a summary of the history of the square and its surroundings, see also Alain Le Pichon, “In the Heart of Victoria: the Emergence of Hong Kong’s Statue Square as Symbol of Victorian Achievement” in *Revue LISA/LISA e-journal*, Vol. VII – n°3 | 2009, 605-625. See also Ian Lambot and Gillian Chambers, *One Queen’s Road Central: The Headquarters of Hong Kong Bank Since 1864* (Hong Kong: The Hong Kong Bank, 1986), 88-91 passim.

¹¹ See particularly Lambot and Chambers *One Queen's Road Central*, pp. 88-90.

¹² *Ibid.*

¹³ Appendix M, "Report on the Botanical and Forestry Department for the Year 1910," Hong Kong Administrative Report 1910, M3.

¹⁴ "Report on Blue Book for 1902," Hong Kong Sessional Papers for 1903, 336.

¹⁵ *The China Mail*, May 18, 1923, 4 and May 25, 1923, 8.

¹⁶ Mrs. Cecil (Ada Elizabeth) Chesterton *Young China and New Japan* (London: George G. Harrap & Co., Ltd., 1933), 62.

¹⁷ Dispatch no. 223, 24 April 1903. War and Colonial Department and Colonial Office: Hong Kong Original Correspondence, CO 129 series, 317, 125. and Government Notification No. 757 in *The Hong Kong Government Gazette*, 28 October 1904, 1747.

¹⁸ See "Report of the Meeting on 7 December 1903" in Hong Kong Hansard 1903, 58-65.

¹⁹ "Report on the Botanical and Afforestation Department," Government Notification No. 201 in *The Hong Kong Government Gazette*, 7 April 1905, 415.

²⁰ Government Notification No. 522 in *The Hong Kong Government Gazette*, 18 August 1905, 1256.

²¹ "Report on the Botanical and Forestry Department, for the Year 1905," Hong Kong Sessional Paper No. 18, 1906, and Appendix N, "Report on the Botanical and Forestry Department for the Year 1915," Hong Kong Administrative Report 1915, N4.

²² Appendix N, "Report on the Botanical and Forestry Department for the Year 1924," Hong Kong Administrative Report 1924, N2-N3.

²³ "Report on the Botanical and Afforestation Department for 1901," Hong Kong Sessional Paper No. 32, 1902, 689.

²⁴ *Ibid.*

²⁵ "Report of the Meeting on 26 February 1914" in Hong Kong Hansard 1914, 29.

²⁶ This trend is especially true early in its life, but seemingly persistent. See "Report on the Botanical and Forestry Department for 1904," Hong Kong Government Gazette 7 April 1905, 416, and "Report on the Botanical and Forestry Department for 1906," Hong Kong Government Gazette, 6 April 1907, 182. See also editorial correspondence in *The China Mail*, 23 December 1924, 7.

²⁷ "Report on the Botanical and Forestry Department for 1906," Hong Kong Government Gazette, 6 April 1907, 182, and "Report on the Botanical and Forestry Department for 1907," Hong Kong Government Gazette 31 July 1908, 419.

²⁸ Notice No. 373 in Hong Kong Government Gazette, 25 August 1916, 540; Notice 271 in Hong Kong Government Gazette, 7 May 1920, 198;

Notice No. 341 in Hong Kong Government Gazette, 25 June 1926, 312. See also *The China Mail*, 17 August 1920, 4.

²⁹ Dispatch no. 258, War and Colonial Department and Colonial Office: Hong Kong Original Correspondence, CO 129 series, 311, 366; and *The China Mail*, 23 December 1924, 7.

³⁰ *The Hong Kong Weekly Press*, 16 June 1902, 447.

³¹ "Report on the Botanical and Forestry Department for 1902," Hong Kong Sessional Paper No. 19, 1903, 204.

³² "Report on the Botanical and Afforestation Department for 1904," Hong Kong Sessional Paper No. [?], 1905, 154.

³³ For instances of vandalism and grazing, see specifically "Report on the Botanical and Forestry Department for the Year 1915," Hong Kong Administrative Report 1915, N4; "Report on the Botanical and Forestry Department for the Year 1920," Hong Kong Administrative Report 1920, N4; and "Report on the Botanical and Forestry Department for the Year 1921," Hong Kong Administrative Report 1921, N6.

³⁴ "Report on the Botanical and Forestry Department for the Year 1924," Hong Kong Administrative Report 1924, N3.

³⁵ See *The Hong Kong Daily Telegraph*, 3 February 1925, 1.

³⁶ For the complete contemporary discussion of the scheme, see *The Hong Kong Telegraph*, 2 October 1936, 7; and 7 October 1936, 4.

³⁷ *The Hong Kong Telegraph*, 2 October 1936, 7.

³⁸ *The Hong Kong Telegraph*, 7 October 1936, 4.

³⁹ *Hong Kong Daily Press*, 12 June 1941, 12.

⁴⁰ *Ibid.*

⁴¹ *Ibid.*

Bibliography

Books and articles:

California Directory Company, *Guest's Guide to Hong Kong compliments of the Hong Kong Hotel* (Hong Kong: The Hong Kong Hotel, 1920).

Cheng, Po Hung, *Early Kowloon* (Hong Kong: University Museum and Art Gallery, HKU, 2010).

Cheng, Po Hung, and Po-ming Toong, *A Century of Kowloon Roads and Streets* (Hong Kong: Joint Publishing, 2004).

Chesterton, Mrs. Cecil (Ada Elizabeth), *Young China and New Japan* (London: George G. Harrap & Co., Ltd., 1933).

Cook, Thomas & Son, *Information for Travelers arriving at Hong Kong* (London: Thomas Cook, 1919).

Crow, Carl, *Handbook for China* (Hong Kong: Kelly and Walsh Ltd., 1933).

Elliot, Brent. *Victorian Gardens* (London: B. T. Batsford, Ltd., 1990).

Griffiths, D. A. "A Garden on the Edge of China: Hong Kong 1848" in *Garden History*, Vol. 16, No. 2 (Autumn 1988), 189-198.

Griffiths, D. A. and S. P. Lau, "The Hong Kong Botanical—A Historical Overview," *Journal H.K.B.R.A.S.* Vol. 26, 1988, 55-76.

Hong Kong Museum of History, *City of Victoria: A Selection of the Museum's Historical Photographs* (Hong Kong: Urban Council of Hong Kong, 1994).

Kirtland, Lucian Swift, *Finding the Worthwhile in the Orient* (New York: Robert McBride & Co., 1926).

Lambot, Ian, and Gillian Chambers, *One Queen's Road Central: The Headquarters of Hong Kong Bank Since 1864* (Hong Kong: The Hong Kong Bank, 1986).

Mayers, William Frederick, N. B. Dennys, and Charles King, *The Treaty Ports of China and Japan: A Complete Guide to the Open Ports of those Countries, together with Peking, Yedo, Hong Kong and Macao*. (Hong Kong: A. Shortrede and Co., 1867).

Le Pichon, Alain, "In the Heart of Victoria: the Emergence of Hong Kong's Statue Square as Symbol of Victorian Achievement" in *Revue LISA/LISA e-journal*, Vol. VII – n°3 | 2009, 605-625.

Shelton, Barry, Justyna Karakiewicz, and Thomas Kvan, *The Making of Hong Kong: From Vertical to Volumetric* (London: Routledge, 2011).

Stoddard, John L., *John L. Stoddard's Lectures Vol. 3 (Japan and China)* (Boston: Balch Brothers Co., 1897).

Wright, Arnold, and H. A. Cartwright, *Twentieth Century Impressions of Hong Kong, Shanghai, and other Treaty Ports of China: Their History, People, Commerce, Industries and Resources* (Lloyd's Greater Britain Publishing Company, Ltd., 1908).

Xue, Charlie Q. L., Zou Han, Li Baihao, and Hui Ka Chuen, "The Shaping of Early Hong Kong: Transplantation and Adaptation by the British Professionals, 1841-1941" in *Planning Perspectives*, Vol. 27, No. 4, October 2012, 549-568.

Government Documents:

Colonial Office: Hong Kong Original Correspondence (National Archives Kew or Hong Kong Government Records Service) CO 129

Hong Kong Administrative Reports

The Hong Kong Government Gazette

Hong Kong Hansard

Hong Kong Sessional Papers

Newspapers:

The China Mail

The Hong Kong Daily Press

The Hong Kong Telegraph

The Hong Kong Weekly Press and Overland China Trade Report

The Illustrated London News

Image Sources:

Figure 1: The Hong Kong Daily Press, The Directory & chronicle for China, Japan, Corea, Indo-China, Straits Settlements, Malay states, Siam, Netherlands India, Borneo, the Philippines, &c. (Hong Kong: The Hong Kong Daily Press Office, 1914). Map insert.

Figure 2: author's collection

Figure 3: author's collection

Figure 4: author's collection

Figure 5: author's collection



Planning a National Park in Lower Yangtze Delta, China -- Taking the 1929 Taihu National Park Plan by Mr. Chen Zhi as a Case

Tianjie ZHANG*, Kailai WANG**

*Associate Professor, Tianjin University, arch_tj@126.com

**Postgraduate, Tianjin University, 296464724@qq.com

Chen Zhi(陈植)'s *National Taihu Lake Park* published in 1929, is the first planning of our country's national park. This article attempts to analyze the beautification and recreation of Chen Zhi's conception. The author starts with the development of the national park at that time and the practice experience of Chen Zhi, combing the Taihu Lake(太湖) watershed's natural and social conditions. What's more, the author interprets the planning text of Taihu Lake from four aspects, including landscape resources, traffic system, supporting facilities, and construction of scenic forests. Based on this, this article analyzes Chen Zhi's considerations of drawing lessons from abroad and integrating them into the local culture, pursues the relevance of its design concept with America and Japan, and presents the spread of national park's concept in our country in the same period.

Key Words: National Park, National Taihu Lake Park, Chen Zhi, Design Considerations

The national park is a land or water conservation area protected by the country, which is for people's recreation or wildlife survival. It plays an important role in cultural heritage and natural environment protection. China's earliest national park planning was in 1929. Commissioned by the ministry of agriculture and mining, Chen Zhi(陈植) planned the Taihu Lake(太湖), which has an area of 36,000 hectares between Jiangsu(江苏) and Zhejiang(浙江) provinces, as "National Park".

This planning is a relatively systematic and comprehensive design of national park. It is a modern case with historical values in the development of China's national parks. This article attempts to interpret this plan in the context of the society at that time, analyzes its considerations of drawing lessons from abroad and integrating them into the local culture, and pursues the relevance of its design concept with America and Japan.

Figure 1 Design Text Structure of *National Taihu Lake Park*

Number	Name of chapters	Main contents
1	Preface	Construction status, definition, nature, development purpose and benefits of national park
2	Park style	Taihu Lake has a large scale, including four parts and seven regions
3	Park landscape	Taihu Lake is rich in landscape resources, including two Dongting mountains, Maji Mountain; Wu River, Wuxian County, Wuxi, Wujin, Yixing, Changxing, and Wuxing that surround the lake
4	Required transportation system for development	Land traffic, water traffic and electrical traffic should be considered in the construction of park
5	Required corollary equipment for development	The construction of the park requires supporting facilities, including restaurants, hotels, swimming pools, electric lights, botanical gardens, zoos, sports grounds, parking lots, signs, museums, pavilions, benches, bridges and sentries



6	Construction of scenic forests	The national park's tree design should focus on scenic forests and street trees
7	Conclusion	Have a firm determination to implement, remove the barrier of lake bandits, contact relevant departments, and complete the construction of the National Taihu Lake Park with concerted efforts of central and local governments

1. Development Status of National Park

The construction of national parks can be traced back to 1872 when the United States established the world's earliest Yellowstone National Park. In the initial stage of development, representatives of the eastern America's intellectuals including artists, explorers and litterateurs came to realize that the Western Development had posed a threat to the original natural environment in the west. In addition, railway companies have found the potential value of using western landscape as tourism resources. Therefore, the idealists who protected the nature and the pragmatists who emphasized the development of tourism joined hands to urge the Congress to protect the peculiar landscape of the west, thus establishing the national park system. The exploration of the United States provides a reference for Chen Zhi's design of China's national parks. Following the United States, Canada, Australia and New Zealand established their national parks[2] respectively in 1885, 1879 and 1887. Basically at the same time, the concept of national park was introduced into Japan. The development of Japanese national park continued to 1930 (the design of Chen Zhi's Taihu Lake National Park was completed) after going through two stages of concept discussion and scale construction. In the early years of concept discussion, Japanese geographers and new mountaineering enthusiasts began to protect the "natural landscape of Japan", while railway experts hoped to stimulate the development of railway and tourism industry to earn foreign exchanges through the establishment of national parks. The stage of scale construction began after the enactment of the National Park Law in 1931. Since then, 12 national parks (Figure 1) were established between 1934 and 1936, and most of them were located in remote areas such as mountain areas or seaside. Nikko designated as the imperial park (帝国公园 teikoku kōen) in 1911.

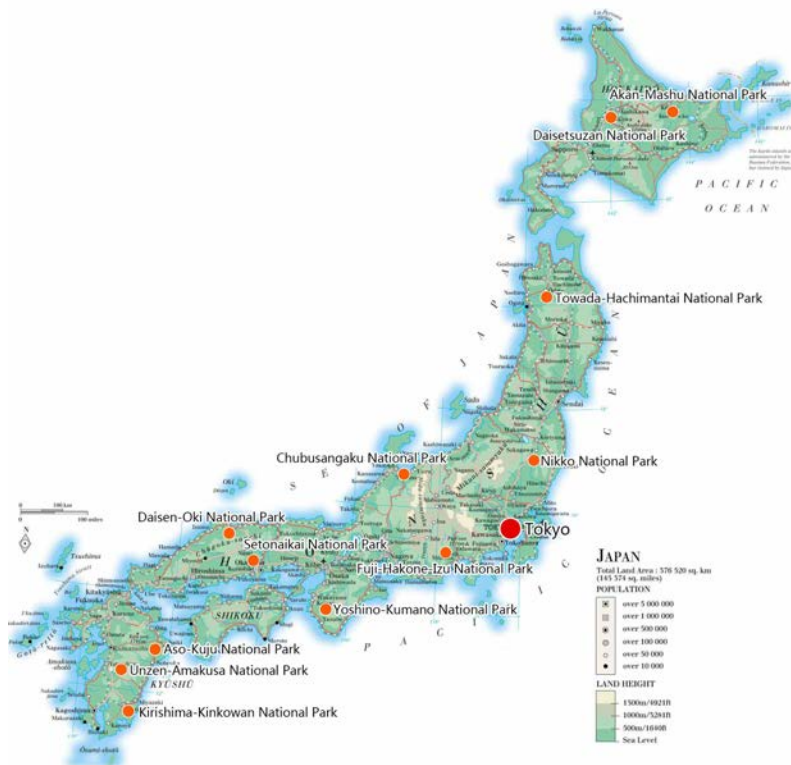


Figure 1 Distribution diagram of Japan's first batch of national parks, 1931 (Repainted by the author from Japanese elevation map)



In the 1920s, Chen Zhi learned the concept of national parks in the United States and Japan. In his *Conspectus of Landscape Making* written in 1928, the first part combed the history of gardening in China, the West and Japan. The history of western gardening alone mentioned the United States, and emphasized that there were much development and utilization of its large-scale parks. The part of Japanese gardening particularly emphasized that "the father of the Japanese National Park", Tamura Tsuyoshi (田村刚 Tiancun Gang), had played an important role. He pointed out in the book, "Dr. Tamura Tsuyoshi has made great efforts to promote the construction of the national park and to write books concerning the gardening (Figure 2)." Tamura Tsuyoshi put forward that natural park was set up for national health care and visits of overseas tourists. Based on natural resources in Japan, he emphasized the importance of Japan's mountains, lakes and hot springs, and puts forward specific requirements for location, scale and matching facilities.

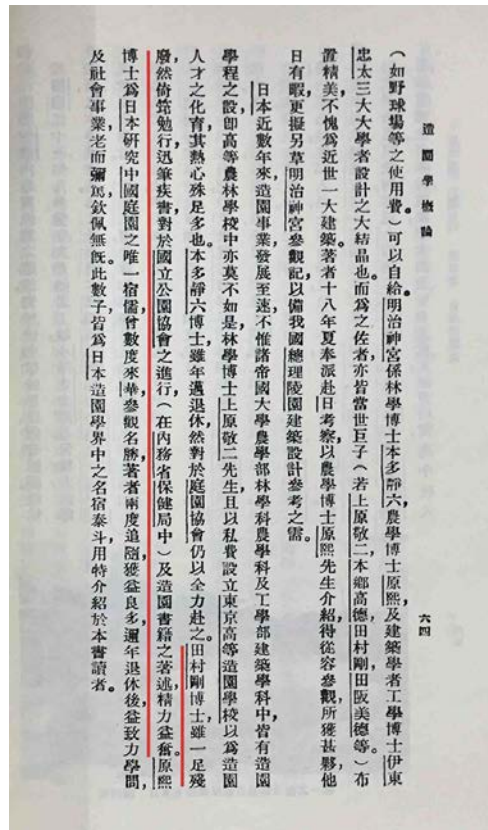


Figure 2 Chen Zhi's comments on Tian Cungang, 1935 (Cited from *Conspectus of Landscape Making*)

2. Professional Education of Chen Zhi

Chen Zhi was born in the intellectual family in 1899. At the strict request of his father, he went to private school at the age of 7, and he received a good humanistic tradition from childhood. After graduating from the first high school in Chongming in 1914, he was admitted to Forestry Department of Jiangsu provincial first agricultural school because of his excellent grades. The agricultural school was established and developed in 1913 under the guidance of Huang Yanpei, director of the Education Department of Jiangsu Province, who advocated pragmatism and vigorously developed industry. From 1919 to 1922, Chen Zhi entered the Tokyo Imperial College's Department for Agriculture, specializing in forestry and gardening. This department was the largest and most complete agricultural college in Japan at that time (Figure 3, Figure 4). Chen Zhi's courses included agriculture, forestry, forest utilization, horticulture, plants, animals, economics, agricultural engineering, farm internships and so on. His mentor was the famous Japanese landscape architect Honda Seiroku (本多静六 Benduo Jingliu), known as the "Father of the Japanese Park" and the "Father of Japanese Forestry." He was also a special member of the National Park Organizing Committee. In 1919, at the same time when Chen Zhi was admitted into the school, Tamura Tsuyoshi, the "Father of the National Park of Japan," also entered the Department for Agriculture as a lecturer, providing Chen Zhi with the possibility to understand the concept of national parks.



Figure 3 Aerial view of Tokyo Imperial College's Agriculture and Forestry Academy, 1926 (Cited from <http://www.a.u-tokyo.ac.jp/history/>)



Figure 4 Forest farm of Tokyo Imperial College's Agriculture and Forestry Academy, 1920 (Cited from <http://www.a.u-tokyo.ac.jp/history/>)

After returning to China in 1922, when the National Taihu Lake Park was designed, Chen Zhi served as a teacher in Jiangsu's first agricultural school, and the technical director and field director of the Jiangsu Education Group Public Forest (later renamed as Jiangsu Education Forest). Moreover, he put himself into the construction of practical projects like the Zhenjiang Zhaosheng Park. (now known as Jin Boxian Park). Many of Chen Zhi's achievements directly or indirectly reflect his concept of gardening, and laid the foundation for planning the national park. Chen Zhi had his own understanding of the national park. In terms of definition, Chen Zhi believed that: "The national park is characterized by the interest of the people, and its cause is to preserve and develop the landscape. The purpose of the national park is to protect historical and scientific materials from being destroyed. Besides, it has complete facilities for public recreation." In terms of importance, he concluded: "With lush forests, various security roles can be achieved; with frequent traffic, the local economy can be promoted, and robberies can be avoided; with a prosperous business, land values can be increased and various professions can be promoted such as farm, industry and commerce; in terms of environmental relations, its influence is huge" This not only focuses on the landscape space, but also pays more attention to the planning perspective of economic or model level, which responds to the development of Japanese national parks' original intention.

3. The History and Present Situation of the Taihu Lake Watershed

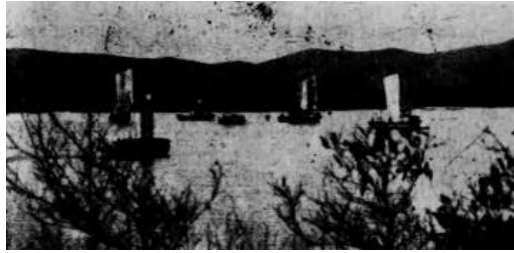
The Taihu Lake watershed has been known for its beautiful landscape since ancient times. In the Jiajing period of the Ming Dynasty, Wang Wen, a famous hermit, once engraved on the Hushan song tablet to praise the charming scenery of Taihu Lake. In addition, he also created *A Picture Describing the Returning to the Baojie Mountain* (Figure 5), showing the beauty of thatched cottages, fisherman's tillage, and the swaying of flat boats around Tortoise Head Garden. In 1924, after visiting the Taihu Lake, Guo Moruo wrote in the *Drifting Trilogy-Purgatory*: "The sun is going to fall. The seventy-two peaks on the lake are sometimes dark blue, sometimes light purple, and sometimes are hung over by the white vague mist. Half of the golden light from the west sky turns the lake into orange." This is also a high praise for the beauty of Taihu Lake.



Figure 5 *A Picture Describing the Returning to the Baojie Mountain*, Ming Dynasty (It is now a collection of the Palace Museum, provided by Huang Xiao)



By the middle of the 20th century, the *Taihu Lake Landscape Line* contained precious images during the period of the Republic of China (Figure 6). It vividly displayed the overall scene of the Taihu Lake's thousands of flat boats and the brilliance of light and shadow. In addition, it described the distinctive scenery of Tortoise Head Garden and Maji Mountain separately. Most of these photos have the cultural landscape intentions such as pavilions, terraces, boats, etc. At that time, people have naturally combined the beautification of landscape with the tourists' recreation, and have regarded both of them as an important part of the "landscape" of Taihu Lake.



Lots of sailboats are competing across Taihu Lake fiercely



The light and shadow of Taihu Lake



Shanjuan Hole in Yixing



Maji Mountains



Tortoise Head Garden



Jichang Garden in Huishan

Figure 6 Landscapes of Taihu Lake Basin(Quoted from reference [6])

4. National Taihu Lake Park

Based on superior natural and social conditions, Chen Zhi completed the planning of the National Taihu Park. At that time, people had already recognized the scenery of Taihu Lake that combined nature with the man-made. Chen Zhi had accepted a certain concept of national park. Therefore, on the one hand his design took the beautification of the Taihu Lake landscape into consideration, and on the other hand, he maximized its recreational functions from the perspective of park development and construction. Chen Zhi inspected the landscape resources of the Taihu Lake Basin in detail and conceived the development and construction of the park in terms of traffic, supporting facilities and the construction of scenic forests.

4.1 Remarks on Landscape Resources

Chen Zhi's commentary on landscape resources starts with the existing natural and artificial landscapes, taking into account the landscape's beautification and utilization potential, as well as the consideration of recreational facilities.

On the macro structure, Chen Zhi described the grand scene of the Taihu Lake region and elaborated the landscape pattern of Taihu Lake. Maji Mountain and Dongting Mountain are the skeletons of the region. Dagong, Xiaogong, Qianshan, Shaoshan and other natural landscapes are embedded therein. It also summarizes the four forms of lakes, islands, plains, and mountains in the Taihu Lake region. On the landscape of the Middle View, Chen Zhi discussed the landscapes by dividing them into two parts--landscapes in the lake and landscapes around the lake. In the lake, the three islands of Dongshan, Xishan and Majishan were introduced in detail (Figure 7). There are cultural landscapes such as the Ancient Snow Temple and Tsz Wan Temple in Dongshan. Swimming pools and bathing areas can be built in Xishan Mountain. Maji Mountain needs protection owing to



severe deforestation. Around the lake, Chen Zhi divided the landscapes into 7 regions, namely Wujiang, Wuxian, Wuxi, Wujin, Yixing, Changxing and Wuxing.

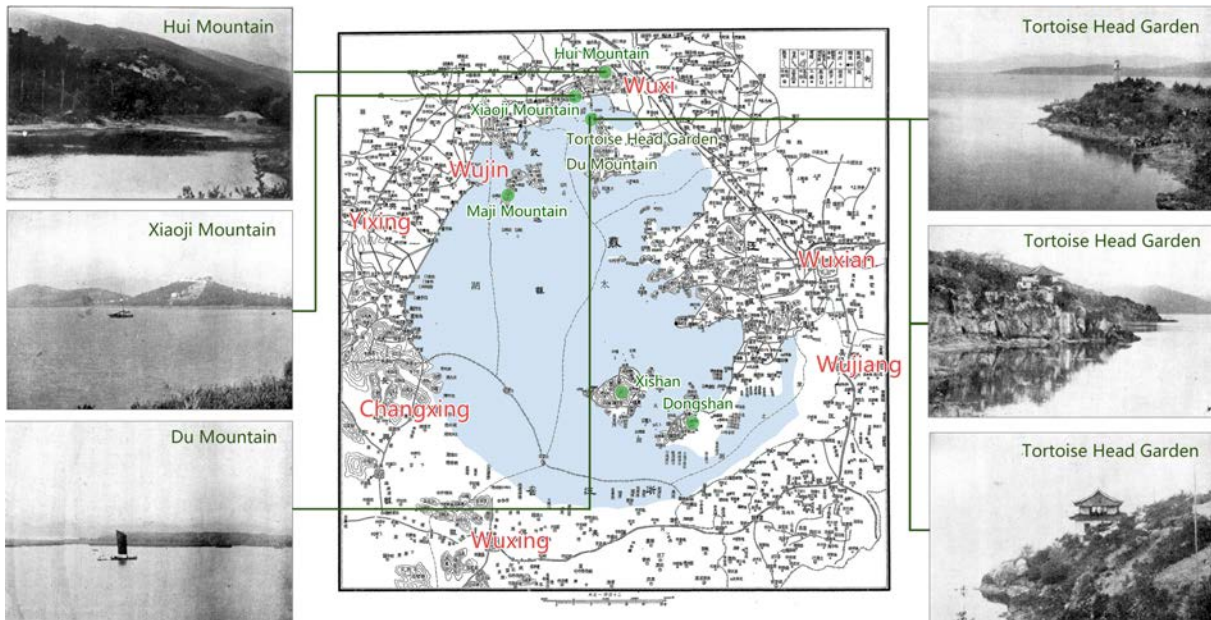


Figure 7 Chen Zhi's photographs and plans of the Taihu Lake Basin (redesigned from reference [5])

Chen Zhi's understanding of the landscape is also an environmental aesthetics concept that inherits Chinese traditional concepts. It integrates nature and the man-made. Text and photographs in the design text confirm this. Natural mountains, lakes, springs, islands, rock formations, and the view of the eagle flowing in the sky and the fish leaping in the water are what Chen Zhi pays attention to. Artificial temples, pavilions and terraces, and farming and fishing are also things he wants to beautify. In response to people's needs, Chen Zhi conceives two areas suitable for bathing in Wuxi and Xishan to provide recreational activities outside sightseeing. However, Chen Zhi's use of the lake does have some limitations. In the Theory of Cities and Parks, there are explanations for the use of water. For the use of waterscapes such as Xuanwu Lake, Daming Lake, and West Lake, natural tourism is still the main theme. Occasionally, activities such as swimming, fishing, and cruises are mentioned. Contents of dredging and water management etc. need to be deepened later.

4.2 Transportation System Planning

On the basis of exploring landscape resources, Chen Zhi takes into account the realization of the recreational functions of the national park, which requires a convenient transportation system in the Taihu Lake Basin. Chen Zhi has designed the traffic system from three aspects of water transportation, land transportation and electrical transportation. In terms of land transportation, Chen Zhi takes the Huanhu Road and Huanshan Road into consideration and emphasizes that "in a small area, we should intentionally twist the road to attract people, so as to extend the time; and in a large area, the width of the road should be wide, and cars should be driven straight. Time is the principle." There are detailed considerations for the width and type of the road. In terms of water transportation, Chen Shi emphasizes the necessity of water transport in light of the current state of national parks. "This park is centered on Taihu Lake, and its watersheds are numerous, so if we would like to have a glimpse of the lake...and get a view from all over the mountains, we will need boats. Otherwise, it will be difficult to get things done." The configuration of steamboats, sailboats, and melon boats has been planned in detail. In the area of electrical transportation, telephone and telegram should be set up to make the information more timely. The supporting facilities for this type of communication facilities are incorporated into the transportation system by Chen Zhi. The design of the three above mentioned aspects not only focus on the time, but also meet the needs of development for a period in the future.

4.3 Perfection of the Supporting Facilitates



In addition to transportation, the supporting facilities of the park are indispensable for the realization of recreational activities. Chen Zhi emphasizes that Taihu Park should be built with restaurants, hotels, swimming pools, electric lights, botanical gardens, zoos, playgrounds, parking lots, signs, museums, pavilions, benches, bridges, and guard posts. The design of Taihu Park mainly has two characteristics:

The first point is the design of tourist-oriented considerations, including the number of facilities, their forms, and even their production methods and operating channels. In the design of the swimming pool, the needs of different groups are also taken into account and several women's swimming pools should be built. The second point is to fully understand the significance of national parks for scientific research. In the construction of many ancillary facilities, services for scientific research should be mentioned. For example, in the construction of the museum, it is said that "for the purpose of academic research, all the materials in the hospital are concentrated." It can be said that Chen Zhi's consideration of the significance of the construction of the national park is very profound, considering future scientific research needs. Of course, there are also imperfections. In terms of the number of supporting facilities, he emphasizes that "more and better" and does not give a suitable reference range.

4.4 Construction of Landscape Forest

Regarding the beautification of the landscape, Chen Zhi also relies on his professional advantages to separate the construction of scenic forests (including scenic forests and street trees) into a chapter. He believes that the scenic forest should regard "beauty" as the main purpose, and "regard reconciling colors as the top priority." The scenic forest, also known as Fuchirin (风致林 Feng Zhilin) [4], is a term used in agriculture and forestry in Japan. The Japan scenic forest is a protected forest that is set up to protect the historical sites and natural landscapes of shrines and temples. Tamura set up a research room for scenic forest planning in 1920 and emphasized that landscape forests are an important factor in the landscape. It not only has a unique aesthetic feeling, but also sets off the background of the main theme of the landscape. It plays an important role in the aesthetic and ecological aspects. [16]. This idea is once again given direct feedback in Chen Zhi's planning of the national park.

As for the planting of landscape forests, Chen Zhi considers it from the perspective of tree species and operations. In terms of tree species, he believes that the Taihu Lake basin is "very suitable for the planting of various warm-banded trees." He also emphasizes the use of native plants. In terms of operations, it may not be too much because of space limitations. As for the planting of street trees, Chen Zhi also specifically mentions tree species, such as poplar, weeping willow, acacia, and so on. In terms of operations, there are also detailed regulations on the planting modulus of street trees. In consideration of the large number of trees required, Chen Zhi believes that there should be a large number of nurseries in need to prepare for the need.

5. Summary and Suggestions

This Taihu Lake project is a representative of the international communication of the national park concept, and is the embodiment of the concept's initial dissemination in China. Chen Zhi's National Taihu Park design has three major breakthroughs:

First of all, he fully realizes that the purpose of the establishment of the national park is to protect the economy and to protect natural human resources, emphasizes the recreation and beautification of the landscape, and innovatively puts forward the significance of the national park for scientific research. Second, he plans the National Taihu Lake Park in detail, changing the method of protection from a passive one to a positive one, and he hopes that people will have more chances to be close to nature and to study nature. Third, Chen Zhi combines the background advantages of his professional agricultural and forestry knowledge and his landscape architecture knowledge, introducing the concept of scenic forests into China, and plans and designs agricultural and forestry special projects for national parks.

After years of development, certain achievements have been made in the protection and development of the Taihu Lake Basin. In July 2016, the Overall Planning of Taihu Lake Scenic Area (2001-2030) was approved by the State Council and was replied by the Ministry of Housing and Urban Development. The Taihu Lake Scenic Area has ushered in new developments. This is a modern response to the idea of Chen Zhi's National Taihu Lake Park. The Taihu Lake landscape will be continued in the new round of construction.



Acknowledgements

Acknowledgements of supported by National Natural Science Foundation of China (No.51778403,51478299) and Tianjin Creative Training Project for Undergraduates (No.201710056175)

Notes on contributor(s)

Tianjie ZHANG

Associate Professor, School of Architecture, Tianjin University, China

Deputy Director, Institute of Urban Heritage Preservation and Regeneration, Tianjin University, China

PhD, School of Design and Environment, National University of Singapore, Singapore.

Other Academic Appointments:

2016- Committee Member, Theory & History Committee of Chinese Society of City Planning

2015- Contributing Editor, Chinese Landscape Architecture, a premier landscape journal in China

Recent Major Grants:

2018-2021 National Natural Science Foundation, China (No. 51778403, RMB ¥610,000) The Place-Making, Perception and Identification of Landscape Values. Project Leader.

2014-2018 National Natural Science Foundation, China (No. 51478299, RMB ¥700,000)

Bibliography

Chen Zhi. 1988. Suggestions for the establishment of National Taihu Lake Park for the Standing Committee of the National People's Congress[M]// Garden Works Collection of Chen Zhi. Beijing: China Architecture & Building Press, 1988:26.

Cao Kang, Dong Wenli. 2017. Modern Concerto for National Parks and City Parks - Review of Park Landscape: The Green Space of Modern Japan [J]. International Urban Planning, 2017, 32(4): 127-132.

水谷知生. 2014. 大正期の 16 国立公園調査地の選定経過と田村剛の国立公園観[J]. ランドスケープ研究 (オンライン論文集).

西田正憲. 2016. 1930 年代における 12 国立公園誕生の国立公園委員会にみる風景の政治学[J]. ランドスケープ研究 (オンライン論文集).

Chen Zhi. 1931. National Taihu Lake Park [J]. Shanghai: Travel Magazine 1931 Volume 5 Issue 1.

Jiang Baiou. 1946. Taihu Lake Scenic Line [M]. Taihu Publishing House.

Skinner, G. William, Ye Guangting, Chen Qiao. 2000. Cities in the Late Imperial China[M]. Zhonghua Book Company.

Chen Zhi. 1935. An introduction to the [M]. business press.

Chen Zhi. 1949. The original theory of afforestation, [M]. national compiling Museum,.

Image sources

Figure 1: Repainted by the author from Japanese elevation map

Figure 2: Cited from *Conspectus of Landscape Making*



Figure 3: Cited from <http://www.a.u-tokyo.ac.jp/history/>

Figure 4: Cited from <http://www.a.u-tokyo.ac.jp/history/>

Figure 5: It is now a collection of the Palace Museum, provided by Huang Xiao

Figure 6: Quoted from reference [6]

Figure 7: Redesigned from reference [5]



INTERNATIONAL PLANNING HISTORY SOCIETY

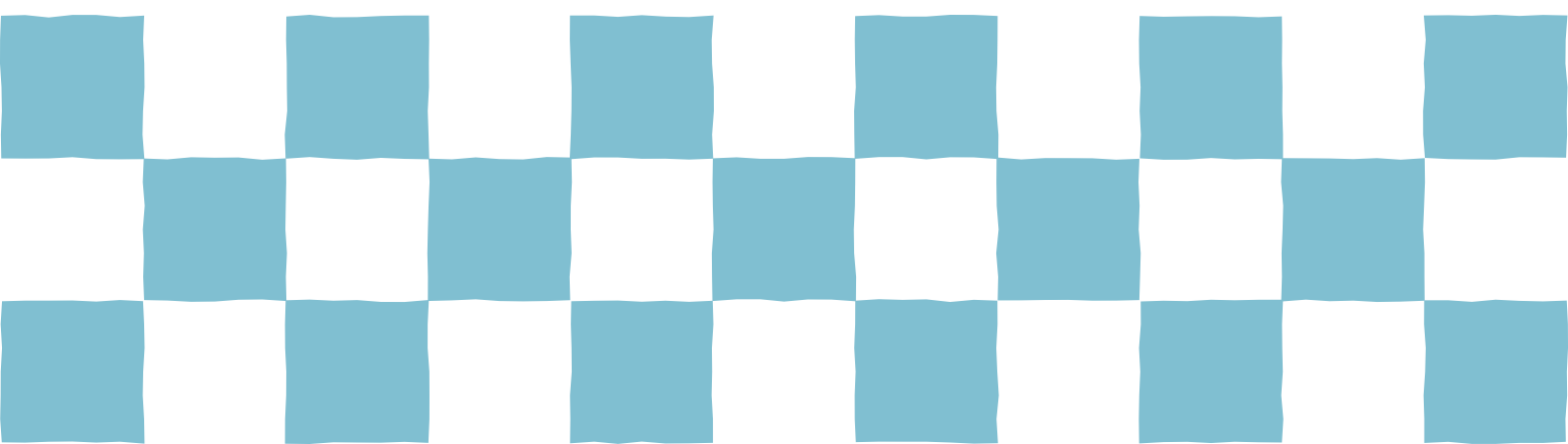
YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

6

Rethinking of Japan's Oversea Concession



What did Eiyo Ishikawa look at in Chinese and Korean cities under Japanese rule and occupation in the 1930s?

Naoto Nakajima (The University of Tokyo)

Japan conquered a significant part of East Asia in the first half of the twentieth century. It is said that this resulted in the so-called occupation planning being implemented in a one-way imposition of Japanese-style urban planning. Researchers in Japan and other countries have been interested in plans and planning systems made by the Japanese, who were pursuing a purely professional ideal and pioneering approaches in colonial cities as an experimental field. However, there has been little interest regarding the subtleties of feeling and the inner struggles of Japanese planners in the literature (let alone of local planners). In particular, there has been no discussion of how Japanese planners were influenced by the East Asian cities they conquered. What did they look at there? We argue that colonial/occupation urban planning was a kind of interactive process between planner mindsets and urban realities.

Eiyo Ishikawa (1893-1955) was a leading urban planner in pre-war and post-war Japan. In addition to being engaged in important planning projects including suburban land readjustment projects in Nagoya, Kanto regional planning, and Tokyo reconstruction planning, he wrote many influential books and unique articles on urban planning.

Ishikawa published his travels—while attending conferences and inspecting cities under Japanese occupation in the 1930s—of Korea, China, and Manchukuo. In his travel articles, he showed his curiosity and respect for local customs and traditions as well as sympathy for peoples who had been conquered. He wrote that Japanese urban planning had to learn from Manchurian local amusement and shopping districts, and he criticized tasteless Japanese colonial planning.

In 1938, Ishikawa stayed for four months in Shanghai making the Great Shanghai Construction Plan with other planners and engineers at the Japanese army's request. During his stay, he frequently visited local theatres and cafes, enjoying Chinese dramas and music, which seemed to be the essence of urbanity for him. He eventually insisted on adopting Chinese-style recreation areas into the Great Shanghai Construction Plan. Mainly through the rediscovery of Ishikawa's experiences recorded in his publications, we can shed new light on colonial/occupation urban planning.

Comparative Study about the City Planning Systems in Taiwan (for the Years 1895-1945) and Korea (for the Years 1912-1945) under Japanese Rule

Yasushi Goto (Yokohama Municipal Government)

This study compared the city planning systems in Taiwan (for the years 1895–1945) and Korea (for the years 1912–1945) under the Japanese rule. In Japan, the City Planning Act and the Urban Area Building Act were independent of each other. However, the Taiwan City Planning Order and the Korea Urban Area Planning Order included not only urban planning but also building construction control. These orders were continuously used by the Republic of Korea or the Republic of China after World War II. Existing researches have elucidated that these orders were more advanced than Japanese City Planning Act. The author's research has derived completely different conclusions. The reason why both urban planning and building control was included in one order was only to simplify the procedure for formulating orders. Taiwan City Planning Order and Korea Urban Area Planning Order had been created from Japanese City Planning Act and Urban Area Building Act as its transplant, rather than being developed independently. Therefore, the planning orders of those colonies had the same basic structure. Urban Improvement Programs in the early years of the colonized era of Taipei and Seoul had conformed to systematic street Improvement plans of that time. However, the features of those plans were significantly different. Taipei's plan to improve the environment had restricted the private right for land and controlled not only street improvement but also the sewage and building constructions. Seoul's program was executed as part of the national road construction. It was merely road construction in urban areas and had not restricted the private right for land; sewage and building constructions were not considered. Therefore, in general, the introduction of the Taiwan City Planning Order and the Korea Urban Area Planning Order standardized urban planning systems between Taiwan and Korea. The Korea Urban Area Planning Order and the Taiwan City Planning Order were drafted after Japanese City Planning Act, which reflected Japanese operational experience. In the comparison between statements of the planning laws and the orders at the time of enactment, the planning orders of those colonies may appear more advanced than those of Japan. However, since Japanese planning laws have also been revised, there was no substantial difference between its planning laws and the planning orders of those colonies at the same time. It is reasonable to see that the planning laws and orders had been improved as a group rather than being regarded as a simple binary confrontation between advanced colonial planning orders and old-fashioned Japanese planning laws. Case studies of modern city planning in Japan, Korea, and Taiwan serve to be valuable experiences to each other.

Yukaku (red-light district) and city planning in Japanese colonial cities in Taiwan, 1895-1945

Masaya Sammonji (The University of Tokyo)

In 1895, Taiwan (Formosa) was ceded to Japan by the Qing dynasty. At the earliest period of the Japanese rule, a crowd of Japanese prostitutes immigrated to Taiwan, which opened an era when sex industry of both Japanese and locals appeared broadly in the cities. Then, aiming to solve sanitary and security issues, Japanese colonial government started to set “kashizashiki designated area (also called yukaku simply)” in each city in 1896, and allowed prostitutes to do their business only inside the area. Although these designations were set only in part of cities, they based on the various situations of the cities at the time and provided the rough location planning of colonial cities far earlier than other well-studied urban policies or plannings, such as the “city improvement plannings (shiku-kaisei)” started in 1900, constructions of shrines, and so on. Thus, in this context, these designations can be considered as the earliest “silent” planning of the Japanese colonial cities.

After that, some yukakus moved to another location in the cities once or more, in response to city growth and progress of the “city improvement planning” . In this way, the transition of the location of yukakus, which can be called “silent” city facilities, was influenced by the shape of cities or various city plannings, and also influenced them at the same time.

This study aims to find a new meaning of the transition of yukakus’ location in Japanese colonial cities in Taiwan, in terms of planning theory. It will provide a new perspective for the planning history of Japanese colonial cities.

Japanese Emperor’s Visualization Facility ——The Construction of Yamato Park in Tianjin former Japanese Concession

Yuan Sun (Beijing Jiaotong University)

In the 18th- 19th centuries, it was the era of the concept of "Nation-state" in European countries. In the process of Nation-state construction, governments of various countries created public buildings and parks to shape the country's image and form an imagination Community. With the establishment of the concession, this form of expression has also been brought to Japan, China, Korea and other Asian countries, affecting the urban form of Asian countries with a "civilization" standard. As the political and cultural center of the Japanese concession, Yamato Park’ s regional architecture and spatial forms are not only closely related to the background of its time, but also serve as a system for governing and governing its overseas nationals and forming a common imagination with the home country. This article analyzes the early planning, gardening style, architectural style, public activities and other aspects of the Yamato Park area, and analyzes the formation background of the modern mixed urban landscape in Tianjin.



Comparative Study about the City Planning Systems in Taiwan (for the Years 1895–1945) and Korea (for the Years 1912–1945) under Japanese Rule

GOTO, Yasushi*

* Dr.Eng., Yokohama Municipal Government, BXM04554@nifty.ne.jp

Some existing studies have argued that the City Planning Orders of Japanese colonies were more advanced than the City Planning Act of Japan. The grounds are the integration of building control and city planning, the open-space district and their continued use by the Republic of Korea and the Republic of China after World War II. However, urban planning and building control were included in one system only to simplify the procedure for formulating orders. Furthermore, the Republics of both Korea and China continued using them for a comprehensive policy and an emergency evacuation, not because of order evaluation. Korea Urban Area Planning Order of 1934 and Taiwan City Planning Order of 1936 were created from the City Planning Act of 1919 and the Urban Area Building Act of 1919, reflecting the operational experience of Japan. These acts and orders have been improved as a group. Case studies of modern city planning in Japan, Korea and Taiwan are valuable references to each other.

Keywords: Taipei, Seoul, Taiwan, Korea, Colony

1. Introduction

This study compares the city planning systems in Taiwan (for the years 1895–1945) and Korea (for the years 1912–1945) under the Japanese rule. In Japan, the City Planning Act and the Urban Area Building Act formulated in 1919 were independent of each other. However, the Taiwan City Planning Order (1936) and the Korea Urban Area Planning Order (1934) included both urban planning and building construction control. These orders were maintained by the Republic of Korea and the Republic of China after World War II. Previous researches have elucidated that these orders had more merit and were more advanced than Japan's City Planning Act.

Regarding Japanese colonial city planning, the studies of Son¹ and Huang² on Korea and Taiwan, respectively, are well known. They were studied mainly as part of the city planning history of their own countries. Therefore, these studies rarely mentioned the relationship between the Japanese city planning laws and the colonial orders, or the relationship between the colonial orders each other. Several Japanese researchers considered the city planning of Korea and Taiwan as derivations from Japan's systems.

Koshizawa wrote that 'In the colonies of Japan, the relationship between city planning administration and building control administration was closer than those in Japan, both the Korea Urban Area Planning Order of 1934 and the Taiwan City Planning Order of 1936 included building control, and their urban regulation methods were more advanced than those of Japan'³. Here, the urban regulation methods refer to the integration itself of building control and city planning, and the open-space district which analysed by Ishida. Ishida evaluated the colonial orders as more advanced system based on the existence of the open-space district, and said 'City planning bureaucrats who could not realize ideals in Japan may have tried to realize their dreams in colonial city planning'⁴. Koshizawa also stated that 'The Republic of Korea and the Republic of China had used these orders until the 1960s. However, both of the governments separately devised city planning law and building law. They abandoned the merits of the orders'.

Goto analysed the drafting process of the Korea Urban Area Planning Order (1934)⁵ and the Taiwan City Planning Order (1936)⁶ and identified the Urban Improvement Programs previously adopted in Seoul and Taipei⁷. The present work re-examines these topics in light of new studies by Goto. Specifically, the differences in the Urban Improvement Program between Seoul and Taipei, the drafting process of the orders and the reasons for including building control, establishing the open-space district and the continued use of the orders by the Republic of Korea and Republic of China are revealed.

The arguments in this paper based upon historical materials including administrative documents, newspapers and magazines. *Keijō nippō* and *Maeil sinbo* were considered agency papers of the Government-General of Korea. *Taiwan nichinichi shinpō* was considered agency paper of the Government-General of Taiwan.



2. Taipei Urban Improvement Program

2-1. Taipei Urban Improvement Plans

The Government-General of Taiwan promulgated⁸ the Taipei Urban Improvement Plan Committee Regulations on 29 April 1897 and announced⁹ the plan of streets and parks inside Taipei's wall as a first Urban Improvement Plan (Figure 1) on 23 August 1900. In addition, the Government-General of Taiwan promulgated the No. 30 Order on 21 November 1899¹⁰ to ban the building houses on the urban facility sites designated by the Urban Improvement Plan. On 23 August 1905, the Government-General of Taiwan extended¹¹ the area of the Urban Improvement Plan (Figure 2) to the whole old city.

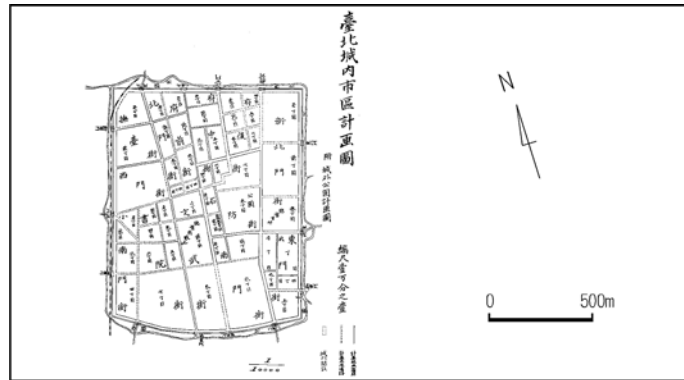


Figure 1: *Taipei Urban Improvement Plan of 1900* (Taipei Prefecture Notification No. 64, 23 August 1900).

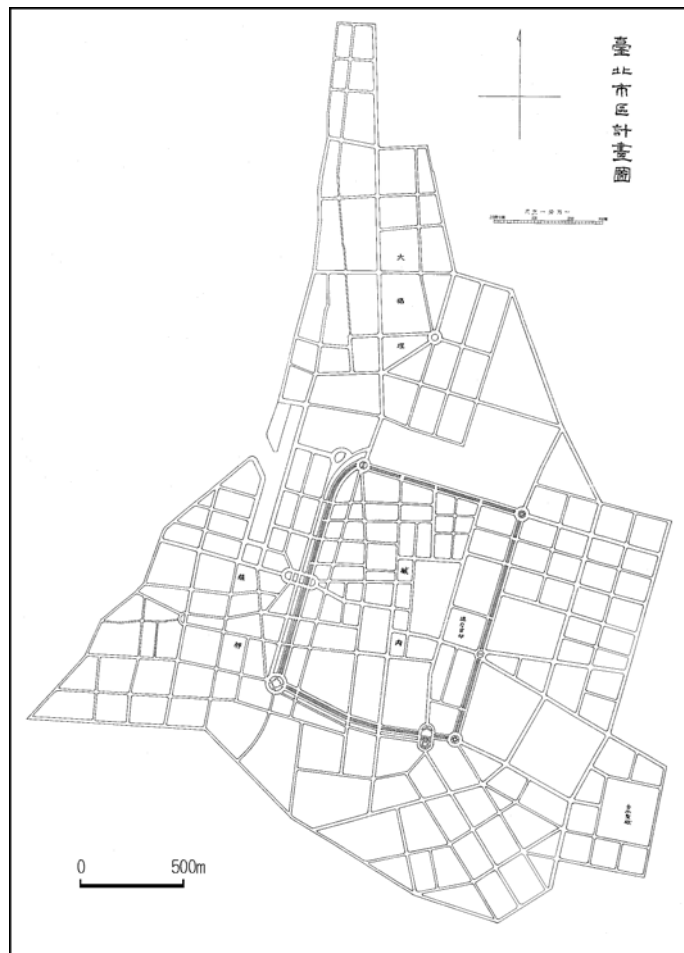


Figure 2: *Taipei Urban Improvement Plan of 1905* (Taipei Prefecture Notification No. 200, 7 October 1905).



2-2. Building Order, Water Supply and Sewerage

The Government-General of Taiwan established building specifications¹² with the Taiwan House Building Regulations (No. 14 Order of the Governor-General) released on 12 August 1900. In the Taipei Urban Improvement Plan Area, each building plan had to include arcades along the streets in accordance with No. 31 Order¹³ of Taipei Prefecture (1900).

The Taiwan Sewage Regulation (No. 6 Order of the Governor-General, 1899) was extended to the area of the Urban Improvement Plan by No. 9 Order¹⁴ of Taipei Prefecture (1909). The Taipei Water Supply Regulation (No. 8 Order of the Governor-General Office, 1909) was also applied to the Urban Improvement Plan Area¹⁵, and The Urban Improvement Plan integrated diverse urban construction methods¹⁶.

2-3. Purpose of Taipei Urban Improvement Plans

The Taipei Urban Improvement Plan Committee Regulations of 1897 defined the purpose of the Urban Improvement Plan as a formation of urban area blocks and completion of sanitation facilities. *Taiwan nichinichi shinpō*¹⁷ reported on the Urban Improvement Plan of 1905, 'The blocks in the Urban Improvement Plan were designed to be shifted from the north-south axis as a result of consideration of sunlight and wind direction'. The Government-General of Taiwan planned streets and sewers together to efficiently design the sewage system¹⁸.

Gotō Shinpei, the Chief of Home Affairs of Government-General of Taiwan, established the Taipei Urban Improvement Plan Committee and supervised it as Chairman. He thought of sanitary facilities as the substitute for religion in an effective colonial rule. Taipei Urban Improvement Plan included many sanitary environmental improvement measures because of his thoughts¹⁹.

3. Seoul Urban Improvement Program

3-1. The Streets Selected for Improvement in Seoul

On 6 November 1912, the Government-General of Korea announced²⁰ The Streets Selected for Improvement in Seoul (Figure 3) and started the improvement process. The selection of the streets was greatly revised²¹ in June 1919 (Figure 4). There was no rationale for that, but the Governor-General of Korea implemented the street improvement program in accordance with the Road Regulation of 1915 (No. 42 Order of the Governor-General Office of 1915)²². Furthermore, The Streets Selected for Improvement did not restrict the private rights on the sites where streets had been planned. The Notification Act was merely a schedule for street construction, as neither administrative action nor private rights on the sites were controlled, and the planning illustration was only reference information.

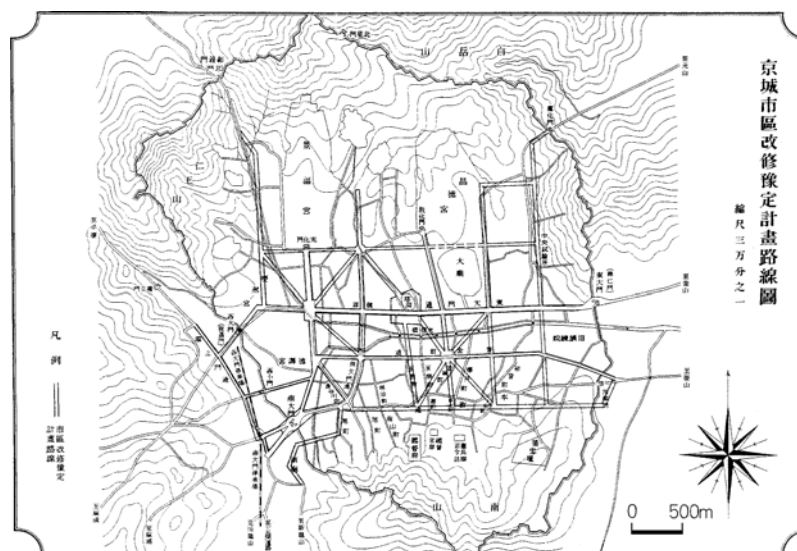


Figure 3: *The Streets Selected for Improvement in Seoul* (Government-General of Korea Notification No. 78, 6 November 1912).



3-2. Building Order, Water Supply and Sewerage

The Urban Building Regulation (No. 11 Order of the Governor-General Office of 1913) established building specifications²³. The buildings had to connect with roads, although The Streets Selected for Improvement was not included. The Government-General of Korea based the sewer system of Seoul on existing small-scale rivers. The Streets Selected for Improvement and the Sewerage Plan were not integrated. The Government-General of Korea bought and expanded the water facilities constructed by American businessmen²⁴ in Seoul, without relating them to The Streets Selected for Improvement.

Compared with the Taipei case, the urban improvement in Seoul did not incorporate The Streets Selected for Improvement with the maintenance of other urban facilities.

3-3. Purpose of The Streets Selected for Improvement

The Streets Selected for Improvement did not integrate water supply, sewers and buildings. It was limited to the maintenance of the streets and considered only as the road improvement of the urban area. It included the roads of Seoul's urban area previously renovated by the Government-General of Korea as part of the national highway maintenance. In other words, The Streets Selected for Improvement was the national highway maintenance plan for Seoul's urban area. The Government-General of Korea emphasised the maintenance of the national highway because of the colonial governance plan designed by Itō Hirobumi, the Japanese Residents-General of Korea. He considered road renovation as a prerequisite for promoting agriculture²⁵.

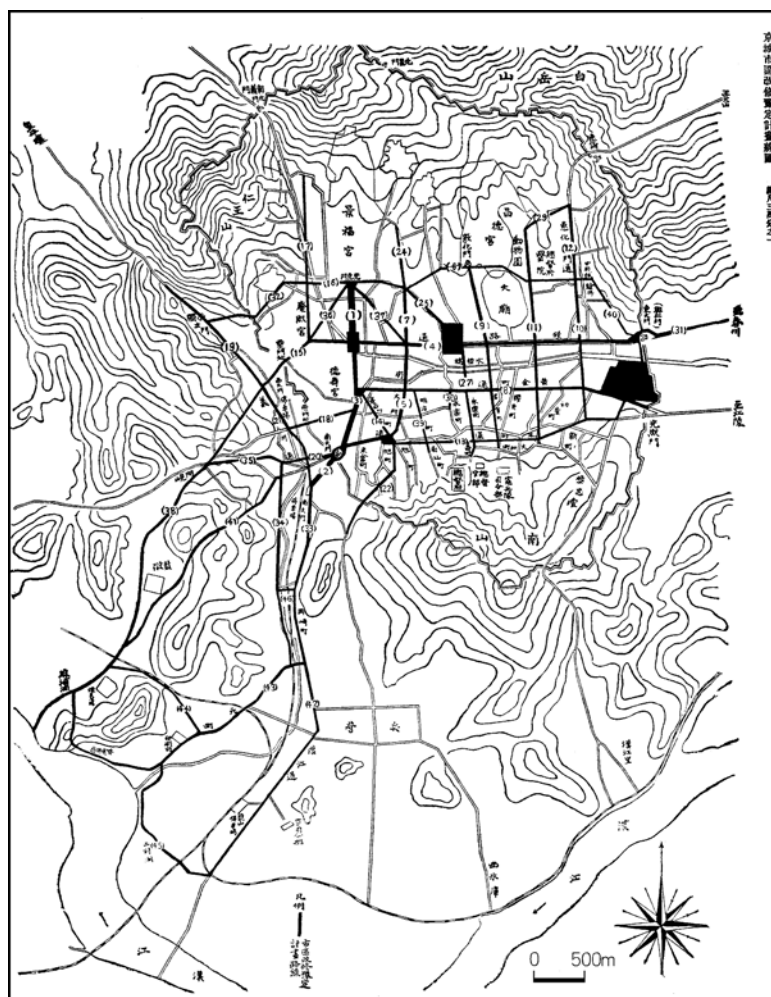


Figure 4: *The Streets Selected for Improvement in Seoul* (Government-General of Korea Notification No. 173, 25 June 1919).



4. The Drafting Process of the City Planning Orders

4-1. Background of the Korea Urban Area Planning Order of 1934

Son²⁶ explained that the Korea Urban Area Planning Order (No. 18 Order of the Governor-General of 1934)²⁷ was enacted because Rajin had to be systematically constructed as a base port city on the economic transportation route between Japan and Manchuria. However, *Keijō nippō's* article²⁸ shows that the drafting process had begun before the designation of Rajin. Furthermore, Goto's study²⁹, based on the urban planning survey report by the Government-General of Korea³⁰ and the lecture record of Naoki³¹, concluded that the primary purpose of the Korea Urban Area Planning Order of 1934 was to create substitute sites for public works in suburbs of Seoul by land readjustment. Shinba, Kōhei, Director of the civil engineering department of the Government-General of Korea in 1938, mentioned some differences between the Korea Urban Area Planning Order of 1934 and the laws of Japan, such as integration of city planning and building control, emphasis on urban expansion and creation of new urban areas³². The open-space district was institutionalised with an amendment in 1940³³. The Urban Area Plan of Seoul was announced³⁴ on 26 March 1936 (Figure 5).

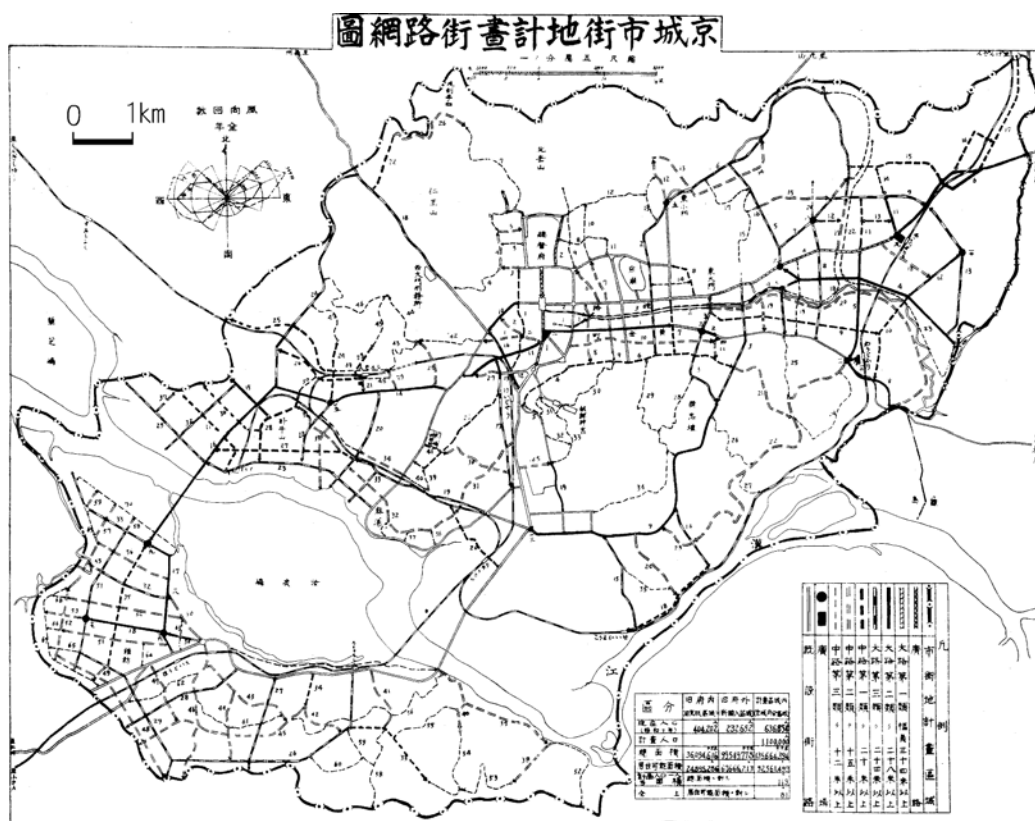


Figure 5: Urban Area Plan of Seoul of 1936 (Government-General of Korea Notification No. 180, 26 March 1936).

4-2. Establishment History of the Taiwan City Planning Order of 1936

The Government-General of Taiwan formulated the Greater Taipei Urban Improvement Plan on 7 March 1932³⁵ (Figure 6) to cope with the expansion of urban areas. However, no city planning order was enacted because of the contradictions in the legal system of Taiwan and unrelated to the technical aspects of city planning³⁶. The Taiwan City Planning Order of 1936 (No. 2 Order of the Governor-General of 1936)³⁷ differed from the City Planning Act and the Urban Area Building Act by introducing special use districts, provisions reflecting climate differences, etc.³⁸.

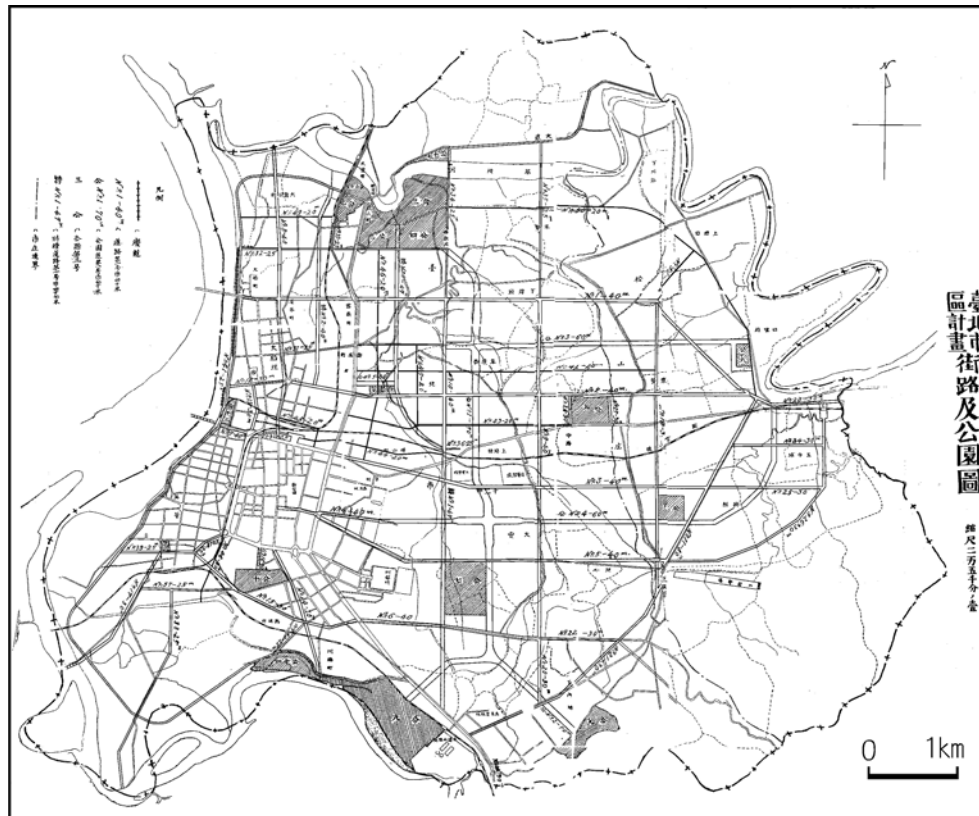


Figure 6: *Greater Taipei Urban Improvement Plan of 1932* (Taipei Prefecture Notification No. 54, 3 March 1932).

4-3. Mutual Inheritance Relationships and Differences between the City Planning Orders

Ushijima Syōzō, Director General of the Government-General of Korea, explained³⁹ that the draft of the Korea Urban Area Planning Order of 1934 was based on the City Planning Act (1919), the Urban Area Building Act (1919) and the Special City Planning Act (1923). Ogawa Hirokichi, entrusted by the Government-General of Taiwan, stated⁴⁰ that the parental laws of the Taiwan City Planning Order of 1936 were the City Planning Act (1919), the Urban Area Building Act (1919) and the Korea Urban Area Planning Order (1934). These orders were formulated according to previous laws and orders, which originated from the City Planning Act (1919) and the Urban Area Building Act (1919).

As mentioned above, the Korea Urban Area Planning Order (1934) differed from the City Planning Act (1919) by emphasising the creation of new urban areas. According to Ushijima, the application area of the City Planning Act was restricted to the cities, towns and villages designated by the Minister of Home Affairs, whereas the Korea Urban Area Planning Order was applicable wherever the Governor-General of Korea considered necessary.

When enacted, the application areas of the City Planning Act (1919) and the Urban Area Building Act (1919) were determined by Imperial ordinance, but the Japanese government revised it and transferred the decision authority to the Minister of Home Affairs. The City Planning Act was revised on 28 March 1933⁴¹, and the Urban Area Building Act on 6 April 1934⁴². In this way, when the Korea Urban Area Planning Order was promulgated on 1934, there was practically no difference about deciding the applicable area between Japan's laws and the Korean order. By comparing the planning laws and the orders at the time of enactment, the orders of the Japanese colonies may appear more advanced than those of Japan. However, since Japan's planning laws have also been revised in a second time, there was no substantial difference between the laws and the orders in the 1930s.

The City Planning Act (1933), the Korea Urban Area Planning Order (1934) and the Taiwan City Planning Order (1936) had the same approach in determining city planning, subjects for planning, land regulation methods, private rights restriction of the site and so on⁴³ (Table 1). The laws of Japan and the colonial orders shared the basic structure not because each colony developed independently its own plan but because the city planning system of Japan was transferred to the colonies. The city planning systems of Korea and Taiwan were standardised by the orders.



		Japan	Korea	Taiwan
System of laws and Orders	City planning	City Planning Act	Korea Urban Area Planning Order	Taiwan City Planning Order
	Building control	Urban Area Building Act		
Applicable place	City planning	(4/4/1919) Cities designated by the Imperial ordinance (Article 2) (28/3/1933) Towns and villages designated by the Minister of Home Affairs, and All cities (Article 2)	Not limited	Not limited
	Building control	(4/4/1919) Cities designated by the Imperial ordinance (Article 23) (6/4/1934) Areas designated by the Minister of Home Affairs (Article 23)		
Subjects for city planning		(4/4/1919) Important facilities to maintain public well-being or to promote welfare (Article 1 of the City Planning Act) Use districts are determined as the urban facilities (Article 10 of the City Planning Act)	(20/6/1934) Important facilities necessary for the creation or improvement of urban areas (Article 1) Use districts are determined as the urban facilities (Article 25)	(27/8/1936) Important facilities necessary for the creation or improvement of urban areas (Article 1) Use districts are determined as the urban facilities (Article 18)
Determining city planning		(4/4/1919) The Minister of Home Affairs decides on city plans after hearing the opinions of the municipalities concerned and upon the deliberation of the City Planning Councils (Article 3 of the City Planning Act)	(20/6/1934) The Governor-general decides on urban area plans after hearing the opinions of the municipalities concerned (Article 2) (18/12/1940) The Governor-general decides on urban area plans after hearing the opinions of the municipalities concerned and Korea Urban Area Planning Councils (Article 2)	(27/8/1936) The Governor-general decides on city plans after hearing the opinions of Taiwan City Planning Councils (Article 2)
Alteration of the shape and quality of land and building of buildings in areas of city planning facilities		(4/4/1919) Permission from the local governors is needed after the approval of city planning projects (Article 11 of the City Planning Act) (30/3/1940) Permission from the local governors is needed after the determining of open-space as city planning facilities (Article 11-2 of the City Planning Act)	(20/6/1934) Permission from the local governors is needed after the approval of urban area planning projects (Article 10) (18/12/1940) Permission from the local governors is needed after the determining of urban area planning facilities (Article 10)	(27/8/1936) Permission from the local governors is needed after the determining of city planning facilities (Article 9)
Use districts		(4/4/1919) Residential district, Commercial district, Industrial district, Special district within industrial area (Article 1 of the Urban Area Building Act) (28/3/1938) Addition of Exclusive commercial district, Exclusive industrial district (Article 2,4 of the Urban Area Building Act)	(20/6/1934) Residential district, Commercial district, Industrial district, Special district within industrial area (Article 18) (18/12/1940) Addition of Open-space district, Mixed use district and Special use districts, Abolition of Special district within industrial area (Article 15,19-3)	(27/8/1936) Residential district, Commercial district, Industrial district, Special use district (Article 21)

Table 1: Comparison of City Planning Laws and Orders.

Source: Official Gazette (Japan), No.1999, Apr.5, 1919. No.2449, Sep.30,1920. No.1871, Mar.29, 1933.

No.2177, Apr.7, 1934. No.3367, Mar.28, 1938. No.3969, Apr.1, 1940. No.4194, Dec.28, 1940. (Gov.-General of Korea), No.2232, Jun.26, 1934. No.4173, Dec.18, 1940. (Gov.-General of Taiwan), No.2770, Aug.27, 1936.

5. Advanced Regulation Methods

5-1. City Planning Orders including Building Control

The Japanese Urban Area Building Act of 1919 was independent from the City Planning Act of the same year, but the colonial city planning orders included building control. The Korea Urban Area Planning Order of 1934 was the first one to do it. Furthermore, the Government-General of Korea tried to set up a new division under the Governor-General's Secretariat to unify the Home Affairs Bureau and the Police Bureau along with the enforcement of the Korea Urban Area Planning Order (1934)⁴⁴. The integration of building control and city planning in the colonial city planning orders was considered as a symbol of advanced features; however, the newspapers under the influence of The Government-General reported different facts. On 8 April 1933, *Maeil sinbo* reported that 'The Home Affairs Bureau and the Police Bureau agreed on the integration of the orders that they had studied'⁴⁵. On the same day, *Keijō nippō* reported that 'the orders will be integrated from the viewpoint of



speeding up deliberation of legislation and simplifying administrative procedures at the time of application⁴⁶. The integration of city planning orders and building orders aimed at speeding up deliberations on legal proposals and simplifying administrative procedures, rather than embodying idealism about city planning.

On 1 August 1934, the Government-General of Korea enforced⁴⁷ only the city planning part of the Korea Urban Area Planning Order and waited until 20 September 1935 to actuate also the building control part⁴⁸.

The order was enforced in stages because the Home Affairs Bureau and the Police Bureau drafted the enforcement regulations separately for each part under their jurisdiction. At that time, they were not yet unified in the new division.

5-2. The Open-Space District

The Urban Area Building Act of 1919 established four types of use districts, including residential district, commercial district and industrial district. At the time of enactment, the orders of Korea and Taiwan had the same use districts.

The open-space district, introduced in the Korean order of 1940, did not allow use other than agriculture, forestry and fisheries, shrines, parks, etc., to suppress the expansion of urban areas and secure the green belt. The Taiwan City Planning Order of 1936 assumed one of the special use districts designated inside the residential area⁴⁹, but it was not realised.

The contemporary Japanese law did not contemplate the open-space district; hence, the colonial city planning orders have been considered advanced. The open-space district was introduced for the first time in the Japanese sphere of power with the Town and Country Planning Act in Manchukuo of 1936. The Policy and Purpose for Setting Open-Space District of 1936 formulated by the Government of Manchukuo stated that 'It is ideal to secure open space by site acquisition and to ease land use restrictions. However, it is difficult due to lack of resources'⁵⁰. The open-space district was created just as a compromise.

In 1940, the City Planning Act of Japan institutionalised the open space⁵¹ as an urban facility. Matsumura Mitsuma, Director of City Planning Bureau of the Ministry of Home Affairs, explained that the open space was recognised as an urban facility rather than as a use district 'Because it is necessary to secure open space promptly by urban planning project'⁵². Thus, the seemingly advanced concepts found in the colonial orders were not necessarily advanced.

6. Continued Use of the Orders by the Republic of Korea and Republic of China

6-1. Republic of Korea

The Japanese rule of Korea ended with the defeat of Japan in World War II. United States Army Military Government in Korea announced The Ordinance Number 21 on 2 November 1945, which maintained the orders of the Governor-General from the Japanese occupation era, including the Korea Urban Area Planning Order of 1934⁵³. The Constitution of the Republic of Korea enacted on 12 July 1948 included Article 100, which preserved the effects of existing laws and orders. The legislation development by the Republic of Korea was delayed because of the Korean war and the coups. The Civil Law was promulgated on 22 February 1958⁵⁴, and the Commercial Law on 20 January 1962⁵⁵. Korea continued to use the Korea Urban Area Planning Order of 1934 after independence because it took time to formulate new laws and not because of the high consideration of the existing order.

6-2. Republic of China

Following the Cairo Declaration in 1943, the Republic of China reviewed the governance plan to obtain Taiwan and formulated the Taiwan Takeover Program on 14 March 1945⁵⁶. The Fifth Subsection of the program proclaimed the temporary validity of the laws and the orders of the Japanese reign era that did not contradict the Three Principles of the People or the laws of the Republic of China. The Governor Office of Taiwan Province, constituted on 3 November 1945, confirmed that the Fifth Substitution of the Taiwan Takeover Program was effective⁵⁷. The Governor Office of Taiwan Province confirmed the effectiveness of 236 laws, including the Taiwan City Planning Order of 1936, with Decree No. 36283 on 24 October 1946⁵⁸. The continued validity of some orders of the Japanese age was a comprehensive prescribed policy for the stability of society and the protection of residents' interests. The Taiwan City Planning Order of 1936 was included because it did not conflict



with the laws of the Republic of China or Three Principles of the People and not because the order itself was appreciated.

7. Conclusion

This study compared the city planning systems of Taiwan and Korea under the Japanese rule. In the early years of Japanese colonisation, the Urban Improvement Programs of Taipei and Seoul had conformed to the systematic Street Improvement Plans of the time. However, those plans significantly differed from each other. Taipei's plan had restricted the private rights on the selected sites and included the control of the sewage and the building constructions. Seoul's program was merely part of the national road construction in urban areas, with no restriction of the private rights, and did not consider sewage and building constructions. Therefore, the successive introduction of the Taiwan City Planning Order of 1936 and the Korea Urban Area Planning Order of 1934 standardised the urban planning systems between the two colonies. These orders were drafted after Japan's City Planning Act of 1919 and reflected its operational experience.

Urban planning and building control were both included in one order only to simplify the formulating procedure. The Taiwan City Planning Order of 1936 and the Korea Urban Area Planning Order of 1934 were based on Japan's City Planning Act of 1919 and Urban Area Building Act of 1919 and did not develop independently. Therefore, these colonial planning orders shared the same basic structure.

When considering the laws and the orders at the time of enactment, the colonial planning orders may appear more advanced than Japan's laws. However, since Japan's planning laws were successively revised, it slightly differed from the colonial orders in the end. Furthermore, the colonial orders were not so advanced as previously thought. They were improved as a group and not evaluated as advanced planning orders with respect to the old-fashioned Japanese laws. Case studies of modern city planning in Japan, Korea and Taiwan are valuable references to each other.

Endnotes

- 1 Son, *Ilje gangjeomgi*.
- 2 Huáng, *Taipei City planning*.
- 3 Koshizawa, *Harbin*, 288.
- 4 Ishida, *Nihon kindai*, 204-207.
- 5 Goto, "Drafting process of the Ordinance", 919-924.
- 6 Goto, "Introduction of Modern City Planning in Taipei", 859-864.
- 7 Goto, "Comparative Study", 865-870.
- 8 *Official Gazette (Government-General of Taiwan)*, No.70, April 29, 1897.
- 9 *Official Gazette (Taipei Prefecture)*, No. 188, August 23, 1900.
- 10 *Official Gazette (Government-General of Taiwan)*, No.644, November 21, 1899.
- 11 *Official Gazette (Taipei Prefecture)*, No. 425, October 7, 1905.
- 12 *Official Gazette (Government-General of Taiwan)*, No.796, August 12, 1900.
- 13 *Official Gazette (Taipei Prefecture)*, No.227, December 26, 1900.
- 14 *Official Gazette (Taipei Prefecture)*, No. 791, June 27, 1909.
- 15 *Official Gazette (Government - General of Taiwan)*, No. 2665, March 25, 1909.
- 16 Goto, "Modern City Planning in Taipei", 859-864.
- 17 *Taiwan nichinichishinpō*, October 8, 1905.
- 18 Government-General of Taiwan, *Taiwansōtokufu minsei jimū*, 453-462.
- 19 Goto, "Idea of Colonial Rule", 84-92.
- 20 *Official Gazette (Government-General of Korea)*, No. 81, November 6, 1912.
- 21 *Official Gazette (Government-General of Korea)*, No. 2062, June 25, 1919.
- 22 *Official Gazette (Government-General of Korea)*, No. 972, October 29, 1915.



- 23 *Official Gazette (Government-General of Korea)*, No.169, February 25, 1913.
- 24 Government-General of Korea, *Chōsen doboku*, 1113-1135.
- 25 Goto, "Urban Improvement in Korea", 715-720.
- 26 Son, *Ilje gangjeomgi*, 181-183.
- 27 *Official Gazette (Government-General of Korea)*, No.2232, June 20, 1934.
- 28 *Keijō nippō*, September 4, 1934.
- 29 Goto, "Drafting process of the Ordinance", 919-924.
- 30 Ueda, "Chōsen ni okeru toshi keikaku", 48-63.
- 31 Naoki, "Keijō no tochi kukaku seiri", 11-12.
- 32 Shinba, "Chōsen ni okeru toshi keikaku", 19-27.
- 33 *Official Gazette (Government-General of Korea)*, No. 4173, December 18, 1940.
- 34 *Official Gazette (Government-General of Korea)*, No. 2758, March 26, 1936.
- 35 *Official Gazette (Taipei Prefecture)*, No. 765, March 3, 1932.
- 36 Goto, "Delegated legislation system", 529-534.
- 37 *Official Gazette (Government-General of Taiwan)*, No.2770, August 27, 1936.
- 38 Hayakawa, "Taiwan toshi keikaku-rei", 64-69.
- 39 *Keijō nippō*, June 20, 1934.
- 40 Ogawa, "Taiwan toshi keikaku-rei", 69-75.
- 41 *Official Gazette (Japan)*, No. 1871, March 29, 1933.
- 42 *Official Gazette (Japan)*, No.217, April 7, 1934.
- 43 Goto, "Study on merits", 513-518.
- 44 *Keijō nippō*, June 15, 1934.
- 45 *Maeil sinbo*, April 8, 1933.
- 46 *Keijō nippō*, April 8, 1933.
- 47 *Official Gazette (Government-General of Korea)*, No. 2264, July 27, 1934.
- 48 *Official Gazette (Government-General of Korea)*, No. 2593, September 2, 1935.
- 49 Oguri, "Tokonatsu", 115-152.
- 50 Ōta, "Man-sen Kansatsu-ki", 34-43.
- 51 *Official Gazette (Japan)*, No. 3969, April 1, 1940.
- 52 *House of Representatives (Japan)*, Special committee, 4.
- 53 *Official Gazette (U.S. Army Military Government)*, November 2, 1945.
- 54 *Official Gazette (Republic of Korea)*, No.1983, February 2, 1958.
- 55 *Official Gazette (Republic of Korea)*, No. 3054, January 20, 1962.
- 56 Kuomintang, *Guāngfū táiwān*, 1990.
- 57 *Official Gazette (Governor Office of Taiwan Province)*, Vol.1, No.6, 1945.
- 58 *Official Gazette (Governor Office of Taiwan Province)*, winter issue (1946): 327-332.

Bibliography

- Goto, Yasushi. 1999. "Comparative Study about Shikukaisei Urban Improvement as Planning System and Technique at KEIJO 1912-1937 (Seoul; at present) and TAIHOKU 1895-1932 (Taipei; at present).", *Journal of the City Planning Institute of Japan*, No.34 (1999): 865-870.
- Goto, Yasushi. "A Study about the Idea of Colonial Rule Shown in TAIHOKU City Planning.", *City Planning Review*, No.236 (2002): 84-92. City Planning Institute Japan.
- Goto, Yasushi. "A study about drafting process of the Ordinance for Street Planning in Chosen.", *Journal of the City Planning Institute of Japan*, No.39-3 (2004): 919-924.



The 18th International Planning History Society Conference - Yokohama, July 2018

- Goto, Yasushi. "A Study about the Introduction of Modern City Planning in Taipei under Japanese Rule.", *Journal of the City Planning Institute of Japan*, No.44-3 (2009): 859-864.
- Goto, Yasushi. "A Study about the characteristic of *Shikukaisei* Urban Improvement in Korea under Japanese rule", *Journal of the City Planning Institute of Japan*, No.46-3 (2011): 715-720.
- Goto, Yasushi. "A Study about the influence from delegated legislation system in the drafting of City Planning Ordinance for Taiwan.", *Journal of the City Planning Institute of Japan*, No.47-3 (2012): 529-534.
- Goto, Yasushi. "A Study on merits of Ordinance for Street Planning in Chosen and City Planning Act for Formosa under Japanese Rule.", *Journal of the City Planning Institute of Japan*, No.49-3 (2014): 513-518.
- Government-General of Korea. *Chōsen doboku jigyō-shi (Civil Engineering Projects in Korea)*. Seoul. 1937.
- Government-General of Korea. *Official Gazette*, No.81, November 6, 1912.
- Government-General of Korea. *Official Gazette*, No.169, February 25, 1913.
- Government-General of Korea. *Official Gazette*, No. 972, October 29, 1915.
- Government-General of Korea. *Official Gazette*, No.2062, June 25, 1919.
- Government-General of Korea. *Official Gazette*, No.2232, June 20, 1934.
- Government-General of Korea. *Official Gazette*, No. 2264, July 27, 1934
- Government-General of Korea. *Official Gazette*, No. 2593, September 2, 1935
- Government-General of Korea. *Official Gazette*, No. 2758, March 26, 1936.
- Government-General of Korea. *Official Gazette*, No. 4173, December 18, 1940.
- Government-General of Taiwan. *Taiwansōtokufu minsei jimu seiseki teiyō dai 10-hen (Civil Affairs Results Part 10)*. Taipei, 1905.
- Government-General of Taiwan. *Official Gazette*, No.70, April 29, 1897.
- Government-General of Taiwan. *Official Gazette*, No.644, November 21, 1899.
- Government-General of Taiwan. *Official Gazette*, No.796, August 12, 1900.
- Government-General of Taiwan. *Official Gazette*, No.2665, March 25, 1909.
- Government-General of Taiwan. *Official Gazette*, No.2770, August 27, 1936.
- Governor Office of Taiwan Province. *Official Gazette*, Vol.1, No. 6, 1945.
- Governor Office of Taiwan Province. *Official Gazette*, winter issue (1946): 327-332.
- Government of the Republic of Korea. *Official Gazette*, No. 1983, February 22, 1958.
- Government of the Republic of Korea. *Official Gazette*, No. 3054, January 20, 1962.
- Hayakawa, Tōru. "Taiwan toshi keikaku-rei no ishoku (Unusual Features of Taiwan City Planning Order).", *toshimondai (Urban Problem)*, Vol.24, No.5 (1937): 64-69.
- Huáng, wǔdǎ. 1997. *Contemporary Taipei City planning in Japanese colonial age*. Banqiao: Taiwan du shi shi yan jiu shi.
- Imperial Diet House of Representatives (Japan). "The minutes of the 75th Imperial Diet House of Representatives Special committee on special city planning act etc." march 4, 1940.
- Ishida, Yorifusa. *Nihon kindai toshi keikaku no hyakunen (Centennial Year of Modern Urban Planning)*. Tokyo: jichitai kenkyū-sha, 1987.
- Japanese Government. *Official Gazette*, No.1999, April 5, 1919.
- Japanese Government. *Official Gazette*, No.2449, September 30, 1920.
- Japanese Government. *Official Gazette*, No.1871, March 29, 1933.
- Japanese Government. *Official Gazette*, No.2177, April 7, 1934.
- Japanese Government. *Official Gazette*, No.3367, March 28, 1938.
- Japanese Government. *Official Gazette*, No.3969, April 1, 1940.



- Japanese Government. *Official Gazette*, No.4194, December 28, 1940.
- Keijō nippō*. "Chōsen shigaichi keikaku-rei no happu ni tsuite Ushijima kyokuchō kataru (Director Ushijima speaks about the release of the Korea Urban Area Planning Order 1934).", June 20, 1934.
- Keijō nippō*. "Chōsen shigaichi keikaku-rei seitei (Establishment of the Korea Urban Area Planning Order)." September 4, 1934.
- Keijō nippō*. "shigaichi keikaku-rei ni tomonatte ka ga shinsetsu sareruka (Will new division be established in accordance with Korea Urban Area Planning Order 1934 ?)," June 15, 1934.
- Keijō nippō*. "Shigaichi seiri-rei wa tekkai (Urban regeneration order only proceed)." April 8, 1933.
- Koshizawa, Akira. *Harbin no toshi keikaku (Urban planning of Harbin)*. Tokyo: Sōwa-sha, 1989.
- Maeil sinbo*. "Dosigyehoeogyong pohamdoel sigajigeonchukchwicheryeong (Building Control Order to be included in Urban Area Planning Order)." April 8, 1933.
- Naoki, Rintarō. "Keijō no tochi kukaku seiri (Land Readjustment of Seoul).", *Keijō ihō (Seoul Bulletin)*, No.89 (1929): 11-12.
- Ogawa, Hirokichi. "Taiwan toshi keikaku-rei no tokushoku (Characteristics of Taiwan City Planning Order).", *kukaku seiri (Land readjustment)*, Vol.3, No.4 (1937): 69-75.
- Oguri, Chūshichi. "Tokonatsu kikō kōki (Posthumous summer journalism).", *Toshi kōron (Urban public opinion)*, No.19, Vol.10 (1936): 115-152.
- Ōta, Kenkichi. "Man-sen Kansatsu-ki (zoku) (Observation note of Korea and Manchuria (continued)).", *Kōen ryokuchi (Parks and greenery)*, Vol.2, No.12, (1938): 34-43.
- Shinba, Kōhei. "Chōsen ni okeru toshi keikaku no tokui-sei (Specificity of City Planning in Korea).", *Toshimondai (Urban problem)*, No.27, Vol.5 (1938): 19-27.
- Son, Jeong-Mok. *Ilje gangjeomgi dosi gyehog yeongu (City planning study of Japanese colonial period)*. Seoul: Iljisa. 1990.
- Taipei Prefecture. *Official Gazette*, No.188, August 23, 1900.
- Taipei Prefecture. *Official Gazette*, No.227, December 26, 1900.
- Taipei Prefecture. *Official Gazette*, No.425, October 7, 1905.
- Taipei Prefecture. *Official Gazette*, No.791, June 27, 1909.
- Taipei Prefecture. *Official Gazette*, No.765, March 3, 1932.
- Taiwan nichinichi shinpō*. "Shiku keikaku no gaiyō (Outline of Taipei Urban Improvement Plan)." October 8, 1905.
- Ueda, Masayoshi. "Chōsen ni okeru toshi keikaku no ichirei (An Example of Urban Planning in Korea).", *Kōgaku(Engineering)*, No.99 (1922): 48-63.
- United States Army Military Government in Korea. *Official Gazette*, November 2, 1945.
- Zhōngguó guómíndǎng zhōngyāng wěiyuánhùi dǎng shǐ wěiyuánhùi (Kuomintang). *Guāngfù táiwān zhī chóuhuà yǔ shòuxiàng jìzhōu (Taiwan's plan for recovery and acceptance)*. Taipei, 1990.

Image sources

- Figure 1: Taipei Prefecture. *Official Gazette*, No. 188, August 23, 1900.
- Figure 2: Taipei Prefecture. *Official Gazette*, No. 425, October 7, 1905.
- Figure 3: Government-General of Korea. *Official Gazette*, No. 81, November 6, 1912.
- Figure 4: Government-General of Korea. *Official Gazette*, No. 2062, June 25, 1919.
- Figure 5: Government-General of Korea. *Toshi keikaku gaiyō (Outline of city planning)*. Seoul. 1938.
- Figure 6: Taipei Prefecture. *Official Gazette*, No. 765, March 3, 1932.



Yukaku (red-light district) and city planning in Japanese colonial cities in Taiwan, 1895-1945

SAMMONJI Masaya*

* *PhD Student, Urban Design Laboratory, The University of Tokyo, 3@ud.t.u-tokyo.ac.jp*

In 1895, Taiwan (Formosa) was ceded to Japan by the Qing dynasty. In the earliest period of the Japanese rule, a crowd of Japanese prostitutes immigrated to Taiwan, which opened an era when sex industry of both Japanese and locals appeared broadly in the cities. Then, aiming to solve sanitary and security issues, Japanese colonial government started to set “kashizashiki designated area (also called yukaku area simply)” in each city in 1896, and allowed prostitutes to do their business only inside the area. It also provided the rough location planning of colonial cities far earlier than other well-studied urban policies or plannings, such as the “city improvement plannings (shiku-kaisei)” started in 1900 and so on. Thus, in this context, these designations can be considered as the earliest “silent” planning of the Japanese colonial cities. After that, some yukakus moved to another location in the cities once or more, in response to city growth and progress of the “city improvement planning”. This study found that there were yukakus in 16 cities of colonial Taiwan in total, and the meanings and grounds of each location changed in response to the progress of urban planning or urban developing.

Keywords: Yukaku, Red-light district, City planning, Japanese colonial city, Taiwan.

1. Introduction

Jinja (神社 shrine) and yukaku (遊廓 red-light district) have been recognized as “symbols” of Japanese colonial cities by some researchers¹, because they were set in the earliest period of Japanese colonial era and characterized Japanese colonial cities with some special functions. Thus, it is very important to focus on these things in order to understand the history of Japanese colonial cities in a variety of aspects, including history of urban planning. Aoi’s research² focused on shrines in the colonial cities of Japan, but there has been no research on relationship between yukaku and city planning yet.

This study aims to find a new meaning of the transition of yukakus’ location in Japanese colonial cities in Taiwan and it has several novelties: it (1) focused on the yukaku’s location in the city, (2) targeted yukakus in all cities of Taiwan and (3) analysed them in terms of urban planning theory.

In this paper, the followings are reported:

- (1) Yukaku’s location in each city and its transition.
- (2) Relationship between yukaku’s location and urban planning and its transition.

It will provide a new perspective and understanding for the planning history of Japanese colonial cities.

2. Methods and materials

In this study, the following materials were investigated; various historical documents such as official documents of the Governor-General of Taiwan (臺灣總督府報), books / newspapers / magazines at the time, city planning maps (市區改正計畫圖) / fire insurance special map (火災保險特殊地圖) and so on.

This paper basically uses original terms and their Japanese pronunciations about the name of cities etc.; such as Taihoku (Taipei 臺北), Takao (Kaohsiung 高雄), ken (prefecture 縣), shu (country 州), shi (city 市) and so on.

3. Policies about urban planning / yukaku in Japanese colonial era

Through the Japanese colonial era, there were some changes in the policies about urban planning. According to Huang(2006)³, these policies were divided into three types. First is in the very early time, such as 1895-1900, called “shiku-kaisei (city improvement 市區改正)” period. In this period, the Governor-General of Taiwan (Taiwan Sotokufu 臺灣總督府) mainly focused only on improvement of water systems and roads, and didn’t consider overall city planning. Then, after 1900, “shiku-keikaku (city planning 市區計畫)” was appointed in some cities, and planners started aiming to make a whole and comprehensive planning on each city. Finally, “Taiwan



Urban Planning Act (Taiwan Toshi-keikaku-rei 臺灣都市計畫令)” was established in 1936, which provided modern and integrated urban planning system in colonial Taiwan.

In terms on yukakus, a crowd of Japanese prostitutes immigrated to Taiwan in the earliest period of the Japanese rule, which opened an era when sex industry of both the Japanese and the locals appeared broadly in the cities. Then, aiming to solve sanitary and security issues, most of local governments started to set “kashizashiki designated area (貸座敷指定地 also called yukaku 遊廓 or yukaku area 遊廓地 simply)” in each city in 1896, and allowed prostitutes to do their business only inside the area. Although these yukaku areas were designated only in part of each city, they based on the various situations of the cities at the time and provided the rough location planning of colonial cities far earlier than other well-studied urban policies or plannings, such as the “city improvement plannings (shiku-kaisei 市區改正)” started in 1900, constructions of governmental buildings, and so on. In the example in Taihoku-ken (臺北縣), the very first local government’s order (kenrei 縣令) in 1896 was about this yukaku. It’s very notable because it’s far earlier than the implementation of any of city plannings. Then, the governmental order about yukaku was established for whole Taiwan in 1906.

According to Zhang(2008)⁴, contents of the order included the followings:

- (1) introduced license system of prostitutes’ business by local government.
- (2) introduced registration system of the prostitutes.
- (3) prohibited business of prostitutes outside yukaku area.
- (4) prohibited prostitutes to go outside yukaku area.
- (5) gave the Governor-General of Taiwan (臺灣總督府) the power to approve designating and redesignating of yukaku area.
- (6) made periodic medical examination compulsory.

Among them, (5) is quite important in the context of the relationship between urban planning and yukaku. In order to designate or relocate yukaku area, local government had to get an approval by the Governor-General of Taiwan. This rule made the yukaku’s location align with urban planning policies.

4. Location of yukakus in colonial Taiwan



Figure 1: *Yukakus in colonial Taiwan*. Edited by author and based on [台中市, 台中市概況(1936), frontispiece.].



The 18th International Planning History Society Conference - Yokohama, July 2018

As a result of comprehensive investigation into historical documents such as public documents⁵ and newspapers⁶, it turned out that yukaku existed in 16 cities of colonial Taiwan in total.

At the same time, the change of the location of all cities was revealed in detail. Yukakus in 7 cities moved to another location in each city once or more, in response to city growth and progress of the “city improvement planning (市區改正計畫)”. Case examples of some cities are shown below. For example, in Tainan, yukakus moved to the reclaimed land in 1912 (yukaku for Japanese) and 1917 (yukaku for locals).

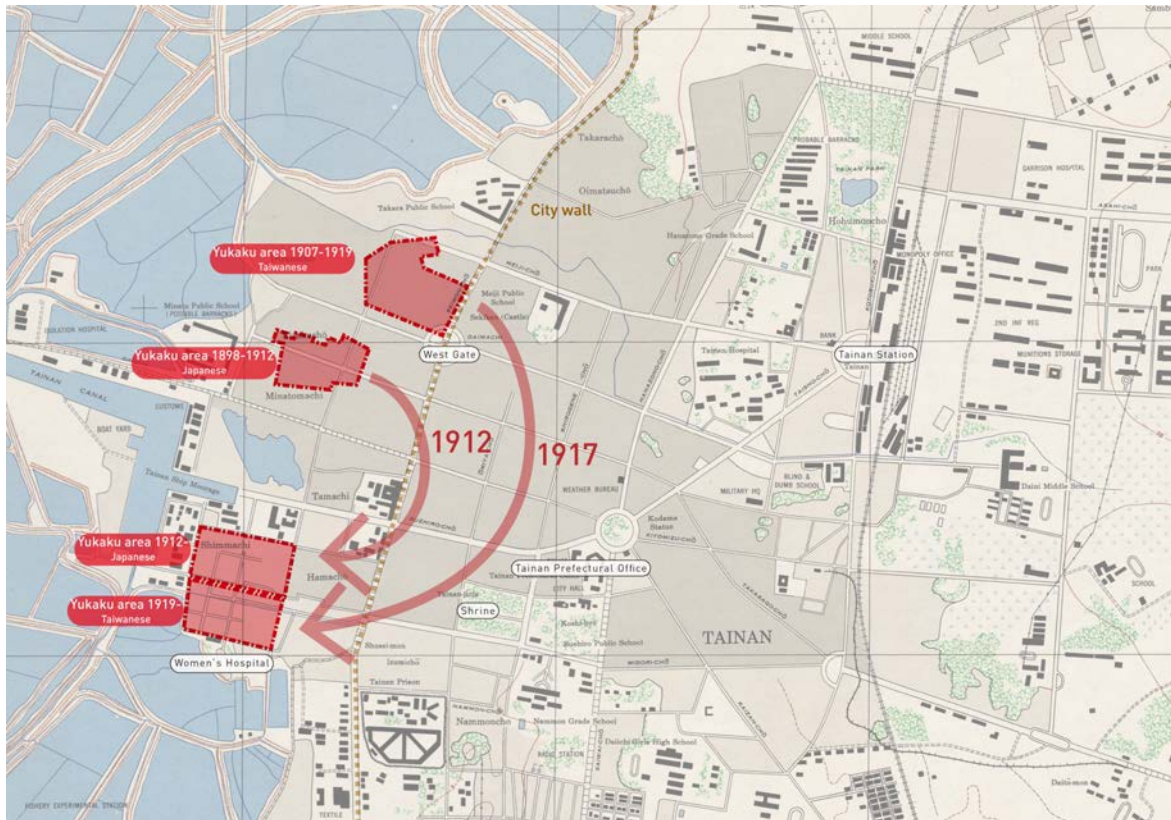


Figure 2: *Changes of the location of yukakus in Tainan.* Edited by author and based on [U.S. Army Map Service, *Formosa City Plans*, (1944-1945).].

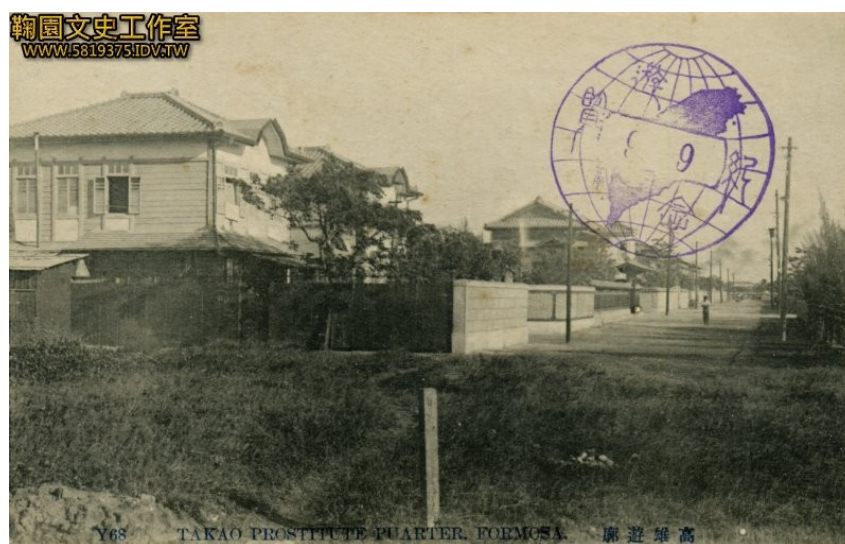


Figure 3: *Picture of Takao Yukaku*, 鞠園文史工作室 <http://www.5819375.idv.tw> (Accessed December 23, 2017)



The 18th International Planning History Society Conference - Yokohama, July 2018

Taking all areas before and after the relocation into consideration, kashizashiki designated areas (yukaku areas) amounted to 34 in total. All of yukaku areas are listed below.

City	Kashizashiki designated area	Year of designation	Year of undesignation
Kiirun 基隆	Tenryoko 田寮港	1896	—
	Gyokudencho 2 玉田町二丁目※	N/A (after 1922)	
Tansui 淡水	Shinseki-gai 新厝街	1896	—
Taihoku 台北	Banka 艋舺	1896	—
	Daitotei 大稻埕※	N/A (after 1922)	—
	Banka South 萬華南※	N/A (after 1922)	—
Giran 宜蘭	Giran-gai 宜蘭街全体	1901	—
	Minsoibo-sho 民壯圍堡庄×	1901	—
Shinchiku 新竹	Nammon-gai 南門外	1897	1924
	Kyakuga 客雅×	1924	—
	Kousharo 後車路※	N/A	—
Byouritsu 苗栗	Naima 内麻	1897	1902
	Koshitei 坑仔低 etc.	1902	1924
	626-659 Byouritsu 苗栗626-659	1924	—
Taichu 台中	Tokiwa-cho 常磐町	1896	1914
	Hatsune-cho 初音町	1914	—
Rokko 鹿港	Hokuto-gai 北頭街	1896	1898
Shoka 彰化	Seimon 西門	1898	1935
	Nammon Shinchi 南門新地※	1935	—
Toroku 斗六	Toroku-gai 斗六街	1906	—
Kagi 嘉義	Kitamon-gai 北門外×	1901	1903
	Nishimon-gai 西門外	1903	—
Tainan 台南	Nansei-gai 南勢街 etc.	1898	1912
	Motosotomasokogai 元外媽祖港街 etc.*	1907	1919
	Shinmachi 1 新町一丁目	1912	—
	Shinmachi 2 新町二丁目*	1919	—
Takao 打狗 (高雄)	Kigo-gai 旗後街一円	1901	1917
	Sakaemachi 榮町	1917	—
Hozan 鳳山	Kaboko-gai 火防口街 etc.	1901	1906
	Shinjo-kosho 新庄仔庄×	1906	—
Mako 媽宮 (馬公)	Kunaimachi/Minamimachi 宮内町・南町	1897	1898
	Jonai 城内	1898	1906
	Hoshio 埔仔尾	1906	—
Karenko 花蓮港	Fukusumi 福住	1910	—

Table 1: List of kashizashiki designated areas (yukaku areas) in colonial Taiwan. ※ represents “de facto” yukaku area of local Taiwanese. * represents yukaku area of local Taiwanese. × represents yukaku area that was only designated and didn’t have real businesses inside. Romanized pronunciation of the names of each area can be not accurate.

5. Discussion



From the point of view about relationship with city structure, the location of each kashizashiki-designated area (yukaku area) can be classified into following 4 types:

- (A) whole designation type: whole area of the existing urban area was designated as yukaku area.
- (B) centre designation type: central area of the existing urban area was designated as yukaku area.
- (C) margin designation type: marginal area of the existing urban area was designated as yukaku area.
- (D) suburb designation type: an area outside the existing urban area was designated as yukaku area.

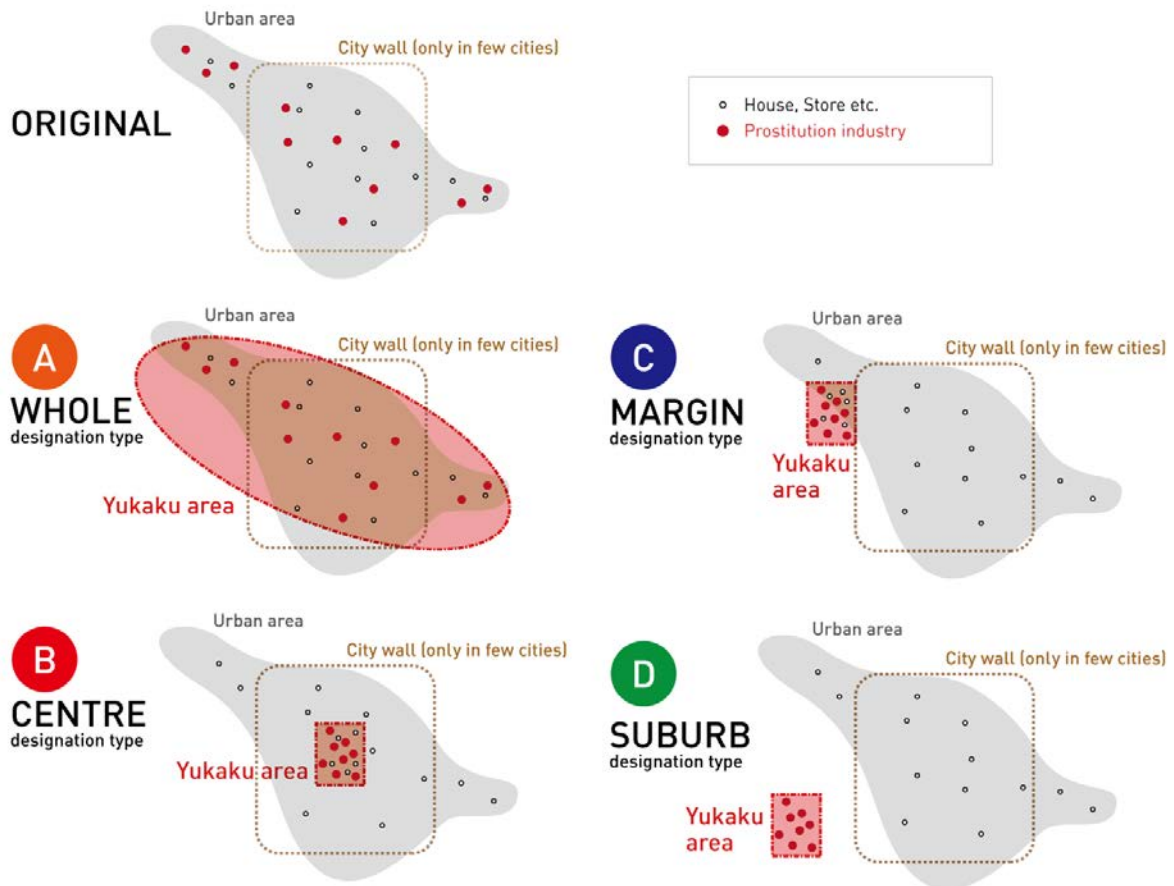


Figure 4: The location patterns of each kashizashiki designated area (yukaku area).

Based on this classification, we classified all of the yukaku areas. The results of classification are shown in Table 2.

City	Kashizashiki designated area	Location type
Kiirun 基隆	Tenryoko 田寮港	(D) SUBURB DESIGNATION TYPE
	Gyokudencho 2 玉田町二丁目※	(B) CENTRE DESIGNATION TYPE
Tansui 淡水	Shinseki-gai 新厝街	(C) MARGIN DESIGNATION TYPE
Taihoku 台北	Banka 艋舺	(C) MARGIN DESIGNATION TYPE
	Daitotei 大稻埕※	(B) CENTRE DESIGNATION TYPE
	Banka South 萬華南※	(C) MARGIN DESIGNATION TYPE
Giran 宜蘭	Giran-gai 宜蘭街全体	(A) WHOLE DESIGNATION TYPE



	Minsoibo-sho 民壯圍堡庄×	(D) SUBURB DESIGNATION TYPE
Shinchiku 新竹	Nammon-gai 南門外	(C) MARGIN DESIGNATION TYPE
	Kyakuga 客雅×	(D) SUBURB DESIGNATION TYPE
	Kousharo 後車路※	(B) CENTRE DESIGNATION TYPE
Byouritsu 苗栗	Naima 內麻	Not clear
	Koshitei 坑仔低 etc.	(B) CENTRE DESIGNATION TYPE
	626-659 Byouritsu 苗栗626-659	Not clear
Taichu 台中	Tokiwa-cho 常磐町	(B) CENTRE DESIGNATION TYPE
	Hatsune-cho 初音町	(D) SUBURB DESIGNATION TYPE
Rokko 鹿港	Hokuto-gai 北頭街	(C) MARGIN DESIGNATION TYPE
Shoka 彰化	Seimon 西門	(B) CENTRE DESIGNATION TYPE
	Nammon Shinchi 南門新地※	(D) SUBURB DESIGNATION TYPE
Toroku 斗六	Toroku-gai 斗六街	(C) MARGIN DESIGNATION TYPE
Kagi 嘉義	Kitamon-gai 北門外×	(D) SUBURB DESIGNATION TYPE
	Nishimon-gai 西門外	(D) SUBURB DESIGNATION TYPE
Tainan 台南	Nansei-gai 南勢街 etc.	(C) MARGIN DESIGNATION TYPE
	Motosotomasokogai 元外媽祖港街 etc.*	(C) MARGIN DESIGNATION TYPE
	Shinmachi 1 新町一丁目	(D) SUBURB DESIGNATION TYPE
	Shinmachi 2 新町二丁目*	(D) SUBURB DESIGNATION TYPE
Takao 打狗 (高雄)	Kigo-gai 旗後街一円	(A) WHOLE DESIGNATION TYPE
	Sakaemachi 榮町	(D) SUBURB DESIGNATION TYPE
Hozan 鳳山	Kaboko-gai 火防口街 etc.	(B) CENTRE DESIGNATION TYPE
	Shinjo-kosho 新庄仔庄×	(D) SUBURB DESIGNATION TYPE
Mako 媽宮 (馬公)	Kunaimachi/Minamimachi 宮內町・南町	(B) CENTRE DESIGNATION TYPE
	Jonai 城內	(A) WHOLE DESIGNATION TYPE
	Hoshio 埔仔尾	(D) SUBURB DESIGNATION TYPE
Karenko 花蓮港	Fukusumi 福住	(D) SUBURB DESIGNATION TYPE

Table 2: *The location patterns of each kashizashiki designated area.* ※ represents “de facto” yukaku area of local Taiwanese. * represents yukaku area of local Taiwanese. × represents yukaku area that was only designated and didn’t have real businesses inside.

The transition of the location of yukaku area is shown in Figure 5 and 6. According to this figure, we can find that more than 7 yukaku areas had changed from (A) whole designation type, (B) centre designation type or (C) margin designation type into (D) suburb designation type. In the cases of Kiirun (Keelung 基隆), Kagi (Chiayi 嘉義), Karenko (Hualian 花蓮港), yukakus were located in the suburbs ((D) suburb designation type) since first yukaku area in each city was designated. Yukaku areas in only four cities did not move to the suburbs.

This means that most of yukaku areas gradually moved to the suburbs during the colonial era of Taiwan.

In (D) type, yukaku areas were located near the border of the grid-patterned street network of city improvement plannings (shiku-kaisei-keikaku 市區改正計畫).

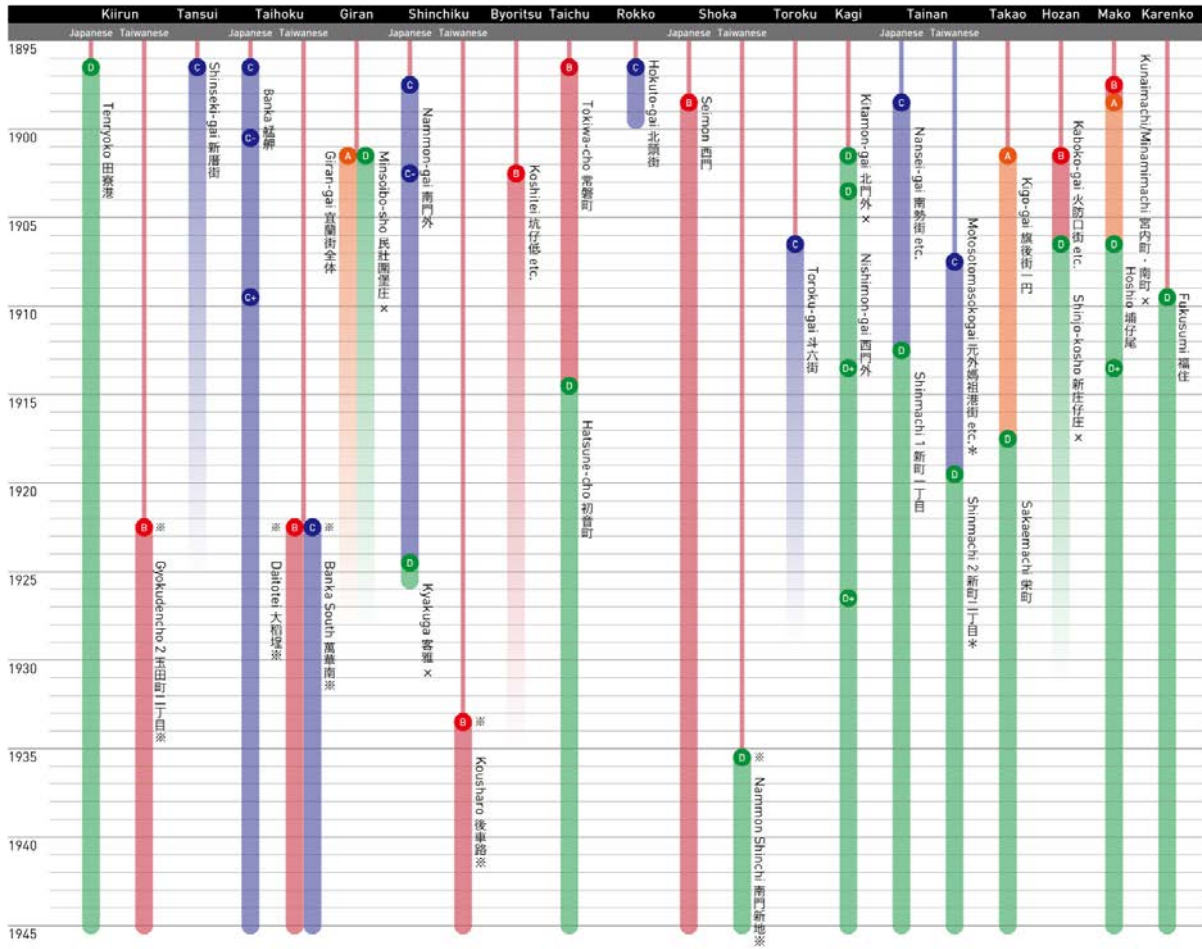


Figure 5: The transition of location patterns of each kashizashiki designated area (yukaku area).

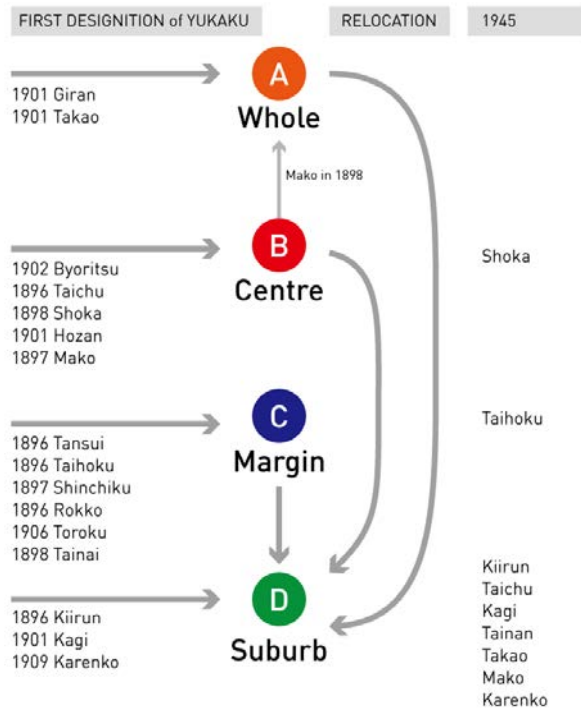


Figure 6: The transition diagram of location patterns of each kashizashiki designated area (yukaku area).

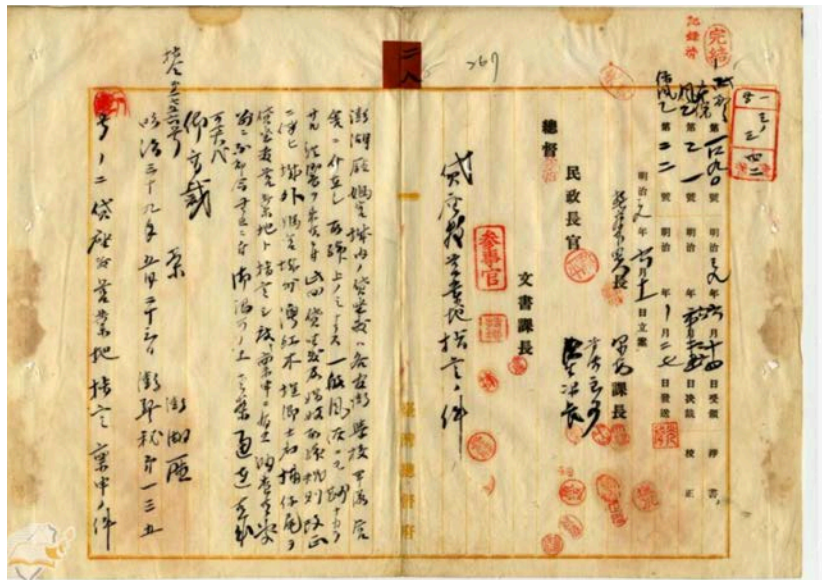


Figure 7: The official paper about relocation of Mako Yukaku area 「澎湖廳告示第四十二號貸座敷營業地域改正ノ件」 (1906年7月11日), 《臺灣總督府檔案》, 國史館臺灣文獻館, 典藏號:00001187088X003.

The reasons for designating of the kashizashiki-designated areas (yukaku areas) were partly found in the official documents such as the Governor-General of Taiwan (臺灣總督府報). The reasons can be largely divided into two; “in order to control prostitution businesses” and “in order to improve the reason for urban planning.”

As a reason for prostitution control, the most emphasized reason is “temporary” in case of (A) whole designation type, (B) centre designation type or (C) margin designation type. For example, the reasons such as “to control prostitutions temporary” were found on the official paper. In contrast, in case of (D) suburb designation type, it seems that the colonial government tried to positively isolate yukaku areas from city centre. For example, the sentence such as “to refrain from society” were written on the official paper.

As a reason for urban planning, negative reasons were conspicuous in case of (A) whole designation type, (B) centre designation type or (C) margin designation type. For example, “dangerousness of attack of bandits”, “lack of land where yukaku can be put” etc.

However, in case of (D) suburb designation type, more positive reasons were written on the official paper: such as “good potential of transportation”, “good landscape”, “scenic beauty”, “compatible with city planning” and so on. These reasons included viewpoint of urban design or landscape design and we can find yukaku’s location of (D) suburb designation type had intendment in the context of urban planning.

Especially, in the case of Tainan (Tainan 台南) and Takao (Kaohsiung 高雄), the local government and the land leveling forming company attracted a kashizasaki designated area (yukaku area) to their new land. From this point of view, it can be said that the designation of the yukaku area could be considered as a measure to expand the urban area or the “driving force” of urban development.

In these case, the grid pattern of roads inside yukaku followed the grid pattern of whole city, but rivers and green spaces were made and used as boundary of yukaku. (Figure 8) Compared to Japan, inner space of yukaku was not so characteristic.



Figure 8: *Sakaemachi Yukaku area in Takao*. Edited by author and based on 都市製図社, 臺灣火災保險特殊地図, 1930.

Moreover, both Japanese and Taiwanese residents joined the discussion about relocation of yukaku on the newspapers or magazines, such as “Taiwan Nichinichi Shimpō”.

6. Conclusions

In conclusion, the following was clarified.

- (1) Yukaku was a symbol of the Japanese colonial city.
- (2) Yukaku in Taiwan gradually began to be located in the suburbs so that it can be aligned with urban planning. The repeated transition of the location of yukakus was influenced by the shape of cities or various city plans, and also influenced them at the same time. The designation of some yukakus was considered as an effective “measure” to expand and develop the urban area. Later, in 1936, the designation of yukaku areas was included in the urban planning system by law⁷.
- (3) In most cases in Taiwan, the grid pattern of roads inside yukaku followed the grid pattern of the whole city, because planning of the whole city was prior to the designation of yukaku’s location. Inner space of yukaku was not so characteristic as Japan’s yukaku. Only rivers and green spaces were used as boundaries of yukaku.

Moreover, this study would be possible to obtain meaningful suggestions on countermeasures against urban problems that are occurring inside cities now, such as private prosecution problems in Asian countries.

However, this study scoped only colonial Taiwan and has its limitation on this point. Further studies on the other countries or areas (such as Korea, Manchuria and so on) are needed in order to illustrate the planning history of Japanese colonial cities before 1945.

Acknowledgements

I would like to express my deep gratitude to great librarians of Hibiya Library & Museum (日比谷図書館文化館) and everyone who always helped me in Taiwan and Japan, and to my professors and colleagues who discuss and work together with me.

Notes on contributor(s)

SAMMONJI Masaya is a PhD student of urban design and planning history in the University of Tokyo. He earned his bachelor’s degree from the University of Tokyo in 2016 and his master’s degree in March 2018. He has been involved in practical design and planning projects with community organizations in Bunkyo City, Tokyo and other localities..



Endnotes

¹ 金富子, “植民地朝鮮における遊廓の移植と展開” シリーズ遊廓社会 2 (吉川弘文館, 2014).

² 青井哲人, 植民地神社と帝国日本 (吉川弘文館, 2005).

³ 黃武德, 日治時期台灣都市發展地圖集 1895-1945 (南天書局 2006).

⁴ 張曉旻, 植民地台灣における公娼制の確立過程 (1896 年~ 1906 年)-- 「貸座敷・娼妓取締規則」を中心に (2008), pp.22.

⁵ Based on the research of 臺灣總督府報 (Taiwan Sotokufu-ho / official documents of the Governor-General of Taiwan), which can be accessed via the database “臺灣總督府檔案” (<http://ds3.th.gov.tw/ds3/app000/>, 國史館臺灣文獻館).

⁶ Based on the research of 臺灣日日新報 (Taiwan Nichinichi Shimpo / Taiwan Daily News), which can be accessed via the digital database.

⁷ 風紀地區 (Fuki-chiku / Public Moral District) is established by 臺灣都市計畫令 (Taiwan Toshi keikaku-rei / Taiwan Urban Planning Act) and 同施行例 (Seko-rei / Enforcement Order) in 1936. The enforcement order included the following sentence: ‘It is illegal to build those [buildings for prostitution industry] unless it is built inside Fuki-chiku’ (風紀地區内ニ非ザレバ之ヲ建築スルコトヲ得ズ) (Article 39).

Bibliography

Hiroshi, Hashitani 橋谷弘, 帝国日本と植民地都市, 歴史文化ライブラリー 2004

Hirohito, Aoi 青井哲人, 植民地神社と帝国日本, 吉川弘文館, 2005

Kan, Nakamura 中村綱, 適地論, 1936

張曉旻, 植民地台灣における公娼制の確立過程 (1896 年~1906 年)-- 「貸座敷・娼妓取締規則」を中心に, 2008

邱旭伶, 台灣藝姐風華, 玉山社, 1999

曾偉彰, 台灣日本時代「遊廓」之研究: 以台南為例, 2004

陳延媛, 洄瀾花娘, 後來居上——日治時期花蓮港遊廓的形成與發展, 2013

臺灣總督府, 臺灣堡圖, 1904

都市製図社, 臺灣火災保險特殊地図, 1930

黃武德, 日治時期台灣都市發展地圖集 1895-1945, 南天書局, 2006

漢珍數位圖書, 臺灣日日新報

國史館臺灣文獻館, 臺灣總督府檔案, (<http://ds3.th.gov.tw/DS3/app000/>)

國史館臺灣文獻館, 臺灣總督府府 (官) 報, (<http://db2.lib.nccu.edu.tw/view/index.php>)

Image sources

Figure 1: 台中市, 台中市概況 (1936), frontispiece.

Figure 2: U.S. Army Map Service, *Formosa City Plans*, (1944-1945).

Figure 3: 鞠園文史工作室, <http://www.5819375.idv.tw> (Accessed December 23, 2017)

Figure 7: 「澎湖廳告示第四十二號貸座敷營業地域改正ノ件」 (1906 年 7 月 11 日), 《臺灣總督府檔案》, 國史館臺灣文獻館, 典藏號: 00001187088X003

Figure 8: 都市製図社, 臺灣火災保險特殊地図, 1930



INTERNATIONAL PLANNING HISTORY SOCIETY

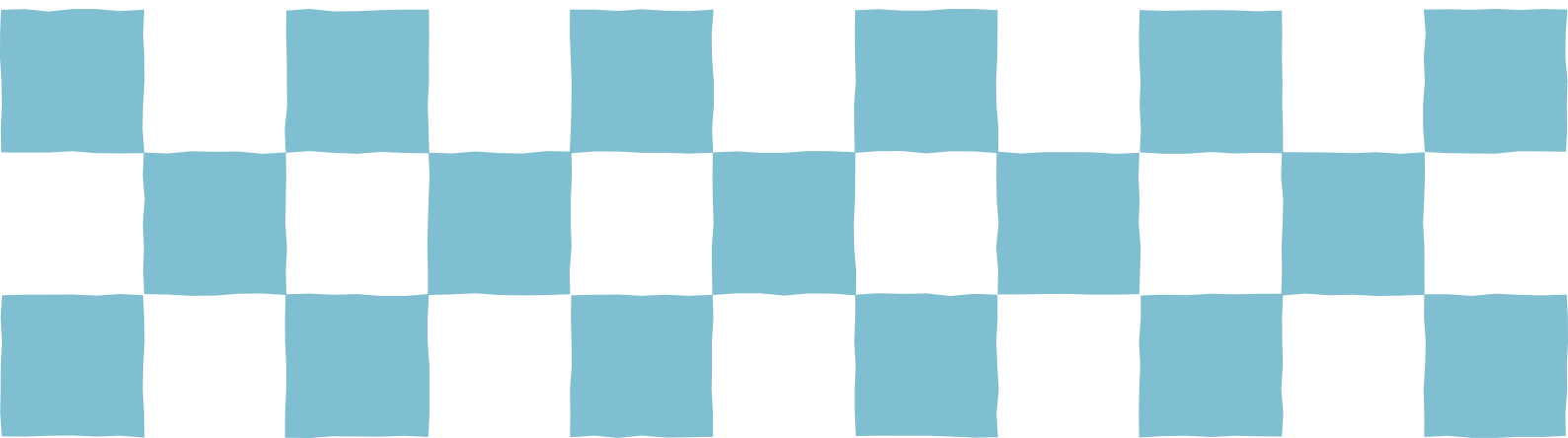
YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

7

Planning Community without Planners / GUHP*



Astute Planners: How Urban Villagers in Guangzhou Converted Their Neighborhood into an African Market

Guangzhi Huang (SUNY at Buffalo)

Since the late 1970s, the Guangzhou Municipal Government had been transforming the Northern Suburb to accommodate foreigners who came for the annual Trade Fair and invested in the city. Sensing the business potential brought by the increasing foot traffic, farmers of Dengfeng Village in the area, who were losing their farm land to the government rapidly, pooled together their money in the 1980s to build three hotels to capitalize on the growing number of visitors. At the meantime, individual farmers also began rebuilding and enlarging their houses into apartment buildings to accommodate the influx of rural migrants as a result of China's economic reforms. When large numbers of Africans began coming to Guangzhou searching for exportable Chinese goods in the late 1990s, the low-cost rental houses and hotels of the Village provided affordable options for these cash-strapped global traders. In the 2000s, to take full advantage of this sudden increase in population and demand for Chinese products, the Village authority opened up two shopping malls, while villagers began to turn the first floors of their apartment buildings into retail stores, all catering specifically to African customers. These in turn attracted unlicensed vendors and hawkers to come and fill up any space where they could sell their products. This paper examines the Dengfeng's transformation in the past three decades and how it evolved into a diverse global market with little state input. Dengfeng's history provides an interesting contrast to the more common story of urbanization in China, which tends to focus on land dispossession by the state. The success of the Dengfeng market, which has made renewal projects significantly more difficult, has at least enabled its residents and businesses to maintain a precarious limbo.

Urban Ordinaries - Vernacular Landscapes as Places of Diversity, Difference and Displacement

Heide Imai (Hosei University, GIS)

In most cities, public bodies are concerned with social, economical, cultural and political integration of marginal urban areas. One of the main strategies to achieve this purpose is to consider culture as one of the main engines of great urban transformations to support the realization of different scale urban renewal projects. As these occur in form of new urban entertainment, economic and cultural clusters in both central and marginal urban areas, a re-evaluation of cities cultural heritage and vernacular landscape is necessary. One of the reason is that in the context of radical urban transformation, new urban inequalities emerge which have to be approached and studied making use of methodological innovation. This paper will focus on the urbanity and everyday practices of in/exclusion of vernacular urban places that are especially the subject of effects of globalization and rising inequalities. As a first issue, this paper aims to understand everyday practices of in/exclusion and the changing role of the everyday dwellers. Secondly, the paper aims to reflect critically on the commodification of the vernacular urban places to understand how the branding of cultural heritage is affecting everyday practices, existing inequalities and the urban identity of each dweller. Finally, different forms of contestations are discussed, as different people consider different vernacular urban places to be worthy of a meaningful place in the fast transforming city.

To do so, the paper will focus on the role and meaning of the urban alleyways of contemporary Tokyo seeking to go behind the façade of the urban landscape to re-contextualise these forgotten yet necessary, marginal yet present places of everyday life. Marginalised through the emergence of new forms of housing and public spaces, re-appropriated by different fields, and re-invented by the contemporary urban design discourse, the social meaning attached to the alleyway is being re-interpreted by individuals, subcultures and new social movements. To portray the life cycle of an urban form being rediscovered, commodified and lost as physical space, the research will make use of historical references, urban narratives, graphic reinterpretations and exemplary study cases, to finally disclose questions of the alleyway's future, its new actors and its new possibilities, closing with a critical statement: extraordinary cities are made of ordinary places which need to be included in the global planning process.

The Paradox of Community Planning in Shanghai Quyang New Village: providing better service space in a formally micro-rayon in three decades

Li Hou (Tongji University), Guanning Zhao (Urban Planning & Design Institute of Shenzhen), Jihuan Li (Tongji University), Xin Kai (Shanghai Tongji Urban Planning & Design Institute), Xufeng Qiu (Tongji University) and Kaiping Zhang (Tongji University)

Recently, a variety of community planning discourses are booming in many Chinese cities, rhetorically and practically, especially in those cities with strong planning tradition and active planners' professional society. However, improving physical environment via state-led public institutions and resources are still the most common model. While planning theories and methodologies evolved since the 1960s in the western context to put more focus on the social and political optimization process of a community, it seems difficult, or even questionable, to comply with these well-intentioned initiatives in China without an awareness of the contextual differences.

This paper will examine Quyang New Village, a residential micro-rayon built in the 1980s in Shanghai, on its gradual changes and challenges as a residential district planned and built in a top-down manner. The original plan put up a relatively static picture of the socialist community, therefore installed a simple hierarchy of basic public services in the middle of the housing block, and restricted the land use as pure residential. Entering the 1990s, along with the economic restructuring and a set of urban reforms, the community has grown more and more diverse, and the residents' demand for both better services and new job opportunities grew rapidly. New commercial space had emerged on ground level residential units along the streets. For more than ten years, this informal business was allowed or even encouraged, which had formed a unique urbanism in the area. The paper will introduce the Village's recent conflicts regarding the forced clean-up campaign on illegal retail space along the streets and the planners' failed attempts to save them through more participatory approach. The future of more community-oriented approaches to planning practice in China remains unclear. However, the paper would like to interpret such paradox of community planning and explore possible ways of improvements under current situation.

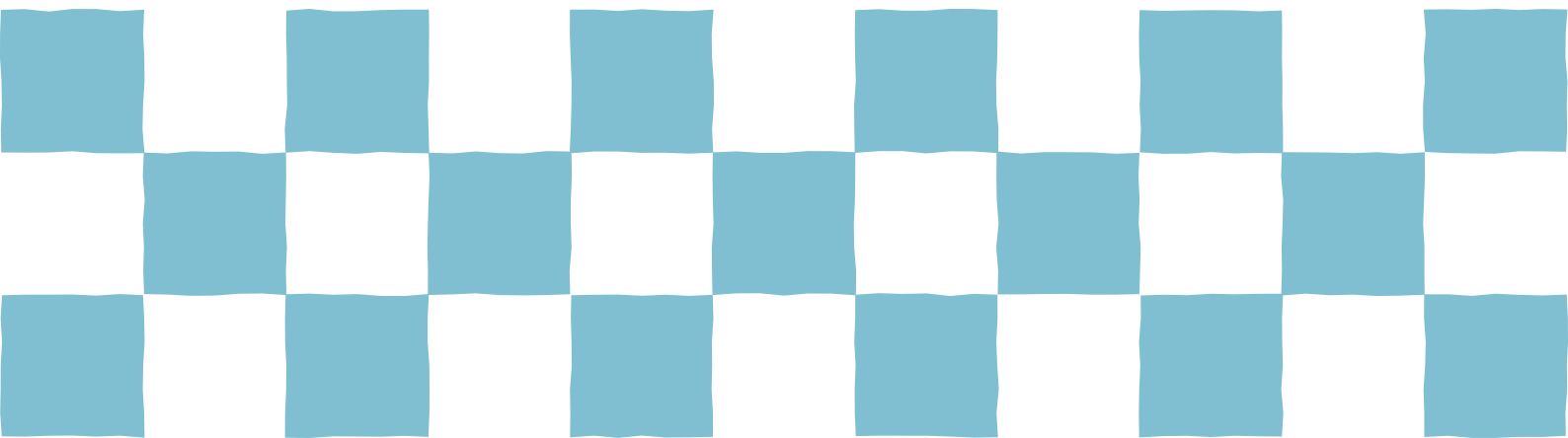


INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

8

**The Global Petroleumscape
in East Asia (East Asian
Petroleumscares (Part 1)) /
GUHP***



THE BATTLE FOR OIL IN THE DUTCH EAST INDIES Plaju, the pearl in the crown of the Bataafsche Petroleum Maatschappij in the turmoil of the 1940s

Ben De Vries (Cultural Heritage Agency of the Netherlands / Rijksdienst voor het cultureel Erfgoed (RCE/OCW))

Oilfields can easily turn into battlefields. This happened more than once in the colony of the Dutch East Indies (Indonesia) in the 1940s, where Japanese, Dutch, Allied and Indonesian forces fought fierce battles over the control of the local oil facilities. With good reasons, because in those days the Netherlands East Indies was one of the world's biggest oil exporters.

It all started in Telaga Said I, in northern Sumatra, in the Mid-1880s, where the first oil was discovered in the thick jungle. Shortly afterwards, in the Mid-1890s, in the swampy south of Sumatra oil of a better quality was found. As a result, nearby Palembang, an ancient city with harbour facilities, quickly mushroomed into a vibrant oil industry city, and the small kampong Pladjoe (Plaju), about eight kilometers further along the River Moesi (Musi), became a spider in an enormous petroleum infrastructure. The Koninklijke Nederlandsche Maatschappij tot Exploitatie van Petroleumbronnen in Nederlands-Indië (1890) formed in 1907 a subsidiary named the Bataafsche Petroleum Maatschappij (BPM/Shell) and built at Pladjoe the largest, most productive and modern refinery of Southeast Asia of its time. The scale of operations grew over time and the BPM planned a comprehensive company town with administration buildings, refineries and jetties for mooring tankers, pipelines, (rail) roads, and designed living quarters for its employees along a rectangular grid, including modern bungalows with shady gardens, shops, schools, sports fields and a church etc. Eventually, the BPM and the municipality of Palembang as the main oil actors created together a petroleumscape : a coherent network of spaces around the physical and financial flows and interests of petroleum in the urban environment.

These times of prosperity and peace all suddenly came to an end when war and revolution broke out in the colony of the Dutch East Indies in the 1940s. As a result, the oil empire of the BPM was at risk. Based on both archival research and secondary sources, this paper elaborates on how the BPM spatially and economically planned its huge industrial oil-footprint at Pladjoe and safeguarded these oil facilities against all kinds of brutal intrusions and destructions during the Pacific War (1942-1945) and Indonesia's struggle for independence (1945-1949). Remarkably, in reaching this goal and in their effort to restore the pre-war situation of peace and prosperity, the BPM's captains of industry, Dutch Army commanders and politicians in the government seats of both Batavia and The Hague worked closely together. Constantly using oil as an economical weapon.

Production First, Livelihood Second: the Life and Death of Worker-Peasant Villages in a Chinese Oil Field

Li Hou (Tongji University)

This paper examines the formation of an alternative industrial landscape and its everyday "urbanism" in China during the 1960s and the 1970s, following the Great Famine and the discovery of oil in the Northeast, formerly Manchurian region. The Daqing Oil Field, a much publicized model of industrialization in the Maoist era, had not only provided China with energy independency, but also contributed to the rise and fall of a settlement model labelled as "integration of urban and rural", "integration of industry and agriculture" - the widespread worker-peasant villages on the mining districts. Daqing had maintained its housing standards that were similar to those of the local peasants, where decentralized villages composed of identical mud houses were indicative of an equal society, a new way of "industrialization without urbanization". Those two decades under the Daqing Model witnessed the emergence of numerous mining districts and factory complexes that statistically were not counted as cities and whose population were engaged in more than just mining and manufacturing. The state's industrialization strategies were translated into unique spatial patterns and built forms that have not only shaped the development path of the country but also integrated the lives and life choices of the common people with the fate and choices of the consolidating socialist State.

This paper attempts to fulfil the scholarly task of reconstructing the social experience of the Maoist past to be genuinely comprehensive, dynamic, and subtle. It depicts socialist industrialism as a system of socioeconomic rules which had been taking dynamic forms in a specific place.

The Daqing Oil Cluster: From petroleum hub to sustainable future

Penglin Zhu (Delft University of Technology)

Since the mid-20th century, the Chinese government in collaboration with various governmental petroleum authorities, first with the Ministry of Petroleum and later with national firms, has transformed the built environment on multiple levels. Through creating interrelated infrastructures and production sites, installing refineries and petrochemical industries, constructing dedicated oil ports, building workers' housing and educational, health or leisure facilities, they effectively created a palimpsestic petroleumscape (Hein, 2016)

While historians of architecture, urbanism, and planning have explored the diachronic changes of territory and people's everyday life individually in the region of the oil field or in the port cities, they have not studied the relationship between diverse oil-related installations and have not explored the urban resilience and sustainable development after the Oil Campaign. Meanwhile, the Chinese petrochemical energy experts have ignored the importance of spatial reality when they are imagining the sustainable future. The paper uses the concept of Oil Cluster which is one agglomerate spatial entity of the regional oil infrastructure and facilities. It attempts to explore the diachronic transformations of architecture and the built environment since the late-1970s of the Daqing-Dalian oil cluster. It examines whether the planning idea after the Oil Campaign considered the urban resilience and sustainable development as key factors. And if yes, how the plans implemented these ideas?

Relating to collections of historical document, this paper classifies the documents into several categories, governmental documents of planning strategy, plans from the local design bureau, historical maps, and photos, respectively. It intends to use discourse analysis to analyse the governmental documents. Moreover, it observes the plans from the design bureau, verifying in which manner and to what extent the plans have considered the planning strategy. Furthermore, it compares the plans and maps to examine how they have been implemented. The research will cover in 3 time spans:

- First, it investigates how urban and rural resilience has been approached by the oil authority and local elites in the period of after the Oil Campaign to the early-1990s. Specifically, it studies the evolving processes of specific urban and rural forms in the Daqing Oil Cluster after the later-1970s through representations such as maps, plans, and photos.
- Second, analyzing the recent innovations in urban planning and design which aims at sustainability, the paper speculates the future development in architecture and the built environment in the coming fossil era. To be more exact, it investigates how the Bohai Strategy has shaped current planning ideas and their implementation by analyzing the official documents from the State Oceanic Administration, the provincial documents on urban plan, and the local urban plans after 2002.
- Lastly, this research considers the recent OBOR Initiative as a potent agent influencing the built environment in the Northern China. It explores how Daqing Oil Cluster participates in the trading network of the New Marine Time Silk Road, and how it might use this opportunity to build urban resilience. Specifically, it examines how the Daqing Oil Cluster will use policy and planning to join of the OBOR Initiative from the official documents the Initiative, the provincial and local announcements, and the recent plan by the local design bureau.

In conclusion, this paper attempts to look into the relationship between national policies, oil, urbanization and industrialization, urban resilience, and sustainable development. Through this case study, the paper aims to analyze the historical development and future trajectory of architecture and the built environment in Chinese oil-industrial cities. Moreover, it offers a useful opportunity to comprehend how the CCP has been guiding the modernization process in China.

THE BATTLE FOR OIL IN THE DUTCH EAST INDIES: PLADJOE, THE PEARL IN THE CROWN OF THE BATAAFSCHE PETROLEUM MAATSCHAPPIJ (SHELL), IN THE TURMOIL OF THE 1940s

Ben de Vries MA

Cultural Heritage Agency of the Netherlands

Email: b.de.vries@cultureelerfgoed.nl

Abstract

Oilfields can easily turn into battlefields. This happened more than once in the colony of the Dutch East Indies (Indonesia) in the 1940s, where Japanese, Dutch, Allied and Indonesian forces fought fierce battles over the control of the local oil facilities. With good reasons, because in those days the Netherlands East Indies was one of the world's biggest oil exporters.

It all started in Telaga Said I, in northern Sumatra, in the Mid-1880s, where the first oil was discovered in the thick jungle. Shortly afterwards, in the Mid-1890s, in the swampy south of Sumatra oil of a better quality was found. As a result, nearby Palembang, an ancient city with harbour facilities, quickly mushroomed into a vibrant oil industry city, and the small kampoeng Pladjoeⁱ (Plaju), about eight kilometers further along the River Moesi (Musi), became a spider in an enormous petroleum infrastructure. The *Koninklijke Nederlandsche Maatschappij tot Exploitatie van Petroleumbronnen in Nederlands-Indië* (1890) formed in 1907 a subsidiary named the *Bataafsche Petroleum Maatschappij* (BPM/Shell) and built at Pladjoe the largest, most productive and modern refinery of Southeast Asia of its time. The scale of operations grew over time and the BPM planned a comprehensive company town with administration buildings, refineries and jetties for mooring tankers, pipelines, (rail) roads, and designed living quarters for its employees along a rectangular grid, including modern bungalows with shady gardens, shops, schools, sports fields and a church etc. Eventually, the BPM and the municipality of Palembang as the main oil actors created together a *petroleumscape*ⁱⁱ: a coherent network of spaces around the psychical and financial flows and interests of petroleum in the urban environment.

These times of prosperity and peace all suddenly came to an end when war and revolution broke out in the colony of the Dutch East Indies in the 1940s. As a result, the oil empire of the BPM was at risk. Based on both archival research and secondary sources, this paper elaborates on how the BPM spatially and economically planned its huge industrial oil-footprint at Pladjoe and safeguarded these oil facilities against all kinds of brutal intrusions and destructions during the Pacific War (1942-1945) and Indonesia's struggle for independence (1945-1949). Remarkably, in reaching this goal and in their effort to restore the pre-war situation of peace and prosperity, the BPM's captains of industry, Dutch Army commanders and politicians in the government seats of both Batavia and The Hague worked closely together. Constantly using oil as an economical weapon.

Keywords:

Petroleum, urban history, 1940s, battle for oil, Dutch East Indies, Palembang, Pladjoe, BPM, Royal Dutch Shell.

Introduction

At the beginning of the oil production in the Dutch East Indies stood the Dutch farmer's son Aeilko Jans Zijlker, who went to the Indies to find his luck after an unhappy love. Zijlker, administrator of the *East-Sumatra Tobacco Company*, discovered oil in North Sumatra. It was a kind of oil seep, still of rather poor quality. After negotiations over royalties with the owner, the Sultan of Langkat, Zijlker in 1883 got the concession of the area and the permission to drill.ⁱⁱⁱ After quickly assessing its potential, the Dutch King William III gave the company the name the *Koninklijke Nederlandsche Maatschappij tot Exploitatie van Petroleumbronnen in Nederlands-Indië*.^{iv} This freestanding company was officially established on 16 June 1890 with a financial back up of about 360.000 dollars.^v Due to this amazing success, Zijlker was sent out to do some more pioneering exploration and drilling around his *oil kampoeng*, but his luck was not eternal as he suddenly died in December of the same year. Nevertheless, this site would eventually become the birthplace of one of the biggest multinationals of the world today: the Royal Dutch/Shell Group.

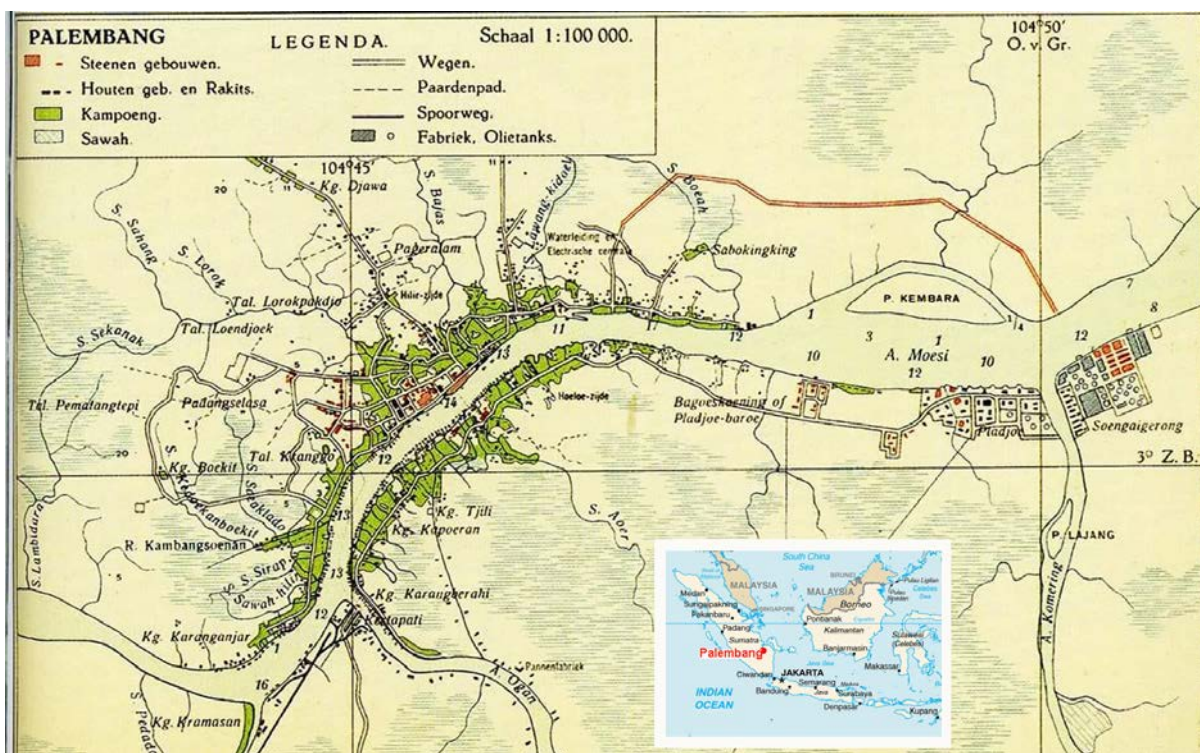


Figure 1. General map, oriented to the northwest, of Palembang and environs, in 1938, with Kartapati (left / down), Pladjoe and Soengei Gerong (right/middle), and Bagoes Koenig (middle). Source: *Comprehensive atlas of the Netherlands East Indies*.

Pladjoe: the pearl in the crown of the BPM

When oil was found in the southern parts of Sumatra, it was the experienced Jan Willem IJerman, head of the *Moeara Enim Petroleum Maatschappij*, who stepped in first and invested near the ancient city of Palembang, the capital of the province South Sumatra.^{vi} Palembang, an important exporter of pepper and tin, was a major river transport hub, strategically located along the Malacca Straits and nearby Singapore and Batavia. All around the world at that time, oil production and transportation relied on water.^{vii} From Palembang harbour to the open waters of the Bangka Straits was about 50 miles. The waterfront city stretched along both sides of the 750 kilometers long muddy River Moesi (Figure 1). The main economic and political parts of town, like the Kraton,

the former sultanates' fortified palace and its surroundings, were lying on the eastern bank, called the Ilir or Hilir ('downstream'). At the western riverbank, called the Oeloe ('upstream') or Hoeloe (Ulu), about eight kilometers from the centre of Palembang, IJzerman established an oil refinery in 1897. At that time, this place was nothing more than a small kampoeng carrying the local name Pladjoe. There was no overland transport between the city centre and Pladjoe, as there were no bridges yet. People had to take the regular ferry. Hence, Pladjoe was lying across the river in relative isolation geographically and was transformed steadily into a well-organized western



enclave; a symbol of modernity and European might.^{viii}

Figure 2. Bungalow in Pladjoe of a BPM-employee, around 1947. Source: Mieke Huijsman-Engelberts.

The facility had been built by the BPM in 1907 on the west bank of the mouth of the tributary Komerling and produced marketable secondary

products which could be efficiently transported by oil tankers from the refinery's jetty to Java, Singapore, United States or Japan. The refinery received crude oil from the rich oil fields of Talang Djimar, Praboe Moelih and Moeara Enim.^{ix} Half of the Indies' oil production was produced in this refinery, especially aviation crude, and it supplied mostly the Airforce in the Pacific.

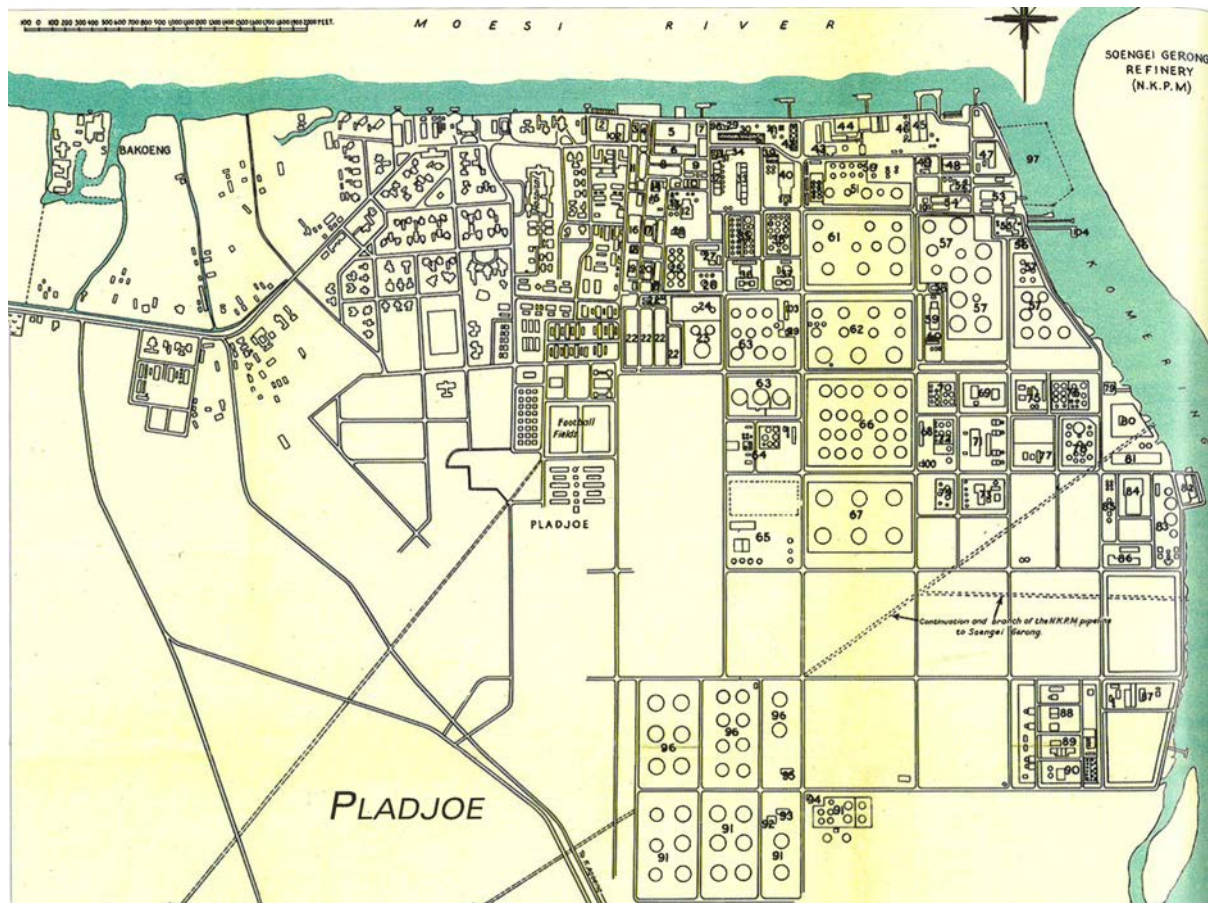


Figure 3. Sports field Pladjoe compound is still in use, now as volleyball field, 2015. Source: Author.

Right next to the spread-out production refinery of in total about 1,500 x 2,000 meters, the BPM created on the west side an ancillary petroleumscapes by building a compact compound with houses for its staff, employees and workers (Figure 2). Most of these stand-alone villas were grouped in blocks of eight or

ten and were almost identical in colonial design, depending on the rank of the employee.^x The European employees' houses were situated along palm-bordered avenues and impeccable manicured lawns, suited for private cars to arrive. Constantly, this area was extended to the south and southwest. The streets had no names, only numbers. The address was for example: 'House 122'. The compound with its almost rectangular grid plan of about 500 x 1,000 meters was fully equipped with all kinds of facilities. The BPM had its own administration building, hospital, hotel, shop and pasar, bakery, European primary school including library, church, clubhouse, 'soos' with cinema and theatre, sporting fields for hockey and tennis, and of course, a swimming pool.^{xi} To this very day, one can see the green and spacious compounds and enjoy the striking tropical modernity of the

architecture, despite the fact that some colonial buildings are dilapidated (Figure 3). Most of the original buildings are still in (the same) function.



REFERENCE	
1. Main office	53. Lumber factory
2. Technical office	54. Carpenter shops
3. Garage	55. Waterpumping station No II
4. Car shop	56. Transformer house
5. Main warehouse	57. Tanks - finished motor spirit
6. Bulk storage	58. Pump house 'D'
7. Customs office and storage yard	59. Gas compressors
8. Storage yard	60. Stabilizers
9. Boiler house } Not in use	61. Tanks - weak Edelcohu plants
10. Power house }	62. Tanks - intermediate products
11. Movable stones	63. Tanks - fuel oil
12. Pump house 'B'	64. Treating installations
13. Wastertreating	65. Sulphuric acid plant
14. Sheds	66. Tanks - reforming plant intermediate
15. Foundry	67. Tanks - cracking plant intermediate prod
16. Mail shop	68. Central pump house
17. Fire shop	69. Reforming unit No I
18. Forge	70. Rundown tanks of reforming unit No I
19. Construction shop	71. Cracking units Nos. I and II
20. Welding shops	72. Rundown tanks of cracking units
21. Sandblasting	73. Reforming unit No II
22. Material storage	74. Rundown tanks of reforming unit No II
23. Tanks - gas oil	75. Redistilling unit
24. Tanks - crude oil	76. Rundown tanks of redistilling units
25. Tanks - gas oil	77. Distilling unit No VI
26. Rundown tanks for distilling unit No II	78. Rundown tanks of distilling unit No VII
27. Distilling unit No II	79. Oil catcher
28. Air compressors	80. Sump
29. Shipping office	81. Storage for acid drums
30. Tanks	82. Water pumping station No VIII
31. Tanks	83. Water treating
32. Bench stills	84. Main boiler house and power house
33. Old and new continuous battery	85. Tanks rundown
34. Tailhouse	86. Laboratory
35. Rundown tanks of distilling unit No IX	87. Alkylation plant
36. Distilling unit No IX	88. Polymerization plant
37. Distilling unit No III	89. Hydrogenation plant
38. Rundown tanks of distilling unit No III	90. Hydrogen and inert gas factory
39. Tanks	91. Tanks - aviation gas and components
40. Pump house 'A'	92. T. E. L. installations
41. Agitators	93. Pump house E - motor spirit
42. Tanks - kerosine intermediate	94. Transformer house
43. Refinery office and laboratory	95. Crude oil pump house
44. Can factory filling and cleaning	96. Tanks crude oil
45. Drum filling and cleaning	97. Lumber harbour
46. Tanks - coming	98. Water pumping station No VII
47. Edelcohu factory for motor spirit	99. Transformer house
48. Edelcohu factory for kerosines	100. Transformer house
49. Edelcohu treating facilities	101. Transformer house
50. Tanks	102. Radio station
51. Tanks - intermediate motor spirit	103. Pump house 'C'
52. Boiler house	104. Water pumping station No I

Figure 4. Pladjoe-complex, July 1945. The living quarters are on the west side. Map was based on BPM maps of 1936 and 1940. The reference shows only the technical installations. Source: *Comprehensive atlas of the Nederlands East Indies*.

Outside these white-collar communities of gloriously shaded streets and lots, the urban space of the colonial society was more differentiated, divided by multi-ethnic differences and from race-to-class-segregated. In the company town Pladjoe lived about 250 European and 4,500 local Asian workers.^{xiii} Europeans were also accommodated in another BPM housing complex called Bagoes Koenig (or Pladjoe-baroe: new Pladjoe), a little west from Pladjoe (Figure 4).

In order to facilitate the steadily growing petroleum industry and to improve the rather low standard of living, the municipality of Palembang started to construct new ancillary structures and assets, like asphalted public roads, railways, ports and airfields. Above all, the municipal Traffic Commission implemented a new town plan in 1935 designed by the Dutch architect Thomas Karsten.

Land was reclaimed from rivers and new public housing, inland transport systems, a ring road and several bridges over the Moesi were built, including the Wilhelmina Bridge (1939) over the Ogan River, replacing the river ferry. This arch bridge connected both oil refineries from the eastern to the western bank, where the new Kartapati railway station (1939), and the coal harbour, were located. On a regular basis ocean steamers navigated the river in the late 1920s. Meanwhile, the new and continuously extending oil (rubber and coal) industry led to the rapid influx of newcomers and a subsequent population increase.^{xiii} Also in Palembang a 'European' quarter was built, called Talang Semut.

As such, the booming oil industry not only had an enormous influence on the socioeconomic structure of the city, but on the whole region as well. More than thirty-five oil-mining concessions in the area needed a complete network of iron pipelines in order to connect hundreds of drill towers, oil pumps and storage tanks, subsequently transforming the urban spatial landscape. In addition, the BPM built a road network, a vivid symbol of modernization, and forty-two schools throughout the southern province before the Pacific War.^{xiv} Such an extended petroleumscape with various oil actors required multiple headquarters for administration and supervision, like in Batavia, designed in a modernistic colonial style in 1938 by the Dutch architect Thomas Nix. Above all, a network of BPM-fuel stations was extended all over Sumatra. According to a BPM-roadmap of 1929 there were in total 185 fuel stations strategically positioned on the island; including 71 in the South Sumatra region; two in Palembang, one in Pladjoe and one in Djambi.

Monopoly of mighty BPM

Further north, around the Residence of Djambi in Central Sumatra, the oilfields and small distillation companies of Tempino, Kenali Asam, Badjoebang, Betoeng and Mangoendjadja were situated. The fields were owned by the *Nederlands Indische Aardolie Maatschappij* (NIAM), a public-private partnership between the BPM and the Dutch East Indies government, set up in 1921. This joint venture was an economic novelty. It was the first time the government became an actor through shares in the Sumatran oil-industry.

The actual refining process did not take place in Djambi, but in Pladjoe instead.^{xv} Starting in 1935, oil was transported from Tempino to Pladjoe through a pipeline over a distance of 270 kilometers through hilly country covered by dense forests, along ricefields, intersecting many watercourses. In 1938 Djambi had about 14 per cent of the total East Indies' production in their hands.^{xvi} In addition, and partly with NIAM's support, some roads and an airport were built in 1933 and the city was linked to a railroad. In 1936 a road was opened between Palembang and Padang by way of Djambi.

Naturally, the BPM feared the increasing competition from the American *Standard Vacuum Oil Co.* (henceforth *Stanvac*), working through an affiliate: the *Nederlandsche Koninklijke Petroleum Maatschappij* (NKPM). Although the Dutch Indies government tried to keep foreign oil companies outside the colony through the Mining Act, the Stanvac struggled to compete with the BPM. So, they started in 1912 to operate their own refinery at Soengei Gerong, directly opposite Pladjoe, on the east side of the River Komerang.^{xvii} It developed into the second largest oil facility in the Asian region, receiving 3,500 barrels of crude per day by pipelines from the fields of Talang Akar.^{xviii} The plant at Soengei Gerong really challenged BPM's control of the global flows of oil as a strategically asset. In 1930, another serious rival emerged on stage: *Caltex*. They also worked through a subsidiary, called the *Netherlandsch Pacific Petroleum Maatschappij Company* (NPPM), and secured extensive exploration concessions in Central Sumatra and on the Riau-islands.^{xix}

In sum, the BPM had quite a strong position in the Dutch East Indies managing large export refineries and controlling an enormous distribution network spread over the Archipelago.^{xx} Around 1930, the BPM owned 85 per cent of the oil production, but in the end of the 1930s this percentage went down to 55 per cent due to the heavy oil competition with Stanvac, which owned already 30 per cent of the promising oil market. In 1938, oil and related products determined an output value of 23.6 per cent of the total export, a value of about 190 million dollars. The six million tons of oil produced yearly in the Netherlands Indies accounted for only 2.7 per cent of the world's total.^{xxi} Hence, the Dutch economy depended heavily on the revenues of the oil resources coming from its crown colony.



Figure 5. Aerial view of Pladjoe, around 1930. Source: KITLV, Leiden.

Epic battle for oil

For both Batavia and The Hague it was vital to keep a watchful eye on the emergence of Japan. In case of a war, The Netherlands, as one of the smaller European powers, was not able to defend its territory in Europe or its colossal colonial empire overseas. Silently, it trusted in the British military protection. After the German victory over the neutral Netherlands in May 1940, Japan stepped up pressure by sending two missions to Batavia demanding a bigger share of the East Indies' oil export.^{xxii} Without doubt, oil was the main quest of the armies of Japanese emperor and the reason for the invasion of the Dutch East Indies. Obviously, oil was vital for their war machine, but Japan had almost no experience and expertise in this branche. The weakness of her war potential lay chiefly in the fact that Japan's home production of natural and synthetic oil amounted to only some 10 per cent of her annual requirements. Of her oil imports in 1939, about 53 per cent came from the United States, 38 per cent from the East Indies and nine per cent from other countries.^{xxiii} Somehow, Japan had to ensure means of replenishing her storage tanks.^{xxiv} Tokyo needed yearly at least 7,9 million tons of oil to win their Greater East Asia War.^{xxv} Sumatra could deliver 5,3 million, so for a long drawn-out conflict the Sumatran oil was crucial (Figure 5). Therefore Japanese troops were instructed to put the most important oil centers in their hands quickly, without any loss or destruction (Figure 6). At the same time, Dutch troops were instructed to destroy the oil facilities before Japanese troops could get in. Authorities in Batavia had boasted that they had 500,000 tons of oil in storage in Palembang and that if the Japanese forces should start a river-ascending operation, they would

release 10,000 ton of oil per day into the Moesi and burn up the convoy coming up the river.^{xxvi} The Dutch colony was in peril.^{xxvii}

Meanwhile, after the fall of France, Japan occupied Air and Naval bases in French Indochina. Immediately, the American President Roosevelt announced in August 1941 the embargo on the export of oil, including a freeze of all bank transfers. Great Britain and the Dutch government in exile in London followed with the same measures instantly.^{xxviii} On 8 December, a day after the attack on the American Navy fleet in Pearl Harbor, Batavia declared war on Japan. One month later, on 11 January 1942, the Japanese Navy conquered the oil-island Tarakan and the oil centre Balikpapan on Borneo. One month later, on 14 February, at the time that the invincible British fortress in Singapore was about to fall, a Japanese invasion fleet of about 10,000 men was sailing toward South Sumatra. Their operational plan was to attack the oil refineries at Pladjoe and Soengei Gerong and seize the superior airdrome Talang Betoetoe near Palembang, where temporarily American B-17 Flying Fortress bombers were stationed.^{xxix} In order to secure these sites and halt the frustrating scorched-earth policy, Japan flew in almost 600 men of the 1st Paratroop Raiding Group by complete surprise.^{xxx}



Figure 6. Japan's need for Palembang's oil. Source: Johan Fabricius, *Brandende Aarde*.

To defend Palembang, there were about 2,000 Dutch troops, plus reinforcements of Australian units and British anti-aircraft sections. The Territorial Command of the Royal Netherlands Indies Army (KNIL) under Lieutenant Colonel L.N.W. Vogelesang, wanted to wait as long as possible before destructing the refineries. Influenced by the oil companies only a limited destruction was planned, keeping the main installation in tact.^{xxxi} Suddenly, in the middle of the night of 15 February, he received the order from Batavia that his military units had to demolish the refinery, at last. In the rush, the huge tanks with oil products were not damaged at all, neither the refinery. After this half-hearted action, they hastily retreated and quietly slipped away in the darkness.^{xxxii} Pladjoe was soon completely in Japanese

hands and they managed to put out the fire in the boilers, shut valves, turned cranks and disarm most of the demolition charges placed in the complex by the Dutch before they were driven out.^{xxxiii} From now on Pladjoe was called 'refinery no. 1' and managed by Nihon Sekiyu ('Nippon Oil').

The refinery of Soengei Gerong, on the contrary, was successfully defended by Dutch troops. After the order of Vogelesang, military units deliberately destroyed 80 per cent of the refinery, including the oil tanks, using a time-delayed demolition charge.^{xxxiv} Nevertheless, the damage done to the refineries and machineries were easily fixed by a group of Japanese drilling crewmen and oil-engineers, resuming the production after six months.^{xxxv}

Japanese occupation

At the start of the Japanese occupation the oilfields in Palembang fell directly under control of the Japanese military. They made use of about 150 oil-employees who were forced to work for them for almost one year, but later were sent to prisoner's camps. The Japanese could therefore only rely on the local oil personnel and they were hardly capable of maintaining the modern machineries.^{xxxvi} During the war this led to a considerable lack of investments and oil was unprofessionally distracted from the oilfields. As a result, the production went down drastically, as the annual reports of the 'Koninklijke' pointed out.

At the end of the Pacific War, massive Allied bombardments started on Palembang. First, the attack by American B-29s in August 1944 was launched, but with negligible effect. Plans were adapted and in January 1945 a more precise series of British air strikes was undertaken on the Japanese held twin refineries that were supplying at that time half their oil and three quarters of their aviation spirit. Next to these 'Palembang Raids' that diminished the oil production, Japanese oil tankers were attacked which had a tremendous effect on the capacity of transportation of oil to Japan. These collective Allied efforts made Japan's war machine eventually come to a halt.^{xxxvii}

Re-capturing the oil facilities

During the Japanese occupation, the Indonesian nationalist movement had gained in power. Nationalist leaders, pressed by fanatic Indonesian youth (*pemuda*), seized the opportunity created by the unexpected Japanese capitulation. Watched by the still unbeaten Japanese troops in Indonesia of over 250,000 men, Achmad Soekarno proclaimed the independent Republic of Indonesia unilaterally, on 17 August 1945, two days after the Japanese surrender. This revolutionary action prevented that the oil installations automatically fell back in Dutch hands. Especially the British supreme command, led by Sir Philip Christison, realized that the Indonesian people were fighting for their cause and issued a statement that implied a *de facto* recognition of the Republic.

Meanwhile, the situation on the oilfields was complicated. Upon request of the Allied forces the refineries at Pladjoe and Soengei Gerong were temporarily put under supervision of Japanese soldiers in September 1945. The Imperial Japanese Army had to occupy these oil installations, including the nearby oilfields and stop the oil production immediately. All the other oilfields in South Sumatra were taken over by the Indonesian forces. On sight, Indonesian (oil) freedom fighters (*lasjkar minyak*) quickly founded their own semi-militarized oil labour unit: *Persatoean Pagawai Minyak (PPM)*. This initiative came from Dr. Adnan Gani and Dr. Mohammad Isa, who both had a prominent seat in the regional government of the Republic in Palembang.^{xxxviii}

The CEO of the 'Koninklijke', Dr. Barthold van Hasselt, was watching the nationalist developments with displeased eyes. He was eager to start the reconstruction of the refineries and make money, like in the old days.^{xxxix} Therefore, he tried to convince the British and Dutch military command of the enormous interests that were involved in the oil business.^{xl} In his opinion the Japanese troops should be replaced by British troops. These were not available, because the spearhead of the military operation was on Java. The British were not inclined to help out the BPM.^{xli}

Then something remarkable happened. Dr. Gani, Governor of South Sumatra, proposed that the BPM itself should take over the Japanese control at the oil centers as quickly as possible.^{xlii} He really wanted two things in return. First, the BPM had to pay interests over the profits to the Republic.^{xliii} Secondly, all the Indonesian workers that were occupying the refineries at that moment should be hired by the BPM and paid in kind with

food, textiles and household items.^{xliv} A profitable oil deal, because through this peaceful consultation and smart oil diplomacy, at the end of September 1946, the Republic gained the international recognition they urgently needed, and the BPM succeeded in taking control again of their most valuable oil installations without any intervention of neither the Dutch government nor the Army.^{xlv} As a bonus, the ‘trade-soldier’ Gani hoped to consolidate his political base and improve his own economic position.^{xlvi}

Nevertheless, truce and peace were apparent. The situation escalated in the end of October after an inflammatory speech by the Republican General Soedirman. The Republican revolt was reverted and led on New Year’s Day 1947 to heavy bombing of Palembang by combined Dutch units of Navy and Airforce. This punitive strike was undertaken without any notice or warning, causing many civilian losses and it left the city in ruins.^{xlvii} After this ‘Battle of Five Days and Five Nights’ Republican troops were forced to withdraw in a radius of twenty kilometers around the petroleum city. Subsequently, their political leaders fled and joined the radical camp in the Djambi area.

Operation Product

Since the landings of Dutch troops in March 1946, the progressive Dutch Lieutenant Governor-General Hubertus van Mook in Batavia and several politicians from the then cabinet Beel in The Hague became more susceptible to the oil interest in South Sumatra, and they were increasingly inclined to intervene. The First Dutch Offensive (‘Eerste Politionele Actie’) soon followed in July 1947 and throned the appropriate name *Operation Product*. The main goal was to occupy the vital economic areas as soon as possible and restart the main companies. Moreover, there was plenty of work for the tens of thousands of people in the overcrowded areas. So they hoped in this way that an important recruitment basis for the Indonesian freedom fighters would disappear.

The Dutch Y-Brigade led by the hotheaded Colonel Frits Mollinger had to occupy the key oil centers around Palembang. From a military and economic point of view the invasion was a success. Mid-August a substantial recovery of the oil production was realized and the refineries received oil again from the oilfields and worked its way up to 2,5 million barrels per day.^{xlviii} The Second Dutch Offensive in December 1948 had hardly any effect on the oilproduction at Pladjoe. This crown jewel of the BPM turned at full speed. Ironically, the Dutch military successes were a pyrrhic victory, because they caused US support to shift to the Republic and forced the Dutch to negotiate the transfer of sovereignty to Indonesia. Interestingly, during both military operations small units of BPM-technicians closely followed the Dutch forces in order to reboot oil extraction in the recaptured areas.^{xlix}

Oil-diplomacy

The management of the BPM, amongst them Johan Frederik van Diermen, the headstrong administrator of Pladjoe, was exploring the possibilities to regain control of the oilfields near Djambi. In a secret report addressed to Prime Minister Louis Beel, the BPM did not show support of a military action against Djambi for fear of damage and sabotage to the oil installations. Instead, the BPM paid 5,000 dollars to Republican security forces of the oilfields and installations near Djambi, in order to prevent destruction.¹ The BPM pragmatically went even one step further and started in May 1948 direct negotiations with the moderate leaders, and ‘oil barons’, Isa, Gani and Pattiasina, who had fled to Djambi after the earlier battle around Palembang. As a result of these ‘peace talks’, the vital oil concessions fell back into the mother’s womb. The BPM staff was very relieved, but Van Diermen’s conduct led to great outrage with the headquarters of the ‘Koninklijke’ in The Hague and with

the staff of Stanvac, as they were not informed at all.^{li} This wasn't for the first time; it happened before with the Gani-deal at Pladjoe. The Minister on Overseas Territories, Lubbertus Götzen, informed the Prime Minister rightaway and told him that '*Van Diermen could not care less who has the authority, if only he gets oil*'.^{liii}

Directly after the landing of Dutch paratroopers on 29 December 1948 and again on 5 January 1949, rebels caused severe damage to the NIAM-oilfields near Rengat and Air Molek. The BPM staff had forecasted this sabotage in many conversations with Dutch politicians.^{liiii} However, both the BPM and Dutch politicians were in favor of recapturing this important oil center.^{liv} Not at least, because the American oil company Cowie & Co INC was eager to buy local concessions from the Republic for one million dollars.^{lv} During the military action small technical units of the BPM operated again as 'advanced parties' in the slipstream of the Dutch troops and were able to minimize the damage and start repairing works.^{lvi} Mid-1949 crude oil was being piped again at pre-war production level.

Conclusion

This history shows how the south Sumatran city of Palembang industrialized and urbanized enormously due to the booming oil industry of the BPM, and how the lay-out of the company town Pladjoe grew bigger and bigger by ambitious planning of the BPM. Also this paper shows what was at stake for the BPM in the political turmoil of the 1940s, what was lost, regained and kept for the future. As for Japan, Palembang and the refineries in Pladjoe, was a coveted military prize. Remarkably, in their effort to safeguard the oil business and restore the pre-war situation of peace and prosperity, BPM's captains of industry, Dutch Army commanders and politicians in both Batavia and The Hague worked closely together. Constantly using oil as an economical weapon.

With the advent of the Indonesian independence in December 1949 the balance was drawn up. It was clear that the BPM failed to arrange business according to the pre-war situation. Pladjoe and its infrastructure was indeed saved from total destruction, but Djambi was regained only in 1949 and the refinery in Pangkalan Brandan, the origin of the Royal Dutch Shell, was lost forever due to fierce local resistance in Atjeh. Despite this outcome, the post-war oil production would eventually triple, compared to the pre-war average situation.^{lvii}

Besides, in the beginning of the 1950s the urgency for road renovation and construction in Palembang was more apparent than ever, especially in the Ulu area, which was heavily damaged during the war and revolution. Therefore the municipality implemented in 1950 a reconstruction plan, designed by Dutch architect H. Lüning.

Furthermore, in the Mid-1950s when postcolonial Indonesia was under the spell of anti-Dutch sentiments, Jakarta did *not* nationalize the BPM, but declared the company indispensable for their national economy, instead.^{lviii} Finally, in December 1965, when the local political situation was rather unstable, the 'Koninklijke'/Shell pulled out by selling all the rights in exploration and production for 110 million dollars to the Indonesian state owned oil company Pertamina.^{lix} Again a smart oil-deal, but Shell would return soon.

Acknowledgements

I am grateful to Prof. Dr. Petra Groen for her helpful comments on the concept-article.

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Notes

i The spelling of the geographical names is similar to the use during the Dutch East Indies.

ⁱⁱ Carola Hein, "Oil Spaces: The Global Petroleumscape in the Rotterdam/The Hague Area", in: *Journal of Urban History*, 13 February 2018.
ⁱⁱⁱ H. Gabriëls, *Koninklijke Olie: de eerste honderd jaar 1890-1990* (Shell, Den Haag, 1990), 9-18; Frederik Carel Gerretson, *Geschiedenis der Koninklijke*, Volume 1 (Leiden: Brill, 1973), 58-59; J. Ph. Poley, *Eroica, the quest for oil in Indonesia (1850-1898)* (Springer Netherlands, 2000), 82.

^{iv} In the Palembang area there were three petroleum companies, in 1900: the *Sumatra-Palembang Petroleum Company* (Sumpal); the French-owned *Moeara Enim Petroleum Company*, and the *Moesi Ilir Petroleum Company*. Soon, they were all assimilated into the Royal Dutch. Based hereupon the Royal Dutch and Shell established the BPM, the operating company of *Royal Dutch Shell* in 1907, that eventually became one of the largest multinationals in the world today: reflecting a 60:40 Dutch-British ownership structure. Woonkyung Yeo, *Palembang in the 1950s: The Making and Unmaking of a Region* (PhD. Diss., University of Washington, 2012), 79-80; Anderson G. Bartlett III et al, *Pertamina: Indonesian National Oil* (Jakarta: Amerisian Ltd, 1972), 48.

^v Joost Jonker, Jan Luiten van Zanden, *A History of Royal Dutch Shell. Vol. 1: From Challenger to Joint Industry Leader, 1890-1939* (New York: Oxford University Press, 2007), 23; Keetie E. Sluyterman, *Kerende kansen. Het Nederlandse bedrijfsleven in de twintigste eeuw* (Boom, 2003), 53-54.

^{vi} Frederik Carel Gerretson, *History of the Royal Dutch*, Volume 2 (Leiden: Brill Archive, 1958), 39-64.

^{vii} Carola Hein, "Between Oil and Water. The Logistical Petroleumscape," in: Neeraj Bhatia and Mary Casper, eds. *The Petropolis of Tomorrow* (New York: Actar/Architecture at Brown, 2013), 436-447.

^{viii} Ida Liana Tanjung, "The Indonesianization of the symbols of Modernity in Plaju (Palembang), 1930s-1960s", 302, in: Freek Colombijn & Joost Coté, *Cars, Conduits, and Kampongs: The Modernization of the Indonesian City, 1920-1960* (Leiden: Brill, 2015).

^{ix} Also from the more remote fields of Maroe, Limau and Kloelang.

^x Freek Colombijn, *Under Construction, The politics of urban space and housing during the decolonization of Indonesia, 1930-1960* (Leiden: KITLV Press, 2010), 80, 126; Idaliana Tanjung, "Plaju, Kota Minyak di Ulu Palembang simbol pribumi vs modernitas", 39. *Paper, Seminar on Street images: Decolonization and changing symbolism of Indonesian urban culture between 1930s and early 1960s*, Yogyakarta, 8-9 August 2005.

^{xi} Peter J.M. Nas, "Palembang: The Venice of the East," in: *Issues in Urban Development: Case Studies from Indonesia*, edited by Peter J.M. Nas (Leiden: CNWS, 1995), 133-134, 140.

^{xii} Johan Fabricius, *Brandende Aarde or East Indies Episode: An Account of the Demolitions Carried out and of some Experiences of the Staff in the East Indies Oil Areas of the Royal Dutch-Shell Group During 1941-1942* (London, Shell Petroleum Co., 1949), 98-99.

^{xiii} Statistics showed a rise from 50,703 people in 1905 to 73,726 in 1920 and again to 108,000 in 1930, of which 2,000 Europeans and 16,000 Chinese. In 1951 the population would almost double to 208,379: Pauline Milone, *Urban areas in Indonesia; Administrative and census concepts* (1966), 108-39; W. J. W. Wellan, "De Stad Palembang in 1935: Tweehonderdvijfenzeventig Jaar Geleden, als een Phoenix uit haar Asch Herrezen" in: *Koloniaal Tijdschrift* 24, no. 3 (1935), 232.

^{xiv} Ida Liana Tanjung, 306.

^{xv} Elsbeth Locher-Scholten, *Sumatran Sultanate and Colonial State Jambi and the Rise of Dutch Imperialism, 1830-1907* (Ithaca: Southeast Asia Program, Cornell University, 2004), 280-81, 309.

^{xvi} L.J. Touwen, "Voordeel van veelzijdigheid. De economische ontwikkeling van Palembang en Djambi tussen 1900 en 1938", in:

Economisch en Sociaal-Historisch Jaarboek, 54 (1991), 154-55, 177.

^{xvii} Agus Setiawan, *The Political and Economic Relationship of American-Dutch Colonial Administration in Southeast Asia: A Case Study of the Rivalry between Royal Dutch/Shell and Standard Oil in Netherlands Indies (1907-1928)* (PhD. Diss., SHSS Bremen, 2014), 3-4, 40-41.

^{xviii} Anderson G. Bartlett, *Pertamina: Indonesian National Oil* (Jakarta: Amerisian Ltd, 1972), 48-49.

^{xix} Hiroyoshi Kanō, *Indonesian Exports, Peasant Agriculture and the World Economy, 1850-2000* (NUS Press, 2007), 226-27, 230.

^{xx} Alex Hunter, "The Indonesian Oil Industry," in: *The Economy of Indonesia: Selected Writings*, ed. Bruce Glassburner (Ithaca and London: Cornell University Press, 1971), 256-257. Besides on Sumatra, there were refineries on Java in Tjepoe and Wonokromo. The island of Borneo (Kalimantan) had a huge refinery in Balikpapan, a few oil fields in Tandjoeng and a strategic oil enclave on the island of Tarakan. Besides, there were concessions on the Moluccan island of Ceram. Finally, the BPM had 40 per cent of the shares in the New Guinea's oil fields of Klamono and Wasian-Mogoi. The other 60 per cent were managed together by the *N.V. Nederlandsche Nieuw-Guinee Petroleum Maatschappij* (NNGPM), Stanvac and Caltex.

^{xxi} H. Baudet and M. Fennema, *Het Nederlandse belang bij Indië* (Utrecht-Antwerpen: Het Spectrum, 1983), 158.

^{xxii} Fabricius, 14; De Jong, 692; Stephen Howarth, Joost Jonker, *A History of Royal Dutch Shell. Vol. 2: Powering the Hydrocarbon Revolution, 1939-1973* (New York: Oxford University Press, 2007), 63; Gene Eric Salecker: *Blossoming Silk Against the Rising Sun: US and Japanese Paratroopers in the Pacific in World War II*.

^{xxiii} Loe de Jong, *Het Koninkrijk der Nederlanden in de Tweede Wereldoorlog*, Vol. 11a (1984-'86), first half, 507.

^{xxiv} C. van den Hoogenband and L. Schotborgh, *Nederlands-Indië Contra Japan, Deel VI: De Strijd Op Ambon, Timor En Sumatra*. Department Van Defensie, Hoofdkwartier Van De Generale Staf, Krijgsgeschiedkundige Afdeling (1959); Lionel Wigmore, *The Japanese Thrust*. Australia In The War Of 1939-1945, Vol. IV. Canberra: Australian War Memorial. 1957. The Japanese dilemma, part 1, 11, in: *The road to war, from Second World War Official Histories*.

^{xxv} De Jong, 11a, first half, 507; De Jong, 11a second half, 694-695.

^{xxvi} Willem Rimmelink, *The Invasion of the Dutch East Indies*. Compiled by The War History Office of the National Defense College of Japan. Senshi Sōsho (War History Series), Vol. 3 (2015), 270.

^{xxvii} Herman Theodore Bussemaker, *Paradise in Peril. Western colonial power and Japanese expansion in South-East Asia, 1905-1941* (PhD. Diss., Amsterdam, 2001), 754.

^{xxviii} The authorities in Batavia published a set of measures that resulted in a freeze on all Japanese assets and placed an embargo on the export of oil, tin and rubber to Japan. *Japan's need for oil and the Embargo (1940-1941)* online article (accessed 6 April 2018); Fabricius, 16-18; De Jong 11a second half, 695-96, 702.

^{xxix} De Jong, 655; J.J. Nortier, "De gevechten bij Palembang in februari 1942", in: *Militaire Spectator* (1985), 312. There was also a secret military airfield 75 kilometers west of Palembang, near Praboe Moelih, called Palembang II (P2), which was not even completed in 1941. It was well camouflaged by the jungle and not known to the Japanese troops at the moment of the invasion. Loe de Jong, *The Collapse of a Colonial Society: The Dutch in Indonesian during the Second World War* (Leiden: KITLV Press, 2002), 286, 388-389.

^{xxx} Erwin Langewis, "Hoe de Japanners de Indische archipel veroverden, 75 jaar geleden: Java zit in de Japanse val", in: *Historiek.net*, 23 februari 2017; Johannes Jan Nortier, P. Kuijt, and Petra M.H. Groen, *De Japanse Aanval op Java: Maart 1942* (1994); Rimmelink, 288-89, 316, 329; De Jong, 35.

^{xxxi} Howarth, Jonker, 65-66.

- xxxii Gene Eric Salecker, “Deadly Dash Forward, Japanese parachute forces mounted an assault on the island of Sumatra soon after Pearl Harbor”, in: *WWII History (October 2016)*, 49.
- xxxiii Rimmelink, 329-30.
- xxxiv Fabricius, 105-106, 120-125; Peter Keppy, *Sporen van Vernieling: Oorlogsschade, Roof en Rechtsherstel in Indonesië 1940-1957* (Amsterdam: Boom, 2006), 42-43; J.J. Nortier, “De aanval op Palembang in februari 1942”, in: *Militaire Spectator*, part 2 (1985), 361; Rimmelink, 344.
- xxxv De Jong, *Het Koninkrijk der Nederlanden in de Tweede Wereldoorlog*, Vol. 11a (1984-‘86), first half, 677; J.J. Nortier, “Japanse parachutisten, Samoerai van de Tweede Wereldoorlog”, in: *Militaire Spectator* (1983); 152, 519-523; Rimmelink, 284.
- xxxvi Jean Aden, *Oil and politics in Indonesia 1945 to 1980* (PhD. Diss., Cornell University, 1988), 40.
- xxxvii Howarth, Jonker, 69.
- xxxviii Bartlett, 71-73.
- xxxix Howarth, Jonker, 226-28.
- xl Archief Indonesië in overgangstijd. Overgekomen archieven uit Batavia. AS, 2e Afdeling, no. 3503, 12 April 1946. National Archives (NA).
- xli Collectie Nederlands-Indië 1945-1950, Sumatra, 207-I, 23 October 1946. Archive Netherlands Institute Military History (NIMH).
- xlii Collectie Nederlands-Indië 1945-1950, Sumatra, 207/A, nota situatie Palembang, ondertekend 27 August 1946. NIMH.
- xliii Aden, 70-71.
- xliv Secretaris-generaal Overzeese Gebiedsdelen aan Lt. G-G, 24 August 1946. AS, nr. 3503. NA.
- lv Bartlett, 73-74; Ida Liana Tanjung, 312-313; Woonkyung Yeo, 84-86.
- lvi Bambang Purwanto, “Economic Decolonization and the Rise of Indonesian Military Business,” in: *Indonesian Economic Decolonization in Regional and International Perspective*, ed. J. Thomas Lindblad and Peter Post (Leiden: KITLV Press, 2009), 44-46.
- lvii Anne-Lot Hoek, “De verzwegen moorden van Palembang. Geschonden oorlogsrecht”, in: *Vrij Nederland*, September 2017, 42-49; Mestika Zed, *Kepialangan, Politik, Dan Revolusi: Palembang 1900-1950* (Jakarta: Pustaka LP3ES Indonesia, 2003).
- lviii Annual Report of the *Koninklijke*, 1947.
- lix Collectie Nederlands-Indië 1945-1950, Sumatra, 207/4, December 1948, NIMH.
- ¹ Directeur van het kabinet G-G aan Lt.G-G, 2 August 1947, AS, no. 3505, NA; Locher-Scholten, 287.
- ii Götzen aan minister-president Beel, 26 May 1948. Rijks Geschiedkundige Publicatiën (RGP) XIII, no. 319.
- iii Minister zonder portefeuille Götzen aan Beel, 7 June 1948. RGP XIV, no. 12.
- iiii Ibidem; Locher-Scholten, 287-92.
- lv Notulen van vergadering gehouden ten huize van de legercommandant op 20 September 1948. RGP XV, 138.
- lv Chef directie Verre Oosten te Batavia (Elink Schuurman) aan ambassadeur te Washington Van Kleffens en minister van Buitenlandse Zaken Van Boetzelaer van Oosterhout, 1 May 1948, RGP XIII, no. 230.
- lvi Collectie Nederlands-Indië 1945-1950, Sumatra, 207/4, December 1948, ondertekend door algemeen commandant Operatie Ekster, NIMH; Petra M.H. Groen, *Marsroutes en dwaalsporen. Het Nederlands militair-strategisch beleid in Indonesië 1945-1950* (1991), 143.
- lvii W. Brand, “Heroriëntatie van vroeger in Indonesië werkende Nederlandse bedrijven”, in: H. Baudet, *Handelswereld en wereldhandel. Honderd jaren Internatio* (1963), 170.
- lviii Henk Biersteker, “Hoe Shell uit Indonesië verdween”, in: *Hervormd Nederland*, 29 July 1995, 51; Gabriëls, 171.
- lix Howarth, Jonker, 240; J. Thomas Lindblad, *Bridges to new business. The economic decolonization of Indonesia* (Leiden: KITLV Press, 2008), 159; Khong Cho Oon, *The politics of oil in Indonesia: Foreign company-host government relations* (Cambridge University Press, 1986), 138-39; Sluyterman, 219.



Daqing Oil Cluster: From petroleum hub to sustainable future

Penglin Zhu*

* *PhD Candidate, Chair of History of Urban Planning and Architecture, Faculty of Architecture and the Built Environment, TU Delft, P.Zhu@Tudelft.nl*

Since the mid-20th century, the Chinese government in collaboration with various governmental petroleum authorities, first with the Ministry of Petroleum and later with state-owned companies, has transformed the built environment on multiple levels, creating interrelated infrastructures and production sites, installing refineries and petrochemical industries, constructing dedicated oil ports, building workers' housing and educational, health or leisure facilities, effectively creating a palimpsestic petroleumscape.¹ The development of Daqing oil field can be the best representor showing the how the Chinese government shaped the built environment and people's lifestyle. Urban form in Daqing has changed extensively after the Chinese Economic Reform in early-1980s when the national policy shifted to complete and optimize the infrastructure and civic facilities. The recent national policies of the *OBOR Initiative*, which aims at balancing the economic sustainability and environmental preservation and *Revitalizing the Old Industrial Bases* in China have helped develop Daqing at the regional scale. Moreover, these national plans aim at balancing two potentially conflicting objectives: economic development and ecological sustainability. This paper explores in which manner the national policies and local spatial plans of Daqing have transform Daqing from the old oil mining district to the domestic oil hub, then to a sustainable oil cluster.

Keywords: oil, regional planning, urban planning, ecological and economic sustainable,

Introduction

Daqing, the most influential Chinese oil city, is an intriguing case to study in which manner the particular Chinese top-down planning system has influenced the urban transformation of the Chinese oil-based cities. As a city built for the national demands for oil, the built environment and lifestyle in Daqing was intertwined closely with the consecutive political shifts. In early-1960s, the central government highly praised the industrial rural form and low-cost living shelters of Daqing, promoting them as the domestic models for the other cities to learn. Specifically, the Architecture Society of China even organized a national conference to learn the experience of the urban form and architecture of Daqing and promote to the national wide.² However, the national planning patterns of 'working first, living second' and 'building extremely low-cost' housing were widely criticised by the national leader in 1980s when the Chinese Economic Reform started. The political propaganda of 'building a beautiful Daqing' is thus a by-product of the politic shift which can be seen as the guideline for the Daqing Municipality and local design bureau to complete the civic infrastructure and facilities. Between 1980-2000, Daqing was slowly transforming from the old oil mining districts to a domestic oil hub. The current OBOR Initiative, which aims to balance two opposing terms of economic development and environmental preservation, is influencing the current policies and plans for Daqing. It has conceived the future development of Daqing into the regional scale, bringing more economic and technological resources to archive the two terms. The national government have issued several economic plans to coordinate the local development such as the *Thirteenth-Five Year Plan for Revitalizing the Old Industrial Bases in Northeast China*.³ Can the Chinese government meaningfully balance the opposing terms of economic and ecologic sustainability in the oil mining cities?

The paper intends to enrich the current research field of the urban history of Daqing. Hou Li, a prominent Chinese urban historian, has studied the lifestyle and the built environment between 1960s to early 1980s,⁴ however, she has not explored the urban changes since 1990s, specifically, after 2004 when the central government issued the national policy of 'scientific development'. It was a national policy for the sustainable development. Moreover, scholars as He Li, a Chinese human geographer, has studied the current urban problems in the post reforming period, however, has not studied the relationship between diverse oil installations.⁵

The paper examines in which degree the national policies and local spatial plans have transformed Daqing Oil Cluster from the old oil mining districts to the domestic oil hub, moreover, in which manner the national policies



and plans have imagined Daqing from the domestic oil hub to the sustainable oil cluster. First, the paper explores how the national spatial strategies shaped the Daqing from the mining districts into a domestic oil hub of multiple oil industries and technology innovations. Second, it examines whether and how the national strategies and local spatial plans have formed a concept of the oil cluster, which brings regional oil infrastructure and various oil-related installations into one agglomerative spatial entity. The last, it investigates how the national and local plans have addressed the notion of ecological sustainability.

Planning processes in the Daqing Oil Hub: Urban centralization and industrial transformation

The national policies, strategies and economic plans, such as *Building a beautiful Daqing* and *Precaution for the industrial transformation*, were national intervene to transform Daqing from the oil mining district to the domestic oil hub after the Chinese Economic Reform. The *Building a beautiful Daqing*,⁶ announced by the former Chinese leader Xiaoping Deng in 1978, aimed to complete infrastructure construction, build more civic facilities including cinema, museum, shopping centre etc. to optimize the people everyday life experience. The *Precaution for the industrial transformation*,⁷ conceived by the former Chinese President Zemin Jiang in 1990, aimed to establish new industries in Daqing for the coming production decline of the oil industry. Therefore, the urban plans in 1990s were made generally for two consecutive purposes, better living environment and industrial transformation. Together with the local planning bureau and planning bureau of the Heilongjiang Province, Daqing municipality issued 3 comprehensive urban plans of Daqing to transform Daqing from the oil mining districts to a domestic oil hub.

Urban centralization was the main planning principle after early 1980s, which was made by the local design bureau to reflect the national strategy shifts of *Building a beautiful Daqing*. Since 1960, the infrastructure and facilities of Daqing were planned on the principle of 'Working first, Living Second'. The form of the oil industrial facilities, living settlements decentralized in the vast oil field. For instance, the residences were constructed in compact areas alongside the roads to the oil extraction sites. According to the yearbook of the Daqing Planning Bureau, the living condition and decentralized urban and rural form were barriers to attract and host the human resources. Therefore, the second comprehensive urban plan proposed to centralize the compositions and infrastructure in the oil field and highlighted the idea of 'core city'. Specifically, Ranghulu District was planned as the cultural, economic, and administrative centre for the oil field. The idea of 'core city' was a start point of the transitions, and it was updated to a new concept of the 'main district' in the Third Comprehensive Urban Planning in 1996 (Figure 1). The Third Comprehensive Urban Plan conceived the tri-town structure to accelerate the urban centralization for the first time. The tri-town refers to three districts West City District, East City District, and Sartu District respectively.



Figure 1 The Third Comprehensive Urban Planning of Daqing (1998-2010), Resource, Daqing Library

The Daqing Oil Field and city started the industrial transformation since early 1990s when the central government issued the developing strategy of Daqing to multiple oil industries and innovative technology industry in mid-1990s. The central government proclaimed the local municipality of Daqing to 'take precautions' of the probable



oil decline, though Daqing still produced a large amount of oil in 1990s. The idea of reforming the local industries soon reflected in the comprehensive urban planning of Daqing. The tri-town system, which has been the major spatial structure to date, has defined the main function of each districts. Among the three districts, East District has been conceived to host the technology innovation zone, while West City District has been planned as the site to facilitate multiple oil industries, Sartu District was the cultural, administrative, and commercial centre. Daqing City started construction of Daqing Hi-Tech Industrial Development Zone on April 10, 1992 which was approved as a National Hi-tech Industrial Development Zone on November 9th the same year. The overall planning area of the development area is 30.65 square kilometres, which consists of the main area and three chemical parks of Hongwei, Xinghua and Linyuan. After several years of development and construction, the development zone has now developed an area of 6.8 square kilometres, a total construction area of 1.68 million square meters, a total of 450 units.

However, the transformation from the oil mining districts to the domestic oil hubs was a slow progress to the particular local planning system that both the municipality and state-owned oil companies were both institutions for the urban development. Before the Chinese Economic Reform, the Ministry of the Petroleum Industry was in charge of the planning processes between early-1960 to later 1970s. Though there was not a comprehensive urban planning in this period, the construction plans were easy to make and build due to the national strategy of 'industry first, living second', which refers to a decentralized semi-urban semi-rural form. The Daqing Municipality, established in 1980 in light of the Chinese Economic Reform, thus far, has been the local institution to make urban plans. However, the municipality can only plan for the infrastructures and facilities outside the oil fields while the Petroleum Administrative Bureau of Daqing was responsible for the planning in the oil fields. They were individual institutions which affiliated to different higher administrators. The Daqing municipality was under the supervision of the Heilongjiang Provincial government and the Petroleum Administrative Bureau was under the supervision of the state-owned PetroChina Company. According to the locals, there has been a gap between these two in the planning processes. For instance, the local municipality and local design bureau conceive the infrastructure and facilities in the comprehensive plans of Daqing, however, the petroleum administrative bureau can postpone or modify the plan when they implement the projects in the area under their control, as an example the West City District.

The local municipality and local urban planning bureau, thus far, have put lots of efforts to coordinate the urban development in the west city district (administrated by the petroleum office). First, the local municipality and local planning bureau tried to highlight their institutional legacy in the planning processes. In 1996, the local municipality organized numerous propaganda which highlighted the importance of the municipality in order to coordinate the construction in the whole city. According to the 1996 yearbook of Daqing, such action was relatively successful. Second, together with the petroleum administration bureau, the Daqing municipality revised the Master Plan of the West City District in 2005. Specifically, it proposed the road adjustment planning, private science and technological centre, and transformation control planning of the West Passenger Station.

Daqing has been urging to balance the economic and ecological development since early-2000. As a double-edged industry, the oil industry is one hand sustaining the domestic economic growth, at the other, it is one of the major pollutions to the environment. The traditional oil field and the city have been facing the problem of environmental degradation for decades since early 2000s. After 50 years intensive oil extraction, the environment problem is severe. Both the national strategies and local spatial ignored the importance of the ecological sustainability until early 2000. The first, second, and third comprehensive urban plans of Daqing did not address the environmental issue as planning priority. The plans focused more on the economic development and industry reforming.

Daqing Oil Cluster: Economic sustainability and environmental preservation

The current national policies, strategies, and plans considers the future development of Daqing into the regional scale, such as the *Plan for Revitalizing the Old Industrial Bases in Northeast China* issued by the National Development and Reform Commission in 2014,⁸ which aims to reactive the industries in the northeast China, and the *One Belt One Road (OBOR) Initiative*⁹ proclaimed by the national government since 2013, which aims to invest some of 1 trillion dollars to build a new Silk Road of trade routines,¹⁰ specifically, the construction of railways, pipelines, oil storages, and massive infrastructure, moreover a joint cooperation of the green technology development. As one node industrial city involved in these national strategies, the future development of Daqing has been tightening with the national developing strategies of regional scale. Together with the national development and Reform Commission and Ministry of Housing and Urban-Rural Development, provincial governments of Jilin and Heilongjiang issued the Plan of Ha Chang City Group Development in 2015 (Figure 2).¹¹ It aims to archive the infrastructure interconnection, industrial coordinated development, co-construction of the



Figure 2 HaChang City Group Pattern, Resource, Plan of Ha Chang City Group Development

environment, and explore new urban forms for the main grain-producing areas. Daqing has been conceived as the core city in the plan which facilitates three industrial bases, petroleum/petrochemical industrial bases, equipment manufactory base, and the new material industrial base. The regional scale goes beyond the traditional provincial and local administrative divisions, can help us to understand the circulations of the oil flow have redrawn the urban form, architectural composition, and landscape. It is the appropriate scale for the research of oil industry development since the infrastructure of the Chinese oil hub has been planned and implemented to serve a region. Meanwhile, it is a potential tool to look at the manner which the national government has tried efforts to balance the two opposing terms of economic sustainability and environmental preservation, studying in which manner and to what extent the national government, local municipality, and local planning bureau have addressed the notions of economic and ecological sustainability, though the national policies and strategies have not spelled out the specific concept of the oil cluster.



Figure 3 Planning of China-Europe Railway Route, Resource, The Plan for China-Europe Railway Express

The paper conceives the regional spatial concept of the Daqing Oil Cluster, which includes the Daqing Oil field and the Daqing city, the oil-related infrastructure and facilities in the Northeast China, as the spatial reality carrying the national terms of balancing the economic sustainability and environmental preservation. The concept of the Daqing Oil Cluster is based on Carola Hein's concept of *palimpsestic Petroleumscape*,¹² which brings not only the built environment and architecture, but the representations and social meanings to the research of the oil as well. Therefore, the oil cluster brings all the oil-related installations into one specific spatial concept which includes the oil exploiting and extracting installations, the national strategic oil storages and the oil dedicated port as well. In the northeast China, the port of Dalian can be seen as a remote, but important part of the Daqing oil cluster. The port Dalian has long been the portal to the hinterlands in the northeast China. It is seen as the key shipping and commercial centre in northeast China in the OBOR Initiative. The infrastructure constructions carried by the OBOR Initiative are mutual advantages for both Daqing and Dalian. In the OBOR Initiative, Dalian port is



the start point of the China-Mongolia-Russia-EU Economic Corridor while Daqing is one of the industrial nodes alongside the plan for China-Europe Railway Express, issued by the national development and reform commission and China Railway Corporation in 2016 (Figure 3).¹³ And the oil products and Volvo cars produced in Daqing have already entered the market through the railway.¹⁴ Meanwhile, as one of the largest oil importing port in the world, the importing oil from Dalian port can also connect to the refining factory in Daqing. Second, Dalian is a potential example to share the experience of reforming in economy and industrial for Daqing. As a national strategical port city, Dalian has been in the frontline of reforming and urban planning to facilitate the foreign investors. However, Daqing is relative conservative comparing to Dalian, as a traditional oil strategic city with high political concern. It has been facing the threaten of oil decline and environmental pollution for decade, moreover, is at the point of balancing the objectives of economy and environment.

The construction of the oil industry is still one of the major goals of industries constructions in the Daqing Oil Cluster. *The Plan of Ha Long City Group Development* has proposed to build an important national reserve base for oil, natural gas, and coal. It aims to enhance the operation management and dispatch adjustment of oil and gas, moreover, improve the cross-regional energy security mechanism. Specifically, it has proposed numerous pipeline constructions including the Daqing-Jinxi crude oil pipeline (Daqing-Tieling section), Sino-Russian crude oil pipeline second-line project and the Sino-Russian-East natural gas pipeline, and the Dalian LNG and Shaan-Jing-Shen-Chang pipeline connection project.¹⁵ Moreover, it proposes to accelerate the construction of Daqing's 10-million-ton oil refining and million-ton ethylene projects, develop ethylene and downstream products in depth, focus on the development of synthetic resins, synthetic rubber, synthetic fibbers, and organic chemical materials. Though the oil industrial still acts as the leading industry, the *Plan of Ha Long City Group Development* has proposed various programs of industrial reforming, highlighting the importance of the economic sustainability. First, it proposes to build cooperation of equipment manufacturing in five cities, Harbin, Daqing, Qiqihar, Changchun, and Siping respectively. The manufacturing including CNC machine tools, agricultural machinery equipment, petrochemical equipment, photovoltaic and new energy equipment. Second, it has conceived Daqing as production centre of the spare parts of vehicle, moreover, a new developing centre of new energy vehicles and plug-in hybrid vehicles.

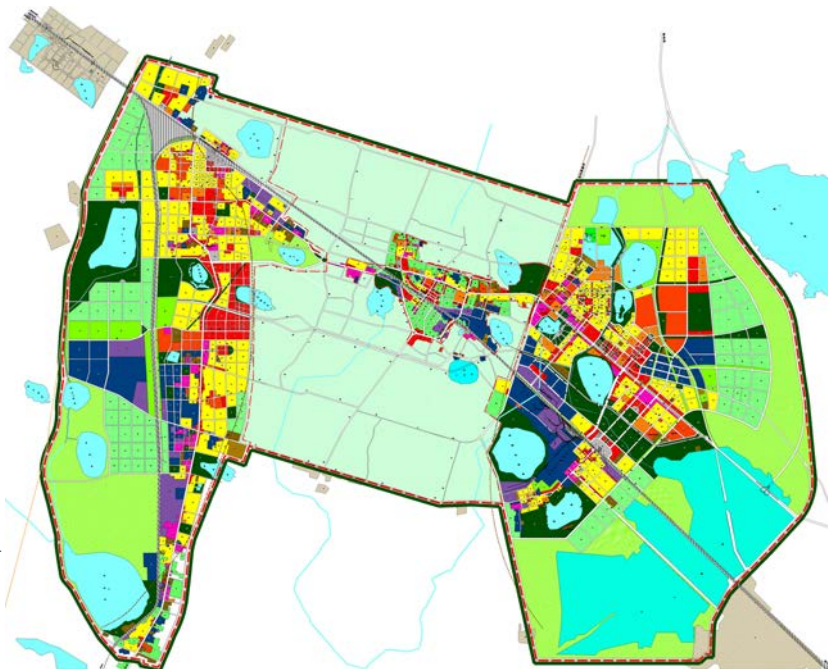


Figure 4 The Forth Comprehensive Urban Planning of Daqing (2002-2020), Resource, Daqing Construction Bureau

To balance the economic development, the fourth and fifth comprehensive urban plans in Daqing has set priorities for environmental sustainability. The national economic plan of *the eleventh five-year plan (2006-2010)*, which highlighted the sustainable development in various aspects including economy and ecology, was the first time addressing the importance of the environment sustainability. The local spatial plans soon reflected to the national strategies that the Forth Comprehensive Urban Planning of Daqing (2002-2020) highlighted the environmental preservation as one of the planning principles in for the first time (Figure 4). Comparing to the third plan, the forth



plan was as a distinct step forward of trying efforts to archive ecological sustainability. By the end of 2004, 20 ecological parks and 1400 hectares of urban green land were implemented in the oil field. Moreover, the sewage treatment program in numerous lakes were completed which solved the traditional problems of ponding. The environmental protection and ecological sustainability became the major social concern in the *Twelfth Five-Year Plan for urban and Rural construction of Daqing (2011-2015)*.¹⁶ It conceived more detailed plans for each district in Daqing, comparing to the eleventh five-year plan. *The Twelfth Five-Year Plan for the Construction of Ecological Civilization in Daqing* proposed three aspects, identifying the ecological zone, developing the ecological industry, developing low-carbon industries and clean energy production base. Specifically, identifying the ecological zone refers to protecting wetland, nature reserves, and forest parks, building agricultural and animal husbandry production and green food base. Developing the ecological industry refers to developing ecological industry and green petroleum and petrochemical base. The last, developing low-carbon industries and clean energy production base refers to develop industries of the wind energy, geothermal energy, and biomass energy. According to the local condition, these three energies resources are substantial in Daqing.

Conclusion

Examining the spatial impacts of the national strategies, the paper first examines the planning ideas of the domestic oil hub between 1980s-2000 in which to assess the implementation of the urban plans in Daqing. It argues that the transformation from the oil mining district was slow due to the two institutions in the planning processes. Moreover, the plans between 1980s-2000 only focused on economic development ignoring the importance of the environmental preservation in the plans. Second, the paper posits the concept of the regional oil cluster as a space in which to assess the implementation of the ongoing OBOR Initiative. It argues that the Daqing Oil Cluster is the appropriate planning scale for the national policies and strategies to archive the economic and environmental sustainability. At last, the environment issue will be the major concern of the future planning. Though the local municipalities and planning bureau have tried efforts to improve the ecology system in consecutive plans, the ecological sustainability is still one of the crucial problem in Daqing due to the oil industry. Lots of human resources and financial support are necessary parts to implement the plans. Thus, whether and to what extend the local municipality have implemented these plans will be an intriguing question for the further research.

Bibliography

- Daqing, 大庆市人民政府; People's Municipality of. "大庆“一带一路”哈欧铁路货运班列投入运营; Daqing "One Belt and One Road" Kazakhstan-Europe Railway Freight Trains Are Put into Operation;" <http://www.hlj.gov.cn/zwfb/system/2017/06/06/010831313.shtml>.
- Hein, Carola. "Analyzing the Palimpsestic Petroleumscape of Rotterdam." *Global Urban History* (2016).
- . "Oil Space: The Global Petroleumscape in the Rotterdam/the Hague Area." *Journal of Urban History* 43, no. 1 (2018).
- Hou, Li. *Building for Oil: Daqing and the Formation of the Chinese Socialist State*. Harvard-Yenching Institute Monograph Series. Harvard University Asia Center, 2018.
- JANE PERLEZ, YUFAN HUANG. "Behind China's \$1 Trillion Plan to Shake up the Economic Order." *The New York Times*, May, 13, 2017.
- Li, He. "Transforming Oil-Mining Cities in Post-Reform China: A Case Study of Daqing." In *Routledge Contemporary Asia Series*, edited by Mark Wang, Pookong Kee and Jia Gao, xxv, 271 pages. London: Routledge, 2014.
- News, 中石油新闻网; CNPC. "1978年9月14日邓小平第三次视察大庆油田; on September 14, 1978, Deng Xiaoping Made a Third Visit to Daqing Oilfield." <http://news.cnpc.com.cn/system/2014/08/26/001504445.shtml>.
- "Plan for Revitalizing the Old Industrial Bases in Northeast China, 东北地区振兴规划." edited by National Development and Reform Commission, 2014.
- Province, 大庆发改委; Development and Reform Commission of Heilongjiang. "大庆市城乡建设‘十二五’规划; the 12th Five-Year Plan for Urban and Rural Construction in Daqing City." edited by 大庆发改委; Development and Reform Commission of Heilongjiang Province. 大庆; Daqing, June, 2014.



- . "大庆市生态文明建设“十二五”规划; the 12th Five-Year Plan for the Construction of Ecological Civilization in Daqing City." edited by 大庆发改委; Development and Reform Commission of Heilongjiang Province. 大庆; Daqing, June, 2014.
- "The Thirteenth-Five Year Plan for Revitalizing the Old Industrial Bases in Northeast China, 十三五东北地区振兴规划." edited by National Development and Reform Commission, 2017.
- Yan, 阎子祥, Zixiang. "中国建筑学会第四届代表带回及学术会议总结; a Summary of the Fourth Session of the Chinese Architectural Society and the Academic Conference." *建筑学报, Journal of Architecture*, (1966): 3.
- "中欧班列建设发展规划(2016-2020年); Plan for the China-Europe Railway Express (2016-2020)." edited by 中国铁路总公司; National Development and Reform Commission 国家发展改革委, China Railway Corporation. Beijing, 2016, October.
- 吉林、黑龙江省人民政府, 国家发展改革委、住房城乡建设部; Jilin, Heilongjiang People's Provincial Government, National Development and Reform Commission, Ministry of Housing and Urban-Rural Development. "哈长城市群发展规划; Plan of Ha Long City Group Development." edited by Heilongjiang People's Provincial Government 吉林、黑龙江省人民政府, 国家发展改革委、住房城乡建设部; Jilin, National Development and Reform Commission, Ministry of Housing and Urban-Rural Development, 2015.
- "大庆——迈向高科技现代化的城市; Daqing --- a City That Is Moving toward High-Tech Modernization." *人民日报海外版; People Daily Overseas Edition*, October, 22, 2001.

Image Sources

- Figure 1. Daqing Library
- Figure 2. National Development and Reform Commission
- Figure 3. National Development and Reform Commission
- Figure 3. Daqing Planning Bureau

¹ Carola Hein, "Oil Space: The Global Petroleumscape in the Rotterdam/the Hague Area," *Journal of Urban History* 43, no. 1 (2018).

² 子祥, Zixiang Yan, "中国建筑学会第四届代表带回及学术会议总结; a Summary of the Fourth Session of the Chinese Architectural Society and the Academic Conference," *建筑学报, Journal of Architecture*, (1966).

³ "The Thirteenth-Five Year Plan for Revitalizing the Old Industrial Bases in Northeast China, 十三五东北地区振兴规划," ed. National Development and Reform Commission (2017).

⁴ Li Hou, *Building for Oil: Daqing and the Formation of the Chinese Socialist State*, Harvard-Yenching Institute Monograph Series (Harvard University Asia Center, 2018).

⁵ He Li, "Transforming Oil-Mining Cities in Post-Reform China: A Case Study of Daqing," in *Routledge Contemporary Asia Series*, ed. Mark Wang, Pookong Kee, and Jia Gao (London: Routledge, 2014).

⁶ 中石油新闻网; CNPC News, "1978年9月14日邓小平第三次视察大庆油田; on September 14, 1978, Deng Xiaoping Made a Third Visit to Daqing Oilfield," <http://news.cnpc.com.cn/system/2014/08/26/001504445.shtml>.

⁷ "大庆——迈向高科技现代化的城市; Daqing --- a City That Is Moving toward High-Tech Modernization," *人民日报海外版; People Daily Overseas Edition* October, 22, 2001.



⁸ "Plan for Revitalizing the Old Industrial Bases in Northeast China, 东北地区振兴规划," ed. National Development and Reform Commission (2014).

⁹ YUFAN HUANG JANE PERLEZ, "Behind China's \$1 Trillion Plan to Shake up the Economic Order," *The New York Times* May, 13, 2017.

¹⁰ Ibid.

¹¹ Heilongjiang People's Provincial Government 吉林、黑龙江省人民政府, 国家发展改革委、住房城乡建设部; Jilin, National Development and Reform Commission, Ministry of Housing and Urban-Rural Development, "哈长城市群发展规划; Plan of Ha Long City Group Development," ed. Heilongjiang People's Provincial Government 吉林、黑龙江省人民政府, 国家发展改革委、住房城乡建设部; Jilin, National Development and Reform Commission, Ministry of Housing and Urban-Rural Development (2015).

¹² Hein.

¹³ "中欧班列建设发展规划(2016-2020年); Plan for the China-Europe Railway Express (2016-2020)," ed. 中国铁路总公司; National Development and Reform Commission 国家发展改革委, China Railway Corporation (Beijing 2016, October).

¹⁴ 大庆市人民政府; People's Municipality of Daqing, "大庆“一带一路”哈欧铁路货运班列投入运营; Daqing "One Belt and One Road" Kazakhstan-Europe Railway Freight Trains Are Put into Operation;," <http://www.hlj.gov.cn/zwfb/system/2017/06/06/010831313.shtml>.

¹⁵ 吉林、黑龙江省人民政府, 国家发展改革委、住房城乡建设部; Jilin.

¹⁶ 大庆发改委; Development and Reform Commission of Heilongjiang Province, "大庆市城乡建设“十二五”规划; the 12th Five-Year Plan for Urban and Rural Construction in Daqing City," ed. 大庆发改委; Development and Reform Commission of Heilongjiang Province (大庆; DaqingJune, 2014). "大庆市生态文明建设“十二五”规划; the 12th Five-Year Plan for the Construction of Ecological Civilization in Daqing City," ed. 大庆发改委; Development and Reform Commission of Heilongjiang Province (大庆; DaqingJune, 2014).

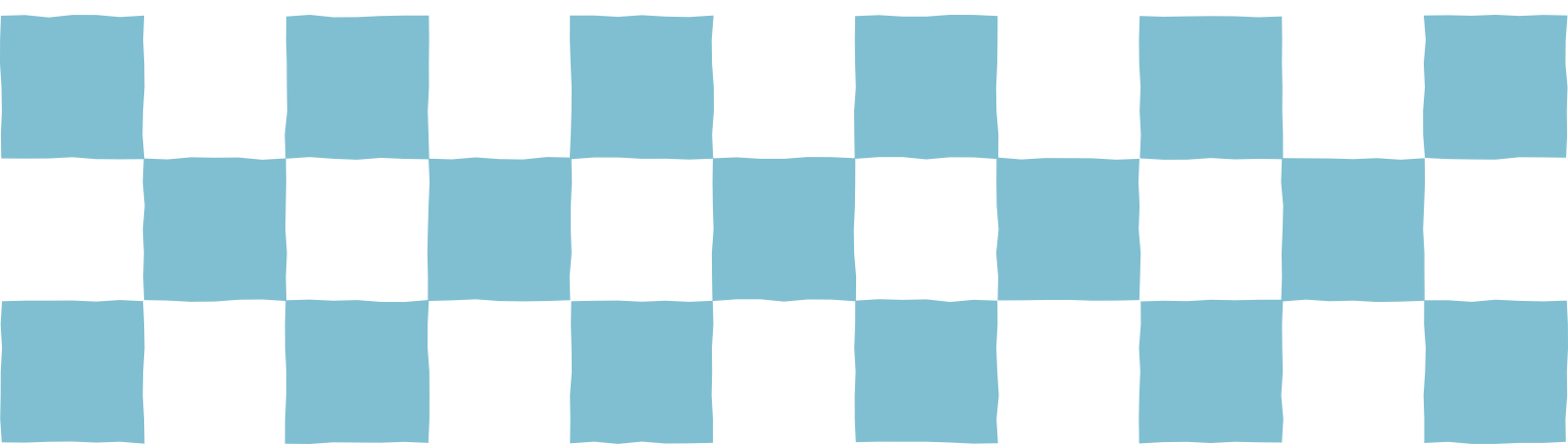


INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

9

**At the crossroads of oil flows
and international planning
exchanges (East Asian
Petroleumscapes (Part 2)) /
GUHP***



Oil's Quiet on the Western Front: Planning the Persian Corridor

Stephen Ramos (University of Georgia)

Oil determined the outcome of the First World War, and logistics determined that of the Second. World War II produced geographies of oil and logistics based on established colonial and trade networks. The German threat to the Russian Western front required collaboration between U.S. and British military engineers to move equipment through the "Persian Corridor" to reach Stalin's army. The project required port and egress road construction to the Soviet Zone, tenfold capacity increase of the Trans-Iranian Railway to Tehran, and construction and operation of aircraft and truck assembly plants. The best-developed port was on the island of Abadan, which was reserved for British oil shipment, so alternative Persian ports, particularly Khorramshahr and Bandar Shahpur, had to be expanded. Though Persia was considered part of the agreed-upon British sphere of political influence due to their established oil interests, the need to build transportation infrastructure for military equipment movement forced Churchill to agree to the U.S. military's command of the eastern Persian route.

While many historians claim that World War II had little impact on the Gulf region, the paper considers the wartime Lend/Lease collaboration as a critical juncture that would link the role of oil speculation, discovery, and logistics to future spatial development, territorial definition, urbanization, and sovereignty in the region. An urbanization typology—strongly influenced by post-war British and U.S. interests in the region for oil speculation—began in Kuwait in the 1950's and moved southward to influence neighboring states as they too discovered oil.

Within the Global Petroleumscape framework, the paper considers ways in which global oil networks and their generative spatial configurations moved in and out of national and transnational trade and security networks. The British and U.S. civilian engineering firms recruited for wartime logistics infrastructure projects in the Gulf region were then essential to the post-war oil extraction and trade infrastructure, and its associate urbanism.

The Persian Corridor case provides a rich example of the intersection of war, geography, infrastructure, planning, and geopolitics as a complex field of interwoven within the intrigue of competing international oil interests and networks.

The Global Petroleumscape, Spatial and Represented: A Tool for Understanding Planning Practice

Carola Hein (Delft University of Technology)

This panel explores the ways in which corporate and public actors have inserted the physical and financial flows of petroleum into the built environment. It focuses on the ways in which the forces of private land purchase, speculation, and construction have interacted with public spatial planning, policy, and regulation, and explores how petroleum actors have guided the development of urban and rural areas around the world. It argues that the spatial presence of petroleum structures and the close collaboration of relevant actors has created path dependencies that reinforce the petroleumscape and shape planning practice. It identifies different layers—both visible and invisible, physical and depicted—that combine into a palimpsestic global petroleumscape. Extraction, refining, transformation, and consumption of petroleum have made an extensive impact on seas, landscapes, cities, and buildings. Oil drilling equipment, refineries, storage tanks, pipelines, dedicated road and rail infrastructure, and gas stations serve the physical flows of oil in industrial areas as well as everyday life. Headquarters, research facilities, housing, cinemas, and leisure facilities are linked to the financial streams of oil. All stand as material witnesses to the invasiveness of petroleum, but some of them are much more subtly connected to petroleum flows—international schools that serve oil expatriate's children, for example, are less visible than refineries. In most instances, oil companies have not been planning agents per se, but they have often collaborated with public governments in charge of spatial planning; as a result, the flows and the interests related to petroleum and their representation have influenced public planning practice, directly and indirectly, in response to the changing urban environment. It further posits that the everyday use, representation, and mostly positive appreciation of petroleum-related structures among citizens of different classes, races, cultures, genders, and ages has created a feedback loop or an energy culture that helps maintain the buildings and urban forms needed for physical and financial oil flows and celebrates oil as a heroic cultural agent – thus leading societies to consume more oil. Following a general analysis of the concept of the petroleumscape, this panel discusses global examples. In appreciating the power and extent of oil can we engage with the complex challenges of sustainable design and policymaking, develop heritage concepts, and imagine future built environments beyond oil.

Shaping Ahvaz' transnational oil modernity; at the crossroads of oil flows and international planning exchanges

Rezvan Sarkhosh (Delft University of Technology)

Through the lens of flows of petroleum, a key commodity of the 20th century, to revisit local urban histories, this paper contributes to the growing literature on transnational and cross-cultural urbanism. It argues that oil created a unique network of international stakeholders (British, German, and American), from various disciplines and professions (engineering, architecture and urban planning) who collaborated to build modern industrial cities adjacent to Iranian oil fields, much of which were found in previously uninhabited areas. Focussing on the development of the southern city of Ahvaz between 1908 and the start of the Iran-Iraq war in 1980, this paper explores how catering to the different facets of the oil industry (oil extraction, transformation, administration, infrastructure and retail), created a cosmopolitan built environment composed of a variety of architectural styles and urban planning approaches. The diverse actors who co-shaped Iran's oil cities also impacted people's lifestyles through new spatial arrangements. These international actors transformed and localized the global flows of ideas and created native processes of modernization. Albeit their good intentions, many of these actors failed to respond to the needs of the people on the ground and thereby contributed to creating social gaps among different strata of the society. Cosmopolitanism in architecture was thusly limited to styles and forms, rather than a truly just and democratic cosmopolitan society.

Localizing Transnational Architectural and Urban Ideas in Iran's Oil boom Era

Mohamad Sedighi (Delft University of Technology) and Elmira Jafari (Delft University of Technology)

Since the aftermath of the Second World War, the flow of oil and its consumption solidified the complex global network. This network facilitated the exchange of new urban ideas and construction technologies between oil consuming and oil-producing countries. This process was accelerated from the mid-1960s when a tremendous increase in oil consumption in the West put the Middle-Eastern oil-rich countries at the cross-section of international political/economic influences. As the second largest oil exporter in the world, the Shah of Iran, Mohamad Reza Pahlavi, became an influential role player in this context. Aiming to fuel his ambitious modernization project in Tehran, the Shah constructed oil refineries in the capital and involved American experts in the expansion of oil-related facilities in Tehran. This also led to an unprecedented rise in local consumption of petroleum for the industrialization of the city. This process of rapid industrialization was coupled with the urban development of Tehran attracting various international architecture and planning firms, such as Victor Gruen Associates, Kenzo Tange, and Llewelyn Davies. As a result, a series of projects were planned and implemented such as the Comprehensive Plan of Tehran (1966-69), the residential neighborhood of ASP (1970-72), Shahestan Pahlavi (1965-75), all flowing the architectural language of the so-called international style, regardless of local culture and context. As a reaction to this situation, a group of leading Iranian architects including Nader Ardalan, Hoshang Seyhun, and Naser Badie, in collaboration with Iran's Ministry of Housing and Urban Development, organised the first Iran International Congress of Architects (IICA) in 1970 held in Isfahan, to discuss the interaction of tradition and technology. Funded by Iran's National Oil Company and supported by Empress Farah Diba, the 1970 IICA attracted many of the leading architects of that time such as Louis Kahn, Paul Rodolph, Buckminster Fuller, Oswald Mathias Ungers and Jose Luis Sert.

By focusing on the architectural discussions provided in the 1970 IICA and on intellectual trends from the late-1960s to the early-1970s in Iran, this paper aims to unravel to what extent the oil-led geopolitics facilitated a paradigm shift from employing international to local architectural models. Consequently, this paper argues that while the flows of oil and its economic and political impacts on the urban development of Tehran set a basis for importing transnational ideas to Iran, it also stimulated local architects to forester a regionalist discourse in architecture and urban planning.



“Shaping Ahwaz' transnational oil modernity; at the crossroads of oil flows and international planning exchanges”

Author's Name: Rezvan Sarkhosh. *

(*PhD, Department of Architecture, chair of History and Urban Planning, TU Delft. Rose.Sarkhosh@tudelft.nl).

Through the lens of flows of petroleum, a key commodity of the 20th century, to revisit local urban histories, this paper contributes to the growing literature on transnational and cross-cultural urbanism. It argues that oil created a unique network of international stakeholders (British, German, and American), from various disciplines and professions (engineering, architecture and urban planning) who collaborated to build modern industrial cities adjacent to Iranian oil fields, much of which were found in previously uninhabited areas. Focussing on the development of the southern city of Ahwaz between 1908 and the start of the Iran-Iraq war in 1980, this paper explores how catering to the different facets of the oil industry (oil extraction, transformation, administration, infrastructure and retail), created a cosmopolitan built environment composed of a variety of architectural styles and urban planning approaches. The diverse actors who co-shaped Iran's oil cities also impacted people's lifestyles through new spatial arrangements. These international actors transformed and localized the global flows of ideas and created native processes of modernization. Albeit their good intentions, many of these actors failed to respond to the needs of the people on the ground and thereby contributed to creating social gaps among different strata of the society. Cosmopolitanism in architecture was thusly limited to styles and forms, rather than a truly just and democratic cosmopolitan society.

Keywords: transnational urban and architectural history, multicultural urban planning, cross-cultural exchanges of architectural experts, global flows of architectural ideas, global petroliumscape, ethics of urban cosmopolitanism, Ahwaz.

Introduction

The promise of the oil's wealth brought flows of international powers, people, knowledge, technologies, and cultures with diverse motivations and skills to the Iranian oil fields from 1908, when the British explorer - William Knox d'Arcy – first explored oil in Southern Iran . Under the leadership of Iranian, British, Germans, and American officials, stakeholders, engineers and architects, multiple cities emerged or developed in the oil cluster of “Khuzestan”; detached but interconnected cities were created with connections to the capitals in national and international levels (Tehran, London, etc). The Oil Companies in charge of the extraction, transportation, refining and exportation of petroleum for the international market needed extensive urban infrastructures, set up elements of the global petroliumscape, as defined by urban historian Carola Hein.¹ Connected through oil flows, these cities were part of a global system; people employed in the oil industry, lived in imported architectural spaces and practiced foreign lifestyles. Architecture and urban planning became tools in the hands of foreign companies to both shape the land for extraction and reining of oil and to accommodate, control, supervise and socialize their staff. These colonial cities could be a good trial to experiment the modernity in Western urban practices and lifestyles examining in process of modernization of the city and the society.²

Among these new born or transformed cities, “Ahwaz”, combined with Karun--the only navigable river to the Persian Gulf in Iran--located in between of the oil fields (MIS) and oil refinery and port (Abadan), was part of



the Iranian oil industry since the early pioneer days.³ International actors' intervention in Ahwaz reached far beyond the industrial infrastructures engaging all layers of the petroleumscape. Ahwaz had a profound relationship with global flows during its history of transformation, development and modernization which promoted the city to the modern capital of Iranian oil fields with a strong role as a mediator and negotiator for Iran in international contexts.

Focusing on the case study of Ahwaz, this paper will shed light on a lesser known aspect of interrelationship of architecture, urban planning and international flows. It combines the history of modern architecture in the developing world with geopolitical considerations. National and international actors in different political and economic periods in Iran, manifested different steps of modernity in Ahwaz through urban transformations. This can be seen in production of modern architectural and construction types (industrial, administrative, residential, ancillary), urban forms (infrastructures, neighbourhoods), lifestyles, engineering and etc. This paper explores consecutive transnational actors and their role in the creation of different periods of development in the city between 1908, the oil exploration in Iran, and 1980 when the Iran-Iraq war made an important outbreak in oil fields urban life⁴.



Figure 1, left: Map of Khuzestan oil fields, showing the important position of Ahwaz in the middle and connected to all the oil spaces. Source: BP Archive. Figure 2 right: maps of Khuzestan, 1970s, Source: The Author, 2017.

Urban development of Ahwaz;

First stage (1908-1926); Fast Building for Oil Industry

Responding to initial needs of the oil industry and its employees, the first urban form of Ahwaz reflected a fast decision making far from thinking for future social issues. Influenced by the previous experiences of United Kingdom in other colonial cities, Ahwaz was designed based on the job hierarchy. The city was classified into social classes and contained various types of housings for workers, employees and manager's in separated neighbourhoods or company towns.⁵ The first and oldest buildings built by APOC in Ahwaz –except managers' houses- were merely simple and functional as row houses for the workers lined in narrow streets, almost in vernacular styles, construction types and materials. (“Kut-Abdollah” and “Khorramkushk”).⁶

Second stage (1926-1941); Growth of Urban facilities and infrastructures

In 1926, with the ascent of the Pahlavi in Iran, Reza Shah who identified the geopolitical significance and resource wealth of oil made Ahwaz the capital of Khuzestan. This shows the reason for taking new steps in the development of the city's built environment. Turning the black gold income to the country, he made a new concession⁷ with APOC in 1933 regarding more benefits for the Iranian government. Improving Iranian workers' life conditions, the Oil Company made an effort to break social gaps and created more urban facilities.⁸ Subsequently, Iran's financial budget multiplied twenty two times from oil revenues. This new income played an important role in encouraging the Shah to invite foreign stakeholders to participate in the industrialization and modernization of the country. In order to decrease the power of Britain and Russia on national, political and economic levels, Reza Shah was particularly interested to have relations with Germany



and the United States.⁹ Trans-Iranian railroad was a main project of national infrastructures which began by one American company¹⁰ in the south and three German companies¹¹ in north of Iran.¹² This variation of actors resulted in two types of architectural styles in 95 railway station buildings. In the south, the American-built infrastructures were designed according to traditional and vernacular architecture of the middle east, while, in the North, Germans had a tendency to make modern forms devoid of any historic references.¹³

In 1929, the railway, reached Ahwaz by the Americans and became one of the main effective features in shaping the urban form of Ahwaz. It also determined the direction of its urban growth by passing the railway through the city.¹⁴ The line functioned not only as a fast way to transport, but also as a symbol of modernization.¹⁵ The American involvements in Ahwaz involved construction of new housings for staffs,¹⁶ "Karun" railways station, engine depots, Wheel shop building, as well as new paved roads and bridges on Karun.¹⁷ In 1933, an accident to the royal train on the inaugural day resulted in the transformation of contractors from the American and the German companies to a Swedish–Danish consortium,¹⁸ which cooperated with construction companies from the Great Britain, Italy, Belgium and Czechoslovakia, named "KAMPSAX." This collaborative effort was concluded in 1938.¹⁹ This transformation of the actors is the main reason behind the changing of architectural styles of railway's buildings of Ahwaz. Railway leaders' housings²⁰ and "Railways' club", belong to the time after opening of railways and probably are built by KAMPSAX since they are designed considerably more modern compared to the other buildings of railways.

In 1930's, the Oil Company competing with the other nationalities' interactions to the area, had realized the importance of advertising itself through architectural and urban projects in order to grow stronger roots in the oil fields. It developed a sizeable oil community in Ahwaz supplying its staffs for housing, along with the usual amenities such as stores and hospital, transport centres, ancillary buildings (educational, religious, entertainment and leisure), and infrastructures as fast main-line car service, airport, pump houses.²¹ Finally apart from being a major traffic junction, Ahwaz also became the midway depot for the pipeline construction and a major distribution centre for oil products.²² As mentioned before in the new contract of 1933, the demands for building urban facilities for the Iranian workers were particularly pressed the by Iranian government from the oil company. The architect who received this great responsibility was the British architect James Wilson, who had started his work with APOC since 1926, but in the 30s the volume of Wilson's works increased from single residential houses to massive constructions. In terms of architectural styles, he tried to use modern style while he was also impressed by vernacular architecture, materials and forms and conceptually used them in his works. With combination of vernacular elements to the extrovert type of buildings having open faces to the streets (instead of introvert traditional types), he created magnificent architectural facades in Ahwaz. In terms of large-scale urban planning issues, one of the main tasks that Wilson accomplished was transforming the structures of company towns. Before that the company towns had very basic, compact and functional patterns.²³ Wilson transformed them to more spacious ones by importing the concept of the "Garden City" of Ebenezer Howard." Howard's ideas were implemented in the Great Britain in late 30s and were concurrently introduced to other parts of the work where the Brits had economic and political control.²⁴ Green spaces, health, light and air were the main characters for planning new urban spaces in the company towns of Ahwaz combining with grid streets and easy access to every neighbourhood based on the need of control of urban spaces by the company.²⁵

By 1939, Persia become the world's fourth largest oil-producing country and still had a strong tendency to collaborate with Germany to launch its modernization projects.²⁶ For British Government, which was eager to keep their influence in Persia as the dominant great power, the great fear was the access of Germany to the Iranian oilfields. Following the increasing German involvement in Iran as their oil-source pilot in the Middle East.²⁷ (at the time of the outbreak of World War II, about 1200 German workers were engaged in business in the country),²⁸ in 1941 the Anglo–Russian invaded Iran and eventually the facilities built by Germans as railway, bridges, etc. beside the Iranian oil were used by Britain to help the Soviet Union and caused their victory in World War II. At this time, the existence of railway bridge turned Ahwaz to the principal built-up area of the oil fields.²⁹ Finally the Soviet Union forced Reza Shah to eliminated all Germans from Iran³⁰ and also leave the power to his son, Mohammad-Reza Shah. After Germans, once again the British built spaces achieved the opportunity of being improved and developed in the oil fields.



Third stage (1941-1951); Development of Ahwaz by AIOC as a Base for Oil Fields³¹

In 1947 the production rate was doubled that of 1939 and AIOC had recognized that M.I.S.³² was not the most suitable location for fields management and headquarters organizations and started to transit the headquarter from M.I.S. to Ahwaz regarding its water connection to Abadan and also its railway connection to Khorramshahr and Shahpur port. Because of the demand of pressing development, stores, workshops, repair services for mechanical transport, construction and maintenance plants were expanded in Ahwaz.

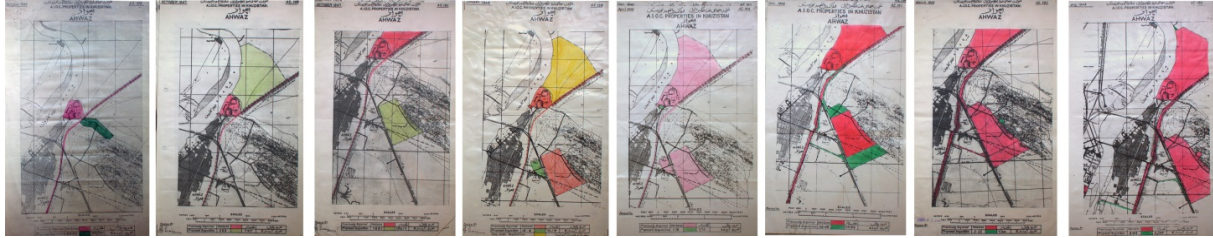


Figure 3: The process of Purchasing Lands in Ahwaz By AIOC from Iranian government 1948-1949, (in these chorological maps, the red lands means which have already been bought and the green lands means which are about to be bought). Source: BP Archive. Archref: 68939.

At this time nationalism and democracy gained a lot of values in Iran. Iranian politics, against Brits, insisted on improvement for Iranian worker's living conditions who were suffering from low wages, poor houses and facilities while the best situations belonged to British employees³³ AIOC, in order to not losing its beneficial position in the oil fields, tried to improve the oil cities conditions but their actions were too late. The Iranian oil minister Mossaddegh, officially nationalized oil in 1951 and later the oil properties and infrastructures were also declared nationalized.³⁴

Fourth stage (1951-1959); Oil Nationalization

With the formation of the "National Iranian Oil Company; NIOC in 1951" an entirely new situation arose in Iran. NIOC had the tremendous responsibility of all the southern oil industry, providing for the fast-growing internal demands. NIOC employed more than fifty thousand professional staff and labourers. The difficulties for the country for the halting of its oil income between 1951 and 1953, resulting in the infrastructural decay and economic downturn of the all oil cities, including Ahwaz.³⁵

In 1954 an agreement was signed between the Iranian Government and the NIOC as well as eight major foreign companies in the global Oil Consortium (five American Companies with a 40% interest; the British Petroleum Company limited with 40%; one Dutch Company with 14% and one French Company with 6%).³⁶ These numbers indicate why Americans became increasingly interested in Iran's oil fields, in parallel to their British counterparts. With the conclusion of the Oil Consortium, the country's income of oil increased nearly four times, and the idea of carrying out a development program for Ahwaz as the headquarter city gained importance. Urban transformations in Ahwaz began with the support of the Iranian oil managers. This was a national approach that continued alongside cooperation with foreign experts. Among development projects implemented in Ahwaz, plans in the various fields of housing, agriculture, communications, industries, social and public utilities, health and education had been most impressive.³⁷ Ownership of some lands that belonged to the oil company transformed for the workers to build houses for themselves.³⁸ In some neighbourhoods as Bagh-Moin and Amanieh in 50s a lot of magnificent residential villas had been built which reveal the development of culture and social taste for architecture in the city.

Because of the large part of British Petroleum in the Consortium of 1954, Ahwaz partly continued to be developed by the influence of the British actors but jointly with Iranian actors; the British architect James Wilson, continued his job in association with the prominent Iranian architect, Farmanfarmayan.³⁹

Parallel to the Brits and the Iranians, through the geopolitical oil interests of the Americans in the Iranian oil fields, Ahwaz crossed the threshold of global modern lifestyles and made huge differences to the period of British power. At that time, the welfare in oil company cities was much more than any other big city in the



country even the capital. The introduction of American culture which believed in better life conditions for workers made labour work better rising their motivations. Becoming the main agent of modernization, American design firms got involved in the expansion of Iranian cities, which led to the export of American Architecture to Iran.⁴⁰ In this regard, there are some documents revealing that “Doxiadis”⁴¹ who had developed a strong track record of work on planning and housing in Iran⁴² had schematic work on Ahwaz. (He had first visited Iran in 1957, to work with the Khuzestan Development Service, a regional development agency which was set up to develop the oil-rich region of Khuzestan⁴³).

Fifth stage (1959-1980); Oil Exploration and Operation in Ahwaz

In January 1959 one of the largest oilfields in Iran was found on Ahwaz’s doorstep and from 1962 onwards, Ahwaz began to yield its great hoard of oil. The city soon became the major central producer of the oil fields and prospered as a result of this new found wealth. The “Iranian Oil Exploration and producing Company” (IOEPC) increased the scope and importance of its activities in Ahwaz by bringing to the town nearly all functions previously located elsewhere; it brought into public view activities which for too long had been hidden away on remote oil fields. Finally, Ahwaz became the only Fields’ Headquarters for transport, engineering, maintenance and construction.

In the 1960s, the oil community became integrated into a rapidly developing city and possessed diversified industries and facilities (as university, hospital, etc). It planned to make oil company employees as permanent residents.⁴⁴ To provide for this, the city had become the centre of “Home ownership scheme” by “Iranian Oil Participants Limited” established on a pilot basis from 1958. It was the “Welfare Concept” of the Western societies to help company’s men to own their home and to pay for it from their monthly earnings.⁴⁵ The company regarding social aspect of the city, aimed to have result in satisfied and dependent employees with real roots in the community. For expending on this scheme in 1966⁴⁶ the company provided financial⁴⁷ and technical requirements to design and construct a variety of houses on freehold lands. Local enterprise made over 90% of the required materials and local contractors provided the labours. It was planned to design various types of houses to try to avoid mass-housing appearance which lack the sense of space in the city. In this theme, characteristic designs to outfit private lands, or renovations of old buildings had also been undertaken.⁴⁸



Figure 4-7 :Home ownership scheme by Iranian Oil Participants Limited, 1961, Source: BP Archive

Various inter-related industries were expanding still further and every industry started to expand its own zone in the city, containing industrial, official and residential facilities; in the north of the city, the lands were owned by the Oil Company, metal industry was located in the east; Army headquarters were in the west and Water and Electricity company was located in the south which is a good example with a specific design for company towns in combining the idea of the Garden city with a geometrical magnificent pattern in its urban planning.



Figure 10: Right: Water and electricity Company town in Ahwaz, source : Google earth. & Figure 11 & 12; middle and left: oil company mass housing projects, 1970s. Courtesy of the Iranian Oil Museum Archives.

The main Company Town was the “New Site” neighbourhood holding new headquarters of the “Iranian Oil Exploration and Producing Company”. The headquarter building was built as a representative tool to expose the power of the oil company, so it was designed in the most modern type of architecture of its time and pushed the process of modernization in architecture of the city. Moreover the whole neighbourhood continued its expansion by large modern residential and recreational areas, a new well-established emergency hospital, staff clinic, club, sports facilities, schools and cinemas to facilitate the modern urban design of the neighbourhood.



Figure 8: National Company of South oil fields in Ahwaz Source: Iranian Oil Museum Archives

In this period, Individual Iranian architects as “Kamran Diba” and “Farmanfarmayan” or “Nader Ardalan” tried to define Iranian modernity and re-read traditional concepts in a modern way.⁴⁹ They were inspired by the principles of organization and typology of traditional Iranian cities and the use of local material adjusted to the climate. This architectural and urban trend was based on localizing the process of modernization in Iranian cities. Thinking of climate and vernacular culture and trying to combine modern and traditional elements in low-cost housings (new towns) were signs of vernacular modernism shaped in the early 1950s and continued until the 1970s in Ahwaz. One good example in the city of Ahwaz is the expansion plan for Jondi-Shapur University in 1968⁵⁰ designed as a clear reference and an iconic modern embodiment of traditional Iranian architecture.⁵¹



Figure 9: Jondi-Shapur University Ahwaz. (1968-1978)



In 1967 the first comprehensive plan for the city of Ahwaz was developed by the Iranian architect and urban planner, "Ali Adibi". However, because of finding oil in planned areas, his urban plan was not implemented at the end.⁵² In 70s, transferring the role of oil exporting port from Abadan to Mahshahr and Shahupur for their larger capacities for arriving larger ships, Abadan lost its previous value and Ahwaz took the role of Abadan to be the most important mediator and dealer to the developed countries. Many high quality homes for managers and offices were built in the city containing 2000 residential houses in 1974 in the lands that belonged to the oil company after oil nationalization.⁵³ The fact of having no more valid comprehensive plan for the city expansion, responding to increasing population of company's employees, in a conflicted method of development to what explained above, unplanned suburbs grew and the city expanded in a disharmonic way. In order to deal with unplanned expansions of the city, the government supported planning of poor residential areas as "Chaharsad-dastgah" and "Kuy-sepidar" inspired by global modern mass housing trends which resulted in unsuccessful living areas in the city. Continuously low-cost housings for labours were built at the Ahwaz suburbs of "Zaitoun" and "Behrooz" in the following years.⁵⁴ All of these separated zones were contributed to various global exchanges which resulted a city bearing the scars of unplanned growth.

The developments of the city in 70s with new urban plans indicated a welcome break with the past; on the one hand, in 1975 Iran announced the creation of new towns in Ahwaz for which Skidmore, Owings & Merrill of Chicago were hired to conduct the planning;⁵⁵ and on the other hand, with financial support of the oil company and under the leadership of Iran's Prime minister of oil, Dr Eghbal,⁵⁶ once again Ali Adibi started to design a new comprehensive plan for the city between 1975-77. The role of urban plans in Ahwaz had grown with a gradual shift in emphasis from gardens for the private sphere to an increasingly public function. New factories located far away from residential areas and often surrounded by newly planted trees and shrubs. These urban planners had a significant role in making the city more ideal for living with socio-cultural developments. The local authorities were improving the appearance of the city, laying out new landscape projects as parks and gardens, rebuilding the river frontage.⁵⁷

Conclusion

In the centre of the Iranian oil cluster, the advent of diverse global alliances (British, German, American) were closely tied to Iran's political, economic, and cultural connections created a unique international network of stakeholders, officials, experts, engineers, architects and urban planners for urban and architectural transformation. The question of how providing to the different facets of the oil industry (oil extraction, transformation, administration, infrastructure and retail), had impacts on planning the city to convert it to a multicultural modern city in the border of various global flows, and their resultant cross-cultural exchanges is the main focus of this research. Since the discovery and the drilling of oil, the modern urban texture in Ahwaz is full of architectural and urban narratives which have been created by international actors and global flows. Transforming from a rural community to a modern city in less than a century caused a unique and complicated urban growth which is important for the global history of modern architecture and urban planning. The oil actors have co-shaped not only the built environment but also people's lifestyles through oil-related buildings, urban projects and their representations. Exploring the transnational urbanism of Ahwaz, this study revealed myriad cross-cultural exchanges between national and international actors. The arrival of the various actors transformed and localized the global flow of architectural knowledge and created native processes that are informative for the field.

Acknowledgements

The author is very grateful to professor Carola Hein, professor and head in chair of History of Architecture and Urban Planning at Delft University of Technology. Professor Hein is the promoter of author's PhD theses. This paper has been initially inspired by her research on global Petroleumscape and then revised by her appreciated comments. The author also wishes to deeply thank Dr. Pamela Karimi, associate professor in University of Massachusetts, for her valuable guidance in the research process and editing this paper. There are also great thanks to the staff of "BP Archive" and "Iranian Oil Museum" for kindly sharing their valuable archives to the author.



Endnotes

- ¹ Hein C, "Analyzing the Palimpsestic Petroleumscape of Rotterdam", *Global Urban History Blog* (2016).
- ² Ortigue, P. L. (2007). "Un empire dans l'Empire ? les villes de l'Anglo Iranian Oil Company et le modèle britannique de colonie pétrolière.." (An empire in the Empire? : Cities of the Anglo Iranian Oil Company and British Petroleum model colony)
- ³ Ahwaz, printed book by Iranian Oil Exploration and Producing Company, 1973.. Source : BP Archive. Archref:Arc65354.
- ⁴ With the start of war in 1980, people started to abandon the city while it was bombed and attacked by the Iraqis.
- ⁵ Company towns grew in oil spaces as residential complexes belonging to the oil companies, designed, invested, reserved and organized by them. The place of these towns were not dependent to the climate, economy or social issues but only concerns about the needs of the company.
- ⁶ Faateh, M: "Fifty Years of Iranian Oil", (1356).
- ⁷ In this new concession due to shah's tendencies for having relationships with Germany, the Anglo-Persian turned into the "Anglo- Iranian Oil Company (AIOC)".
- ⁸ Henniker, E. "Major Nationalisation: The Anglo-Iranian Oil Company, 1951, Britain vs. Iran" (2013).
- ⁹ Khatib-Shahidi, Rashid Armin. *German Foreign Policy Towards Iran before World War II : Political Relations, Economic Influence and the National Bank of Persia* [in English]. London: I.B. Tauris, 2013. p 41
- ¹⁰ (Ulen & Co.)
- ¹¹ (Philip Holtzman, Julius Bergerand and Siemens Bahn)
- ¹² Sadka, 'German Relations with Persia', p.81
- ¹³ *Rahahan-e Sarasari-ye Iran*, pp.100-101
- ¹⁴ Mojtahed Zade. R, & NamAvar Z. "DarJost-e-Juy-e Hovviate Shahri-e Ahwaz", 2016. P.177
- ¹⁵ Lemańczyk, S. (2013). "The Transiranian Railway – History, Context and Consequences." *Middle Eastern Studies* 49(2): 237-245.
- ¹⁶ ("Chehel-o-Hasht Family" residential complex)
- ¹⁷ *Rahahan-e Sarasari-ye Iran*, p.133.
- ¹⁸ A. Christensen, *Det Gamle og det Nye Persien* (København: Folkeoplysning Fremme, 1930), p.180.
- ¹⁹ Sadka, 'German Relations with Persia', p.81.
- ²⁰ "Hasht-Bangleh"
- ²¹ Beizapur, M. "Sima'ie Shahr'e Abadan", Sakhteman No.27, (1987).
- ²² Ahwaz, printed book by Iranian Oil Exploration and Producing Company, 1973.. Source : BP Archive. Archref:Arc65354.
- ²³ Which is visible in simple patterns of old urban spaces of Khorramkushk and Kut-Abdollah
- ²⁴ A good sample is "new Site" neighbourhood
- ²⁵ The Neglected Garden: "The Politics and Ecology of Agriculture in Iran Keith Stanley McLachlan", (1988)
- ²⁶ Khatib-Shahidi, Rashid Armin. *German Foreign Policy Towards Iran before World War II : Political Relations, Economic Influence and the National Bank of Persia* [in English]. London: I.B. Tauris, 2013.
- ²⁷ Asgharzadeh, A. "Iran and the Challenge of Diversity: Islamic Fundamentalism, Aryanist Racism, and Democratic struggles", (2007).
- ²⁸ Rahmani, A. "Germany: national interests and security of Islamic republic of Iran" 2006.
- ²⁹ Khatib-Shahidi, Rashid Armin. *German Foreign Policy Towards Iran before World War II : Political Relations, Economic Influence and the National Bank of Persia* [in English]. London: I.B. Tauris, 2013
- ³⁰ Henniker, Edward "Major Nationalisation: The Anglo-Iranian Oil Company, 1951, Britain vs. Iran" (2013)
- ³¹ The Anglo-Iranian oil company, Limitd 1947
- ³² M.I.S, or "Masjed-Soleyman" was the first headquarter of Khuzestan oil Cluster
- ³³ Ehsani, K. (2014). The Social History of Labor in the Iranian Oil Industry: The built environment and the Making of the Industrial Working Class (1908-1941). Leiden, The Netherlands., Universiteit Leiden. **PhD**.
- ³⁴ Henniker, E "Major Nationalisation: The Anglo-Iranian Oil Company, 1951, Britain vs. Iran" (2013).
- ³⁵ "Working with the operating companies in IRAN", by Iranian Oil Participants Limited & Iranian Oil Exploration and Producing Company & Iranian Oil Refining Company, 1965.
- ³⁶ Ibid.
- ³⁷ Ibid.
- ³⁸ Faateh, Mostafaa. *Fifty Years of Iranian Oil*. 1977.
- ³⁹ "Working with the operating companies in IRAN", by Iranian Oil Participants Limited & Iranian Oil Exploration and Producing Company & Iranian Oil Refining Company, 1965.
- ⁴⁰ Jeffrey W. Cody, "Exporting American Architecture 1870-2000", ed. Dennis Hardy, Planning, History and Environment Series (2003).
- ⁴¹ Mr. Doxiadis, who gained international prominence as one of the architects of Greece's postwar reconstruction, was the head of Doxiadis Associates, an urban-planning concern with offices all over the globe, including Washington.
- ⁴² DIARY-DOX-NA 1, Doxiadis Diary 1957.View all notes
- ⁴³The limits of scientific planning: Doxiadis and the Tehran Action Plan Ali Madanipour
The Khuzestan Development Service was modelled on the Tennessee Valley Authority (TVA) created by Franklin Roosevelt in 1933, as a model of government intervention for regional economic development for a river basin. See the *Time* magazine's article on Monday, 21 November 1960, for a description of the TVA and its influence on similar projects in other countries, including Khuzestan. <http://jcgi.pathfinder.com/time/magazine/article/0,9171,874224-2,00.html> (accessed July 1, 2008).
- ⁴⁴ Bavar, S. "Naft Va Tamaddon E Sanati" [Oil and Industrial Civilization]. 2016.
- ⁴⁵ Home ownership scheme by Iranian Oil Participants Limited, 1961, Source: BP Archive
- ⁴⁶ Henniker, Edward "Major Nationalisation: The Anglo-Iranian Oil Company, 1951, Britain vs. Iran" (2013).
- ⁴⁷ A total sum of 1,400,000 pounds was released by the Iranian Oil Operating companies,⁴⁷ Henniker, Edward "Major Nationalisation: The Anglo-Iranian Oil Company, 1951, Britain vs. Iran" (2013).
- ⁴⁸ Home ownership scheme by Iranian Oil Participants Limited, 1961, Source: BP Archive
- ⁴⁹ Arefian, F. F, Iradj Moeini, S. H. "Urban Change in Iran: Stories of Rooted Histories and Ever-accelerating developments." 2016.



⁵⁰ In the complex Diba also planned a residential neighbourhood for the staff of the university of "Jondi-shapur", which is also inspired by the vernacular Khuzestan architecture.

⁵¹ Diba D. & Dehbashi M. "Trends in Modern Iranian Architecture", 2004

⁵² Mojtahed Zade. R, & NamAvar Z. "DarJost-e-Juy-e Hovviate Shahri-e Ahwaz", 2016.

⁵³ Ghasemi, I. & Fulad, A. "Oil, civilization and urban growth"

⁵⁴ Mojtahed Zade. R, & NamAvar Z. "DarJost-e-Juy-e Hovviate Shahri-e Ahwaz", 2016. P.46

⁵⁵ Engineering-New Record, 1975, 24 April, PP.13-17; House and Home, 1975, 48, October, p,9

⁵⁶ The Oil Prime minister of the time

⁵⁷ Ahwaz, printed book by Iranian Oil Exploration and Producing Company, 1973.. Source : BP Archive. Archref:Arc65354.

Bibliography

Abtahi, Alireza. *Oil and Bakhtiaries*. Iran Historical research Institute, 2005.

Ahmad Pourahmd, Bahar Habibian, Mohamadreza Ahmadian. "An Analysis of the Physical Space of Ahwaz City."

Aitchison, Mathew. "The Architecture of Industry, Changing Paradigms in Industrial Building and Planning." *University of Queensland, Australia* (2014).

Alvarez, Richard Erben. *Oil and the Failure of Development : Iran and Venezuela in the Twentieth Century Dissertation:Ph. D. University of Utah*. [Salt Lake City] : The University of Utah, 2006.

Ansari, Mostafa. *The History of Khuzistan, 1878-1925 ; a Study in Provincial Autonomy and Change*. . Dissertation: University of Chicago, 1974.

Arefian, F. F, Iradj Moeini, S. H. "Urban Change in Iran: Stories of Rooted Histories and Ever-accelerating developments." 2016.

Atabaki, Touraj. "Far from Home, but at Home: Indian Migrant Workers in the Iranian Oil Industry." (2015).

Baker, Robert L., and Collection Mazal Holocaust. *Oil, Blood and Sand* [in English]. New York, London: D. Appleton-Century Co., 1942.

Bakhtiar, Dr Ghafar pur. "Bakhtiaries, Oil and British Government."

Bamberg, J.H. *The History of the British Petroleum Company: The Anglo-Iranian Years, 1928-1954*. . Cambridge University Press, 2006.

Bavar, Syrus. "Naft Va Tamaddon E Sanati" [Oil and Industrial Civilization]. 2016.

———. "Negah I Be Peidaii E Memari E No Dar Iran." (2007).

Beizapur, Mohammad. "Sima'ie Shah'r'e Abadan." *Sakhteman* 27 (1987).

Bjur, Mir Azimzadeh and Hans. "Transforming Cities. The Role of the Configuration of the Network of Public

Spaces in Urban Life." *Chalmers University of Technology, Sweden, The Swedish institute in Rome*.

Blum, Charlotte. "Germany and the Middle East." [In English]. *MIDDLE EAST BUSINESS WEEKLY. MEED* 39, no. 42 (1995): 8-17.

Çelik, Zeynep. "Empire Building: Orientalism and Victorian Architecture by Markcrinson." *University of California Press on behalf of the Society of ArchitecturalHistorians* (2017).

Choueiri., edited by Youssef M. *A Companion to the History of the Middle East*. Malden, MA : Blackwell Pub. Ltd, 2005., 2005.

Cody, Jeffrey W. "Exporting American Architecture, 1870-2000." [In English]. (2005).

Company, Anglo-Persian oil. *Iranian Oil Industry* 1927.

Company, British Petroleum. "Fifty Years in Pictures a Story in Pictures of the Development of the British Petroleum Group, 1909-1959." (1959).

Company, Iranian national oil. *Oil and Life*. 1969.

———. *Research on Iran's Oil Industry*. 1970.

———. *A Review of Iran's Oil Industry*. 1969.

———. "Soil of Oil." 1971.

Company, Iranian Oil Operating. *Story of Oil*. 1963.

Company, Iranian Oil Pipeline and Telecommunication. *Timeline of Iran's Oil Industry and Material Transportation*. 2012.

Company, London : British Petroleum. "Our Industry : Petroleum." (1970).

Company., British Petroleum. *Geological Maps and Sections of South-West Persia. Based on the Work of the Geological Staff of the Anglo-Persian Oil Company, Ltd. 1909-1933 [and] Anglo-Iranian Oil Company, Ltd. 1933-1951.*: [London], [Edward Stanford, Ltd.], , [1956].

Cooper, Bryan, and T. F. Gaskell. *North Sea Oil : The Great Gamble* [in English]. London :: Heinemann, 1966.

Crinson, Mark. "Modern Architecture and the End of Empire." (2003).

Cronin, Stephanie. *Soldiers, Shahs and Subalterns in Iran : Opposition, Protest and Revolt, 1921-1941*. Basingstoke ; New York : Palgrave Macmillan, 2010., 2010.

Cronin, Stephanie. *Tribal Politics in Iran : Rural Conflict and the New State, 1921-1941*. London ; New York : Routledge, 2007., 2007.

Damluji, Mona. *Petroleum's Promise: The Neo-Colonial Imaginary of Oil Cities in the Modern Arabian Gulf*

Downloadable Archival Material : English. eScholarship, University of California 2013-01-01.

Dashtaki, Khodabakhsh ghorban pur. *England & Bakhtiary- 1896-1925*. 2011.

Davenport-Hines, R. P. T., and Geoffrey Jones. *British Business in Asia since 1860* [in English]. Cambridge; New York: Cambridge University Press, 2002.

Ebrahimi, Abdolhossein Shiravi and Seyed Nasrollah. "Exploration and Development of Iran's Oilfields through Buyback." (2006).

Ehsani, Kaveh. "Boom & Bust." *iranian.com* (February 15, 2005).

———. "Oil, State, and Society in Iran in the Aftermath of Wwi." In *The First World War and Its Aftermath: The Shaping of the Middle East*, edited by Thomas Fraser: London & Chicago: Gingko Library Press, 2015, 2015.

———. "Pipeline Politics in Iran: Relations of Power and Property, Dispossession and Distribution." *South Atlantic Quarterly*. 116:2 (Spring 2017) (2017).

———. "'Politics of Property in the Islamic Republic of Iran.'" In *The Rule of Law, Islam, and Constitutional Politics in Egypt and Iran*, edited by Said Amir-Arjomand and Nathan Brown: Albany: State University of New York Press, 2013, 2013.

———. "Social Engineering and the Contradictions of Modernization in Khuzestan's Company Towns: A Look at Abadan and Masjed-Soleyman." *International Review of Social History* 48(03):361 - 399 · December 2003 (2003).

———. "The Social History of Labor in the Iranian Oil Industry: The Built Environment and the Making of the Industrial Working Class (1908-1941)." *Universiteit Leiden*, 2014.

———. "The Urban Process in Abadan 1929-1941." (2016).

Elling, Rasmus Christian. "The World's Biggest Refinery and the Second World War: Khuzestan, Oil and Security." (2017).



The 18th International Planning History Society Conference - Yokohama, July 2018

- El-Shakhs., edited by Hooshang Amirahmadi and Salah S. *Urban Development in the Muslim World*. New Brunswick, N.J. : Center for Urban Policy Research, c1993., 1993.
- Elwell-Sutton, Laurence Paul. *Persian Oil : A Study in Power Politics* [in English]. London :: Lawrence and Wishart, 1955.
- Emami, Alireza. *Oil and Iranian Development (Ph.D.) Utah State University, 1980.* : Logan, Utah : Utah State University , 1980.
- Faateh, Mostafaa. *Fifty Years of Iranian Oil*. 1977.
- Farmanfarmaian, Manucher. *Blood and Oil: Inside the Shah's Iran*. 1999.
- Farmanfarmayan, Abdol Aziz. "Evolution of Iranian Architecture from 1940 to 1978." *Architect*.
- Ferrier, R. W., and A. A. Fursenko. *Oil in the World Economy* [in English]. London [etc.] :: Routledge, 1989.
- Fieldhouse, David Kenneth. *Western Imperialism in the Middle East, 1914-1958* [in English]. 2009.
- Fields, John L Renne; Billy. *Transport Beyond Oil : Policy Choices for a Multimodal Future*
Washington, DC : Imprint : Island Press, ©2013., 2013.
- Filiu, Jean-Pierre, and David B. *Best of Enemies : A History of Us and Middle East Relations. Part 2, Part 2* [in English]. 2014.
- Fowler, Gwilym Roberts; David. *Built by Oil*. Reading, Berkshire : Ithaca Press ; Concord, MA : Distributed in the US exclusively by Paul & Co., ©1995., 1995.
- Fuccaro, Nelida. *Histories of City and State in the Persian Gulf. Manama since 1800*. Cambridge, Cambridge University Press, ISBN, 2009.
- Gharipour, Mohammad. "Contemporary Urban Landscapes of the Middle East." [In English]. (2016).
- GHEISSARI, ALI. "Contemporary Iran, Economy, Society, Politics." *Oxford University Press* (2009).
- Golzari, Nasser. *Architecture and Globalisation in the Persian Gulf Region* [in English]. [S.I.]: ROUTLEDGE, 2016.
- Graham, Robert. *Iran (Rle Iran D) : The Illusion of Power.*: Hoboken : Taylor & amp ; Francis, 2011., 2011.
- Ha'eri, Abdolhadi. *Nokhostin Ruyaruitha'ie Andishegaran'e Iran Ba Doruie'ie Tamaddon'e Borjuazi'e Gharb* [The First confrontation of Iranian Intellectuals With the Procedures of Western Bourgeois Civilization]. Tehran, Iran: Amir Kabir, 1988.
- Haghighi, Saied. "Sociology of Life and Building in Company Town." (2015).
- Hakimian, Hassan. "Institutional Change, Policy Challenges and Macroeconomic Performance: Case Study of Iran (1979)." (2007).
———. "Iran: Dependency and Industrialisation ". *Publication: The IDS Bulletin, v12 n1 (December 1980): 24-28* (1980).
- Hammond, Geoff. *The Last Khan*. Cork : BookBaby,, 2012.
- Healey, Alan Gilbert; Patsy. *The Political Economy of Land : Urban Development in an Oil Economy*. Aldershot, Hants ; Brookfield, Vt., U.S.A. : Gower, 1985, 1985.
- Hein, C. "Between Oil and Water. The Logistical Petroleumscape." *The Petropolis of Tomorrow* (2013).
———. "Global Landscapes of Oil." *New Geographies* (2009).
———. "Using Historical Analysis to Imagine New Fossil-Free Futures: Studing Global Petroleumscales in the Dutch Randstad." (2016).
- Henniker-Major*, Edward. "Nationalisation: The Anglo-Iranian Oil Company, 1951 Britain Vs. Iran." (2013).
- Hooshang Amirahmadi Affiliation: Rutgers University, New Brunswick, NJ 08903. "Popular Movements, Incidental Factors, and the State's Measures for Regional Development in the Islamic Republic of Iran
- Hoskuii, Seyed Mohammad Zaman Daryabary Vashtani & Morteza Beki. *Seir'e Yek Sad Sale'ie San'at'e Naft'e Iran, Tahavvolat'e Hoghughi Va Eghtesadi* [One Hundred-Year History of Oil Industry, Legal and Economic Transformations]. Tehran, Iran: Yazda, 2008.
- Hossein Bakhodaa, *, Morteza Almassia, Naser Moharamnejadb, Reza Moghaddasi, Mostafa Azkiad. "Energy Production Trend in Iran and Its Effect on Sustainable Development." (2012).
- Ikelegbe., Augustine. *Oil, Environment and Resource Conflicts in Nigeria*. Zürich : Lit, 2013.
- Institute, / Cultural Heritage of Iran. "List of Oil Buildings Heritage." 2016.
- Inyang, Eno F. *Comparative Development with Large Endowments of Capital (Oil Revenue) Three Case Studies Nigeria, Iran, Libya Downloadable Archival Material : English*. North Texas State University, 1983.
- Iran, National Oil Company of. "Proclamation [Proclamation] by the Temporary Board of Directors of the National Oil Company / National Oil Company of Iran." National Oil Company of Iran, 1951.
———. *Naft'o Zendegi* [Oil and Life]. Tehran, Iran: Sherkat'e Melli'e Naft'e Iran, 1969.
———. *Oil and Economic Development of Iran*. [Tehran] : [National Iranian Oil Co.], [1969?], 1969.
- Jafari, Peyman. "20150701 : Iran in the Middle East : Transnational Encounters and Social History (1)." [In English]. (2015).
- Julien Temple; Stephen Malit; Dr. Feelgood (Musical group), ; Product of Malitsky (Firm), ; Cadiz Music (Firm),. *Oil City Confidential*. [London] : Cadiz Music, [2013], 2013.
- Kano, Kiromasa. *Urban Problems and Urban Policies in Oil-Exporting Countries : The Case of Tehran*
Tokyo : Institute of Developing Economies, 1985., 1985.
- Karim Emami, Mehdi Adibpour *. "Oil Income Shocks and Economic Growth in Iran." (2012).
- Karimi, Z. Pamela. "Transitions in Domestic Architecture and Home Culture in Twentieth Century Iran." (2009).
———. *Domesticity and Consumer Culture in Iran : Interior Revolutions of the Modern Era*. London ; Routledge, 2013. Ebook Library
- KARL, TERRY LYNN. "Oil-Led Development: Social, Political, and Economic Consequences." *Stanford University Stanford, California, United States* (2004).
- Karshenas, Massoud. *Oil, State and Industrialization in Iran*. 1990.
- Katouzian, Homa. *The Political Economy of Modern Iran : Despotism and Pseudo-Modernism, 1926-1979* [in English]. London :: Macmillan, 1981.
- Ehsani K, LEIDEN UNIVERSITY. "Conclusion: Abadan and Oil Workers in the Interwar Years (1926-1941)." (2014).
———. "An Empty Land and a People without History."
———. "The Social History of Labor in the Iranian Oil Industry: The Built Environment and the Making of the Industrial Working Class (1908-1941)." 2014.
- Kedourie, Elie, and Edward Ingram. *National and International Politics in the Middle East : Essays in Honour of Elie Kedourie* [in English]. London, England ;: F. Cass, 1986.
- Kent, Marian, Economics London School of, and Science Political. *Oil and Empire : British Policy and Mesopotamian Oil, 1900-1920* [in English]. London [etc.] :: Macmillan [for] the London School of Economics and Political Science, 1976.
- Khani, Reza Amir. *Good Smells of Oil*. Ofogh, 2013.
- Khatam, Azam. "From the Company-Towns to the Oil Company's Staff Camps in Iran."
- Khatib-Shahidi, Rashid Armin. *German Foreign Policy Towards Iran before World War II : Political Relations, Economic Influence and the National Bank of Persia* [in English]. London: I.B. Tauris, 2013.
- Khazeni, Arash. *Tribes & Empire on the Margins of Nineteenth-Century Iran*. Seattle : University of Washington Press, ©2009., 2009.



- Khodadadian, Farshid. *Revaiaf-E Naft* [Oil Narrative]. Tehran, Iran: Ravabet Omumi'e Sherkat'e Melli'e Naft'e Iran, 2011.
- . *Oil Narrative, an Overview of the First Half of the Hundred-Year History of Iranian Oil* 2008.
- Kimbell, Lotfollah Nahai; Charles L. *The Petroleum Industry of Iran*. [Washington, D.C.] : U.S. Dept. of the Interior, Bureau of Mines : [For sale by the Supt. of Docs., U.S. G.P.O.], [1963].
- Koyagi, Mikiya. "Experiences of the Trans-Iranian Railway, a Review of Mobilizing Iran: Experiences of the Trans-Iranian Railway, 1850-1950." (2015).
- L.P.Elwell-Sutton. "Persian Oil, a Study in Power Politics." (1995).
- Labban, Mazen. *Space, Oil, and Capital, Ebook*. Abingdon [England] ; New York, NY : Routledge, ©, 2008.
- Lesser, Ian O., Institute National Defense Research, Security International, Program Defense Strategy, Corporation Rand, States United, Command Central, States United, and Staff Joint Chiefs of. "Oil, the Persian Gulf, and Grand Strategy : Contemporary Issues in Historical Perspective." [In English]. (1991).
- Levey, Zach, and Elie Podeh. *Britain and the Middle East : From Imperial Power to Junior Partner* [in English]. Brighton [England]; Portland, Or.: Sussex Academic Press, 2008.
- Longhurst, Henry. *Adventure in Oil : The Story of British Petroleum* Winston Churchill, 1959.
- Longrigg, Stephen Hemsley. *Oil in the Middle East : Its Discovery and Development* [in English]. London [etc.] : Oxford University Press, 1954.
- Mahdavi, Paasha. "Explaining the Oil Advantage: Effects of Natural Resource Wealth on Incumbent Reelection in Iran." (2014).
- Marchettini, Nadia. *The Sustainable City Iii : Urban Regeneration and Sustainability*. Southampton : WIT., 2004.
- Masoud Nasiri a, n, RezaRamazaniKhorshid-Doust a, NasserBagheriMoghaddam b. "Effects Ofunder-Developmentandoil-Dependencyofcountries on Theformationofrenewableenergytechnologies:Acomparative Study Ofhydrogenandfuelcelltechnologydevelopmentiniran and Thenetherlands." (2013).
- Matthewson, Timothy M. "The Architecture of Oil: The Colonial Revival in Beaumont, Texas, 1902-1914." (1989).
- McLachlan, K. S., and Unit Economist Intelligence. *Spending Oil Revenues : Development Prospects in the Middle East to 1975* [in English]. Qer Special ; No. 10; Qer Special ; No. 10. London : Economist Intelligence Unit, 1972.
- Mejcher, Helmut, Camilla Dawletschin-Linder, and Marianne Schmidt-Dumont. *The Struggle for a New Middle East in the 20th Century : Studies in Imperial Design and National Politics* [in English]. Berlin; Piscataway, NJ: Lit ; Distributed in North America by Transaction Publishers, 2007.
- Melville, Peter Avery; Gavin Hambly; C P. *The Cambridge History of Iran. Vol. 7, from Nadir Shah to the Islamic Republic*. Cambridge : Cambridge University Press, , 1991.
- Menore, Pascal. *Joyriding in Riyadh: Oil, Urbanism and Road Revolt*. New York: Cambridge University Press, 2014., 2014.
- Ministry of Interior, Department of Public Statistics, Tehran. *Ahvaz* : Tehran, 1960.
- Mohammad Reza Farzanegan a. "Oil Revenue Shocks and Government Spending Behavior in Iran." (2011).
- Mohammad Reza Pahlavi, Shah of Iran, 1919-1980. *Shahanshah of Iran on Oil : Tehran Agreement : Background & Perspectives*. London : Transorient, 1971., 1971.
- Mohammadi, Ali. *Iran Encountering Globalization : Problems and Prospects* [in English]. London : RoutledgeCurzon, 2003.
- Mokhtari, Eskandar. *Iran's Modern Architectural Heritage*. 2011.
- Mona Khorsand, Pouya Doulabi. "The Urban Features of Residential Architecture of Ahvaz." (2015).
- Moore, Elke aus dem. *Post-Oil City : The History of the City's Future*. Stuttgart : Institut für Auslandsbeziehungen ; Berlin ARCH+, c2011., Elke aus dem Moore.
- Mostafa Elm. *Oil, Power and Principle: Iran's Oil Nationalization and Its Aftermath*. (Syracuse, 1992), p. 28., 1992.
- Motadel, David. "Khatib-Shahidi, R.A. (2013).German Foreign Policy Towards Iran before World War Ii: Political Relations, Economic Influence and the National Bank of Persia." *Diplomacy & Statecraft* 26, no. 2 (2015): 377-79.
- Mowlazadeh, Mohammad Ali. "Evaluation of the Post-Revolutionary Urban Land Policy in Iran : Case Study Ahwaz City." *Boston Spa, U.K. : British Library Document Supply Centre, , no. Thesis/dissertation : Thesis/dissertation : Microfilm : English* (1991.).
- Naderi, Kamran Afshar. "Iran Industrial Architecture, between the Two World Wars." *Architect*.
- Naderi, Mohammad Hasan. "England, Oil and Power." In *Iran Development; Past, Present, Future.*, 2015.
- Nazem, Hossein. "Oil Concessions in Iran." (1946.).
- Newman, Peter, Dr. *Resilient Cities : Responding to Peak Oil and Climate Change*. Washington, DC : Island Press., 2009.
- Obeng-Odoom, Franklin, author. *Oiling the Urban Economy : Land, Labour, Capital, and the State in Sekondi-Takoradi, Ghana*. New York, NY : Routledge, 2014.
- Ortigue, Pauline Lavagne. "Un Empire Dans L'empire ? Les Villes De L'anglo Iranian Oil Company Et Le ModèLe Britannique De Colonie PéTrolieRe,." (2007).
- Parra, Francisco R. *Oil Politics : A Modern History of Petroleum* London ; New York : I.B. Tauris., 2004.
- Pearson, Ivan L. G. *In the Name of Oil : Anglo-American Relations in the Middle East, 1950-1958* [in English]. Eastbourne [England]; Portland, Or.: Sussex Academic Press, 2010.
- Potter, Lawrence G. *The Persian Gulf in Modern Times : People, Ports, and History*. New York, NY : Palgrave Macmillan, 2014., 2014.
- Rashidian, Nayyereh Zaman. *A Review of the History of Khuzestan*. 1992.
- rizvi, sandy isenstadt and kishwar. "Modernism and the Middle East , Modern Architecture and the Middle East: The Burden of Representation."
- Ross Barrett (Editor), Daniel Worden (Editor). *Oil Culture*. 2014.
- Ross, Michael Lewin. *The Oil Curse : How Petroleum Wealth Shapes the Development of Nations Ebook*. Princeton, N.J. : Princeton University Press, 2012.
- S. T. Orszulik. *Environmental Technology in the Oil Industry*. 2008.
- Sahab, Abbas. "Map of Ahvaz." Tehran: A. Sahab, 1960.
- Schayegh, Cyrus. ""Seeing Like a State": An Essay on the Historiography of Modern Iran." *Cambridge University Press* (2010).
- Schroeder, Dieter, Joachim Schroeder, Fernsehen Bayerisches, Deutschland Arbeitsgemeinschaft der Öffentlich-Rechtlichen Rundfunkanstalten der Bundesrepublik, Production Preview, and Films Landmark. *Fight for Oil : 100 Years in the Middle East : A Film*. Falls Church, VA: Landmark Media, 2007.
- Seyed Mohammad Zaman Daryabary Vashtani, Morteza Beki Hoskuii. *A Hundred-Year History of Oil Industry in Iran*



- Legal and Economic Developments*. yazda, 2008.
- Silverstein, Ken. *The Secret World of Oil* [in English]. 2014.
- Sistani, Iraj Afshar. *Negahi Be Khuzestan* [A View on Khuzestan]. Tehran, Iran: Nashr'e Honar, 1987.
- Somayeh alaly nhryvsfy1, Manochehr javanmardi2*. "Measuring the Development Level and Ranking of Countries of Ahvaz Using Human Development Index Model." (2015).
- Stewart, Richard A. "Sunrise at Abadan : The British and Soviet Invasion of Iran, 1941." (1988).
Studies., Djavad Salehi-Isfahani; Oxford Institute for Energy. *Government Subsidies and Demand for Petroleum Products in Iran*. Oxford : Oxford Institute for Energy Studies, 1996.
- Szeman, Imre. "The Cultural Politics of Oil: On Lessons of Darkness and Black Sea Files." (2010).
- Szeman, Imre, and Dominic Boyer. *Energy Humanities : An Anthology* [in English]. Baltimore :: Johns Hopkins University Press, 2017.
- Talinn Grigor, Deanna Bridge. "Review: Architecture and Globalisation in the Persian Gulf Region, by Murray Fraser and Nasser Golzari, Eds." *Journal of the Society of Architectural Historians* 74, no. 4 (2015): 509-11.
- Tibi, Bassam. *Conflict and War in the Middle East, 1967-91 : Regional Dynamic and the Superpowers* [in English]. New York: St. Martin's Press, 1993.
- Touraj Atabaki, Kaveh Ehsani. "Oil and Beyond: Expanding British Imperial Aspirations, Emerging Oil Capitalism, and the Challenge of Social Questions in the First World War." In *The World During the First World War, Edited by Helmut Bley and Anorthe Kremers*, edited by edited by Helmut Bley and Anorthe Kremers: Essen: Klarte Verlag, 2014, 2014.
- Ulrichsen, Kristian. *The First World War in the Middle East* [in English]. 2014.
University), Jonathan Silver (LSE/Durham. "Petro-Urbanisms: Urban Futures on the Oil Frontier." (2014).
- Vahid Alipour; Jonathan Dewsbury; University of Manchester. School of Mechanical, Aerospace and Civil Engineering. *Test Reference Year for Ahvaz, Iran.*: Manchester : University of Manchester, , 2011.
- Valentine M. Moghadam. "'Industrial Development, Culture, and Working Class Politics: A Case Study of Tabriz Industrial Workers in the Iranian Revolution'," *International Sociology*, vol. 2, no. 2, 1987, pp. 151-75. (1987).
- Valizadeh, Iraj. "Anglo and Bungalow in Abadan, ." (2010).
- Walker, A R. *Oil-Dependent Economies and Port Development : The Gulf States of the Middle East*. 1984.
- Watenpugh, Keith David. "Being Modern in the Middle East : Revolution, Nationalism, Colonialism, and the Arab Middle Class." [In English.]. (2014).
- Williamson, John Woolfenden. *In a Persian Oil Field; a Study in Scientific and Industrial Development* [in English]. London: E. Benn Ltd., 1927.
- Wright, Denis, 1911-2005. *The Persians Amongst the English : Episodes in Anglo-Persian History*. London : I.B. Tauris, c1985., 1985.
- Yergin, Daniel. *The Prize : The Epic Quest for Oil, Money & Power* [in English]. Free Press trade pbk. ed. ed. New York :: Free Press, 2008.
- Zagagi, Nimrod. "Urban Area and Hinterland: The Case of Abadan (1910-1946)." (2016).
- Zahra Namavar1*, Rouhollah Mojtahedzadeh2. "Economy, the Fundamental Element of Urban Identity of Ahvaz." (2015).



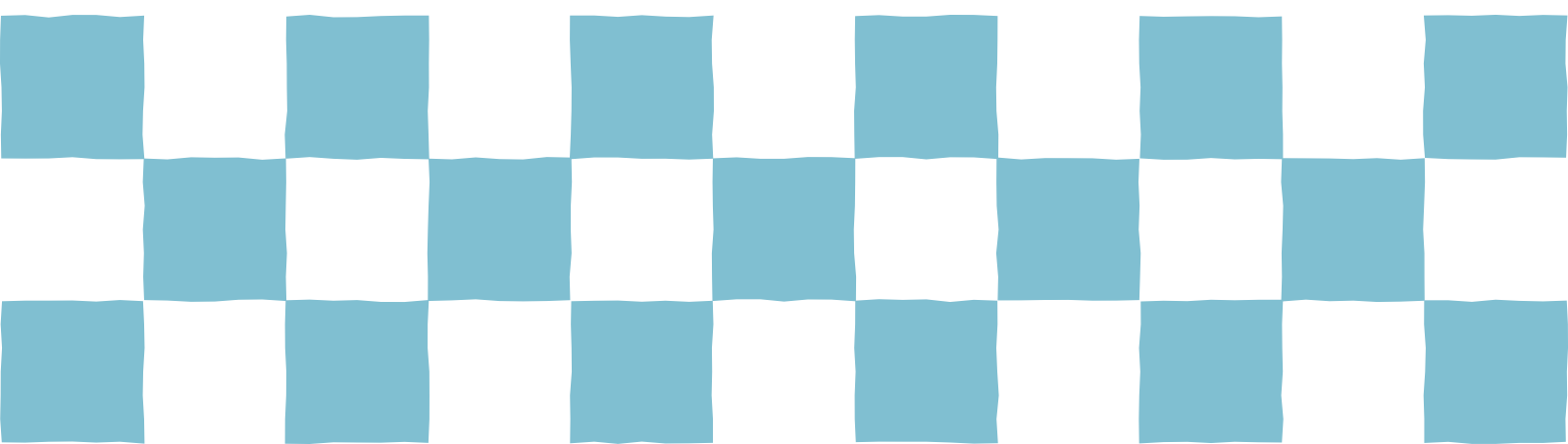
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

10 Planning Modern Shanghai and Tianjin



The Urban Change in Modern Shanghai Descript by Maps, 1840s-1930s

Gao Xi (Tongji University) and Peng Nu (TONGJI UNIVERSITY)

The urban change in modern Shanghai is a complex process which fused a lot of reasons in many ways. It is also the most important window to understand the urban modernization in china coastal city. This paper described the process of urban modernization in modern Shanghai according the analysis of the map of modern shanghai urban renewal. It separated to three parts. The first part, from river to sea, new and old existed together. Following the port opening, the old Chengxiang area and the new settlements area dramatic existed together. The second part, from street to the road. The new city views in settlements influenced the old town. The administrative department initiated the original change in Chengxiang area concentrate on building roads. And the influence from old land shape to the settlement' s road plan was different in British and French settlement. The third part, port areas and the city. With the city development, the bund function changed. And the relationship of Shiliupu dock and Chengxiang area was intimate. The general city structure、 road structure、 relations of port and city area, as the marks of city changing which can be seen from the maps published in this period.

Planning Greater Shanghai: 1927—2017

Richard Hu (University of Canberra)

This article offers a complete narrative of modern planning in Shanghai. It started from 1927 when the Nationalist Government established Shanghai Special Municipality and started preparing the first modern plan in Shanghai and China, to 2017 when a new plan “Shanghai 2040” was submitted for the State Council’ s approval. It bridges two historic divisions that have hindered the writing of Shanghai’ s planning history: the division between the Nationalist Government and the Communist Government in 1949, and the division between a planned economy and a market economy in 1978. Thus it structures Shanghai’ s modern planning in three broad periods – the Nationalist period (1927-1949), the planned economy period (1949—1978), and the market economy period (1978-2016) - with sub-periods within each of them. The article outlines the master plan documents, making process and approach, and political, economical and social contexts. By doing so, it summarises the thematic continuity and change in the plans, and identifies the endogenous and exogenous factors that contributed to the formation of the planning themes. It further critically reviews the latest plan “Shanghai 2040” that sets a vision of Shanghai as an excellent global city. The article concludes with a few observations on the macro-history of planning Shanghai. First, planning Shanghai has been a national strategy, the Nationalist Government and the Communist Government alike, constituting an important component in China’ s nation building. Second, planning Shanghai has been highly political and ideological, subject to strong political wills and pushed by political leaders at the time. Third, planning Shanghai has been heavily influenced by international planning diffusion, from the West first, and the Soviet Union then, and the developed world again in recent decades. Fourth, planning Shanghai approach remains top-down, elitist, rational, and expert-centric, with public consultation and participation insufficient or tokenism. Lastly, planning Shanghai tools remain highly physical, technical, design-based, and infrastructure and land use-controlled, which prioritise economic growth far ahead of environmental and social concerns.

The Griffin Plan for Shanghai, 1904-1906

James Weirick (The University of New South Wales)

An event in Yokohama in January 1906 – the accidental death of the Chinese trade commissioner to Japan, Huang Kaijia 黄开甲 (1860-1906)– seems to have ended one of the most intriguing city planning ventures of the early modern era. Two years previously, as Imperial Vice Commissioner to the St Louis Exposition, Huang Kaijia was almost certainly the ‘delegate from the Chinese government’ who commissioned the design of a ‘new city at Shanghai’ from the American architect and landscape architect Walter Burley Griffin (1876-1937)

This paper reviews the testimony emanating from Griffin and his colleagues on which the claim for a Shanghai city plan from 1904-1906 is based; the modernising impulses in Shanghai at the time; and the broader context of ‘New China’ reforms initiated by the Qing Dynasty in the first decade of the twentieth century. From the available descriptions, the following details of the proposal can be established. First, the project was a Chinese initiative, not a ‘colonial’ venture associated with the Foreign Settlements. Second, the proposal involved ‘a modern city on a new site’ located ‘a few miles’ from the traditional walled city. Third, the project was conceived as an alternative to the ‘narrow streets, swarming tenements and insanitary areas’ of the ‘old city’ – and, indeed, included the proposal to ‘abandon the old city.’ Fourth, Griffin ‘drew the plans for the new Shanghai in detail.’ Based on archival research, critical review of contemporary newspaper accounts and recent scholarship on the ‘tradition vs modernity’ debate in Chinese historiography, the paper seeks to address the question, what does the fragmentary evidence of the ‘Griffin Plan for Shanghai’ tell us about innovation and change in urban thinking before the Chinese revolution of 1911; the continuity of ideas across the revolutionary divide; and the distinctive fusion of modernity and poetic power in the successor to the Shanghai scheme in the Griffin oeuvre, the winning entry in the Australian Federal Capital competition of 1911-1912.

Why not Bund, but Victoria Road; Water level – the landscape of concessions in Tianjin (Tientsin)

Yichen Liu (Toyohashi University of Technology)

Background

In Asian’ s modern history, many European and American powerful countries have created many concessions there, especially in China. The most typical ones were Shanghai’ s combined concessions and Tianjin’ s nine individual concessions. Concessions were often built by the sea or river because they relied heavily on water for transportation. The most well-known sample was Shanghai’s common concession. Tall foreign commercial facilities were facing Huangpu River, which have created a beautiful landscape. However, in Tianjin, business, commercial facilities did not face Haihe River, instead they face inland - Victoria Road.

Purpose

The aim of this paper is to explore the reasons behind the fact that Concessions commercial facilities in Tianjin were built facing Victoria Road instead of Haihe river. This paper is to focus on the hypotheses that in Tianjin, commercial facilities such as the Western Bank did face Haihe River in the early days of the settlement of the British Concession when the majority of transportation was on Haihe river. However, due to the deteriorating of Haihe River the transportation on water declined, the main means of transportation was no longer on the river, it shifted from ships to trains and cars on the road.

In 1900, the boxer rebellion (義和團運動) in Tianjin had caused damages to many buildings in the concession which speed up the change. During the boxer rebellion many business facilities were destroyed and new opportunities presented themselves. The boxer rebellion damaged many buildings and commercial facilities, due to all the above factors many foreign firms decided to either renovate or build complete new buildings for their business. As we have discussed the main transportation had shifted from water to road, business facing Victoria road instead of facing Haihe river would bring many benefits to the business. As a result, the well -known buildings and commercial centers in Tianjin can be found facing Victoria road, unlike those in Shanghai facing the water forming the bund.

Conclusion

Transportation’ s shift from water’ road represented the advance of modernism. In many countries, this process took a long time, while in Tianjin it happened suddenly because of the deteriorating of Haihe River and the Boxer Rebellion. It also created the need and the opportunity for a port to be built at estuary where Haihe joins Bohai sea. Taku Port was established as a result.



The Urban Change in Modern Shanghai Descript by Urban Maps, 1840s-1930s

Gao Xi

PhD, Department of Architecture and Urban Planning, Tongji University, gao_public@foxmail.com

Peng Nu (corresponding author)

Professor, Department of Architecture and Urban Planning, Tongji University, pengnu@tongji.edu.cn

NSFC(NO.51178314)

Abstract

The urban change in modern Shanghai is a complex process which fused a lot of reasons in many ways. It is also the most important window to understand the urban modernization in china coastal city. This paper described the process of urban modernization in modern Shanghai according the analysis of the map of modern shanghai urban renewal. It separated to three parts. The first part, from river to sea, new and old existed together. Following the port opening, the old Chengxiang area and the new settlements area dramatic existed together. The second part, from street to the road. The new city views in settlements influenced the old town. The administrative department initiated the original change in Chengxiang area concentrate on building roads. And the influence from old land shape to the settlement's road plan was different in British and French settlement. The third part, port areas and the city. With the city development, the bund function changed. And the relationship of Shiliupu dock and Chengxiang area was intimate. The general city structure, road structure, relations of port and city area, as the marks of city changing which can be seen from the maps published in this period.

Keywords: *Modernization of Shanghai, Map, Road plan, Settlement, Chengxiang, Port*

The urban development in modern Shanghai is complex. Integrating the influences and effects from the various aspects, the urban spatial pattern with a sense of collage is formed. Due to the different backgrounds of designers, the urban maps of Shanghai in this period have different on the drawing styles, spatial scopes, and contents. As the most intuitive and effective pictures for responding a city, the urban maps truly reflect the development of urban space in the modernization of modern Shanghai, and even the gradual formation of its structure layout.

There are many research on the city maps of modern Shanghai, which are not limited to the urban planning history. For example, Chong Zhong discussed issues such as the map drawing level, the development of the printing industry, and the role of maps in social life, etc. From the perspective of planning history, Baihao Li, et al, outlined the several stages of the urban development in Shanghai from 1843 to 1949 from the formation of modern Shanghai and combining with the maps and historical events. Qian Sun discussed the urban construction of the public concession and the French Concession from the perspective of system and norms, as well as the effect of the urban planning by the Shanghai municipal government on its urban form after 1927. There also are some most recent research, such as the "Shanghai City Map Integration" by Xun Sun and Chong Zhong published in August 2017. This book is about a complete and systematic compilation of the Shanghai maps from 1504 to 1949, and some map information in this paper is derived from this book.

In this paper, it selects five types of Shanghai maps from the beginning of the establishment of the concession in Shanghai in 1843 to the enemy-occupation in 1937 as the important evidence for the modernization of Shanghai. 1. In the late Qing dynasty, there were freehand-painted intentional maps that painted with Chinese traditional map-making methods. 2. In the early period of concession, designers designed the practical local mapping maps and the first full actual surveyed maps. 3. At the beginning of the 20th century, during the period of accomplished basic urban construction in the concession, the authorities of the Public Concession and the French Concession make the road planning maps and the cadastral maps for urban development. 4. At the end of the 19th century, influenced by the Western survey maps, the Chinese modern publishing group painted the actual survey map of Shanghai, which was first painted by the Chinese. 5. In the 1920s, after the establishment of the Shanghai special city by the national government, the planning map of roadway system for the Shanghai special city was drawn.

The analysis and comparison of these maps drawn by different groups and representatives of regimes visually illustrate the changes in the urban structure of modern Shanghai. The inner core of the city was constantly moving out of the estuary, from the city developing along the river to the city developing toward the port; the dual compatible urban form was produced due to the coexistence of the traditional feudal towns and the modern cities



in the concessions; the narrow, curved streets and lanes in the traditional towns have slowly transformed into the modern urban street systems suitable for automobile traffic; Relying on the development of the port, in the urban structure, modern Shanghai was transformed from the integration of port and city to the separation of port and city.

1.From the river to the sea, the old and the new exist side by side

Like any other modern port cities, Shanghai is a port city transformed by the modernization of urban planning brought by opening ports and establishing settlement. After Opium War in the late Qing Dynasty, British settlement began to be established in November 1843. By 1849, the United States and France built settlements in the Hongkou region and the old town north adjacent areas respectively. With the colonization development of cities rented by the Western countries, Shanghai has changed from a traditional town to a prosperous modern city. The city center has also been transformed from Chengxiang area with traditional town into a rented Bund-centered area. Changes in the city center has also been identified in the subsequent urban development. Shanghai also formed the situation that the old town and the settlements, the old traditional town and the new modern city exist side by side, respectively governed by Tao-tai, the local administration organization of Qing government and municipal council independently built and organized by settlement. In 1850s and 1860s, it can be seen that the old and the new exists side by side from the map of old urban area and settlements. Administrative division continued until 1945 and the division on the spatial form was still clearly discernible.

It can be seen from the map of Shanghai county authored by Zhao Zhihe made in 1851 Fig.1. The map of old urban area were appeared in the local chronicles in the form of freewill drawing without pursuit of accuracy of the dimensions. It mainly covered the government offices, ancestral halls, public temples, city walls, gates, rivers, bridges, etc. The drawing method of "flange city wall" is adopted. There is no drawings for roads. The description of landmark buildings are in the



Figure 1 :Zhao Zhihe. *The Map of Shanghai County*. 1851 [日.山下和正藏]

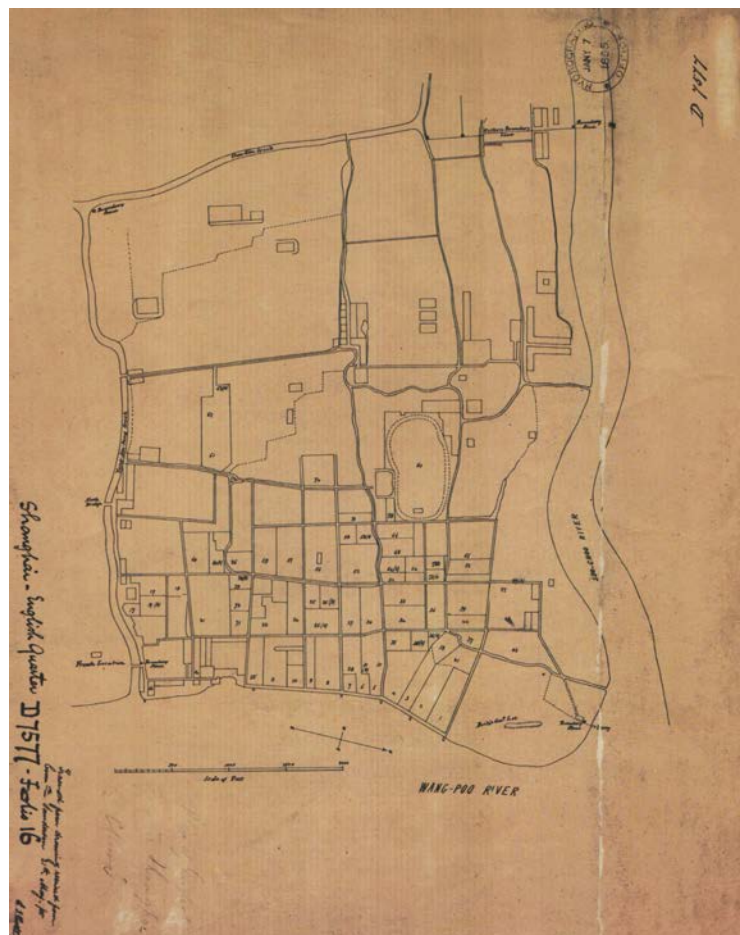


Figure 2: Commander Sanderson.*Shanghai English Quarter*.1851-1852[United Kindom Hydrographic Office]



form of symbols and names inside the frame. At the same time, it can be seen from Shanghai-English Quarter made from 1851 to 1852 Fig.2, the full figure of contemporary British settlement in Shanghai has already adopted the method of actual measurement drawing, in which the scale and compass have appeared. The main features of the map are roads, plots and its serial numbers. It is already in the same form as an modern actual measured map.

The situation that old urban area and settlements exist side by side can be seen from the map of City, Settlements and Environs in Shanghai in 1861. Fig.3 This map is considered to be the pioneer Shanghai map fully manifested integral old urban area and leased areas in the existing actual measured Western maps.¹ The map are mainly marked with information about roads and waterways, as well as British and French fortifications against the Taiping Heavenly Kingdom. Part of old urban area is surrounded by water and city walls and the internal road structure is influenced by the topography and waterways. The road structure in the settlement is more square and the street blocks are more regular.



Figure 3 :City, Settlement And Environs of Shanghai.1860-1861.[The National Archives, United Kingdom]

2.From street to the road

2.1 British settlement roads controlled by old roads and topography shape

It can be seen from the map of City, Settlements and Environs in Shanghai in 1861, Fig.3 that the road structure in settlements is largely different from the road structure of Chengxiang area with twists and turns, multi-small road and guillotine road. In 1845, British settlement's first consul, George Balfourⁱ agreed with Shanghai Taotai about The Shanghai Land Regulationsⁱⁱ which began to contain provisions on roads. The Shanghai Land Regulations stipulated the network of nine roads. Before Shanghai opened, there were six east-west towards river avenues, three east-west beach roads and two north-south passages between Chengxiang area and Wusong River. The Shanghai Land Regulations in 1845 does not need the expropriation procedure for private lands because of the public attribute of the original road, so the newly stipulated settlement road takes the original road system as the foundation of the road structure. But land regulation

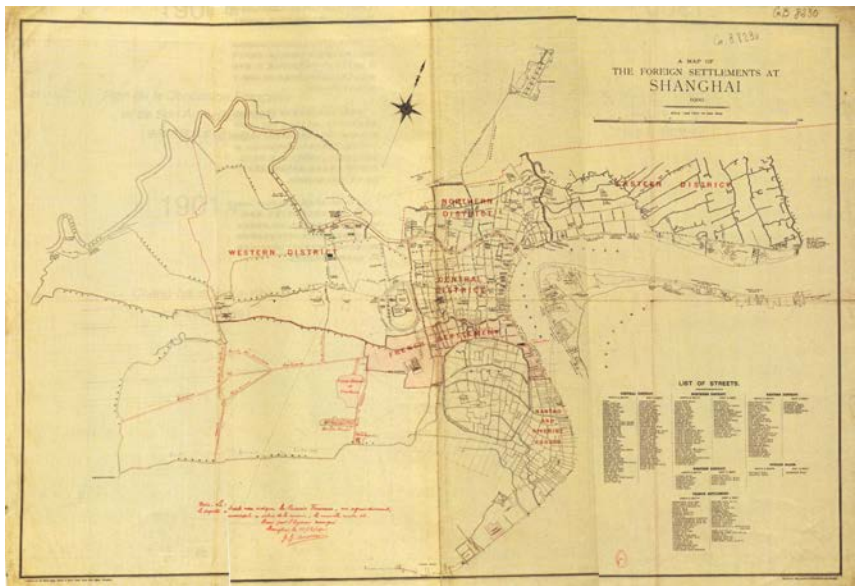


Figure 4:A Map of The Foreign Settlement at Shanghai,1900.[The National Librararys of France]

ⁱ George Balfour, British settlement's first consul .He arrived in Shanghai on 8 November 1843 aboard the steamer Medusa, and immediately began discussions with the ranking local Chinese official, the Taotai , on the opening of foreign trade and the site of a foreign settlement. He left the post of Shanghai consul in 1846, and was replaced by Rutherford Alcock.

ⁱⁱ The Shanghai Land Regulations,1845,which was the basis of the establishment of british settlement. It stipulates the geographical scope of the settlement and provides the legal basis for establishing the self-governing council.It also make great contribut to the urban plan of Shanghai.



rebuilds the old roads and defines road grades. "The width of the roads along the Huangpu River (now the Zhongshandongyi Road) and the Tasheng Old Road (today's Jiujiang Road) is" 2.5 Zhangs (about 8.33 meters) measured by the Customs". Other converted roads and new roads are all 2 Zhangs(about 6.67 meters).² In addition, the plot of the small road is also divided in accordance with plot edge of the original lands. Because of the dense water network from Chengxiang area to the Wusong River, the settlement continues the old road and the natural form of the land to build roads. But the shape of road is seems about 150-200 meters in grid shape regular and just like the result of top-down road planning.

2.2 Planning awareness for road structure in French settlement

Compared with the road structures in the British and French settlement, the road structure of French settlement presents a more regular feature. Different from the road construction method followed the original road and private land boundary in British settlement, the city management agency of the French settlement has more planning consciousness on the design of the road structure. In particular, it is reflected in the out-of-boundary road plan in the French settlement expansion area after 1900. Tri-junction is an important motif in Baroque city. In the Map of the Foreign Settlements at Shanghai in 1900 Fig4, J.J.Chollotⁱⁱⁱ's mark shows that the straight and wide Paui Brunat Road(today's Huaihai Road) and the intersecting Liou ka Za Road(today's Donghu Road) and Big Grave Road(today's Fenyang Road) formed a three-way junction. In the 1901 map of Chang-hai et Zi-Ka-Wei Fig.5, we can see the comparison between the straight standard planning roads and the original natural, small land division line. There is a difference between the urban form of the three-fork intersection planned in the French settlement expansion area and that of the three-fork junction of the Baroque city. The three-fork intersection in Baroque city is built from a dense building facade into a square of the city. Because of the shortage of the building construction, the restriction of the retreat of the building and the practice of the boulevard, the space form of the city square can not be formed in the three-fork intersection of the French settlement expansion area.

By 1914, the French settlement had expanded to Xujiahui. The council also made a detailed road plan to fill the roads in the expanded area. Adopt the grid of roads to fill the street plots, more suitable for the interests of real estate developers. Further implementation of Baroque road planning at some public road nodes: such as design a triangular urban garden at Boissezon Road(today's Fuxing West Road) and Alfred Road(today's Wulumuqi Road) and Joffre Road(today's Huaihai Road) and the

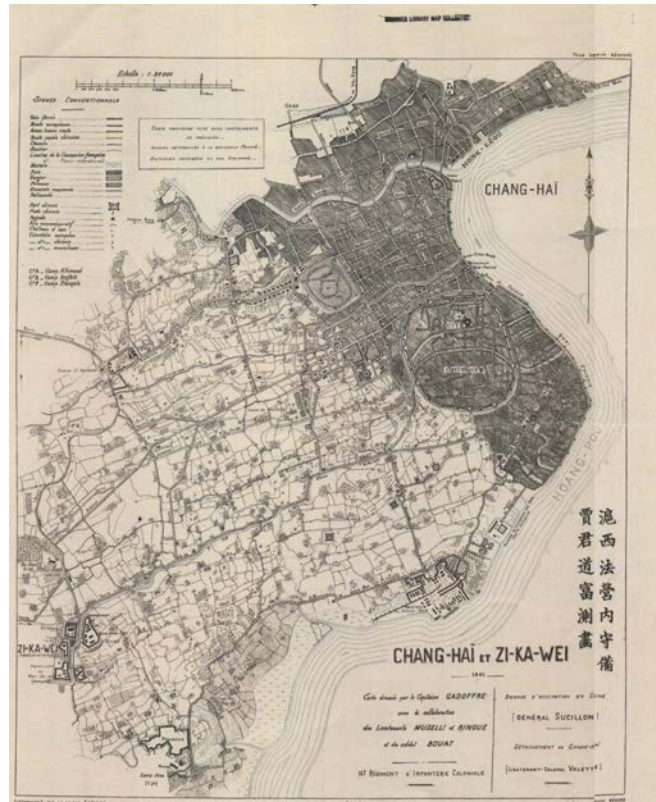


Figure 5:Gadoffre.*Chang-hai et ZI-KA-WEI*.1901.[Earth Science Library and Map Collections,Stanford University]

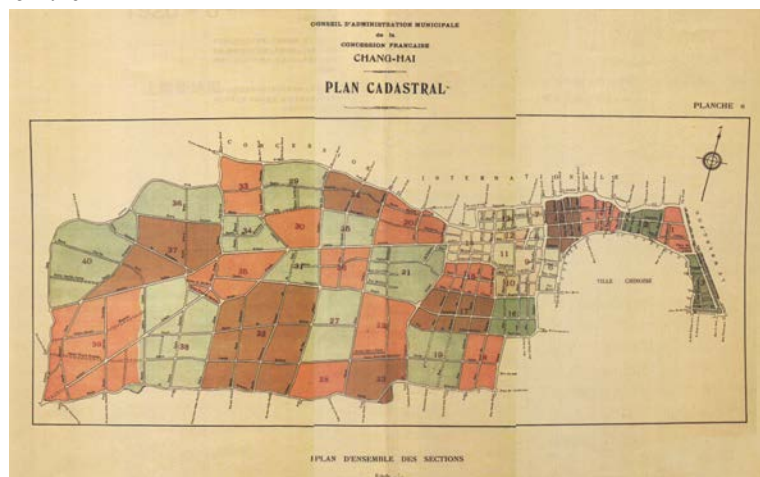


Figure 6: Municiple Administrate Council of French Settlement,*Plan Cadastral*.1925[Shanghai Library]

ⁱⁱⁱ J.J.Chollot,Chief engineer of French Concession municiple bureau from 1893 to 1907.



radiation plaza at three important junctions.³ Fig.6 The urban situation of this road design is still preserved.

2.3 Road reconstruction of streets and alleys in Chengxiang area

After 1850s, influenced by the actual-measured map drawn by westerners in the early modern times, the map drawing in our country also changed greatly and formed a series of actual survey map activities based on the Complete Map in Shanghai Chengxiang Area and Settlements. Fig.7 It lasted until the end of the 19th century and also reflected the road of urban construction in 1895 after the city's earliest municipal organization-the establishment of the Nanshi Road Bureau.

Traditional Chinese cities and towns are characterized by street space, but most of the streets are narrow, unsuitable for automobile traffic and lack of drainage lighting and other infrastructure. In order to transform the present situation, the main task of the Shanghai Nanshi Road Engineering Bureau established in 1895 is to transform the streets and build the roads.⁴ Formed the modern urban reconstruction activities dominated by the demolition of city walls, the filling of rivers, the building of roads, the construction of docks and the construction of bridges.

Comparing Complete Map of Shanghai Chengxiang Area and Settlements painted by Xu Yucang in Qing Dynasty in 1884, Dian Shi Zhai amendment^{iv}, and Chengxiang part in Shanghai Nanshi map in 1914 Fig.8, we can see the change of urban space caused by these urban renovation activities. From 1912 to 1914, the north and south walls were demolished successively and a round-the-city road was built on the original city foundation, namely, Fahuaminguo road (now Renmin Road) and Zhonghua Road. A series of creeks have also been levelled into roads. History in this period is also described in the map of Shanghai Nanshi Area in 1914 Fig.9: "management in Nanshi area pays attention to the gradual reconstruction of traffic roads over the years. It is difficult to record all those expanded roads, and those who build roads with silt creams, such as those who build roads in the Central District, such as the Black Bridge Bang in the Central District, the Fu you Road, the Park Bang, the Ning River Road, the Pavilion Bridge Bang, the Yunliang River Bang, the Penglai Road, the Penglai River Bang, the Pure Land Road, and the Shou Shu Bang are the Shangwen Road`` The northern half of the city has been filled in by



Figure 7: Xu Yucang, Complete Map in Shanghai Chengxiang Area and Settlements. 1880[China National Library]



Figure 8: Chengxiang Part in Complete Map of Shanghai Chengxiang Area and Settlements painted by Xu Yucang, 1884, and in Shanghai Nanshi map, 1914.[Shanghai Normal University]



Figure 9: Shanghai Municipality Annals. Explanation of Map of Shanghai Nanshi Area. 1914.[Shanghai Normal University]

^{iv} Dianshizhai is one of the earliest and powerful Lithographic press in China. Ognized by British man Ernest Major in Shanghai 1876.



*the county administration, and the southern half of the city will continue to be built. The old city will be rebuilt and city appear to flourish. "*⁵

The spatial form of the traditional towns in Shanghai where houses are built first and then the streets and lanes. The traffic pattern of traditional towns in the south of the Yangtze River are river system. Chengxiang have formed a road-oriented urban structure after the municipal departments have learned the urban development model in settlements building roads before house construction and promoted the modern city development of Shanghai.

2.4 The pioneer road planning in modern Shanghai

Mr. Sun Zhongshan first put forward the "Great Shanghai Construction Plan" in the General Plan of China in 1922, which was targeted to build Shanghai into an international commercial harbor city as the largest port in the East. ⁵ After the establishment of Shanghai Special City in 1927, municipal council of national government proposed the "Great Shanghai Plan". As the Chinese's earliest and most complete urban planning in Shanghai, it was the imitating stage for western urban planning in modern times.

The Great Shanghai Plan incorporated the functional zoning and rapid transit ideas in contemporary western urban theory. In the regional zoning plan of downtown Shanghai, the central district of Shanghai is divided into five functional areas: administrative district, industrial zone, commercial port district, commercial district and residential area. It can be seen from the map of the road system in Shanghai center 1932 **Fig.10**, central area uses a radial and circular network of main roads and the composition of buildings in the city center, making roads "like starlight, while city downtown occupies the center of the road obtaining the tendency to control the overall situation." ⁶ The road emphasizes the layout of geometry, organized by diagonal lines and small grids to emphasize central axisymmetry. The urban space in the central region demonstrates the mixture of Baroque centralized space and modernism functional partitions. The

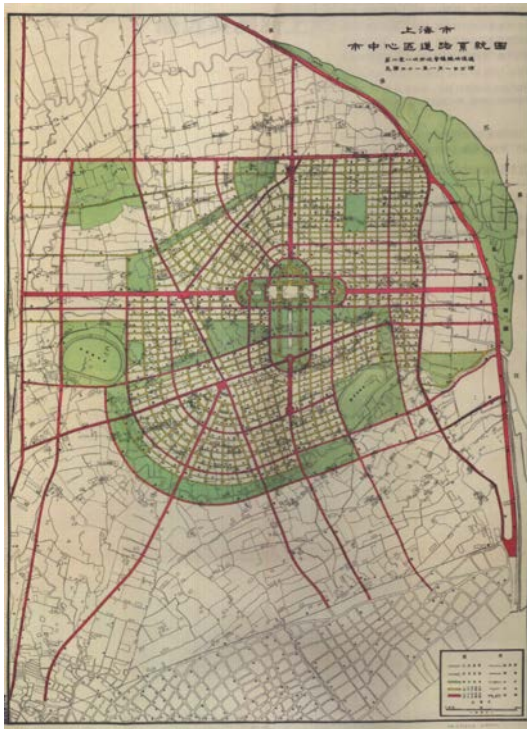


Figure 10: Shanghai Municipality Bureau. *Map of Road System in Shanghai Center. 1932.* [China National Library]

administrative buildings in the central district adopted the Chinese traditional architectural style in Shanghai carrying the meaning of national rejuvenation and transcending the concession as well at that time.

We can see the relationship between the new city center and the city existed before in the map of main road system in Shanghai special city 1929. **Fig.11** The National Government hopes to develop a new urban center on the "virgin land" of northeast of the city. Therefore, in order to avoid the restriction of the private ownership of land to the urban development, the national government first relegated the



Figure 11: Shanghai Municipality Bureau. *Map of main road system in Shanghai Special City. 1932.* [China National Library]

⁵ Great Shanghai Construction Plan. Carry on the world commercial port plan proposed by Sun Zhongshan, nationalist government put forward Great Shanghai Construction Plan. Construct new city center at Jiangwan. But the construction was broke by Japanese army invasion in 1937.



undeveloped land to the public as the reserve land for urban construction. Therefore, the roads of the Great Shanghai Plan can not be affected by the trace of the original land shapes and it is a completely new state which is not subject to any restriction. Due to the Japanese occupation of Shanghai in 1937, the "Great Shanghai Plan" could not continue. However, the construction of road network in the central area has been partially formed and presented in the urban form of Shanghai today.

3. Port areas and cities

3.1 Port area is urban area

During the decades since port opening, the settlement has developed concentrated on the the Bund. The Bund is an undeveloped marsh before port opening. During Qing Dynasty of Kangxi Emperor period in 1683, there was a map depicting the geography of overall Shanghai in Shanghai county annuals. Fig.12 It can be seen that the area near the Huangpu River in the north of Yang Kang Pang area was the location of the Bund," *Along with Huangpu river, there are many old shipyards and wooden shops, followed by rice fields, cotton fields and a small village farther back.*" *"Most of the ground is wet and uninhabitable."*⁷ But the land is in good condition as a port and easy to load and unload cargo. Therefore, as the representative of the British settlement, Bund has become a specialized port for foreigners because of the prosperity of trade and developed rapidly. Because of their proximity to the port, businessmen were willing to live along with the river and their shops. As a result, their live and business activities were concentrated in the Bund area. In 1853, the map of Shanghai and its suburbs Fig.13 clearly demonstrates the site of foreign port area (Bund) and the local port area at eastern Chengxiang. The main buildings in the British settlement are concentrated in the area near the Bund Pier, to the west part which is becoming rarer and dominated by churchyard、 graves and so on.

At the beginning of the establishment of the Bund, the early road construction of the British settlement also indicated a close relationship with the port. In 1855, Ground Plan of the Foreign Settlement at Shanghai-North of the Yang Kang Pang Canal Fig.14 demonstrates that street block scale of the road near the port side is smaller than that far from the port side and indicated east-west strip pointing to the port in the direction. *"The field becomes fine smooth after governing vehicle and roads. Ports along with Huangpu River, are implanted with large wooden stump, extended through the iron chain to more than ten miles with broad of several Zhang (about 3.3meter). Therefore, the port is exactly*



Figure 12:Shanghai County Annals. A Map Depicting the Geography of Overall Shanghai.1683[Shanghai Library]

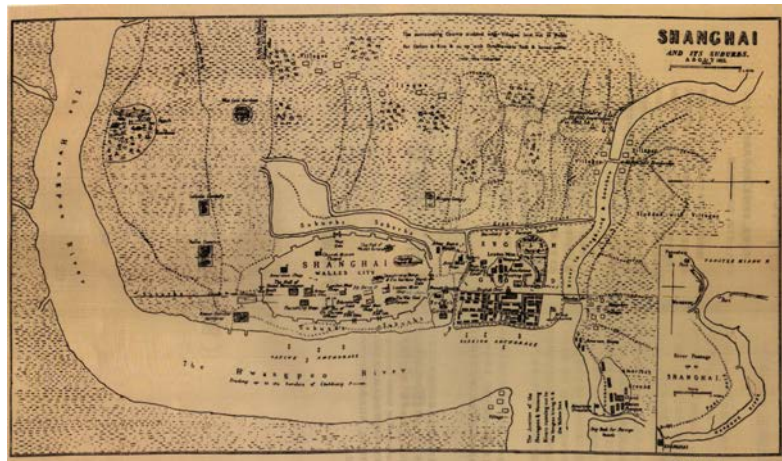


Figure 13:Shanghai and Its Suburbs,About 1853[The History of Shanghai,George Lanning]



suitable for the ship..."⁸ The main roads from the south to the north leads to a port at the end, which is convenient for loading and unloading cargo. The shops and business firms are located in the streets near the port, and the prosperity of the port brings the thriving of the city trade mixed with the port area.

3.2 Separation of urban areas in port areas

At the beginning of the port, sailboats were used as merchant ships. After the rising of ships, the silt in Huangpu River made it difficult for large vessels to enter the port. Although the dredging bureau carried out dredging operations, the port conditions on the Bund became more and more severe. The transfer of the port became a matter of course. The

Hongkou area north of Wusong River became the American settlement in 1848 and became the northern section of the public settlement after merging of the British and American settlements in 1863. The condition of river in this area is wider and deeper than the Bund and more suitable for ship merchant port. Comparing with the China East Coast, Wusong River, Shanghai Harbor in 1866 and 1889 Fig.15 respectively, there were only a few warehouses and other buildings in Hongkou area in 1866, while the docks, streets and buildings had developed on a large scale by 1889.

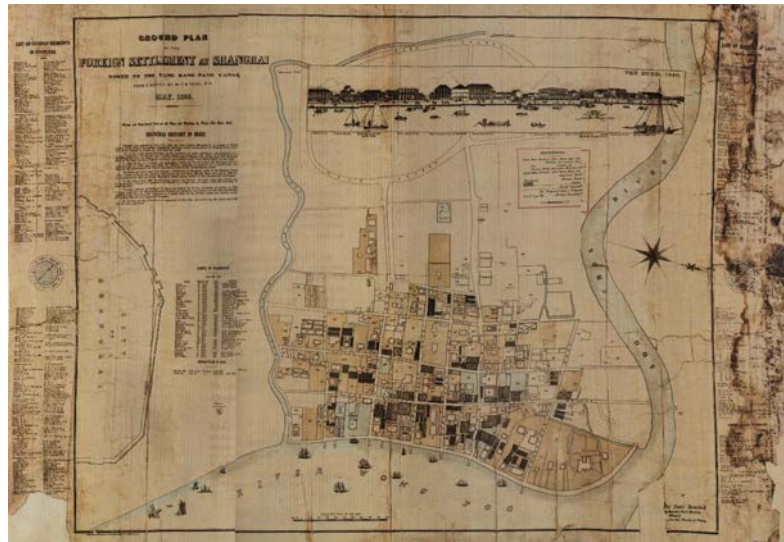


Figure 14: F.B.Youel.*Ground Plan of the Foreign Settlement at Shanghai-North of the Yang Kang Pang Canal.1855*[Shanghai Library]

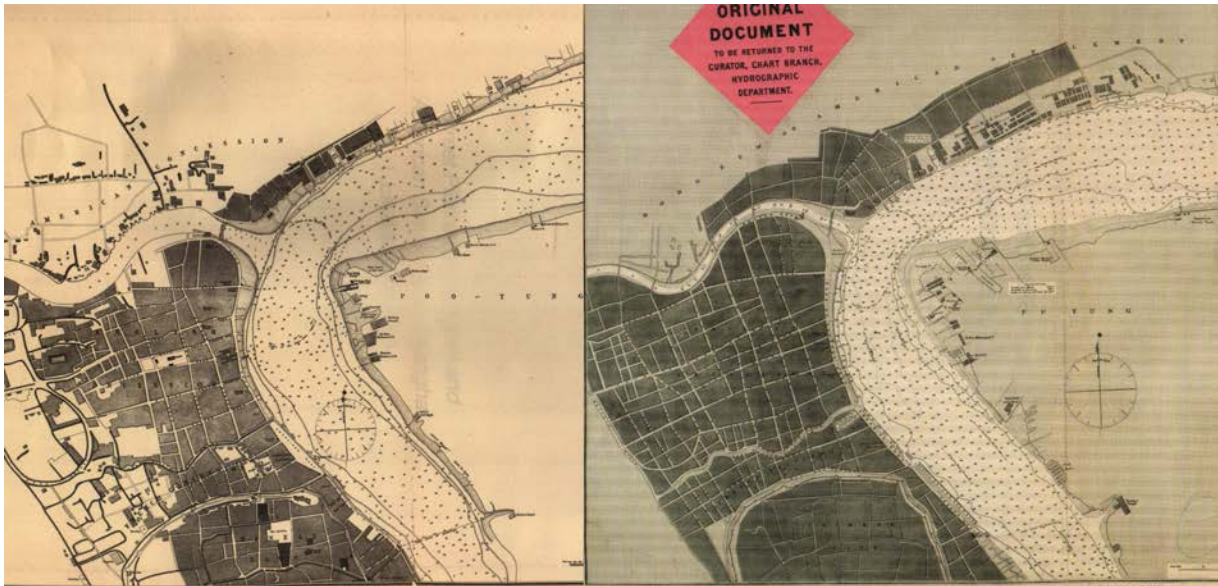


Figure 15: *Comparison of the China East Coast, Wusong River, Shanghai Harbor in 1866 and 1889*[British Hydrographic Bureau]

With the development of transportation and commerce, the land price in the Bund is rising rapidly. The commercial tycoons choosing to lives and works here became dissatisfied with the noise and chaos of port area. In 1869, Edward Cunningham,^{vi} the director of municipal council in of British settlement proposed that the port should be developed away from the Bund and put forward that "*the Bund is the only place where residents can absorb fresh air from the Huangpu River when they walk slowly at dusk as well as the only place with an open view in the concession. The Bund of the British concession is the eyes and heart of Shanghai* ".⁹ This proposal

^{vi} Edward Cunningham, the director of municipal council in of British settlement from 1868-1869. Proposed the function changing of the bund.



changed the history of the Bund and established the position of developing the Bund as a financial and commercial center, while the port area moved outward.

3.3 Chengxiang area and port area



Figure 16: Qiu Yufu, Xu Yucang. *Part of Map of Settlements and Chengxiang Area. 1875*[China National Library]

Before the opening of the port, Shanghai was China's largest domestic trade port. The Shiliupu docks on the east side of Chengxiang area was very prosperous. But such a historical ancient port lost the opportunity for development in the face of the coexistence of the old and new port areas, and greatly fell behind the development of the settlements area together with Chengxiang. From the overall map of the settlements and Chengxiang area in Shanghai in 1875 **Fig.16**, we can see dense docks on the east side of Chengxiang area along the

bank line of Huangpu river. There were a street to the urban area behind each dock. The street construction here is obviously port orientation.¹⁰ But these docks are small in scale, backward in construction and still traditional wharves, facilities are far behind that of the settlement docks. Moreover, the hinterland between the east wall of Chengxiang area and Huangpu River is too narrow, and the poor street conditions also restrict the development of the port modernization. After the establishment of Nanshi District Road Bureau, efforts were also made to renovate the port area. Fill the trenches, demolish the walls, build roads to expand the hinterland of the port area, and manage and renovate the wharf. However, on account of specific situation of old area and old port mixed and the excessive absorption of business opportunities by settlements, modernization stagnated.

Summary

The urban modernization of Shanghai is a complicated process. It can be roughly divided into three parts: the modernization of the Shanghai county seat, the development of the settlement area and the urban planning and construction of Shanghai after the establishment of the National Government. The development of settlements plays an important role in it. In this period, the map made by various administrative agencies and civil society has become an important image material for studying the modernization of Shanghai city.

Meanwhile, in this paper, it also has some new discoveries in the comparative analysis of Shanghai maps. There was a huge difference in the form of Shanghai maps drawn by the Chinese and by Westerners in middle of the 19th century, while such difference is also reflected in the differences in spatial characteristics of traditional Chinese towns and newly-built concession cities. There were differences between the road shape features of the treatment of the original sites between the public concession and the French Concession, and the differences also affected the road reconstruction in the old city area. By comparing the maps in different periods in the public concession, it can be seen that the port area gradually migrated to the sea in the urban space.

This paper takes the modern urban map of Shanghai as the research object. From several aspects such as the old and new—coexistence of Chengxiang areas and settlement in urban structures, the transformation and road modification of the streets and lanes in Chengxiang area, the formation of the street structure of the British and the French settlement, the road planning of the National Government on the new Shanghai center, changes in the relationship between the port and the urban area in the urban modernization, strive to illustrate the changes in the modern urban spatial structure and the development of modernization in Shanghai.

Referencing



- [1]Xun Sun, Chong Zhong. Urban Map Integration in Shanghai [M] Shanghai: Shanghai calligraphy and painting Publishing House. 2017.
- [2]Qian Sun. Modern Urban Planning in Shanghai and its Institutional background and the characteristics of Urban Spatial form. [J] Architecture. 2006.
- [3]Baihao Li, Jian Guo, Yaping Huang. History of Modern Urban Planning in Shanghai and its Model Research [J] Journal of Urban Planning. 2006.
- [4]Shanghai Central District Construction Committee. Plan for the Construction of the Central District of Shanghai. [M] December1930.12 in 1919)
- [5] Hanxiang Hu. Shanghai Shijiao. A Brief Introduction to Shanghai's Opening of Ports. [M] Shanghai Ancient Books Publishing House, 1989.
- [6]Lincai Huang. Travel Notes of Shanghai [M]. Shanghai Bookstore No. 1984.
- [7]Proceedings of Board Meetings of Municipal Council (Volume 4) [M]. 1870.
- [8]Qiang Wu. Study on relationship between Port and City of Shanghai in Modern Times. [D] Shanghai: Fudan University .2011.

Endnotes

- ¹ Xun Sun, Chong Zhong. Urban Map Integration in Shanghai [M] Shanghai: Shanghai calligraphy and painting Publishing House. 2017.38
- ² Qian Sun. Modern Urban Planning in Shanghai and its Institutional background and the characteristics of Urban Spatial form. [J] Architecture. 2006.44
- ³ Qian Sun. Modern Urban Construction Administration System and its Impact on Public Space in Modern Shanghai. [D] Tongji University. 2006.44
- ⁴ Baihao Li, Jian Guo, Yaping Huang. History of Modern Urban Planning in Shanghai and its Model Research [J] Journal of Urban Planning. 2006.
- ⁵ Xun Sun, Chong Zhong. Urban Map Integration of Shanghai [M] Shanghai: Shanghai calligraphy and painting Publishing House. 2017.139
- ⁶ Shanghai Central District Construction Committee. Plan for the Construction of the Central District of Shanghai. [M] December1930.12 in 1919)
- ⁷ Hanxiang Hu. Shanghai Shijiao. A Brief Introduction to Shanghai's Opening of Ports. [M] Shanghai Ancient Books Publishing House, 1989.1.2
- ⁸ Lincai Huang. Travel Notes of Shanghai [M]. Shanghai Bookstore No. 1984.559
- ⁹ Proceedings of Board Meetings of Municipal Council (Volume 4) [M]. 1870.689
- ¹⁰ Qiang Wu. Study on relationship between Port and City of Shanghai in Modern Times. [D] Shanghai: Fudan University .2011.82



The Griffin Plan for Shanghai, 1904-1906

James Weirick*

*Faculty of Built Environment, University of New South Wales, email address: j.weirick@unsw.edu.au

Abstract: An event in Yokohama in January 1906 – the accidental death of the Chinese trade commissioner to Japan, Huang Kaijia 黄开甲 (1860-1906)– seems to have ended one of the most intriguing city planning ventures of the early modern era. Two years previously, as Imperial Vice Commissioner to the St Louis Exposition, Huang Kaijia was almost certainly the ‘delegate from the Chinese government’ who commissioned the design of a ‘new city at Shanghai’ from the American architect and landscape architect Walter Burley Griffin (1876-1937). This paper reviews the testimony emanating from Griffin and his colleagues on which the claim for a Shanghai city plan from 1904-1906 is based; the modernising impulses in Shanghai at the time; and the broader context of ‘New China’ reforms initiated by the Qing Dynasty in the first decade of the twentieth century. From the available descriptions, the following details of the proposal can be established. First, the project was a Chinese initiative, not a ‘colonial’ venture associated with the Foreign Settlements. Second, the proposal involved ‘a modern city on a new site’ located ‘a few miles’ from the traditional walled city. Third, the project was conceived as an alternative to the ‘narrow streets, swarming tenements and insanitary areas’ of the ‘old city’ – and, indeed, included the proposal to ‘abandon the old city.’ Fourth, Griffin ‘drew the plans for the new Shanghai in detail.’ Based on archival research, critical review of contemporary newspaper accounts and recent scholarship on the ‘tradition vs modernity’ debate in Chinese historiography, the paper seeks to address the question, what does the fragmentary evidence of the ‘Griffin Plan for Shanghai’ tell us about innovation and change in urban thinking before the Chinese revolution of 1911; the continuity of ideas across the revolutionary divide; and the distinctive fusion of modernity and poetic power in the successor to the Shanghai scheme in the Griffin *oeuvre*, the winning entry in the Australian Federal Capital competition of 1911-1912.

Keywords: urban visions, cross cultural exchange, city planning, Shanghai

Introduction

An event in Yokohama in January 1906 – the accidental death of the Chinese trade commissioner to Japan, Huang Kaijia 黄开甲 (1860-1906)¹ – seems to have ended one of the most intriguing city planning ventures of the early modern era. Two years previously, as Imperial Vice Commissioner to the St Louis Exposition, Huang Kaijia was almost certainly the ‘delegate from the Chinese government’ who commissioned the design of a ‘new city at Shanghai’ from the American architect and landscape architect Walter Burley Griffin (1876-1937).

This paper reviews the testimony emanating from Griffin and his colleagues on which the claim for a Shanghai city plan from 1904-1906 is based; the modernising impulses in Shanghai at the time; and the broader context of ‘New China’ reforms initiated by the Qing Dynasty in the first decade of the twentieth century. Based on archival research, critical review of contemporary newspaper accounts and recent scholarship on the ‘tradition vs modernity’ debate in Chinese historiography, the paper seeks to address the question, what does the fragmentary evidence of the ‘Griffin Plan for Shanghai’ tell us about innovation and change in urban thinking before the Chinese revolution of 1911; the continuity of ideas across the revolutionary divide; and the distinctive fusion of modernity and poetic power in the successor to the Shanghai scheme, the Griffin Plan for Canberra.

The ‘Shanghai testimony’

When Griffin achieved fame as winner of the international competition for the Australian Federal Capital in 1912, a feature article in the *New York Times* reported that ‘his only other experience in planning a city’:

. . . was when he drew plans for the rebuilding of Shanghai, China, which, a few years ago, it was proposed to rebuild a few miles from its present site, with its narrow streets, swarming tenements, and insanitary areas. Mr. Griffin drew the plans for the new Shanghai in detail, but the scheme was abandoned.²



The 18th International Planning History Society Conference - Yokohama, July 2018

To date, the plans have not been found – however, another article on Griffin’s success in the Canberra competition, published in *Engineering News* (New York), provides more details of the Shanghai commission:

Walter B. Griffin... also prepared a design for a new city at Shanghai, China, a few years ago, when it was proposed to establish a modern city on a new site, and to abandon the old city, which is largely an insanitary collection of native huts. The delegate from the Chinese government to the St. Louis Exhibition had plans prepared by Mr. Griffin, but owing to the death of the delegate on his return to China nothing was done toward carrying them out.³ tell us

The Australian writers – and Progressive Era activists – Miles Franklin (1879-1954) and Alice Henry (1857-1943), then resident in Chicago, interviewed Griffin in June 1912 and submitted an article to the *Daily Telegraph* in Sydney which adds further details of the Shanghai project in relation to the ‘Federal Capital prize’:

It may be interesting to note that this is not the first foreign city designed by Mr Griffin. The Chinese Commissioner to the St Louis Exposition, authorised by his government to obtain a design for the rebuilding of Shanghai on a site somewhat removed from the present one, accepted the plans submitted by Mr Griffin. Owing, however, to the death of the Commissioner, and a change in the Government, this undertaking is still in abeyance.⁴

In 1933, correcting the draft of a thesis on his life and work by University of Sydney architecture student Nancy Price, Griffin amended and authorised the following statement, which given its provenance can be considered an autobiographical note:

In 1906, following the St Louis World Exposition, there came through the medium of the Imperial Delegation, a possibility for a development involving the replanning of the Chinese city of Shanghai. Designs were prepared by him, but the whole project came to naught through the untimely death of the interested delegate on his return to China.⁵

Griffin’s wife, the brilliant architect and delineator Marion Mahony Griffin (1871-1961) – co-author of the Griffin Plan for Canberra and his colleague in the office of Frank Lloyd Wright in the 1904-1906 years – provided recollections of the Shanghai project in relation to Griffin’s early work in her memoir of their life together, written in the late 1940s:

Shortly after graduation he laid down a town plan for a city to be built in China for a Chinese client who unfortunately died before the work could be initiated. The underlying principles were clearly established here – the laws of distribution and occupation. This was Griffin’s first plan of a whole Municipality.⁶

Another colleague from Wright’s office in the 1904-1906 period, Chicago architect Francis Barry Byrne (1883-1967), who took over the Griffins’ American practice when they left for Australia in 1914, provided a somewhat similar recollection in a conversation with historian Mark Peisch in 1953:

Byrne said that c.1910 there was a project to move the city of Shanghai to a new site. Griffin submitted plans for the project but no record of these exist.⁷

Peisch went on to describe the Shanghai project as ‘an obscure and intriguing episode in Griffin’s career as a planner.’⁸ To this day, no plans have been found.

Although the timing and tenor of the various accounts, their mix of consistencies and inconsistencies, and the lack of any documentary evidence in support of the Griffin claim, must raise doubts about the Shanghai project,⁹ circumstantial evidence does support the possibility that the claim is correct.

The ‘Chinese client’

The 1904 Louisiana Purchase Exposition in St Louis, Missouri was the first occasion that China was officially represented at a World’s Fair. The Chinese Pavilion, an elaborately decorated courtyard complex in late Qing style, was prominently sited near the eastern entrance to the Fair grounds. The large Chinese delegation was led by Prince Pu Lun 溥倫 (1874-1927), nephew of the Emperor and considered at the time to be heir to the throne.¹⁰ The key figure behind the Chinese presence in St Louis, however, was the Imperial Vice Commissioner, Huang Kaijia, who as a young man had been educated in the United States. There can be little doubt that Huang Kaijia is the



The 18th International Planning History Society Conference - Yokohama, July 2018

‘delegate from the Chinese government’ who is purported to have had Griffin prepare plans for a ‘modern city on a new site’ at Shanghai.

In 1904, Walter Burley Griffin was a key member of Frank Lloyd Wright’s Studio in Oak Park, Chicago with some measure of freedom to undertake independent commissions.¹¹ Descriptions of daily life in the Wright Studio, recorded in the letters of draftsman Charles E. White jr., capture the enthusiastic response of Wright and his colleagues to the St Louis Fair.¹² For Griffin, the Fair undoubtedly provided lessons in the art of city building. As an ensemble, the major pavilions were deliberately designed to outclass the scale and magnificence of the Chicago Fair of 1893; their arrangement on a radial plan was considered an innovation in terms of City Beautiful principles; and the streets, terraces and public parks of the urban scene were infused with the practical realities of the City Efficient: mass transit, electric lights, modern sanitation.¹³ However, the design of the Fair was by no means an unqualified success – the expansion of the program to fill a 1200-acre site, double the size of the Chicago Fair, created an overwhelming spectacle. The vast array of Beaux Arts buildings, set among colonnades, fountains, cascades and statuary, confused the classical ideal with bombast and excess. The smaller state and national pavilions, designed to attract attention, were generally considered ‘pomposities or curiosities.’¹⁴

The symbolic purpose of the Fair was to celebrate the centennial of the ‘Louisiana Purchase’ – the acquisition’ by the United States, of the French territories stretching from the Mississippi to the Rockies, negotiated by treaty during the presidency of Thomas Jefferson. Territorial expansion and national identity, material progress and the ‘march of civilisation’ were thus the *sine qua non* of the event, promoted in direct and subliminal ways.¹⁵ In this context, the Chinese Pavilion was a curious presentation of deep culture and elaborate artifacts, contained within a single-storey courtyard building, which was claimed to be a replica of Prince Pu Lun’s summer residence in Beijing, ‘gorgeous in scarlet, gold, ebony and blue.’¹⁶ Set behind a symbolic *pailou* gateway, the pavilion, partially built by American workmen and partially by Chinese artisans, appears to have been a conflation of Chinese motifs, rather than a replica of a significant Qing dynasty building.¹⁷ In its combination of timber screens, inlays, carvings and lattice work with somewhat awkwardly resolved roof forms and massing, the pavilion evoked more the superficial exoticism of Chinoiserie than the tectonics and symbolism of traditional Chinese architecture. In effect, the exhibit expressed the uneasy relationship of the late Qing regime to the modern world: a deeply traditional society seeking engagement with the west on its own terms, at the same time wracked with internal tensions and inconsistencies.

The conservative East Coast journal, *American Architect & Building News* dismissed the Chinese pavilion with the comment, ‘China is still clinging to the past in her exhibit of a summer palace of a nobleman,’¹⁸ but to the progressive architects of Chicago, sympathetic to the spirit and forms of non-western architecture, it was undoubtedly fascinating, and almost certainly prompted the initial contact between Walter Burley Griffin and Huang Kaijia. The treasures in the Chinese Pavilion restricted access to individuals presenting a card, or small groups and it could have been in this context, that Griffin as a visitor to the Fair, met Huang Kaijia.¹⁹ There is another possibility – the American architect for the pavilion, Charles H. Deitering was a classmate of Marion Mahony at MIT in the 1890s,²⁰ it could have been through Deitering that Griffin had the opportunity to meet Huang Kaijia. How the contact led to the commission to design a ‘modern city’ for Shanghai, and whether the commission had any basis in reality, are not known. Huang Kaijia was a protégé of the leading moderniser in Shanghai, the industrialist Sheng Xuanhuai 盛宣懷 (1844-1916), a powerful force in the Qing Dynasty’s ‘self-strengthening’ (*zhiqiang*) movement in the nineteenth century. His many official posts included Director-General of the Imperial Railway Administration, where Huang Kaijia served as Secretary in the 1890s.²¹

As a boy of 12, Huang Kaijia had been selected to study in the United States as a member of the ‘Chinese Educational Mission’, an experiment initiated during the reign of Emperor Tongzhi 同治帝 (1856-1875), which sent annual contingents of thirty students to the United States for a period of fifteen years to gain a western technical education, then return to China as experts in the service of the Imperial Government.²² The experiment was cut short in 1881, when its promoters lost influence at the Qing court and the students, then numbering over a hundred, were recalled. Huang Kaijia, who attended middle school and high school in Hartford, Connecticut, had just completed his sophomore year at Yale. He returned to Shanghai. As he later recalled, his American experience cost him twenty years of struggle ‘to make a breach in the wall of Chinese conservatism’²³ but with many other classmates from the Chinese Educational Mission, he gained the patronage of Sheng Xuanhuai and involvement in the first telegraph and railway ventures in China. He subsequently entered the diplomatic service and was a member of the Chinese embassy to the coronation of King Edward VII in 1902; served as Vice Commissioner to the St Louis Fair in 1903-1905; and as a Trade Commissioner to the United States later in 1905.²⁴



Indeed, he made three trips to the United States in the period 1903-1905, June 1903 to January 1904 overseeing construction of the Chinese Pavilion at St Louis; April 1904 to January 1905, touring the United States with Prince Pu Lun until June 1904 and carrying out his official duties at St Louis until the New Year.²⁵ He subsequently returned in August 1905 as a Trade Commissioner concerned with the rights of Chinese merchants and students to enter the United States under controversial provisions of the US immigration laws, and a boycott of American goods by Shanghai merchants these had induced.²⁶ He returned to China in October 1905. The details of his death are recorded in the alumni archives at Yale:

After reaching China he suffered from nervous exhaustion and spent three months in a hospital in Peking, going thence by advice of his physician to a health resort in Japan for the winter months. His death was due to a distressing accident. On the morning of January 24 he entered a bath room where there was a charcoal stove with a kettle of hot water. Overcome by the charcoal fumes, he fell against the stove, overturning it and being badly burned from the shoulders to the knees by the water and coals. Though found immediately and given the best medical attendance, he was unable to stand the shock and died at the Yokohama General Hospital, after twenty hours of intense suffering.²⁷

This sequence of events supports the many statements emanating from Griffin and his colleagues that nothing was done towards carrying out the plan for Shanghai 'owing to the death of the delegate on his return to China.'

The dates of Huang Kaijia's sojourns in the US suggest that if the 'Shanghai testimony' is correct, Griffin embarked on his first venture in city planning sometime between April 1904 and October 1905. Griffin left Wright's office to establish his independent practice in the second week of January 1906,²⁸ it is possible he entertained hopes for the Shanghai project at that time²⁹, only to learn of Huang Kaijia's death within a month.³⁰

Modernising impulses in Shanghai in the period 1904-1906 were certainly consonant with preparation of a city plan. In 1905 the population of Shanghai had passed one million, with approximately half in the Chinese city and half in the foreign enclaves,³¹ the British-dominated International Settlement and the French Concession. The International Settlement had long been administered by its own civic entity, the Shanghai Municipal Council, established in 1854.³² In 1905 the Chinese city – dating from 1074³³ – was the first in China to achieve municipal self-rule with an alliance of local gentry and merchants granted authority by the Qing Dynasty to establish the Shanghai City Council.³⁴ This notable shift in governance may have some bearing on the commission Griffin received to prepare a plan for 'a modern city on a new site.' As Mark Elvin has commented, 'the Shanghai City Council was an impressive attempt by a still cohesive and self-confident traditional Chinese social order to adapt itself to modern Western ideals of democracy and of organizational and technological efficiency . . . the influence of the modern West was apparent in almost every aspect of the Council's work.'³⁵ The links between the modernizing impulse in Shanghai; the formation of the Shanghai City Council; the presence of a Shanghai-based, American-educated envoy at the St Louis Fair; the 'model city' ambitions of the exposition; an enthusiastic young American with 'model city' ideas; and a city plan for Shanghai may be tenuous, but they are certainly plausible.

Huang Kaijia was one of the 'earnest reformers' of the city.³⁶ As Secretary of the Imperial Railway Administration, he was involved in the first sustained railway venture, construction in 1898 of a line from the Zhabei district of Shanghai on the northern outskirts of the International Settlement twelve miles north to a deep-water port at Wusong on the Yangzi River (this replaced a line built by the British without permission, notoriously dismantled in 1877³⁷). There is a newspaper account of Huang Kaijia accompanying Sheng Xuanhuai and the Managing Director of the railway Zhu Baokui on an inspection of the line a day before its official opening.³⁸ Zhu Baokui 朱宝奎 (1862-1925) was another member of the Chinese Educational Mission who had studied in the United States, he subsequently served as Managing-Director of the Shanghai-Nanjing Railway in its planning phase, 1903-1905 with two other members of the Chinese Educational Mission (CEM) on its board, Liang Dunyan 梁敦彦 (1858-1924) and Tang Rongjun 唐荣俊 (the latter became General-Manager of Jardine Mathieson, the formidable British trading company). A fourth member of the CEM, Zhong Wenyao 钟文耀 (1861-1945) took over as Managing-Director of the Shanghai-Nanjing Railway on the opening of the first section to Nanxiang in November 1905 as it extended up the valley of the Yangzi. Liang Dunyan, Zhong Wenyao and Huang Kaijia had been hosted by the same family in Hartford, Connecticut and were classmates throughout their US education from middle school and high school in Hartford to Yale. In the 1903-1905 period, the CEM network extended into the centre of provincial power with Liang Dunyan on the staff of Zhang Zhidong 张之洞 (1837-1909), Viceroy of Liangjiang Province at Nanjing, whose dictum – "Chinese learning for fundamental principles and Western learning for practical application" – proclaimed in his 1898 reformist treatise *Exhortation to Study*, struck the keynote for the era. The



CEM network also included Liang Pixu 梁丕旭 (1864-1917) – Sir Chentung Liang Cheng – Chinese Ambassador to the United States, 1903-1907.³⁹ The strength and influence of this inter-connected group,⁴⁰ together with Huang Kaijia's connections to the Manchu Court at Beijing evidenced by his Imperial appointments, provide support to the proposition that Huang Kaijia was 'authorised by his government to obtain a design for the rebuilding of Shanghai on a site somewhat removed from the present one.'⁴¹

The Griffin Plan

The physical form of Griffin's Shanghai Plan is not known, but from the available descriptions, the following details of the proposal can be established. First, the project was a Chinese initiative, not a 'colonial' venture associated with the Foreign Settlements. Second, the proposal involved 'a modern city on a new site' located 'a few miles' from the traditional walled city. Third, the project was conceived as an alternative to the 'narrow streets, swarming tenements and insanitary areas' of the 'old city' – and, indeed, included the proposal to 'abandon the old city.' Fourth, Griffin 'drew the plans for the new Shanghai in detail.'⁴² Fifth, as Marion Griffin recalled, 'the underlying principles were clearly established here – the laws of distribution and occupation,'⁴³ in other words, the integration of transport and land use: the site for the new city was almost certainly linked to the new rail lines extending west to Nanjing or north to Wusong from North Station at Shanghai, most likely the latter, with a tramway connection from the West Gate of the Old City to North Station through the International Settlement, planned since the 1890s, under construction in 1904.⁴⁴

Although the detailed plans have been lost, the descriptions of Griffin's Shanghai scheme are infused with progressive notions of modernity and urban reform. In this, they are consistent with accounts of the emergence of a 'New China' in the first decade of the twentieth century – a period of change that followed reforms mandated by the Qing Court in the aftermath of the Boxer Rebellion.⁴⁵ The vision of a new Shanghai implied by the Griffin plan, suggests the desire to develop a stronger and more assertive Chinese city to challenge the power and influence of the Foreign Settlements. At the same time, the failure to pursue the idea, interpreted structurally, rather than as an outcome of contingency and chance, can be seen as an expression of the 'agonism' that Theodore Hutters has argued, lies at the centre of the modernising impulse in the last years of the Qing dynasty – a 'discourse of anxiety' in which receptivity to new ideas was met by 'a countervailing tendency to shut off alternatives even as they were being advanced . . . because most of the new ideas . . . either did in fact come or were taken as having come to China from the modern West.' The combination of dynamic change and a 'pervasive sense of impasse' was grounded in:

the fear that adapting too easily to alien ways would result in irreparable damage to the very set of institutions that reform was designed to save – that is, a Chinese culture whose continuity as a unified whole could be traced back thousands of years The period . . . is thus fraught with an anxiety growing out of a central paradox . . . a paradox virtually unique to East Asia in the modern world wherein a nation was obliged, under an indigenous government, to so extensively modify its culture to save it, that questions inevitably arose as to whether the resulting entity was that which was intended to be saved in the first place.⁴⁶

The long-accepted view that 'traditionalism' in turn-of-the-century China was replaced by nationalism, with all its emotive power and explosive content,⁴⁷ is challenged by Hutters in a critical study of Chinese literature and intellectual currents in the years 1895-1919. This study draws upon the work of Prasenjit Duara to define Chinese discourse across the revolutionary divide as a movement which claimed both 'descent and dissent from past cultural practices' – a movement whose inner tension was its defining characteristic.⁴⁸ The paradox of 'at once identifying with and resisting the past', which characterized late nineteenth and early twentieth century China, meant that 'the need to establish a new nation . . . made the need to cherish that nation's history and traditions all the more insistent, even as they simultaneously needed to be denied.'⁴⁹

The Griffin plan for Shanghai, predicated on abandoning the old city, and building a 'modern city on a new site' clearly denied Chinese history and traditions – whether it demonstrated any 'Chinese' tendencies cannot be conclusively established. The origins of the Griffin project in the heady atmosphere of the St Louis Fair, at the height of the City Beautiful movement – and at a time when Chinese traditions of city building were little known in the West⁵⁰ – suggest that the scheme was an exercise in American 'civic art'. At the same time, the creative fusion of exotic motifs in Griffin's architecture, strongly evident in his earliest civic projects and fully developed by the time of the Canberra plan,⁵¹ together with the subtle power of his landscape ideas,⁵² suggest that the scheme



could have demonstrated an imaginative engagement with 'Chinese' principles of site planning and architectural expression.⁵³

The Legacy

The tumult and dislocation which overwhelmed China in the years following the 1911 Revolution have long been represented as a break between the cultural world of the late Qing and early Republican periods. Recent scholarship, however, has searched for evidence of continuity in the Chinese experience,⁵⁴ and in the practical realm of city planning, the possibility that the Griffin Plan was not lost in 1905, but survived to inform planning proposals for Shanghai in the 1920s must be considered.

The Greater Shanghai Plan, initiated by the re-constituted 'Special Municipality' of Shanghai in 1927-1929, featured an impressive new town and civic centre, located on a new site at Jiangwan, north-east of the existing city, linked by rail and road connections to the deep-water port at Wusong. The tantalizing question is whether this move to establish 'a modern city on a new site' drew upon Griffin's ideas of 1905 in any way. The siting, scale and strategic significance of the 'Greater Shanghai Plan' demonstrate a remarkable grasp of city planning principles in terms of transportation and land use, civic presence and symbolic power.⁵⁵ The 'city beautiful' aspects of the scheme, organised around a cross-axial alignment of ceremonial spaces; the central significance of the 'civic centre'; the geometric array of urban districts, combining streets and blocks in grid and radial patterns; the inflection of the street pattern with respect to the subtle topographic relief and river systems of the deltaic landscape; the integration of parks, park systems and greenbelts; the separation of industrial and residential districts; the efficient alignment of railways and arterial roads, interconnecting the new and old city, the port and the larger metropolitan region – reflect ideas developed in many city plans of the era. The 1911 Griffin Plan for Canberra, however, was a 'new city' plan in which these ideas appeared with clear and compelling force. Did Griffin's Shanghai Plan of 1905 contain similar ideas? Despite the death of its advocate, Huang Kaijia in 1906 and the collapse of the Qing Dynasty in 1911/1912, did this plan survive in the archives of the Shanghai municipal authorities to inform the city planning initiatives of the late 1920s?

Regardless of the fate of Griffin's Shanghai Plan, the origin of the commission at the St Louis Fair of 1904 indicates that the notion of a 'modern' city was at least considered during the last years of the Qing Dynasty, and represents a significant departure from the cosmological tradition of walled city formation, which had distinguished Chinese spatial strategies for millennia.⁵⁶ This approach to city building, with its basis in the legitimation of imperial power, had been manifest as recently as the 1880s with the establishment of the walled city of Taipei as the prefectural capital of Taiwan.⁵⁷ However, the 'modern' dimension of twentieth century city planning – rational land-use, efficient transportation, advanced municipal engineering and infrastructure, regularised land parcels and land tenure, unbounded possibilities for expansion – did not foreclose the possibility of a symbolic, 'cosmological' dimension to urban life, and the belief that a harmonious society has some correspondence with harmonious patterns of city space. Griffin's Canberra Plan is redolent with these associations.⁵⁸ The question raised by his earlier planning proposals for Shanghai is whether the challenge of designing a city in China contributed to Griffin's spatial symbolism, in which the physical location of functions and land uses transcend utilitarian concerns to yield a deep sense of 'rightness' and inner purpose, so that in the flux of everyday life, civic ideals are fused with concrete experience.⁵⁹ In Griffin's Canberra scheme, the rational distribution of city functions was combined with a set of design strategies – the parallel alignment of government buildings, the pagoda-like form of the crowning ceremonial structure, the mandala patterns of the various centres, the axial alignments on surrounding mountains, the balanced irregularity of 'naturalistic' landscape, the still presence of the central lake – to evoke the timeless qualities of an ancient capital.⁶⁰

In the absence of Griffin's detailed plans for a New Shanghai, the fusion of 'tradition' and 'modernity' in his 'New China' project can only be inferred from his other work, beginning with his adaptations of Japanese architecture around 1900,⁶¹ and culminating in 1911 with the imaginative architectural proposals for Canberra, developed in association with his wife, Marion Mahony Griffin. In the drawings submitted for the Australian Federal Capital competition, the temple-like ensemble of ceremonial courtyard buildings, arrayed in the Canberra landscape, demonstrate a fascinating synthesis of architectural traditions and new constructional systems at the scale of the modern city.⁶²

Conclusion



The funeral of Huang Kaijia was held ‘at the deceased’s residence’, Bluff no.184 in the Yamate District, Yokohama on 14 February 1906, his memorial tablet inscribed with the words ‘revered by his sovereign as a loyal servant.’⁶³ In Shanghai, the *North China Herald* eulogised ‘a man of sterling integrity and probity,’ noting with regret that ‘his brilliant talents, from which so much was hoped to push on the progress and enlightenment of his country . . . have, alas! been lost China.’ Western notions of progress and enlightenment nevertheless stood in contrast to deep Chinese traditions, memorably captured in descriptions of Huang Kaijia’s position in the hierarchy of the Qing Dynasty: ‘Metropolitan Officer of the 4th grade, with the brevet 2nd rank red button and peacock’s feather.’⁶⁴ Whether this servant of the emperor had the rank and network connections to push forward plans for ‘a new city at Shanghai’ will never be known, certainly with his death, no more than the barest traces of the scheme managed to survive.

Whether real or ideal, the Griffin Plan for Shanghai of 1904-1906 stands as the first attempt to design a ‘modern city’ for China. The project remains a mystery in its physical details, but as an idea it resonates with creative tension between modern and traditional approaches to city building, and thereby occupies an imaginative space in twentieth century urbanism. This is the imaginative space defined by Prasenjit Duara, which at once claims ‘descent and dissent from past cultural practices’ – an historical condition whose inner tension is its defining characteristic.⁶⁵ For an object lesson in this approach, we need look no further than the mysterious fusion of rationality and poetic power in the successor to the Shanghai scheme, the Griffin Plan for Canberra \ as presented in the original competition drawings of 1911: ink-and-watercolour on linen, emblazoned with gold, culminating in the magnificent perspective from the heights of Mount Ainslie drawn by Marion Mahony across three horizontal panels – designed to unfold like a Chinese screen.

Acknowledgements

I am greatly indebted to Professor Karl Fischer, Professor Paul Kruty, Judith Ann Schiff, Dr Anne Warr, Professor Xu Yinong, Zhang Qinnan, Ju Xizhe and Yu Zhizhe for insight and guidance in the preparation of this paper.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

James Weirick is Professor of Landscape Architecture and Director of the Urban Development & Design Program, Faculty of Built Environment, University of New South Wales, Sydney, Australia. A graduate of Harvard University, Professor Weirick taught at the Boston Architectural Center, University of Massachusetts/Boston, University of Canberra and Royal Melbourne Institute of Technology, prior to his appointment to the Chair of Landscape Architecture at UNSW in 1991.

Endnotes

¹ In all historical accounts, Huang Kaijia was known by versions of his Cantonese name, Wong Kai Kah, or Wong Kai-kah; Pinyin romanization for Chinese names is adopted in this paper.

² ‘American designs splendid new Capital for Australia,’ *New York Times*, 2 June 1912, 39.

³ *Engineering News*, 4 July 1912, 23-24; see also Wernekke, ‘Der Wettbewerb um einem Bebauungsplan für die Bundeshauptstadt von Australien,’ 75 based on the above sources.

⁴ Henry & Franklin, ‘Walter Burley Griffin,’ 3; Franklin, 1912 Pocket Diary, entries for 4, 5, 6 & 7 June. Franklin Papers, MS 364/2, CY 2153, Mitchell Library, Sydney.

⁵ Price, Walter Burley Griffin, p.8.

⁶ Griffin, *The Magic of America*, IV: 16, 59, 290.

⁷ Peisch, ‘Conversation with Barry Byrne, (typescript), 3. Peisch Papers, MS 1979.009.0001, MB 1, Folder 21. Avery Library, Columbia University, New York.

⁸ Peisch, *Chicago School*, 95.

⁹ Harrison, *Walter Burley Griffin, Landscape Architect*, 21; Kaiser, ‘The China connection – Walter Burley Griffin and Shanghai’; Griffin materials in Australian and US public collections do not include the Shanghai plans; and to date, reference to the project has not been found in the reports from Prince Pu Lun and Huang Kaijia in the Ministry of External Affairs Collection, Institute of Modern History Archives, Academia Sinica, Taipei (I am indebted to Ju Xizhe for searches of the on-line materials from this collection).

¹⁰ Fairbank & others, *The I.G. in Peking*, p.1401, n.3; *St Louis Republic*, 8 May 1904, 25.

¹¹ Griffin’s independent commissions undertaken while working for Wright included the Campus Plan for the Eastern Illinois State Normal School, Charleston, Illinois (1901) and the William H Emery House, Elmhurst, Illinois, (1903) – Peisch, *Chicago School*, 45-46, 96.

¹² Smith, ‘Letters, 1903-1906, by Charles E. White,’ 105, 107.

¹³ Schuyler, ‘The Architecture of the St Louis Fair,’ 385-395; Stevens, ‘General Plan of the Exposition,’ 1129-1131.



- ¹⁴ Pomeroy, 'The Louisiana Purchase Exposition: a comparison and criticism,' 1164.
- ¹⁵ Christ, 'The Sole Guardians of the Art Inheritance of Asia,' 675-709.
- ¹⁶ Lowenstein, *Official Guide to the Louisiana Purchase Exposition*, 127.
- ¹⁷ Planning and dispatch of the Chinese exhibit were overseen by Sir Robert Hart (1835-1911), who served the Qing Dynasty as Inspector-General of the Imperial Maritime Custom Service for almost sixty years. Plans for the Chinese Pavilion were prepared in Shanghai by British architects Atkinson & Dallas, but proved inadequate. The project was re-documented in St Louis by architect Charles H. Deitering (1870-1938) based on models sent from China – Fairbank & others, *The I.G. in Peking*, 1401; *World's Fair Bulletin*, August 1903, 3; *St Louis Republic*, 17 October 1903, 2; 3 November 1903, 4; *St Louis Post-Dispatch*, 5 July 1938, 17 – see also, Dirlik, 'Architectures of global modernity,' 40-42.
- ¹⁸ 'Impressions of the St Louis Fair,' *American Architect & Building News* 86, no.1501, 1 October 1904, 3.
- ¹⁹ 'Must have a card to visit Chinese Pavilion at Fair,' *St Louis Post Dispatch*, 17 January 1904, 16; Barnard, 'Wonderful Chinese Palace at the Fair,' 2 July 1904, 5.
- ²⁰ Anon, 'Register of Former Students,' MIT, 130, 194, 643.
- ²¹ Feuerwerker, *China's Early Industrialization*, 58-96; *North China Herald*, 8 August 1898, 257-258
- ²² LaFargue, *China's First Hundred*, 13.
- ²³ *Hartford Courant*, 8 February 1908, 8.
- ²⁴ LaFargue, *China's First Hundred*, 90-91.
- ²⁵ *Los Angeles Times*, 27 June 1903, 4; *San Francisco Call*, 16 January 1904, 14; 18 April 1904, 1-2; 26 January 1905, 16; for Prince Pu Lun's departure, see *St Louis Republic*, 12 June 1904, 52; *New York Times*, 16 June 1904, 15.
- ²⁶ *San Francisco Call*, 16 August 1905, 5; 9 October 1905, 2; Reid, 'Taft's telegram to Root, July 1905,' 70; see also Wong Kai Kah, 'A menace to America's oriental trade,' 404-414.
- ²⁷ Johnston & Sherman, *Yale 1883: the book of the class*, 246-247.
- ²⁸ Letter, Frank Lloyd Wright to Walter Burley Griffin, 13 January 1906, Griffin Family Collection; First National Bank of Dwight Collection, MS 1969.1, Ryerson & Burnham Archives, The Art Institute of Chicago (Griffin's last letter in project sequence dated 5 January 1906); Smith, 'Letters, 1903-1906, by Charles E. White,' 110.
- ²⁹ This may account for Griffin recollecting in 1933 that the date of the project was 1906 – Price, Walter Burley Griffin, p.8.
- ³⁰ 'Wong Kai Kah dies in Japan,' *St Louis Post-Dispatch*, 6 February 1906, 3.
- ³¹ Leung, *The Shanghai Taotai*, 195.
- ³² Li Yingchun, Planning the Shanghai international settlement, 22-27.
- ³³ Johnson, *From Market Town to Treaty Port, 1074-1858*, 70.
- ³⁴ 'A Chinese municipal council,' *North China Daily News*, 17 October 1905, 5.
- ³⁵ Elvin, 'The administration of Shanghai, 1905-1914,' 260-61.
- ³⁶ 'Funeral of Wong Kai Kah,' *Hartford Courant*, 19 March 1906, 2.
- ³⁷ Pong, 'Confucian patriotism and destruction of the Woosung Railway,' 647-676; ironically Sheng Xuanhuai organised the destruction.
- ³⁸ 'The Woosung Railway,' *North China Herald*, 8 August 1898, 257-258.
- ³⁹ *North China Herald*, 12 March 1903, 489; *The Times* (London), 1 September 1905, 9; *Page's Weekly*, 7, no.63, 1042; *Hartford Courant*, 6 August 1929, 6; CEM Biographical Profiles, *Chinese Educational Mission: Connections, 1871-1881*, <http://www.cemconnections.org/>
- ⁴⁰ 'An Interesting Reunion,' *North China Herald*, 10 December 1902, 1232.
- ⁴¹ Henry & Franklin, 'Walter Burley Griffin,' 3.
- ⁴² *New York Times*, 2 June 1912, 39; *Engineering News*, 4 July 1912, 23-24.
- ⁴³ Griffin, *The Magic of America*, IV: 16.
- ⁴⁴ Shanghai Municipal Council, *Annual Report 1898, 277; Annual Report 2003*, p.200.
- ⁴⁵ Wright, 'Introduction: the rising tide of change,' 1-3; Reynolds, *China, 1898-1912*.
- ⁴⁶ Hutters, *Bringing the World Home*, 2, 7-8.
- ⁴⁷ Wright, 'Introduction: the rising tide of change,' 3-4; Levenson, *Confucian China and its Modern Fate*, 108.
- ⁴⁸ Hutters, *Bringing the World Home*, 9; Duara, *Rescuing History from the Nation*, 66-67
- ⁴⁹ Hutters, *Bringing the World Home*, 9, 10.
- ⁵⁰ Boerschmann, 'Chinese architecture and its relation to Chinese culture,' was the first significant English-language account of Chinese city formation. Although it carries dates of 1911 and 1912, it was not released until January 1913, see: *Washington Herald*, 11 January 1913, 8. Contrary to Proudfoot, *Secret Plan of Canberra*, 62-63 and Kögel, *Grand Documentation*, 33 this paper could not have influenced the Griffins' entry in the Australian Federal Capital competition, which was prepared September-December 1911.
- ⁵¹ For example, the Clark Memorial Fountain, Grinnell, Iowa, 1910; the project for a State Fair Exhibition Building for the Universal Portland Cement Company, 1911; and the architectural elements of the Griffin entry in the Australian Federal Capital Competition, 1911-1912 – Kruty, *Walter Burley Griffin: architectural models of projects and demolished buildings*, 22-26; Vernon, *A Vision Splendid*.
- ⁵² Griffin's knowledge of *feng shui* has been inferred from 'water' and 'mountain' relationships in the Canberra Plan, most provocatively in Proudfoot, *Secret Plan of Canberra*, 19-21, 56-65 – but to date, no documentary evidence has been found to support this assertion.
- ⁵³ A further dimension to Griffin's 'Chinese' interests is provided by his later involvement with leading members of the Chinese community in Melbourne, Australia which resulted in a number of significant commissions, most notably the Chinese Nationalist Club in Little Bourke Street (1921); the Cheong and Moon Houses, Castlecrag, NSW (1921-1922); and the Blue Hills garden suburb, East Croydon, Victoria (1921). The architectural projects, in particular, indicate Griffin's attempt to suggest 'difference' through the deployment of imaginative geometric elements, rather than direct borrowing of Chinese motifs, Turnbull & Navaretti. *The Griffins in Australia and India*, 176-177, 182-183, 188.
- ⁵⁴ Hutters, *Bringing the World Home*, 11, 178; Cohen, *Discovering History in China*, 79-96.
- ⁵⁵ MacPherson, 'Designing China's urban future,' 39-62; Balfour & Zheng, *Shanghai*, 75-77; Zhang Bing, 'The evolution of strategic planning in Shanghai, 1927-1949,' 12-16; Chan & Zhang, *Shanghai Jindai Jianzhu Shigao*, 14-18.
- ⁵⁶ Wright, 'The cosmology of the Chinese city,' 33-73.
- ⁵⁷ Allen, 'Reading Taipei: cultural traces in a cityscape,' 1-3.
- ⁵⁸ Weirick, 'The Griffins and modernism,' 8-10; Zhang, 'Canberra,' 54-61.
- ⁵⁹ Weirick, 'Spirituality and symbolism in the work of the Griffins,' 68.
- ⁶⁰ Muller, *The Esoteric Nature of Griffin's Design for Canberra*.
- ⁶¹ Harrison, *Walter Burley Griffin, Landscape Architect*, p.18.
- ⁶² Weirick, 'Spirituality and symbolism in the work of the Griffins,' 71.
- ⁶³ *Hartford Courant*, 19 March 1906, 2.
- ⁶⁴ 'A loss to his country,' *North China Herald*, 30 January 1906, 227.
- ⁶⁵ Duara, *Rescuing History from the Nation*, 66-67, 81; Hutters, *Bringing the World Home*, 9.



Bibliography

- Allen, Joseph R. "Reading Taipei: cultural traces in a cityscape." *Harvard Studies on Taiwan* 3 (2000): 1-21.
- Anon. "Register of Former Students." *Bulletin of the Massachusetts Institute of Technology, Boston* 50, no.3 (1915): 5-718.
- Balfour, Alan & Zheng Shiling. *World Cities: Shanghai*. Chichester: Wiley-Academy, 2002.
- Barnard, Catherine. "Wonderful Chinese Palace at the Fair" *Catholic Advance*. 2 July 1904, 5.
- Boerschmann, Ernst. "Chinese architecture and its relation to Chinese culture," *Annual Report of the Smithsonian Institution, 1911*. Washington, D.C.: Government Printing Office, 1912.
- Chan Congzhou & Zhang Ming eds. *Shanghai Jindai Jianzhu Shigao (Shanghai Early-Modern Architectural History)*. 4th ed. Shanghai: Shanghai Sanlian Shudian, 2002.
- Christ, Carol Ann. "'The Sole Guardians of the Art Inheritance of Asia': Japan and China at the 1904 St Louis World's Fair," *Positions: East Asia Cultures Critique*, 8, no.3 (2000): 675-709.
- Cohen, Paul A. *Discovering History in China: American historical writing on the recent Chinese past*. 2nd ed. New York, 1996.
- Dirlik, Arif. "Architectures of global modernity, colonialism, and places." *Modern Chinese Literature & Culture* 17, no.1 (2005): 33-61.
- Duara, Prasenjit. *Rescuing History from the Nation: questioning narratives of modern China*. Chicago: Chicago University Press, 1996.
- Elvin, Mark. "The administration of Shanghai, 1905-1914," in: Mark Elvin & G. William Skinner. *The Chinese City between Two Worlds*. Stanford: Stanford University Press, 239-262.
- Feuerwerker, Albert. *China's Early Industrialization: Sheng Hsuan-huai (1844-1916) and Mandarin Enterprise*. Cambridge, MA: Harvard University Press, 1958.
- Fairbank, John King, Katherine Frost Bruner & Elizabeth MacLeod Matheson, eds. *The I.G. in Peking: letters of Robert Hart, Chinese Maritime Customs, 1869-1907*. Volume 2. Cambridge, MA: Harvard University Press, 1975.
- Griffin, Marion Mahony. *The Magic of America*. New York: New York-Historical Society, c.1949. Electronic Edition, Manuscript Facsimile. The Art Institute of Chicago & The New-York Historical Society, 2008. <http://www.artic.edu/magicofamerica/moa.html>.
- Henry, Alice. & Miles Franklin. "Walter Burley Griffin: winner of the Federal Capital prize." *Daily Telegraph* (Sydney), 3 August 1912: 15.
- Harrison, Peter. *Walter Burley Griffin, Landscape Architect*. Canberra: National Library of Australia, 1995.
- Huters, Thomas. *Bringing the World Home: appropriating the West in Late Qing and Early Republican China*. Honolulu: University of Hawai'i Press, 2005.
- Johnson, Linda Cooke. *Shanghai: from Market Town to Treaty Port, 1074-1858*. Stanford: Stanford University Press, 1995.
- Johnston, George Washington & Charles Colebrook Sherman, eds. *Yale 1883: the book of the class compiled after its quarter centenary reunion*. New Haven: Tuttle, Moorehouse & Tyler, 1910.
- Kaiser, Daniel. "The China connection – Walter Burley Griffin and Shanghai." *Ricker House Chronicles* (2014): <https://kaiser355.wordpress.com/2014/01/13/the-china-connection-walter-burley-griffin-and-shanghai/#comments>



The 18th International Planning History Society Conference - Yokohama, July 2018

- Kögel, Eduard. *The Grand Documentation: Ernst Boerschmann and Chinese religious architecture (1906-1931)*, Berlin: de Gruyter, 2015.
- Krutzy, Paul. *Walter Burley Griffin: architectural models of projects and demolished buildings*. Urbana-Champaign: School of Architecture, University of Illinois, 2003.
- LaFargue, Thomas E. *China's First Hundred: Educational Mission students and the United States, 1872-1881*. reprint ed. Pullman: Washington State University Press, 1987.
- Leung Yuen-Sang. *The Shanghai Taotai: linkage man in a changing society, 1843-1990*. Singapore: Singapore University Press, 1990.
- Levenson, Joseph R. *Confucian China and its Modern Fate*. Berkeley: University of California Press, 1968.
- Li Yingchun. Planning the Shanghai international settlement: fragmented municipality and contested space, 1843-1937. Ph.D thesis. Hong Kong: University of Hong Kong, 2013.
- Lowenstein, M.J. ed. *Official Guide to the Louisiana Purchase Exposition*. St Louis: The Official Guide Co., 1904.
- MacPherson, Kerrie L. "Designing China's urban future: the Greater Shanghai Plan, 1927-1937." *Planning Perspectives* 5, no.1 (1990): 39-62.
- Muller, Peter. *The Esoteric Nature of Griffin's Design for Canberra*. Walter Burley Griffin Memorial Lecture. Canberra: Royal Australian Institute of Architects (ACT Chapter), 1976.
- Peisch, Mark L. *The Chicago School of Architecture: early followers of Sullivan and Wright*. London: Phaidon.
- Pomeroy, Eltweed. "The Louisiana Purchase Exposition: a comparison and criticism." *The World Today* 7, no.3 (1904): 1157-1164.
- Pong, David. "Confucian patriotism and destruction of the Woosung Railway, 1877." *Modern Asian Studies* 7, no.4 (1973): 647-676.
- Price, Nancy E. Walter Burley Griffin. Year 5 thesis. School of Architecture, University of Sydney – draft with handwritten corrections in ink by Walter Burley Griffin. Harrison Papers, National Library of Australia. MS 8347, Box 6, Folder 35.
- Proudfoot, Peter. *The Secret Plan of Canberra*. Sydney: University of New South Wales Press, 1994.
- Reid, John Gilbert. "Taft's telegram to Root, July 1905," *Pacific Historical Review*, 9, no.1 (1940): 66-70.
- Reynolds, Douglas R. *China, 1898-1912: the Xinheng Revolution and Japan*. Cambridge, MA: Council on East Asian Studies, Harvard University, 1993.
- Schuyler, Montgomery. "The Architecture of the St Louis Fair." *Scribner's Magazine* 35, no.4 (1904): 385-395.
- Shanghai Municipal Council. *Annual Report for the Year ended 31st December 1898*, Shanghai: Kelly & Walsh, 1898.
- Shanghai Municipal Council. *Annual Report for the Year ended 31st December 1903*, Shanghai: Kelly & Walsh, 1903.
- Smith, Nancy K. Morris ed. "Letters, 1903-1906, by Charles E. White jr., from the Studio of Frank Lloyd Wright." *Journal of Architectural Education* 25 no.4 (1971): 104-112.
- Stevens, Walter B. "General Plan of the Exposition." *The World Today* 7, no.3 (1904): 1129-1131.



Turnbull, Jeff & Peter Navaretti. *The Griffins in Australia and India: the complete works of Walter Burley Griffin and Marion Mahony Griffin*. Melbourne: Miegunyah Press.

Vernon, Christopher. *A Vision Splendid: how the Griffins imagined Australia's Capital*. Canberra: National Archives of Australia, 2002.

Weirick, James. "The Griffins and modernism." *Transition*, 24 (1988): 5-13.

Weirick, James. "Spirituality and symbolism in the work of the Griffins," in: Anne Watson, ed. *Beyond Architecture: Marion Mahony and Walter Burley Griffin, America, Australia, India*. Sydney: Powerhouse Publishing, 1998: 56-85.

Wernecke, Regierungsrat. "Der Wettbewerb um einem Bebauungsplan für die Bundeshauptstadt von Australien." *Der Städtebau* 7 (1913): 73-77, 86-88.

Wong Kai Kah. "A menace to America's oriental trade," *North American Review* 178, no.568 (1904): 404-414.

Wright, Arthur. "The cosmology of the Chinese city," in: G. William Skinner ed. *The City in Late Imperial China*. Stanford: Stanford University Press, 1977: 33-73.

Wright, Mary Clabaugh. "Introduction: the rising tide of change," in Mary Clabaugh Wright, ed. *China in Revolution: the first phase, 1900-1913*. New Haven: Yale University Press, 1968: 1-63.

Zhang Bing. "The evolution of strategic planning in Shanghai, 1927-1949." *Planning History* 17, no.2 (1995): 12-16.

Zhang Qinnan. "Canberra," in: *Yue Du Cheng Shi (Reading City)*. Beijing: Sanlian Shudian, 2004: 54-61.

Manuscript Sources:

First National Bank of Dwight Collection, Ryerson & Burnham Archives, Art Institute of Chicago, Chicago
Miles Franklin Papers, Mitchell Library, State Library of New South Wales, Sydney
Peter Harrison Papers, National Library of Australia, Canberra
Mark Lyons Peisch Correspondence & Papers, Avery Library, Columbia University, New York
Ministry of Foreign Affairs Collection, Institute of Modern History Archives, Academia Sinica, Taipei
Yale Alumni Records, Sterling Library, Yale University, New Haven

Newspapers:

Catholic Advance (Fort Leavenworth, KS)
Daily Telegraph (Sydney)
Hartford Courant (Hartford, CN)
Los Angeles Times (Los Angeles)
New York Times (New York)
North China Daily News (Shanghai)
North China Herald (Shanghai)
San Francisco Call (San Francisco)
St Louis Post-Dispatch (St Louis)
St Louis Republic (St Louis)
The Times (London)
Washington Herald (Washington, D.C.)

Professional & Technical Journals:

Engineering News (New York)
Page's Weekly (London)
World's Fair Bulletin (St Louis)

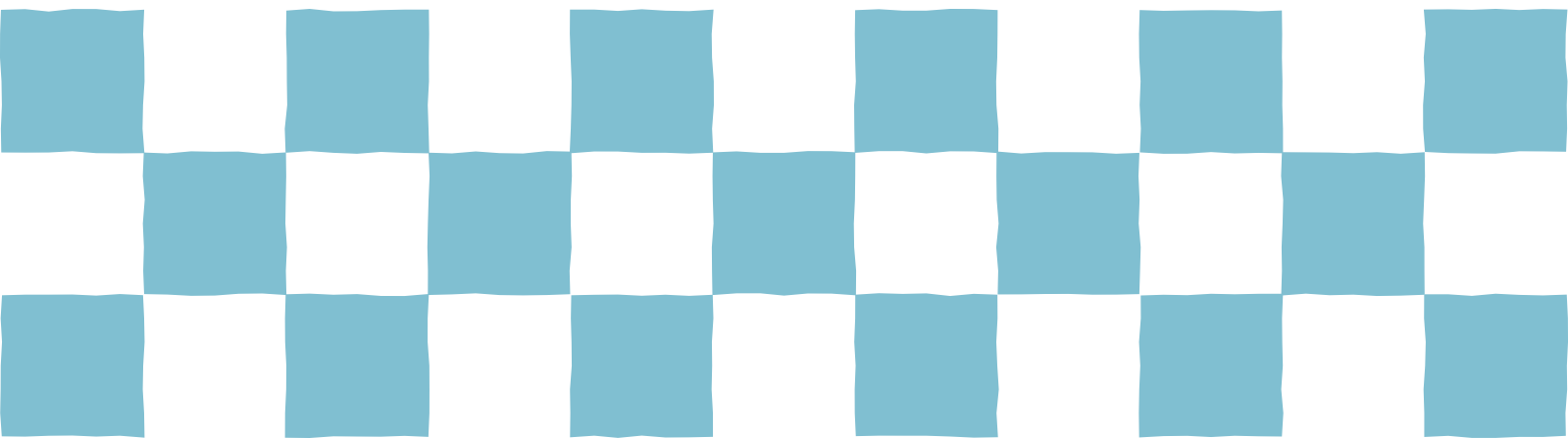


INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

11

**Between Empires and Nations:
Urban Change in Twentieth
Century China and Taiwan /
GUHP***



Postwar Urban Reconstruction in China, 1938 - 1958

Toby Lincoln (University of Leicester)

This paper outlines my next major research project. It explains how urban reconstruction in China during and after World War II (WWII) laid the foundation for the country to become the world's largest urban society. In focusing on the war as a transformative period in the development of China's cities, instead of the Communist Revolution, it writes the country into the global history of urban change throughout the 20th century. The paper focuses on what ideas on urban planning were circulating in China throughout the 1940s, and the extent to which the Nationalist Government was able to implement them. Before the outbreak of war with Japan, planners and architects had written about many of the ideas that were fashionable in global planning circles, including garden cities and zoning. During and after the war, they developed their ideas to respond to such issues as aerial bombardment and the need for urban reconstruction. In doing so, they also referenced international experiences from Germany, Japan, the UK and the USSR among other countries. Just as importantly, throughout the wartime period, the Nationalist Government was building up an administrative and legal apparatus to manage the reconstruction and expansion of cities. Officials at central and local government attempted to put into practice some of the latest global ideas on urban change, which were then circulating around China. Despite the difficulties of WWII and the civil war that followed it, urban reconstruction in the 1940s formed the foundation for the development of socialist cities after 1949.

Building a Socialist Industrial City: Factory, City, and Countryside in Mao's China

Koji Hirata (Stanford University)

This paper examines how industrial enterprises and ordinary people participated in construction of cities in the early years of the People's Republic of China. Much of the past scholarly literature on urban planning in the early PRC focused solely on the state bureaucracy. By contrast, I focus on how urban-planning policies were implemented at the ground level, by focusing on the case of Anshan—a major industrial city in Manchuria (Northeast China) that had previously been constructed as a Japanese colonial city prior to 1945. To examine the urban construction of Anshan, I draw upon a wide range of newly available sources, including local newspapers, official municipal histories, and confidential government reports. This paper begins with a brief overview of the establishment of the PRC city-planning bureaucracy, which is followed by a discussion of the process and outcomes of urban construction. The paper then discusses the population movement to Anshan from the countryside, and how this contributed to issues of housing shortages in the city.

Altogether, this reexamination of the Chinese urban political economy demonstrates that local-level negotiations among various actors, including lower-level officials, enterprise managers, and even migrant workers, lay at the heart of urban-construction policies in Mao-era China, even during the period usually characterized by centralization of power. Firstly, far from being monolithic, policy implementation in the early PRC city was radically fractured among different enterprises and local government offices. The enterprises and government offices constructed housing buildings, roads, and factories according to their own plans as opposed to those of the city government. Secondly, partly because of the city government's lack of centralized power, the city's physical infrastructures were transformed more gradually than the city officials had planned, and the city's landscape in the end remained only moderately changed from that of the period under Japanese colonial rule. Thirdly, the city government lacked the kind of centralized power necessary to predict and control people's daily activities and movements. While the city government failed to build sufficient urban infrastructure, it also failed to foresee and control migration into the city. Combined with slow development of the city's urban infrastructure, the resulting population explosion brought about a range of crises, from disposal of human waste and urban crimes to, most seriously, a shortage of housing.

From Shinto Shrines to Martyr Temples and others: 'Religious' Space, Rituals and their shifting political Symbolism as Enunciation of Power(s) in Taiwan since the Post-war Era

Liza Wing Man Kam (Georg-August-Universität Göttingen, Max-Planck Institute for Study of Religious and Ethnic Diversity)

First it was ceded to Japan in 1895-1945, then it became the island of retreat for the Chinese Nationalists (Kuomintang, or KMT) in 1949 after the Civil War of China. Currently it is the first polity in the Chinese world who is 'allegedly (one of the) most successful cases of democratic transition in East Asia' (Chu and Huang 2010)

In the last two centuries, Taiwan has gone through several shifts on political paradigm and ideologies before, during and after Japanese colonisation.

Shintoism was the 'state religion' in Japan, and by 1937, 120,000 Shinto Shrines had been built in the country. Departing from being centres of worship, these Shrines also serve as sites of enunciating political power as well as icons to facilitate identity formation (Tsai, 2001, 2015)

As Taiwan became the 'extended territory' of Japan, Shinto Shrines were built nationwide in Taiwan as icons enunciating colonial power in political, religious and cultural terms. The colonial authority made use of Shinto Shrines as religious spaces but simultaneously asserted the additional political, military, authority and 'enlightenment' layers of symbolism to further iconise Shinto Shrines. They acted as symbolic 'surveillance' and 'reminder' (Tsai, 2001) of concepts such as the 'greatness' of, and the loyalty to the Japanese Empire in the quotidian existence of the colonised populace. In the later stage of the colonial period, Shinto Shrines became the most significant spatial and material symbolism under the Kōminka policy. Shrines in different forms penetrated into every single household of the colonised. According to Tsai (2001), 'some were built by Japanese expatriates to safe-guard their business on the colonised island, some were solely icons of political power-- regardless of the original intentions of constructing such Shinto Shrines, once they appeared in the setting of Taiwan who did not belong to the same religious framework as the Japanese, it became inevitable that such architectural prototype is always associated to be the icon representing the colonial power.'

Departing from analysing the Shinto Shrines as colonial architectural/ spatial icons, this paper studies the evolved/ evolving roles of these shrines in the context of post-colonial Taiwan, as well as the liturgical and non-religious activities hosted in them 1. As the various political symbolisms; 2. As the tools and driving forces to gather/mobilise populaces and; 3. With their performative effects examined, hence how it affects the process of identity formation, in parallel with the historical timeline which marks the several political paradigm shifts in the Taiwanese society since the colonial era.



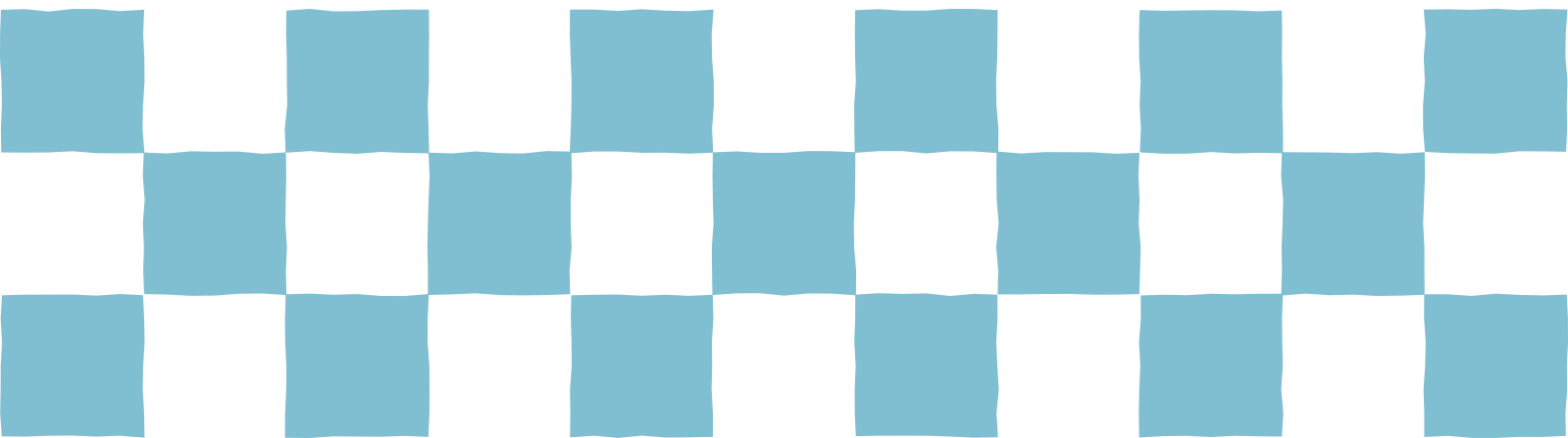
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

12 Planning History in Modern China



Spatial History: Policy Interventions, Uneven Development, and Rescaling in the Beijing-Tianjin-Hebei Region, China, 1962–2017

Yi-Qun Zhang (School of Architecture and Urban Planning, Nanjing University)

With the emergence of social issues such as "Beijing Folding," China's regional inequality has recently received increasing attention. As a typical case, it remains key question to understand the development process in Beijing and its surrounding areas. This paper aims to show the evolution of policy intervention and spatial development in the Beijing-Tianjin-Hebei region, also known as Jing-Jin-Ji region, from a historical perspective, to reveal the internal dynamics and mechanism of regional uneven development in a highly centralized environment, and to explain the role of policy intervention in reterritorialization.

According to the traditional location theory, Beijing is the geographical core of the Beijing-Tianjin-Hebei region and therefore should serve as a regional center. However, entering the era of globalization, Beijing became a typical Global City-region, which has attracted more global and national-scale flows from a multi-scalar perspective, and there is no close geographical connection between Beijing and the surrounding areas. In the meantime, through the orchestrated arrangement under continuous policy intervention, over-concentration of capital is triggered, which further aggravates regional uneven development.

On the basis of comprehensively reviewing the progress of related research on spatially-targeted intervention, this paper selects data from industrial and commercial enterprises across the nation from 1977 to 2017 to make a historical interpretation of the development of the industrial structure and policy intervention in the Beijing-Tianjin-Hebei (Jing-Jin-Ji, JJJ) region, revealing the features of regional industry evolution, and elaborated the role and spatial effects of policy intervention in regional development.

The study's findings suggest that: 1) Under the authoritarian regime, spatially-targeted intervention is the result of state space selectivity, and the stickiness of policies and institutions attached to geographical space is the key point to understand unbalanced development of cities and regions; 2) The evolutionary process of industries in the Beijing-Tianjin-Hebei region presents cyclical fluctuations and has a coupling and interaction relationship with regional policies. 3) The realization of collaborative governance in the Beijing-Tianjin-Hebei region relies on the easing of rights and the reconstruction of the scalar relationship, and the establishment of multi-level governance system.

Dilemma Between Density and Living Quality: The Urban Planning History of Sinan Road District Before and After 1949

Kaiyi Zhu (Delft University of Technology)

The saturation of urban construction in contemporary Chinese metropolises has forced planners to face the inevitable strategy of optimizing housing stock. Whereas several Chinese big cities are revealing their flourish, old urban properties have suffered from damage and collapse, caused by a lack of maintenance and rough occupancy. Improvement of quality of dwellers' lives has consequently gone hand in hand with the transformation of existing historic buildings. This paper investigates the unique urban planning history and demographic changes in Sinan Road (also named as Rue Massenet) District of Shanghai and the socioeconomic impacts on local inhabitants' living quality led by formal and informal planning dynamics.

The story of modernism in Shanghai originated in 1840s when the first foreign merchants and missionaries settled. Sinan Road District was formed during the expansion of French Concession. As a result of the shifting socioeconomic atmosphere, quondam houses, which were built for middle and upper classes, have been residence for diverse inhabitants, from aliens to important members of the government, from prominent tycoons to ordinary labourers and even low-income groups. Sinan Road District has gone through two phases of urbanization, within which both population structure and urban morphology of the district have undergone apparent changes. In the first stage before 1949, when the district was still under the influence of concession period, this district maintained the style and features as an upscale community. This identity and status positioning of Sinan Road District was designated and planned by the French Concession Bureau (Conseil D'Administration Municipale de la Concession Française de Changhai in French and 公董局 in Chinese) in the early twentieth century. After 1949, housing shortage has become a long-standing issue as a result of labour tide. Local government split upscale houses in French Concession and assigned them to multiple migrant workers in order to reduce the pressure on urban housing. Occupancy from low-income groups has significantly changed standards of local living quality. Therefore, in the second stage of urbanization after 1978, living conditions in historic districts have accordingly become complicated and intractable to conduct. In this case, heritage approaches, such as demolition, urban renewal, adaptive reuse, renovation, have emerged in endlessly. However, urban transformation in historic areas has been marketing selection dominated by capital. Although heritage approaches have gradually demonstrated the erstwhile prosperity in Sinan Road to the public, reminiscences and relevant population have almost vanished. Tentative conclusions indicate that multiple inhabitants' behaviour and habits have decisive influence on the qualitative changes of inhabitants' lives; moreover, governors' plans and capitalists' contribution are crucial remedies in the transforming process of an urban area but cannot determine the final direction of a certain urban transformation when it comes to the essence of lives; most importantly, the fight for stabilization between density and quality is a time-consuming perseverance, requiring cooperation between various stakeholders. In general, investigating the underlying changing goals and ambitions, stakeholders' attitudes, planning strategies for urban transformation in historic districts is needed.

An Investigation on the External Passage Development and Spatial Structure Transformation of Modern Kunming from a Southeast Asian Perspective, 1885-1945

Tianjie Zhang (Tianjin University, Associate Professor) and Yuqi Zhang (Tianjin University, Postgraduate student)

From a regional perspective of Southeast Asia, the paper focuses on Kunming, the capital city of Yunnan Province in southwest China, on the border with Burma, Laos and Vietnam. The research elucidates the planning ideas and construction process of international external passages, via both land and air, and explores their influences on Kunming's spatial structures from 1885 to 1945. Historically, Kunming was the cradle of the ancient Southern Silk Road and the Tea Horse Road. As an important node city in China's southwest frontier, Kunming has been the gateway between China and Southeast Asian countries for economic and political connections.

The paper examines the land and air route planning, construction process and transport volumes of the passages between Kunming and Southeast Asian countries. It identifies the impetus of passage construction increase, such as Kunming's self-opening as a treaty port and strategic retreat in late 1930s, which further accelerated Kunming's modernization and affected regional economic structure. The passages between Kunming and Vietnam were mainly supported by the Yunnan-Vietnam Railway, together spread French Colonial influences. The Yunnan-Burma Railway, the Burma Road, the Ledo Road and the Hump Air Route were established in succession. These external passages became the arteries of economic transportation. Kunming became an important node of the Southwest China-Vietnam and Southwest China-Burma-India economic corridors. Kunming developed into an international economic center in early 1940s.

Accordingly, the paper, via archives research, field works and in-deep interviews, reveals the changing characteristics of Kunming's spatial structures influenced by these external passages. To certain degree, the external passages accelerated Kunming's urban growth along the traffic lines. The city center shifted to the Station area, where industrial and commercial developments also congregated. New industrial zones were planned to the east and north of the old city, where new passages brought more convenient transportations. The internal road network plan also emphasized the connection with new railway station and bus stations.

Besides, the research elucidates the planning practices, traces their theoretical origins, and uncovers their indigenous considerations.

Certain key figures and their planning thoughts will be analyzed in details. The first Kunming mayor Zhang Weihuan was ever educated in Tokyo Imperial University from 1919 to 1921. During his mayorship in 1920s, he visited Japan several times to investigate municipal construction and administration. Other technocrats like Ding Jishi, Tang Ying who drafted the metropolitan plan respectively in 1939 and 1942, ever studied in Germany. Contextualized in the worldwide communications of modern city planning ideas, the paper will reveal the diverse and dynamic planning interactions in Kunming from a regional perspective of Southeast Asia.

McPublic Spaces: McDonald's appropriation of the everyday place in Hong Kong

Diego Caro (The University of Hong Kong)

The pressure of high property prices in Hong Kong forces a great percentage of people to live and work under poor conditions; this fact, combined with the lack of effective open public spaces in the city, has empowered for decades the rise of places of consumption as an extension of domestic and professional realms. In the 1970s, a large process of appropriation and interiorization of the "public" by multinational corporations was initiated, primarily through shopping malls. In this context, McDonald's has played a crucial role in the integration of everyday activities into spaces of consumerism in Hong Kong since the opening of its first outlet in the city in 1975. The aim of this paper is to analyse the role of McDonald's restaurant design in Hong Kong in the production of everyday places where the production of social space happens under the constraints of the market's spectacle and speculations.

There are currently 244 McDonald's strategically distributed in the most populated areas of Hong Kong, of which 116 are opened 24hours. Its access appears hardly restricted; users range from families with children, to high school students, construction workers, domestic helpers or groups of elderly people. Moreover, Hong Kong and Mainland China McDonald's have been known in recent years for letting homeless people, referred as "McRefugees", sleep in their restaurants, or high school students overstay while playing videogames. McDonald's outlets in Hong Kong have evolved from the original aesthetics of the company with a colourful postmodern cafeteria look, to the newest concept "Next", internationally released in Hong Kong in 2015, with a bold design, neat materiality, touch screens and open layout. Throughout this process, its restaurant design and policies have evolved by appropriating the rhythms of the city and its citizens.

Whereas Hong Kong's city escape is commonly perceived as the product of top down strategies carried out by "coalitions" between public institutions and private corporations, McDonald's offers a case study of informal activities influencing the way a global enterprise develops. Its new "Next" concept might be seen as an attempt to anticipate informality. Two opposing ideas underlie this "open look": the aim to homogenize customers through the sanitation of the space, versus the provision of neutral spaces to allow for the occurrence of heterogeneity. The presence of the screen as an intermediary between the restaurant and its customers empowers a dichotomy between an impersonal fast food service and current paradigms that aim to prioritize people and food.



Dilemma Between Density and Quality: The Demographic History of Sinan Road Area

Zhu Kaiyi *

* PhD Candidate, Department of Architecture, K.Zhu-1@tudelft.nl

This paper investigates the unique urban planning history and demographic changes in Sinan Road (also named as Rue Massenet) Area of Shanghai and the socioeconomic impacts on local inhabitants' living quality led by formal and informal planning dynamics. Examining both tangible and intangible characteristics of this area under five different historical phases, this paper indicates that population density and urban quality cannot always be positively or negatively related. Urban quality can reach the maximum value when area population of concentrated density stays in an ideal state, although, as a result of the qualitative variates, such state (peak value) is in suspense. Through analysing the overarching strategic plan of different periods, it also argues that urban quality is not merely dominated by or directly related to density but more by the population's social demands and their initial interaction with a specific area, active or passive involvement.

Keywords: population density, Sinan Road area, historic district, social demands, urban transformation, living quality

Introduction

The saturation of urban construction in contemporary Chinese metropolises has forced planners to face the inevitable strategy of optimizing housing stock. As a city where urban heritage practices happen frequently, municipal construction and housing departments of Shanghai jointly issued a series of implementation opinions in 1999, to improve and monitor pilot preservation and reconstruction projects of historic buildings and blocks of this city. This turning point has brought a more comprehensive platform of expression in the context of market economy, while enabling multiple values of urban heritage to be fully discovered by varied stakeholders in a new era. Sinan Road area is an important component of Hengshan-Fuxing Historic Area, which was designated as one of the twelve *Areas with Historical Cultural Features* (历史文化风貌区) in 2003 by Shanghai municipality. This paper examines formal and informal urban transformation in Sinan Road area throughout the history, investigating the dilemma between population density and space experiencing quality within this area.

Sinan Road was initially built in 1914 from farmlands and ponds and named after Jules Massenet as Rue Massenet Road. Reaching Huaihai Middle Road (Xiafei Road) on the north and Taikang Road (Jiaxiyi Road) to the south, it is one of the most distinctive roads in the Shanghai French Concession with its richness in historical and cultural features. The whole historic area was largely developed between the 1910s and 1930s. Interested in the integrity of its legacies and the diversity of architectural features, scholars analyse regarding this area have revealed under the following points: Shao Yong and Ruan Yisan focus on the utilization and redevelopment criteria of urban heritage protection by considering their public and social interest, and besides, flexibility in the formulation of heritage protection policies and operational mechanisms by local government in the background of market economy¹; Mou Zhenyu's study of land use and development process of modern Shanghai²; in Wei Min's research, from the perspective of urban planning, the thesis discusses the main objects and approaches in heritage protection practice under the principle of integrated conservation, with proposing specific proposals for forward progress³. Nevertheless, the inadequacy of research is that the most previous studies are always tending to split the past and present status of Sinan Road area, without connecting different stages of development as whole and exploring its changes as a consistent social issue. Therefore, taking density and quality as two key elements which have been consistently interacted throughout the history of area development, in addition to the study of a general history of Shanghai French Concession where the target site located as a basis, this paper explores the demographic changes and its resulting urban phenomenon in multiple historical stages for comparison; it then investigates the significance of population density and its relationship with urban quality, especially, when many architects and urban planners embraced an ethos of low density urban community.

The Necessity of Population and Density

When American socialist and activist Jean Jacobs' talks about city diversity in her book *The Death and Life of Great American Cities*, the necessity of a concentrated density and old buildings are almost equally important to



a community⁴. Although, the population of in each city is different, Asian cities, such as Shanghai and Beijing, follow a high-density mode⁵. According to urbanists' analysis of urban density and sustainability, environmentalists Peter Newman and Kenworthy indicate a negative correlation between the energy consumption and the overall population density of a city, which means that the lower population density it is, the less sustainable the city will become⁶. Conversely, architect Steffen Lehmann indicates that there is a limitation of compactness for sustainable urban liability⁷. Sustainability represented by the energy consumption is merely one of the indicator to assess urban quality of every locality, this research reveals a scientific fact that within the public's choice for production convince many things are discarded, including people⁸. There is particularity of Sinan Road; more sustainable urban features, such as vibrant urban forms, social equity, efficient infrastructure and urban greenery, could not be achieved in a stable district with a history over semi-century⁹. Under the circumstances, its significance as urban heritage should be re-examined; settling both population and liveability of Sinan Road under the demographic shift throughout history, native residents, whether at what historical phase they moved into this community, without doubts, have become one of the most representative features of the site. In this paper, it further investigates the demographic composition of native residents and their engaging approaches and degrees of involvement in Sinan historic site, to investigate people's material and spiritual needs in everyday-life. Applying this method, this paper aims to clarify population's sense of location intimacy, which is tightly associated with living quality, liveability and urban health of every specific historic district.

The Formation and Expansion of the French Concession and Two Urban transformation Phases before 1949

The story of modernism in Shanghai originated in 1840s when the first foreign merchants and missionaries settled. Before and after entering the Republic of China, although the newly appearing New Shikumen Lilong houses were equipped with basic sanitation facilities and better environment, they were still built for economical and practical purpose. Those old Lilong houses, as a result of the shifting socioeconomic atmosphere, could no longer satisfy the needs of booming nouveau riche, let alone meeting politicians' and bigwigs' living standards. Sinan Road area was formed during this era, the third expansion of French Concession (Figure 1). Before the contemporary urban transformation started in 1999, Sinan Road area had gone through five phases of urbanization, within which both population structure and urban morphology of the district had undergone apparent changes. This urban development process will be elaborated in the following content.



Figure 1. Anonym. *Extension map of the French Concession in 1920*. [Shanghai, date unknown]



Stared in 1914, the French Concession authorities took advantage of the third expansion to create a core zone intentionally. Under such circumstances, in order to ensure the purity of European residents of the region and its thriving and prosperous, the French Concession Bureau issued a series of related orders. It was clearly stipulated by the bureau that only houses constructed with European features was allowed in the expanding area, with elaborate description of architectural details. In addition, each community was equipped with doorkeepers who were mainly responsible for public security and health¹⁰. According to the *Decade Report of Customs (1912-1921)*, the west part of the French Concession was the first and single unique example of Shanghai that was delicately designed by architects and planners¹¹. This west end had therefore become a place where political, economic, military, cultural, entertainment and social activities frequently happened. Although there was a structural adjustment of population composition after 1927, both housing usage conditions of every single property and surrounding public urban environment were staying in a ideally preconceived state as planned.

Turning point of urban transformation in Sinan Road area first appeared with the outbreak of the Second Sino-Japanese War. During this period, expatriates from Europe and America had withdrawn from China in succession; coincidentally, most domestic households, the politicians and bigwigs, left their properties and handed over to relatives and friends for management. Meanwhile, as a respond to warfare, famine and shortage of materials, a large number of victims flooded into the French Concession, causing a shortage of housing. In this case, with the decline of these powerful or glamorous families, a single family house in Sinan Road area was usually divided into several households, subsidizing family daily expenses. Most previous households could not return, and the main body of residents had changed from politicians and celebrities to entrepreneurs and businessmen; nevertheless, compared with communities in Luwan District, the ratio of educated population held a sharp advantage of 90 percent more than the others¹². In the second phase, Sinan Road area was still a high-end residential area in Shanghai. This paper thus claims that in the second historical phase of urban transition, in terms of living density, the increase in population had literally put pressure on varied communities in Sinan Road area; moreover, such demographic shift had not effected the overall sustainability of the area, either from the perspective of the elitism of the local population or the degree of regional environment and community vigour and vitality. The relationship between population density and urban quality in Sinan Road area had therefore reached and maintain a healthy and sustainable balance before 1949, after its establishment.

Three Urban transformation Phases in Sinan Road Area after 1949

Between 1949 and 1999, the whole Chinese society had experienced a period from turbulence to recovery and development. Global Industrialization brought the evolution of China's industry, leading growth of labours, and besides, multi-storey commercial housing more in line with market demands. In addition to the reform of political system and the change of house-ownership in the new regime, former status of historic blocks in Sinan Road area were to comply with the political demands of the era. Since 1949, urban transformation in this historic site has chronologically experienced three phases successively: starting from 1956, the urban housing renovation utilized for emerging industries under the context of a mechanism of public-private partnership; immigration of low income households to this area in the Cultural Revolution period in order to balance housing resources in various administrative districts; urban conservation practices as a respond to the rising emphasis on historic relics after the reform and opening-up policy in 1978. The latest urban transition has kept happening contemporarily.

In the third phase of urban transformation, as a result of the original architectural design, there were a number of vacant houses with large space, which were suitable for industrial offices or factory buildings. Allocated to enterprises, these delicate and large houses encountered their first adaptive reuse with rough alterative details. Strictly stipulated architectural features formulated by the old French Concession Bureau had been gradually replaced by industrial materials and coating layer, large equipment, temporary barracks and industrial waste. On the other hand, with the nationalization of historic housing, local government offered a considerable number of such houses in Sinan Road to senior intellectuals, senior officials and returned overseas Chinese celebrities as reward for working¹³. In this case, social function and the original high-end nature of this area had changed, fresh residents moved in still being with reliable socio-political and educational background, but differently, the adaption facing factories has led communities to a more civilian direction. From the perspective of the whole area, such adjustment brought diversity, even though there was doubt whether it could fully integrated into the advancement of Sinan Road area. The dramatic developing process of the Chinese society could not leave time for deliberateness and verification.

Effects of the Cultural Revolution had rapidly swept across the country, in the fourth phase between 1966 and 1976. Luwan District government split upscale houses in French Concession and assigned them to multiple migrant people from working class and poor families, in order to reduce the pressure on urban housing and



equilibrating housing resources across Shanghai. However, this measure helped the stabilization and settlement of inappropriate occupancy, changing the former standards of high living quality. The significantly growing poverty population could not afford their rents, even gas bills at the time¹⁴. Commodities consequently replaced with pits and firewood replaced with gas stoves as well. In addition to those physical alternations of architectural tangible features, intangibly, in order to respond to Mao's call for rebellion, temporal radical 'rebels' pillaged houses from former legal residents who were defined as reactionaries in the turbulent time¹⁵. With an increasing population density of poor households, disorganized reconstruction, deteriorating urban landscape and retrogressive lifestyle had largely impacted the urban health and sustainability of Sinan Road area. Such phenomenon of social disorder had no longer being a matter about adding community inclusion, diversity or complexity, and on the contrary, it had created the polarization of the population of different historical phases within the same community, causing irreversibility effects emerged several year later after the Cultural Revolution.

In the last stage of urbanization after 1978, living conditions in Sinan Road area have accordingly become complicated. Complying to government directive, heritage practices regarding historic neighbourhoods has been evolving; approaches of urban heritage transformation are varied from urban renewal and regeneration, renovation to restoration and conservation. Indeed, Sinan Road area, being one of the most outstanding historic block ever, was appointed by Shanghai administration to be one of the four pilot locations to be conserved at the moment, among all the communities in this area, Sinan Mansion was selected for a testing urban heritage approach. This mansion site, located on the south of Chongqing South Road, west of Sinan Road, south of Medicine Faculty of Shanghai Jiaotong University, north to Fuxing Middle Road, has been designated as an important part of Shanghai Hengshan-Fuxing Historic Area, containing one of the largest concentration Garden Lilong houses (Figure 2). In 1999, according to planning strategy, the project was positioned as a high-quality living and commercial leisure community with Shanghainese unique cultural and historical features. The project consists of four functional areas: Sinan Mansion hotel, characteristic boutiques, residential apartments and enterprise mansions; the total construction area is approximately 78,800 square meters, of which approximately 30,000 square meters of old buildings will be conserved. Until now, the entire project has not been completed. This seemingly tangibly ideal conservation plan whereas has also greatly reduced the local population by all residents relocation, obtaining a more efficient environment for redevelopment. Bringing Sinan Mansion area to its previous past glorious scene more or less, urban vibrancy has not been improved as expected by city reformers. Located in the most active commercial centre, Sinan Mansion has become a place where could not gather popularity (Figure 3). Relocation of native residents has indeed a certain degree of negative impact on maintaining the long-term diversity and sustainability of this space. Noticing better urban healthy quality and disappearance of regional polarization, there seems no precise boundary to identify the advantages and disadvantages of population density shrinking.



Figure 2. Author. *Sinan Mansion area has been surrounded by high-rise buildings, and other historic houses in the French Concession are located a little bit further around.* [2018]



Figure 3. Anonym. *There is almost no people in the public space of Sinan Mansion area, and this place is losing its urban vibrancy.* [Shanghai, 2014]

Integrated Conservation Plan and Population Expelling

As mentioned, the Sinan Mansion area has been a pilot project under the context of urban heritage transformation. This redevelopment project was overall designed by a French architect Jean-Marie Charpentier and, German architect Wolfgang Keilholz was responsible for the restoration work of this project. Developers and urban reformers applied integrated conservation plan in Sinan Road historic areas in 1999; the measure aimed to relocate all residents is an unescapable method for three reasons. Firstly, historic houses in this area were built more than half a century ago, dark and moisture, deteriorating with less of repair, and besides, the aged facilities can no longer approach the living demands of modern society in Shanghai. Secondly, every single house has contained considerable number of households since the late 1920s, accommodating an extremely high density in each property; moreover, being a micro society with one house, conflicts and contradiction between households and households have been more complicated to solve. Thirdly, considering themselves not native residents, current dwellers have weak sense of private space maintenance and heavily damaged previous architectural details. Under the circumstances, regarding conserving historic houses in Sinan Mansion area as a matter of urgency, the developer assumed that present residents could not afford the further huge rent in a shortly coming future as a result of their existing low income level. Experienced planners' and developers' decision of relation could give no causes for much criticism, although it somehow has taken away the vitality of this community meanwhile. In 1982 and 1987, ICOMOS successively issued and approved the concept of "tangible heritage" and "intangible heritage" in the *Burra Charter* and the concept of "historic towns and urban areas" in *Washington Charter*¹⁶. Since then, protecting city inhabitants as intangible within every integrated conservation plan and urban regeneration practice has received extensive attention across the world. Finnish architect and urban conserver Juukka Jokilehto indicates that interpretations of internationally agreed charters has been deliberately utilized as an excuse rather than a guiding standard by varied politicians in their regulation formulation and stakeholders in their decision making¹⁷; nevertheless, these charters have brought a possibility for population density and multiple qualities in historic sites, with the methodology by merging tangible and intangible heritage conservation at maximum.

Conclusion

Indeed, in a broader sense, population density and urban quality cannot always be positively or negatively related. Going through the whole transforming history, taking tourists and staff members into consideration as permanent population in the present Sinan Road area, looking at the changing population composition and quality in this historic district, this analyse raises a conclusion that the population density and urban quality are roughly express in a curve pattern characteristics of concave function. In this correlation, urban quality reaches the maximum value when area population density stays in an ideal state. However, as a result of the qualitative variates, the most ideal state (peak value) is in suspense without any solution, although population quality and density in the original plan brought great praise in the 1920s. In this context, urban quality contains not only pleasant environment, delicate architectural appearance and urban landscape, but also includes the vitality, complexity and diversity of a region, and besides, the capability to maintain the healthy demographic



development and keep the balance of flexible supply and demand as facilitated foundation for marketing operation in every respect of a historic district.

In integrated urban conservation project of historic district, varied stakeholders' coordination is one of the most key elements to settle the dilemma between concentrated density and public quality. In general, administrative urban plans and capitalists' contribution are crucial remedies in the transforming process of an urban area but cannot determine the final direction of a certain urban transformation when it comes to the essence of lives. Under such basis, this paper hence argues that urban quality is not merely dominated by or directly related to density but more by the population's social demands and their initial interaction with a specific area, active or passive involvement. Multiple habitants' behaviour has decisive influence on the qualitative changes of inhabitants' lives. In the specific example of Sinan Road area, when people took initiative and in an ethical manner occupancy of the communities within, urban liveability and vibrant could improve or at least maintain in a sustainable situation; on the contrary, when appearing passive and immoral intervention, living quality faced decline. The fight for stabilization between density and quality is a time-consuming perseverance, investigating the underlying goals and ambitions, stakeholders' attitudes and motivation, planning strategies for urban transformation in historic districts are in request.

Notes on contributor

ZHU Kaiyi (1991), is a PhD candidate at TU Delft. Kaiyi obtained her Msc in Conservation of Historic Buildings at the department of Architecture and Civil Engineering of the Faculty of Engineering and Design in the University of Bath. Since October of 2016 when she started her first year of PhD studies at Chair History of Architecture and Urban Planning, Kaiyi's research and practice is related to the development of international conservation theories and urban heritage practice "in the name of conservation" located in historic residential areas of China's big cities.

Endnotes

¹ Shao, Yong, and Yisan Ruan. "Urban Heritage Protection under the Background of Market Economy: A Case Study of the Garden Residence of Sinan Road, Luwan District, Shanghai (市场经济背景下的城市遗产保护—以上海市卢湾区思南路花园住宅区为例)." *Urban Planning Forum (城市规划汇刊)*, no. 2 (2003): 39-43.

² Mou, Zhenyu. "Land Development Pattern of Modern Shanghai: Take Rue Massenet for Example (近代上海的土地开发模式——以马斯南路为例)." *Historical Research in Anhui (安徽史学)*, no. 3 (2013): 28-35.

³ Wei, Min. Project of Sinan RD, Block No. 47-48: A Research on the Integrated Conservation (思南路 47-48 号街坊的整体性保护研究). *Shanghai: Tongji University (上海: 同济大学)*, 2006.

⁴ Jacobs, Jane. *The Death and Life of Great American Cities*. Vintage, 1961.

⁵ Lehmann, Steffen. "Sustainable Urbanism: Towards a Framework for Quality and Optimal Density?". *Future Cities and Environment* 2, no. 1 (2016): 8.

⁶ Newman, Peter, and Jeffrey Kenworthy. *Sustainability and Cities: Overcoming Automobile Dependence*. Island press, 1999.

⁷ Lehmann, Steffen. "Sustainable Urbanism: Towards a Framework for Quality and Optimal Density?". *Future Cities and Environment* 2, no. 1 (2016): 8.

⁸ This argument is addressed from Samuel Johnson's words in Jane Jacobs's book, saying as "Men, thinly scattered," and "make as shift, but a bad shift, without many things ... It is being concentrated which products convenience." Jacobs, Jane. *The Death and Life of Great American Cities*. Vintage, (1961): 200.

⁹ Hall, Peter, and Mark Tewdwr-Jones. *Urban and Regional Planning*. Routledge, 2010; Bramley, Glen, and Sinead Power. "Urban Form and Social Sustainability: The Role of Density and Housing Type." *Environment and Planning B: Planning and Design* 36, no. 1 (2009): 30-48.

¹⁰ Information is recorded in documentary material in Shanghai Archive, U38-1-1255, p.32 and p. 33-35.

¹¹ Xu, Xueyun, and Zhongli Zhang. *Overview of Shanghai's Modern Social and Economic Development: Compilation of the 1882-1931 "Department of Customs Reports" (上海近代社会经济发展概况: 1882-1931 《海关十年报告》译编)*. Shanghai Academy of Social Sciences Press (上海社会科学院出版社), 1985.

¹² Hu, Ruirong, and hui Shanghai Shi Luwan Qu zhi bian zuan wei yuan. "Luwan Qu Zhi." [In Chinese]. (1998): 110.

¹³ Zhang, Xing Quan. "Chinese Housing Policy 1949-1978: The Development of a Welfare System." *Planning Perspectives* 12, no. 4 (1997): 433-455.

¹⁴ Lu, Wenda. *Shanghai Real Estate Annals (上海房地产志)*. Shanghai Academy of Social Sciences Press(上海社会科学院出版社), 1999.

¹⁵ "Rebels" (造反派 in Chinese) were groups of people who contributed to abolish cultural traditions in the Cultural Revolution.

¹⁶ Icomos, Australia. *The Burra Charter: The Australia Icomos Charter for Places of Cultural Significance 1999: With Associated Guidelines and Code on the Ethics of Co-Existence*. Australia ICOMOS, 2000. ICOMOS, Charter. "For the Conservation of Historic Towns and Urban Areas (Washington Charter)." Paris: ICOMOS, 1987.

¹⁷ Jokilehto, Jukka. "International Charters on Urban Conservation: Some Thoughts on the Principles Expressed in Current International Doctrine." *City & Time* 3, no. 3 (2007): 2.



Bibliography

- Australia ICOMOS, 2000. ICOMOS, Charter. "For the Conservation of Historic Towns and Urban Areas (Washington Charter)." Paris: ICOMOS, 1987.
- Bramley, Glen, and Sinead Power. "Urban Form and Social Sustainability: The Role of Density and Housing Type." *Environment and Planning B: Planning and Design* 36, no. 1 (2009): 30-48.
- Denison, Edward, and Guang Yu Ren. *Building Shanghai: The Story of China's Gateway*. John Wiley & Sons, 2013.
- Hall, Peter, and Mark Tewdwr-Jones. *Urban and Regional Planning*. Routledge, 2010.
- Hu, Ruirong, and hui Shanghai Shi Luwan Qu zhi bian zuan wei yuan. "Luwan Qu Zhi." [In Chinese]. (1998).
- Icomos, Australia. *The Burra Charter: The Australia Icomos Charter for Places of Cultural Significance 1999: With Associated Guidelines and Code on the Ethics of Co-Existence*.
- Jacobs, Jane. *The Death and Life of Great American Cities*. Vintage, 1961.
- Jokilehto, Jukka. "International Charters on Urban Conservation: Some Thoughts on the Principles Expressed in Current International Doctrine." *City & Time* 3, no. 3 (2007): 2.
- Lehmann, Steffen. "Sustainable Urbanism: Towards a Framework for Quality and Optimal Density?". *Future Cities and Environment* 2, no. 1 (2016): 8.
- Lu, Wenda. *Shanghai Real Estate Annals (上海房地产志)*. Shanghai Academy of Social Sciences Press(上海社会科学院出版社), 1999.
- Mou, Zhenyu. "Land Development Pattern of Modern Shanghai: Take Rue Massenet for Example (近代上海的土地开发模式——以马斯南路为例)." *Historical Research in Anhui (安徽史学)*, no. 3 (2013): 28-35.
- Mumford, Lewis. *The City in History: Its Origins, Its Transformations, and Its Prospects*. Vol. 67: Houghton Mifflin Harcourt, 1961.
- Newman, Peter, and Jeffrey Kenworthy. *Sustainability and Cities: Overcoming Automobile Dependence*. Island press, 1999.
- Shao, Yong, and Yisan Ruan. "Urban Heritage Protection under the Background of Market Economy: A Case Study of the Garden Residence of Sinan Road, Luwan District, Shanghai (市场经济背景下的城市遗产保护——以上海市卢湾区思南路花园住宅区为例)." *Urban Planning Forum (城市规划汇刊)*, no. 2 (2003): 39-43.
- Wei, Min. Project of Sinan RD, Block No. 47-48: *A Research on the Integrated Conservation (思南路47-48号街坊的整体性保护研究)*. Shanghai: Tongji University (上海: 同济大学), 2006.
- Xu, Xueyun, and Zhongli Zhang. *Overview of Shanghai's Modern Social and Economic Development: Compilation of the 1882-1931 "Department of Customs Reports" (上海近代社会经济发展概况: 1882-1931《海关十年报告》译编)*. Shanghai Academy of Social Sciences Press (上海社会科学院出版社), 1985.

Image sources

Figure 1: 1920 French Concession Extension map, Digital Collections, <http://i.imgur.com/QtZVJPf.jpg/>. (Accessed March 25, 2018.)

Figure 2: Background map from Google Map, <https://www.google.com/maps/@31.2153365,121.4694704,748m/data=!3m1!1e3/>. (Accessed March 30, 2018.)

Figure 3: Sinan Mansions Shanghai.JPG, https://commons.wikimedia.org/wiki/File:Sinan_Mansions_Shanghai.JPG/. (Accessed March 30, 2018.)



Studies on External Transportation Development and Spatial Structure Transformation of Modern Kunming from a Southeast Asian Perspective, 1885-1945

Tianjie ZHANG *, Yuqi ZHANG **

* Associate Professor, School of Architecture, Tianjin University, China, arch_tj@126.com

** Postgraduate, School of Architecture, Tianjin University, China

From a regional perspective of Southeast Asia, the paper focuses on Kunming, a gateway between China and Southeast Asian countries. The research elucidates the planning ideas and construction process of external routes, via both land and air, such as Yunnan-Vietnam Railway, Yunnan-Burma Railway, Burma Road, Stilwell Road and Hump Airline in early 20th century. These external routes became the arteries of cargo transportation, and Kunming became a regional economic center and military command center during wartime. The paper further reveals the transformation of Kunming's spatial structures influenced by these external routes, which accelerated Kunming's urban growth along the traffic lines. The city center shifted to the Station area, where industrial and commercial developments also congregated. New industrial zones were planned to the east and north of the old city, where new passages brought more convenient transportations. The internal road network plan also emphasized the connection with new railway station and bus stations. The research construes the planning ideas and implementation, traces their theoretical origins, and uncovers their indigenous considerations.

Keywords: Urban Planning History of Modern China, Regional Perspective of Southeast Asia, Kunming, External Routes, Spatial Structures

Fund Items: Supported by National Natural Science Foundation of China (No. 51778403, 51478299) ; Innovation Project of University Students (No. 201710056339)

1 Introduction

Kunming is the capital of Yunnan and an important city in southwest China. As the birthplace of the ancient Southern Silk Road and the ancient Tea Horse Road, the southwest is the frontier of economic and cultural exchanges between China and Southeast Asia, and also the core area for inland opening to the outside world¹. In modern times, Kunming once had a rapid development. After the Sino-French War of 1885, the French and British forces reached into Yunnan. In 1910, Kunming opened a commercial district and began its modernization. In 1937, with the full-scale outbreak of the Anti-Japanese War, the eastern coastal cities were blocked, a large number of people, factories and schools moved westward. Kunming became an important gathering place during the Anti-Japanese War. In modern times, Kunming built a number of domestic and international access roads, which had an important impact on the evolution of the regional structure of Southeast Asia and the internal spatial structure of Kunming. In combination with Southeast Asian regional perspectives, this paper attempts to explore the access construction between modern Kunming, the domestic and Southeast Asian countries and its impact on the evolution of urban spatial structures.

2 Development Background of Modern Kunming

2.1 Urban development before modern period

Kunming is surrounded by mountains on three sides and Tien Lake in the south. It was an important population gathering place in ancient times and gradually became the center of politics, military, economy and culture in Yunnan. Tuodong city, built in the Tang Dynasty (618-907 AD), formed the embryonic form of Kunming. In the Song dynasty (960-1279 AD), the area was expanded. Zhongqing City in the Yuan Dynasty expanded to the north based on the city of Song dynasty. The city of Ming Dynasty (1368-1644 AD) continued to move north and the brick city covered an area of about 3 square kilometers (Figure 1). It was prominent for political and military function. The Qing Dynasty (1644-1911 AD) inherited the Ming and formed the main axis of space from South Gate to Wuhua Mountain. Before modern times, the urban spatial structure of Kunming gathered in blocks. The urban space expanded northward due to the influence of topography. The landscape pattern of "three mountains and one lake" was continued (Figure 2). With the opening of the commercial district in 1910, Kunming began its transition to modernization.

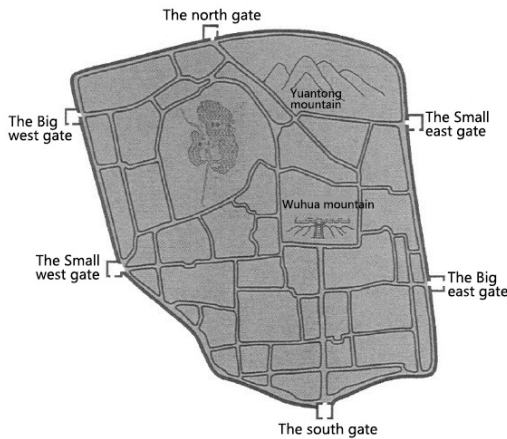


Figure 1: Kunming in Ming and Qing Dynasty

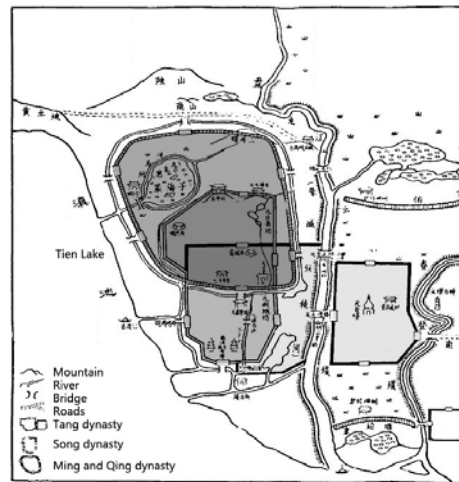


Figure 2: The changes of the city site in Kunming

2.2 Regional traffic development before modern period

The terrain of Kunming is dominated by hills and mountains. Affected by the terrain, traffic conditions before modern times were not very developed, but there were still accesses connecting inside and outside, such as the Southern Silk Road, the ancient Tea Horse Road, and Shu'an South Road. The Southern Silk Road had come into being before the Han dynasty, starting from Sichuan, went through Kunming to Myanmar and India (Figure 3). It was a business and cultural communication channel, linking Southwest China with South Asia. The Tea Horse Road was in contact with the "Great Triangle" areas of Yunnan, Sichuan and Tibet in China (Figure 4). And it extended abroad to India, Myanmar, Vietnam, Laos and Thailand. It was the important civil international trade channel and cultural communication center. Shu'an South Road was also one of the most important transportation routes in ancient times. It started from Sichuan, went through Yunnan to Vietnam. In addition, there were also some Horse Roads and water transportation routes that linked Kunming and the domestic areas such as Guizhou, Guangxi, Sichuan and Tibet. Before modern times, the main direction of communication between Kunming and the international countries was Vietnam, Myanmar, India and other Southeast Asia countries. This laid the foundation for the modern Kunming to expand its access to Vietnam, Myanmar, and India.



Figure 3: The ancient southern silk road

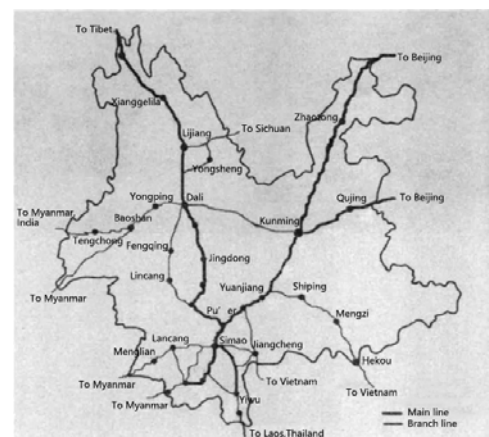


Figure 4: Road map of Tea Horse Road

3 Formation of External Routes in Modern Kunming

3.1 Routes between Kunming and Southeast Asian countries

3.1.1 Routes between Kunming and Vietnam



In modern times, the transportation links between Kunming and Vietnam have been significantly enhanced, and the construction of the Yunnan-Vietnam Railway has been an important support. At the end of the 19th century, the British and France saw Yunnan as an export to develop trade network in China's inland. It urgently needed a railway to connect Yunnan². Afterwards, the France obtained the Yunnan-Vietnam Railway construction right. The Yunnan-Vietnam Railway started from Kunming and stretched southwards to Vietnam (Figure 5). It was opened in 1910 and was one of the earliest international railways in China³. It formed a new pattern of modern external channels of Kunming. During the Anti-Japanese War, the Yunnan-Vietnam Railway was the traffic arteries in the early stage and assumed the most important task of transporting materials for aiding China.

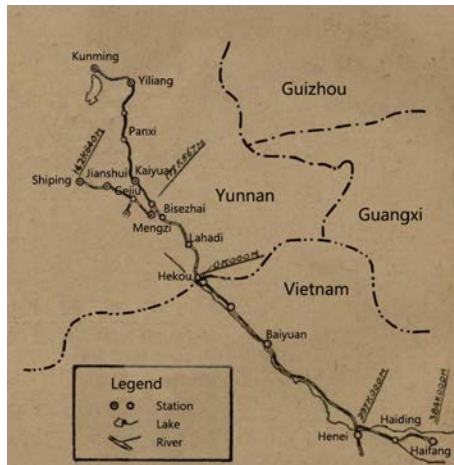


Figure 5: Road map of Yunnan-Vietnam Railway



Figure 6: Road map of the Burma road

3.1.2 Routes between Kunming and Myanmar

During the Anti-Japanese War, under the pressure of the Japanese military's blockade to southeastern coastal cities, the access between Kunming and Myanmar has been further developed. In 1937, Long Yun, Chairman of Yunnan Province, proposed to Chiang Kai-shek the "Plan for the Construction of the Yunnan-Burma Road and the Yunnan-Burma Railway"⁴. In 1938, the Burma Road opened. It travelled from Kunming to Xiaguan, Baoshan in the west, and to Bamo in Myanmar. It communicated with the inland provinces of Yunnan, Sichuan and Guangxi and the outland of Myanmar's Mandalay and Yangon (Figure 6). After the Yunnan-Vietnam Railway was cut off, the Burma Road was once the only international communication landline in the rear of Anti-Japanese War, called the lifeline⁵. The Burma Road had the second largest traffic volume, just after the Yunnan-Vietnam Railway. Although it was dominated by military transport, it was also a trading road⁶. Another route linking Burma was the Yunnan-Burma Railway which had been proposed during the late Qing Dynasty. However, due to various factors in wartime, this line only partly built.

3.1.3 Routes between Kunming and India

In 1942, Japanese invaded Myanmar and cut off the access between China and Myanmar. This provided an opportunity for the expansion of the Kunming-India access. In order to transport aid supplies, the US military opened up the Hump Airline (Figure 7). It was an air corridor from Kunming, flying over the Himalayas to reach India. It was the only transportation line that offered international assistance in the late Anti-Japanese War. There was also a road linking China and India, the Stilwell Road (Figure 8). At that time, the Yunnan-Vietnam Railway and the Burma Road were both cut off. The transportation of the Hump Airline was limited and the transportation costs were high. Therefore, the construction of the landline between China and India was necessary⁷. The Stilwell Road was built by China, America and Britain from 1942 to 1945. It started from Redo in India, went through Myanmar entered the western Yunnan and finally reached Kunming. It was the most convenient land route connecting China, India and Myanmar to the Southeast Asia.



Figure 7: Route map of the Hump Airline



Figure 8: Road map of the Stilwell Road

3.2 Domestic Routes of Kunming

In addition to international links, Kunming also strengthened its transportation links with other parts of China in modern times, which changed Yunnan's situation of accessible to foreign countries but inaccessible to domestic cities, thus formed China's southwest national defense transportation network.

As for links with other provinces, roads between Kunming and Guizhou, Sichuan, Guangxi, Nanjing were main construction projects. As important domestic railway transportation routes were cut off during the Anti-Japanese War, roads became key access to the southwest. To promote provincial roads connection in southwest and unify planning and management, the national railway department of the Ministry of Communications established southwest highway transport authority in 1938, planning to open Changsha-Guiyang-Kunming-Chongqing and other major channels⁸. The main roads completed in the early period of the Anti-Japanese War include the Yunnan - Guizhou road, Sichuan - Yunnan road, Yunnan - Guangxi road and Beijing - Yunnan road. In addition, since modern times, the caravan transportation has gradually declined. In order to restore the caravan post transportation during the Anti-Japanese War, the original post way in Yunnan was renovated, including the Sichuan and Yunnan post transportation and the Yunnan-Tibet-India post transportation. They also bore the heavy burden of transporting materials to China's war zone and played an important role in logistics support⁹. In the aspect of railway construction, railway from Yibin of Sichuan province to Kunming was planned to put up in 1937, but only part of it completed due to the war. In addition, Kunming also opened up air routes to Chongqing, Nanjing and Fuzhou.

As for links between domestic provinces, the government of Yunnan province listed road construction as one of the four most important political issues in 1928. In the same year, Yunnan provincial highway administration was founded and Kunming was designated as the center of "four main roads and eight districts" highway planing¹⁰. In this planning, the east Yunnan road connects Yunnan and Guizhou, the northeast Yunnan road connects Yunnan and Sichuan, the west Yunnan road connects western Yunnan and the south Yunnan road connects Yunnan and Guangxi.

3.3 Summary

In modern times, the access between Kunming and Vietnam, Myanmar and India gained rapid development. Especially after the outbreak of the Anti-Japanese War, the authorities attached importance to international route. With Kunming as the heart, roads and railways as the backbone, the construction of transportation networks has enabled Kunming to display an enormous advantage in the international, inter-provincial and provincial relations.

The external access constructed of Kunming leads the regional spatial structure of Yunnan (Figure 9). After the opening of the Yunnan-Vietnam Railway, it has been the most densely-connected external channel for the people, logistics, capital and information in Yunnan¹¹, forming the Yunnan-Vietnam Economic Corridor with the "Yunnan-Vietnam Railway" as the main axis and the group of towns in Southeast Yunnan. During the Anti-Japanese War, the construction of life lines such as the Burma Road, the Hump Airline and the China-India Road has enabled Kunming to become a hub city for relief supplies. The Burma Road and the China-India Road have helped to form the Yunnan-Myanmar-India Economic Corridor and the group of towns in West Yunnan. Meanwhile, the construction of the inter-provincial traffic of Xukun Railway, Yunnan-Guizhou Road, and the



provincial road network also strengthened the links between Kunming and inland China. Huge amounts of aid materials were transferred from Kunming to Sichuan, Guizhou and Guangxi through these accesses. Kunming has become a key fulcrum supporting China's wartime economy. In Yunnan, a regional spatial structure, with Kunming as the center and traditional central cities as the nodes, has come into being.

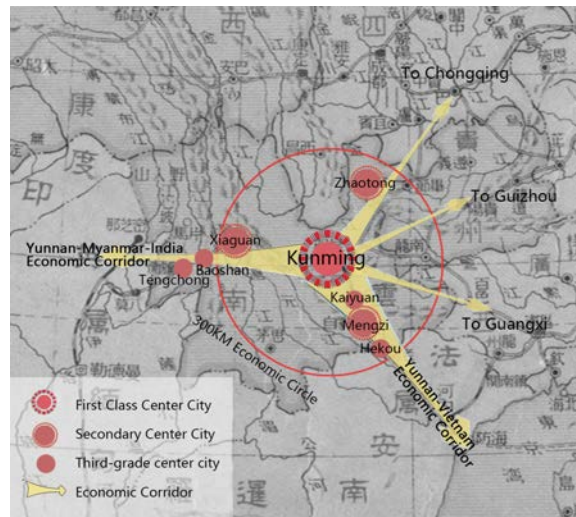


Figure 9: Diagram of modern Kunming regional spatial pattern

4 Corresponding Transformation of Kunming's Spatial Structure in Modern Period

4.1 Formation of Dual-core Structures (1910-1936)

After the opening of the Yunnan-Vietnam railway in 1910, the railway economy became an important factor in the reconstruction of the urban structure of Kunming. The commercial district centered on the Yunnan-Vietnam Railway Station, which was located outside the South Gate of Kunming (Figure 10). With the opening of the Yunnan-Vietnam Railway, Kunming's commercial trade quickly flourished¹², forming an early business district. At the same time, urban space began to expand eastwards and southwards, presenting the "dual-core" structure of Kunming's old city district, where government offices and temples are the centers, and the commercial district¹³. In terms of urban road network, unlike the old city, commercial district adopted a small-scale grid to pursue higher commercial land value.

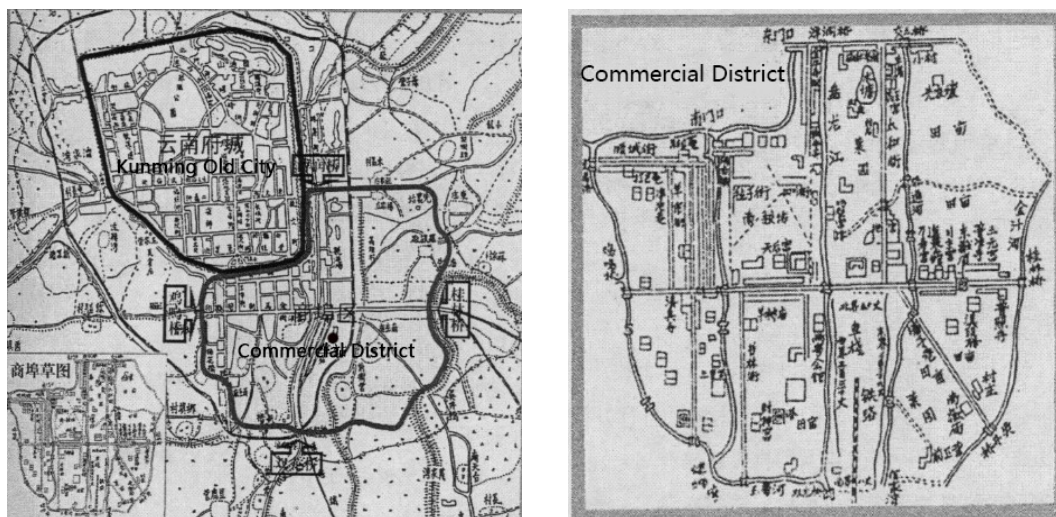


Figure 10: Location map of Kunming commercial district, 1920s

In 1922, the Kunming Municipal Public Office was established and a new urban construction plan was introduced. Its executive was Zhang Weihai, supervisor of Kunming Municipal Public Office. Zhang Weihai went to Tokyo Imperial University and the Tokyo Municipal Research Society in 1919 for learning the constitution



and the municipal administration¹⁴. The experience of studying abroad in Japan made Zhang Weihuan deeply influenced by theories such as Garden City. He proposed that in the future expansion plans, it was necessary to adopt the latest approach so that the industrial and commercial areas also included appropriate garden areas¹⁵. The plan confirmed that urban space would continue to expand to the south area and serve as an industrial and commercial area. In addition, the opening of the Yunnan-Vietnam Railway also affected the traffic network in Kunming. At this time, the railway station became an important transportation node. In order to dredge the traffic between the railway station and the old city, Zhang Weihuan drafted the demolition of the South Gate Tower and built a ring road, vigorously transforming the old streets, and letting the road connect to the train station so as to get maximize traffic utility.

In 1928, the Kunming Municipal Government was established. In order to better meet the needs of car travelling, the municipal government has vigorously rectified the traffic in the city. In 1930, it proposed the construction of Ring Road. In 1931, it proposed the "New Market Development Plan" to mainly renovate the streets. In 1935, it formulated a detailed plan for the transformation of the city roads. In 1936, it implemented the "8-Street Plan" for remodeling the streets. Before the Anti-Japanese War, Kunming had formed a new road network. In addition, there has been a marked expansion of urban space (Figure 11). Except for district 4, which were affected by the topography and developed northward, the overall urban space still extended eastwards and southwards.

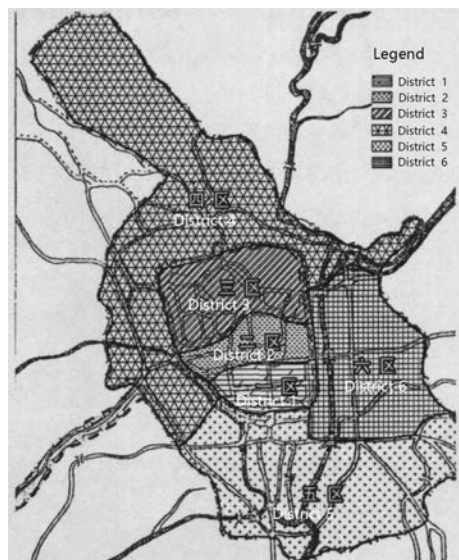


Figure 11: The urban zoning plan, 1935

4.2 Development of Concentric Zone Model (1937-1945)

During the Anti-Japanese War, China's social and economic center moved inland. With the construction of international routes and the domestic southwest road network, Kunming's urban status was even more important. It was not only the political, cultural and economic center of the Yunnan, but also a traffic hub and strategic point for domestic and foreign connection. During this period, Kunming had two important planning. The first was the "Great Kunming City Planning" in 1939. It could be regarded as the rudiment of regional planning, proposed by Ding Jishi, Director of the Kunming municipal public works who had studied in Germany. The other important planning was the "Outline of the Three-year Construction Plan of Kunming", drafted by Tang Ying in 1941. Tang Ying also studied in Germany. The concepts of Urban Zoning, Garden City, and Satellite City were introduced in the plan.

The Outline proposed a long-term plan for the scale of urban development land of 170 square kilometers. The municipal authorities also proposed that the density of urban population should not be too large. It should adopt Garden City, the evacuation development method which combined rural and city, and expand radioactively along railway lines or road to form a multi-point satellite urban system¹⁶. The Outline proposed the concept of urban zoning (Figure 12), delineating administrative areas, cultural areas, commercial areas, residential areas, industrial areas, scenic areas, cemetery areas and forestry pastoral areas. Urban zoning took into account the impact of traffic on different functional areas. For example, the industrial area was outside the city, located in the eastern and northwestern parts of the city for transportation convenience, with the Yunnan-Vietnam Railway, Yunnan-Burma Railway, Xukun Railway and the Burma Road, Yunnan-Guizhou Road outside and inner-city roads. During the



Anti-Japanese War, Kunming formed several important industrial districts (Figure 13). They formed independent groups around the city and had a convenient transportation link to the city center. The business district was located in the area around Yunnan-Sichuan station and Yunnan-Vietnam station where there were a lot of people and logistics.

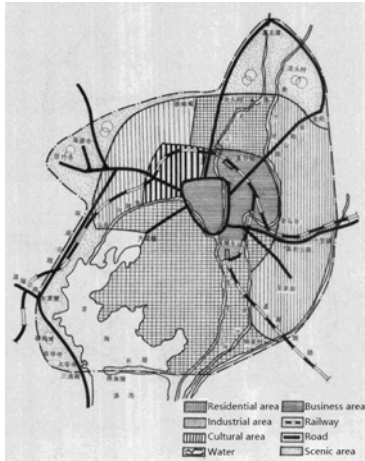


Figure 12: The zoning plan in Kunming, 1943

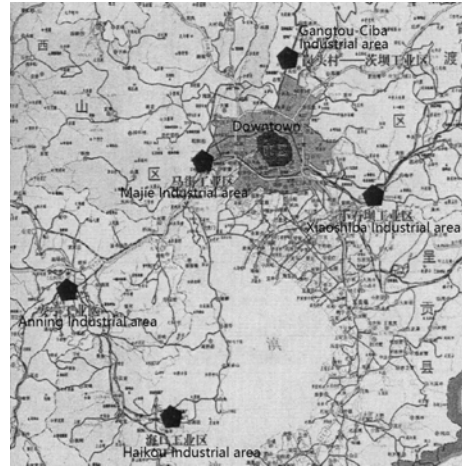


Figure 13: The industrial layout of Kunming during the Anti-Japanese War

In terms of traffic network, in order to meet the requirements of urban evacuation development and contact with external traffic, the “Outline” proposed the road system adopted a ring with radial structure (Figure 14). The external accesses of the Burma Road and Yunnan-Guizhou Road were radial and connected with the loops. The east ring railway and city road were also provided to connect the North Yunnan-Sichuan Railway Station and the South Yunnan-Vietnam Railway Station. In addition, from 1938 to 1942, the “Ten Street Project” was implemented to renovate the city street. In 1942, the main street design of Kunming was proposed (Figure 15) and the main roads were widened. The urban form at this stage basically formed the spatial structure of the “Concentric Zone Model”, with the circular radiation path as the skeleton¹⁷.

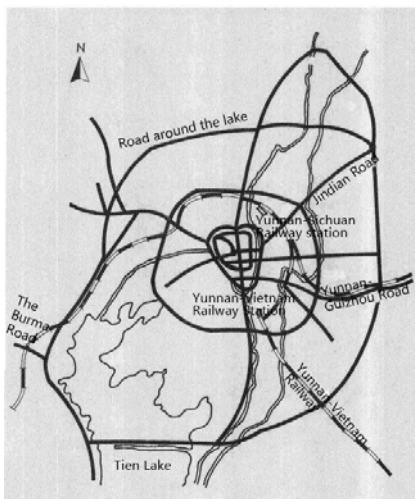


Figure 14: The planning of the main road system, 1943

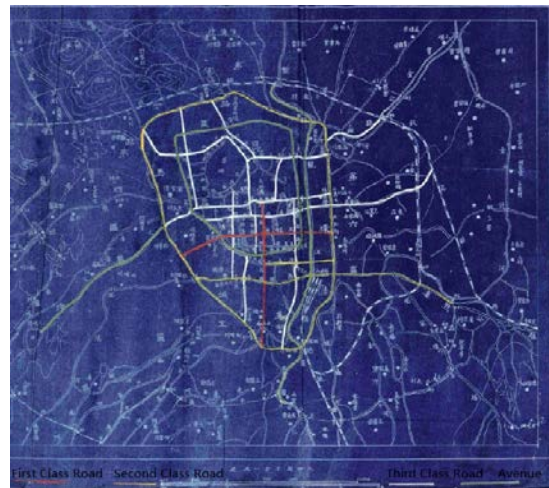


Figure 15: Design of main street in Kunming, 1942

4.3 Summary

Table 1: Summary of planning practice in modern Kunming

Period	1900-1921	1922-1927	1928-1936	1937-1945
Historical Development	Opening Commercial	Kunming Municipal Public Office	Kunming Municipal Government	During Anti-Japanese War






	district in 1910	was established in 1922	was established in 1928		
Construction of External Access	Yunnan-Vietnam Railway	—	Yunnan-Guizhou Road; Yunnan Road Project	The Burma Road, Yunnan-Burma Railway, the Hump Airline, the China-India Road, Xukun Railway, Southwest Road Network	
Major Plan and Planners	—	Kunming New Urban Construction Plan, Zhang Weihan (1923-1928)	Plan for New Market Development, The Kunming Municipal Government(1931)	The Great Kunming City Planning, Ding Jishi (1939)	The Outline of the Three-year Construction Plan of Kunming, Tang Ying (1941)
Planning urban area	The newly opened commercial district was located outside the South Gate.	The planned urban area was 50 square miles, and the urban area focused on the southward development.	The city continued to expand eastward and southward	Delineated with Tien Lake as the center, all counties around Tien Lake were within the scope of Kunming City	Planned the urban area a scale of four-ring 170 square kilometers
Urban road network	Small Scale Grid in commercial district	Planning radial road network in the south, keeping the chessboard road network in the north and renovating the old roads	Mainly to renovate the streets	Constructing the road around the lake linked with the urban areas, counties and areas around the lake	Ring with radial road network; the loop was connected with the external roads, and connected to railway stations
Urban Zoning	New commercial district and old city	Old Northern District, New Southern District as the Industrial and Commercial District	6 administrative districts	Making simple functional division according to the original county area	The concept of urban zoning was proposed, taking the impact of traffic into account
Major planning concept	—	Garden City, City Beautiful Movement	—	Decentralized development, the rudiment of regional planning	Urban Zoning, Garden City, Satellite City

Recalling the development of Kunming in modern times, the construction of external accesses was an important factor in promoting and influencing its development. From the end of the 19th century to 1945, Kunming's urban space generally expanded eastward and southward along the major traffic routes. The urban area expanded from 3 square kilometers to 7.8 square kilometers. The spatial structure evolved from the early lumps to dual-core structure and to the concentric zone model. The road network in the city was gradually improved to meet the needs of the automobile era. Several important external stations had a good connection with urban road networks. Urban functional zoning was also affected by external accesses.

Table 2: Urban growth of modern Kunming



Urban Built-up Area			
Period	Qing Dynasty	The 1920s	The 1940s
Historical Development	—	In 1910, the Yunnan-Vietnam railway was opened, and in the same year, it opened the commercial district.	During the Anti-Japanese War, the opening of multiple domestic and international accesses made Kunming a strategic place for the rear.
Urban Expansion	Mainly concentrated in the city	Extended eastwards and southwards	Expanded along the traffic lines
Urban Area	About 3 km ²	About 6.08 km ²	About 7.8 km ²

5 Conclusion and Discussion

Traffic is the foundation of a city's development, especially in the special period of modern times. The construction of modern external accesses in Kunming is formed under the dual thrust of foreign forces and domestic reform. It vigorously promoted the modernization of Kunming and southwest China, making Kunming a hub city of the Anti-Japanese war and a military and economic center rather than the frontier military town in early period. Kunming became the forefront of opening to the outside world in southwest China. The Kunming-centered transportation line is the material carrier of Kunming's external access and the artery of southwest economic transportation. The construction of external access has extended the scope of economic and cultural communication. It affected the spatial pattern of the entire Yunnan and southwest China. It constructed the Kunming-centered China-Vietnam economic corridor and China-Myanmar-India economic corridor, strengthened the economic interaction between Sichuan, Guizhou and Guangxi provinces. It has promoted the development of towns along the routes as well.

The period of the Anti-Japanese War is an important stage for the construction of Kunming's external accesses. It provides a direct impetus for Kunming's urban development. Kunming obtained the external power of urban development through external transportation, which supported its wartime operation, and played multiple roles in political, military and economic aspects. It profoundly affected the spatial structure of Kunming. The development of external access changed Kunming's traditional "walled city" form, expanded urban space and provided a new axis for urban growth. When the transportation is still underdeveloped, the urban spatial structure is a concentrated mass. The construction of external accesses made the urban spatial more decentralized and flexible, promote the expansion of urban space, present the embryonic form of concentric zone model and display a decentralized industry area layout. The urban space gradually expanded to the east and south, and the urban center shifted to the railway station area where the industry and commerce have been developed. The urban road network has also undergone adjustment accordingly. In addition, in the course of the construction of Kunming's external accesses, some western planning concepts have been absorbed, such as Garden City and Urban Zoning, which injected new ideas for urban planning in Kunming. It's worth noting that Kunming's reference to western planning ideas was selective and localized. For example, Zhang Weihai's understanding of Garden City was translated from Japan. The Garden City movement in Japan was developed and promoted as a high-level residential area in the suburbs of large cities¹⁸. However, Zhang's understanding of Garden City focused on the construction of material landscape environment and urban livability.

Bibliography

- ¹ YANG Baojun. *Study on the Strategy of "One Belt and One Road"*. China Urban Planning Association semimonthly, 2017(5).
- ² Rousseau, J. *An imperial railway failure: The Indochina-Yunnan railway, 1898-1941*. The Journal of Transport History, 2014, 35(1): 1-17.
- ³ Kunming Foreign Trade and Economic Cooperation Bureau. *Kunming Foreign Economic and Trade annals*. Yunnan Nationalities Press, 2003.



- ⁴ ZHANG Yi. *Burma road: the lifeline of the Anti-Japanese War*. Literature and history monthly,2005(09):17-18.
- ⁵ Grossfeld,S. *The Burma Road a journey into another China*. Boston Globe, 1989, Oct 01.
- ⁶ CHENG Li. *The Historical Position of Burma Road in Anti - Japanese War*. Journal of Qujing Normal University,2005,(04):68-71.
- ⁷ Biswas,R. *Strategic link between India and Burma*. Noticias Financieras, 2008, Oct 08.
- ⁸ *Intermodal route of Southwest highway*. The southwest herald, 1939,1(1): 54-60.
- ⁹ DU Juan. *Yunnan Caravan during the Republic of China*. Sichuan University,2004.
- ¹⁰ CHE Lin. *The enlightenment of planning and construction of highway network in modern Yunnan province*. Journal of Yunnan Agricultural University,2011,5(6):116-121.
- ¹¹ CHE Lin. *Yunnan- Vietnam Railway and urban form changes in modern Kunming*. Journal of Guangxi normal university,2013,34(03):139-145.
- ¹² XIE Benshu, LI Jiang. *History of Modern Kunming*. Yunnan University Press,1997.
- ¹³ PENG Fei. *The characteristics and influencing factors of the urban form development in modern Kunming*. Kunming technology university,2009.
- ¹⁴ LIU Shaotang. *Biography of the republic of China, volume 4*. Shanghai Sanlian bookstore,2014.
- ¹⁵ ZHANG Weihai. *An idyllic city*. Road journal ,1927,19(3):35-41.
- ¹⁶ CHEN Zhongren. *The way of Kunming municipal construction*. Kunming municipal, 1947,1(1):11.
- ¹⁷ JIAN Haiyun. *The transportation Layout study based on the urban morphology of Kunming*. Chongqing university,2008.
- ¹⁸ LIU Yishi. *The origins of the 1932 Xinjing Plan: An intellectual study*. Urban Planning Journal,2015(04):99-110.

Image sources

- Figure 1: LIU Xue. *Kunming, spring city : history, modern, future*. Yunnan arts Press,2002.
- Figure 2: LI Xiaoyou. *Kunming scenery annals*. Yunnan Nationalities Press,1983.
- Figure 3: Kunming Foreign Trade and Economic Cooperation Bureau. *Kunming Foreign Economic and Trade annals*. Yunnan Nationalities Press,2003.
- Figure 4: LI Nan. *Chinese ancient traffic*. China Business Press,2015.
- Figure 5: *Route schematic of Sichuan - Yunnan and Yunnan - Vietnam Railway*. World Transportation Monthly, 1948, (9):47.
- Figure 6: SONG Zijie, ZHANG Lvjian, HUANG Zhongxiu. *The Burma Road*. Today news agency,Chengdu,1945.
- Figure 7: LI Song. *Natural moat thoroughfare(China-Burma-India war lifeline)*. Northern Literature and Art Press,2015
- Figure 8: GAO Zhiyong. *Baoshan Highway annals*. Baoshan Highway annals editorial committee ,1999.
- Figure 10: LIU Xue. *Kunming, spring city - history, modern, future*. Yunnan arts Press,2002.
- Figure 11: Kunming Local History Compilation Committee. *Kunming annals, the second volume*. Beijing: People's Press,2002.
- Figure 12: ZHOU Yuefeng. *Planning of Kunming*. Yunnan People's Press, 2009.
- Figure 13: LIU Xue. *Kunming, spring city - history, modern, future*. Yunnan arts Press,2002.
- Figure 14: ZHOU Yuefeng. *Planning of Kunming*. Yunnan People's Press, 2009.
- Figure 15: YANG Ping. *Outline of Kunming Urban Planning in Republic of China*. Yunnan archives, 2016, (03):22-29.



McPublic Spaces: McDonald's' appropriation of the *everyday* place in Hong Kong

Diego Caro

* MPhil, Department of Architecture, University of Hong Kong, dcaro@connect.hku.hk

This paper analyses the role of McDonald's in Hong Kong as a consumption-oriented place where the production of social space happens under the constraints of the market's spectacle and speculations. McDonald's in Hong Kong have evolved from the original aesthetics of the company, with a colorful postmodern cafeteria look, to the latest concept "Next" with a bold design, neat materiality, touch screens and open layout. Throughout this process, its restaurant design and policies have evolved by appropriating the rhythms of the city and its citizens. Whereas Hong Kong's city escape is commonly perceived as the product of top down strategies carried out by "coalitions" between public institutions and private corporations, McDonald's offers a case study of informal activities influencing the way a global enterprise develops. Its new "Next" concept might be seen as an attempt to anticipate informality. Two opposing ideas underlie this "open look": the aim to homogenize customers through the sanitation of the space, versus the provision of neutral spaces to allow for the occurrence of heterogeneity. The presence of the screen as an intermediary between the restaurant and its customers empowers a dichotomy between an impersonal fast food service and current paradigms that aim to prioritize people and food.

Keywords: cross-cultural, globalization, everyday spaces, public & private, spaces of appropriation vs spaces of domination

Introduction

The pressure of high property prices forces a great percentage of Hong Kongese to live and work under poor conditions. This fact, combined with the lack of effective open public spaces in the city, has empowered the rise of places of consumption as an extension of domestic and professional realms. In this context, McDonald's has played a crucial role in the integration of everyday activities into spaces of consumerism in Hong Kong since 1975. This interiorization and appropriation of the "public" by multinational corporations is part of a larger process in the city initiated in the 1970s, primarily in shopping malls.

Social scientists refer to public space through two main ideas: accessibility and the public sphere as a place for communal dialogue¹. In terms of accessibility, there are 244 McDonald's' restaurants strategically distributed in the most populated areas of Hong Kong of which 116 are opened 24hours². Its access appears hardly restricted; users range from families with children, to high school students, construction workers, domestic helpers or groups of elderly people. Moreover, Hong Kong and Mainland China McDonald's have been known in recent years for letting homeless people, referred as "McRefugees", sleep in their restaurants. The prefix Mc has been used over the past decades to create neologisms, often following pejorative connotations associated with McDonald's. This paper's title "McPublic" refers to contemporary spaces of consumption that make up an essential background for everyday life.

As a place for dialogue, it is particularly relevant the influence of its interior design's playful mood combined with intense branding strategies in people's behaviour and habits. McDonald's Hong Kong has evolved from its first restaurants emulating the American colorful postmodern touch of the brand in the 1970s, to the world's first McDonald's Next, a drastic new concept with a bold design, pure clean materials such as concrete, wood or steel, touch screens and open layout³. Along this process, McCafé was incorporated in Hong Kong in 1999 and, recently, healthier and Create Yourself menus have been implemented in accordance to current trends.

This study will take into consideration: users, workers, designers and the corporation, in order to understand how McDonald's has assimilated and appropriated the everyday into its capitalist consumer strategies where private and public ambiguity arises.



Public & private ambiguity

Public space and low standard living conditions

There are two key factors that contribute to the proliferation of private third places in Hong Kong as substitutes of public and domestic scopes: the characteristics of its public space and the living standards of its residences⁴.

Rampant growth and privatization of the public realm for the benefit of big corporations, have turned public spaces in the city into residual areas: narrow sidewalks, overcrowded squares or parks whose access is hindered by big infrastructures, as an example. Moreover, these spaces are often restricted and surveilled⁵. On the other hand, housing average areas and living standards in Hong Kong are remarkably low. According to Hong Kong's Government, the average living space per person in 2013 for Public Rental Housing was less than 13sqm.⁶ The dimensions in the case of informal subdivided flats can decrease down to 4.5sqm.⁷ These minimal conditions often force people to find a third space as a substitute of their living and working places.

Privatization of public space

As a consequence of its development-oriented urban dynamics, Hong Kong has relied on the private sector to provide public space provision to the city. The most common form under which these spaces are developed is POPS (Privately Owned Public Space). Originated in New York in 1960, this concept was adopted by Hong Kong Government in the 1980s due to its rapid economic growth⁸. The synergy between local state and corporate strategies in Hong Kong is particularly significant as the government is the landowner as well as the lawmaker⁹. The intentional manipulation of planning systems in order to favor big corporations has created an efficient "Bureaucratic society of controlled consumption" that shapes Hong Kong social space¹⁰.

Whereas in the case of POPS the public use of a private space is institutionalized, there are numerous cases where this boundary is ambiguous. A crucial factor that intensified this ambiguity was the upswing of the shopping mall in the 1970s in Hong Kong; this process of interiorization and privatization of public spaces meant a radical change in everyday life of space¹¹. In opposition to some negative characteristics of open public spaces such as adverse weather conditions or poor accessibility, these private spaces are safe, organized, located in strategic points of the city linked to a subway station and provide a comfortable environment. Moreover, the rise of a consumer culture brought new lifestyles and aspirations.

McDonald's in Hong Kong

Hong Kong in the 1970s

The first McDonald's, opened in Hong Kong in 1975, was located in Paterson Street, Causeway Bay. The landing of the big franchise coincided with a period of unprecedented economic and demographic growth after WWII. The city was transiting from being a second sector-based economy to a financial and high-technology industries center where shopping malls and offices were being built at a frantic rhythm¹². Fast food culture was not a new phenomenon in Hong Kong. The intense rhythm of the city, long working hours and commuting time meant that people often consumed take away food. Thousands of street food vendors delivered food day and night during the 1960s and the 1970s. The first step to the corporatization of street food was carried out by Café de Coral in 1968 by incorporating fast food into clean and nicely decorated interior spaces¹³. This company is currently one of the main competitors of McDonald's in Hong Kong with 150 outlets. In this context, McDonald's found optimal conditions to enter the local market: one year after its first restaurant, McDonald's set foot in Kowloon with a restaurant in Yau Ma Tei. In 1981, McDonald's in Kwun Tong beat the world record of daily transactions¹⁴.

In parallel to the development of shopping malls, the restaurant chain gradually transitioned from being an exotic place, especially for young people wishing to be part of a popular culture, to a common meeting point in everyday routines, where not only fast food was offered but a place to stay¹⁵. The strategy of McDonald's' first Manager in Hong Kong, Daniel Ng, was not to compete with local food restaurants but to stick to their original American menu and aesthetics. According to Watson, McDonald's also played an important role in Hong Kong by setting new standards of cleanliness, particularly in toilets, and people's discipline, such as queuing while waiting to order¹⁶. Moreover, McDonald's offered a safe space, free of triads, alcohol or cigarettes, to young people. This whole process can be considered as a "McDonalization" of Hong Kong's society in the terms used by Ritzer of "efficiency, predictability, calculability, substitution of nonhuman for human technology and control over



uncertainty”¹⁷. The international debut of the latest concept Next in Hong Kong indicates the naturalization of the brand in the city.

Hong Kongese habits

A closer look at the specificities of Hong Kong in comparison to United States suggests some important differences in people’s habits. Whereas in the United States 70% of McDonald’s sales come from drive-thru, in Hong Kong this service is not offered and its home delivery service accounts for less than 20% of its transactions in Hong Kong¹⁸. In the United States, the average eating time in fast food industries is 11 minutes and in Hong Kong 20 to 25 minutes; in addition to this, Hong Kongese often consider McDonald’s meal as a snack before eating at home¹⁹. These facts denote a social component involved in McDonald’s consumers in Hong Kong.

Ubiquity in the city

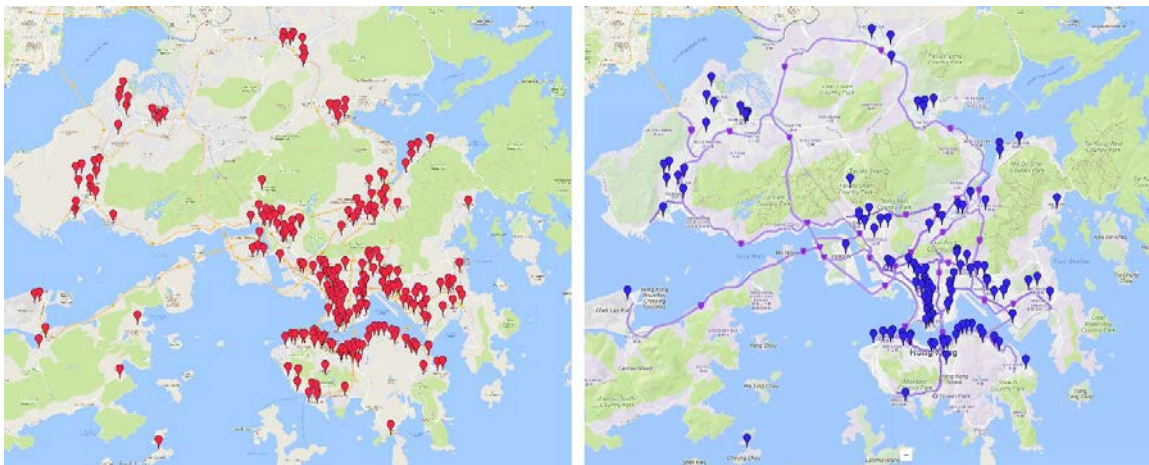


Figure 1. Caro, Diego. *Map of Mcdonald's outlets in Hong Kong. Day(red) and 24h(blue)*. [Hong Kong 2017]

There are currently 244 McDonald’s restaurants strategically distributed in Hong Kong, of which 116 are open 24 hours. There is a McDonald’s situated within a radius of 500 meters in 83 out of 91 MTR stations, and, in the proximities of the outlets, intense signage is carried out in different forms in relation to street’s typologies.

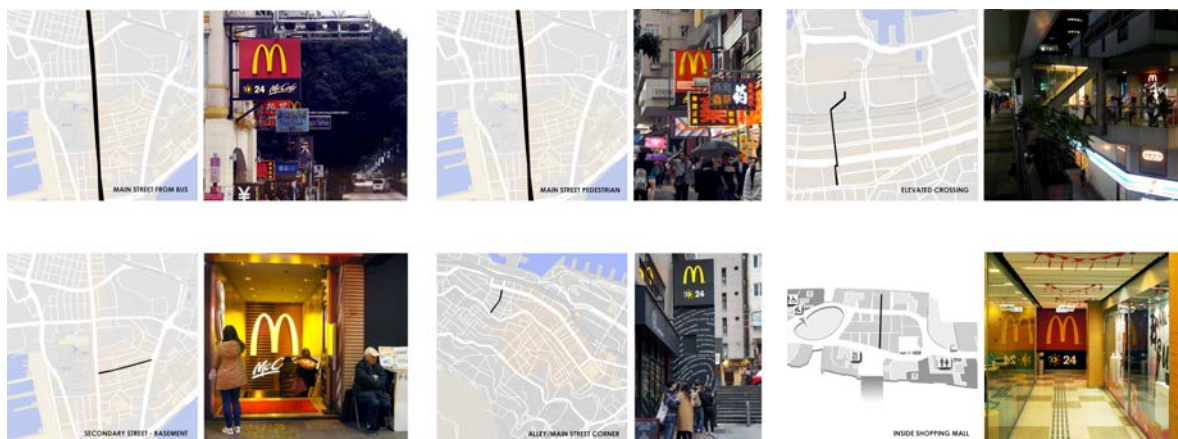


Figure 2. Caro, Diego. *Diagrams of Mcdonald's' signage in Hong Kong*. [Hong Kong: 2017]



Among its restaurants, McDonald's located in residential areas are particularly successful. In 1992, 7 out of the 10 busiest McDonald's in the world were in Hong Kong and 5 of them were located in residential areas of the city (Kowloon Bay, Tsuen Wan, Shatin, Tuen Mun and in Kwun Tong)²⁰. Moreover, the corporation is also visible in the city landscape through the sponsorship of events, charity campaigns and community services²¹.

McDonald's and Real Estate

The omnipresence of McDonald's in the city is intrinsically connected to the corporation's real estate business strategies²². McDonald's' real estate properties worldwide are worth more than \$31 billion, from which it gets more than \$5 billion revenue annually²³. This means that the corporation makes most of its profits from acquiring outlets and subletting them to its franchisees. Since its origins in Hong Kong, McDonald's has had close relationship with banks and developers. The first restaurant in the city was opened by one of the three sons of the co-founder of the Bank of East Asia. Most recently, in 2017, 80% of McDonald's China & Hong Kong shares were bought by CITIC and Carlyle groups in an attempt to set more localized directions. The first steps of the new owners were several deals with some of the most important Chinese Real Estate developers such as China Evergrande Group, China Overseas Land & Investment Ltd. or China Vanke Co., whereby McDonald's will be the first retailer to see new developments so as to decide the location for their future investments²⁴.

Notwithstanding, real estate speculation has also negatively affected McDonald's' locations in Hong Kong. High prices in rents, that in some cases tripled in the past 40 years, have forced iconic outlets like the first McDonald's in Paterson Street to relocate. The main reason behind this increase is the rampant emergence of high-end retails that respond to the increasing demand of these products by Mainland Chinese tourists according to property consultants²⁵.

McWorld: McKids, McGamers and McRefugees

Kid's loyalty programs

The McWorld alters the physical space of the city as well as its citizens²⁶. Through intense loyalty campaigns, McDonald's has targeted kids since the first appearance of Ronald McDonald in 1963. In Hong Kong, these controversial marketing strategies have had a strong impact in the way they enjoy their leisure time as well as the way they perceive leisure space in the past years. McDonald's has developed specific spatial practices focused on children, from a Toys Museum to a restaurant designed from drawings done by kids²⁷. The kids that celebrated their birthday parties in a McDonald's in the 1980s and 1990s get married nowadays in the same outlets²⁸.

Whereas the idea of kids' indoctrination suggests that McDonald's uses marketing as a mechanism of control, top down strategies, other groups of people, like McGamers or McRefugees, have played an unexpected role in McDonald's creating bottom-up informal situations that the corporation have somehow absorbed.

McGamers

Albeit originated in Japan, McGamers were probably the first big phenomenon of informal overstays taking shape inside McDonald's outlets in Hong Kong. Their presence increased dramatically after the release of PlayStation Portable (PSP) in 2005 and, particularly, the game Monster Hunter. The need of physical proximity between gamers due to Bluetooth connection, and electric outlets where people would connect several devices to a power strip, plus the possibility of enjoying an informal environment to gather and make controlled noise far from school or home, brought a vast amount of teenagers inside McDonald's.

Nowadays, whereas physical proximity is not required due to the spread of the internet, McDonald's has done a good use of the ideas acquired from McGamers by offering charging stations for mobile phones or free Wi-Fi. The recent video game phenomenon PokemonGo in 2016 was also taken advantage of by the corporation in Japan with more than 3000 restaurants in the country introducing virtual gyms in their interiors. Quickly, other companies, including Starbucks, followed this trend²⁹.



McRefugees

Hong Kong and Mainland China McDonald's have been broadly known in recent years through media for letting homeless people sleep in their restaurants³⁰. According to Homeless Outreach Population Estimation organized by City University of Hong Kong in 2015, 254 people were reported to stay overnight in fast food restaurants. In reference to McRefugees, McDonald's Hong Kong expressed in an official statement that the company welcomes all walks of life to visit their restaurants any time and that tries to be accommodating and caring to customers who overstay³¹.

McDonald's restaurant design evolution

For over 50 years, McDonald's has transited from a fast food chain in the United States focused on automobile culture with basic and cheap menus and decoration to a more sophisticated restaurant offering coffee, bakery or customized salads. The influence of external factors has played a decisive role in the evolution of its marketing strategies and restaurant design. Among them: competitors such as Starbucks or KFC, food health issues, anti-capitalistic movements, workers' protests, real estate market, new technologies or changing practices of customers. Throughout these years, two milestones have affected drastically the restaurant's interior design in Hong Kong: The incorporation of McCafé and the recent McDonald's 'Next' concept.

First restaurants

The first McDonald's' restaurants developed in the United States had a postmodern cafeteria look where the golden rings were a predominant element within a white and red background. The building became a sign, as some of the case studies shown in *Learning From Las Vegas*³². Venturi and Scott Brown themselves also designed a McDonald's in Buenavista, Florida in 1990, that can be consider as a paradigmatic example of this original trend. The first McDonald's in Hong Kong was designed in a similar fashion and just a few of this first generation of McDonald's were kept until recent years. One of them was the recently closed McDonald's in Kwun Tong that, after 30 years running, had become an icon within the neighborhood. The renovation of this McDonald's stayed on hold for many years due to urban speculation uncertainty becoming a short of vintage place³³.

McCafé

The first McCafé in Hong Kong opened in 1999 in Wing Shan McDonald's in Sheung Wan. This new service meant a crucial change in the restaurant's design and atmosphere that became more playful yet sophisticated. Warm materials were introduced as well as colorful wallpapers and furniture. Regarding the spatial distribution, semi-enclosed spaces were generated by variations in furniture elements, some of them fixed, as well as the disposition of vertical elements such as wooden louvers. Different conceptual designs for different areas of the city and for different customers. McDonald's' design catalogue in Hong Kong proposes different moods for its restaurants: Allegro, Fresh & Vibrant, Simply Modern, Living Room or Craft, among others³⁴.



Figure 3. "Minimal", "Public & Hub Metro" and "Form & Allegro" interior concepts. McDonald's. <http://www.mcdonalds.com.hk/en.html> (Accessed November 20, 2017)

This evolution can be considered as a result of the competition for the third place market with companies like Starbucks. This corporation arose dramatically and expanded internationally in the 1990s, with its first outlet opened in Hong Kong just one year after the implementation of McCafé in the city³⁵.



McDonald's NEXT

The most recent concept 'Next' was first implemented in Hong Kong in 2015³⁶. Its design was carried out by the Australian firm Landini Associates. This new restaurant's style varies considerably from the previous concept: grey is now the predominant color; wallpapers display stylized quasi architectural drawings of McDonald's classic menus; vertical partitions disappear; and light fixtures become subtle elements of space distribution offering a more open space where most of the areas are visually connected. Comfortable and homogeneous furniture, totally moveable, ranging from black fabric and metal in the case of seating elements, to concrete or wood for the tables, where some phone charging points are incorporated. Cooking spaces and McCafé open up with wide glass surfaces and stainless steel. And lastly, the implementation of touch screens where customers can order and pay their meals as a key element of this new design. The main idea behind its design is "to create memorable places of commune where people and food are the key actors"³⁷.



Figure 4. Landini Associates. *McDonald's NEXT in Admiralty*. [Hong Kong: 2015]

Case Study: Mei Foo McDonald's

The case study chosen is located in the ground level of Mound Sterling Mall in Mei Foo Sun Chuen Estate. This residential estate, built between 1968 and 1978, is one of the largest private housing developments in the world³⁸. This outlet, with a built surface of 490sqm, was first opened in 1989 and renovated into the new 'Next' design in early 2017. This McDonald's was one of the first in the world, together with Admiralty and Smithfield branches, to offer wedding ceremonies.

The research method consisted of data collection from observation in the outlet. The field work was carried out for 4 weeks in the months of November and December 2017, with a total of 4 visits. During the observations, notes were taken about customers considering 4 different factors: gender, age group, consumption and activities. Remarks in relation to the spatial distribution of users were also noted.

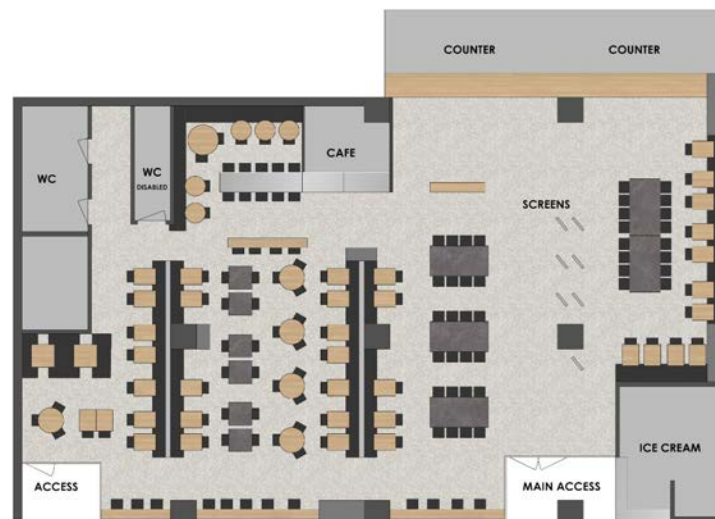


Figure 5. Caro, Diego. *Mei Foo McDonald's estimated floorplan*. [Hong Kong: 2017]



Several suggestions derived from the results:

McDonald's targets a greatly wide range of age groups and these are distributed along different days of the week and times of the day. During weekday mornings, groups of elderly chatting are predominant whereas, in the late afternoon, the main users are high school students doing their homework or talking while having a snack. At night, mainly middle-aged men having a drink after the workday. Another important factor is that a higher percentage of people were involved in a conversation than people using their phones, although both activities were predominant. During weekdays, a high percentage of people can be spotted working, holding job meetings or doing their homework in the case of young students. Most of these customers are regulars and live, work or study in the area.

During the observations, a remarkable percentage of the visitors overstayed or did not consume. This figure was particularly high on Sunday afternoons reaching 35%. This fact might be explained due to the working schedule of domestic helpers whose free day is, normally, on Sunday. The percentage of female visitors during that day was over 65%. During the research, 2 McRefugees were spotted. 2 women were seen in every occasion sitting and sleeping in the same location, next to the secondary access.



Figure 6. Caro, Diego. McDonald's Mei Foo. Data collection charts. October/November 2017. [Hong Kong: 2017]



Conclusions

From 1975, McDonald's has transited from being an "exotic" American brand to becoming a regular place in Hong Kongese's everyday life. Through a thoroughly studied evolution of its restaurants' design and locations, menus, advertising campaigns and community involvement, the company has managed to absorb the diversity of the city and its culture as well as to mitigate opposing forces.

McDonald's' market studies provide the corporation a great capacity to foresee and react to consumer's trends beforehand, assimilating the rhythms of the society in order to later control them. The efficiency of the private model of market research and anticipation suggests that, often, private spaces of consumption have a higher capacity to engage with society than public places. The latest restaurant concept "Next" might be seen as a step towards the appropriation, sanitation and control of informality, a McDonalization of society versus unpredictability and uncertainty. McDonald's has abandoned its original colourful look giving way to an austere design of its outlets and some of their locations have been displaced from the main spots of the city, yet its omnipresence has not been compromised; the brand has impregnated the everyday conscience of its customers. Behind the neutral appearance of its newest restaurant design, a filtered reality empowers a dichotomy between what seems to pursue current paradigms and trends that aim to prioritize food and people and an impersonal fast food service focused on maximizing profits.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Diego Caro is a PhD student at the Department of Architecture of the University of Hong Kong. His area of research focuses on urban and social issues regarding public & private spaces, everyday life and spaces of domination and contestation. After obtaining a MArch from the University of Navarra in 2010, he worked for over 7 years as architect and urban planner in renowned offices of Madrid, Tokyo, Beijing and Shanghai, including Kengo Kuma & Associates, Neri & Hu and Brearley Architects & Urbanists where he implemented "Networks Cities" concepts in the coordination of different urban master plans.

Endnotes

¹ Stéphane Tonnelat "The Sociology of Urban Public Spaces" in *Territorial Evolution and Planning Solution: Experiences from China and France*, eds. Wang Hongyang, Savy Michel and Zhai Guofang. (Paris: Atlantis Press, 2010), 84-85.

² "Find a Restaurant" McDonald's, Accessed Nov 28 2017. <http://www.mcdonalds.com.hk/en/restaurant-locator.html>

³ Alisha Haridasani "McDonald's Next debuts in Hong Kong" *CNN*, October 29, 2017, <https://edition.cnn.com/travel/article/hong-kong-mcdonalds-next/index.html>

⁴ Ray Oldenburg, *The Great Good Place: Cafes, Coffee shops, bookstores, bars, hair salons and other hangouts at the heart of a community* (New York: Paragon House, 1989)

⁵ Alexander R Cuthbert and Keith G McKinnell, "Ambiguous space, ambiguous rights - corporate power and social control in Hong Kong" *Cities* 14, No. 5 (1997): 295-296

⁶ Average Living Space per Person in Hong Kong, Hong Kong Government, last modified June 5, 2013, <http://www.info.gov.hk/gia/general/201306/05/P201306050278.htm>

⁷ Naomi Ng, "Average living space for Hong Kong's poorest residents same as that of prisoners, survey reveals" *South China Morning Post*, October 31, 2017, <http://www.scmp.com/news/hong-kong/community/article/2117810/average-living-space-hong-kongs-poorest-residents-same>

⁸ Todd W Bressi "The New York City Privately Owned Public Space Project" *Places* 15 (1) (2002): 42

⁹ Cuthbert and McKinnell, "Ambiguous space, ambiguous rights", 296-299

¹⁰ Henri Lefebvre *Everyday Life in the Modern World*, Sacha Rabinovitch, translator (New York: Harper & Row, Publishers, 1971).



- ¹¹ Tai-lok Lui "The Malling of Hong Kong" in *Consuming Hong Kong*, ed. Gordon Mathews and Tai-lok Lui (Hong Kong: Hong Kong University Press, 2001), 33-40.
- ¹² James Watson, *Golden Arches East: McDonalds in East Asia* (Palo Alto: Stanford University Press, 2006), 80-83
- ¹³ Watson, *Golden Arches East*, 80-81
- ¹⁴ "Our History", McDonald's, accessed November 15, 2017, <http://www.mcdonalds.com.hk/en.html>
- ¹⁵ Watson, *Golden Arches East*, 85-86
- ¹⁶ Watson, *Golden Arches East*, 89-90
- ¹⁷ George Ritzer, "The McDonalization of Society", *Journal of American Culture* 6, n.1 (1983): 100-107
- ¹⁸ "Newsroom", McDonald's, accessed November 15, 2017, <http://news.mcdonalds.com/Corporate/Feature-Stories-Articles/2016/How-Drive-Thru-Windows-Changed-the-Way-America-Ord>
- ¹⁹ Watson, *Golden Arches East*, 93
- ²⁰ "Our History", McDonald's, accessed December 1, 2017, <http://www.mcdonalds.com.hk/en/about-us/our-history.html>
- ²¹ "Ronald McDonald House Charities Activities", McDonald's, accessed December 1, 2017, <http://www.mcdonalds.com.hk/en/social-responsibility/ronald-mcdonald-house/activities.html>
- ²² "McDonald's Real Estate: How They Really Make Their Money", Wall Street Survivor, accessed November 12, 2017, <http://blog.wallstreetsurvivor.com/2015/10/08/mcdonalds-beyond-the-burger/>
- ²³ "ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934. For the fiscal year ended". McDonald's, December 31, 2016
- ²⁴ Zhang Yichen, "McDonald's China Counts on Property-Developer Deals to Catch KFC", interviewed by Shery Ahn and Betty Liu. *Bloomberg Daybreak: Asia*, Bloomberg August 15, 2017, <https://www.bloomberg.com/news/articles/2017-08-15/mcdonald-s-china-counts-on-property-developer-deals-to-catch-kfc>
- ²⁵ Xie Yu, "Citic, Carlyle to buy McDonald's franchise in Hong Kong, China in a deal worth US\$2.08 billion" *South China Morning Post*, January 10, 2017, <http://www.scmp.com/business/companies/article/2060484/citic-carlyle-buy-mcdonalds-franchise-hong-kong-and-china-us208>
- ²⁶ Leo Burnett "McWorld", Tv Campaign, 1990
- ²⁷ "Social Responsibility" McDonald's, accessed November 20, 2017, <http://www.mcdonalds.com.hk/en/social-responsibility.html>
- ²⁸ "Wedding Party", McDonalds, accessed November, 20, 2017, <http://www.mcdonalds.com.hk/en/parties/wedding-party.html>
- ²⁹ Reuters, "Pokemon Go's Creator is Working on More McDonald's-Style Sponsorships", *Fortune*, August 3, 2016, <http://fortune.com/2016/08/03/pokemon-go-mcdonalds-sponsorships/>
- ³⁰ Juliana Liu, "The Night Time 'McRefugees' of Hong Kong, *BBC*, October 27, 2015, <http://www.bbc.com/news/world-asia-china-34546807>
- ³¹ The Associated Press, "McRefugees Haunt Hong Kong McDonald's", *Mashable Asia*, November 13, 2015, <http://mashable.com/2015/11/13/mcrefugees-hong-kong-mcdonalds/#5bDscDqbvaqy>
- ³² Robert Venturi, Denise Scott Brown, Steven Izenour, *Learning from Las Vegas : The forgotten symbolism of architectural form* (Cambridge, Mass.: MIT Press, 1977) ,15-18
- ³³ "Kwun Tong Residents Recall Fond Memories as Old Mac Set to Close", *Ejinsight*, August 16, 2017, <http://www.ejinsight.com/20170816-kwun-tong-residents-recall-fond-memories-as-old-mac-set-to-close/>
- ³⁴ "Discover Our Restaurant Design", McDonald's, accessed November 25, 2017, <http://www.mcdonalds.com.hk/en/about-us/our-restaurants/discover-our-restaurant-design.html>
- ³⁵ "Company Timeline", Starbucks, accessed November 25, 2017, <https://www.starbucks.com/about-us/company-information/starbucks-company-timeline>
- ³⁶ Press Releases, Mcdonald's, accessed November 25, 2017, <http://www.mcdonalds.com.hk/en/about-us/press-releases.html#>
- ³⁷ Lucy (Landini Associates Press Department), interviewed by Diego Caro, via email, October 2017
- ³⁸ Chi-kau Chan and Johnnie Casire, "Community development and management of private sector housing estates in Hong Kong", University of Hong Kong, August 1995



Bibliography

Hardt, Michael., and Antonio Negri. *Empire*. Cambridge, Mass.: Harvard University Press, 2000.

Oldenburg, Ray. *The Great Good Place: Cafes, Coffee shops, bookstores, bars, hair salons and other hangouts at the heart of a community*. New York: Paragon House, 1989

Lefebvre, Henri. *Everyday Life in the Modern World*, Sacha Rabinovitch, translator. New York: Harper & Row, Publishers, 1971

Mathews, Gordon. and Lui, Tai-lok. *Consuming Hong Kong*. Hong Kong: Hong Kong University Press, 2001

Watson, James. *Golden Arches East: McDonalds in East Asia*. Palo Alto: Stanford University Press, 2006

Ritzer, George. *The McDonaldization of Society 5*. Los Angeles, Calif.: Pine Forge Press, 2008.

Venturi, Robert. Scott Brown, Denise and Izenour, Steven. *Learning from Las Vegas : The forgotten symbolism of architectural form*. Cambridge, Mass.: MIT Press, 1977

Sorkin, Michael. *Variations on a Theme Park: The New American City and the End of Public Space*. New York: Hill and Wang, 1992

Koolhaas, R., Mau, B. *S, M, L, XL*. New York: The Monacelli Press, 1995

Friedman, Thomas L. *The Lexus and the Olive Tree*. Rev. ed. New York: Farrar, Straus, Giroux, 2000.

Jameson, Fredric. *Postmodernism, Or, the Cultural Logic of Late Capitalism. Post-contemporary Interventions*. Durham: Duke University Press, 1997.

Image sources

Figure 1. Caro, Diego. *Map of Mcdonald's outlets in Hong Kong. Day(red) and 24h(blue)*. [Hong Kong 2017]

Figure 2. Caro, Diego. *Diagrams of McDonalds' signage in Hong Kong*. [Hong Kong: 2017]

Figure 3. "Minimal", "Public & Hub Metro" and "Form & Allegro" interior concepts. McDonald's. <http://www.mcdonalds.com.hk/en.html> (Accessed November 20, 2017)

Figure 4. Landini Associates. *Mcdonalds NEXT in Admiralty*. [Hong Kong: 2015]

Figure 5. Caro, Diego. *Mei Foo McDonalds estimated floorplan*. [Hong Kong: 2017]

Figure 6. Caro, Diego. McDonald's Mei Foo. Data collection charts. October/November 2017. [Hong Kong: 2017]



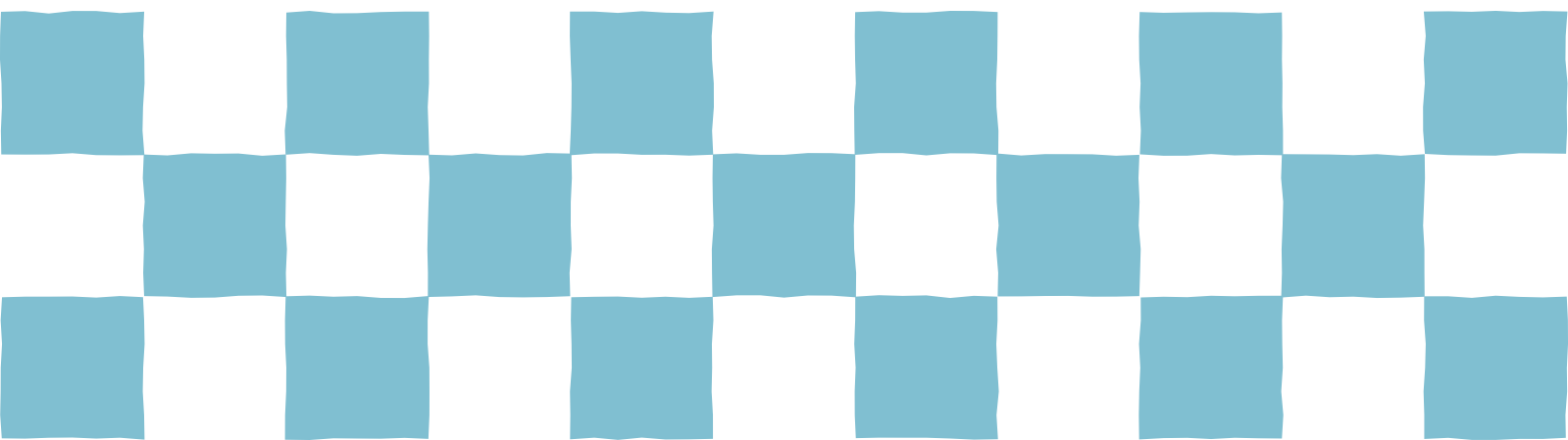
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

13 Foreign Influence in Planning



Reception of the Città Ideale. The cultural impact of the Italian Renaissance on town planning in Poland

Maciej Motak (Cracow University of Technology)

The concept of the Ideal City, as developed in Italy during the 15th and 16th centuries, has produced a significant number of treatises with texts and drawings, which, largely speaking, are theoretical rather than applied. Although new Renaissance towns were quite a rare phenomenon both in Italy and in other countries, a number of such towns were constructed in the Polish-Lithuanian Commonwealth. Two types of new towns were built according to their basic functions: the town-and-residence compounds were prestigious family seats combined with adjacent towns, while the "economic" towns were local trading centres. The fashionable ideas and forms of the Città Ideale were adopted by those towns' founders and planners. Selected examples of Polish Renaissance towns are discussed in this paper. Apart from Zamosc (1578, designed by Bernardo Morando and often considered the most perfect Ideal City, and not only in Poland), other slightly less ideal though equally interesting town-and-residence compounds are also described: Zolkiew (1584, now Zhovkva, Ukraine) and Stanislawow (1662, now Ivano-Frankivsk, Ukraine). Three of the "economic" towns are also presented here: Glowow (1570, now Glogow Malopolski), Rawicz (1638) and Frampol (founded as late as c. 1717, although still of a purely Renaissance form).

Exporting Development Zone Planning from China to Africa: Taking JinFei Development Zone in Mauritius as a Case

Lu Zhang (Tianjin University), Tianjie Zhang (Tianjin University) and Krishna Chinasamy (Tianjin University)

The last three decades witness the establishment of over 20 Sino-African economic and trade cooperation zones, which are based on the model of China's development zones. The cooperation zones are unique areas for cross-border economic cooperation between China and African countries. They are jointly developed by both governments and large-scale enterprises mainly from China under favorable policies and conditions. Their plans and development paths are mainly formulated by Chinese planners and operators and accordingly refer to the domestic counterparts within China.

This paper selects JinFei Economic and Trade Cooperation Zone (JFET Zone) in Mauritius as a specific case. Mauritius is situated in the "golden triangle" connecting Asia, Africa and Australia. It becomes a gateway of the eastern African continent, and a crucial transportation node between Asian and African continents. Informed by its unique location, the research examines the planning and implementation of the Sino-Mauritian cooperation zone contextualized with the macro background of international economic and political collaborations, and also local micro settings. It intends to reveal the planning connection between JFET Zone and the Chinese domestic counterparts, and also the local amendments in response to indigenous conditions.

The paper examines the planning and developing pattern of China's domestic development zones. In China, the establishment of development zones can be dated back to the early 1980s. As regional growth poles, they have successfully accelerated China's urbanization. The research summarizes their development process into four stages. Currently, China's development zones are at the fourth stage, namely diversified development and transformation. Besides the obvious achievements, they inevitably have some problems at the same time, like chaotic industrial layout, space conflicts caused by rapid expansion, and environmental challenges. Although it is generally regarded as a successful Chinese experience, and is according exported overseas, including African countries.

Subsequently, the study focuses on JFET Zone, and explores its multiple motivations, detailed planning concepts and implementation process. It examines the spatial layout and industry configuration of JFET Zone, contextualized within Sino-African trade and international investment situations. Besides the opportunities and achievements, the study also discusses the difficulties and challenges. Mauritius owns a small land area, small population, and limited domestic market. Shortage of natural and human resources, a Mauritius' political and economic environment differs greatly from China. The paper uncovers the main problems and difficulties for building JFET Zone. In addition to the opinions from Chinese actors, the study further investigates the perceptions from the local government and society about JFET Zone via interviews or internet open data. It intends to present a panorama of JFET Zone based the response from both African and Chinese actors. The paper tries to evaluate the transnational exporting of Development Zone Planning from China to Mauritius and bring forward some suggestions for its sustainable localization and development.

FRENCH INFLUENCES ON BELGRADE URBAN DEVELOPMENT

Milena Vukmirovic (University of Belgrade - Faculty of Forestry) and Corinne Jaquand (ENSAPB Ecole nationale supérieure d'architecture de Paris-Belleville)

In its development, cities always looked at each other, competed and grew. However, special attention has been drawn to those most developed and they were considered to be the role models. Such parallels can also be made between Paris and Belgrade, i.e. France and Serbia. In an effort to build itself according to European standards, Serbia has looked at developed European countries, while its capital city has been urbanized and built following the example of the most developed European cities and towns. During the 1867 the City of Belgrade has adopted its first urban plan done by Emilijan Josimovic. The same year the state was officially released from the centuries-long Ottoman rule, while the second half of the 19th century in the national history is characterized by Europeanization. This period is also characterised by the cooperation with French engineers and experts in the field of infrastructure and investments. Over the course of 150 years, Paris and Belgrade have been developing in accordance with their own capabilities, historical circumstances and at each pace. However, during all these years, the influences of some Frenchmen and the city building based on the French capital city as the role model can be identified in the built tissue of Belgrade. In regards with the mentioned, this paper will present the research results of chronological mapping of the French influences on Belgrade's urban development and their kinds, the particular exchanges between Paris and Belgrade and the intensity of collaboration between two cities/countries.

A Historical Review of Foreign Ideology in Planning Practice in Vietnam

Đinh Thế Anh (Southeast University), Li Baihao (Southeast University) and Ren Xiaogeng (Southeast University)

Within 2,000 years, Vietnam was ruled by China for more than 1,000 years, was colonized by France for almost 100 years, and was divided into pro-American and pro-Soviet Union camps for more than 20 years during the world's cold war. It can be stated that Vietnam's political, social, cultural and other aspects contain deep foreign trails, the same as urban planning. Urban planning in Vietnam consists of a technical and political process. Its evolutionary phases have been highly affected by foreign influences. First of all, it drew on ancient Chinese social and natural philosophies, including planning for maintaining national political and adapting to the universe and nature; Secondly, it accepted the science and technology of France from the 19th to the 20th century, including the Vauban fortress, port-city planning, municipal engineering and management, urban expansion and remediation planning; Thirdly, in the wave of socialism in the second half of the 20th century, Vietnam had learned from the Soviet Union about planning for Industrial cities and industrial zones, planning for towns and villages network and residential units in centrally planned period; Finally, in the second half of the 20th century, in the territory south of the 17th latitude line, it imitated the US market economy concept and introduced theories such as the new city planning, the regional planning and organic growth theory. To summarize it, these thoughts and practices are not only valuable experiences and lessons for Vietnam but also serve as basis to answer questions about "local theory", "national identity" and "regional features" when facing globalization and considering the path of national modernization.

The article reviews some foreign thoughts, their practices and their influences that appeared in the history of Vietnam. With limited historical data and imperfect research foundations, these papers aim to reconstruct a clue about planning characters and planning events. Based on the source of thoughts, this article summarizes the perceived historical information and divides it into four parts: China, France, the Soviet Union and the United States, presenting in chapters while focusing on an important feature of urban planning in Vietnam, which is the superposition of multiple dimensions of urban and rural concepts, construction techniques and concept technology of different cultures in the same physical space dimension. In the conclusion, the article will analyze this feature, explains how it has been formed and what kind of influence and effect it has had on urban planning since 1986 Đổi Mới.



Reception of *Città Ideale*. Italian Renaissance cultural impact upon town planning in Poland

Maciej Motak

* Maciej Motak, PhD, DSc, Faculty of Architecture, Cracow University of Technology, mmotak@pk.edu.pl

The concept of the Ideal City, as developed in Italy during the 15th and 16th centuries, has produced a significant number of treatises with texts and drawings, which, largely speaking, are theoretical rather than applied. Although new Renaissance towns were quite a rare phenomenon both in Italy and in other countries, a number of such towns were constructed in the Polish-Lithuanian Commonwealth. Two types of new towns were built according to their basic functions: the town-and-residence compounds were prestigious family seats combined with adjacent towns, while the “economic” towns were local trading centres. The fashionable ideas and forms of the *Città Ideale* were adopted by those towns’ founders and planners. Selected examples of Polish Renaissance towns are discussed in this paper. Apart from Zamosc (1578, designed by Bernardo Morando and often considered the most perfect Ideal City, and not only in Poland), other slightly less ideal though equally interesting town-and-residence compounds are also described: Zolkiew (1584, now Zhovkva, Ukraine) and Stanislawow (1662, now Ivano-Frankivsk, Ukraine). Three of the “economic” towns are also presented here: Glowow (1570, now Glogow Malopolski), Rawicz (1638) and Frampol (founded as late as c. 1717, although still of a purely Renaissance form).

Keywords: ideal cities, Renaissance planning, Polish town planning, urban composition, cross-cultural exchange

Introduction

The well-established term Ideal City is primarily associated with the Renaissance¹, principally the Italian Renaissance since it was developed in the 15th and 16th centuries mostly in Italy (and to a lesser degree in France and Germany²). Most Ideal City concepts were drawn up, described, and published in architectural and urban treatises by Italian authors, theoreticians, and practitioners of architecture and planning. They include Leon Battista Alberti (c. 1452), Filarete (c. 1464), Francesco di Giorgio Martini (c. 1476), Leonardo da Vinci (c. 1490), Sebastiano Serlio (from 1537), Pietro Cataneo (1554, 1567), Andrea Palladio (1570), Giorgio Vasari the Younger (1598), Vincenzo Scamozzi (1615), and many others. In time, their various concepts took on the generic name of “Ideal City”, which was first used by Vasari³. While their views may have differed, there were still enough features common to their towns for them to be subsumed under this term. It should also be said that they tended to express their ideas more eloquently in their drawings than in their words.

The theory lying behind the construction of ideal cities derived largely from the humanistic ideas of the Renaissance, as expressed in the art and architecture of the period. The c. 1414 re-discovery of the treatise *De Architectura Libri Decem*, written c. 20 BCE by Marcus Vitruvius Polio, is regarded as one of its direct triggers. (It was also translated into several languages, including Italian, Spanish and French in the 16th century). Vitruvius’s works, especially Book I (Chapters 4-7), contained suggestions for the location, planning and construction of towns, and those searching for an ideal city formula attempted to apply his guidelines and also to reconstruct his missing drawings. As time went on, they also wished to master the theory behind them. However, despite general admiration for his views, there were also some who expressed cautious criticism towards them⁴.

The aim was to create a town-planning formula which would meet the residents’ needs in a full and complex way, especially with regards to their health and comfortable living standards. The towns had to possess a perfect composition, and also provide appropriate protection against external attack. Theoretical considerations produced three basic types of highly regular town plans: orthogonal (gridiron), radial, and “mixed” (combining the features of both). The characteristics of ideal town planning required the insertion of a town plan into a regular polygon; using a particular measurement module, this meant the introduction of a great number of squares and plazas; the application of axial connections and other compositional interactions; and the influence of fortification geometry on the town plan. An attempt at a holistic approach to the process of town building may also be noted, as well as a tendency towards an orderly, harmonious, balanced, symmetrical, closed and complete composition, characteristic of Renaissance art and architecture .

The practical results of this theory were limited and not immediate. Town planning was only at the beginning of its separation from the discipline of architecture⁵. The scale of physical changes to Italian cities was relatively



small, especially in the 15th century⁶. Even when they increased during the next century, it mostly took the form of re-modelling existing towns and modernising their fortification systems⁷. New towns in the already quite urbanised Italian states were rare. However, from a wider perspective, the claim that the “two centuries between 1500 and 1700 in Europe are not primarily noteworthy for new towns”⁸, is not entirely borne out vis-à-vis Poland.

Reception of Renaissance in Polish town planning

The period of the most intense search for the formula of an ideal city lasted from the end of the first half of the 15th century (Alberti) till the beginning of the 17th century (Scamozzi). This was also the time when a new formula for Polish statehood appeared. In 1386, the Kingdom of Poland, reunited after its earlier division into five duchies, was nominally united with the Grand Duchy of Lithuania, which lay to the north-east. Two centuries later, in 1569 this actually became a reality, when the two states combined to form a Commonwealth of Two Nations. The 16th century is often referred to as Poland’s Golden Age, especially with reference to its cultural and artistic life⁹. It was a state of substantial political importance in Europe. It had a successful feudal economy; it enjoyed a high level of religious freedom; and it had an idiosyncratic ‘democratic’ system, whereby representatives of the nobility (*szlachta*), sitting in a two-chamber parliament, shared power with the monarch¹⁰. Unfortunately, this favourable period in Polish and Lithuanian history came to an end during the devastating wars waged continuously in East-Central Europe between 1648 and 1673.

At the start of the 17th century, the importance and influence of the aristocracy in the Commonwealth noticeably increased. Despite its low number (several dozen rich families as opposed to several dozen thousand *szlachta* families, and a population of c. 10 million), it became the most powerful and influential social group and dominated all the other social classes: peasants, burghers, the remaining nobles, even the King himself. These aristocratic families were responsible for the creation of a number of new towns in the late 16th century and in the 17th century.

Renaissance as an architectural style emerged in Poland at the beginning of the 16th century, after being imported into court circles, largely from Florence. Knowledge about Renaissance ideas and features penetrated into Poland via books (including treatises on architecture), travel, academic studies made abroad, for example in Padua, dynastic marriages (King Sigismund I married Bona Sforza in 1518¹¹), and other sources. It may be interesting to note that the first fully regular post service started in 1558 between Krakow and Venice, after less regular services began c. 1519).

The first work of Renaissance architecture, the arcade over the contemporary late Gothic tomb in Wawel Cathedral in Krakow, then the capital, dates back to 1502. In the same year began the complex re-modelling of the Royal Castle, which was designed and overseen by Francesco Fiorentino. And 1517 saw the construction of the magnificent mausoleum in the Cathedral by Bartolomeo Berrecci, referred to as the “best example of Renaissance architecture on this side of the Alps”¹². Over the next decades, the Renaissance style became very popular with the aristocracy, nobility, and burgher and clerical circles in many towns and cities of Poland and Lithuania.

As regards town planning, the increasing domination of aristocracy at this time was reflected in the foundation of their own private towns. Until the 15th century towns had been founded by royal decree. Although generally more numerous than Renaissance projects in Italian states, new Polish urban foundations were also quite limited in certain regions because of the existence of many medieval towns, with either regular or irregular plans. Thus new towns were established in the south and east of Poland, where, with a settlement network not yet dense enough, conditions were favourable for further urbanization. Additionally, the largest aristocratic agriculture-oriented *latifundia* were to be found in this region, some of which were even equipped with their own private armies and judicial system. Between 1570 and 1670 (with one significant later exception), they built a number of new private towns, some of which reveal the impact of the ideal city theory. From the urban point of view, two major groups of new foundations may be distinguished.

The town-and-residence compounds and the “economic” towns

The Renaissance towns in the Commonwealth, most of which were founded from scratch (*in cruda radice*), fall into two basic groups according to their principal functions: town-and-residence compounds and “economic” towns. The former, founded by wealthy aristocratic families, contained an impressive residence with an adjacent town, both protected by a fortification system. However, being the works of a specific functional system and original urban form, they were relatively rare. Their founders were rich, ambitious, highly educated representatives of their social class, and their new private towns were intended, apart from other functions, to



serve as a visible sign of the importance and prestige of their families. The fashionable ideas and forms of the *Città Ideale*, which were already known to Italian urban planners, proved to be a fruitful source for them to mime. In addition to these relatively large towns, which were family seats, landowners also needed a considerable number of smaller (in terms of population rather than size) towns whose function, purely economic, was to organise trading and crafts across their vast *latifundia*. Dozens of these were established, some of which received extremely regular and well-composed plans. Some of the “economic” towns had much simpler plans and tended to be established by less wealthy noble families as part of the economic organisation of the surrounding farmlands, since the export of grain was the base of Poland’s economy at the time.

Some of the new towns, of both types, were granted plans of a Renaissance character. They followed theoretical proposals to a various degree and in some cases also featured traditional elements, typical of Medieval town planning¹³. Below are discussed six Renaissance cases: three town-and-residence compounds and three “economic” towns. Each description starts with the town’s origin and its urban form and ends with its relation to Italian Renaissance town planning. In the first group are Zamosc, Zolkiew, Stanislawow, and in the latter Glowow, Rawicz, Frampol (original names).

Town-and-residence compounds were complex structures and consisted usually of three main components: the owner’s residence (palace or castle), the town proper, a ring of fortifications¹⁴. These elements can be spatially connected in different ways, thereby defining their composition. Four subgroups may be identified and distinguished (Figure 1), each featuring a clear compositional axis which linked the palace to the city proper, the latter constructed on a regular gridiron plan, centred on a market square: simple link; compositional link (e.g. Zolkiew); closed compositional link (e.g. Zamosc and Stanislawow); free link¹⁵. Renaissance features can be seen in compounds as a whole and/or in their particular components.

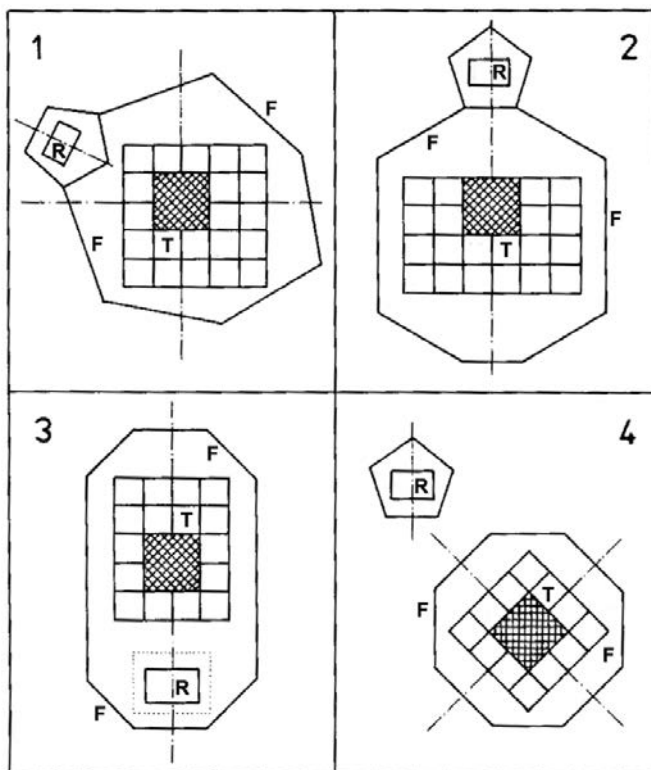


Figure 1. Schemes of the four basic types of Renaissance town-and-residence compounds: simple link (1), compositional link (2), closed compositional link (3) and free link (4). R – residence, T – town, F – fortifications. The market square area is hatched. Evaluation by Mieczysław Książek, drawing by Maciej Motak.

In the “economic” towns, there was no residence and in most of them there were no fortifications either. Due to the simplicity of most plans, their subgrouping is based on the proportion of “modern” Renaissance features versus traditional Medieval ones, rather than on the shapes of the plan. The cases under discussion date back to different years, and even centuries: Glowow was founded in the 16th century, Rawicz in the 17th and Frampol – only in the 18th, although the impact of the Renaissance impact may be noted in all three.

All six cases are illustrated with the plans of the towns as built by the 17th or 18th century (Figure 2).

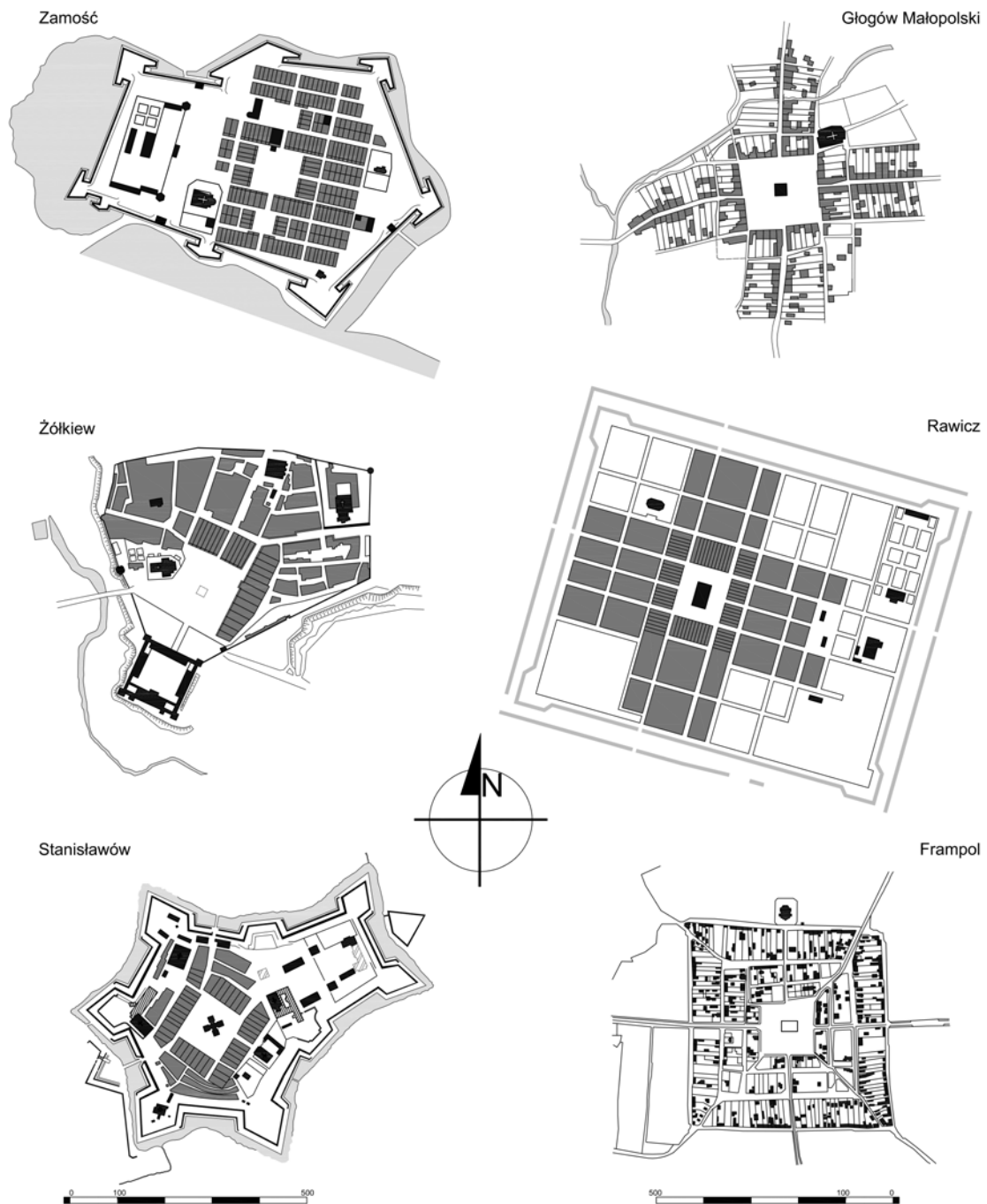


Figure 2. The schemes of the built plans of residence-and-town compounds (on the left, top to bottom: Zamosc, Zolkiew, Stanislawow) and of “economic” towns (on the right, top to bottom: Glowow, Rawicz, Frampol), as of the 18th century. Public buildings are shown in black while residential blocks – in dark grey (except for Frampol for its specific structure). Based on the and own research and the compilation of plans and maps. Evaluation by Maciej Motak, drawing by Maciej Kapolka.

Zamosc

This was one of the earliest and most perfectly planned Renaissance urban projects. The town was chartered in 1580 by Jan Zamoyski (1542-1605), Chancellor of State and Commander-in-Chief of the Army. The town proper was placed near the residence. The residence area contained the palace, back-buildings, gardens and



armory. Both the town proper and the residence were enclosed within a ring of modern bastion fortifications according to the New Italian System. The town proper was laid out within the square plan (c. 360 by 360 m) in accordance with a regular, modular orthogonal network, with the market square at its centre (also square, 100 by 100 m). Two compositional axes crossed in the very centre of the market square: the latitudinal, very gently bent, linked the market square with the residence (whose gate tower closed the vista of the street leading to it), while the longitudinal linked the ceremonial market square with two smaller, ancillary squares of everyday commercial use. The crossing point of the two axes – the town's focal point – was neither emphasised nor even marked in any way, although its presence was indisputably felt. An important feature of Zamosc is its three-dimensional composition. The centre of the town is marked by the town hall tower which stands out slightly from the northern frontage of the market square, around which there are numerous (c. 280 – by 1605) two- or three-storey burgher houses, which are in turn surrounded by large volumes of public edifices – the Academy and the temples of several faiths. The Collegiate Church, the Zamoyski palace, and the Academy (only the third in the Commonwealth) symbolise the three powers: Soul, Politics, and Science.



Figure 3. 1930s view of the Zamosc town hall as seen from under the arcades of the market square. The photograph by Adam Lenkiewicz c. 1938.

The Zamosc plan partly resembles a theoretical plan of Pietro Cataneo (1567), in which town and fortress were to be linked by the compositional axis, with the ancillary squares complementing the main square. The impact of Italian town planning theory on Zamosc is also revealed in the use of regular polygons. The quadrangle of the town proper plan was carefully placed within the pentagon of the fortifications plan, which was extended westwards to embrace the residence. The continuous arcaded passages around the market square and along other streets are another sign of Italian influence. Last but not the least, one should note the personal connection. Zamosc was designed by the architect Bernardo Morando (c. 1540-1600), who came to Poland from Padua (Padova). Jan Zamoyski probably met him while studying in Padua and in 1578 commissioned from him a project for his family seat¹⁶. Morando lived and worked in Zamosc until the end of his life and he was responsible for numerous architectural projects there: the Zamoyski palace complex, the town hall (Figure 3), the Collegiate Church, the Academy, the fortifications, and burgher townhouses including his own. After his death, local masters followed his style (Greek Catholic Church, Synagogue etc.).



Zolkiew (now: Zhovkva, Ukraine)

Owing to Zamosc's pioneering character, its large scale, and the superior quality of its town plan and architecture, it became a model to be emulated by other urban compounds with a similar functional-spatial structure. An early example is the town of Zolkiew, founded in 1594 (officially chartered in 1603) by Jan Zamoyski's closest collaborator, namely Vice-Chancellor and Deputy Commander-in-Chief, Stanislaw Zolkiewski (1547-1620). Zolkiew is of similar size, though less regular than Zamosc and was formed by three components: the Zolkiewski castle, the town proper, and a ring of somewhat obsolete walls. The compositional axis linked the castle with the market square (in the middle of which originally stood the town hall), via the high street, which led to the town gate, next to which was the synagogue. This regular, composed strip of town building was adjoined by less regular districts on the eastern and western sides, as there were already small settlements there, whose presence the founder decided to respect.

The relation of Zolkiew to the Italian Renaissance is weaker than that of Zamosc and seems to be of a more indirect character – through borrowings acquired via Zamosc. The axial composition and arcaded passages along two frontages of the market square show a definite influence, and also of note are certain symbolic connotations. The places of worship might originally have been located in accordance with a determined topographical order, and the four city gates led to the four corners of the world. Although authorship of the Zolkiew town plan remains uncertain, it now seems quite likely that he was an Italian architect working in Lviv, Paolo Il Felice¹⁷.

Stanislawow (now: Ivano-Frankivsk, Ukraine)

Stanislawow is a relatively late example of a town-and-residence compound. It was founded in 1662 by the *chorazy* (Flag-Bearer) Andrzej Potocki (c. 1630-1691), who was later to become an influential statesman. The compound consisted of three originally composed elements: the Potocki family residence (never finished), the town proper (its simple plan rotated by 45 degrees in relation to the town-residence axis) and the exceptionally regular ring of bastion fortifications of the Dutch system – hexagonal, although elongated in order to embrace the residence, and further equipped with two ravelins. The 45-degree rotation was repeated in the cross plan of the town hall, which was built in the centre of the market square, its tower symbolising the municipality and its four wings offering retail spaces. Like Zamosc, Stanislawow was one of more important fortresses in the Commonwealth.

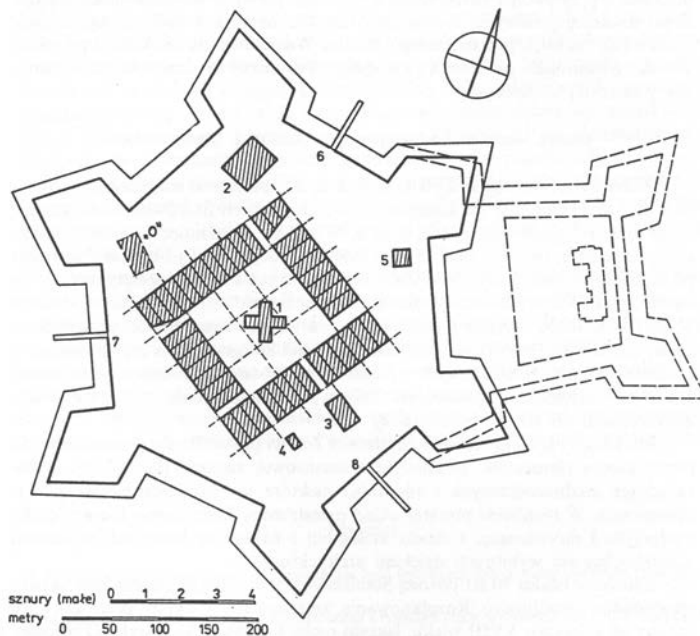


Figure 4. Hypothetical hexagonal plan of Stanislawow c. 1670 and its further north-east elongating extension. The scale is marked in so-called short rods (above) and metres (below). Evaluation and drawing by Maciej Motak.

In Stanislawow, as in Zolkiew, one notes significant, although probably indirect, borrowings from Renaissance town planning but also, unlike Zolkiew, some over-formation characteristic at the transition period from Renaissance to Baroque urban art. Three-dimensionally, the skyline of Stanislawow is close to that of Zamosc. The residence in its planned shape was already close to the Baroque plan. The same could be noted of the



elongation of the entire compound plan. However, in its first phase Stanislawow may have received a perfectly hexagonal plan¹⁸, which was elongated after several years to include the planned palace into a ring of fortifications (Figure 4). The symbolic order of the location of the places of worship turned out to be more permanent than in Zolkiew¹⁹. The simplified plan of the town and the sophisticated plan of the fortifications seem to support the speculation that the fortification planner, Francesco Corassini of Avignon, was responsible for the whole compound²⁰.

Glowow (now: Glogow Malopolski)

The very first Polish town to receive a Renaissance form was Glowow, which was founded in 1570 in eastern Malopolska in the south of Poland. Its founder was a modest nobleman, Krzysztof Glowa (-1582), Castellan of Polaniec and also Royal Secretary, perhaps a man of more far-reaching ambition than this post would imply²¹. The town functions were mainly commerce and agriculture. The town plan was very regular, based on the square of the whole town (c. 500 by 500 m) and nearly the square of the centrally located market square (160 by 150 m), both crossed symmetrically by two compositional axes leading along streets from the market square into the four corners of the world. The town hall was built in the centre of the large market square, its volume closing the views from all four streets leading to the market square. Four ancillary squares were laid out at each corner of the market square, which were intended to be built up with public buildings (only the Parish Church was built at this time). Lots for 120 burghers' houses were laid out along the market square frontages and the four main streets.

The Glowow plan resembles to some extent certain plans by Pietro Cataneo (1554) but these did not feature a building in the market square. Closing a street with a view of a building in the square appeared in the works of Baldassare Perruzzi and Sebastiano Serlio. Ancillary squares were also typical of many Renaissance concepts. In addition, the strong emphasis of the cross composition of the two main arteries refers to the fundamental scheme of ancient Roman town planning favoured by Renaissance Italian town planners. There is some dispute as to the unsolved attribution of the Glowow plan, although it gently favours an Italian personal connection²². There is also an hypothesis that the original plan of Glowow could have been be of a radial type, but there is no convincing proof of this²³.

Rawicz

Rawicz was founded in 1638 by a local influential noble, Adam Olbracht Przyjemski (1590-1644) as town for craftsmen, in Wielkopolska, in western Poland. The town plan was enclosed within a slightly elongated rectangle, its dimensions c. 780 by 660 m. It is an orthogonal plan, with a very regular street network and an almost centrally located rectangular market square (100 by 120 m). There are three streets along each longer frontage and two streets along each shorter frontage, the elongation of the town hall plan corresponding to the elongation of the market square. The corner areas of the town were initially left unbuilt, with the intention that they be built up later. Another, smaller, square was laid out in the east of the town. Quite rarely for "economic" towns, simple fortifications were built soon around Rawicz, which developed quickly and successfully, reaching over 300 houses in the late 17th century.

In the case of Rawicz, it is quite difficult to point to direct Italian patterns. The town was probably planned by Michael Flandrin, of Flemish origin, a military engineer from Wroclaw. The founder himself had studied in Bavaria. A certain similarity of the Rawicz plan to the French town of Richelieu (1638) and presence of the French-refugee town of Erlangen, near Nuremberg in Bavaria (1684) has been noted²⁴. If correct, that would mean either a very quick transfer of the original source, or rather a reference to the later re-planning of the town. The town plan bears also a similarity to the towns laid out in accordance with the Laws of the Indies in Spanish colonies²⁵. It can be seen, apart from the regularity and scale, in the proportions of the market square. All in all, the original plan of Rawicz seems to have a lot in common with ideal city patterns, though they were probably transferred via non-Italian channels.

Frampol

Frampol was constructed in the Lublin region – the centre of Poland at the time and now eastern Poland. It was founded in 1717, or slightly later, by Marek Antoni Butler, a modest local noble. It is therefore a very late work of the Renaissance period to which it belongs stylistically and could perhaps be seen as a post-Renaissance town. It is the only Polish example of a Renaissance town whose plan is not entirely orthogonal – a so-called mixed plan, combining features of gridiron and radial plans. It uses the square-shape plan (500 by 500 m). As many as eight streets leave the centrally located market square (with the town hall built originally in the very centre) – four perpendicular from the mid-frontages and four diagonal from the corners. Three strips of buildings surround



the market square, although the innermost one was probably added in the 19th century, diminishing the oversized surface of the market square from 225 x 225 m to 140 x 140 m. The characteristic element of the most external belt of buildings, inhabited by farmers, are their private “town barns” along the town limits, beyond which there were individual narrow farmlands (Figure 5).



Figure 5. The barns lining the most external streets and town limits of Frampol. The photograph by Maciej Motak, 1994.

In Frampol there is a striking similarity to one of the most precise and mature concept projects of the ideal city, i.e., by Giorgio Vasari the Younger (1598)²⁶. Eight axes crossing one another at the very centre of both the plan and the market square with its town hall as well as the disposition of ancillary squares are definitely Vasari-like features. The town Vasari drew and described was, however, octagonal and fortified. The transfer of that pattern and the name of the author of the Frampol plan unfortunately remain unknown.

Conclusion

One must begin the conclusion with the fact that there were more towns with Renaissance features in the territories of the former Commonwealth than the six presented above. Other examples of town-and-residence compounds are Brody (1584, with the 1630s fortifications by Andrea dell’Aqua), Szarogrod Podolski (1585), Wisnicz Nowy (1616); of the “economic” towns – Oleszyce (1576), Tomaszow Lubelski (1590), an extension of Grodzisk Wielkopolski (1593).

The six towns briefly discussed above still bear – to a varied extent – the features they were bestowed with when they were founded and laid out. Since most of them have since grown in size, the Renaissance compounds discussed here now form the centres of towns of various sizes, although they have retained their original composition. This is most noticeable in the heart of each town, its market square (Figure 6). The original regular plan has helped keep the same spatial order. In addition, all six towns, both in Poland and Ukraine, enjoy a good reputation for the preservation of their urban and architectural heritage, with numerous listed buildings. The town that stands out particularly is Zamosc, a splendid example of an ideal city, recognised since 1992 as the World Heritage Site.

The cultural impact of the Italian Renaissance upon town planning in Poland has been expressed in a number of ways and has left traceable marks. In all the discussed cases there is a direct and/or indirect following of theoretical plans, as well as particular features generally present in ideal city concepts, such as regularity, symmetry, balance, and the more specific ones like the primary straight street, gridiron and enclosed space²⁷. The compositional axis, or axes, has played an important role in all cases. The main, regular, centrally located market square was usually accompanied by ancillary squares (two in Zamosc, four in Glowow, one in Rawicz, four in Frampol). The town hall was deliberately located in the middle of the market square (five cases) or in its frontage (Zamosc). In some cases (Zamosc, Stanislawow) there is a conscious three-dimensional care shown for the town skyline and volume, which goes well beyond the typical, two-dimensional planning concept. Some of the authors of the projects were Italian architects (in Zamosc, Zolkiew, perhaps Glowow) and all the authors showed a good understanding of the concept of ideal city, which they shared with those who commissioned them



– the town founders. In addition to this, Italian Renaissance influence on Polish town-planning may be noted in other fields, such as fortifications (especially of Zamosc), and in the general attention shown to harmonious and balanced urban composition.

The non-Italian influence (French, German) upon Polish Renaissance town planning cannot be missed or omitted. Moreover, some of the local Polish masters (builders, surveyors) learnt quickly from external sources and successfully implemented the principles of the new style. However, it was the Italian Renaissance that was mostly responsible for introducing the Renaissance town planning into Poland and, to a large extent, for its further development and substantial achievements. Combined with the necessary adjustments to local topography, as well as individual conditions and requirements, it resulted in a number of noteworthy Renaissance-built new towns.

Within these deliberations on cross-cultural impact, one might also recall its 20th-century obverse. The 1598 book by Giorgio Vasari the Younger was actually found, translated and edited by a Polish historian, Teresa Zarebska, in 1962.



Figure 6. Contemporary views of the Renaissance market squares. Founded as residence-and-town compounds (on the left, top to bottom): Zamosc with the town hall (phot. 2012); Zhovkva with the collegiate church and partly lost frontage (phot. 2006); Ivano-Frankivsk with the town hall modernised in c. 1930 (phot. 2004). Founded as “economic” towns (on the right, top to bottom): Glogow Malopolski with the town hall (phot. 2014); Rawicz with the town hall (phot. 2014); Frampol with the parish church as seen from the market square (phot. 1994). The photographs by Maciej Motak.



Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Maciej Motak, PhD, DSc, architect and academic, carries out research into the history of architecture and urban forms, heritage protection, contemporary architecture. He is the author of 4 books including *Outline of the History of the Urban Development of Krakow* and over 90 research papers or chapters. He edits and translates books on architecture and planning into Polish. He is a Poland-licensed architect, the author or co-author of c. 35 built projects of residential and public buildings, and (in teams) of 12 competition entries in the fields of architecture and planning.

Endnotes

¹ J. S. Curl recalls "Renaissance period" and "Renaissance designers" of the *citta ideale*. James Stevens Curl, *A Dictionary of Architecture* (Oxford: Oxford University Press, 1999), 332.

² The German and French cases were discussed e.g. by G. Münter. Georg Münter, *Idealstädte. Ihre Geschichte vom 15.–17. Jahrhundert* (Berlin: Henschelverlag, 1957), 66-98.

³ The treatise by Vasari the Younger was translated and edited by Teresa Zarebska to be published as *Miasto idealne kawalera Giorgio Vasariego: obmyślone i narysowane w roku 1598* (Warszawa: Państwowe Wydawnictwo Naukowe, 1962).

⁴ It can be noted e.g. in the work of Pietro Cataneo. Teresa Zarebska, *Teoria urbanistyki włoskiej XV i XVI wieku* (Warszawa: Państwowe Wydawnictwo Naukowe, 1971), 103.

⁵ Teresa Zarebska, who thoroughly studied and perfectly reviewed most of the Italian treatises, pointed to the fact it was only "in statu nascendi". *Ibid.*, 7.

⁶ Nicholas Adams, Laurie Nussdorfer, *The Italian City, 1400-1600* [in:] *Italian Renaissance architecture from Brunelleschi to Michelangelo*, ed. Henry A. Millon (London: Thames and Hudson, 1996), 205, 220.

⁷ Anthony Edwin James Morris, *History of Urban Form Before The Industrial Revolution* (Harlow: Longman, 1994), 159.

⁸ Spiro Kostof, *The City Shaped. Urban Patterns and Meanings Through History* (London: Thames and Hudson, 1991), 111.

⁹ Marcin Fabianski, *Złoty Krakow* (Krakow: Wydawnictwo Literackie, 2010); Norman Davies, *God's Playground. A History of Poland*, vol. 1 *The Origins to 1795* (New York: Columbia University Press, 1982).

¹⁰ Norman Davies, *ibid.*

¹¹ Maria Bogucka explains that the marriage of Sigismundus and Bona was an important event, though not a crucial one – one of the series of events that helped transfer Italian culture to Poland. Maria Bogucka, *Bona Sforza* (Wrocław: Ossolineum, 2004), 88.

¹² The chapel was first called this way ("a pearl of Renaissance architecture...") by the renowned and meticulous 19th-century architect and historian of art August von Essenwein, *Die mittelalterlichen Kunstdenkmale der Stadt Krakau* (Graz: Lith. Anst. v. Th. Schneider, 1866), 91-92.

¹³ The urban historian has emphasised that only a small part of towns founded in the Renaissance time can actually be called Renaissance ones for their stylistic features. Wojciech Kalinowski, *Zarys historii budowy miast w Polsce do połowy XIX wieku* (Torun: Wydawnictwa Uniwersytetu Mikołaja Kopernika, 1966), 223.

¹⁴ Some smaller compounds had no fortifications or they only protected the residence.

¹⁵ Mieczysław Książek, *Zagadnienia genezy rozplanowania i typologii miast prywatnych XVI i XVII wieku w południowej Małopolsce* (Krakow: Politechnika Krakowska, 1988), 156-161.

¹⁶ Jerzy Kowalczyk, *Morando Bernardo*, *Polski Słownik Biograficzny*, vol. 21, 1976, 693.

¹⁷ Maciej Motak, *Elementy nowatorskie i tradycyjne w kompozycji urbanistycznej wybranych renesansowych założen miejsko-rezydencjonalnych w Polsce* [in:] *Studia z historii architektury i urbanistyki* (Krakow: Politechnika Krakowska, 1999), 213.

¹⁸ *Ibid.*, 210-211.

¹⁹ Siergiej Krawcow, *Stanisławów w XVII-XVIII w. Układ przestrzenny i jego symbolika*, *Kwartalnik Architektury i Urbanistyki* vol. 38, 1993, 9-12.

²⁰ Maciej Motak, *op. cit.*, p. 213.

²¹ Franciszek Kotula, *Głowow. Renesansowe miasteczko*, *Biuletyn Historii Sztuki* b. 1, 1954, 4.

²² The dispute was reported and summed up by J. Kowalczyk in: Jerzy Kowalczyk, *Głowow. The enigma of the plan for the first Renaissance town in Poland*, *Kwartalnik Architektury i Urbanistyki*, b. 4, 2012, 51. It was pointed to the fact that the owner, being a royal secretary, was close to Polish-Italian cultural exchange.

²³ *Ibid.*, 42, 45.

²⁴ Tadeusz Pawłowski, *Unikalny układ urbanistyczny Rawicza* (Accessed November 23, 2017; March 25, 2018).

²⁵ The Laws of the Indies are discussed in numerous publications, e.g., John William Reys, *The Making of Urban America. A History of City Planning in the United States* (Princeton: Princeton University Press, 1992), 26-32, who also presents it in light of the possible impact by Vitruvian and Alberti's views.

²⁶ Noted, e.g., by Georg Münter, *op. cit.*, 96.

²⁷ A. E. J. Morris, *op. cit.*, 161-163. No Polish example was quoted in this extensive review of world history of urban form.

Bibliography

Adams, Nicholas; Nussdorfer, Laurie, *The Italian City, 1400-1600* [in:] *Italian Renaissance architecture from Brunelleschi to Michelangelo*, ed. Henry A. Millon, London: Thames and Hudson, 1996.

Bogucka, Maria, *Bona Sforza*, Wrocław: Ossolineum, 2004.



Curl, James Stevens, *A Dictionary of Architecture*, Oxford: Oxford University Press, 1999.

Davies, Norman, *God's Playground. A History of Poland*, New York: Columbia University Press, 1982

Fabianski Marcin, *Złoty Krakow [Golden Krakow]*, Krakow: Wydawnictwo Literackie, 2010.

Kalinowski, Wojciech, *Zarys historii budowy miast w Polsce do połowy XIX wieku [The Outline of the history of the City Development in Poland Up to Mid-19th Century]*, Torun: Wydawnictwa Uniwersytetu Mikołaja Kopernika, 1966.

Kashima, Akihiro; Kigawa, Tsuyoshi, *Preliminary Essay on the Continuity of Town Planning Concepts of the Renaissance "Ideal City" and the Modern Town Planning*, 15th IPHS Conference, São Paulo, 2012.

Kostof, Spiro, *The City Shaped. Urban Patterns and Meanings Through History*, London: Thames and Hudson, 1991.

Kotula, Franciszek, *Głowow. Renesansowe miasteczko [Głowow. A Renaissance town]*, Biuletyn Historii Sztuki" b. 1, 1954.

Kowalczyk, Jerzy, *Morando Bernardo*, [in:] *Polski Słownik Biograficzny*, vol. 21, 1976.

Kowalczyk, Jerzy, *Głowow. The enigma of the plan for the first Renaissance town in Poland*, *Kwartalnik Architektury i Urbanistyki*, b. 4, 2012.

Krawcow, Siergiej, *Stanisławow w XVII-XVIII w. Układ przestrzenny i jego symbolika [Stanisławow in 17th - 18th c. Spatial arrangement and symbolics]*, *Kwartalnik Architektury i Urbanistyki*, vol. 38, 1993.

Ksiażek, Mieczysław, *Zagadnienia genezy rozplanowania i typologii miast prywatnych XVI i XVII wieku w południowej Małopolsce [Origin of layouts and typology of private towns in the 16th and 17th century in southern Little Poland]*, Krakow: Politechnika Krakowska, 1988.

Kusnierz, Kazimierz, *Miejskie ośrodki gospodarcze wielkich latyfundiów południowej Polski w XVI oraz XVII wieku [Economic town centres of large latifundia in southern Poland typology in the 16th and 17th century]*, Krakow: Politechnika Krakowska, 1989.

Miasto idealne kawalera Giorgio Vasariego: obmyślane i narysowane w roku 1598 [Ideal City by Cavalier Giorgio Vasari: Thought-out and Drawn in 1598], translated and edited by T. Zarebska, Warszawa: Państwowe Wydawnictwo Naukowe, 1962.

Morris, Anthony Edwin James Morris, *History of Urban Form Before The Industrial Revolution*, Harlow: Longman, 1994.

Motak, Maciej, *Elementy nowatorskie i tradycyjne w kompozycji urbanistycznej wybranych renesansowych założeń miejsko-rezydencjonalnych w Polsce [Traditional and Inventive Elements of the Urban Composition in the Selected Renaissance Town-and-Palace Compounds in Poland]* [in:] *Studia z historii architektury i urbanistyki*, Krakow: Politechnika Krakowska, 1999.

Münter, Georg, *Idealstädte. Ihre Geschichte vom 15.–17. Jahrhundert*, Berlin: Henschelverlag, 1957.

Pawlowski, Tadeusz, *Unikalny układ urbanistyczny Rawicza*, http://www.obywatel.rawicza.pl/rawicz/book/2016_UUU-Rawicza/Rawicz.html, accessed 23.11.2017; http://obywatel.rawicza.pl/rawicz/book/380_lat_Rawicza/380-lat.html, accessed 25.03.2018.

Pilarczyk, Zbigniew, *Rawicz jako przykład nowej lokacji miasta w Rzeczypospolitej w XVII wieku*, Rawicz: Gramma, 1998.

Reps, John William, *The Making of Urban America. A History of City Planning in the United States* Princeton: Princeton University Press, 1992.

Vitruvius, Marcus, *Ten Books on Architecture*, numerous editions in English and other languages.



Zarebska, Teresa, *Teoria urbanistyki włoskiej XV i XVI wieku* [with English summary: *Theory of Italian townplanning of the 15th and 16th centuries*], Warszawa: Państwowe Wydawnictwo Naukowe, 1971.

Image sources

Figure 1. Evaluation by Mieczysław Książek, drawing by Maciej Motak, 1999. Published in: M. Motak, *op. cit.*, 1999, redrawn 2018.

Figure 2. Evaluation by Maciej Motak, drawing by Maciej Kapolka, 2017. Unpublished.

Figure 3. Photograph by Adam Lenkiewicz, c. 1938 (published as a postcard by Lwów: Książnica Atlas, 1939), Original postcard from the author's archive.

Figure 4. Evaluation and drawing by Maciej Motak, 1999. Published in: M. Motak, *op. cit.*, 1999.

Figure 5. Photograph by Maciej Motak, 1994, from the author's archive. Unpublished.

Figure 6. Photographs by Maciej Motak, 1994-2014, from the author's archive. Unpublished.



A Historical Review of Foreign Ideology in Planning Practice in Vietnam

Dinh The Anh*, Li Baihao **, Ren Xiaogeng ***

* *PhD, School of Architecture in Southeast University, dinhtheanh696@gmail.com*

** *Professor, School of Architecture in Southeast University, libaihaowh@sina.com*

*** *PhD, School of Architecture in Southeast University, renxiaogeng@126.com*

Within 2,000 years, Vietnam was ruled by China for more than 1,000 years, was colonized by France for almost 100 years, and was divided into pro-American and pro-Soviet Union camps for more than 20 years during the world's cold war. It can be stated that Vietnam's political, social, cultural and other aspects contain deep foreign trails, the same as urban planning. The article reviews some foreign thoughts, their practices and their influences that appeared in the history of Vietnam. With limited historical data and imperfect research foundations, these papers aim to reconstruct a clue about planning characters and planning events. Based on the source of thoughts, this article summarizes the perceived historical information and divides it into four parts: China, France, the Soviet Union and the United States, presenting in chapters while focusing on an important feature of urban planning in Vietnam, which is the superposition of multiple dimensions of urban and rural concepts, construction techniques and concept technology of different cultures in the same physical space dimension. In the conclusion, the article will analyze this feature, explains how it has been formed and what kind of influence and effect it has had on urban planning since 1986 Đổi Mới.

Keywords: Planning history of Vietnam, Planning history of French colonial, Modern history in Southeast Asia cities, Modern Vietnam

1 Introduction

Vietnam is a country that has experienced many political changes during its own development. Most of these changes are related to foreign countries, as Vietnam was ruled, colonized, received a military or technical assistance, etc. Within 2,000 years, Vietnam was ruled by China for more than 1,000 years, was colonized by France for almost 100 years, and also was divided into pro-American and pro-Soviet Union camps for more than 20 years during the world's cold war.¹ It can be stated that Vietnam's political, social, cultural and other aspects contain deep foreign trails, the same as urban planning.

Urban planning in Vietnam consists of a technical and political process. Its evolutionary phases have been highly affected by foreign influences. First of all, it drew on ancient Chinese social and natural philosophies, including planning for maintaining national political and adapting to the universe and nature; Secondly, it accepted the science and technology of France from the 19th to the 20th century, including the Vauban fortress, port-city planning, municipal engineering and management, urban expansion and remediation planning; Thirdly, in the wave of socialism in the second half of the 20th century, Vietnam had learned from the Soviet Union about planning for industrial cities and industrial zones, planning for towns and villages network and residential units in centrally planned period; Finally, in the second half of the 20th century, in the territory south of the 17th latitude line, it imitated the US market economy concept and introduced theories such as the new city planning, the regional planning and organic growth theory. To summarize it, these thoughts and practices are not only valuable experiences and lessons for Vietnam but also serve as basis to answer questions about "local theory", "national identity" and "regional features" when facing globalization and considering the path of national modernization.

Therefore, the article reviews some foreign thoughts, their practices and their influences that appeared in the history of Vietnam. The research object is divided into two main parts: (1) foreign planners implement planning and construction on Vietnam's territory; (2) Vietnamese use foreign thoughts to explore and plan. With limited historical data and imperfect research foundations, these papers aim to reconstruct a clue about planning characters and planning events. Based on the source of thoughts, this article summarizes the perceived historical information and divides it into four parts: China, France, the Soviet Union and the United States, presenting in chapters while focusing on an important feature of urban planning in Vietnam, which is the superposition of multiple dimensions of urban and rural concepts, construction techniques and concept technology of different cultures in the same physical space dimension. In the conclusion, the article will analyze this feature, explains how it has been formed and what kind of influence and effect it has had on urban planning since 1986 Đổi Mới.



2 China

The ancient Chinese planning was not a pure plan or construction technique, its knowledge system spread over various aspects of the country's executive rule and management functions.² However, it cannot be said that it only belongs to the field of political management, and it also includes the ancient Chinese people's understanding of the universe and their understanding of the geographical environment in which they live.³ Of course, a short exposition cannot make it easy for us to understand this dispersive and extensive knowledge system, however, if we choose important content, it is mainly manifested in two aspects: one is planning for maintaining national politics; the other is planning for adapting to the universe and nature. Since Emperor Qin Shihuang unified China, the concept of these two aspects has profoundly affected the planning and construction practices in Vietnam with the ten-century rule.

2.1 Planning for maintaining national political

In the history of being ruled by China, Vietnam had constructed basically unchanged local political system - the system of prefectures. It is a system implemented throughout the country by QinShiHuang after the unification of the six nations and has continued throughout the feudal era. We can understand this simply: divide the country's territory into a number of "counties" with a radius of 2500km²(方圓百里;千里百縣), then combine more than 20 counties into a prefecture and establish a magistrate of prefecture, and the country's ruling system is built on all counties.⁴ We will further understand the operating mechanism of the prefecture: it will be a national territory covered by approximately 50,000 km²; The ruler builds a shire ruling city (local administrative center) at its most convenient point of transportation; The prefectures government will be about 100 kilometers away from the prefectures where it is located.⁵ In this way, when there is a riot, a thief or a disaster in any part of the prefectures, the intelligence will arrive in the hands of the ruler day and night, and the ruler can completely arrange military or administrative work to arrive in the local within 3 days. It should be emphasized that an operability of this system is very flexible, and a size and number of prefectures and counties are variable. The location arrangement of the prefecture city and the county city are also based on different geographical conditions to meet the resource supply, transportation, and military defense. However, the military system and the county system can be combined or separated. In short, as a structure of the feudal society, the prefecture-county is a plan for the preservation of national politics in terms of planning thought. In the national territory of Vietnam, the important figures for the construction and updating of the county system are the feudal rulers from the Qin, Han, and Tang dynasties, representative figures include ZhaoTuo, ShiDai and MaYuan.

ZhaoTuo of Baiyue is the first person to implement the prefectures system on the territory of Vietnam. ShiDai of the Western Han Dynasty systemized it, and MaYuan (14 BC - 49 AD) of the Eastern Han Dynasty was to further construct the system into a complete state. From 42 to 44, Ma Yuan investigated the local territory and population, adjusted administrative divisions, and built at least one prefecture city and most county cities. 《後漢書》 records the specific conditions of these tasks: "馬援奏言西於縣戶有三萬二千，遠界去庭千餘裡，請分為封溪、望海二縣，許之。援所過輒為郡縣治城郭，穿渠灌溉，以利其民" .It means that Ma Yuan has investigated 32,000 households in Xiyu County (Red River Delta Area),⁶ and the distance from the furthest boundary to the political center has exceeded the distance of more than a thousand miles (427.5 km), thus referring to the emperor that this place can be divided into two counties from the original one county (because of a large number of people, there is a demand to increase political institutions). It can be said that Ma Yuan actually formulated the vague prefecture system in Vietnam strictly in accordance with the Eastern Han standard model. Most importantly, he had done a systematic survey of the population and geography and had fully implemented the system of prefectures into a physical space.

2.2 Planning for adapting to the universe and nature

According to the above explanation, we will also find another part of planning method that parallels political planning- adaptation to nature, and its philosophy consists of three steps: First, a geographical environment survey; The second is to choose suitable habitat or political or military locations; The third is to plan living space and future development space according to laws of nature. In Vietnam, Ma Yuan in the Eastern Han Dynasty had basically completed its first step, and the remaining two steps were completed by the Tang Dynasty's military governor GaoPian (? -887) and the MingDynasty exchequer Huang Fu (1362-1440).

In 866, he was under Emperor Yizong of Tang's orders to study the geographical situation in Vietnam. He spent the last 20 years of his life and conducted a comprehensive survey of the Red River Delta region, and statistics of the 27 imperial land (帝王貴地 possible to build a political center) and 569 expensive places (血脈貴地 environment with suitable habitats) in the region are given. These surveys were recorded by later generations



in historical materials such as 《高駢安南地藁記》 (Figure 1), 《安南地理藁·高同謹撰》 (Figure 2). In the 17 years (1407-1424) of the Ming Dynasty's Huang Fu working in Vietnam, he continued his work and extended the scope of the investigation southward to the Sông Lam basin. As a minister of the Ministry of Works and the Ministry of War in feudal China, his work was recorded in detail in the Ming Dynasty historical materials such as 《安南地脉》 and 《奉使安南水程日記》. In short, Huang Ping and Huang Fu built many cities, towns and villages. In addition, he had left many references for Vietnam to build towns. Today's Hanoi is actually Gao Pian's site, and he also had formulated the initial spatial structure (political area, production area, Development Zone).

According to the 《大越史記全書》, after becoming an independent autocratic monarchy (10-19 century), the feudal rule of Vietnam took an initiative to accept and study China's planning ideology. Li Gongyun, the founding emperor of the Li Dynasty, explained these thoughts on the Transfer of the Capital.

“昔商家至盤庚五遷，周室迨成王三徙。豈三代之數君，徇於己私，妄自遷徙？.....況高王故都大羅城，宅天地區域之中，得龍蟠虎踞之勢，正南北東西之位，便江山向背之宜，其地廣而坦平，厥土高而爽塏，民居蔑昏墊之困，萬物極蕃阜之豐，遍覽越邦，斯為勝地，誠四方輻輳之要會，為萬世京師之上都” (Edict on the Transfer of the Capital).⁷

This section describes Li Gongyun's reflection on the relocation of capital by the Shang and Zhou dynasties and appreciates the ancient capital that was built. From this emperor's analysis of the situation, position, front and rear, mountains, terrain, vegetation and residential areas, it can better illustrate the ancient planning of Vietnam were deeply influenced by China.



Fig 1: 《高駢安南地藁記》. A geographical survey to find human settlements

Fig 2: 《安南地理藁·高同謹撰》. A geographical survey to find human settlements

3 France

3.1 Vauban fortress

During the Vietnam Tây Sơn civil war(1771-1802), GiaLong emperor who led the military forces of the South, in order to resist military forces of the North, entrusted the missionary Béhaine to the West to seek military assistance from Europe.⁸ Béhaine went to France in 1786 and returned to Vietnam in 1789. Due to the outbreak of the French Revolution, he failed, but he came back with military technology, including technology to build a military Vauban fortress.⁹ With the assistance of Béhaine, GiaLong emperor finished the plan of the capital of Gia Dinh in 1792. Main experts in a construction of Giadinh capital are as follows: First, Jean Baptiste Marie Dayot who was the French Navy's lieutenant, as Technical Consultant of tactics and defense; Second, Victor Olivier de Puymanel who was the director of planning and architecture, responsible for mapping and designing urban pattern; Third, Théodore Lebrun who was a French engineer, responsible for the construction and management of the project; Fouth, Trần VănHọc who was Béhaine's disciple, as the interpreter and was mainly responsible for



directing the workforce and setting up the urban roads and zoning. In addition, as the true master of the capital, the emperor put forward strict requirements on the design of feng shui and etiquette space organizations.¹⁰

In the later period of the Civil War, the Giadinh model was transplanted to various new occupation sites along with the victory of the Royal Army's advancement to the north, such as the Mỹ Tho(1792), Diên Khánh (1793), Vinh (1803) and Thanh Hóa (1804) etc (Figure 3 and 4). In 1805, the Nguyễn Dynasty unified country, the model of fortress was modeled by the state and gradually merged with the administrative divisions, eventually it evolved into a standardized city system that covered Vietnam's territory.



Fig 3: the Citadel of Diên Khánh

Fig 4: the Citadel of Vinh

3.2 Port-city planning

After the "Tianjin Treaty" (1858), in order to improve participation in the colonial movement that divides the Chinese market, on February 17, 1859, French occupied Saigon in order to meet the crossover needs of military and trade.¹¹ Taking Saigon as temporary capital, the French gradually expanded their military power and eventually annexed the territories of Vietnam, Cambodia and Laos (Historically known as French Indochina) in 1897. In the construction strategy of the Vietnam region, they set up these coastal cities as French colonial cities, including Saigon, Quy Nhon, Nha Trang, Da Nang, Hai Phong, Hanoi, etc. In this context, with the construction of a free trade port, Port-city planning technology was transplanted to Vietnam.

Taking Saigon as an example, on February 22, 1860, the governor Le Page initiated the construction of Saigon Port during the emergency period, proposing the construction of urgent projects as soon as possible, taking into account the future development of the city. He arranged the engineer's captain D'Ariès to make a plan which is "plan for new buildings" (Figure 5).¹² With the victory of the war and the thriving trade of Saigon port, Napoleon III and captains of the navy, Charner and Bonard, announced that they would permanently rule the territory of Cochinchine, delineate the "urban area" of Saigon and build it into "French's Singapore". They invited military engineer Paul Coffyn to plan and design for the city. On April 30, 1862, he proposed a plan called "Saigon 500,000 Civil Engineering Projects" (Figure 6).¹³

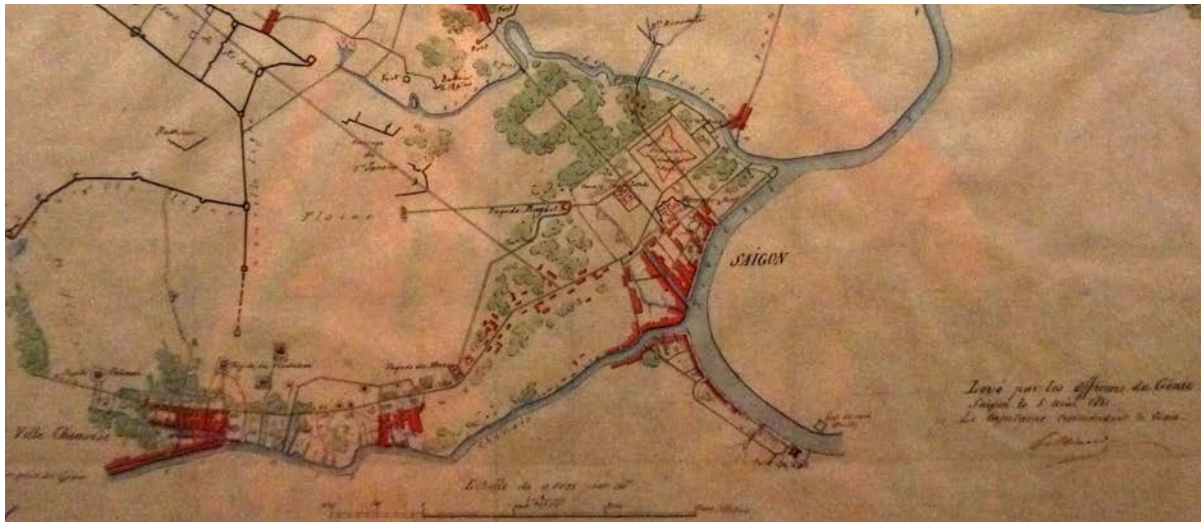


Fig 5: The construction of Saigon in 1861 under the war environment

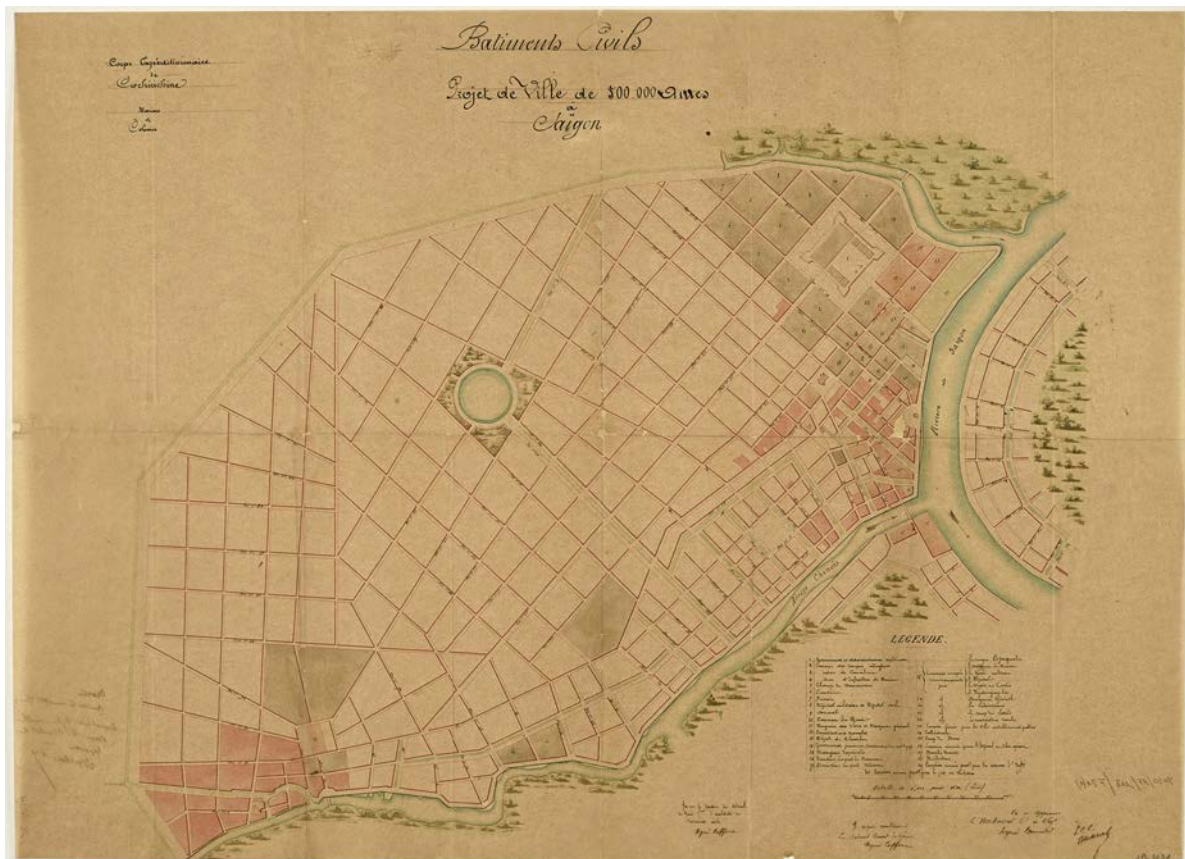


Fig 6: Paul Coffyn's "Saigon 500,000 Civil Engineering Projects"

3.3 Municipal engineering and management

The French colonial cities in Vietnam, in fact, serve Europeans (not only for the French).¹⁴ In the early days of establishing the city, their first task was to establish an official municipal system when facing multiracial citizen groups. This system will set urban operating rules and public policies for the realization of colonial economic goals.¹⁵ After 1870, most of the contents of urban planning were incorporated into the municipal system, forming the administrative techniques for the two objectives: the first one is to plan and build urban public land; the second one is set up regulations and supervision for the construction of private lands.



In Vietnam, Hanoi and Hai Phong, were colonial cities that were basically built through municipal planning. Before the official rule, the colonialists firstly established the "Commission Municipale Provisoire", and then clearly specified that the organization should take over the planning and construction of the city.¹⁶ For example, Hanoi's City Committee" started taking over urban planning and construction work in February 1888, and this agency has completed the following tasks: Firstly, formulate urban boundaries, urban suburbs and municipal development reserved areas; Secondly, count and divide urban lands into public lands and private lands(Figure 7); Thirdly, set administrative and civilian areas, and focus on the construction of administrative districts and European settlements(Figure 8).¹⁷ It can be said that the French municipal plan has a far-reaching impact on urban redevelopment in Vietnam, namely, clearly distinguishing cities and villages, standardizing public and private lands, modern transportation, sanitation, public security, fire prevention and so on, all of these contents have changed the Vietnam's understanding of cities and urban planning.

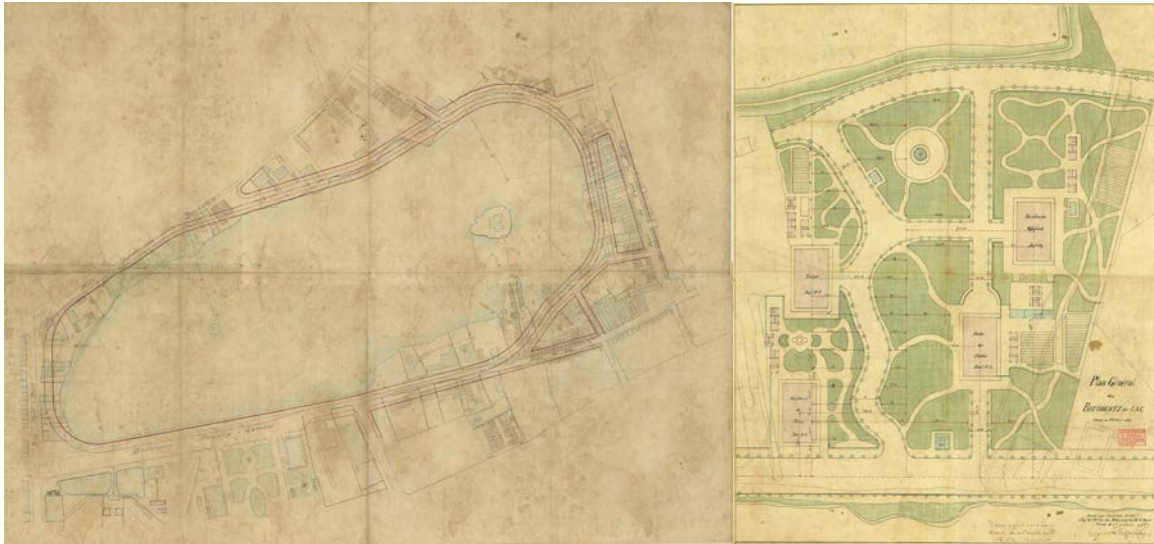


Fig 7: Road planning in Hoan Kiem Lake

Fig 8:Hanoi City Administrative Center Planning

3.4 Urban expansion and remediation planning

From 1920 to 1922, the Socialist Party Maurice Long came to Vietnam to serve as Governor. In order to response to French Cornudet Act,¹⁸ he immediately established Central Services of Urban Planning and Architecture in Hanoi and hired Ernest Hébrard, a well-known planner, to serve as director. Ernest Hébrard who was a member of SFU (société française des urbanistes) and also an architect of the Rome Prize winners, drew urban expansions for six cities with a population of 10,000 in Hanoi (Figure 9), Haiphong, Nam Định, Hue, Saigon and Phnom Penh (Cambodia) from 1920-1930 and drew optional administrative capital plan for Dalat (Figure 10) These planning programs of Hébrard emphasized sanitation, urban beautification and public space, using modern planning techniques such as land division, urban functional zoning, heritage protection and green belts. In addition, he was a pioneer in proposing locality in Vietnam, setting up "new (racial) mixed neighborhoods" and "new types of local neighborhoods" for Vietnamese residents.¹⁹ After Ernest Hébrard left Vietnam in 1930, these urban planning programs were still disputable among politicians. Although only a small part was implemented, its planning theory was gradually recognized in the latter period. French planners such as Louis Pineau, Mondet, Lagisquet, who took over Hébrard's work, gradually completed his thoughts and paid more attention to the protection of local characteristics and natural environment.



Fig 9: Hébrard's Saigon Plan (1924).



Fig 10: Hébrard's DALAT future plan (1924).

4 The Soviet Union

After the end of the first French Indochina war in 1954, Ho Chi Minh had led North Vietnam following the path of communism. On one hand, North Vietnam seek assistance from the Soviet Union and China, on the other hand, adopting a socialist approach towards development models based on the Marxist-Leninist ideology. After the agreement name “The Economic and Technical Cooperation Agreement” of the Soviet Union and North Vietnam signed in 1955, many experts from the Soviet Union and other communist countries had arrived to support Vietnam.²⁰ In the field of planning, at least ten countries had built expert groups to work in Vietnam. The main focuses in their works included a preparation for emergency war, development planning, and post-war reconstruction planning. The main objects of planning practice can be divided into three major types: planning for industrial cities and industrial zones, planning for towns and villages network, planning for Residential units.

4.1 Planning for Industrial cities and industrial zones

In 1960, planning experts from Poland, Russia, and China had arrived in North Vietnam. Piotr Zaremba(1910-1993),²¹ a professor from Poland, was the first expert who put forward a proposal of “Capital regional plan” for Hanoi. He suggested building three ring roads and one railway surrounding West Lake to transform it into a new geographical center and arranged industrial and manufacturing sites along sides these transportation projects. His proposal was complemented and completed in 1962 by a Russian architect name I.A.Antyonov. In 1973, Sergei Ivanovich Sokolov represented for the Leningrad Scientific Research Centre for Town Planning and Construction (LRCTPC) to make the planning for the region of Hanoi.²² Once again, the ideas of Piotr Zaremba was adopted to complete Hanoi-Leningrad plan which had profound impacts on the development of modern planning in Vietnam (Figure 11).



Fig 11: Hanoi-Leningrad plan

Besides of Hanoi, Poland experts also made plans for Haiphong, an industrial port city. Meanwhile, Chinese experts were working on the planning of two industrial cities, ThaiNguyen (iron and steel industry) and VietTri



(chemical industry). From 1965 to 1975, East Germany sent many experts to help planning Vinh, a manufacturing city. Romania experts assisted in planning ThaiBinh (focusing on agricultural production), North Korea assisted to plan the BacGiang industrial zone, Cuba assisted to plan the Donghoi Industrial zone, Hungary assisted in the planning of HonGai and BaiChay so on.²³ In general, these planning practices share a common feature: stressing out industrial production in order to eliminate the characteristics of the colonial economy which paid more attention to the trade. At that time the Communist party perceived trading cities as non-productive cities.

4.2 Planning for towns and villages network

Facing frequent air strikes of US army, the government of North Vietnam put forward the decentralized development model which constructed the networks of production in rural areas. Planning and constructing a network composed of multiple small towns and villages. With the help of experts from China and the Soviet Union, Two counties around Hanoi (ĐàoViên and KhoáiChâu) were designed according to this model and gradually extended to HảiHung, AnSở, QuỳnhLư, ĐôngHung, NamNinh and other places.²⁴ In this process, the planners from Bulgaria put forward new concept for whole provincial region, a dynamic planning program accord to the development stage, to guide the traditional villages to the large-scale production model and eventually become a number of modern villages. This model had laid the foundation of the modern rural planning in Vietnam.

4.3 Residential units in centrally planned period

The destruction of cities in war and the industrial development caused housing shortage, which was also a major issue for the urban construction during 1955 to 1965. This housing problem was clearly noticeable in many cities such as Hanoi, Haiphong, Vinh, Namdinh where industrial sites were concentrated. In an effort to solve this problem, the expert group from East German had proposed a planning concept for the urban center of Vinh city. The core idea is to choose a region with the most convenient traffic and transform it into a residential area which can accommodate a large-scale population (Figure 12). In addition, the experts from LRCTPC also proposed the model of neighborhood unit, as an alternative solution built in suburbs of large cities (Figure 13).²⁵



Fig 12: Residential estates QuangTrung in Vinh (2001)

Fig 13: Residential estates KimLien in Hanoi (2000)

5 The United States

In 1955, on the other side of the 17-degree line, the U.S. government with many goals and ideas began to assist South Vietnam. Besides the financial, military and food aid, Washington had assisted South Vietnam through the United States Agency for International Development (USAID) also in drawing up plans and implementing several projects. But, first of all, we must explain some of the civil wars that occurred in South Vietnam at that time.

Unlike for North Vietnam, the war situation faced by South Vietnam was not air defense, but guerrilla warfare. As a result, it caused many problems for a development of the city. In the 15 years from 1960 to 1975, most of the people in South Vietnam migrated to big cities, where they thought might find a sense of security. Under this circumstance, cities such as Saigon, NhaTrang, DaLat, VungTau, BienHoa, and other cities have ushered in an extra population that is several times greater than the original. According to statistics, from 1950 to 1975 in Saigon,



the urban population increased by 2 times.²⁶ Therefore, the handling of issues such as outsiders, refugees, crowded space and rapid and disorderly expansion has become the primary task of South Vietnam's urban planning at this time. The United States technical experts who had faced these problems before proposed two experiences for South Vietnam: one is the planning of the new city; the other is the regional planning and organic growth theory.

5.1 planning of the new city

In 1965, commissioned by USAID, Greece's Doxiadis Associates (DA)²⁷ formulated the first edition of the master plan for Saigon.²⁸ They did a thorough research on resources, climate, landforms, soil quality, internal and external financial capabilities, and even local customs, however, the plans they made were not implemented due to the wrong planning ideology. It had used the old city of Saigon as a starting point to determine the four new cities in the neighboring cities that can accommodate the migrant population, actually, it is a planning concept that makes the city develop linearly (Figure 14). This plan rigidly concentrates the traffic to the axis that runs through the center of the old city and a new city, making the connection between the old and the new very weak. DA's idea was simple: first, to plan a relatively isolated area for the inhabitants; secondly, to design a mega block on the area; finally, to develop a high-density simple housing in a huge street profile. DA believed that this approach is a good way to deal with the largest number of migrants for the least amount of public finances. However, such planning has wasted too much land resources, making the land redevelopment phase facing many obstacles, and it would also require too many government interventions.²⁹

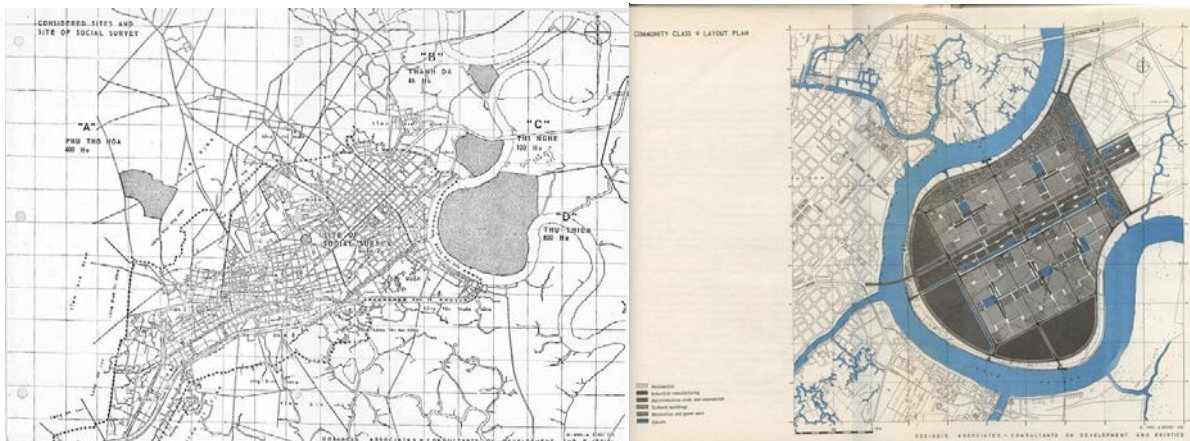


Fig 14: master plan for Saigon by Doxiadis Associates (1965). Comments: DA point to determine the four new cities in the neighboring cities: "A" PhuThoHoa 400Ha, "B" ThanhDa 46Ha, "C" ThiNghe 100Ha, "D" ThuThiem 800Ha.

Then, in 1972, USAID commissioned Wurster, Bernadi and Emmons (WBE) in San Francisco to re-plan the most important new city for Thu Thiem Peninsula.³⁰ From the viewpoint of land value potential, finances and implementation policies, WBE hoped to promote the development of an entire west side of the Saigon River area through the development of the region, and then plan Saigon to become a dual-center structure city (Figure 15). The idea of WBE was also not implementable. The plan would be more suitable for an era of development and requires broader internal and external financial capabilities. As the result, in the time of the war, most of the new arrivals were "war refugees, and WBE's plans became unrealistic.

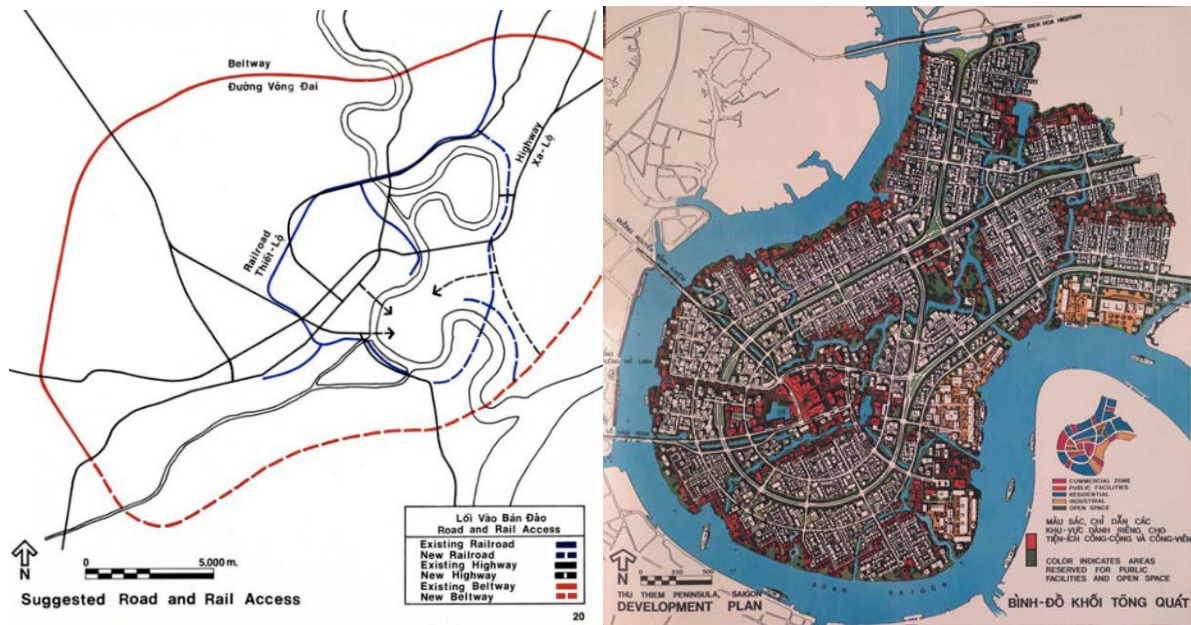


Fig 15: WBE's Saigon Plan.

5.2 Regional planning and organic growth theory

In the absence of urban planning in 1965 and 1972, USAID commissioned Frank Pavick and James Bogle, two U.S. urban research experts in 1974, to find a solution for planning problems. The two experts collaborated with the Urban Design Bureau of South Vietnam (affiliated with the Ministry of Transport and Public Works) to place urban development issues in a wider space, the Saigon Metropolitan Area, through the perspective of regional planning. They found more space for the Migrant population and also assumed several leapfrog spatial development methods. In addition, through the prediction of three factors of land development, further analysis of the actual situation of local financial capacity, and finally put forward an organic growth plan for the urban space in Saigon District(Figure 16).

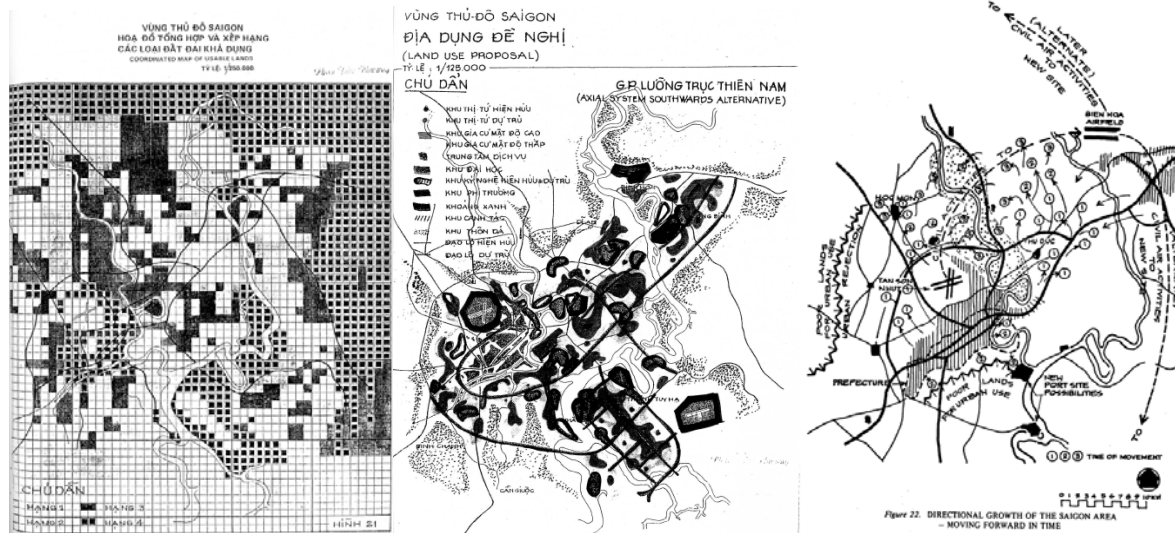


Fig 16: Frank Pavick and James bogle analysis and proposal.

6 Conclusions

From the above analysis, we can see that urban planning in Vietnam from ancient times to the present is certainly not as simple as following other countries when they ruled or receiving assistance and finding themselves when they are independent. This process can be regarded as superimposed on the same dimension by the



spatialization of multi-layered urban and rural concepts, construction technologies and concept technologies of different cultural colors. On the one hand, this superimposed effect is embodied in the physical space, presenting a city or town that is spliced by different cultural plates; On the other hand, the superposition effect has also created many fuzzy areas in the planning ideology space, especially manifested in the value of the “foreign planning” of Vietnamese rulers, planners and even the entire society. In other words, when a certain foreign planning in history is placed in front of Vietnamese policymakers, it will generally show two sides: one is modernity, superiority or humanity; the other is ruled, colonized, imperialist or unforgettable hunger. This led to Vietnam’s urban planning (including disciplines and administration) to be a kind of cross-cultural interaction since 1986, but not the incubator of a flourishing hybridity, but ambiguous, which is sometimes praised or despised when it comes to the foreign planning of their own experience. We can find the basis for the important urban planning documents of Vietnam in the past 30 years (the master plans of Hanoi, Ho Chi Minh and Hue) and the urban planning academic literature, especially in the analysis of localization, national identity, foreign, China, France, Soviet Union, United States and other related keywords.

It should be noted that the urban planning in Vietnam from ancient times to the present has rarely crowded out foreign plans, but more inclined to rely on foreign experience when facing new challenges or when there is a necessity to change its own theoretical system. Because of this, there will be two questions: the first one is “How many of the foreign plans that have been experienced have been absorbed into their own knowledge? The second one is “when facing a complex historical background and historical space, how can we see ourselves and which foreign culture system will we use for reference?” Of course, these two issues only proceed from a historical perspective, but this paper believes that it is the source of a series of theoretical and practical problems, such as “Urban Heritage”, “National Identity”, “Cultural Identity”, “Local Characteristics”, “Root Culture”, “Branding City”, “Planning Education” and “Planning Effectiveness”.

Notes on contributor(s)

Dinh The Anh is a Ph.D. candidate of the School of Architecture in Southeast University, Nanjing, China. His major is Urban Planning and research direction is Urban Planning History & Theory and Heritage Protection.

Li Baihao is a professor of the School of Architecture in Southeast University, Nanjing, China. And his is also the Vice-chairman and Secretary-general of Academic Committee of Urban Planning History & Theory and Urban Planning Society of China. His research interests are mainly in urban planning history and theory.

Ren Xiaogen is a Ph.D. candidate of the School of Architecture in Southeast University, Nanjing, China. Her major is Urban Planning and research direction is Urban Planning History & Theory and Heritage Protection.

Notes

1. The Vietnam War(1954-1975), it was the second of the Indochina Wars and was officially fought between North Vietnam and the government of South Vietnam. The North Vietnamese army was supported by the Soviet Union, China and other communist allies and the South Vietnamese army was supported by the United States, South Korea, Australia, Thailand and other anti-communist allies.
2. Sun Shiwen. “The Discipline”, 107.
3. Tan Ying. “Harmony Between”, 5.
4. See Yang Hongnian, Ou Yangxin, *History of China's political system*, 311. It regards the view of “千里百县，县有四郡” in Zhou Li.
5. Ming Ming. *Chinese knowledge*, 19.
6. Fudan University Institute of History and Geography, *Chinese historical*, 282.
7. See Edict on the Transfer of the Capital in https://en.wikipedia.org/wiki/Edict_on_the_Transfer_of_the_Capital.
8. Mantienne, Frédéric, and T. A. Nguyễn, *Les relations*, 147.
9. The Vauban fortress refer to citadels that were designed and built according to the military theory proposed by Sébastien Le Prestre de Vauban (1633-1707). Based on the prototype of the early Italian bastion, it replaced the “high tower” monolithic city walls with a multi-layered fortification by dwarfing and deepening the city walls so as to highly integrate ordnance and geometry, at the same time it also exhibits good aesthetics.
10. Ký P J B T V, *Souvenir historiques*, 7.



11. Tsuboi Y, *L'Empire vietnamien*, 63.
12. Tainturier F, "Architecture and Urban Planning", 73.
13. Tôn Nữ Quỳnh Trân, Trương Hoàng Trương, "Viết thêm", 16.
14. Vann, Michael G. "Building Colonial Whiteness", 279.
15. See Fonds de Maire de Hanoi N°1 document in National Storage Center 1 in Hanoi.
16. See Fonds de la Résidence Supérieure au Tonkin N° 71344 document in National Storage Center 1 in Hanoi.
17. Đào Thị Diễm. *Hà Nội thời Pháp*, 205-219.
18. See Dubost, Françoise, "Les nouveaux", 154.
19. See Fonds de Maire de Hanoi N° 4168 document in National Storage Center 1 in Hanoi.
20. Logan, "Russians on the", 443.
21. Piotr Zaremba (born June 10, 1910 in Heidelberg, died October 8, 1993 in Szczecin) - Polish urban planner, co-founder of the Polish school of spatial planning, the first Polish president of Szczecin (1945-1950), prof.
22. See S. I. Sokolov, "Gorod na Karasnoi Reke", 26. The team included M.G. Vasil'eva, N. V. Romnyuk, A. Shelekhov, L. I. Symikov and S. N. Samonia. A. Kucher.
23. Lưu Đức Cường, "Thành tựu", 22.
24. Lưu Đức Cường, "Thành tựu", 23.
25. Logan, *Hanoi: Biography of a city*, 204.
26. Desbarats, Jacqueline. "Population redistribution", 45.
27. Doxiadis Associates was one of the most influential urban planning consultancy firms in the world in the 1960s. One of the most important constructs of the project is the Islamabad capital of Pakistan.
28. Erik Harms. *Luxury and Rubble*, 141.
29. An evaluation of the 1965 DA plan based on the 1972 plan text.
30. Erik Harms. *Luxury and Rubble*, 149.

Reference

- Đào Thị Diễm. *Hà Nội thời Pháp thuộc qua tài liệu và tư liệu lưu trữ 1873-1945*. Hanoi: nxb Hà Nội, 2011.
- Desbarats, Jacqueline. "Population redistribution in the Socialist Republic of Vietnam." *Population and Development Review* (1987): 43-76.
- Dubost, Françoise. "Les nouveaux professionnels de l'aménagement et de l'urbanisme." *Sociologie Du Travail* 27.2(1985):154-164.
- Erik Harms. *Luxury and Rubble Civility and Dispossession in the New Saigon*, University of California Press, 2016
- Fudan University Institute of History and Geography. *Chinese historical place name dictionary*, Nanchang: Jiangxi Education Press, 1986.
- Ký P J B T V. *Souvenir historiques sur Saïgon et ses environs*. Saigon: Imprimerie Coloniale Saigon, 1885.
- Logan, William S. "Russians on the Red River: The Soviet Impact on Hanoi's Townscape, 1955-90." *Europe-Asia Studies* 47.3(1995):443-468.
- Logan, William S. *Hanoi: Biography of a city*. Sydney: UNSW Press, 2000.
- Lưu Đức Cường, "Thành tựu của công tác quy hoạch đô thị nông thôn trong sự phát triển đô thị 60 năm qua" *tạp chí Quy hoạch Đô thị* 32(2018), 21-28.
- Mantienne, Frédéric, and T. A. Nguyễn. *Les relations politiques et commerciales entre la France et la péninsule indochinoise (XVIIe siècle)*. Paris: Indes savantes, 2001.
- Mantienne, Frédéric. "The transfer of western military technology to Vietnam in the late eighteenth and early nineteenth centuries: the case of the Nguyễn." *Journal of Southeast Asian Studies* 34.3 (2003): 519-534.
- S. I. Sokolov. "Gorod na Karasnoi Reke: v Leningrade razrabotan proekt general'nogo plana razvitiya stolitsy V'etnama", *Leningradskaya panorama*, 8(1983), 26-29.
- Sun Shiwen. "The Discipline of Urban and Rural Planning in China: History and Prospect." *China City Planning Review* 27.1 (2018): 106-112.



Tainturier F. “Architecture and Urban Planning During the French Administration in Saigon” In *Saigon three centuries of urban development (fourth edition)*, edited by Lê Quang Ninh and Stéphane Dovert, 70-97.

Tan, Ying. “Harmony Between Human Beings and Nature Brings about Beautiful Environment——The Research on the Eco-City Theory in Guanzi.” *Planners* 21.10(2005): 5-7.

Tôn Nữ Quỳnh Trân, Trương Hoàng Trung. “Viết thêm về quy hoạch Coffyn 1862”. *Tạp Chí Khoa Học Xã Hội* 2(2011):16-23.

Tsuboui Y. *L'empire Vietnamien face a la France et a la Chine, 1847-1885*. Paris: L'Harmattan, 1987.

Vann, Michael G. “Building Colonial Whiteness on the Red River: Race, Power, and Urbanism in Paul Doumer's Hanoi, 1897-1902.” *Historical Reflections* 33.2(2007):277-304.

Yang Hongnian, Ou Yangxin. *History of China's political system*, Wuhan: Wuhan University Press, 2012.

Ming Ming. *Chinese knowledge is fully known National Reading Upgrade*, Beijing: China Overseas Chinese Press, 2015.

Image sources

Figure 1: Institute of Hán-Nôm Studies in Hanoi.

Figure 2: Institute of Hán-Nôm Studies in Hanoi.

Figure 3: Google Earth.

Figure 4: Google Earth.

Figure 5: Bibliothèque nationale de France.

Figure 6: Bibliothèque nationale de France.

Figure 7: National Storage Center 1 in Hanoi.

Figure 8: National Storage Center 1 in Hanoi.

Figure 9: National Storage Center 2 in Hochiminh City.

Figure 10: National Storage Center 2 in Hochiminh City.

Figure 11: manuscript of architect Huỳnh Tấn Phát.

Figure 12 and figure 13: Google Earth.

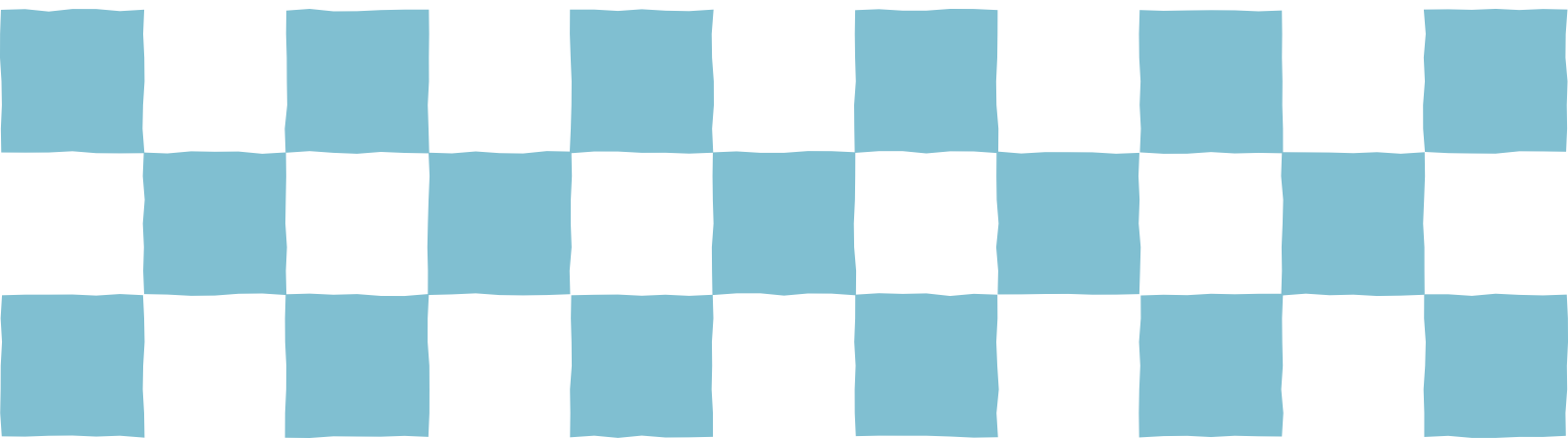
Figure 14, Figure 15 and Figure 16: Architecture Magazine of Vietnam Association of Architects.



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

14 **Taking possession of the
history: reconstructions,
allusions and simulacra for
urban revival / Round Table**



Mon. July 16, 2018

Session 2 (2:00PM-3:45PM)

Room 9, Yokohama Port Opening Hall

Moderators:

Aleksey Krasheninnikov, Professor, Moscow Architectural Institute
Andreas Butter, Ph.D., IRS Erkner, Germany

History of urban planning has witnessed an impressive variety of reconstructions of buildings from Ancient Rome, Gothic, Baroque or Chinese styles, showing us striking comparative perspectives, cross-cultural allusions and borrowings. Every reconstruction fits into a certain political, economic and technological framework and rises questions of authenticity by the professional community and public.

Global examples of the late XX and early XXI century are the most dominating and arguable. The Frankfurt am Main center, developed in the 1950s-70s is being replaced widely by constructions claimed to be authentic of the medieval city. The Stadtschloss in Berlin where they applied a 3-D-technologie is another example on the site of the demolished 1970s Palace of the Republic. In Moscow, they have reconstructed several churches ruined in the anti-religious Soviet campaign, replacing socialist objects, changing urban plans. An upcoming past is replacing a vanished future of Modernism.

The current wave of reconstructions of architectural losses, due to different reasons or simulacra borrowed from other cultures or locations have become new epicenters of urban transformations. Sometimes, we see correct archeological reconstructions, in others – just an idea, or an image of a certain cultural time period. Urban historical allusions, have become very popular for commercial, social and cultural purposes, encouraging tourists to visit, identities to be built, or the hospitality business to flourish. Champs Elysees simulacrum in China or Disneyland parks worldwide, Las Vegas themes in the US ensure worldwide scalability of urban patterns. Reconstructions interpret history in many ways and can be more convincing than the reality at times. At times, reconstructions affect preservation practices and devalue existing landmarks.

Key words: Urban planning, reconstructions, urban simulacrum, architectural losses, urban historical allusions, cultural borrowings.

We hope to receive contributions, which would help us to understand urban trends, purposes of reconstructions and their roles in the current urban planning, seeking for the answers to the following questions:

How aesthetic, psychological and political motives interact with each other in respect to the national and local histories and who are the initiators of reconstructions?

When are reconstructions considered as a tool for the healing of urban traumas or, vice versa, causing public disagreement?

Under which circumstances could reconstructions be seen as intentional signifiers of social values of a past period and for what reason this period is chosen?

What are the economic reasons for the reconstructions or allusions: attracting tourists, customers or land valuation? How have city-images changed?

What do the newly created urban highlights effect the overall layout of human habitats?"



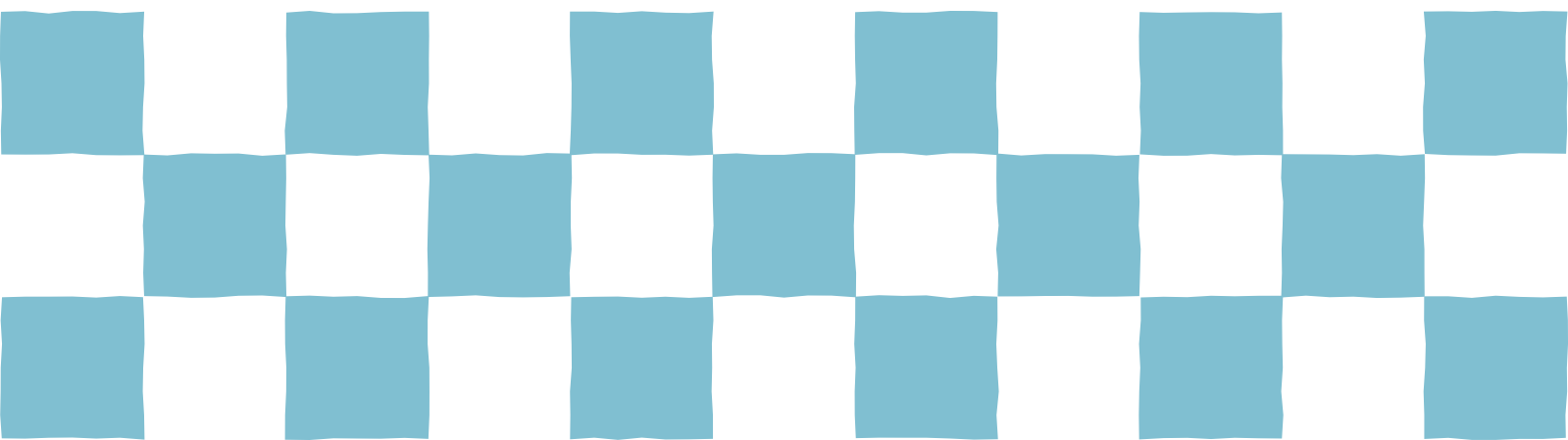
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

15 Westernization in East Asia



Guangzhou as Livable City: Its Origin, Inheritance, and Development ——from the Thirteen-hong to Its Ecological Status Quo

Yanjuan Han (School of Arch. and Urban Planning,Guangzhou University;School of Civil Eng. Wuhan University of Technology), Yue Pang (School of Arch. and Urban Planning,Guangzhou University)

Abstract: This article intends to explore the ideas and concepts that dominate the landmark versions of planning in a historical survey on the development of urban planning for the construction of Guangzhou. From the Late 17th C. to the Mid-19th C. Xiguan in Guangzhou witnessed the booming of the Thirteen-hong characterized by gardens and buildings in Western architectural styles. These characteristics constituted the architectural features and urban spatial patterns on both sides of the Pearl River, and caused the moving westward of the ancient city center to the Thirteen-hong Business District. After The Second Opium War Western merchants began their planning and construction of Shameen with Western planning techniques, which, together with the model of the Thirteen-hong, led to the urban modernization of Guangzhou urban planning. During the years from 1911 to 1948, the urban planning and construction in Guangzhou underwent a sequence of processes from simplicity to complexity, and from part to whole. There was also a process from the simple imitation of Western ideas and concepts of urban planning in Dashatou Island to the renovation of Guangzhou urban planning marked with road and park construction. This process includes the dismantle of the city walls for road construction in 1912, the prelude of modern urban planning of Guangzhou in 1914, the planning for network and city-round road and park construction in 1918, the idea of "Traffic First" in 1921, the regional studies and planning in 1923, the concept of functional division in 1932, the idea of implementing urban function division in 1920s and 1930s, and the transference from the initial techniques and measures to land management in 1937. After that there was the adoption of the "zonal cluster layout" along the Pearl River in 1984, the idea of the Planning of Urban Agglomeration of the Pearl River Delta in 1995, and the continuation of the "four land usage modes" in 2003. The idea and concept of urban planning for Guangzhou, thus derived localized from the practice of Western urban planning in the Thirteen-hong and Shameen, later underwent the municipal planning of Dashatou, the idyllic residential districts. The innovated regional green space in 2006, followed by the livable urban and rural planning in 2016, and up to the lately ecological city in 2018, all bear the marks of the early ideas and concepts realized in the Thirteen-hong, Shameen, and Dashatou. Therefore, it can be further concluded that the urban planning of Guangzhou, developed from the initial function of landscape beautification to the regulation of regional green environment of the Pearl River Delta, underwent finally a full process of imitation, learning, transformation, and innovation, resulting in an idea of green, open, and shared urban construction.

Developing New Kowloon into a Modern Suburb: Emergence of Modern Town Planning in Hong Kong (1898-1941)

Alex Ka Lok Cheung (The Chinese University of Hong Kong)

Soon after acquisition of the New Territories in 1898, the portion of it adjacent to the old territory of Hong Kong was delineated and named as "New Kowloon". New Kowloon was then the most important ground for urban expansion and practice of town planning within the colony. Given this historical background, this paper aims to trace and explain how and why New Kowloon was developed and town planning was utilised by the colonial government to develop this new district.

In this paper, it would be demonstrated that town planning was utilised to divert private investment to New Kowloon, so as to open up this district and eventually make Hong Kong a more prosperous colony. In many occasions, the colonial government depicted Kowloon as a modern suburb as compared with City of Victoria. In this developing district, sites for constructing factories and port facilities were provided. Besides, in order to accommodate the rapidly increasing population of the colony, various housing schemes were implemented. Eventually, in order to regulate the property market and living cost in the colony, the Town Planning Scheme was formulated in 1922 as a masterplan for the district. Therefore, New Kowloon was developed, in a planned manner governed by the colonial government, into the most important suburb of the city at the time.

At such, the style of governance of the Hong Kong colonial government is demonstrated. There is a general impression that, under the ideology of laissez-faire, town planning was not available in Hong Kong before the WWII, or at least limited to the minimum degree. However, this paper suggests that the colonial government actively drew up development plans in a top-down manner, so as to boost economic growth and transform the colony into a prosperous modern city in British Far East. In this way, in the context of pre-war Hong Kong, town planning was not a profession practised by professionals, but a pragmatic tool made use of by the colonial government.

The case of Nanjing. The growth and westernization of the city from the First Opium War to the Nanjing Decade

Domenica Bona (Università degli Studi Roma Tre)

With a focus on architecture and planning and direct linkages with politics and entrepreneurship, this paper investigates the spatial evolution of Nanjing in the period from the First Opium War (1842) and the Thirties, the so called Nanjing Decade. From this perspective, it suggests an alternative interpretation of the case study enlightening the participation of both foreign and local actors in the refoundative process. During that time, the foreign influence was predominant in Nanjing and led the modernization of the city, starting from the port system and its infrastructural layout as an outpost commercial hub on the Yangtze River. Indeed, after the fall of the Chinese Empire (1911), the contribution mainly of the Americans allowed the republican government of KMT to move the capital from Beijing to Nanjing and draft a modern plan for a new westernized Chinese capital. Artificers of this new stage of development were American investors, architects, and engineers flanked by Chinese colleagues educated in the West, promoters of modern ideas, advanced technologies and modernist styles. Thanks to the intertwined network of local and foreign designers, Western ideas in the field of architecture and planning could find in Nanjing a unique testing ground; moreover, the fortunate occasion of founding a new capital acted as a common aim for politicians, entrepreneurs, and designers who considered the spatial change of Nanjing as part of a wider change to realize shared ideas and wills.

Stressing the focus on the new forms and the persistent historical features defining the development of Nanjing, this paper discusses the importance of Western planning ideas into the early-modern history of the Nanjing as a relevant example of Chinese Treaty Ports legacy. To do so, this research assumes an "interpretative-maps approach". By analysing a diachronic series of maps from the Seventh Century to the 1970s, drawn by Chinese and foreign geographers, together with the masterplan proposals for the competition for the Capital Plan in 1929 and a wide range of architectural designs of the early-mid Twentieth Century, some interpretative maps show the evolution of urban patterns, the grafting of new elements and the relevant structural transformations that only partially maintain the features of the classical imperial layout. In parallel, a critical explanation of the spatial transformations is driven by comparing maps with historical accounts, critical essays on planning and the wide literature of Treaty Ports.

This work of interpretation helps in gaining a fresh approach to the Treaty Ports of China and, specifically, gives a new perspective to the colonial history of Nanjing. In fact, the Western contribution to the urban landscape goes far beyond the common experience in other cities where foreign enclaves toil to relate to the pre-existing Chinese settlements and hardly participate in a general harmonized development.

Urban governance, planning culture and colonial history in East Asia Cities (EAC)

Yu-Tzu Lin (Delft University of Technology)

Many EAC's planning institution has been shaped by their colonial past and several of their present urban challenges have colonial roots. For example, Hong Kong and Singapore follow British-style urban planning system, major urban form in Taiwan is based on Japanese planning history and Korea became a protectorate of Japan. The framework of planning institutions in EAC is mainly provided by state governments e.g. China, Korea, and Vietnam. For decreasing carbon emissions, participatory practices in urban governance and planning often play critical roles in the implementation of effective urban mitigation. The urban form of many EAC has been compact, mixed-use, and high density, but the carbon emissions in some cases is still comparatively higher than other cities with urban sprawl and low density. Most of the East Asia cities had experienced a period of rapid urban and economic growth, and some are still in rapidly urbanization. They have similar cultural background, colonial heritage, and are facing common governance and institutional limitation. Those factors increase GHG emissions not only through social norms, but also by the way of affecting urban land use.

Their limited capacities of urban planning and management to respond to mitigation needs within local climate governance is the entry point to expand solution space for urban mitigation. Planning intervention such as land use and design policies has become a critical tack to change human behaviors since the built environment affects physical activity as the institutional opportunity to address GHG emissions. Well-planned cities with good climate governance reflect efficient coordination by the way of urban planning to integrate public and private sectors at multiple geographic scales. However the planning cultures significantly across countries. Although since the 1990s, a number of countries have adopted decentralization policies that has the advantage of empowering local governments, the formal strategic spatial planning for urban development is not well provided for in local government administration. The EAC's planning system mostly belonging to top-down approach can be categorized according to the degree of autonomy and authority. These administrations often lack the power and organization to fully enforce building codes, environmental controls, and plans for built environment. Based on a literature review and documentary analyses, this paper begins by providing a brief introduction of the interrelationship between the colonial history and the planning culture in EAC; secondly, analyzes EAC's public participation in plan making with the local governments and the degree of empowerment for the stakeholders by using the democracy scores measured by Freedom House in 2016 to indicate the extent to which the urban planning process is involving the stakeholders.; thirdly elaborate the similarities of urban challenges intertwined with planning culture; and finally presents transferrable solution for common lessons facing by EAC as conclusions and suggestions.

Guangzhou as Livable City: Its Origin, Inheritance, and Development —from the Thirteen-hong to Its Ecological Status Quo

Yanjuan Han*^{1,2}, Yue Pang**, Xing Jiang***

*¹PhD, School of Arch. and Urban Planning, Guangzhou University, saup_hanyanjuan@gzhu.edu.cn

*² PhD, School of Civil Eng., Wuhan University of Technology, saup_hanyanjuan@gzhu.edu.cn

** PhD, School of Arch. and Urban Planning, Guangzhou University, Pangyue@gzhu.edu.cn

*** PhD, School of Arch. and Urban Planning, Guangzhou University, judyix@126.com

Abstract: This article intends to explore the ideas and concepts that dominate the landmark versions of planning in a historical survey on the development of urban planning for the construction of Guangzhou. From the Late 17th C. to the Mid-19th C. Xiguan in Guangzhou witnessed the booming of the Thirteen-hong characterized by gardens and buildings in Western architectural styles. These characteristics constituted the architectural features and urban spatial patterns on both sides of the Pearl River, and caused the moving westward of the ancient city center to the Thirteen-hong Business District. After The Second Opium War Western merchants began their planning and construction of Shameen with Western planning techniques, which, together with the model of the Thirteen-hong, led to the urban modernization of Guangzhou urban planning. During the years from 1911 to 1948, the urban planning and construction in Guangzhou underwent a sequence of processes from simplicity to complexity, and from part to whole. There was also a process from the simple imitation of Western ideas and concepts of urban planning in Dashatou Island to the renovation of Guangzhou urban planning marked with road and park construction. This process includes the dismantle of the city walls for road construction in 1912, the prelude of modern urban planning of Guangzhou in 1914, the planning for network and city-round road and park construction in 1918, the idea of "Traffic First" in 1921, the regional studies and planning in 1923, the concept of functional division in 1932, the idea of implementing urban function division in 1920s and 1930s, and the transference from the initial techniques and measures to land management in 1937. After that there was the adoption of the "zonal cluster layout" along the Pearl River in 1984, the idea of the Planning of Urban Agglomeration of the Pearl River Delta in 1995, and the continuation of the "four land usage modes" in 2003. The idea and concept of urban planning for Guangzhou, thus derived localized from the practice of Western urban planning in the Thirteen-hong and Shameen, later underwent the municipal planning of Dashatou, the idyllic residential districts. The innovated regional green space in 2006, followed by the livable urban and rural planning in 2016, and up to the lately ecological city in 2018, all bear the marks of the early ideas and concepts realized in the Thirteen-hong, Shameen, and Dashatou. Therefore, it can be further concluded that the urban planning of Guangzhou, developed from the initial function of landscape beautification to the regulation of regional green environment of the Pearl River Delta, underwent finally a full process of imitation, learning, transformation, and innovation, resulting in an idea of green, open, and shared urban construction.

Keywords: Thirteen-hong, livable ecotype city, urban planning ideas, modern urban planning history, Guangzhou city

Introduction

Guangzhou ranked the 40th in a list of 361 world cities selected in 2016 by the Globalization and World Cities Study Group and Network (GaWC), concerning the leading ability demonstrated and the leading role played in global activities, and has become a first-tier city of the world since then.

Guangzhou has been one of the earliest modern Chinese cities where foreign trade was granted officially. During 1910's, after 1949, and 1980's, especially since the initial period of China's reform and opening up, Guangzhou has been shouldering the leading role of Chinese modernization, and has ever since become a stage for cross-cultural communication between the Western and the East.

This paper intends to analyze the inheritance and developmental ideas and techniques of city planning mentioned above in the construction of a livable ecotype city in the light of the development of the urban planning of Guangzhou.

1 The Square and Gardens in the Thirteen-hong

Guangzhou had been the only Chinese trade port for the West since 1757, with the business halls in the Thirteen-hong chartered for the service, where Western merchants were constantly seen coming and going.

In the beginning, according to Huashiyiyan, the Thirteen-hong covered only a small area as residence for the merchants coming from the United States, Britain, France, Denmark, Holland, Brazil, Portugal, Russia and some other countries.

Close to 1795, however, the area had already covered an area of 5.1 hectares, with the Thirteen-hong in the north, the Pearl River in the south, the West River in the east, and Lianxing Street in the west (now the area for Guangzhou Cultural Park).

Afterward, the Thirteen-hong underwent several recoveries from fire damages¹, and the architectural style was changed from the early Chinese architectural style to a combined Sino-European style, characterized with European colonnade.

By the end of the Qing Dynasty, the buildings in the Thirteen-hong appeared to be in a Western architectural style, mostly white and pale yellowish brown with gray tiles and red brick, arranging neatly along the Pearl River, thus forming a unique landscape along the river (Figure 1).

The trade flourishing, the Thirteen-hong Square, initially designed as a reserved buffer for the Pearl River tides, was gradually turned into the function of a temporary goods yard. Around 1842, Isaac M. Bull (1808-1884), an American merchant, designed a garden with 9 flower beds in the Square, about an area of 130 thousand square feet or 0.012 square kilometers, in front of the business buildings of the United States (Figure 2). A flagpole, surrounded with potted flowers, was set up in the central flower bed. About 2 years later, the British merchants began to build their garden connecting to the American one in front of the British buildings. In 1856, however, these buildings, together with the gardens, were all destroyed in The Second Opium War.



Fig.1 The Thirteen-hong in 1840s



Fig.2 American Garden in the Thirteen-hong
(about 1844-1845)

Now the profound impact of Thirteen-hong on the landscape and urban spatial patterns in Guangzhou

¹ Thirteen-hong: The analysis of urban development dynamic in Guangzhou at Qing Dynasty, Honglie Yang, Famous City in China, 2014 (5):54-61

can still be seen everywhere. And the Thirteen-hong area itself, still retaining the old street pattern and Sino-Western architectural style even today, is still one of the largest and most bustling commercial wholesale blocks in Guangzhou. Evidently, the gardens in Thirteen-hong have an important impact on Chinese gardening.

2 Shameen Concession – Miniature Models of Modern Western Planning

In 1859, Britain and French seized Shameen, and in two years developed the place into an island of about 0.8 square kilometers with 870 meters long and 290 meters wide.

In 1861, the British Government signed an Agreement on Shameen Concession with the Qing Dynasty. Soon the British and the French authorities began to uniform the planning and construction of the grid-shaped roads and the green environment in Shameen Concession.

There was a walking road along the embankment, with a football field and a tennis field. A British garden and a French garden were also planned (Figure 3). The concept of public landscape with gardens in the Thirteen-hong period was thus retained and developed.

The colonial urban planning mode applied in the Thirteen-hong was adopted in the construction of Shameen, and the experience and lessons learned from the construction of Thirteen-hong were applied as reference in the site selection, environment development, and garden construction in Shameen.

All of the urban planning strategies and techniques, the regular grid-type road system, the open fields and gardens, and all relevant constituents presented in Shameen construction, later became a template for the modernization of construction in Guangzhou, thus stimulating the booming urban modernization of the city.



Fig.3 Map of Shameen in 1910

3 Urban Planning Exploration in the Republic of China

In 1911, the then Republic of China, with the common aspiration of the Chinese people, started an urban revitalization, and soon the reform of modern urbanization began.

3.1 Municipal Planning of Dashatou Island

In 1912, the Guangdong Military Government implemented the modernization of public works in Guangzhou. They dismantled the city walls for road construction. By 1914, the Engineering Bureau of Dashatou was set up to plan and construct the Dashatou Island. The Dashatou Planning (figure 4) , designed by Guanying Jiang the engineer and Shengren Chen the assistant engineer, was quite a fairly complete and systematic planning developed by the Guangdong Military Government at the early stage of the Republic, even though it was still an imitation of the Western urban planning techniques.

The elevation of Dashatou was the same as that of Shameen, and the planning area was 814 mus, i.e. about 0.54 square kilometers, in which 340 mus were set aside for the embankment, roads, parks, meadows, and lanes, while about 470 mus were kept as the building area. The embankment surrounding the island was 13,050 feet long, enclosed was a regular road grid layout with 3 horizontal and 8 vertical streets. The spacious area of embankments, roads, parks, grasslands was very large, covering more than 40 percent of the island².

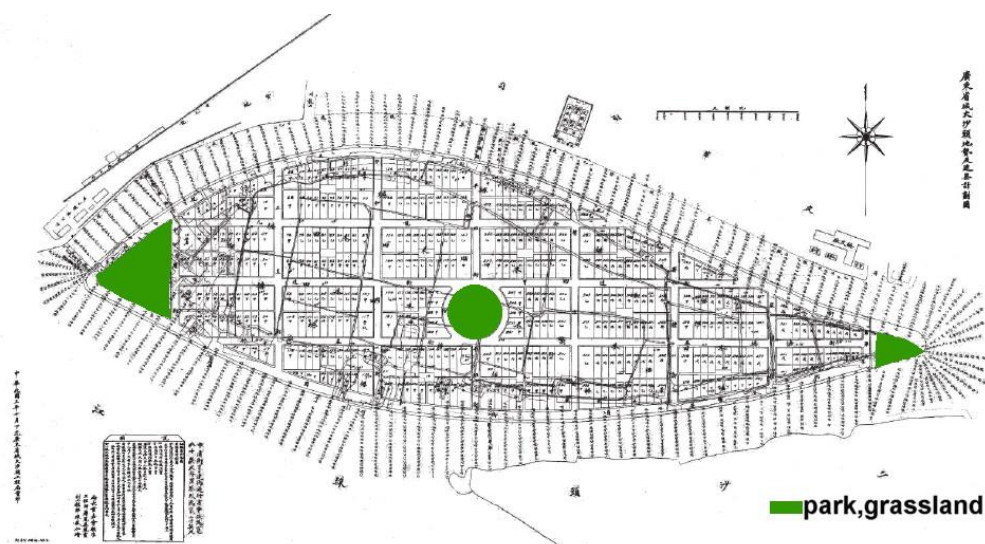


Fig.4 Plan Diagram of Dashatou

Evidently, the impact of design concept and planning techniques applied in the construction of Shameen is prominent in the planning of Dashatou with its flexible 4 times road width, regular road network, and the attention paid to the recreation spaces, public lawns and environmental greening. Unfortunately, for various reasons, the planning of Dashatou had not been implemented. But the planning ideas lived on, and would have a profound influence on the urban modernization of Guangzhou.

3.2 Municipal Planning of Guangzhou City

In 1918, the then Guangzhou Municipal Bureau issued the planning for road and park construction, focusing on the construction of the city-round road and network road. The location of the first park in Guangzhou was settled at the old government department (figure 5).

In 1921, Guangzhou was chartered, and the Municipal Department was founded. Implemented was the planning of urban road improvement and park construction, realizing the idea of “Traffic First” proposed by Sun Ke the mayor. Then, planned and constructed successively were a number of roads including Yuexiu North Road, Mapenggang Road, Zhusigang Road, Weixin Road, Yuexiu South Road, Wenming Road,

² Guangdong Dashatou Engineering Bureau revelation, 1914, Sun Yat-sen Library of Guangdong Province

Danan Road, Taiping Road, Dade Road, Panfu Road (Chang Road), Yuexiu Road, Gongyuan Road and Yong Han North Road (Figure 6). Five parks were also planned, including Dongshan park, Xiguan park, and Haizhu park. The official planning of urban modernization of Guangzhou was well on its way.

In order to solve the problems among regional division, population increase, resource allocation, and governance capacity, the Municipal Department had a planning to expand the urban area along the traffic lines outside the old city. In 1923, based on regional studies of the whole city, a regional planning for the proposed urban area was completed by the Works Bureau of Guangzhou Municipal Department .



Fig.5 Road Map of Guangzhou in 1918



Fig.6 Road Map of Guangzhou in 1927

The planning outgrew the original scale of the old city. Included in the proposed planning of the urban area, besides the public fields, wild fields, and transport hubs, were the considerations of natural boundaries, future population growth, distance to the district or city center, reach of the police force, expectations of usefulness, industry distribution, easiness of district division, nearness to highlands, or the rivers,.

As a result, the proposed urban area was bordered by Baiyun mountain in the north, water pond at Beidi in the southwest, Henan Huangpu in the South, the line along Xiachebei river from Dongpuxu to Shuitugang in the north. The proposed urban area was, however, too large for the economic limitations. Therefore, a smaller but more appropriate, or affordable area was confirmed (Figure 7).

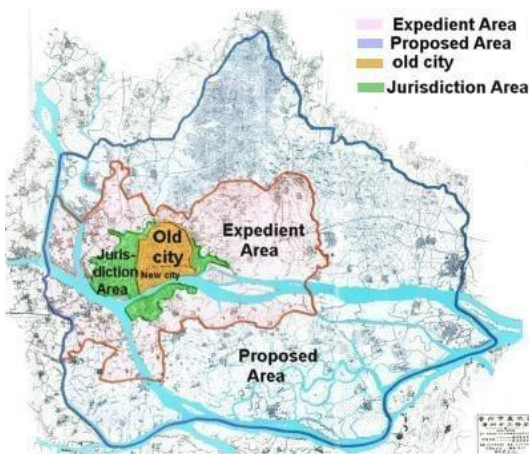


Fig.7 Demarcation of Appropriate and Proposed Areas in 1923



Fig.8 Road System Diagram in Guangzhou in 1932

In August of 1932, the then government promulgated the first urban planning scheme of Guangzhou—The Urban Design Outline of Guangzhou³. The planning divided the whole area into four functional districts: the industrial districts, the residential districts, the commercial districts, and the mixed districts.

The industrial districts were arranged along the Pearl River, including the West Village, the southeastern part of Shiweitang, Niujiaowei, Niugusha and Luochongwei.

In addition to the original commercial districts in the old city proper, the new commercial districts were located at the East of Huangsha Railway Station and Dongshan, to the west of the provincial government office, and in the northwestern part of Henan.

The residential districts fall into two categories, the beautiful exemplary residential districts and the civilian residential districts. The former ones were located in the central-northern part of Henan, the eastern part of Dongshan, Chebei, and the southeast part of Feieling Hill. The latter ones were adjacent to industrial districts, scattered around Bantang, and Fangcun in the southwestern part of the city.

The old city proper was reserved as mixed districts. Meanwhile, 10 parks in different sizes were planned in response to the emphasis in the outline of the planning on leisure places and parks for the public.

In November of 1932, the then City Government promulgated the Road System Map of Guangzhou (Figure 8). The arrangement of the road system adopted a chessboard-style layout, with five kinds of road width, namely 40m, 30m, 20m, 15m and 10m. In order to meet the needs of automobile traffic, the cross-shaped network of wide roads and large blocks were designed to be in the administrative district, while a network of narrow roads and small plots for walking are to be built in the commercial and residential districts.

For the first time in the history, the concept of functional division is introduced, with this complete and specific planning document, into the urban planning of Guangzhou. It focused on urban function division, road and infrastructure construction, and green space and parks layout. It marked the transformation of urban planning of Guangzhou from local road planning to overall urban planning.

In 1920s and 1930s, the idea of implementing urban function division in Guangzhou was accepted and applied in actions to adopt Western urban planning methods for local needs. The idea soon became an important approach to upgrade the urban environment. In harmony with the then economic conditions and government capacities, the demarcation of the appropriate and proposed areas broke the shackles of the old administrative divisions, and made it an easier work, from macro land layout to micro building control, for the then government to manage and implement unification of urban modernization.

In 1937, the Anti-Japanese War brought the urban construction of Guangzhou to a stop(Fig.9). After the war, in 1947, the then City Planning Commission of Guangzhou resumed the procedures of land division. The emphasis of urban planning of Guangzhou transferred from the initial techniques and measures to land management (Fig.10). The city was again divided, but this time, into six districts: the ordinary residential district, the rural residential district, the commercial district, the industrial district, the scenic district, and the agricultural district. The rural residential district emphasized the idea of residential environment construction.

At that time, there were 7 parks in Guangzhou. From the Road Traffic Map of Guangzhou Special City, published in 1948, it could be concluded that the procedures were an extension and realization of the design idea of urban planning draft in 1932.

³ The Outline Draft of Guangzhou's Urban Design (Document-Politics-590), 1932, Guangzhou Archives.



Fig.9 Road Map of Guangzhou in 1937

During the years from 1911 to 1948, the urban planning and construction in Guangzhou underwent a sequence of processes from simplicity to complexity, and from part to whole. There was a process from the simple imitation in Dashatou Island to the urban renovation marked with road and park construction, a process from simple road construction to overall urban traffic system, a process from scattered green lands to the overall greening system, a process from subdistrict planning to comprehensive planning of the whole city, a process from simple planning techniques to comprehensive land management, and finally, a process from simple imitation to localization.

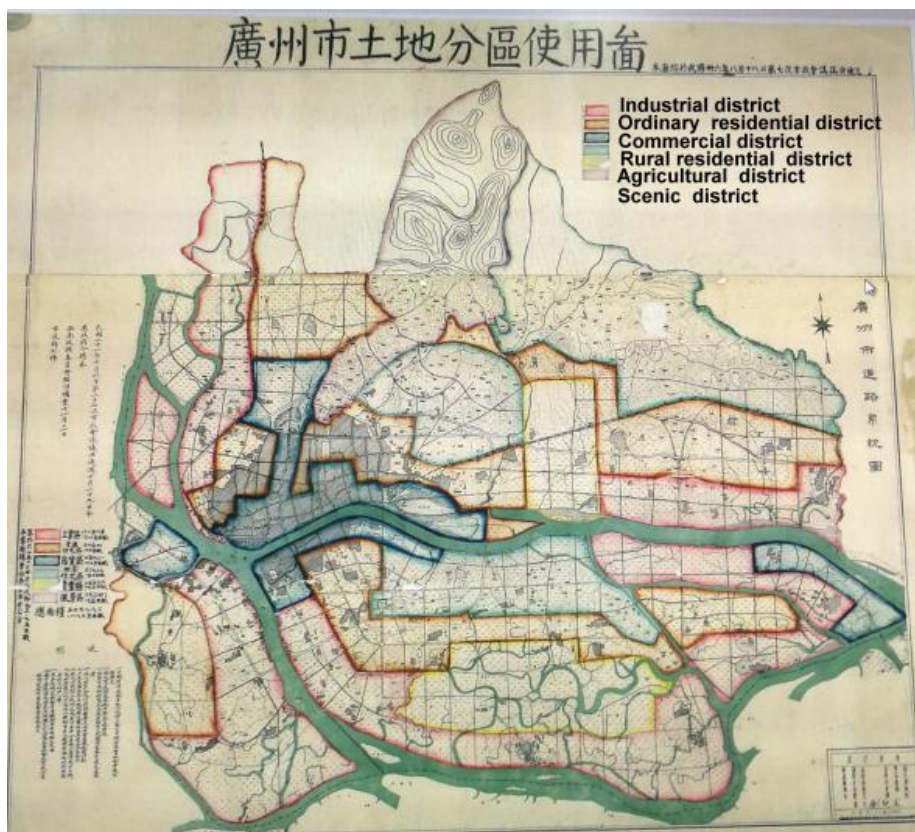


Fig.10 The Land Utilization Segmentation Map of Guangzhou in 1947

4 Planning Innovation after Reform and Opening in 1980s

On September 18, 1984, the State Council approved the City Master Plan of Guangzhou ((Fig.11)), the planning purpose of which was changed from "building Guangzhou into a socialist productive city" to "building Guangzhou into an economic center of the whole province and South China, and make it a prosperous, civilized, stable and beautiful modern socialist city" by adopting a "zonal cluster layout" along the Pearl River: the old urban area, Tianhe District and Huangpu District.

The focus of urban greening was on the downtown greening, encouraging greening in every possible patch in the old city proper. This master plan pays attention to the protection and construction of ecology and environment, but its strategies and means are not much different from those proposed by the Government of the Republic of China.

In 1995, based on the regional overall planning of Guangdong Province, the Construction Committee of Guangdong Province issued the Development Planning of Urban Agglomeration of the Pearl River Delta, proposing a conception of four modes of land use: the metropolitan district, the urban concentration district, the opening district, and the ecological sensitive district. The planning, especially the assignation of the open and ecological sensitive districts lay an emphasis on urban planning from old city reconstruction and urban expansion to co-building of urban greening and ecological protection.

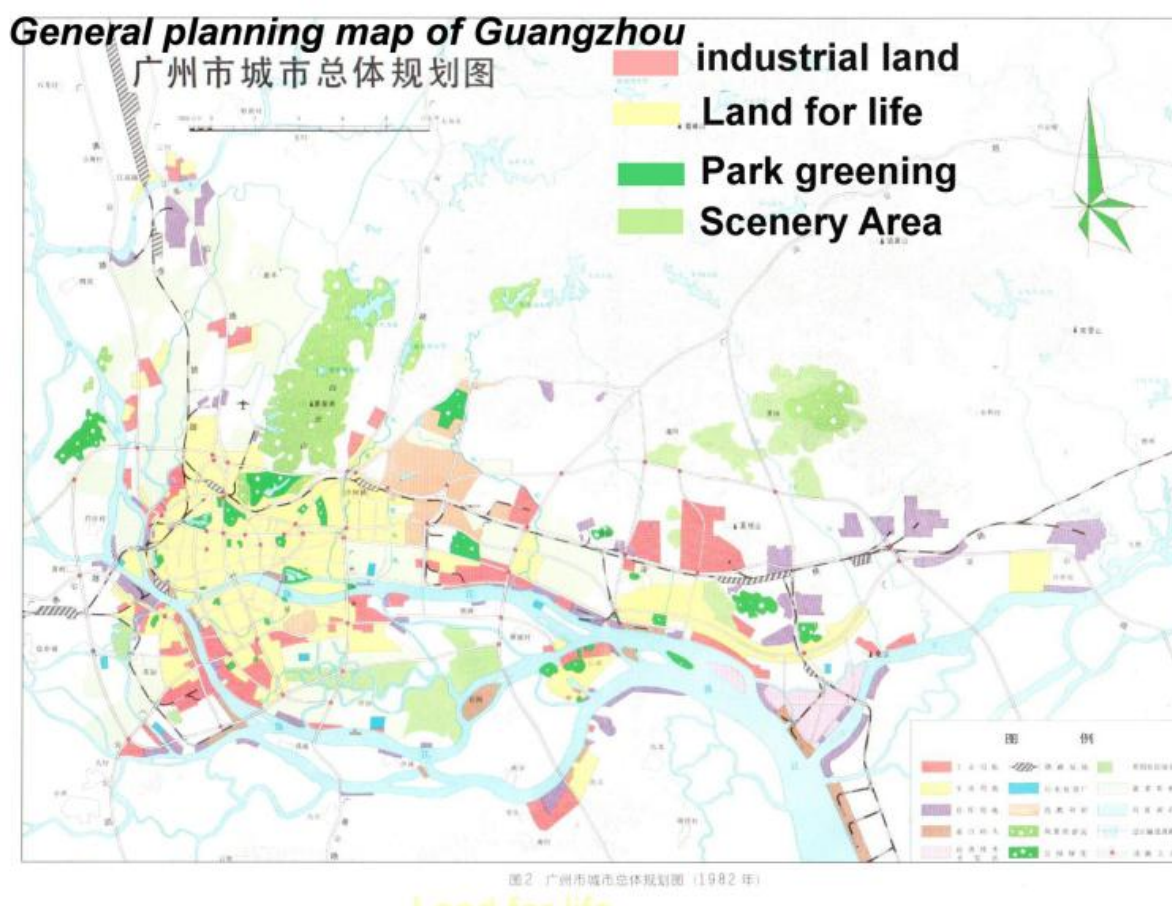


Fig.11 the General planning map of Guangzhou in 1984

In 2003, as the continuation of the “four land usage modes” advocated in 1995, The Guidelines for

Regional Green Space Planning of Guangdong Province was issued to further highlight the construction of ecotype green spaces. In 2006, the emphasis of regional green space was elevated to the legal level with the Regulations for the Implementation of Coordinated Development Planning for the Urban Agglomeration of the Pearl River Delta in Guangdong.

The planning regulations, compiled and adjusted from 1995 to 2003, all aimed at the regional planning of the Pearl River Delta. As a result, Guangzhou took the leading role in the development of the whole region, and thereby became an integral part of the Regional planning.

In 2012, a concept of planning for livable urban and rural areas was introduced and advocated in the Urban Comprehensive Planning of Guangzhou (2011-2020), proposing that the urban size should be rationally controlled with a total planning area of about 7,434 square kilometers. By the end of 2020, the urban resident population should be less than 18 million, and the construction land, less than 1,772 square kilometers, in which urban construction land less than 1559 square kilometers.

To highlight the water features of South China and construct the ecological water city, the water surface rate and drainage density of the city should also be increased to restore the ecological network of urban and rural water system, and the planning water surface rate should be 11% (Fig. 12, 13).



Fig.12 Green Space System Planning



Fig.13 Urban Road Network Planning

In Feb. 2018, the Urban Comprehensive Planning of Guangzhou (2017-2035) reinforced the vision of developing a beautiful and vigorous city of flowers in the world. Taking the Pearl River Water System as the developing path, the construction of the hub-type cyberspace structure of Guangzhou is now underway, and can be completed soon with the support of the transportation system and the ecological corridors (Fig. 14, 15).

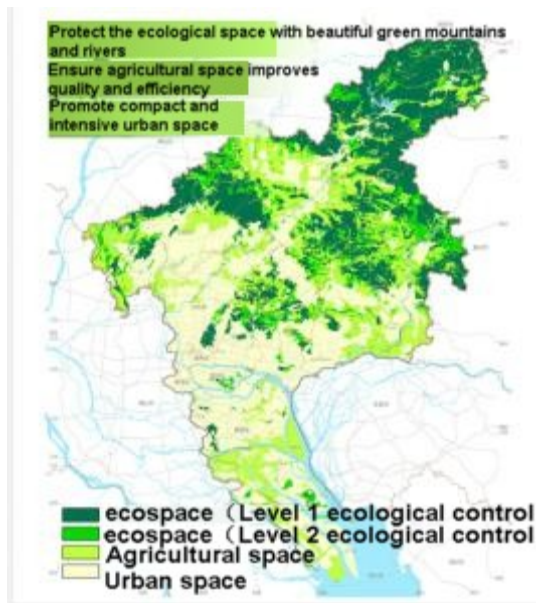


Fig.14 City Ecospace

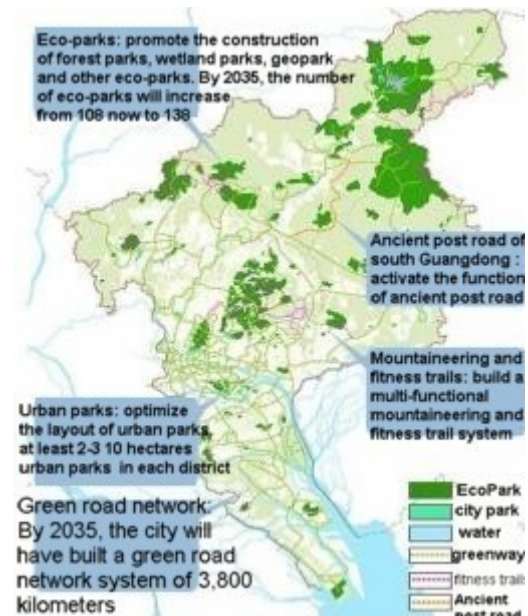


Fig.15 Park and Recreation System of the City

5 Conclusions

Upon the survey of the planning history of Guangzhou it can be concluded that, from the few parks on the Thirteen-hong square to the overall planning of ecological Guangzhou, the urban planning of Guangzhou has witnessed the development from the district planning of Dashatou, through urban function division and the idyllic residential district, to the regional greening and livable city, which completes at last the process from imitation, study, transformation, and innovation. All these have brought to the birth of a unique concept of urban construction, a unique concept of an innovation, harmony, green, open, sharing, attractive, and distinctive ecological city of Guangzhou. It can also be concluded that the planning versions at all stages of the history of Guangzhou share something in common: assigning special districts, urban function divisions, network and ring road systems, avenues, squares, parks, and green space designs.

What can be noted is that ideas and concepts of urban planning have always changing to suit the foreseeable needs. In different developing periods, the ideas and emphases of green space construction are different. In the Thirteen-hong period, the role of green gardens was only landscaping. In the period of the Republic of China, the roles of green gardens were not only landscaping and recreation, but also an important symbol of city modernization. At the 21st century, the expansion of green lands is for the improvement of air quality and living suitability. In recent years, urban planning has paid more and more attentions to the planning and constructing regional green spaces. The construction of parks and public green spaces has become increasingly important in the prevention of the city from malignant expansion and environmental deterioration, and in the improvement of ecological environment. The development of green space has experienced a constant increase of quantity and area, and has evolved into the construction of ring green space and regional green space. Finally, this development has completed the urban ecological green space system, reflecting the development trend of urban public green space, and ecological green space planning.

Finally, it must be pointed out that the urban development discipline be observed, and insisted should be the strategy of sustainable and coordinated development in a balance among economy, society, population, environment, and natural resources. It is the common aspirations and dreams for the Chinese to

make Guangzhou into a prosperous, harmonious, ecological and livable modern city by enhancing the urban comprehensive function and improving regional radiation-driven capabilities and international influence.

Acknowledgements

The research was funded by Guangzhou Science and Technology Project (201604020071) .

Disclosure Statement

No potential conflict of interest was reported by the authors.

Notes on contributor(s)

Yanjuan Han, Lecturer of Guangzhou University, PhD student of Wuhan University of Technology, major in the history of urban planning in modern China.

Bibliography

Changxin Peng. *The Beginning of Public Park in China — The American and English Gardens of Thirteen Factories of Canton*. Chinese garden, 2014 (5) :108-114.

Chunchen Zhao, Xiangdong Chen. *Spring up of Thirteen-hong of Guangzhou at Qing Dynasty*. The Qing History Journal, 2011 (3) :25-36.

City Planning Commission of Guangzhou. *the procedures of land utilization segmentation*. 1947, 33(3):206.

Guangdong military government. *Revelation of Guangdong Dashatou engineering bureau*. 1914, Sun Yat-sen Library of Guangdong Province.

Guangzhou Municipal Government. *the urban design outline of Guangzhou*. 1932, Guangzhou Archives

Honglie Yang. *thirteen-hong: The analysis of urban development dynamic in Guangzhou at Qing Dynasty*. Famous city in China, 2014 (5) :54-61.

Junming Ni. *The historical development and characteristics of urban space in Guangzhou*. Historical chronicles of Guangdong, 1996 (3) :28-36

Lihua Wei, Xiaopei Yan, Yuting Liu. *A study on the urban social space structure of Guangzhou in the Qing Dynasty*. ACTA GEOGRAPHICA SINICA, 2008 , 63 (6) :613-624.

Ruisheng Xu. *From "Central Park" to "green road" ----review of the construction of public green space in Guangzhou*. Urban Insight, 2016 (5) :122-138.

Image sources

Figure 1: http://news.china.com/history/all/11025807/20170120/30193616_1.html.

Figure 2: Views of the Pearl River Delta, Macau, Canton and Hong Kong, HK, Art Museum of HK, 2002, P426.

Figure 3, 8, 12: http://www.360doc.com/content/17/0227/17/40056926_632463165.shtml.

Figure 4, 5, 9, 11: Sun Yatsen Library of Guangdong Province.

Figure 6, 10: Guangzhou Urban Construction Archive.

Figure 7, 13: Ruisheng Xu. From "Central Park" to "green road" -----review of the construction of public green space in Guangzhou, URBAN INSIGHT, 2016 (5) :122-138.

Figure 14, 15: <https://wenku.baidu.com/view/999997257375a417866f8fb2.html>.

Figure 16,17: <http://gd.qq.com/a/20180226/009085.htm>.



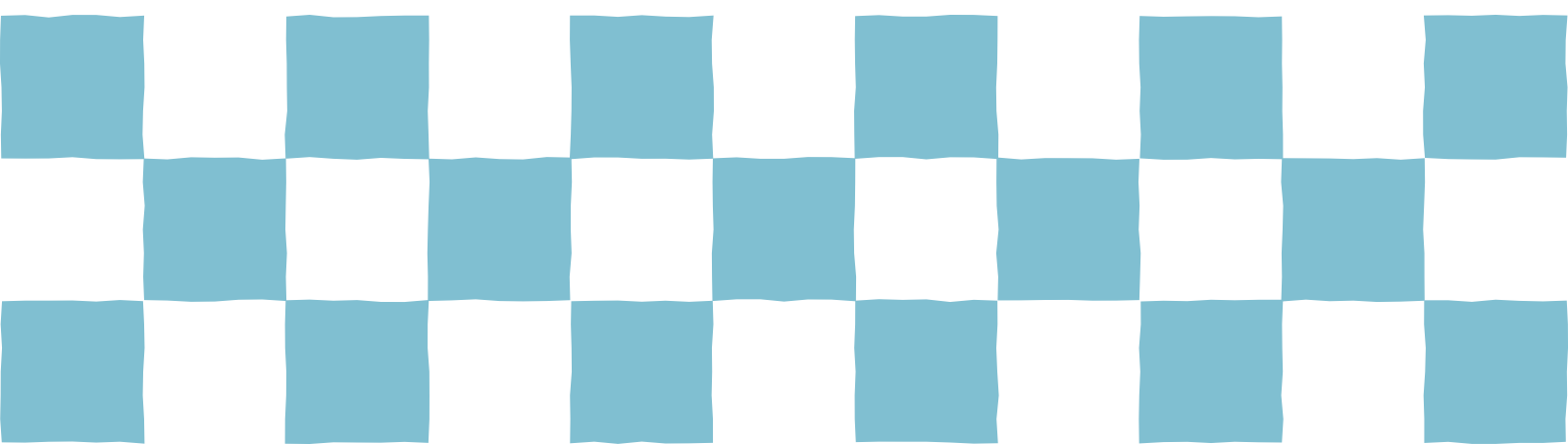
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

16 History of Urban Conservation



The Rise of Historic Preservation in the Urban Land Use Planning System in Tokyo: Towards Heritage-led Regeneration

Jiewon Song (National University of Singapore)

The earliest approach to integrate heritage preservation into the urban land use planning system can be dated back to 1968 in New York City, which was the first city on the globe, implemented transfer of development rights (TDR) to allow the preservation of heritage properties and opened the path for urban redevelopment at the same time. Across the Atlantic Ocean, the House of Commons of the United Kingdom launched a report on “The Role of Historic Buildings in Urban Regeneration” in 2004 to review the management of the historic environment in order to promote the heritage preservation within the UK urban regeneration scheme. Their approach was, however, to control historic buildings within the planning system but without taking a TDR program into account. As was emphasized in the 2004 House of Commons Report, heritage plays a central role at the heart of contemporary urban placemaking by integrated into urban redevelopment.

In Japan, urban regeneration emerged as a part of national economic revitalization strategies when cities suffered a long-term economic downturn after experienced its infamous bubble economy. Under this scheme, heritage-led regeneration projects were put into practice from the late 1990s onward when the preservation of modern heritage took the center stage of cultural heritage administration, while the national government promoted deregulations in several sectors of the economy, including the urban and heritage sectors. Along these lines, local governments such as the Tokyo Metropolitan Government (TMG) introduced competitive development strategies to win the global intercity competition.

In 1999, the TMG officially implemented heritage-led regeneration framework within the city planning system under the national economic initiative that is known as the Important Cultural Property Special Type Specified Block System (Juyo Bunkazai Tokubetsu Gata Tokutei Gaiku Seido, 重要文化財特別型特定街区制度, STSBS). Indeed, this STSBS is a spin-off of the Specified Block System (Tokutei Gaiku Seido, 特定街区制度, SBS), which was established in 1961 and launched as the first redevelopment system aiming to create urban blocks comprised of open space and high-rise buildings in times when cities in Japan underwent rapid urbanization. However, the national and local government agencies, private developers, and corporate owners collectively acted as place-makers to shape the SBS into a mode of heritage preservation in order to prevent the demolition of modern heritage properties in the midst of strong pressures for urban changes.

Given these backgrounds, this study attempts to examine the historical development of the integration of heritage preservation into the urban land use planning system focusing on Tokyo. In doing so, it also sheds light on the economic, social and political background and the intent of the establishment of the heritage-led regeneration framework at the level of urban policy and decision-making processes that have never been spotlighted and/or clarified either in Japanese or English literature. The study, therefore, is built on multilevel data set such as stakeholder minutes of the meeting and government archives on corresponding urban redevelopment projects involved with heritage preservation in central Tokyo. This study is set in Tokyo, but it provides an insight into the origin and evolution of urban heritage preservation in Japan.

“The spirit of living continuity”? Revisiting the vision, methodologies and influence of the English Studies in Conservation (1968)

John Pendlebury (Newcastle University) and John Gold (Oxford Brookes University)

The late-1960s witnessed sustained debate about the prevailing direction of policy towards the existing built environment. With comprehensive redevelopment proceeding apace there was increasing momentum behind a nascent conservation movement that sought a less interventionist and more human-scale approach. Against this background, an initiative launched in 1966 by central and local government in partnership saw small teams of consultants commissioned to prepare analytic and advisory reports on four historic cathedral cities: Bath, Chester, Chichester and York. Their reports, published in 1968 as the *Studies in Conservation*, were intended not just to provide specific information about the physical and economic fabric of four cities, but also collectively to act as pilot studies able to indicate more generally the options available to policy-makers in the future planning and management of this genre of city.

In this paper, we make use of oral testimony, archive sources and contemporary commentaries by interested observers to identify the origins and purpose of this initiative. The opening part provides a brief overview of the background to the initiative and the way in which the case-study cities were selected. The next section analyses the various intrinsic visions offered for these cities, and comments on the methodologies proposed for achieving conservation. We then consider the reception the plans received on publication and their impact, both locally and nationally. The final section provides historiographic commentary on the significance of the *Studies in Conservation* half-a-century after their publication. Although now often conceived principally as part of a reaction to clearance-oriented urban renewal, we note that they were framed in accordance with the spirit of times in which modernist-inspired approaches were still regarded as accepted orthodoxy, identifying continuity as well as disjuncture. In light of that point, we end by situating them within the context of wider debates over the role of architecture and planning in the evolution of the city and specifically the active construction and reconstruction of the relationship between conservation and modernism that was occurring at that time.

A Voyage from “A Future for Our Past” to “Our Heritage: Where the Past Meets the Future”

Nuran Zeren Gulersoy (Istanbul Technical University Faculty of Architecture)

During the 1970s, European Council of Ministers Commission tried to continue the attempts on promoting and protecting the common architectural heritage of European Countries; A campaign was launched in 1972 to promote European Common Cultural Heritage among European Countries. As a result of the Split Conference in 1971, the year 1975 was declared as “European Heritage Year.” The Campaign for “European Heritage Year (1975)” started with a convention in 1973, Zurich-Switzerland, and used the motto: “A future for our past.” The need of an “integrated conservation” policy -which considers the results of economic and social studies along with the historical, archaeological and architectural study of the urban pattern to protect areas with historical and cultural value and the need of using monetary facilities for protection and regeneration were supported.

This year, 2018, has been designated “European Year of Cultural Heritage” by the European Union. European Culture Forum held in Milan by European Commission on 7 December 2017, launched the 2018 European Year of Cultural Heritage. The year aims to encourage more people to discover and explore Europe’ s rich and diverse cultural heritage and to reinforce a sense of belonging to a common European space. The main idea is to understand the past and to look to our future. The slogan of the year is “Our Heritage: Where the Past Meets the Future.” The Year will pursue an integrated approach to heritage and put people at the center. During the year, 10 European initiatives will focus on four main objectives: engaging people with cultural heritage, promoting its value, fostering its protection and stimulating innovation. Cultural heritage, its value to society, its contribution to the economy, its role in European cultural diplomacy, the importance of safeguarding it for the enjoyment of future generation will be promoted.

In this paper, the voyage of the cultural heritage promotion policy in Turkey will be described with the reference of the European approach, from the “1975 European Cultural Heritage Year: A Future for Our Past” to “2018 European Year of Cultural Heritage: Our Heritage, Where the Past Meets the Future.”

Heritage and urban sustainability in the context of prescriptive planning. Challenges for integrating territorial policies in Mexican cities

Gabriela Lee Alardín (Universidad Iberoamericana Ciudad de México) and Gabriela Estrada Díaz (Universidad Iberoamericana Ciudad de México)

Urban planning for Mexican cities seems to be historically dissociated from scales and aspects of planning which are widely recognized as essential to meet criteria for sustainable development. This presentation will focus on two particular issues in relation to urban planning, namely environmental considerations and cultural heritage conservation. First, a revision of how these topics have been addressed over the last few decades by government agencies at the federal, state and municipal level at territorial, urban, and local scales will show how public policies apply unto land units without an integral approach. Since the 1960s a profusion of plans were outlined for Mexican cities, aiming to articulate physical growth with social and economic development; this type of centralized urban planning was not socialized with local stakeholders, and later efforts to implicate them in the process were hindered by demographic dynamics and land use regulations. Today urban planning is led by local governments, with little social participation. On the other hand, environmental policies have long been devised by federal and state authorities considering regions or watersheds, disregarding both the dynamics of inlying cities and towns and the value of cultural landscapes, and disconnected from urban plans. Finally, urban heritage conservation policies have been a part of urban planning since the 1990s but in practice they remain insufficient to ensure the integration of the city of the past into the city of the future, thus disregarding its potential social, economic, and cultural contributions to sustainability.

Mapping planning criteria for urban heritage, the city, and its natural environment would constitute valuable input for recent initiatives in Mexico which strive to provide an integral multiscale framework for territorial and urban development, aligned with international recommendations for urban sustainable development, such as Habitat III’ s New Urban Agenda and UNESCO’ s Recommendation on the Historic Urban Landscape. This paper explores whether merging these layers of information would be possible in the Mexican planning structure, and if current practices might be modified to suit this purpose.



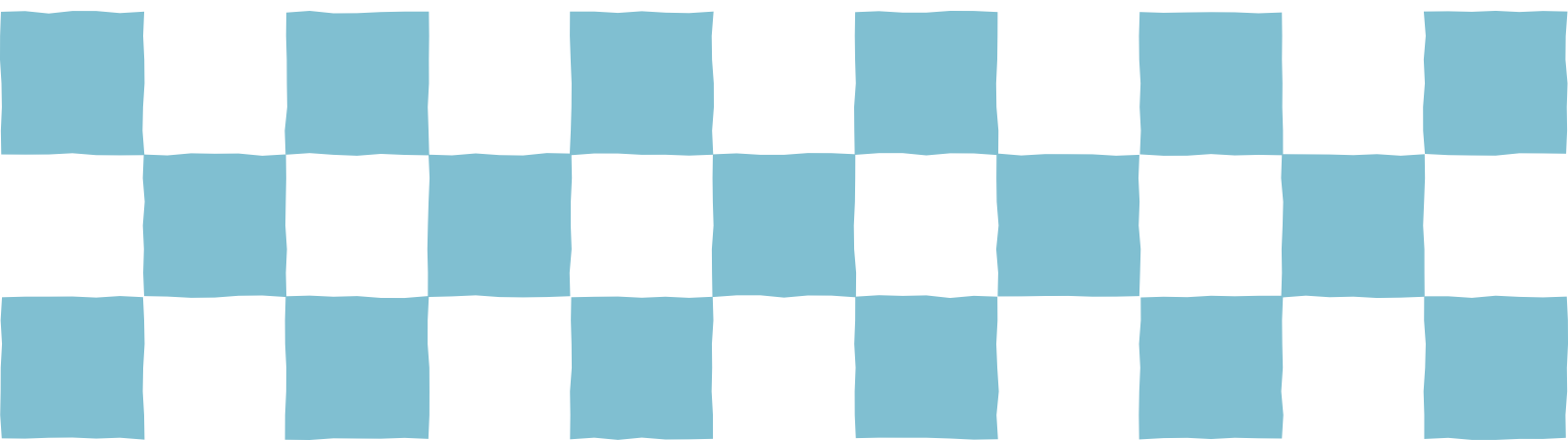
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

17 Living Heritage and Local Community



Living Heritage Conservation: from commodity-oriented renewal to culture-oriented and people-centred revival

Yiran Xu (Urbanisation and Urban Rural Planning Research Center of Jiangsu, Southeast University)

Living Heritage is characterized by 'continuity', in particular those historic places that are still a 'living' part of their community. For the tangible cultural heritages, especially the historic districts, the most important thing is to protect the texture of the old city formed hundreds of years ago, as well as the streets and alleys with friendly human scale. For the intangible cultural heritage, the treasures are actually those real life memories of the local residents as if had been integrated into their bone marrow and blood. It is gratifying to note that behaviors like forced demolition of shabby ancient houses or construction of fake antique commercial streets has gradually been abandoned these years. In China, the mainstream of living heritage conservation is shifting from commodity-oriented renewal to culture-oriented and people-centred revival, which has obviously displayed in many planning practices. The paper firstly mentioned the extension and connotation of the concept of 'cultural heritage' over the last two decades through a series of authoritative documents issued by some typical international heritage protection and research organizations. It then explores the application approaches of living heritage conservation through two conservation practices in Nanjing, China. In the first project, the author conceived a brand-new way of protecting and revealing historic streets, named 'Reflection Alley'. It treats the street as an open museum, utilizing current semi-dismantled remains, providing a stage for dialogues between history and modernity, endowing the historic legacy with a sustainable future. In the second project, a 'Five-stakeholder Platform' is set up to support the progressive revitalization of a historic district. Through in-depth community engagement, the design team have developed a three-phase planning guide helping locals to protect and repair their residences thus stimulating the vitality of community life. The paper provides solutions for the implementation of culture-oriented and people-centred revival through the interaction between tangible and intangible parts and the connections to community. The paper concludes with thoughts on the positive significance of living heritage conservation, highlight on the continuous tracking and management to achieve long term sustainability, and expectation for the further exploration on the balance between commercial interests and original continuity of community.

Between Vulnerability and Living Livelihood Culture: Reassessing small alleys as urban heritage

Daisuke Abe (Ryukoku University)

Kyoto, an ancient capital of Japan, has a grid pattern that clearly defines citizens' living form. It requires attempts and devices of how to build a neighborhood in a city. It also flexibly accepts divers way of living type making the best of existing street-block relations, which brought about several features for Kyoto. In this article, main focus will be placed on the historical value of so-called Roji, which represents tiny alleyway between houses in urban block. The combination between Roji and Machiya, a traditional townhouse mainly build during the early modern period, 2-3 stories, made of wood, usually deep and narrow, and built very close to the edge of the street, defines historic environment and tourist image of Kyoto. The buildings along the sides, eaves, and paving material determine the spatial form of Roji. These make for a unique and interesting atmosphere, which creates an identity that differentiates the Roji from alleys in general. However, in recent years, the unique spatial qualities of Roji are decreasing. There is a policy dilemma; reinforcing urban physical structure to improve vulnerability, or conserving living popular culture on tiny alleys? Therefore this article intends to discuss the following discourses. Urban morphology, as well as architecture, should be evaluated as an important urban heritage in contemporary cities, and be a target for conservation and improvement. Preservation of historic quarters in contemporary cities sometimes just results in mere protection of monumental historic building and religious architecture whose value and importance are easy for every citizen to understand. However, those historic buildings are not the only heritage that would inherit the city's context and memory to future generations. For better conservation of urban context and memory, it is important to expand the concept of urban heritage, focusing on the following two approaches: 1) to understand urban heritage as a mechanism between street-block-backyard and 2) to include build-environment mainly created in a modern and contemporary period, which could be "future heritage".

Planning and local heritage in São Paulo: Multiple views on the Bexiga neighborhood, São Paulo, Brazil

Ingrid Ambrogi (Mackenzie University), Nádia Somekh (Mackenzie University) and José Geraldo Simões Jr. (Mackenzie University)

The present work seeks to discuss the neighborhood of Bexiga, a place that exemplifies the great contradiction between a global city, such as São Paulo and one of its districts, considered as one of the city's heritage, as a result of multiple urbanistic, traditional and social historic perspectives called Bexiga.

The Bexiga neighborhood is located in a central area, close to Avenida Paulista, valued and with strong pressure of the real estate market, aiming at the densification of its territory. In contrast to this verticalization, the Bexiga neighborhood concentrates innumerable residential properties. The site began to be occupied at the end of the sixteenth century and from the end of the nineteenth century it began to be parceled out, and since then it has been home to small traders, workers, craftsmen, service providers, migrants and immigrants, artists, among other trades, in short, inhabited by a population of medium and low income, that in many cases lives in precarious conditions of health, in collective properties of rent - the slum tenements. The heritage listing of almost a thousand buildings in this area denotes its relevance and need to be preserved. However, the urban guidelines derived from the master plan of the city of São Paulo point to an opposite path, favoring the densification and renovation of this richly built heritage buildings.

This contradiction and the alternatives for its confrontation and solution will be the object of study treated by this table, composed by researchers who have been studying this neighborhood for years. The debate seeks to address similar situations also observed in other global cities.

In addition to this urban dimension, the study also addresses the culture and memory of the neighborhood, present in the daily life of the residents and in the history of their material records. In this way, the study of photographic archives and inventories of past neighborhoods will be explored, such as IGEPAC Bela Vista (carried out by the Department of Historic Patrimony of the city of São Paulo in the 1980s) and the Museum of Memory of Bexiga, the families of the neighborhood and the incentive of the Street Museum, an initiative of the architect and photographer Júlio Abe Wakahara, an event that helped bring the population closer to the history of its neighborhood.

In this way, the project uses these important records as a contribution to the heritage education process of the residents, making them aware of the inherent values of their culture and helping them in facing this public debate that is taking place regarding the future that is desired for the Bexiga neighborhood: whether preservation and patrimonial conservation, or real estate development with gentrification, or even an integrated action between cultural preservation and economic development. This is the main question that today is part of the agenda of this neighborhood and on which the present study will certainly help to point out the best ways.

What kind of future has been drawn through movements for urban design by proprietors in Ginza, Tokyo from pre-war to post-war?

Takahiro Miyashita (The University of Tokyo)

This paper revealed development of movement for urban design by local proprietors in Ginza from 1930's to 1960's. Ginza Street in Tokyo is known as one of the first modern style streets in Japan. This street has developed greatly by modern buildings and advanced urban design methods in modern times and after although it has also been suffered heavy damage twice by Great Kanto Earthquake (1923) and Great Tokyo Air Raids (1945.)

We pay attention to Ginza Street Association: a store association has been composed of proprietors in Ginza Street, and reveal development of their movement for urban design from 1930's to 1960's and find out a new historical context of Ginza.

In 1930's, Ginza Street Association started movement for "Urban beauty" of Ginza Street. They aimed for actualization of comfortable urban spaces for shoppers and beautiful townscape by Tokyo Olympics in 1940. Main themes of this movement were the removal of telegraph poles and the abolition of the tram, and they have appealed to the city government. In 1937, they planned 10-year plan for redesign of Ginza Street by themselves. However, this movement ended in failure as Japanese society had entered the war regime after 1938.

After WWII, Ginza Street Association released "Ginza reconstruction plan" in 1945. In this plan, an awareness of the issues they had shared in 1930's was succeeded though it was under the condition most buildings had been burnt down by air raids. After that, they have argued ongoingly with city government, and they achieved large-scale construction including the removal of telegraph poles and the abolition of tram in 1968. We can understand this result as the goal of their movement for a long time from pre-war.

In conclusion, this paper revealed the continuity of their movement for urban design from pre-war to post-war through paying attention to changes of the awareness of the issues and the image of spaces. Based on these facts, we can find a new historical context of Ginza different from existing historical view found through history of the building of architectures by architects in Ginza.

In addition, the organization of GSA has played a role as a place where local proprietors argued the future image of their town for a long time. It can be thought that the succession of such a platform has a great value to take over the awareness of the issues to next generation.



Living Heritage Conservation: from commodity-oriented renewal to culture-oriented and people-centred revival

XU Yiran

*Urbanisation and Urban Rural Planning Research Centre of Jiangsu, Southeast University, China,
njxuyiran@gmail.com*

Living Heritage is characterized by ‘continuity’, in particular those historic places that are still a ‘living’ part of their community. In China, the mainstream of living heritage conservation is shifting from commodity-oriented renewal to culture-oriented and people-centred revival, which has obviously displayed in many planning practices. This paper centres on the connotation of living heritage and explores its applications approaches through two conservation practices in Nanjing, China. In the first project, the author conceived a brand-new way of protecting and revealing historic streets, named ‘Reflection Alley’. It treats the street as an open museum, utilizing current semi-dismantled remains, providing a stage for dialogues between history and modernity, endowing the historic legacy with a sustainable future. In the second project, a ‘Five-stakeholder Platform’ is set up to support the progressive revitalization of a historic district. Through in-depth community engagement, the design team have developed a three-phase planning guide helping locals to protect and repair their residences thus stimulating the vitality of community life. The paper provides solutions for the implementation of culture-oriented and people-centred revival through the interaction between tangible and intangible parts and the connections to community.

Keywords: Living heritage, Heritage conservation, Historic district, Culture-Oriented, People-Centred, Community engagement.

Introduction

In China, the mainstream of living heritage conservation is shifting from commodity-oriented renewal to culture-oriented plus people-centred revival, which has obviously displayed in many planning practices. This paper will centre on the connotation of living heritage and explore its applications approaches through conservation practices. It firstly introduces the definition of living heritage and its characteristic and major elements, clarifying the relationship between tangible and intangible parts. Afterwards, the paper mentioned the extension and connotation of the concept of ‘cultural heritage’ over the last two decades through a series of authoritative documents issued by some typical international heritage protection and research organizations. Among them the shift of view in living heritage conservation practices is summarized by the author as ‘trends from commodity-oriented renewal to culture-oriented and people-centred revival’. Next, two design practices in Nanjing, the capital of Jiangsu Province, China, are taken as examples to illustrate the implementation through the interaction between tangible and intangible parts and the connections to community. Both are innovative ideas and good trials to ameliorate conventional conservation approach. The paper concludes with thoughts on the positive significance of living heritage conservation, highlight on the continuous tracking and management to achieve long term sustainability, and expectation for the further exploration on the balance between commercial interests and original continuity of community.

Living Heritage and its tangible and intangible continuity

Living Heritage is characterized by ‘continuity’, in particular those historic places that are still a ‘living’ part of their community¹. Although we do not regard any heritage as ‘dead’, some heritage sites have been occupied by new functions after touristic, economic or social transformation like ‘museumification’. Diversity, continuity and community (three key elements of heritage) are largely overlooked during the process². This kind of conventional conservation approach might indeed bring new vitality to the heritage to prevent isolation from current society, but it also means the connections between community and heritage have been suppressed or even

¹ Wijesuriya, “Living Heritage: A summary,” ICCROM, 2015.

² Wijesuriya, “Conservation in Context,” Edizioni Polistampa, 2010.



broken down to some extent³. The question that needs to be asked is whether local residents can still enjoy or benefit from the heritage places that have been converted into popular tourist attractions⁴.

Continuity does not mean invariance. It consists of several continuous elements, namely, original functions, community connections, cultural expressions and long-term care. In this context, changes are inevitable and should be embraced as a part of the continuity rather than reduction. Constant evolutions can occur to both tangible and intangible components, such as expansion of existing dwellings to better serve the growth of population, or old customs which have been altered or abandoned with the passage of a generation. Some long-term negative consequences are due to greater emphasis on the fabric and neglect of the living dimensions. From the perspective of sustainable development, the purpose of conservation is not to 'freeze them in time and space as material manifestations', but to ensure functional in the lives of communities⁵.

Tangible and intangible are a unity of opposites, so are tangible cultural heritage and intangible cultural heritage. Conventional conservation approach tends to separate them. For the former, especially the historic districts, the most important thing is to protect the texture of the old city formed hundreds of years ago, as well as the streets and alleys with friendly human scale. For the latter, the treasures are actually those real-life memories of the local residents as if had been integrated into their bone marrow and blood. In fact, communities do not compartmentalize heritage as tangible or intangible. It does not make sense to update the material space without considering human needs. Besides, without the tangible carriers like human beings, certain intangible heritages cannot be dependent and vice versa. Therefore, in this paper, the author hopes to integrate the perceived dichotomies through the interaction between tangible and intangible.

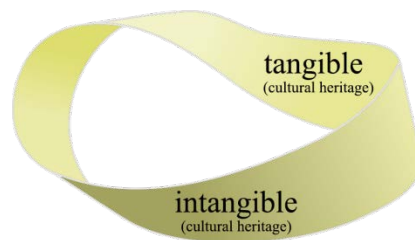


Figure 1: *A unity of opposites: tangible (cultural heritage) and intangible (cultural heritage).*

Culture-oriented and people-centred trends

As mentioned before, compared to the success in economic factors, much more attention should be paid to exploring new conservation and management approaches and decision-making processes, based on the continuity of both tangible and intangible elements, to enhance the sustainability of living heritage in communities. The author defines the shift of view in living heritage conservation practices as 'trends from commodity-oriented renewal to culture-oriented and people-centred revival'.

Over the last two decades, the extension and connotation of the concept of 'cultural heritage' have been continuously enriched internationally. In 2001, UNESCO adopted *The Universal Declaration on Cultural Diversity*⁶, on the basis of which new heritage types were emerged, such as cultural landscapes and cultural routes. In 2003, ICCROM launched a programme on Living Heritage Sites to emphasize the living dimensions of heritage sites⁷. In the same year, *The Convention for the Safeguarding of the Intangible Cultural Heritage*⁸ was adopted by UNESCO. *The Declaration on the Conservation of Historic Urban Landscapes* was announced in 2005, revised and final adopted in 2011 as a good trial to reconnect the different cultural traditions with socio-economic dynamics that are present in any contemporary city. In 2015, ICCROM developed a community participation programme for promoting '*the People-Centred Approach to Conservation*'.

The change of protection scope in China also shows the similar trends from static objects to living remains, from material elements to a combination of material and non-material elements. The emphasis on living continuity protection of historic districts is also in line with the international concept of sustainable development. Though the current understanding of 'authenticity' has not yet reached a rational attitude, the early blind pursuit of 'modernization' has been largely corrected in China. It is gratifying to note that behaviors like forced demolition

³ Webber, Tauvinga, "Domboshava Rock Painting Site," 3-10.

⁴ Court, Wijesuriya, "People-Centred Approaches," ICCROM, 2015.

⁵ Wijesuriya, "Living Heritage: A summary," ICCROM, 2015.

⁶ Wikipedia, "UNESCO Universal Declaration on Cultural Diversity."

⁷ Wijesuriya, "Conservation in Context," Edizioni Polistampa, 2010.

⁸ Wikipedia, "Convention for the Safeguarding of the Intangible Cultural Heritage."



of shabby ancient houses or construction of fake antique commercial streets has gradually been abandoned these years. To avoid large-scale demolition and construction, attempts have been made to explore small-scale, progressive and organic renewal approaches.

On one hand, these trends are closely related to the increasing importance of culture as a kind of soft power. Chinese President Xi Jinping delivered a report at the 19th National Congress of the Communist Party of China on Oct. 18, 2017. Xi stressed that cultural confidence represents a fundamental and profound force that sustains the development of a country and a nation. He called for a culture that is sound and people-oriented, that both promotes socialist material wellbeing and raises socialist cultural-ethical standards⁹.

Regarding to the protection of cultural heritage, Xi Jinping pointed out that, 'To meet the people's new aspirations for a better life, we must provide them with rich intellectual nourishment. We will strengthen protection and utilization of cultural relics, and better preserve and carry forward our cultural heritage.' He put forward a vision to let those treasures come alive, for instance, the cultural relics collected in the forbidden palace, the heritages displayed on the vast land, and the characters written in ancient books¹⁰.

On the other hand, the reason lies in the continuously strengthened bottom-up civil coordinating forces. The implementation of urban planning is a process of 'game and distribution' of the interests of administrative power, civil coordination and market forces¹¹. The improvement of the overall quality of citizens contributes to higher attention to public space, public life, and public events. The requirements of most people are usually found in the debate, so as to make a city dynamic and harmonious. This might also be one of the passive reasons for people-centred trend.

This trend is even more pronounced in cities with higher levels of citizen culture, one of which is Nanjing, the capital of Jiangsu Province, China. There are nearly fifty colleges and universities in Nanjing, second only to Beijing and Shanghai, together with numerous scientific research institutes and troops. Meanwhile the total population of Nanjing is far below Beijing or Shanghai. Some cutting-edge living heritage protection projects have also emerged under this circumstance in Nanjing. Two practices the author participated in are taken as examples below to illustrate how the culture-oriented and people-centred trends can be implemented through the interaction between tangible and intangible parts.

Project 1: conserve intangible heritage in a tangible way

In the 'Reflection Alley' project, our planning and design team conceived a brand new way of protecting and revealing historic streets. It treats the street as an open museum, utilizing current semi-dismantled remains to provide a stage for dialogues between history and modernity, and endows the historic legacy with a sustainable future.

Core issue of Pingshi Street

This is a conceptual design proposal for an existing historic street, 'Pingshi Street'. The site is located in the old town of Nanjing, a city recognized as one of the Four Great Ancient Capitals of China, and it is now the second largest city in the East China region¹².

As a thousand-year-old ancient street, 'Pingshi Street' is actually an alley compared to our current urban scale. In the past, the street was a fusion of culture and business, with many traditional food shops and leather workshops on both sides, most of which are two-story old wooden houses.

In general, streets are often not as 'lucky' as buildings to get a priority, considering more complex interest entanglements and higher renovation costs. For example, Ganxi's Mansion nearby, commonly known as "the ninety-nine and a half rooms" built two hundred years ago, has been restructured into a folk museum and open to the public now¹³. As time goes by, it no longer conforms to the definition of 'living heritage'. The reasons that Ganxi's Mansion can be promptly repaired include not only its great historical value and rare huge scale, but also its relatively independent ownerships and the continuous relocation of original residents.

There was a period of 'tough' time when 'Pingshi Street' underwent partial demolition in 2013, due to the difficulty to repair the wooden structures and the pressure from the rising land price of the old city centre. However, it quickly triggered a strong social debate which forced the demolition to stop.

⁹ Xi Jinping, "Great Success of Socialism with Chinese Characteristics."

¹⁰ China Youth Network, "Xi Jinping talked about the protection of cultural heritage."

¹¹ Southern Weekly, "Urban Construction in Nanjing Progresses in Debate."

¹² Wikipedia, "Nanjing."

¹³ People's Daily Online, "Ganxi's Mansion - The ninety-nine and a half rooms."



Afterwards, some houses were designated as sites to be protected for their historical and cultural value at the level of municipality. According to Law of the People's Republic of China on the Protection of Cultural Relics, the principle of keeping these cultural relics in their original state must be adhered to in the repairs and maintenance at the sites and in any removal involving these sites.

However, the other part of the street was still in an awkward situation. For a long time, local residents had to pass by those ruins every day. According to field surveys and interviews with locals, a core issue was raised. Is there an appropriate way to revitalize the street and meet all of the following goals at the same time?

- Keeping the cultural relics in their original state
- Displaying the historical and cultural value of the street
- Reusing the broken walls and wooden structures from the ruins
- Providing vitality for modern community life



Figure 2: Public Space Renovation Plan for Pingshi Street.

Tangible 'Reflection Alley' and intangible open museum

Therefore, the planning and design team put forward the concept of 'Reflection Alley', regarding the Pingshi Street as an open museum. No matter tangible or intangible, each historical fragment here is an exhibit. It can be as large as a courtyard or as small as a kettle. It may be a dish of traditional fried dumplings or a piece of



memory told by the elders. In other words, not only the material cultural remains are cherished, but also the memories of local residents will be recalled.

Six potential nodes in Pingshi Street were selected to further develop the detailed plan. Just like the preparation before the display, each historical fragment here went through the cleaning up, appraising and repairing process. In addition to the protection, more efforts had been made to renovate public space and stimulate community vitality. The 'reflection' idea can be perceived in the following ways:

- Transparent materials were used to complement the street interface. It helps to reproduce the original scale and texture of the historic blocks and provide containers for social activities.
- Vertical sections of the architectural structures left over from the demolition were protected by special glass covers. Some old photos of the building were hung on the wall which had an educational subtext.
- The trusses of architectural structure that remained in the site were redesigned and integrated into new communication space.
- If the street facade on one side had been missing, glass was used to reflect the appearance of the other side of the street to reshape the past image.
- To build a landmark at the street entrance reusing those old objects and discarded materials from the site.

In this project, it is the culture-oriented conservation of tangible heritage, which promotes the intangible heritage. It enables the street to 'self-describe', providing a new way of thinking for the conservation of living heritage. Pingshi Street has been revitalized by new vitality and integrated into the contemporary community.

Project 2: conserve tangible heritage in an intangible way

In the Xiaoxihu project a 'Five-stakeholder Platform' is set up to support the progressive revitalization of a historic area. Through in-depth community engagement, our planning and design team have developed a three-phase planning guide helping locals to protect and repair their residences thus stimulating the vitality of community life.

Core issue of Xiaoxihu

The project site 'Xiaoxihu' is located in the south part of Nanjing inner city. The total area is about 4.69 hectares, with 1,390 households and 2,600 people living there. The value of heritage conservation here lies in its well-preserved traditional street pattern and a large number of traditional Ming and Qing Dwelling houses.

Now the block is among the list of 22 historic townscape conservation areas in Nanjing, which was announced in *Conservation plan of Nanjing historic city, 2010-2020* by municipal government. This plan divided historic areas (selected to be protected) into three protection levels, namely, historic districts, historic townscape conservation areas and general historical areas. Xiaoxihu belongs to the middle protection level, emphasizing both authenticity and flexibility in terms of protection requirements¹⁴.

The core issue of Xiaoxihu was the contradiction between the dilapidated living conditions and the growing demand for modern life. The per capita living area was less than 12 square meters according to the statistics of 2015. Apart from the high density, another imminent dilemma was the lack of basic living facilities (toilets, bathrooms, sewer system, prevention of roof leakage, etc.). It was imperative to expand the living space intensively, improve the living conditions efficiently, and ultimately enhance the vitality of the community on the basis of inheriting historical features¹⁵.

The government had organized some investigation and concept planning work about the final vision of this area. However, those ideas were a mere scrap of paper, without practical implementation plan guiding the whole regeneration process¹⁶. Another reason for the suspension of the ideas was related to the nearby tourist attraction, 'Laomendong'. It had a similar historical background to Xiaoxihu. Driven by consumption culture, this area had undergone a thorough relocation of local residents at the cost of high demolition and reconstruction funds. This kind of commodity-oriented renewal can maximize land benefits in the short term, and meanwhile lead to the depression of the overall living atmosphere of the historic blocks. After comprehensive consideration, the government decided that the Laomendong's mode will no longer be applied to Xiaoxihu. A culture-oriented and people-centred revival approach that would not just consider the material space was waiting to be presented.

¹⁴ Nanjing Government, "Conservation plan of Nanjing historic city, 2010-2020."

¹⁵ ZOU Jianguo, "The inheritance and development of residential space."

¹⁶ DONG Jia, "From Design to Management."



Intangible ‘Five-stakeholder Platform’

It was indicated in the guidance note (People-Centred Approaches to the Conservation of cultural heritage: Living Heritage) published by ICCROM in 2016:

Communities contain capacities and assets that outlast political or professional structures and complement specialist knowledge and skills. Where the relationship between people and heritage has been weakened or broken, a people-centred approach seeks to identify the problems and rectify them. In this context, heritage is seen as having the potential to play an active role in communities and bring benefits to people, thereby demonstrating that heritage is meaningful to society, as well as gaining society’s support for its on-going use and protection.

The crux of the controversy lied in the fact that individual residents of Xiaoxihu had not formed an organized whole to participate in the coexisting multi-stakeholders’ game with the equal rights to speak. With this in mind, the planning and design team firstly conducted in-depth interviews with 216 property units to stimulate more extensive community involvement. Outputs included a deeper understanding of the specific desire of each household to improve their living standards, as well as an ‘identity file’ with photos and requirements for each property unit. Moreover, we also unearthed some potential community leaders who were willing to speak for the interests of the residents. These above were conducive to providing residents with personalized solutions, predicting the difficulty of advancement and implementation of the follow-up demolition plan, and ultimately strongly guiding the direction of the overall conservation strategy.

Throughout the design process, there were various forms of public participation, such as public exhibitions, cognitive map graffiti events, community open days, and the establishment of social media platform public pages¹⁷. More often, the exchanges within five stakeholders’ platform were achieved through meetings. A vivid and easy-to-read ‘Five-stakeholder Platform Guidebook’ defined the rights and responsibilities of each party:

- Planning Bureau and other government functional departments are responsible for formulating and interpreting the policies and handling specific policy issues arising during the process.
- Sub-district and Community Neighbourhood Committee undertake a large number of basic tasks such as opinion collection, policy advocacy, and coordinating the specific contradictions in the process.
- The planning and design team communicates directly with the residents, proposes revival plans, answers technical questions of architectural design, and guarantees the goals and effects of the planning implementation.
- The major investor is in charge of the infrastructure construction and the disposal of public housing. Commissioned by government or residents, construction team works according to the architectural design plans.
- With the help of community autonomy organization, local residents can have equal dialogue with other stakeholders and put forward their requirements of the architectural design.



Figure 3: Public exhibition. Figure 4: Community open day. Figure 5: Cognitive map graffiti event.

Tangible construction guide

The conservation of Xiaoxihu is a continuous process of development. A three-phase, small-scale, progressive construction guide was developed for different types of functional units. In addition, the design team chose a typical site for each type of functional unit for a pilot design.

- In the first phase, most of the work will be carried out to improve people’s livelihoods. It will last for 3 to 5 years to address the issues that local residents are most concerned about, such as improving infrastructure,

¹⁷ XU Yiran, “Participatory urban design methods.”



adding toilets and kitchens, etc. The reserved and some newly added public service spaces will start renovation or construction in the form of government co-ordination. Residents can freely choose whether to accept compensation for demolition and move at any time. With reference to the style guide, residents can independently update relatively good residential units. Community autonomy organizations are still in the process of nurturing and the five-stakeholder platform has not yet been completed¹⁸.

- During the second phase, the five-stakeholder platform is established, on the basis of which all types of functional units will be built. The whole process is estimated to take 5 to 7 years. Government will mainly promote the construction of public service space and the conservation of historic buildings. Correspondingly, the renovation of general dwelling units is led by community autonomy organizations. Once a consensus has been reached among residents sharing the same house, they can seek help from the five-stakeholder platform and apply for the permit. Reaching the consensus as soon as possible gives priority to improving their dwellings.

- The third phase is expected to take another 3 to 5 years, focusing on the joint updating of the general dwelling units. The five-stakeholder platform undergoes constant adjustment and improvement while the construction and renovation of public space have ended. Inevitably, there will be some groups that do not reach consensus and will continue to negotiate abided by the principle of residents' free will and five-stakeholder consensus.

In summary, the Xiaoxihu project itself was an innovative attempt of collaborative planning, achieving a full range of social mobilization, and gaining in-depth design results and extensive social influence. The most precious intangible heritage here is the residents themselves and their lifestyle, which is the core of the conservation of living heritage. The intangible people-centred approach helps to give equal respect to different stakeholders, particularly safeguard the interests of disadvantaged communities, avoid potential conflicts, and ultimately achieve a smooth conservation of tangible heritage.

By the end of 2017, the first phase of work has made some progress in accordance with the guide. A pilot part of the municipal common ditch is under construction. Some buildings planned to become public service spaces in the future are expropriated under the premise of respecting the wishes of residents and property owners.

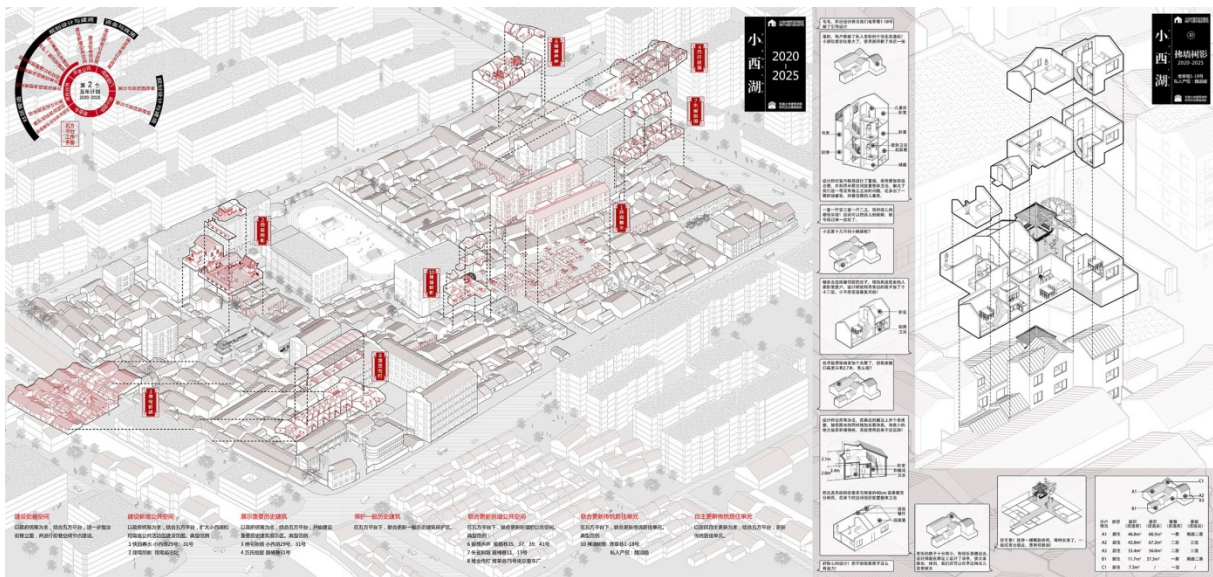


Figure 6: Construction guide for different types of functional units for Xiaoxihu.

Conclusions

Living heritage is defined as a heritage place maintains its original function and connects with community. Its essential characteristic, ‘continuity’, does not mean invariance, but is accompanied by changes in both tangible and intangible components. Over the last two decades, protection scope of ‘cultural heritage’ has been continuously enriched worldwide. UNESCO and ICCROM put more emphasize on sustainable development in terms of economic, environmental and social factors, and the living dimensions and community involvement of heritage sites, to reconnect the different cultural traditions with socio-economic dynamics that are present in any

¹⁸ ZOU Jianguo, “The inheritance and development of residential space.” essential



contemporary city. In China, especially in the cities with higher levels of citizen culture, shows the similar trends shifting from commodity-oriented renewal to culture-oriented and people-centred revival in living heritage conservation practices. There are two main reasons for these trends: the increasing importance of culture as a kind of soft power at the top-down level, and the continuously strengthened bottom-up civil coordinating forces.

From the two projects (Pingshi Street and Xiaoxihu) introduced above, one can easily perceive the gratifying progress from conventional conservation methods separating material and non-material parts, to new small-scale, progressive and organic revival approaches with tangible and intangible interactions. Whether the starting point is 'tangible' or 'intangible', the ultimate goal is to achieve long term sustainability in safeguarding heritage and its hidden culture with an empowered community engaged in decisions made for them and their heritage, which is the real motivation for advocating culture-oriented and people-centred revival in the process of protecting living heritage. The systematically approaches of living heritage can be seen in the ICCOM guidance note *People-Centred Approaches to the Conservation of cultural heritage: Living Heritage, 2016*, from which one may have a deeper understanding of living heritage.

More efforts should be placed on the continuous tracking and management of living heritage. After all, there is no end or a simple completion to maintain the vitality of community and reach the harmonious coexistence with society. Besides, the economic or commercial interests mentioned above are not unimportant as well. They are indispensable sources for the restoration work and need to be considered. In the context of this article, the emphasis is on the perception of a comparatively more noteworthy issue. In fact, how to balance economic interests and original continuity of community is also a problem that needs further exploration.

Acknowledgements

The conceptualization of this article was stimulated by the preparation for a new magazine initially called Human-habitat Heritage started in July 2017 for which the author is responsible. The author would like to thank all the respondents for their valuable input and for the materials they provided for this paper. This paper would not have been possible without the assistance from my design team members in Pingshi Street and Xiaoxihu projects. Many thanks to Prof. WANG Jianguo, academician of Chinese Academy of Engineering, my tutor in Southeast University, China, for his support and guidance at various stages of the research. Special thanks to CHEN Xiaohui, director and my tutor in Urbanisation and Urban Rural Planning Research Centre of Jiangsu, China, for her encouragement in the process of the full paper writing.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

XU Yiran is an urban planner, urban designer and young scholar of Urbanisation and Urban Rural Planning Research Centre of Jiangsu, China. She participated in some research and projects on sustainable urban planning and design at Kungliga Tekniska Högskolan, Sweden and Technische Universität Berlin, Germany in 2014. One of her recent studies at Southeast University, China in 2017 focused on the development of participatory approaches for urban design under the new environment of network data and media. She is interested in urban form and public space quality, eco-city, and heritage conservation (the reuse practices of historic buildings and the role of stakeholders involved).

Bibliography

- China Youth Network. "Xi Jinping talked about the protection of cultural heritage." September 15, 2017. http://news.youth.cn/tbxw/201709/t20170915_10721201.htm.
- Court Sarah, Wijesuriya Gamini. "People-Centred Approaches to the Conservation of Cultural Heritage: Living Heritage." ICCROM, 2015.
- DONG Jia. "From Design to Management -Task Shift of Architects in Urban Regeneration Process." The Asian Conference on Sustainability, Energy & the Environment, 2016.
- Nanjing Government. "Conservation plan of Nanjing historic city, 2010-2020."
- People's Daily Online. "Ganxi's Mansion - The ninety-nine and a half rooms." July 23, 2012. <http://en.people.cn/90782/7884356.html>.



Southern Weekly. "Urban Construction in Nanjing Progresses in Debate." June 2, 2005.
<http://news.sina.com.cn/c/2005-06-02/17186826875.shtml>.

Webber Ndoro, Tauvinga Pascal. "The Vandalism of the Domboshava Rock Painting Site, Zimbabwe: Some Reflections on Approaches to Heritage Management." In *Conservation and Management of Archaeological Sites*, Vol. 6, N. 1, 2003: 3-10.

Wijesuriya Gamini. "Conservation in Context." In Falser, M.S., Lipp, W., Tomaszewski, A. (eds.) *Proceedings of the International Conference on 'Conservation and Preservation-Interaction between Theory and Practice, In memoriam Alois Riegl (1858-1905)'*, Firenze, Edizioni Polistampa, 2010: 233-248.

Wijesuriya Gamini. "Living Heritage: A summary." ICCROM, 2015.

Wikipedia. "Convention for the Safeguarding of the Intangible Cultural Heritage." October 17, 2013.
https://en.wikipedia.org/wiki/Convention_for_the_Safeguarding_of_the_Intangible_Cultural_Heritage.

Wikipedia. "UNESCO Universal Declaration on Cultural Diversity." November 2, 2001.
https://en.wikipedia.org/wiki/UNESCO_Universal_Declaration_on_Cultural_Diversity.

Wikipedia. "Nanjing." April 6, 2018.
<https://en.wikipedia.org/wiki/Nanjing>.
<https://en.wikipedia.org/wiki/Nanjing>.

XI Jinping. "Secure a Decisive Victory in Building a Moderately Prosperous Society in All Respects and Strive for the Great Success of Socialism with Chinese Characteristics for a New Era." 19th National Congress of the Communist Party of China, October 18, 2017.

XU Yiran. "The inheritance and development of participatory urban design methods under the background of Internet-plus era." Mater diss., Southeast University, 2017.

ZOU Jianguo "The inheritance and development of residential space based on property unit in Xiaoxihu, old south of Nanjing." Mater diss., Southeast University, 2016.

Image sources

Figure 1: Conceptual diagram made by XU Yiran (the author).

Figure 2: Design Proposal for Pingshi Street project made by XU Yiran, YUAN Man, SHEN Bowen, and LYU Mingyang, Southeast University, China, 2015.

Figure 3-5: Photograph by ZOU Jianguo, 2015.

Figure 6: Design Proposal for Xiaoxihu project made by urban design team, Southeast University, China, 2015.



Succession of the image of the city in the movement for urban design by local proprietors in Ginza from pre-war to post-war

Takahiro Miyashita*, Naoto Nakajima**

* *Doctoral Student, Department of Urban Engineering, University of Tokyo, miyashita@ud.t.u-tokyo.ac.jp*

** *PhD, Department of Urban Engineering, University of Tokyo, naoto@ud.t.u-tokyo.ac.jp*

This paper revealed the development of the movement for urban design by local proprietors in Ginza, Tokyo from 1930's to 1960's. Ginza Street is known as one of the first modern style streets in Japan. This street has developed greatly by modern buildings and advanced urban design methods in modern times and after although it has also suffered serious damage twice by Great Kanto Earthquake (1923) and bombing in 1945. Therefore, buildings and urban space have seen repeated reconstruction and renewal until today. On the other hand, if we pay attention to local proprietors, we can understand that they have developed the movement for urban design of Ginza Street continuously and succeeded the awareness of the issues toward urban space. So this paper finds a new historical context of Ginza through the elucidation of development of their movement from viewpoints of how the awareness of the issues and the image of spaces have changed.

Keywords: Modernization of the city, History of Machizukuri, Shop-owners' Association, Ginza

1. Introduction

Ginza Street, is known as a main street of Tokyo, is one of the first modern style streets in Japan. The starting point of its modern history was the construction of "Ginza Renga-gai (Ginza Brick Town)" in 1872 (Meiji Period.) This street has developed greatly with modern buildings since that time, and scholars have studied it from various viewpoints. We can find several important previous studies in fields of planning history and architectural history. Fujimori (1982) approached the history of Ginza Street in terms of architectural history and studied the development of planning of Ginza Renga-gai by the Meiji Government¹. And he also examined changes of architectural styles a lot of architects had used in development along Ginza Street from the Meiji period to pre-war in the Showa period² (1868-1945.) Hatsuta (2004) revealed changes of urban functions and development along the street in terms of formative history of a busy street³. Okamoto (2003) documented changes of land use and land ownership in Ginza since the Edo period and considered the relationship between these changes and urban development.

Ginza Street suffered catastrophic damage three times, by fire in the Meiji period (1872), by the Great Kanto Earthquake (1923) and U.S. bombing in 1945. These disasters razed buildings to the ground. Three scholars mentioned previously regard these disasters as turning points in formative history of Ginza and indicate the extinction of urban context. In addition, they grasp a town of Ginza as the aggregate of architectures and draw history of Ginza from viewpoints of the accumulation and changes of architectural actions by various architects. Considering these studies, we can understand the historical context that Ginza Street has been developed through overcoming serious disasters and repeating reconstruction and renewal by modern architectures.

On the other hand, we can find another historical context if we pay attention to local proprietors' actions. There is a store association: "Ginza Street Association (GSA)" composed of proprietors in Ginza Street. They have been continuously involved in the urban design of Ginza Street since their establishment in 1919. Although Miyashita (2018) revealed the change of their movement⁴, the consideration on the historic significance of their movement was insufficient. So this paper paid attention to consistency of the issues, the image of spaces, and a role as a place where local proprietors argued. And we find the historical value in the elucidation of arguments on townscape they have desired and reveal development of their movement from pre-war to post-war.

2. Viewpoints of analysing and methods

GSA has tackled arguments on identities of their town, Ginza and ideal townscape they desired since the establishment of an organization. Especially, they started large-scale movement in 1930's in preparation for the 1940 Tokyo Olympics and Japan Expo. They were aiming for realization of comfortable urban space for shoppers and beautiful townscape by international events in 1940. But it became difficult to continue their actions in the war regime of Japanese society after 1938. To make matters worse, buildings along the street were burned down by air raids during WWII. Although it suffered serious damage, they restarted their movement as



Figure 1: Current Ginza Street

soon as the war terminated in 1945. And they achieved the removal of telegraph poles and the abolition of the tram in 1960's.

It is worthy of notice that the organization of GSA has played a role as a place where local proprietors argued the future image of their town for a long time. The existence such a framework enabled them to succeed the awareness of the issues toward urban space from pre-war to post-war. So this paper reveals changes of a place they have argued their town and the image of spaces shared among them. Then, based on these analyses, this paper finds a new historical context different from existing ideas based on the history of architectures in Ginza.

This paper pays attention to various internal materials kept in the office of GSA. For example, a great number of scrapbooks have been edited since 1936. We can find articles on not only their movement but also urban development in Ginza in these scrapbooks. This paper reveals historical facts on their actions through them. In addition, this paper carried out searching of major newspapers by digital archives of Yomiuri Shimbun and Asahi Shimbun as it is unclear whether all articles about GAS have been collected in these scrapbooks. We also pay attention to internal materials such as the record of proceedings of the governing body. All policies of movement have been decided in the governing body. Therefore, we understand the process of arguments inside through these texts. In addition, this paper reveals the change of external claims through petitions to the authorities and articles in bulletin of GSA.

3. Development of the movement by Ginza Street Association in 1930's

3.1. Development of the movement aimed for the Tokyo Olympics

In July 1936, it was decided that two international events: Olympic Games and Expo were going to be held in Tokyo in 1940. With this decision as a turning point, the importance of urban design in Tokyo was argued by newspapers. GSA decided to tackle movement for the removal of telegraph poles and the abolition of the tram in these situations⁵. A promotor of this movement was Koji Hosaka (The vice-president of GSA.) A newspaper article in those days reported that this movement had been started based on an awareness of the issues that these telegraph poles and overhead wires of the tram in Ginza Street made townscape ugly.

We can understand the awareness of the issues they had and the image of ideal townscape from their remarks in those days. For example, we note the "Conversation meeting on the symbol of metropolis" supported by a newspaper company on June 1st, 1936. 22 proprietors in Ginza including the president and the vice-presidents of GSA participated in this meeting and argued problems on townscape and identities of their town. At the beginning, a facilitator asked them, "Which way should Ginza Street aim at a promenade or a shopping street?" All participants answered "Ginza Street should be a promenade" for this question. An expression of



Figure 2: Ginza Street in pre-war (1936)
Source: Kyobashi Library, Tokyo



Figure 3: Buildings along the street (1934)
Source: Ginza Street Association

“promenade” was used as the image of a street with widened sidewalks, rich green, gorgeous show windows and bright neon signs. Participants stated as follows⁶.

“Show windows in Ginza are greatly inferior to that of Paris. In addition, neon signs are also inferior to that of Times Square in New York. We have to learn about usage of spaces from these cases.”

Umekichi Kosaka (Owner of a restaurant, Hibiya Matsumotorou and Taishoken)

Thus they shared the directionality that Ginza Street should aim at the image of spaces idealized Western cities. On the other hand, they also desired a Japanese style townscape. There were not many Japanese style architectures in those days though a lot of buildings had been built as reconstruction buildings after Great Kanto Earthquake in 1923. Most of these buildings adopted Western style, Historicism and Art Deco. But local proprietors didn't necessarily appreciate such a townscape.

“I agree with the idea of creating a nationalistic townscape. It must not be the imitation of Western cities. It is worthless that creating townscape that visitors from foreign countries can't recognize as Japanese city. I desire Japanese style architectures like old castles are built more.”

Yaichi Tamaki (Senior adviser of GSA)

Thus local people shared two inconsistent images of townscape. The former image of town scape idealized Western cities had been shared since construction of Ginza Renga-gai. On the other hand, the later image called “Japanese style townscape” and “nationalistic townscape” came to be shared as it was supposed that many visitors would come to Ginza from foreign countries in 1940.

3.2. Development of movement for the Tokyo Olympics (1940)

GSA submitted a petition to the mayor of Tokyo and the chair of city assembly to assert the importance of the abolition of the tram in October, 1936⁷. But a reaction from the authorities was poor as the fare of trams became the yield of taxes⁸. So GSA took noticed of Nihon Toshi-Fukei Kyokai (The Society of landscape of cities Japan) as a new partner for cooperation. Toshi-Fukei Kyokai was established by Yoshitane Tochinai (urban critic) and composed by private influential person such as journalists, professors, presidents of companies, and authors⁹. GSA decided to cooperate with this organization to advance their movement.

Two organizations named the team “Ginza judging team,” and they hold an inspection and a conversation meeting on November 24th. Participations from Toshi-Fukei Kyokai proposed the following ideas in this meeting¹⁰.

“Japanese style architectures should be rebuilt to Western style buildings as there is not the sense of unity of townscape in Ginza Street.”

“Buildings along the street should have at least 4 stories to be the unified townscape.”

“Each building should have a show window on the 1st floor.”

“Street trees should be changed from willows to ginkgoes as willows in Ginza are very scanty.”



Figure 4: Sidewalk of Ginza Street (1936)
Source: Kyobashi Library, Tokyo



Figure 5: Noise survey by Ginza prosecutor team (1936)
Source: Ginza Street Association

“Bicycles parked along the street should be removed.”

“The tram should be abolished, and GSA should donate the stylish community bus to the city government.”

“Street lights should be renewed.”

“The number of entrances of the subway should be increased.”

Though the height limit in Ginza Street was then 31m by the building regulation law, most of buildings along the street were one story or two stories except department stores. In addition, willows were growing poorly because of a decrease in ground water¹¹. Toshi-Fukei Kyokai criticized these situations harshly. In the end of this meeting, they decided to tackle the removal of telegraph poles and the abolition of the tram together. Then, based on these arguments, they hold a survey of noise pollution in Ginza Street on December 19th. The purpose of this survey was indicating the problems of the tram to society¹², and newspapers reported this survey on a large scale.

Thus GSA and Toshi-Fukei Kyokai developed movement for the realization of “Urban Beauty.” However these two organizations had different images of ideal townscape. Although local proprietors had two directions of images: modern townscape idealized Western cities and Japanese style townscape, Toshi-Fukei Kyokai criticized Japanese style architectures and willows. Especially, Yoshitane Tochikai asserted that willows weren’t suitable for street trees, and he stated, “Ginkgos are ideal trees to decorate the modern main street” in the conversation meeting mentioned before¹³. For this claim, Koji Hosaka accepted the change of street trees to ginkgoes. As proprietors had regarded willows as the symbol of “Japanese style townscape,” they accepted this claim conditional on planting historical tree species in Japan. However, this decision wasn’t carried out as conditions of willows had changed for the following year¹⁴.

3.3. Release of “Ginza remodelling plan” and the end of the movement for “Urban Beauty”

In January, 1937, GSA released a plan for redesign of urban space from medium and long-term perspectives. The plan was named “Ginza Kaizo Keikaku (Ginza remodelling plan.) The contents are as follows¹⁵.

“Create a beautiful busy street through the removal of telegraph poles and reconstruction of buildings.”

“Promote pedestrianization through the abolition of the tram and the ban of through traffic.

“Ban running of cars except the bus in a period of time with many crowds.”

“Design small parks on the street in such block, and keep atmosphere clean by lawn and shrubs.”



The contents of this plan are different from the proposals by Toshi-Fukei Kyokai in conversation meeting in December, 1936 (3.2, 1.10). But these proposals affected their movement not a little as Hosaka made referenced in introducing the rule of minimum height of buildings in the media.

In addition, GSA started negotiation with the city government on the removal of telegraph poles, and they reached an agreement in February, 1937¹⁶. Thus they finally anticipated the realization of one of the main themes.

However, these opportunities were lost as Japanese society entered the war regime after 1938. The biggest turning point was enactment of the law to ban the late-night business of stores except restaurants in 1938. This regulation led to the sluggishness of commercial activity in Ginza. In addition, neon signs were banned for the purpose of reduction of the electricity consumption in the same year. To make matters worse, the agreement to remove telegraph poles was cancelled by the Ministry of Finance for the reason of reduction of the budget in the war regime¹⁷. Thus opportunities for “Urban Beauty” were lost, and the GSA movement ended in failure.

4. Development of the movement by Ginza Street Association in post-war

4.1. Efforts in the war damage revival period

Buildings in Ginza suffered serious damage by air raids in 1945. Nevertheless GSA undertook the reconstruction of a shopping street as soon as the war terminated, and they procured timbers for temporary buildings. In addition, they submitted “Ginza reconstruction plan” to City Planning Division of the Tokyo metropolitan government in December, 1945¹⁸. The contents included ideas: the removal of telegraph poles, the abolition of the tram, the change of street trees from willows to ginkgos and the stipulating of minimum height of buildings. In this plan, the issues they had shared in 1930’s was succeeded though it was under the condition most buildings had been burnt down. In addition, ideas proposed by Toshi-Fukei Kyokai in pre-war (3.2, 1.10) were included. We can also understand that proprietors succeeded ideas they had shared as the image of ideal townscape called “promenade” in 1930’s. On the other hand, the image of Japanese style townscape called “nationalistic townscape” wasn’t expressed in this plan.



Figure 6: Sketch of buildings along Ginza Street
Source: Shogyo Toshi-bi Kyokai, *Encyclopaedia of Ginza Past and Present* (1951)



Although this magnificent plan wasn't put into practice due to supply shortages in the war damage reconstruction period, GSA achieved the improvement of street space. Although a road of Ginza Street was under the control of the Tokyo metropolitan government, they didn't have enough budgets for space design in Ginza Street¹⁹. So GSA played a role of the manager of sidewalk substantially in those days and constructed new pavement and street lights from 1949 to 1951. These street lights were selected in a design competition. The judge was Hideaki Ishikawa (the chief of construction bureau of Tokyo metropolitan government, urban designer) who had tackled movement for "Urban Beauty" with GSA as a member of Toshi-Fukei Kyokai in 1930's²⁰. We can also infer their passion to design new townscape from the fact that the design of street lights was entered in the Register of Designs.

When we pay attention to then townscape in Ginza Street, we can find show windows in most buildings though many of them were temporary buildings. Local proprietors had found the value in show windows since pre-war and giving advices on lighting and display in shops were main tasks of GSA in those days.

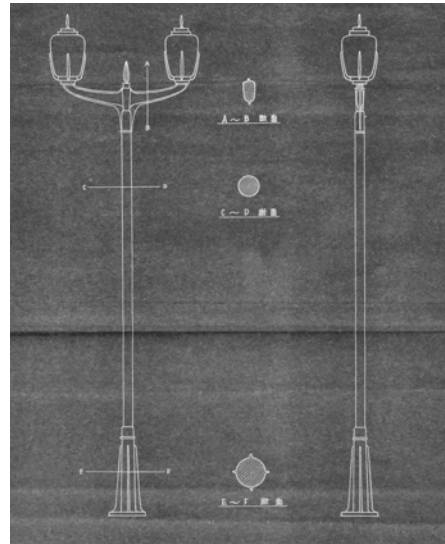


Figure 7: New street lights
Source: Ginza Street Association

4.2. Development of the movement for the Tokyo Olympics (1964)

In December, 1955, GSA decided to tackle movement for the abolition of the tram again²¹. This was one of main themes in "Ginza reconstruction plan," and proprietors more than 80% demanded to remove them according to a questionnaire survey for members of GSA. Although they imagined a desire to create the planting strip between roadway and sidewalk after abolishing the tram, a response of the metropolitan government was poor. The authorities claimed that the tram played important roles in terms of avoiding congestion of the passenger of other public transportation²⁰. So they invited essays and ideas on redesign of Ginza Street in prize competition to raise public interest in urban design in 1957. Experts such as Eiichi Isomura (urban sociologist) and Yoshiro Taniguchi (architect) were invited as judges, and winning works were selected from 273 works²². And Ginza Street Association released a principle of movement on June 6th, 1958. The following contents were decided based on winning works of a competition²³.

"Achieve the removal of telegraph poles and the abolition of the tram."

"Promote to build communal buildings and make the height of buildings even."

"Redesign buildings to be able to go through to back streets."

"Design show windows in each building continuously."

"Design new show windows between roadway and sidewalk."



Figure 8: Ginza Street and the tram
(1955)
Source: Ginza Street Association

In addition, they sent in a petition for the abolition of the tram in October, 1959²⁴. Although they sent a same petition again in February, 1961, the Metropolitan Assembly didn't adopt this petition²⁵. The competent authorities judged that the tram still had a big value in terms of transportation.

On the other hand, GSA developed arguments on construction of pavement on sidewalk with the competent authorities of street space, Tokyo National Highway Office. In August, 1963, they reached an agreement on carrying out of construction of new pavement by the Tokyo Olympics in 1964²⁶. Although local proprietors had a desire to use granites for pavement, they had to give up as it became difficult to dig up the road surface if it was made of granite²⁷. As a result, National Highway Office decided to pave coloured asphalt, and GSA had the decision of a colour of asphalt. Shiro Kimura (the managing committee of GSA, dress designer) selected "pigeon" (beige tones) considering colours of building and pedestrians' clothes²⁸. The construction was completed in August, 1964.



Thus the holding of the Olympics led to increase proprietors' desire for urban design same as pre-war. And they were proud that Ginza symbolized Japan. We can find description as follows in the bulletin of Ginza Street Association²⁹.

“We can't accept French style Ginza and American style Ginza. We want to invite people from the world to Ginza of Japan.”

But a viewpoint to desire traditional townscape wasn't shared among local proprietors, and they had the image of “promenade” same as “Ginza reconstruction plan” in the war damage revival period.

4.3. Arguments for large-scale construction of Ginza Street

In 1967, it was seen the epoch-making change of arguments in the metropolitan assembly. As the authorities had a lot of problems about the operation of the tram in terms of traffic congestion and financial difficulties in those days, they decided to abolish the tram in Ginza Street³⁰. GSA considered this decision as a chance to achieve the large-scale construction of Ginza Street. In addition, they had planned holding of “The Great Ginza Festival” when they heard this news. So they wanted to hold a big event using the whole street space after the realization of construction³¹. They petitioned to redesign street space to National Highway Office as soon as Tokyo metropolitan government decided to abolish the tram. As a result, National Highway Office decided to carry out the overall redesign of street space including the removal telegraph poles based on this petition³². Thus GSA had an opportunity to achieve their longtime aims, the abolition of the tram and the removal of telegraph poles at the same time.

National Highway Office had a plan to pave sidewalk using concrete blocks at first. In contrast to this plan, GSA proposed the following idea to re-use the granite paving stones of the tram³³. As National Highway Office accepted this proposal, GSA achieved their aim they had given up once four years before.

Thus GSA expressed their opinions to the authorities though the movement for urban design from pre-war. On the other hand, they didn't have a clear policy on street trees. Willows in Ginza Street were getting poor in growth under the influence of decrease in ground water and car fumes in 1960's. Arguments whether should change tree species occurred among local proprietors based on these situations. Keizo Uekusa (the managing committee of GSA) stated, “Willows can't harmonize with modern buildings though they used to harmonize with Japanese style architectures in days of old³⁴.” However, board of governors couldn't come to the decision about this argument as some members took objection to remove them. As a result, they decided to leave the choice on street trees to National Highway Office in order to make negotiation for the redesign of Ginza Street a success³⁵. Based on this offer, National Highway Office decided to remove willows and plant raphiolepis umbellata³⁶.



Figure 10: Parade in “Great Ginza Festival (1968)
Source: Ginza Street Association



Figure 11: Willows in Ginza Street (1960)
Source: Ginza Street Association



Figure 9: Ginza Street after large-scale construction (1968)
Source: Ginza Street Association

Construction of Ginza Street was carried out from December, 1967, the day the tram was abolished, and it finished by the day of “Great Ginza Festival” on October 11th, 1968³⁷. The details were the removal of telegraph poles and overhead wire of the tram, the widening and paving of sidewalk, designing of new street lights, planting of new street trees, and the construction of a common duct under sidewalk. And large-scale parades and the big bargain sale on redesigned street in “Great Ginza Festival.”

5. Conclusion - A new historical context of Ginza found in the continuity of the movement by local proprietors

This paper revealed the development of the movement for urban design by local proprietors in Ginza from 1930's to 1960's. Figure 12 is a chart on the change of their movement. We can find things in common on contents of “Arguments inside of Ginza Street Association,” “Release of private plans” and “Petitions to the authorities.” If we pay attention to consistency of the issues and the image of spaces, we can understand themes of their movement were succeeded from pre-war to post-war. Especially, it's worthy of note that the contents proposed pre-war were included in “Ginza reconstruction plan” which was planned under the situation of great damage by bombing. And the steadfast repetition of these arguments had an influence on policies and constructions by the authorities in 1960's. These two policies have been carried out in various cities by administrative authorities in post-war. But they have historical meanings as the goal of continual movement by local proprietors since pre-war in this case.

GSA continued being interested in urban space of Ginza Street after 1970's. Although they had developed the movement through petitions and release of private plans by 1970's, they came to participate in the urban planning administration of Chuo Ward, Tokyo as members of “Ginza Machizukuri conference” after 1988. In addition, GSA and Chuo Ward cooperated for planning of the establishment of district plan in 1990's. Machizukuri by local people entered the new stage.

The organization of GSA has played a role as a place where local proprietors argued the future image of their town consistently for a long time. It can be thought that the succession of such a platform has a great value to take over the awareness of the issues to next generation. On the other hand, the image of spaces shared among them has changed with the times. In 1930's, they had two different images of ideal townscape: the image called “promenade” idealized Western cities and the image called “nationalistic townscape” to introduce characteristics of a Japanese town to visitors from foreign countries. But the later image vanished in post-war though they still had a pride that “Ginza was a symbolic town of Japan.” These tendencies appear conspicuously in arguments on street trees. Local proprietors found the value in willows as the symbol of “Japanese style townscape” in a period



they placed importance on the later image of spaces. But the value of willow wavered in the post-war period as they lost interest in Japanese style townscape. As a result they decided to leave the choice about street trees to National Highway Office.

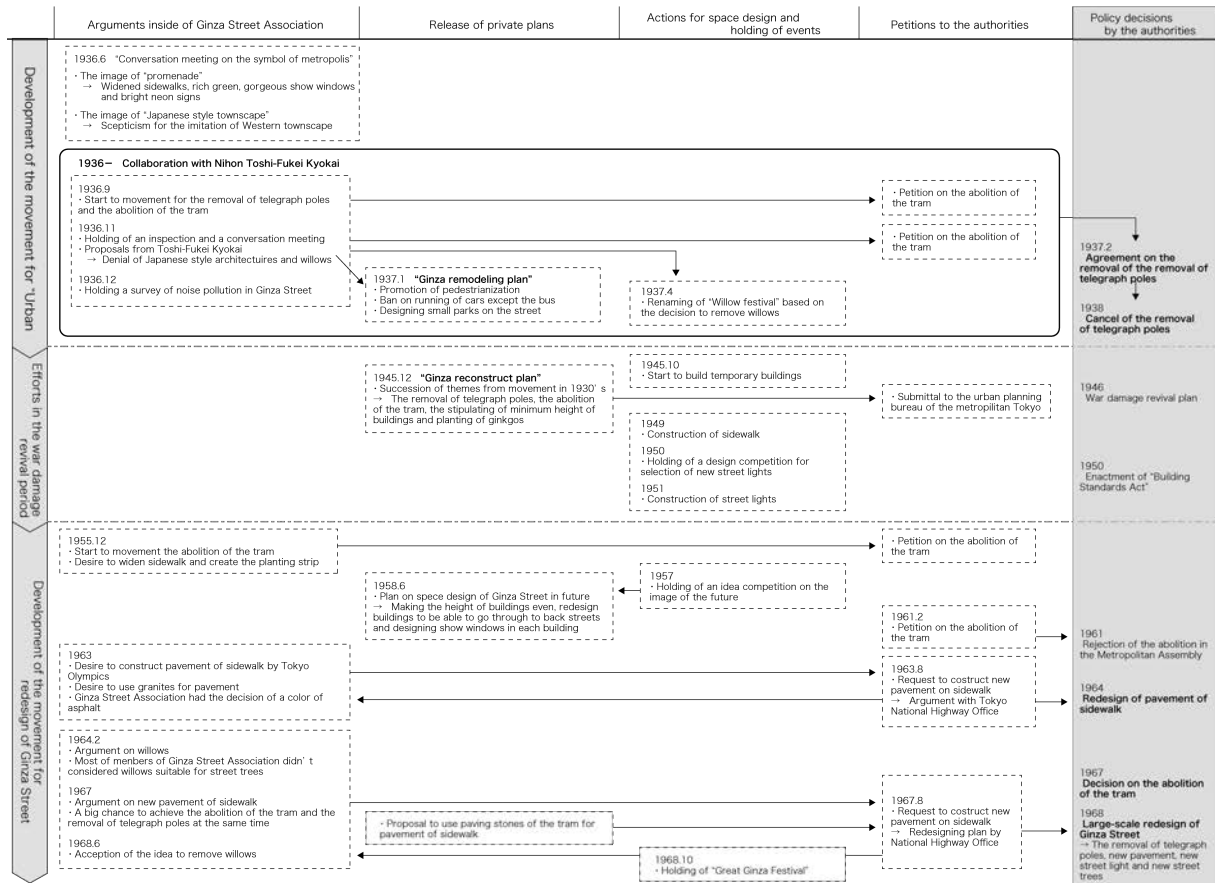


Figure 12: Development of the movement by Ginza Street Association from 1930's to 1960's

Thus this paper found a new historical context of Ginza through placing importance on the accumulation of arguments by local proprietors. This context shows us the different historical view from that of the past found through history of the building of architectures by architects in Ginza. Urban space designed by local people was definitely not many. The history of their movement hasn't paid attention as we can't find the spatial fruits easily. But this historical context shows us the accumulation of time they have attempted to create their town. Finding various historical contexts should lead to the re-recognition of the richness of time in urban space.

¹ Terunobu Fujimori, *Plans of Tokyo in the Meiji period* (Iwanamisyoten, 1982)

² Terunobu Fujimori, *Architectural design in Ginza and Architects*, Shiseido ed., *Ginza modern and architectural design* (1993) 6-39

³ Toru Hatsuta, *Downtowns in modern times* (University of Tokyo Press, 2004)

⁴ Takahiro Miyashita, Naoto Nakajima, *A study on development of movement for urban design by Ginza Street Association*, Tokyo, J. Archit. Plann., AIJ, Vol.83, No.744 (2018) 241-249

⁵ Yomiuri Shimbun (Sep. 9, 1936) 5

⁶ Jiji Shinpo (Jun. 7, 1936) 4-5

⁷ The contents of a petition are as follows. Tokyo Nichinichi Shimbun (Oct. 6, 1936) 6

"Ginza Street Association decided to tackle beautification of Ginza for 1940. The main themes are the renewal of style of buildings, the removal of telegraph poles, the arrangement of signboards, the renewal of show windows, the improvement of lighting in shops and the control of street stalls."

"Running of the tram on the relatively narrow street has bad influences on traffic and overhead wires of the tram disturb realization of Urban Beauty. We don't need trams as other means of communication such as the subway and the bus have developed."

⁸ Tokyo Nichinichi Shimbun (Oct. 18, 1936)5

⁹ Naoto Nakajima, *Movement for urban beauty* (University of Tokyo Press, 2009)

¹⁰ Hochi Shimbun (Nov. 25, 1936) 5



- ¹¹ Tokyo Nichinichi Shimbun (Dec. 3, 1936) 10
- ¹² Tokyo Nichinichi Shimbun (Dec. 20, 1936) 3
- ¹³ Tokyo Nichinichi Shimbun (Dec. 8, 1936) 6
- ¹⁴ Hochi Shimbun (Jun. 24, 1937) 12
- ¹⁵ Jiji Shinpo (Jan. 25, 1937) 5
- ¹⁶ Mainichi Shimbun (Feb. 6, 1937) 8
- ¹⁷ Yomiuri Shimbun (Jun. 29, 1938) 7
- ¹⁸ Mainichi Shimbun (Dec. 12, 1945) 3
- ¹⁹ Koji Hosaka, *Shopkeepers talk about Ginza*, Shogyo-kai, Vol.3, No.8 (1950) 24-30
- ²⁰ Asahi Shimbun (Jan.21, 1951) 3
- ²¹ Asahi Shimbun (Dec.15, 1955) 10
- ²² Yomiuri Shimbun (Sep. 28, 1957) 10
- ²³ Asahi Shimbun (Jun. 7, 1958) 15
- ²⁴ The contents of a petition are as follows. Ginza Street Association, *A petition on Ginza Street* (1959)
“Traffic problems are getting worse day by day. We demand the abolition of the tram as the first action to solve these problems. It is a shame of a capital and a nation to continue obsolete tram in world famous Ginza though Tokyo Olympics is held five years later.”
- ²⁵ Yomiuri Shimbun (Mar.18, 1961)11
- ²⁶ Mainichi Shimbun (Aug. 25, 1963) 16
- ²⁷ Ginza Street Association Bull., Vol.2, No.1 (1964) 9
- ²⁸ Ginza Street Association proc. (Jan. 12, 1965) 2
- ²⁹ Ginza Street Association Bull., Vol.2, No.2 (1964) 2
- ³⁰ Shuichi Sato, *Reconstruction of Ginza Street*, Doro, No.329 (1968) 77-80
- ³¹ Ginza Street Association proc. (Dec. 8, 1963) 2
- ³² Shuichi Sato, *Reconstruction of Ginza Street*, Doro, No.329 (1968) 77-80
- ³³ Ginza Street Association, *A petition for reconstruction of Ginza Street* (1967)
- ³⁴ Yomiuri Shimbun (Feb. 9, 1968) 13
- ³⁵ Ginza Street Association proc. (Aug. 1, 1967) 2
- ³⁶ Ginza Street Association proc. (Jun. 27, 1968) 2
- ³⁷ Nihon Keizai Shimbun (Oct. 10, 1968) 12



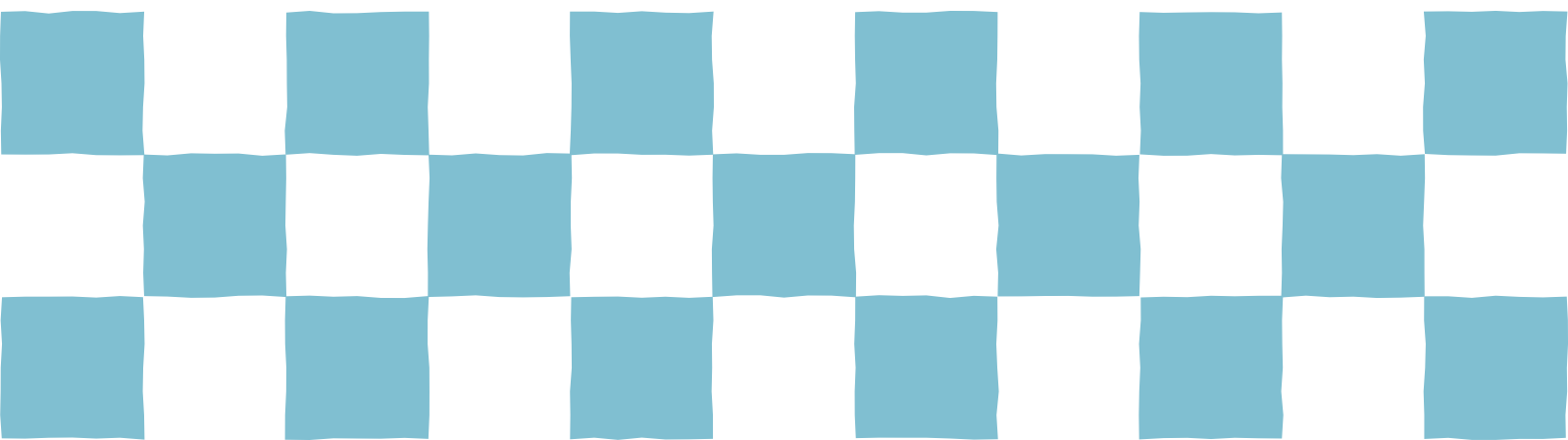
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

18 Transportation (Railway)



Study on the Spatial Planning of the Secondary Station –Located Areas along Chinese Eastern Railway

Zhang Bocheng (School of Architecture of Harbin Institute of Technology), Zhao Zhiqing (School of Architecture of Harbin Institute of Technology) and Wang Qinglian (School of Architecture of Harbin Institute of Technology)

At the end of 19th century, Russian tsar, to expand their influence in Far East and consolidate their strategic position in Yellow Sea region in China, built a T-shaped railway penetrating Northeast China, namely Chinese Eastern Railway, which starts from Manzhouli City (in Inner Mongolia Autonomous Region) in the west, ends in Suifenhe City (in Heilongjiang Province) and reaches to Lvshunkou District (in Liaoning Province) in the north. During the railway construction (1897-1903), a large amount of areas attached to railway station-located areas had been constructed and developed constantly, which therefore facilitates the emergence of new type morphology of cluster arising from the railway in northeast China. And the towns' morphology of this period had had the profound influence on the subsequent the towns' development in northeast China. In this research, the author himself went to St. Petersburg in Russia and to check and collect files in Russian National History Archives, from which a large amount of basic files about city construction during the period of the construction of Chinese Eastern Railway have been generated; then, based on the above materials (ages and number), the research period (construction of Chinese Eastern Railway 1897-1903), objects (railway stations along the main lines of Chinese Eastern Railway:) and sample (Station Manzhouli and Suifenhe) are determined. During the sampling process, based on the scale, number and representatives of the railway stations, two secondary stations (Station Manzhouli and Suifenhe which functioned as administrative center, border business center and crucial nodes of railway service, are selected as the research samples; Thirdly, the historic planning drawings and towns' construction for two stations are translated to extract the planning information, earlier city construction, social economy development, location features, land layout, texture of street profile, street transport, buildings' texture, landscape greening and other basic elements of towns' morphology. Two towns are compared to conclude the typical structural pattern and morphology, which include the land layout, grid structure of road network, wide and flat road design, orderly towns' texture, enclosed buildings' texture and concentrated landscape greening. Ultimately, Russian style station in Suifenhe City is taken to conduct field research and empirical analysis and explicit the conservation content of historic features as well as propose the conservation ideas depending on the principles of completeness and authenticity. After hundreds of years, the Russian style stations during the Chinese Eastern Railway have developed into to the commercial centers, which dominate in the modern city. Although the features of earlier Russian style stations have been broken, these centers still demonstrate strong sense of environment and landscape as Russian style colonial city. This research intends to explore the planning content of earlier stations to restores the planning elements of earlier cities with the ultimate aim to reveal the historical landscape of the towns, which is greatly significant to the conservation of urban historical features.

From the Port to the Inland ——Jiaoji Railway and Urban Development and Spatial evolution of Modern Cities in Shandong

Bo Jiang (Shandong Jianzhu University), Qipeng Mu (Shandong Jianzhu University) and Yanyu Cui (Shandong Jianzhu University)

The research mainly focuses on the construction process of Jiaoji railway and its great influence towards the urban development and spatial evolution of modern cities in Shandong Province. The modern transportation system in Shandong, represented by Jiaoji railway as well as the trade network it built, leads directly to change of Shandong regional economic trend and the layout of Shandong economic centers. To demonstrate Jiaoqi railway' s role in the urban development of Shandong, many historical documents, such as Shandong Map in 1831, and the Map of Jianan Fu in 1898, are provided to prove the objectivity of this research. Besides, the researchers did some field surveys to the cities along Jiaoqi railway and collected some first hand data. All the documents and field survey data serve to show the scientific nature of this research. With the help of the documents and the empirical data, the research explores the changes of some cities along Jiaoqi railway. The coastal city of Qingdao, with the boost of city population and the rapid urban expansion under the influence of Jiaoqi railway, has gradually formed its own characteristic city outlay; With the banks, shops and factories built after the opening of Jiaoqi railway, the inland city of Jinan has experienced a economic resurgence and grown into the capital city of Shandong. Many self-sustaining small villages along the line of Jiaoqi railway, such as Zibo, Fangzi, Gaomi, Jiaoxian, Mingshui, Yidu, ect., have changed greatly and developed quickly due to the railway traffic. Since then, new cities of Shandong completely abandoned the traditional city layout and the economic center of Shandong is moving rapidly from the cities and towns along the canon to the cities along the railway and then to the cities along the ocean. The development of city modernization of Shandong went into a new era and the overall economic outlook has been fundamentally changed.

History matters in making Lahore sustainable

Muhammad Imran (Massey University)

Lahore, like many other South Asian cities, is facing sharp population growth and economic development coupled with increased motorisation and a deteriorating urban environment. The second-largest city of Pakistan and capital of the Punjab province, the metropolitan area, had 9.9 million people in 2010, distributed over approximately 3000 square kilometres. As a major economic centre, the city produces nearly 10 percent of national GDP. Although sustainable transport modes make over 60 percent of total trips, the city administration has been criticised by planning scholars for putting most of its recent investment into roads and low-density housing, despite severe air pollution and vulnerability to climate-change-related events.

This paper examines the contradictions and uncertainties that have characterised urban planning in Lahore in the pre and post-independence period by using a sustainable city and sustainable transport literature. This paper begins with a historical overview of urban planning in Lahore by exploring the Mughal and the British period of development and the impact of partition on the post-independence planning. The formal planning documents (Master/Structure Plans) produced from 1947 to 1990 will be reviewed to understand the current structure and transport and environmental challenges in Lahore.

The second section analyses transport and urban development policies and projects since the 1990s. The analysis shows that the status of Lahore as a 'political capital' provide the opportunity to implement the high-quality roads infrastructure (flyovers, underpasses and a ring road) and the country first ever Bus Rapid Transit (BRT) system (2013) and Metro Train project (2018) in the city. The role of charismatic and transformational leadership in implementing these mega projects is highlighted.

The final section shows how the Lahore Bus Rapid Transit (BRT) and Metro train projects can provide a 'window of opportunity' to redefine transport and housing issues and offer a transit-oriented development (TOD) solutions in Lahore. Some radical changes to land use planning and alternative funding sources are explored to examine if an integrated public transport system can be developed in Lahore to provide sustainable mobility for its residents.

ANKARA COMMUTER LINE AS THE PRODUCT AND WITNESS OF MODERN PLANNING EXPERIENCE IN TURKEY

Selin Çavdar Sert (Gaziantep University), Funda Baş Bütüner (Middle East Technical University) and Ela Alanyalı Aral (Middle East Technical University)

Evolution of commuter rail transit systems has always served a tight relationship with the development of urban planning theory and practice. Expansion of urban areas towards peripheral lands, emergence of small size industrial towns, development of specialized urban zones, massive population flow from rural to urban areas, insufficient urban services and poor living conditions of industrial cities as the urban questions of the late 19th and early 20th centuries triggered the invention of new transportation modes and technologies. Commuter rail development in Ankara, on the other hand, has a peculiar history begun with the establishment of the Republic of Turkey in 1923, as opposed to its numerous contemporaries which had emerged as the lasting effects of Industrial Revolution on cities.

In the aftermath of the World War I, quite a number of cities were established, of which some were assigned to be capital cities of new nation-states. In this period, Ankara town was also pronounced as the capital city of the newly established Republic. However, transformation of Ankara from a small Anatolian town to a modern capital city necessitated planned development and highly organized infrastructure intervention. For the establishment of the city, famous figures –namely Carl C. Lörcher and Hermann Jansen- representing the 19th century culturalist school of spatial organization were commissioned. Within this planning context, the commuter line was served as one of the major transportation infrastructures in 1925 to integrate green structures (vacant lands, recreation areas, farms and productive landscapes), emerging residential areas and city center and to introduce modern urban life to the citizens. It was recognized as a planning tool in the designation of the rural-urban continuum, urban green network, community spaces and logistic centers. Keeping in mind this history, Ankara Commuter Line and its historic components are the modern planning legacies of the early 20th century.

Covering approximately 37 kilometers distance, currently, Ankara commuter line operates between the west and east edges of the existing urban core. Besides being a passenger service delimited by urban areas, it is recognized as a planning threshold and provides great opportunity for experiencing and reaching the fragmented historic properties (historic villages and landed estates etc.) of the Republican period plans. In this respect, the aim of this study is to reveal the significance of Ankara Commuter Line as a city planning legacy by mapping its earlier development and accompanied built and landscape heritage.



Study on the Spatial Planning of the Secondary Station –Located Areas along Chinese Eastern Railway

Bocheng ZHANG *, Zhiqing ZHAO **, Qinglian WANG ***

* *Bocheng ZHANG, Doctoral candidate in School of Architecture, Harbin Institute of Technology, Heilongjiang Cold Region Urban-Rural Human Settlements Science Key Laboratory & e-mail:951787866@qq.com*

** *Zhiqing ZHAO (corresponding author), Professor & Doctoral Supervisor in School of Architecture, Harbin Institute of Technology, Heilongjiang Cold Region Urban-Rural Human Settlements Science Key Laboratory & e-mail:zhaozq88@126.com*

****Qinglian WANG, Doctoral candidate in School of Architecture, Harbin Institute of Technology, heilongjiang Cold Region Urban-Rural Human Settlements Science Key Laboratory& e-mail:wangqinglian23@sina.com*

During the Chinese Eastern Railway construction (1897-1903), a large amount of areas attached to railway station-located areas had been constructed and developed constantly, which therefore facilitates the emergence of new type morphology of cluster arising from the railway in northeast China. And the towns' morphology of this period had had the profound influence on the subsequent the towns' development in northeast China. In this research, the author himself went to St. Petersburg in Russia and to check and collect files in Russian National History Archives, from which a large amount of basic files about city construction during the period of the construction of Chinese Eastern Railway have been generated; then, based on the above materials (ages and number), the research period (construction of Chinese Eastern Railway 1897-1903), objects (railway stations along the main lines of Chinese Eastern Railway:) and sample (Station Hailar and Suifenhe)are determined; Thirdly, the historic planning drawings and towns' construction for two stations are translated to extract the planning information ,earlier city construction, social economy development , location features, land layout, texture of street profile, street transport, buildings' texture, landscape greening and other basic elements of towns' morphology. Two towns are compared to conclude the typical structural pattern and morphology. Ultimately, Russian style station in Suifenhe City is taken to conduct field research and empirical analysis and explicit the conservation content of historic features as well as propose the conservation ideas depending on the principles of completeness and authenticity. After hundreds of years, the Russian style stations during the Chinese Eastern Railway have developed into to the commercial centers, which dominate in the modern city. Although the features of earlier Russian style stations have been broken, these centers still demonstrate strong sense of environment and landscape as Russian style colonial city. This research intends to explore the planning content of earlier stations to restores the planning elements of earlier cities with the ultimate aim to reveal the historical landscape of the towns, which is greatly significant to the conservation of urban historical features.

Keywords: urban morphology, urban planning history, Chinese Eastern Railway, secondary railway station.

Introduction

At the end of 19th century, to expand the influence in the Far East and consolidate the strategic position in the Yellow Sea region of China, Russian Tsar constructed a T-shaped railway (hereinafter referred to as Chinese Eastern Railway) through northeast Chinese, which starts from Manchuria in the west, ended in Suifenhe in the east and reached to Lushun in the north (Shixuan Jin 1986,chap 1). During the construction process of Chinese Eastern Railway, the stations along the railway were divided into five types based on the railway transport service and its derived requirements. Among them, the secondary station, as the crucial node of the railway service, functioned as the collection and distribution of the materials, locomotive maintenance and railway administration management, etc(Jianhong Dong 1989, chap 3). meanwhile, the spatial planning and construction of the station-located areas were increasingly developed, which then drove the secondary station-located villages and towns to gradually become the important administrative and border trade along the railway.

Table 1 Geographical statistics of secondary stations

Station	Construction	Original	Distance from	Distance from	Location
---------	--------------	----------	---------------	---------------	----------



		name	Station Harbin	Station Manchuria	
Manzhouli	1901	Mengjiuliya	935km	—	Manzhouli City, Inner Mongolia Autonomous Region
Hailar	1901	Hulun	748km	187km	Hailar District, Hulunbuir City Inner Mongolia Autonomous Region
Boketu	1901	Buhaduo	539km	396km	Boketu Town, Yakeshi City, Inner Mongolia Autonomous Region
Qiqihar	1903	Xitun	270km	665km	Anangxi District, Qiqihar City, Heilongjiang Province
Hengdaohezi	1901	—	271km	1206km	Hengdaohezi Town, Hailin City, Heilongjiang Province
Suifenhe	1903	Pogulanqiana	548km	1418km	Suifenhe City, Heilongjiang Province

I layout of land use

Station-located areas, as the spatial node for the service of railway operation, involves many aspects of railway-related economy, culture, education and administration and others in its types of land use. The specific types include the commercial land for the service of railway transport and trade, the residential land for the living and daily life of railway staff and residents, the recreational land for leisure, medical land for rehabilitation and care and specific land for professionals (including monks, judges, translators, teachers, etc.). Different types of land use are set up to initially form the towns' function of the station-located areas, such as administration, border trade and locomotive maintenance.

As shown in Figure 1 and Figure 2, the layout of land use for two secondary station-location areas takes the railway station as the origin with the distribution along the railway lines, while constantly extending to both sides of the railway. The railway station is located in the center with the elliptical square to the south; closely to the railway station, the residential land is distributed on the west and east side of the square in front of the station, which includes staff dormitory and residential houses; the commercial land and medical land are adjacent to the residential land use, locating in the western part of the town, which include shop, hotels; the special land is scattered in the northwestern part of the town, which includes education land (schools for Russian students), houses for translators and teachers; the entertainment land is between the special land in the western part of the town, which includes clubs and parks. The newly added land for citizen's life, closely to the residential land, is distributed to the northern edge of the town.

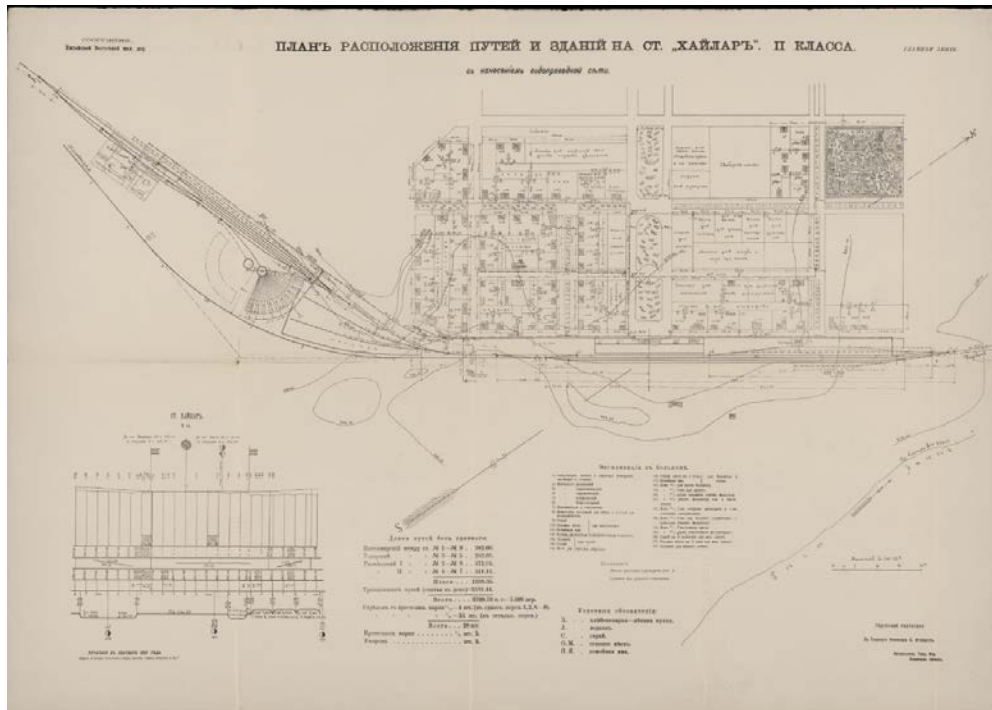


Figure 1: Ignagus . Hailar planning drawing . [Hailar,1902]

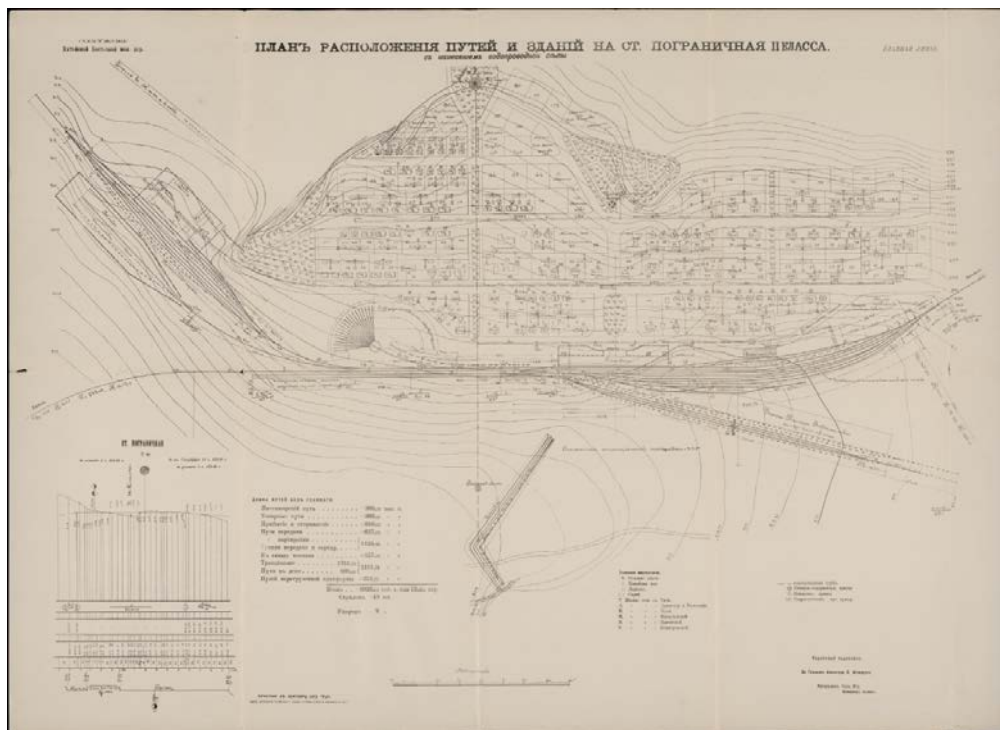


Figure 2: Ignagus . Suifenhe planning drawing . [Suifenhe,1902]

Through the comparison of each land scales and the distance away from the railway station (seen in Table 2), it's concluded that the scale of the residential land is the largest and then the commercial land; for the distance away from the railway station, the nearest is the residential land and then the commercial land. The station-location area is generally planned to service the railway operation and its required derivative services. In the plan, a large amount of residential land, squares and commercial land are set around the railway station. Additionally, the medical land is set up closely to the railway station, which is convenient to the life of railway staff and their



families; in the plan, the commercial, special and entertainment land are scattered to improve activity space and towns' vitality; on the other side, in the plan, there are also the hotels specially for Chinese, which are set at the northeastern edge of the town along with the houses for translators. A large amount of idle land is reserved for the future construction and development of the towns. As the crucial transport nodes of prosperous trades, the proportion of commercial land in station-located area is larger. In sight of the land demand from the population growth, the land for life is reserved to accommodate newly increased citizens. Large scale parks are constructed in the towns to further mitigate the environmental issues brought by the surging population(Sun Hui, 2006).

Table 2 Statistics of land use in station-located areas (sagene¹)

Land use	Station Suifenhe			Station Hailar		
	Planning area (m ²)	percentage	Distance from Station Harbin (m)	Planning area (m ²)	Percentage	Distance from Station Harbin (m)
Residential land	45000	67.37%	< 10	22500	48.70%	< 10
Commercial land	3500	5.24%	< 75	5000	10.82%	< 25
Special land	3200	4.79%	< 125	2700	5.84%	< 75
Medical land	2000	2.99%	< 150	—	—	—
Entertainment land	1100	1.65%	< 200	2500	5.41%	< 100
Idled land	12000	17.96%	—	—	—	—
Total	66800	100%	—	46200	100%	—
Remarks	Idled land is set up around the towns.			The land for life is reserved to accommodate new newly increased citizens at the north end of the towns.		

The plan of secondary station-located not only serves the railway operation, but also satisfies the derivative requirements from the operation, which include staff residence, commercial trade, entertainment, education, religion and military, etc. For the types of land use, according to the different functional demands, the land use of station-located area include commercial land, residential land, entertainment land, special land, medical land and idled land (reserved land for newly increased residents), etc. The structure layout depends on the proportion of land use and the distance from the railway station. The railway station is located at the center of the town with the square to the north; the commercial land, closely to the railway station, is distributed along both sides of the square in front of the station; the residential land, closely to commercial land, is distributed on both sides of railway station; entertainment land, distributed in the west of the town, is closely adjacent to commercial land and residential land; the special land, distributed in the west of the town, is closely adjacent to the commercial land and entertainment land; distributed at the northwestern edge of the town, medical land is closely to the residential land; the idled land (reserved land for newly increased residents) is scattered on the edges of the town.

II Road network structure and street design

Since these two secondary station-located areas were constructed on newly built area, their road networks therefore demonstrate the characteristics of overall planning. The road structure is the compact small-scale grid with straight roads. The towns with grid road network are more resilient in growth scale and direction. Meanwhile the frontage proportion could be increased to ensure the standard land subdivision, fair land purchase and lease, accessible trade flows and unified planning and management. For Station-Hailar-located areas, the distance between the roads is commonly within 125 sagene, the width of the main road is 9 sagene and 7.5 sagene for minor roads. For Station-Suifenhe-located areas, the distance between the roads is commonly within 100 sagene, the width for main roads is 10 sagene and 4 sagene for minor roads.

Through the comparison between the structures of the road network and street design for these two stations (see Table 3), it's concluded that the structure of road network , which is applied in the planning patterns of the secondary-station-located areas, the width of main roads is approximately 10 sagene and 5 sagene for the minor roads. This kind of structure could easily generate the street profile, parallel to the roads, which avoids the sharp corners at road crossings, benefits to deal with the building orientation and land lease as well as the land

¹ 1 sagene=2.134 meter



development and commercial operation. In general, the grid structure unifies the orderly layout of the towns, which is conducive to the towns' development of construction. In addition, the street design is featured as wide, flat and straight with dense road network. The distance between the roads is commonly within 100 sagene. For straight streets, nodes are connected with straight lines to further facilitates traffic and eliminate the secrets among irregular neighborhood; with the straight street, the colonists could more effectively control the city.

Table 3 Comparison of road network structure and street design for two stations (Sagene)

Station	Structure of road network	Street width		Street design
		Main street	Minor street	
Suifenhe	grid	10	4	wide, straight and flat
Hailar	grid	9	7.5	wide, straight and flat

III Town texture and landscape greening

The street profiles for two secondary station-located areas are mostly short squares with the ratio of length and width between 1:2 and 1:3. The street profile, however, for residential land ranges from short and squares to narrow and long and the ratio of length and width even reaches to 1:4. The scale of the street profile is relatively small. The planning structure has demonstrated strict geometric features, small scale of street profile and dense urban fabric. The depth of typical street profile for Station Hailar-located areas and Station Suifenhe-located areas are respectively 120 sagene and 110 sagene. The typical depth of commercial land and residential land is 50 sagene; the standard grid dominates in land division. The scale are 50 sagene ×132 sagene and 45 sagene ×115 sagene in respective. For architectural texture, the buildings are set up in double rows within the street profile and the buildings at the edge are set up closely to the four corners of the land, of which the public toilets, garbage, ice pits and sheds exist in the middle (see Figure 3). The greening in front of the station is the oval green land with the respective scale of 20 sagene×50 sagene×3 sagene and 18 sagene×38 sagene (see Figure 4); setting up in the middle of the roads, the width are respective are 5 sagene and 6 sagene; the park greening concentrates in the north of the towns, which is square and trapezoidal, with the scale of 5,041 square sagene and 4,750 square sagene (see Figure 5).

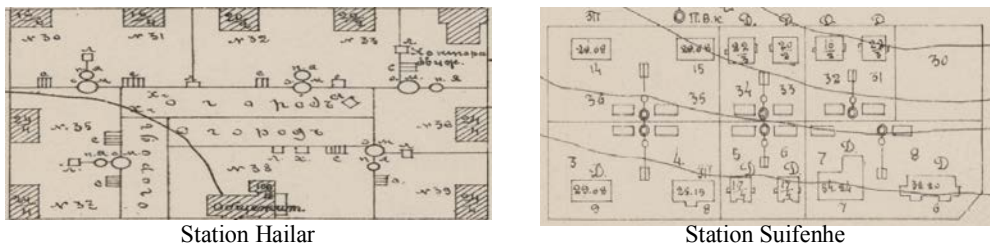


Figure 3:Ignagus . Buildings' texture. [Hailar、 Suifenhe,1902]

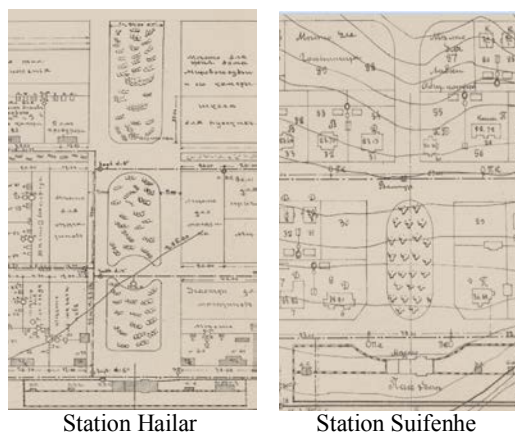


Figure 4:Ignagus . Greening in front of the station. [Hailar、 Suifenhe,1902]

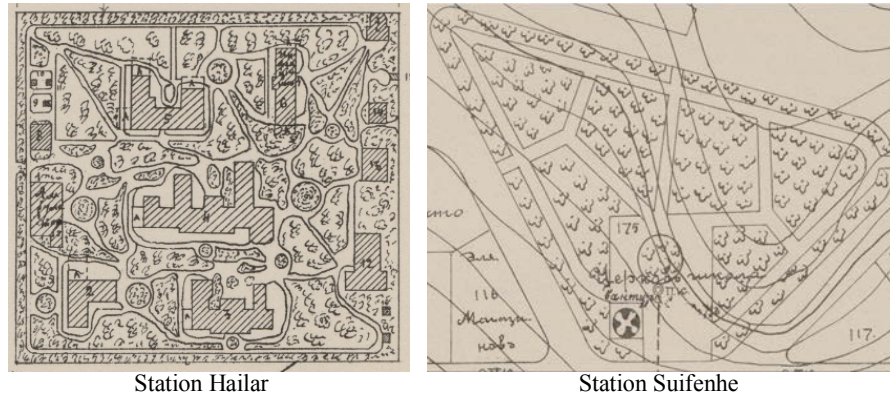


Figure 5: Ignagius . *Parks' greening*. [Hailar、 Suifenhe, 1902]

Based on the comparison of towns' texture and landscape greening (see Table 1), the depth of street profile for the secondary station-located areas is 100 sagene. And it's 50 sagene for commercial land and residential land. The standard grid dominates in land division. The land scale is 50 sagene×100 sagene, which unified the shape, orientation and scale of the land. For architectural texture, the buildings are set up in double rows within the street profile and the buildings at the edge are set up closely to the four corners of the land, of which the public toilets, garbage, ice pits and sheds exist in the middle. With this kind of layout, it's possible to obtain large inner courtyard between the dwellings to further form an ideal public space of communication, which is more concentric and conducive to the neighborhood communication as well as cold resistance and wind protection; in additional, one characteristic of this layout is to stress the street-facing interface with the vegetable garden in the inner courtyard, which endows the courtyard with the function of agricultural production. The landscape greening include greening in front of the station (oval), road greening and park greening; the road greening is set up in the middle of the roads, 5 sagene; the parks greening concentrates at the north end of the towns.

Table 4 Comparison of towns' texture for each station (Sagene)

Station	depth of street profile		plot		Building's texture	
	Typical street profile	commercial and residential land	division	scale	buildings' layout	remarks
Suifenhe	110	40	grid	45×115	double row, closely to the four corners of the land; public toilets, garbage, ice pits and sheds exist in the middle	—
Hailar	125	50	grid	50×132	set up along the edge, closely to the four corners of the land; public toilets, garbage, ice pits and sheds exist in the middle	vegetable garden in the inner courtyard

Table 5 comparison of landscape greening for each station (Sagene)

Station	Greening in front of the station	Scale	Road greening	Greening width	Parks greening	Greening area	shape
Suifenhe	oval	18×38	In the middle of the roads	6	northwest part of the town	4750	trapezoidal
Hailar	oval	20×50×2	In the middle of the roads	5	northeast of the town	5041	square

IV Summary of planning models for secondary station-located areas

Influenced by the idea of functional zoning of the secondary station-located area, the layout considers the railway station as the center and set up a large amount of oval squares and greening at the center of the towns. Public buildings, such as commerce and entertainment, are also set around the squares. The railway station,



additionally, is taken as the base to develop along the railway lines from the south to the north, in which residential land, commercial land, entertainment land, special land, medical land and military land. The land scale is dominated by the residential and commercial land. It's therefore generated that the plan focuses on the railway operation and the basic function of the station-located area is to satisfy the requirements of residence, life and business from the railway staff. The typical grid is applied by the road network of the towns. The spatial form of the square is the simple and wide station in front of the station. The street is wide, straight and flat. The depth of the typical street profile is 100 sagene and 50 for the typical depth of commercial land and residential land. The buildings are set up in double rows within the street profile and the buildings at the edge are set up closely to the four corners of the land, of which the public toilets, garbage, ice pits and sheds exist in the middle. The road greening is set up in the middle of the roads and the parks greening concentrates at the north end of the towns.

V The application in conservation of historical features-taking Suifenhe City as an example

After hundreds of years of city development and construction, the earlier station-located areas have already been submerged in the continuous expansion and reconstruction of city map. Through the comparison of original planning drawings and remote sensing of status quo, the historical boundaries of earlier Suifenhe Station-located areas is determined (see Figure 6), which is composed by Xinghong Road, Zhanqian Road, Changan Street and Jvyuan Street. Within historical boundaries, it's still clear to find out the planning characteristics of earlier secondary station-located areas, which conclude the grid road network, flat and straight street and orderly land division. However, the typical greening in front of the station and road greening is hardly reserved and the enclosed structure of the building is additionally changed. Generally speaking, the Russian style station-located areas in Suifenhe City have retained the earlier planning framework.



Figure 6 illustration of historical boundaries for Suifenhe Station-located areas

Historic buildings, as the most recognizable characteristic elements, are significantly crucial to the construction of historical features. The field research of historic building is conducted to clarify the current information of the remains within historical boundaries (see Table 6). According to the statistics, within Russian style station-located areas, there are total 26 historic buildings, among which the number of building is 2 for Japanese occupation period(1935-1945) and 24 for Russian occupation(1896-1917); most of the buildings are well preserved with less influence on authenticity. For buildings' base, more than 60% have mildew problems and some have others such as weathering, settlement, fragmentation, cracks and burial issues. 70% of the walls more or less have crack issues and less have weathering, mildew and efflorescence; the users are complex and 16 buildings is individually owned and 9 buildings is state owned. The rest one is collective ownership. In



conclusion, the number of historic building remains is less, well preserved and, however, is faced with damage such as mildew and cracks as well as lost risk; additionally since the remains is largely individual owned, the utilization and conservation of the buildings themselves are hardly regulated and consistent with the counterpart of the surrounding environment, which has caused huge damage to the historical features (see Figure 7).

Table 6 Statistics of status quo of historic buildings

Name	The former site of the Russian Consulate in Suifenhe	Current function	commerce
Address	No.111,Guanghua Road Guanghua Community, Suifenhe Town, Suifenhe City, Heilongjiang Province		
Age	1931	Façade material	Plastering
Altitude elevation(M)	456	Building' s structure	Brick and mortar
Level of cultural relics	National Key Cultural Relic Conservation Unit	Heritage type	Administrative office
Ground floor	2	Underground floor	1
Floor area(m²)	679	Construction area(m²)	1358
Ownership	Country	Using agency	Suifenhe Museum of Russian Painting Art
Damage	Base	Mildew	
	Wall	Peeling	
	Layout	Complete and authenticity	



Figure 7 Environment of historic buildings

Suifenhe City has completely preserved the earlier planning framework and part of historical buildings in Russian style station-located areas. Two historical featured areas are mainly constituted within historical boundaries: areas of single historic building and clusters of historic buildings (see Figure 8). Under preserving the earlier planning framework completely and following the principles of building authenticity and completed features(Long Shao 2016,chap 2), the existing problems from the field research are combined to put forward the following conservation ideas of historic features. In general, the earlier planning layout, the authenticity of historic buildings and consistency of surrounding environment are in full conservation while continuing their earlier function and moderately increasing new functions without destroying historic features (Jun Zhang 2017,chap 2). Another is to formulate the conservation principles and measures for conservation of historic



buildings, environmental remediation, management and exhibition, etc. On the other side, two distinct strategies are deployed for two types of historic featured areas. Since the historic features of single historic buildings area have been broken, therefore, in this area, the conservation of the buildings themselves is stressed to implement overall conservation. The conservation scope is rationally divided according to the specific circumstances, where the development and utilization should be forbidden and the proper development is permitted(Wan Yong,2011). As developing, the coordination of the overall style is also paid attention. The design of new elements should be coordinated with historic features to avoid using strange decoration materials and excessive large mass and scale; the new is coordinated with the old and the traditional buildings are coordinated with the modern buildings to form mutually coordinated features. The cultural relic conservation units and excellent historic buildings are not only in respect; new modern buildings are also arranged reasonably. New buildings obey not breaking the overall atmosphere of historic and cultural featured areas.

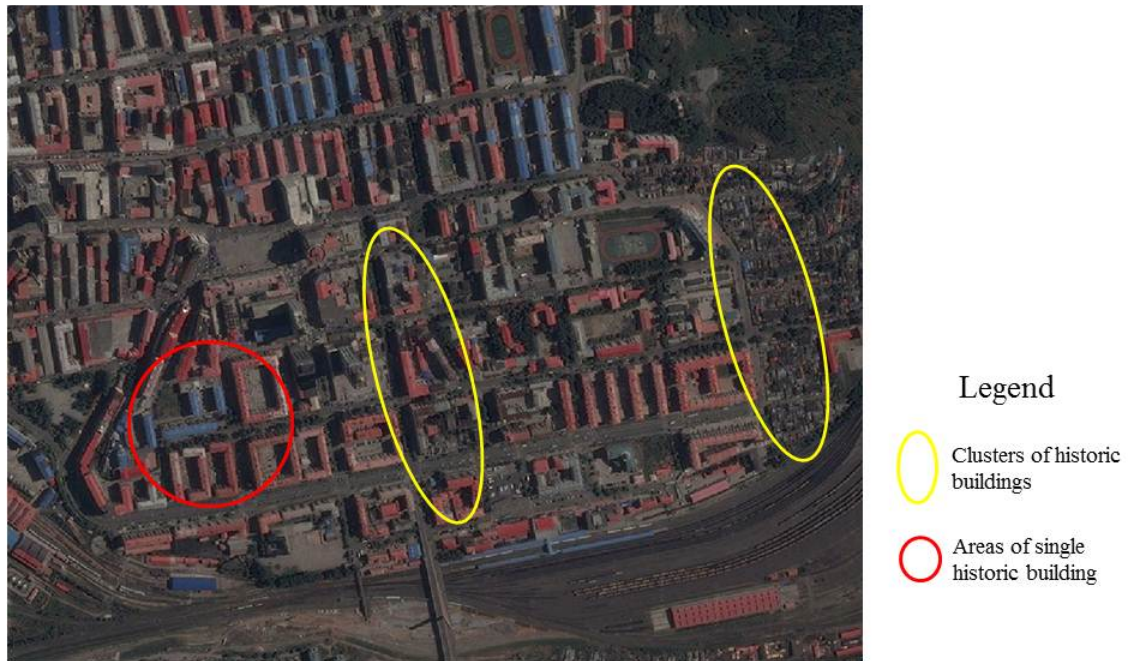


Figure 8 illustration of spatial distribution of historic buildings

Conclusion

After hundred years of vicissitudes and drastic changes of social and economic system, Russian style station-located areas, along Chinese Eastern Railway, still demonstrate strong adaptability with obvious location advantages. The land layout of parcel development is conducive to consolidation and expansion for goods, people and commercial trade. The spatial texture of street profile is condensed and fine and the road traffic is smooth and orderly. Although the earlier planning framework of station-located areas is reserved, a large amount of historic buildings have already been damaged more or less, and even most of them have disappeared. The historical features require urgent conservation within the station-located areas. In this research, the author strives to restore planning histories to further achieve the conservation of historic features of earlier station-located areas. However, this research is only limited to the quantitative analysis, including the collection of historical materials and the existing problems, which is insufficient in the consideration of the recognition of historical features from different groups as well as the eyes' perception on historical features and other factors.



Referencing

- 1.Sun Hui, Liang Jiang. *The Colonial Model Of the Commercial Districts in Modern China*(Urban Planning Forum,2006),102-106
- 2.Wan Yong, Li Shuyin, Shen Zhilian. *Cases of Ancient City Protection and Technical Innovation* (China Ancient City, 2011),56-61

Acknowledgements

I am really appreciating the careful guidance, my tutor, Prof. Zhiqing Zhao, from Harbin Institute of Technology. Also thanks the help from Prof. Khodjakov Mikhail during the material collection and the translation from my colleagues, Ms, Yue Wang. Please replace this text with your own.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Bocheng Zhang, from the School of Architecture of Harbin Institute of Technology, Heilongjiang Key Lab on Urban-Rural Human Settlement Science in Winter Cities, PhD student. Research fields: conservation and planning of cultural heritages. During August to December, 2016, I visited St. Petersburg State University to make joint research on cultural heritage conservation along Chinese Eastern Railway. The published papers include Study on the Conservation of Historical Cultural Heritage in St Petersburg City and Research Situation and Hot Issues Analysis of Chinese Eastern Railway from the Perspective of Urban Heritage. The papers pending on include the Spatial Characteristics of Station Area Planning for the Secondary Stations along Chinese Eastern Railway, Research on the construction of Chinese Eastern Railway (main line) and Urban Planning in Northeast China and etc.

Bibliography

- 1.Shixuan Jin, Wenshu Xu: *Chinese Railway Development History*. Chinese Railway Press, 1986
- 2.Jianhong Dong: *Chinese Cities Construction History*. Chinese Architecture and Building Press, 1989
- 3.Long Shao, Lingling Zhang, Shan Feng: *Chinese Eastern Railway-Industry Cultural Landscape Resources System Integration and Landscape Remodeling*. Chinese Architecture and Building Press, 2016
- 4.Jun Zhang:*Research and Evaluation on Values of Architectural Heritage of Chinese Eastern Railway*. Chinese Architecture and Building Press, 2017

Image sources

Figure1:Russian National History Archives, Digital Collections [ф350оп16д700л1], [http://www.fgurgia.ru/search/SIMPLE/10523?sPs\[0\].tV=%D0%9A%D0%92%D0%96%D0%94&lc=ru#!page:1/o:27608476/p:1/o:27821861/p:35/o:1167965283/p:1](http://www.fgurgia.ru/search/SIMPLE/10523?sPs[0].tV=%D0%9A%D0%92%D0%96%D0%94&lc=ru#!page:1/o:27608476/p:1/o:27821861/p:35/o:1167965283/p:1)

Figure2:Russian National History Archives, Digital Collections [ф350оп16д678л1], [http://www.fgurgia.ru/search/SIMPLE/10523?sPs\[0\].tV=%D0%9A%D0%92%D0%96%D0%94&lc=ru#!page:1/o:27608476/p:1/o:27821861/p:34/o:1167964489/p:1](http://www.fgurgia.ru/search/SIMPLE/10523?sPs[0].tV=%D0%9A%D0%92%D0%96%D0%94&lc=ru#!page:1/o:27608476/p:1/o:27821861/p:34/o:1167964489/p:1)

Figure 4、 5、 : The same as Figure 1 and Figure 2

Figure 6: Google Remote Sensing Satellite Gallery

Figure 7: Taken by author

Figure 8: Google Remote Sensing Satellite Gallery



History matters in making Lahore sustainable

Muhammad Imran*, Abid Mehmood** and Abdur Rehman Cheema***

* *School of People, Environment and Planning, Massey University, New Zealand* (m.imran@massey.ac.nz)

** *Sustainable Places Research Institute, Cardiff University, UK* (mehmooda1@cardiff.ac.uk)

*** *Rural Support Programmes Network, Islamabad, Pakistan* (arehmancheema@gmail.com)

Lahore, the second-largest city of Pakistan, is facing sharp population growth and economic development coupled with increased motorisation and a deteriorating urban environment. This is due to a long history of investment into roads and low-density suburban housing development in Lahore which increases motorisation. This paper provides a historical overview of urban planning in Lahore by shedding light on the Mughal and the British period of development followed by the post-independence planning paradigm in the city. This paper examines the contradictions and uncertainties that have characterised urban planning in Lahore in the pre and post-independence period by using a sustainable city and sustainable transport literature. The analysis shows that Lahore traditionally attracted investment in the high-quality roads infrastructure (flyovers, underpasses and a ring road) and recently in the country first ever Bus Rapid Transit (BRT) system (2013) and Metro Train project (2018) in the city. The paper argues that the Lahore BRT and Metro train projects can provide a window of opportunity to redefine transport and land use issues and offer a transit-oriented development (TOD) solutions in Lahore.

Keywords: Lahore, transport, sustainable urban development

Introduction

Lahore, the second-largest city of Pakistan and capital of the Punjab province, is facing sharp population growth and economic development coupled with increased motorisation and a deteriorating urban environment. Although over 60 per cent of total trips are made by sustainable transport modes¹, the city administration has been criticised by planning scholars for putting most of its recent investment into roads, despite severe air pollution and vulnerability to climate-change-related events such as flooding and heatwaves². Employing a sustainable city and sustainable transport framework, this paper examines the contradictions and uncertainties that have characterised transport and urban planning in Lahore in the post-independence period. The paper inquires into how Lahore got itself into its current urban planning situation, examines the implementation of Lahore's first Bus Rapid Transit (BRT) project and metro train project (the Orange line) and suggests how these projects provide opportunities for transit-oriented development (TOD) model for future urban growth. The paper begins with a historical overview of urban planning and development of Lahore since the Mughal period. This is followed by a more detailed and critical review of urban and transport planning in Lahore in the post-independence era through the lens of metropolitan strategic plans (locally called 'Master Plans'). Finally, the paper focuses on the challenges and opportunities arising from the BRT and Orange line metro projects, to establish the urgency of finding reforms in land use planning to facilitate TOD.

Pre-1947 Lahore

Lahore was a prominent centre of the Mughal Dynasty. Before the Mughals, Lahore was subjected to regular Afghan and Mongol invasions that it protected itself from by building 13 gates and a wall around the inner city. The Mughals aspired to transform the city by constructing architecturally significant buildings including Lahore Fort (1566) (see Figures 1), Shalimar Garden (1642) and Badshahi Mosque (1673).

After a brief period of Sikh rule in the first half of the nineteenth century, the British colonization of north-western India brought further changes to the architecture and culture of Lahore. The Lahore Railway Station was completed in 1861, connecting the city with major urban and regional centres. The British established prestigious educational and research institutions in Lahore (such as Government College (1861)); a modern municipal system (Municipal Committee (1862) (see Figures 2); open spaces (Lawrence Garden (1862)); and new road systems (such as Egerton Road, Davis Road etc.). The Punjab Municipal Act 1911, Punjab Town Improvement Act 1922, and Lahore Municipal Corporation Act 1941 were all used to regulate land use and the provision of infrastructure facilities in Lahore.



Figure 1 Lahore Fort (Source: Authors)



Figure 2 Lahore Metropolitan Corporation Building (Source: Authors)

The British viewed the old city (mixed land use in an organic layout) as backward and in need of modernization by separate zoning and by-laws for housing, educational and institutional buildings, and commercial activities³. Model Town, established in 1921, on the outskirts of Lahore, was laid out on 'garden city' principles with bungalow-style housing and was governed by the Cooperative Model Town Society Limited (see Figure 3). The newly built areas and major civic and government buildings in Lahore were connected through a suburban railway network, omnibuses and horse-drawn carts (tongas)⁴. These developments strengthened Lahore's status as the political, social and cultural capital of north-western India⁵. However, the chaotic, densely-populated inner city remained excluded from modern planning practices. The walled city continued with its traditional *bazar* economy⁶.

Patrick Geddes report 'Town Planning for Lahore' published in 1917 argued for conservation and improvement of the walled city of Lahore through a 'conservative surgery' approach rather than large-scale demolition in the name of slum clearance. He emphasized combining physical and social planning in development projects and proposed several 'garden villages' outside the walled city to accommodate Lahore's urban growth. The later part of the colonial period was characterized by a development planning tradition, in which state-led policies sought to co-ordinated land use with accessibility through transport and to enrich the social and economic sustainability of the city.

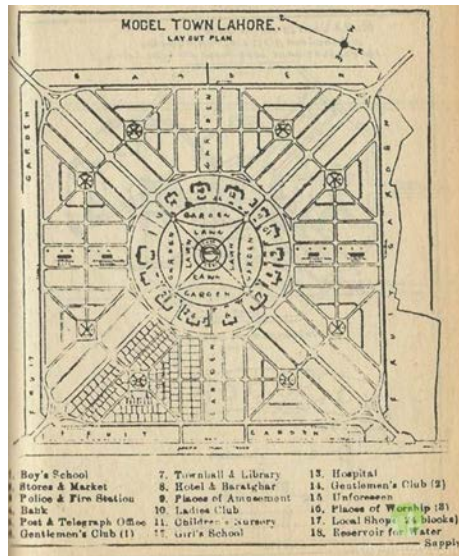


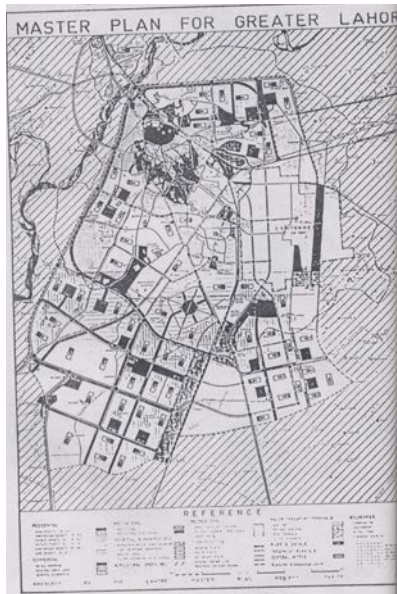
Figure 3 The Model Town, Lahore, 1927 (Source: Sir Ganga Ram Pocket Book of Engineering)

Post-1947 Lahore

Lahore suffered after the partition of British India in 1947 when 240,000 middle-class Sikh and Hindus, comprising one-third of Lahore's population, fled to India⁷. On the other hand, almost half of East Punjab's population (comprising 400,000 Muslims) moved to Lahore in a wave of reverse migration and violence. This demographic change made Lahore one of the fastest growing cities of the time. The partition also made Lahore a border city, creating a sense of insecurity not experienced before.

Pakistan joined the Colombo Plan in 1950 and made arrangements for preparing national level Five Year Plans. The second Five Year Plan (1960-65) recommended preparing master plans for 11 major cities, leading to the formulation of the first *Master Plan for Greater Lahore (1965-80)*⁸. The Master Plan project office published an interim report in 1962 followed by the Master Plan in 1965. First Master Plan proposed a three-tier hierarchy of neighbourhood, district (metropolitan) and divisional (greater district) civic centres, a 24 kilometre green belt around the city and four industrial satellite towns served by high-quality inter- and intra-city transportation projects⁹. A 'circumferential arterial road' (later named the Ring Road) was also proposed together with standards for a road hierarchy, justified as a catalyst for economic growth¹⁰. For commuter traffic, the Master Plan recommended a mass transit 'circular railway' system as a 'long-range project', arguing that the Lahore Omnibus Services would be unable to cope with the expansion of new planned neighbourhoods and satellite towns. Most of the road proposals in the first Master Plan were eventually implemented in the medium to long term, although a large part of the Ring Road has been constructed only recently. The circular railway as a mass transit system and a green belt to check urban sprawl and ribbon development did not catch the attention of decision-makers.

The Lahore Urban Development and Traffic Study (LUDTS), known locally as the Lahore Structure Plan (1980-2000), was the second strategic master plan prepared by foreign consultants and financed by the World Bank. Like the 1965 Master Plan, the 1980 Structure Plan recommended south and south-westward growth over its twenty-year life supported by high-speed roads¹¹. The main argument behind its proposals was the strong belief that a rising level of economic activity would bring low-density suburban development and a higher volume of private vehicles¹². With no statutory basis the Structure Plan remained an advisory plan for the development¹³. The *Integrated Master Plan for Lahore (2001-2021) (IMPL)* (LDA, 2004) and the (draft) *Integrated Strategic Development Plan for Lahore Region 2035 (ISDP-35)* (LDA, 2013) are the recent strategic urban development plans prepared to guide future development in the Lahore metropolitan area. In relative terms, land use planning and policy in both the IMPL and ISDP-35 maintain the status quo of accommodating future urban growth in greenfield development at the edge of the city (see Figure 4).



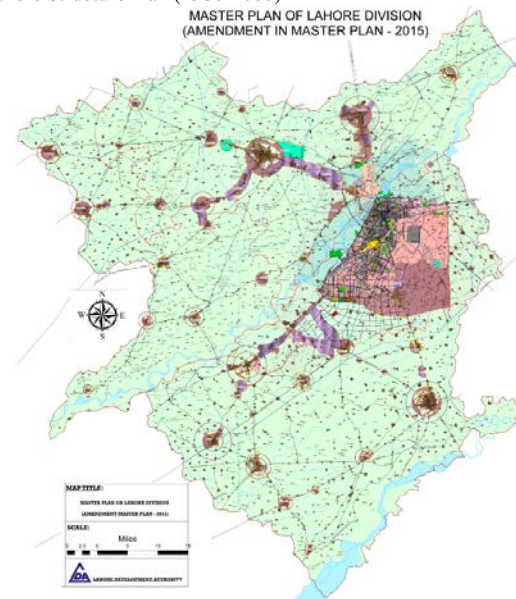
Master Plan for Greater Lahore (1965-80)



Lahore Structure Plan (1980-2000)



Integrated Master Plan for Lahore (2001-2021)



Integrated Strategic Development Plan for Lahore Region 2035

Figure 4 Various Master Plans of Lahore (Source: Document published by LDA)

All Master Plans were not fully implemented due to institutional disconnection - the absence of a comprehensive implementation framework, the absence of legal protection of the plan, a lack of systematic allocation of funding to proposed projects, out-dated zoning, building and land subdivision regulations, flawed property tax policy, the absence of programmes for urban renewal and the purchase of land for public purposes, and of incentives for private sector and institutional re-organization¹⁴. All Master Plans in Lahore have weaknesses in terms of their content, preparation process and enforcement mechanisms¹⁵. Moreover, these plans only apply to two-thirds of the total area under the jurisdiction of Lahore Development Authority (LDA) and the Lahore Metropolitan Corporation. These plans do not include land uses and bylaws in Cantonment¹⁶ or Defence Housing Authority areas even though these comprise nearly one-third of the built-up area of Lahore. Overall, Master Plans have taken a long time to prepare and then have been approved (or partially approved) reluctantly, do not apply to significant parts of the urban area and are inadequately and selectively implemented. In spite of these deficiencies, however, these plans set the direction for future urban growth for the upper-middle class and for investment in city transport. For example, the exponential growth of gated communities in urban fringe has become successful in recent decades



because they offer the growing urban middle class better security in the face of increasing street crime and terrorism¹⁷ and a prestigious a lifestyle that gives access to modern facilities and amenities, along with speculative investment. After spending four years as a Country Director for UNDP, Marc Andre Franche spoke of Pakistan's 'apartheid of opportunities' and argued that 'Pakistan will not be able to survive with gated communities where you are completely isolated from the societies, where you are creating ghettos at one end and big huge malls for the rich at the other end. It is not the kind of society you want your kids to live in'¹⁸. However, it is not only the planning mechanisms within Pakistan that favour the elite, but also international agencies such as the World Bank which continue to promote an elite-led economic growth model which exacerbates inequalities¹⁹.

Challenges to and opportunities for sustainable transformation

Despite the pro-road and pro-suburban emphasis of Master Plans in the post-Independence era, 60 per cent of the 9.6 million daily trips in Lahore still take place by sustainable transport (walking, cycling and public transport)²⁰. This is possible because 80 per cent of Lahore's population still lives in the inner and intermediate areas of the city, within an average seven kilometre radius of the centre, at average densities of 200-600 persons per hectare²¹. There is an opportunity to prepare urban development plans that show sensitivity to the socio-economic characteristics and spatial realities of Lahore and bring investment and improved quality of life to these existing high density urban areas. This section explores difficulties to date in challenging the road-based transport paradigm through case studies of Pakistan's first Bus Rapid Transit (BRT), or the Metro Bus, and of the metro, or 'Orange', train line currently under construction. We argue that these public transport investments should serve as catalysts for land development alongside the BRT corridor and around train stations as the basis for sustainable regeneration.

Bus Rapid Transit (BRT): Pakistani cities have failed to develop high-quality mass transit systems in the post-Independence era, and public transport has been provided largely by privately-owned minibuses with very low levels of service and comfort²². The main reason for this failure has been a lack of political leadership and investment in public transport to make the best use of existing high-density development²³. However, this situation changed in 2013, when the Chief Minister of Punjab, Shabaz Sharif (SS), succeeded in gaining support to complete Pakistan's first BRT in Lahore. Lahore BRT is a 27 kilometre-long corridor and is equipped with an intelligent transport system (ITS) (see Figure 5).



Figure 5 BRT in Lahore (Source: Author)

The project was completed in 2013, at the cost of approximately PKR 30 billion (US\$ 0.28 billion), raised from provincial resources. BRT has been criticized for its high construction and operational costs, the dislocation of people and businesses, its negative impact on the environment and heritage sites, the opportunity cost of education and health issues affecting the entire province, and lack of public involvement in the planning and design processes. However, some scholars have viewed the criticism of the BRT as being out of context in that it did not take into account public transport key performance indicators. BRT offers high speed (45-60 km/hour) transport during both peak and off-peak periods²⁴ and, together with a fare structure that encourages short trips, it has the potential to become a 'game-changer' for the public in Pakistani cities who have been accustomed, under the deregulated private sector to being loaded like cattle on to buses and wagons (low-quality mini-buses)²⁵. Haider²⁶



sees an essential role for public investment in public transport but proposes that the private sector should be involved in property development to subsidize the capital cost of transit projects.

The Orange Line: The successful implementation of the BRT project encouraged the Punjab Government to initiate Pakistan's first metro train, the Orange line project, in Lahore, planned to be completed in mid-2018. Like the BRT, the 27 kilometre-long railway passes through historical and compact parts of the city. Approximately 250,000 people a day will be able to travel on this train. The Orange line comprises 25.3 kilometres of elevated and 1.7 kilometres of underground sections. The total cost²⁷ of the project is estimated at over PKR 162 billion (US\$ 1.5 billion), 100 per cent financed by a Chinese 'soft' loan. The Chief Minister of Punjab has described the Orange line as the 'common man's ride', providing safe, swift and pollution-free transport. Like the BRT, the Orange line project has also been opposed by political and civil society actors who have concerns about the dislocation of people²⁸. Questions have also been raised about the transparency of land acquisition and compensation, lack of civic engagement, privacy issues and the threat of terrorism inherent in the elevated sections. The loudest opposition came from groups who had reservations about the design of the project and its potential effects on important heritage sites of Mughal and British architecture (see Figure 6). Because of these controversies, the project has been challenged in the Lahore High Court. The Orange line project was suspended in August 2016, when the Lahore High Court ordered the Punjab Government to stop construction at sites near eleven historic buildings. The court ruled that this violated a law prohibiting construction activities within 200 metres of UNESCO-listed heritage sites.



Figure 6 The Orange line construction near the Chaurburji, Lahore (Source: Pakistan Today newspaper)

The Punjab government challenged this decision in the Supreme Court (the highest court in the country), which allow construction of remaining sites after one year of hearing and on the advice of the technical committee. The government had hoped to complete this project before the 2018 general election in May. In short, a lack of communication and the adoption of a set planning process, a deficit in trust, and mismanagement - specifically, the absence of a traffic plan and resettlement issues - created confusion about both the BRT and Orange line projects among residents, businesses and professionals. We consider the lessons from these projects to provide a 'window of opportunity' for the discussion and introduction of contemporary urban planning practices and, specifically, of transit-oriented development in Lahore which will be explored in the next section.

TOD as a model for Lahore's future: Considering Lahore's long history of greenfield development, how can the BRT and the Orange line can drive a transformational shift in sustainable urban development. It is estimated that the service sector in Lahore has already grown to 42 per cent of the workforce, resulting in mass transit system demand. The BRT and Orange line projects, while imperfect, need to be built upon in support of the case for investment in high-quality public transport to reduce rising congestion under conditions of continuing population and economic growth. Proposals for transport and land use integration have been largely absent from Lahore's Master Plans to date. The current practice of reactive planning needs to be replaced by proactive planning based on TOD in newly-built public transport corridors. The recently developed Punjab Land Use Rules 2009 also allow high rise residential and office towers and Lahore has also received more investment in the retail sector than anywhere else in Pakistan in the last ten years through the building of medium and large-scale shopping malls²⁹. However, these malls are located haphazardly in the city and are mainly accessible by cars. There is a need to direct this retail investment strategically to sites accessible by the Orange line and BRT. Private developers toned



to be encouraged to invest in land development in high-quality transit corridors, particularly if the LDA assists by assembling the land.

Lahore can learn from the experience in this regard of Hong Kong and Singapore in Asia and of Curitiba, Bogota and Santiago in South America, all of which integrated high-quality public transport with land use by adopting a proactive transport and land use planning approach, sometimes called the 'transit city' model³⁰. In Lahore, it is important to develop a shared smart vision of the BRT and the Orange line corridors and to prepare an urban regeneration master plan for these corridors, followed by institutional capacity building to manage regeneration. Pakistani cities need clever preservation and creative destruction to make urban renewal happen³¹. Even high-density cities can adopt a compact city policy with 'local sensitivity' to improve the quality of life³². Likewise, we argue that a regeneration plan should incorporate a holistic place-based land use plan covering a 500-metre radius from BRT and train stations. High-density TOD along a transit corridor ultimately generates a greater number of passengers to sustain a mass transit system, and Lahore could transform Ferouzpur Road, Multan Road and GT Road into new and desirable high-density residential and commercial areas (see Figure 7).



Figure 7 The built environment alongside the Orange line (Source: Chief Minister of Punjab Facebook)

Lahore, historically an 'aspiring architectural capital' and a 'political powerhouse'³³ in the post-independence era, is well-placed to exploit its strengths to adopt TOD. The transit-city model requires the institutional capacity to adopt innovative land use approaches, rules, regulations and procurement strategies in their local context. The Punjab Mass Transit Authority (PMTA) has considerable responsibility for policy-level guidelines, regulations and procurement of public transport but, in its current form, it lacks a mechanism to collaborate with LDA and LMC, the land use planning agencies. The LDA itself has little or no experience or capacity to formulate or implement land use policy in existing built-up and brownfield areas, but high-density development is gaining momentum as powerful voices are raised against the negative consequences of sprawl. For example, the Higher Education Commission Pakistan recommended that 'in view of urban sprawl in the country, it has become imperative to establish a top-level Land Use Planning Authority at Federal Level along with parallel Provincial and District Level Authorities for land use planning and strategic development planning in the country'³⁴. There is also a proposal to pass a City and Regional Planning Act in Punjab to establish a Divisional (Regional) Planning Authority (DPA), which will be responsible for spatial planning and land use and building control. It is expected that the DPA will promote and encourage a pattern of compact and mixed land use development that is convenient to existing transportation infrastructure.

Although a region-wide planning agency is desirable to focus on the bigger-picture land use and public transport issues, there is also a need to concentrate on creating innovative mechanisms to fund the public transport network. A TOD-based urban growth model will help to develop innovative sources of funding public transport. The BRT project in Lahore was built by the Punjab government and the Orange line is under construction with the help of Chinese funds. However, the financial sustainability of these projects is in question unless new and reliable sources of funding can be found to support their operation and extension³⁵. Although it is too early to claim that the BRT and Orange line will increase property values in the future, this should be the aspiration, and there is a need to develop rules to capture these increases, brought about by public investment. Many projects around the world now use value-capture models to fund high-quality public transport systems in cities³⁶. However, land value capture is generally limited to commercial properties. We also argue for value-capture mechanisms for regeneration or



redevelopment of whole corridors supported by an urban renewal programme and micro-level land use planning approaches, using the BRT and Orange line corridors as a pilot project and starting with the development of government-owned properties. Affected people can benefit from newly refurbished apartments, and new commercial areas can be developed, taking advantage of increased patronage and providing the basis for value capture to fund future transit investment. The new regeneration plan needs to be underpinned by enhanced urban design near bus and train stations and can still be informed by Patrick Geddes's suggestions to include street layouts, plot shapes and small pocket parks to promote the social and economic interaction between residents. A successful pilot project can help to mobilise the support of civic, professional and political actors beyond traditional transport operators and property developers³⁷.

The BRT and the Orange line projects in Lahore were underpinned by political will and charismatic leadership, but professional leadership is also required. Planners have the technical knowledge to justify and chart a path towards a more sustainable city³⁸. The Pakistan Council of Architecture and Town Planners (PCATP), the Institute of Planners Pakistan (IPP), Institute of Architects of Pakistan (IAP) and the Pakistan Engineering Council (PEC) need to show professional leadership and bring the smart corridor and TOD agenda to the forefront of the development debate. The establishment of a Lahore Development Forum for the ongoing debate about future development scenarios for the city could also help to inform the next generation of civic leaders. Engaged residents, professionals and politicians have the capacity over time to influence an alternative development agenda positively. In short, the BRT and the Orange line initiatives can be seen as an opportunity to break the path dependency of roads and greenfield development providing the first steps in overhauling land use planning and transport policies to make infrastructure investments sustainable over time. A comprehensive institutional framework for integrating public transport and land use planning in Lahore is required to influence policy, funding and leadership in favour of TOD. If Lahore takes the lead in developing such a framework, then the city will be at the front of the sustainable city queue in South Asia.

Endnotes

¹ JICA, 2011

² Imran, 2010; Haider, 2014; Ul Haque, 2014

³ Glover, 2007

⁴ Rudduck, 1965

⁵ Suvorova, 2011

⁶ Leonard, 1986

⁷ Talbot, 2006

⁸ GoPunjab, 1973

⁹ Rahmaan, 2013

¹⁰ Imran, 2010

¹¹ LDA and World Bank, 1980a

¹² LDA and World Bank, 1980b

¹³ Rahmaan, 2013

¹⁴ Hameed and Nadeem, 2008

¹⁵ Anjum, 2010

¹⁶ Cantonment Boards, established under the Federal Ministry of Defence are responsible for performing local government functions in their jurisdiction.

¹⁷ Coaffee *et al.*, 2009

¹⁸ <https://tribune.com.pk/story/1171773/former-undp-director-takes-aim-pakistans-elite-scathing-final-interview/> dated 29 August, 2016

¹⁹ Ali, 2016

²⁰ JICA, 2011

²¹ Anjum, 2010

²² Adeel *et al.*, 2016; Imran, 2009; Haider and Badami, 2005

²³ Imran, 2009

²⁴ Haider, 2015a

²⁵ Haider, 2015b

²⁶ Haider, 2015b

²⁷ <https://tribune.com.pk/story/1014135/metro-train-project-govt-chinese-bank-ink-rs162b-loan-agreement/> dated 22 December 2015

²⁸ <http://tribune.com.pk/story/1008500/transport-revise-metro-train-projects-model/> dated 12 December, 2015

²⁹ <http://tribune.com.pk/story/1092296/mall-culture-pakistans-booming-retail-sector/> dated 27 April, 2016

³⁰ Cervero, 1998

³¹ Ul Haque, 2014

³² Bardhan *et al.*, 2015

³³ Pakistan's administrative structure comprises four Provinces (Punjab, Balochistan, Sindh and Khyber-Pakhtunkhwa), seven Tribal Agencies, Azad Kashmir and Northern Areas. However, Punjab comprises over 56 percent of the total population of the country and is influential in popular politics. Therefore, Lahore as the capital of Punjab is called a political powerhouse of the country.

³⁴ Higher Education Commission, Pakistan, 2011, p.61

³⁵ Imran, 2015

³⁶ Burke, 2016

³⁷ Burke, 2016



Bibliography

- Adeel, M., Yeh, A., and Zhang, F. "Transportation disadvantage and activity participation in the cities of Rawalpindi and Islamabad, Pakistan." *Transport Policy*, 47 (2016): 1-12.
- Ali, S. "Partly true." *The Express Tribune*, 8 September 2016. Available at <http://tribune.com.pk/story/1178855/partly-true/> Accessed 8 February 2017
- Anjum, A. *Assessment of Land Development and Management Practices in Five Large Cities of Punjab*. Lahore: Urban Unit, 2010. Available at <http://www.urbanunit.gov.pk/PublicationDocs/28.pdf> Accessed 30 June 2017
- Bardhan, R., Kurisu, K. and Hanaki, K. "Does compact urban forms relate to good quality of life in high density cities of India? Case of Kolkata." *Cities*, 48 (2015): 55-65.
- Burke, M. "Problems and prospects for public transport planning in Australian cities." *Built Environment*, 42, No. 1 (2016): 37-54.
- Cervero, R. *The Transit Metropolis: A Global Inquiry*. Washington: Island Press, 1998.
- Chiodelli, F. "Re-politicizing space through technical rules." *Planning Theory*, 11, No. 2 (2011): 115-127.
- Coaffee, J., O'Hare, P. and Hawkesworth, M. "The visibility of (in)security: the aesthetics of planning urban defences against terrorism." *Security Dialogue*, 40, No. 4-5 (2009): 489-511.
- Glover, W. *Making Lahore Modern: Constructing and Imagining a Colonial City*. Minneapolis, MN: University of Minnesota Press, 2007.
- Government of the Punjab (GoPunjab) *Master Plan for Greater Lahore*. Lahore: Master Plan Project Office, Housing and Physical Planning Department, 1973.
- Haider, M. & Badami, M. "Balancing efficiency and equity in public transit in Pakistan", in Laquian, A., V. Tewari, and L. Hanley (eds.) *The Inclusive City: Infrastructure and Public Services for the Urban Poor in Asia*. Baltimore: The Johns Hopkins University Press, 2005.
- Haider, M. "Pakistan's urbanization challenges: Transport and mobility", in M. Kugelman (eds.) *Pakistan's Runaway Urbanization: What Can be Done?* Washington: Wilson Center, 2014.
- Haider, M. "A game-changer for the Pakistani public." *The Dawn*, 6 Feb, 2015a. Available at <http://www.dawn.com/news/1161887> Accessed 8 February 2017
- Haider, M. "Moving masses." *The Dawn*, 29 January, 2015b. Available at <http://www.dawn.com/news/1083553/moving-masses> Accessed 8 February 2017
- Hameed, R., & Nadeem, O. "Challenges of implementing urban master plans: The Lahore experience." *World Academy of Science, Engineering and Technology*, 2, No. 12 (2008): 1297-1304.
- Higher Education Commission, Pakistan *Curriculum of City & Regional Planning*. Islamabad, 2012. Available at <http://hec.gov.pk/english/services/universities/RevisedCurricula/Documents/2011-2012/CityAndRegionalPlanning-2011-12.pdf> Accessed 30 June 2017
- Imran, M. "Public transport in Pakistan: A critical overview." *Journal of Public Transportation*, 12, No. 2 (2009): 53-83.
- Imran, M. *Institutional Barriers to Sustainable Urban Transport in Pakistan*. Karachi: Oxford University Press, 2010.
- Imran, M. *Innovative ways of funding public transport: Lessons for Pakistan*, 2015. Available at http://pakstran.pk/ncst_papers.html Accessed 30 June 2017
- JICA. *The Project for Lahore Urban Transport Master Plan in the Islamic Republic of Pakistan*. Lahore: ALMEC Corporation, 2011.
- Lahore Development Authority (LDA) and World Bank/IDA. *Lahore Urban Development and Traffic Study, Vol. 1-A – Urban Planning*. Lahore: LDA, 1980a
- Lahore Development Authority (LDA) and World Bank/IDA. *Lahore Urban Development and Traffic Study, Vol. 1-B – Urban Planning*. Lahore: LDA, 1980b.
- Leonard, J. "City profile: Lahore." *Cities*, 3, No. 1 (1986): 12-23.
- Rahmaan, A. "Lahore: Then (1960 and 1980), now (2000), and its future prospects", in Bajwa, K. (eds.), *Urban Pakistan*. Karachi: Oxford University Press, 2013.
- Rudduck, G. *Urban biographies*. Karachi: Planning Commission, Physical Planning and Housing Study 19, 1965.
- Suvorova, A. *Lahore: Topophilia of Space and Place*. Karachi: Oxford University Press, 2011.
- Talbot, I. *Divided Cities: Partition and Its Aftermath in Lahore and Amritsar, 1947-1957*. Karachi: Oxford University Press, 2006.



The 18th International Planning History Society Conference - Yokohama, July 2018

- Ul Haque, N. "Frustrated urbanization and failed development in Pakistan", in M. Kugelman (eds.) *Pakistan's Runaway Urbanization: What Can be Done?* Washington: Wilson Center, 2014.



Ankara Commuter Line as the Product and Witness of Modern Planning Experience in Turkey

Selin Çavdar Sert*, Funda Baş Bütüner**, Ela Alanyalı Aral**

* *PhD, Gaziantep University, Department of City and Regional Planning, selin.cavdar@gmail.com*

** *PhD, Middle East Technical University, Department of Architecture, fbutuner@metu.edu.tr*

** *Assoc.Prof., Middle East Technical University, Department of Architecture, earal@metu.edu.tr*

Evolution of commuter rail transit systems has always served a tight relationship with the development of urban planning theory and practice. Commuter rail development in Ankara has a peculiar history begun with the pronouncement of Ankara as the capital city of the new regime in 1923, as opposed to its numerous contemporaries which had emerged as the lasting effects of Industrial Revolution on cities. In the earlier plans representing the culturalist school of spatial organization, Ankara commuter line was recognized as a planning tool in the designation of the rural-urban continuum, urban green network, community spaces and logistic centers. The commuter line together with adjoined uses, today, might be a remarkable case in the broad identification of the railway heritage assets as well as the complementary relationship between urban morphology and history. Besides being a mass transport service covering approximately 37 km distance, the line provides planning opportunities in consolidating the fragmented historic properties (historic villages, landed estates, industrial areas etc.) of the Republican period plans and discovering the spatial interactions generated by the railway lines. In this respect, the aim of this study is to reveal the significance of Ankara Commuter Line as a city planning legacy by mapping its earlier development and accompanied built and landscape heritages.

Keywords: City Planning Legacy, Ankara Commuter Line, Planning History, Railway Heritage

Introduction

Beyond being linear transport features, railways have always been constructive tools in the early 20th century nation-building, economic restructuring, territorial control, urban and regional development processes. Setting aside their technical features, a railway line may be recognized as the medium of a long journey that penetrates into the history of a city and society by revealing and incorporating historic assets. Within this context, this paper focuses on the commuter line of Ankara as the product and witness of the early 20th century modern planning experience.

Before World War I (WWI), the railway network crossing Ottoman Anatolia (Berlin-Istanbul, Istanbul-Bagdad) was controlled by the European empires. The railway technology, on the other hand, was imported from those western quarters; and Ottoman Empire was obliged to create tremendous budgets for the regional railway constructions. Since the railway policy of Ottoman Period was strongly dependent to territorial/regional control plans of European empires, the inlands of Ottoman Anatolia lacked of railway system which further became a strategic problem during the Turkish War of Independence. After the WWI, many newly established nations started to structure their economy in line with the progressive development ideas. The Republic of Turkey followed this path in order to remove dependent Ottoman Empire image as well as to take a place among developed Western countries as an independent and equal partner. Removal of railway imperialism was one of the targets of the young Republic in making independent national policy and economy (Figure 1). Nationalization of the railway network was equated with the success of the new regime; and institutionalization of railway constructions was recognized as a prerequisite in achieving national development and international commerce goals. The pronouncement of Ankara as the new capital was also supporting the progressive ideals of the state in a sense that the establishment of modern capital would represent the new regime and its cultural codes. Ankara, on the other hand, was offering a poor nature and insufficient infrastructure qualities in the aftermath of the War -even though it had been a prestigious and strategic node during the Turkish War of Independence owing to its central geographical location and the existence of railway and telegraph systems¹. Therefore, the establishment of the capital city and construction of the commuter line began simultaneously; and

¹ During the War, Ankara was decided to be the center of the War since the city was far enough from the hot war and close to the West. The city was also a node in the telegraph network and had the railway access to Istanbul and other war spaces (Tekeli, 1984). After the War, Republican elites were expecting that Istanbul would stay as the capital city. However, as being the prestigious center of the War, Ankara was pronounced to be the new capital city.



this process generated a commuter line which has been highly integrated with the Republican Period's industrial and landscape heritage.



Figure 1: Demiryollar [Railway] Newspaper, 1931:7. *Picture depicting the power and significance of machine age and railway construction as the sign of civilization.*

There are two early planning studies which play significant roles in the emergence of the modern urban core and rural environments of Ankara as well as the development of Ankara commuter line. Prepared by Carl C. Lörcher (1924-1925) and Hermann Jansen (1928-1937), the main features of the plans were expressing the 19th century culturalist planning approaches². The commuter line of Ankara, on the other hand, was recognized as a consolidative and generative component in these early planning approaches, since it was united with green stripes, public squares, productive landscapes (agricultural lands, landed estates, recreation areas) and small number of industrial quarters. Later planning experiences of the city between 1955 and 1980 exposed the commuter line as a barrier and transportation threshold in the designation of industrial and residential zones, shaping up the urban macroform and stratifying parallel multi-lane roads which further resulted in a sharp polarization between north and south of the line as well as the loss of the earlier planning legacies (rural-urban continuum dominated by landscape fabric, transport-landscape interaction).

Ankara commuter line, currently, depicts a territory that covers heritage assets and diverse forms of interaction as the products of modern city planning experience. Regarding the planning history of Ankara, this study intends to reveal the significance of Ankara Commuter Line as a city planning legacy by mapping its development and accompanied heritage. The conducted mapping study focuses on the early planning legacies which once produced continual landscape fabric (including heritage assets) and socio-spatial interaction, yet now are fragmented at a greater pace.

Recovering the Commuter Lines beyond Mass Transport

Keeping in mind the tight relationship between urban fabric and railway development and considering the impact of the railway development in reflecting multi-layer histories (nation-building, railway imperialism), it is possible to read planning history of a city through its railway/commuter line development. Transportation corridors, for Wilson (2002), can reflect particular events in nations' or societies' histories since these corridors may be deeply embedded in the collective memory and be recognized as "*the timeline of the country*". In this respect, commuter lines possess the associative values that blend time-space and societies in a particular context. The built and landscape fabric enfolding railway lines, on the other hand, may comprise historic assets which embellish the historic significance of these lines. In that sense, a railway journey would transform to a spatial experience that narrates and consolidates distinct fragments of urban history.

Urban history and urban morphology studies have a complementary relationship; as Moudon (1994) puts it, any morphological research can only be conducted by historical analysis; since whole and parts have undergone continuous change and transformation. Similarly, planning history of a city cannot be read without decoding and mapping the physical components of urban fabric in a certain chronology. As being physical components of urban form, the commuter lines might be significant cases in understanding the city planning histories. Beyond being massive passenger services, owing to their scale, function and linearity, as well as sequences (stations and

² According to Choay (1969), planning understanding of the late 19th century is based on two main schools of spatial organization which are progressist and culturalist. Progressist model maintains the social progress and future scenarios whereas culturalist model emphasizes urban cultural community and history in a nostalgic outlook (Choay, 1969: 31-102).



stops) and motion, diverse forms of spatial interaction and meaning have generated during their lifespans. The interactions often demonstrated by the culturalist urban planning approaches (rural landscape-railway, urban core-railway, neighborhood-railway, industry-railway, green-blue infrastructure-railway) contribute emergence of a territory that transcends the seemingly impermeable borders of the railway corridors. Since culturalist approach was characterized by compact urban form, radial ordered green structures and arteries, continual voids, low density development, strong emphasis on urban history and geomorphology; commuter lines were predominantly recognized as planning tools in the designation of the rural-urban continuum, urban green network and community spaces.

On the other hand, a commuter line itself has the capacity to construct an interactive spatiality beyond defining a strict border between urban uses. This nature of commuter lines might bring new perspectives for the development of future planning scenarios; and for Allen (1991) "Its [transport infrastructures'] primary modes of operation are; the division, allocation, and construction of surfaces; the provision of services to support future programs; and the establishment of networks for movement, communication, and exchange". However, these interactions or permeability between physical components, for Moudon (1994), cannot be represented through conventional solid-void mapping techniques.

This morphological re-structuring evolved historically also provides opportunities for the broad identification and consolidation of the railway heritage assets (station buildings, bridges, tunnels, culverts, maintenance hubs, storehouses, housing compounds, railway landscape) and accompanying heritages (industrial, landscape). The linearity and sequential feature of the railway transport brings out visual interaction with heritage sites/assets, and eventually make them legible as identical image elements of the city. Sustaining the entire commuter line as a heritage asset is an urban planning question owing to the scale, function, transformative impact of the line on the urban fabric and accompanying assets (built and continual natural properties). The railway lines have a transformative nature that generate continual spatial changes all along their neighboring environment (Bütüner, Aral, Sert; 2017b). The chronology and physical pattern of transformation are significant in understanding the spatial history of the railway and in developing future scenarios for the adjoining urban fabric. As Tatom (2006) stated, modes of interaction between transportation lines and cities are worth to discover, since they may be treated as spatial planning opportunities beyond being technical infrastructure requirements.

The other aspect concerning commuter lines is their capacity to unite opposites (De Block, 2013) both in physical and conceptual/perceptual terms. They can knit together rural and urban, natural and artificial, traditional and modern, historic and new, continual and sequential, linear and nodal. This feature of commuter lines doubtlessly motivates urban history and morphology studies to adopt new terminologies and mapping techniques in understanding the transport infrastructures.

Regarding this theoretical framework, Ankara commuter line offers a characteristic case in discussing the contribution of the 19th century modern planning approaches in creating distinct forms of built and landscape heritages, the exploration of the conceptual origins concerning railways as uniting planning tools, as well as the transformative impact of commuter lines on the landscape fabric. **It is important to note that there is not any previous study concerning the historic significance, heritage value or morphological analysis of Sincan-Kayaş Commuter Line development in Ankara. Through this study, it is also aimed that planning history studies in Turkey might gain new perspectives in understanding the tight relationship between urban history, urban morphology and commuter line development as well as in the broad identification of railway and accompanying built and landscape assets as significant modern planning heritages.**

Reading the Planning Legacy of Ankara through Commuter Line Development

Emergence of the city of Ankara and the commuter line have a peculiar and shared planning history dated back to the establishment of the Republic of Turkey in 1923. The capital city was shaped by six planning experiences³ having their impacts on the macroform, CBD, transport systems and quality of life. Regarding the approaches adopted for these planning processes and the changing growth dynamics of Ankara, the commuter line was conceptualized, utilized and transformed in distinct ways. Among them, the plans prepared by Lörcher and Jansen are the focuses of this article, since their approach on Ankara commuter line aimed to generate rural urban continuum, social meanings, visual quality and quality of life which are worth to explore. Reflecting the culturalist ideas, these two early planning experiences recognized the commuter line development predominantly as a tool for bringing social infrastructure to the city and in exposing rural-urban continuum by uniting the line with industrial areas, landed estates and green structures. By the later planning processes, the multiple functions of the commuter line were reduced into transport oriented strategies as opposed to the early planning approaches.

³ Realized between 1924-1956, the three master plans followed culturalist planning approaches. The two plans prepared between 1970-1990 had the features of structure plan, and the rest adopted strategic planning approach.



This approach further resulted in the loss of historic meaning of the line and the fragmentation of the earlier planning legacies.

Establishment of Ankara and the commuter line had a close relationship with the progressist⁴ and statist goals of the early Republican Period: realization of the exemplary urban revolution, cultural modernization, socio-economical progress embodied in the establishment of the modern capital city. Ankara as being the new administrative center would portray the spatial manifestation of the national progress. The War of Independence brought a demolished town center that had long lacked of sufficient social, cultural and physical services. The regional railway line reaching to the west edge of the town center was the only sign of civilization grasping the moorlands of Ankara. Displaying the characteristic properties of the pre-industrial city, Ankara had developed around the citadel and made up of wooden two- storey dwellings; streets had not seated on any geometric order and lacked of infrastructure. German architect Carl C. Lörcher was commissioned for the preparation of a master plan in 1923 (Cengizkan, 2006). Finalized in 1925⁵, the plan was modest and realistic which would be proposed to a newly established state that had limited post-war budget, human resources and technical knowledge.

The plan has a circular and compact macro-form supported by radial axes and baroque arrangements that associates sub-planning areas (Figure 2). The main districts, namely the historic town center *Angora* (on the north) and the new city *Çankaya* (on the north) were associated by the Station Road⁶. Starting from the railway station park, the Station Road, as its contemporaries in the Europe, was designed as the most prestigious commercial axis of the city. The main railway station and its periphery, for Lörcher (1925), should become one of the most significant image elements of Ankara. The station would be where newcomers and visitors met with the capital city and should reflect the modern cultural life in the city. For this reason, the periphery of the station was supported by commercial uses as well as parks and public squares having radial arrangements.

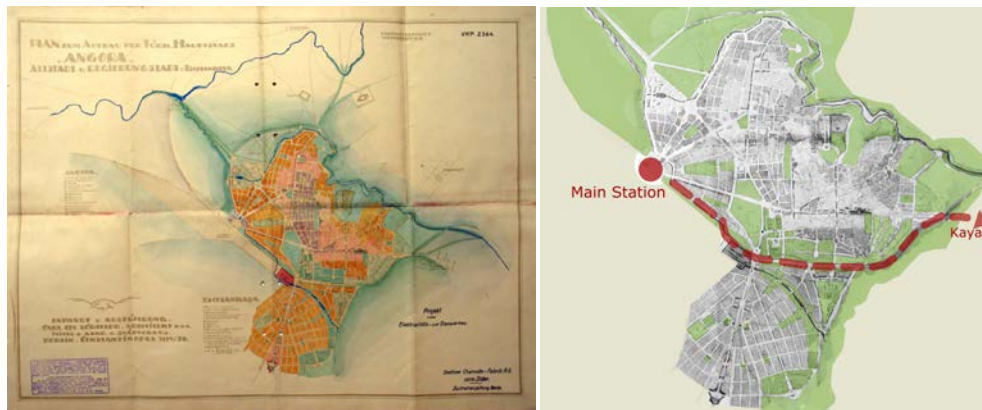


Figure 2: Carl C. Lörcher. *Ankara Master Plan dated 1925 (on the left); railway line and green network in Lörcher Plan (on the right).*

The construction of additional regional railway lines, for Lörcher (1925), would transform Ankara an important logistic node in the country and enforce its centrality within Anatolia. As a consequence, an industrial quarter was formed following the 3 km distance from the main station. Since the additional lanes of regional railway were under construction, Lörcher delimited planning study with the main station on the west (Figure 2). Regarding the feasibility limits of states' post-war economy, he did not suggest development on the flat lands of west portion (Lörcher, 1925), or not expose it as a possible development axis.

Following the establishment of Ankara-Kayaş railway line, railway excursion tours towards east were started in 1928 (Emiroğlu & Uzmay, 2013) which aimed to meet citizens with rural extensions of the city rather than providing massive transport. Dated back to the late 19th century, there have been vineyards, orchards, small size landed estates and summer houses on the route of the railway (Bütüner, Aral, Çavdar, 2017a). The excursion tours aimed to make existing green patches accessible, whereas the culturalist planning scenarios consolidated

⁴ For the founders of the Republic -Mustafa Kemal Atatürk and his comrades, being a self-sufficient nation necessitated progress in all levels and arms of economy (agriculture, industry, commerce), land democracy, science and culture.

⁵ During the planning study, Lörcher submitted two plans for the development of the historic city and the new city. The plan dated 1924 was mainly focusing on the existing urban pattern to highlight the historic and cultural potentials of the district whereas the plan dated 1925 was aiming to construct the new city and governmental quarter of the Republic. For Lörcher, Angora would reflect 'the glorious historic past of the city' whereas Çankaya would represent 'the future visions'.

⁶ Besides station and its periphery, the planning report detailedly analyzed potentials of the existing historic landmarks as well as stream network as a social infrastructure component, and proposed new road network, residential areas, public spaces, and urban services.



the patches by the addition of new green infills. The west axis, on the other hand, had different development dynamics owing to the geomorphologic outlines, soil structure, hydrology as well as spatial history of the land. In the early 1920s⁷, the railway line was the only sign of civilization grasping the moorlands of west Ankara. Moreover, marshlands extending along the Ankara Stream were enfolding the line. This physical character of the west was disrupting the modern image of the city besides being public health threat, whereas the west pole was recognized as a gate through which the regional trains approach to the city. Consequently, in 1925, quite a large size landed estate, namely *Atatürk Forest Farm*, was established in order to replace marshlands with productive and modern landscape; maintain the agricultural and industrial revolution; provide new and modern modes of recreation. Covering 52.000.000 sqm land, AFF was offering recreational and agricultural education facilities, in addition to modern agricultural and agro-industrial production. A railway station was opened in 1926 to reach the Farmland from the city center -which would also become a node for supplying raw materials as well as distributing AFF products such as beer, milk etc. to other cities. Existence of AFF and railway corridor attracted the industrial development along the commuter line, such as cement factory (1926), cartridge factory (1955), sugar factory (1962) in the following decades. The military quarters were also formed in the west portion as being other consequences of commuter line development.

At the end of the 1920s⁷ the population of Ankara increased more rapid than it was expected in 1924⁷. To obtain a new master plan, an invited planning competition was opened in 1928⁸. Among the candidates, Hermann Jansen who was also the award-winner of the Berlin Master Plan Competition was commissioned. Representing the culturalist school of spatial organization, the plan dated 1932 had a circular and compact macro-form and aimed to develop the city towards the north-south and east directions (Figure 3). The legacy of Lörcher Plan was kept except the revisions concerning the peripheral development of the Main Railway Station. Jansen's plan isolated the Main Station from the city center through placing it within an industrial corridor and removing the commercial uses around it (Günay, 1988). The construction of large arteries for motorized transportation, on the other hand, was not encouraged; even the main arteries of north-south and east-west connections were kept limited without bringing alternative roads that further caused permanent traffic congestion.

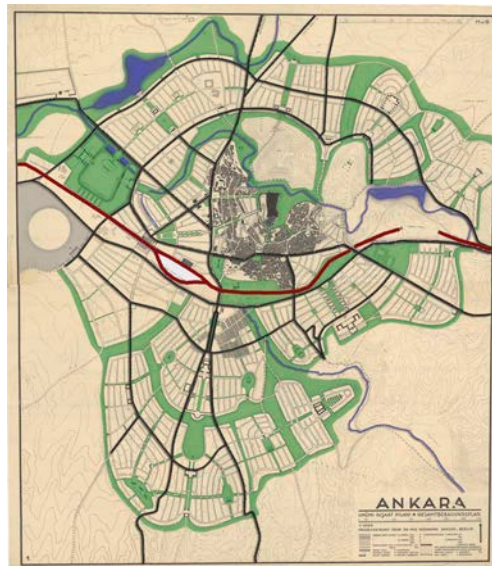


Figure 3: Hermann Jansen. *Ankara Master Plan dated 1932. The green network, railway line and main arteries comprising the outlines of the plan are emphasized in green, red and black colours.*

The green network of the plan had a high level organization⁹. The green areas as being continual-structural components of the plan, for Jansen (1937), should be accessible for all people and be offered in every

⁷ The population of Ankara was 40,000 in 1924, and Lörcher foresaw the future population of Ankara as 200,000 for twenty years since he had suggested low density development for the new city. However, the population of Ankara has already reached 75,000 in 1928, and there were not any planning experts to control the growth of the capital.

⁸ Before the competition, German planner Carl C. Lörcher was commissioned for the preparation of Ankara Master Plan in 1924 (Cengizkan, 2006). Continued until 1926, the planning study focused on reclamation of old city as well as designation of the main elements of new city without paying attention to macroform development.

⁹ Previous planning approaches, for Jansen, recognized green areas as means of beautifying the environment, while contemporary planning approach interpreted them as a 'tool for providing health and recreation facilities to modern human'. Recreation and relaxation were equated with sports and walking activities in Jansen's planning approach; modern human could relax by walking and involving in sports.



neighborhood (Figure 3). Similar to Lörcher's approach, Jansen put a strong emphasis on the continuity of green stripes¹⁰ along the commuter line, and for him "skeleton of the city should be composed of main arteries, railway line and green stripes". Moreover, these stripes were not only supporting pedestrian movement but also adding "visual quality" to the transport modes (Jansen,1937). Extending along the arteries, commuter line, and Ankara Stream green stripes should orientate people through parks, squares, private gardens or even the frontiers of the city. By this way, arteries and commuter line would provide continuity between rural landscapes and urban core (Jansen, 1937).

Together with the establishment of Atatürk's private farm and Etimesgut and Sincan Modal Villages, west of the city needed new road connections that had not been foreseen in the 1932 plan. In addition to that, continuous changes comprising density increases and speculative pressures were begun to deploy within the plan by the coactions of the local administration. For these reasons, existing plan was recovered by Jansen between 1934 and 1937¹¹. The plan dated 1937 extended the urban fabric towards west along the commuter line and opened up new lands on the north, south and east for the urban development (Figure 4). All these plan revisions led increase in the number of railway stops reaching new neighborhoods/villages, and the emergence of 'railway station and park' duo in neighborhoods as typological elements of urban plan. Culturalist school of spatial organization embraces the human scale and social interaction, therefore, even the stations and their parks were formed to produce collective spaces¹².

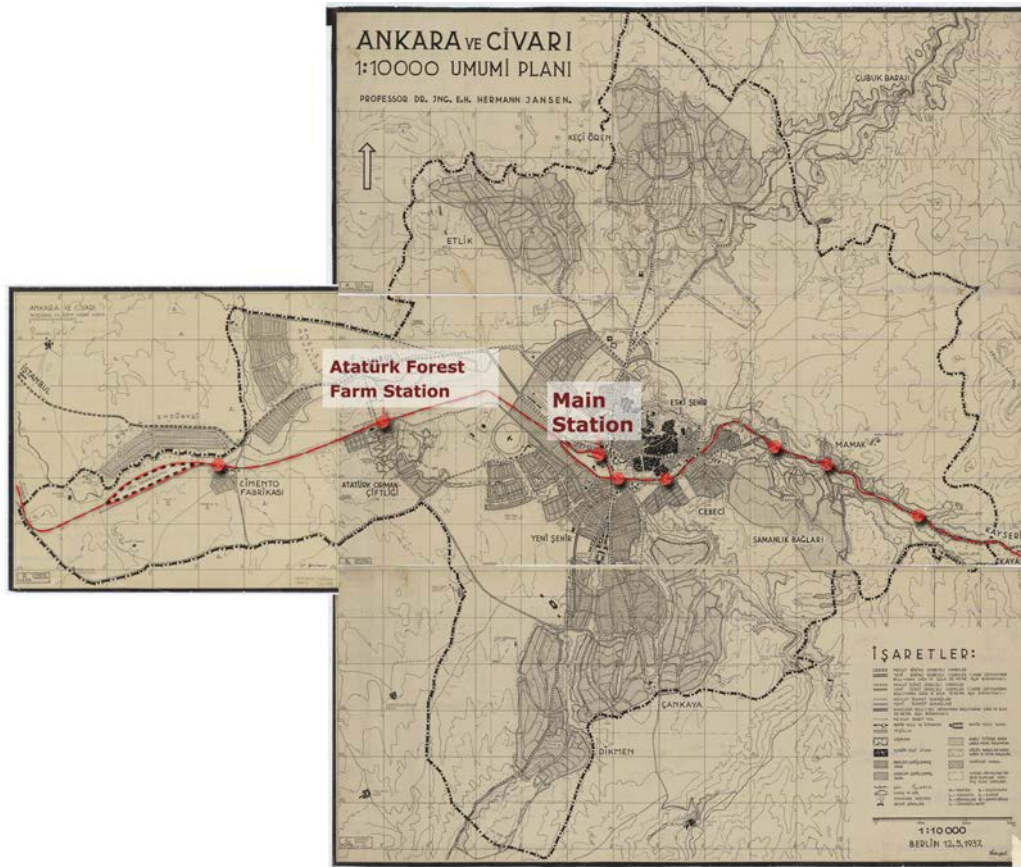


Figure 4: Hermann Jansen. 1:10000 scale Ankara Master Plan dated 1937. The commuter line and stations are emphasized in red colour.

After resignation of Jansen in 1938, speculative pressures and emerging squatter-belts have started to shape the urban form, Ankara faced with unplanned development process. Nevertheless, latter planning study dated 1956

¹⁰ The green stripes were the planted pedestrian axes following main and lateral arteries as well as commuter line (Jansen,1937).

¹¹ Jansen resigned in 1938 as a result of the weakness of the local administration against land speculation. Indeed, it was the beginning of an unplanned development period characterized by speculative pressures (Tankut,1993). The only state figure supporting the planned development was the President Atatürk (Atay, 2014). After his death in 1938, local administration remained uncontrolled.

¹² Beside numerous macro-scale impacts of railway lines, particular micro-scale interactions are also emerged between railway line and detached areas. Transport modes create collective spaces (Wall, 1999) and pointlike relationships, like stations which become the nodes of interaction in economical and social terms.



would not cope with these spontaneous growth dynamics, since the 1956 plan was utilized as a tool for approving speculative decisions rather than controlling urban development. Starting with 1960s', the continual landscape fabric along the commuter line was interrupted as a result of sprawl and emerging squatter areas. Until the 1970s', the urban development of Ankara was carried out through piecemeal plans. Following planning study, dated 1980, reflected the features of the structure plan approach and became a milestone for the removal of culturalist planning approaches. By suggesting long-term strategies, it mainly aimed to control squatter development and propose a realistic growth scenario for Ankara. By opening up new lands for urban development and service areas, a linear development scenario towards west was adopted without supplying north-south road connections. The commuter line together with Ankara Steam and AFF were recognized as a threshold, barrier and macroform generator differing from earlier planning approaches. This approach towards commuter line, however, further resulted in the social and economical polarization between north and south of the city, fragmentation of landscape reminiscent of Republican Period plans (Bütüner, Aral, Çavdar; 2017a), stratification of new boulevards parallel to the commuter line and visual and physical isolation of Ankara Stream. Following master plans sustained this tendency, consequently the interplay between the commuter line, continual landscape fabric and water structures were diminished and the station parks in the neighborhoods were shrank or disappeared. The built components of railway heritage also have not been taken into consideration, currently, many of them under the threat of demolition to sustain the urban transformation economy.

From Legacy to Future: Mapping the Railway Heritage of Ankara

Extending along 37 kilometers distance, currently, Ankara commuter line operates between the west and east edges of the existing urban core. It offers a characteristic case by setting up a territory where three infrastructures –transportation, green and water- adjoin (Bütüner, Aral, Sert; 2017b).

Being both the product and the witness of modern planning experience in Turkey, Ankara commuter line generated a continuum between rural and urban, core and periphery, and united landscape and technical infrastructures, neighborhood and social infrastructure (station parks and squares) regarding the culturalist planning ideas of the early 20th century. The landscape fabric (cultivated lands, parks, forests, and landed estates) designed along the line (Figure 5), the planned interplay between nature and infrastructure were assumed to convey visual and aesthetic impacts, make the city legible and imageable and be the community spaces of modern citizens. Even though this landscape fabric is still legible as depicted in 2013 map, its continuity along the line was interrupted, the cultivated lands and Atatürk Forest Farm was fragmented and shrank out at a greater pace starting from the 1960s'.

The built assets of Ankara commuter line constructed between 1920s' and 1940s' comprise station buildings, station parks, bridges, tunnels, culverts, maintenance ateliers, rail and locomotive hubs, storehouses, and housing compounds (Figure 5). Together with the urban development starting from 1950s' and decentralization, the logistic requirements of the line was transferred to the west and the built railway heritage assets dated back to the Early Republican Period faced with long period of abandonment until 1990s'. Currently, very few of them are registered or refunctionalized¹³. The industrial heritage accompanying the commuter line, on the other hand, was located towards west due to the existence of Atatürk Forest Farm and the density increase in urban core (Figure 6).

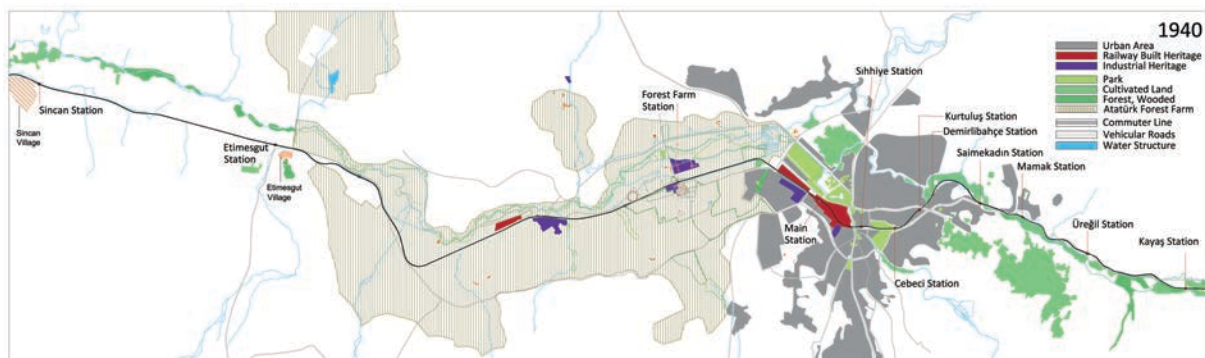


Figure 5: Rendered by the authors based on Ankara touristic map dated 1963 and Atatürk Forest Farm map dated 1960. Map showing the built and landscape heritage accompanying the Ankara Commuter Line in 1940.

¹³ The unregistered railway built assets remained at the urban core are currently under the threat of demolition.



Figure 6: Rendered by the authors based on Ankara map dated 2013. Map showing the built and landscape heritage accompanying the Ankara Commuter Line in 2013.

Conclusion

Commuter line developments, doubtlessly, bring fresh discussions on planning history studies since they may symbolize nation-building; represent urban history; emerge as modern planning heritages and city planning legacies; and often intermingle various forms of continuity (space-time continuum, urban-rural continuum) or interactions (rural-industry, infrastructure-landscape, transport-heritage etc.) owing to their scale, linearity and function. In this regard, Ankara commuter line and accompanying built and landscape heritage as the remarkable elements of urban image of Ankara symbolize several meaning sets comprising the statism and modernization in all senses and the urban revolution first experienced in Ankara.

In the aftermath of the WWI, quite a number of cities were established, of which some were assigned to be capital cities of new nation-states. In this period, Ankara town was also pronounced as the capital city of the newly established Republic. However, transformation of Ankara from a small Anatolian town to a modern capital city necessitated planned development and highly organized infrastructure intervention. For the establishment of the city, famous figures –namely Carl C. Lörcher and Hermann Jansen- representing the 19th century planning approaches were commissioned. In these early plans prepared between 1924-1937, Ankara commuter line was not only recognized as one of the major transportation infrastructures, but also as a planning tool in the designation of the rural-urban continuum, modern industrial and rural environments, logistic centers, urban green network and community spaces.

Brought by these earlier plans, currently, Ankara commuter line and adjoined built and landscape assets become the urban planning heritages of Ankara as well as the prominent remnants and the legacy of the early 20th century modern planning experience in Turkey. The line and accompanying assets clearly have historic, cultural, identity, age, aesthetic, visual, perceptive, social infrastructure and technical values. Once integrated the planned green network (landed estates, recreation areas, vacant lands), industrial areas and city center; currently, the generative potential of the line is interrupted at a greater pace. The entire assets, on the other hand, may not be valued as the outstanding examples of modern architecture or landscape, however, the emphasis here is to conserve their historic integrity, their capacity in reflecting societal history and the original ideas behind the planning approaches -which are all indispensable parts of planning historiography. Although fragmented at a greater pace, the city planning legacy of culturalist school in Ankara is still legible and might be an effective tool in recovering social amenity and city planning relationship as well as re-evaluating the potential future contributions of spatial interactions generated by the commuter line.

Regarding the history of modern planning theory and practice in particular, influenced by culturalist ideas in Europe, modern railway landscapes of Ankara also helps us to construct a modern landscape planning history evolved with and beyond planning thought and to restore the place and long forgotten significance of landscape history in planning historiography.

Bibliography

Atay, Falih Rıfıkı. *Çankaya*. İstanbul: YKY, 2014.

Allen, Stan. 'Infrastructural Urbanism'. In *Points and Lines: Diagrams and Projects for The City* edited by S. Allen, 40-89. New York: Princeton Architectural Press, 1999.



The 18th International Planning History Society Conference - Yokohama, July 2018

Çavdar Sert, Selin. “Bir Fikir Mirası Olarak Atatürk Orman Çiftliği'nin Somut ve Somut Olmayan Değerleri”. [Tangible and Intangible Values of Atatürk Forest Farm as A Heritage of Ideas] *Journal of Ankara Studies* 5, no.2 (2017):225-256. DOI: 10.5505/jas.2017.97269

Bütünler, Funda; Aral, Ela; and Çavdar, Selin. “Kentsel Mekan Olarak Demiryolu: Sincan-Kayaş Banliyö Hattı” [Railway as Urban Space: The Sincan- Kayaş Commuter Line], *Journal of Ankara Studies* 5, no.1 (2017a):73-97. DOI: 10.5505/jas.2017.68077

Bütünler, Funda; Aral, Ela; and Çavdar Sert, Selin. “Transformative Urban Railway: Ankara Commuter Line and Lost Landscape”. *24th ISUF International Conference City and Territory in the Globalization Age Proceedings*, 27-29 September 2017, Valencia.2017b.

Cengizkan, Ali. *Ankara'nın İlk Planı 1924-25 Lörcher Planı*. Ankara: A. E. Vakfı ve Arkadaş Kitabevi. 2004.

Choay, Françoise. *The Modern City: Planning in the 19th Century*. New York: George Brazillier Inc.1969.

De Block, Greet. “Planning Rural-Urban Landscapes: Railways and Countryside Urbanisation in South-West Flanders, Belgium (1830–1930)”, *Landscape Research* 39, no: 5 (2013): 542-565. DOI: 10.1080/01426397.2012.759917

Emiroğlu, K., Uzmay, Ü. *Demiryolu Ansiklopedisi*, Ankara: TCDD Gelişim Vakfı Yayınları.2013

Günay, Baykan. “Our Generations of Planners: The Hopes, The Fears, The Facts”, *SCUPAD Seminars*, Salzburg, 1988.

Jansen, Hermann. *Ankara İmar Planı Raporu*, Translated by: Mithat Yenen. İstanbul: Alaaddin Kırıl Basımevi.1937.

Lörcher, Carl C. “Plan Açıklama Raporu”. In *Ankara'nın İlk Planı 1924-25 Lörcher Planı*, Ankara: A. E. Vakfı ve Arkadaş Kitabevi. 1925.

Moudon, Anne Vernez “Urban Morphology as an Emerging Interdisciplinary Field”. *Urban Morphology*, no.1(1997): 3-10.

Tankut, Gönül. *Bir Başkent'in İmarı: Ankara (1929-1939)*. İstanbul: Anahtar Kitaplar,1993.

Tatom, Jacqueline. ‘Urban Highways and the Reluctant Urban Realm’, In *The Landscape Urbanism Reader*, edited by Charles Waldheim, 179-196. New York: Princeton Architectural Press, 2006.

Tekeli, İlhan. “Ankaranın Başkentlik Kararının Ülkesel Mekan Organizasyonu ve Toplumsal Yapıya Etkileri bakımından Genel Bir Değerlendirilmesi”. In *Tarih İçinde Ankara Eylül 1981 Seminer Bildirileri*, edited by Erdal Y. et.al., 321-334, Ankara: ODTÜ Mimarlık Fakültesi Yayını.1984.

Wall, Alex. ‘Programming the Urban Surface’. In *Recovering Landscape*, edited by James Corner, 232-249. New York: Princeton Architectural Press, 1999.

Wilson, Amy. U.S. Route 66: historic road is time line of America, National Geographic News, 18 January, accessed 14 March 2018 at: http://news.nationalgeographic.com/news/2002/01/0102_020104wir66.html.

Image Sources

Figure 1: National Library, Turkey. Demiryollar Magazine Archives.1931:7.

Figure 2:METU Faculty of Architecture Department of City and Regional Planning, Baykan Günay Collection.

Figure 3:METU Faculty of Architecture Department of City and Regional Planning, Baykan Günay Collection.

Figure 4: Technische Universität Berlin Architekturmuseum, Digital Archive. Doc No:22993; plan no: 2750.



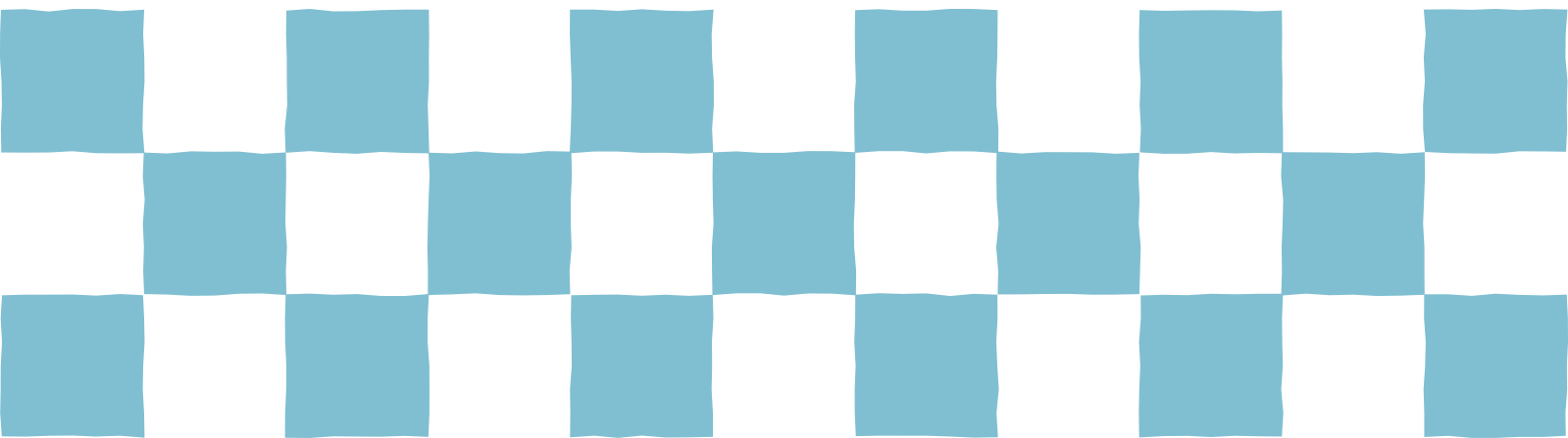
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

19 Planning History of Harbor Cities



Institutional changes and the Shifting Power Network: Planning Wusong Port from 1898 to 1999

Hao Jiang (Tongji University) and Li Hou (Tongji University)

Located at the intersection of Yangtze river and Huangpu river, Wusong is a maritime gateway to Shanghai. The function and location of Wusong Port have experienced several changes in the twentieth century. While market condition, economic structure and physical factors have been the major determinants of change highlighted in previous studies, central and local governments are playing key roles in transforming ports and their planning.

While the western powers had tried to extend the concession to Wusong, the Qing Government made Wusong as the first trade port self-determinately in order to maintain the sovereignty in 1898, carried out a modern planning to construct a commercial port. Although it failed, it proclaimed the beginning of the modern urbanization of Wusong. In 1920, Northern Warlords Government made it a trade port the second time in order to use it as a engine of national economic development, and presented Outline of Wusong Opening Plan. During this time, the development target was to compete with Shanghai port. In 1927, Wusong became part of the Shanghai special city, the construction of Wusong port became an important factor to promote the development of Shanghai City. The construction of Wusong port has been considered comprehensively in the Greater Shanghai Plan (1929) and Greater Shanghai Plans (1946-1949)

After the founding of the People's Republic of China, Wusong port was built as an industrial port to promote the construction of Shanghai which was orientated an industrial city by the central government. This intention is also reflected in Shanghai Master Plan (1959,1986)

In this paper, the author introduces the issue of institution as a factor of considerable significance. Based on field investigation and historical geography analysis, inquiring port plans, policy documents, laws and regulations as the basic historical data, the author try to review the process of developing Wusong port in the twentieth century and analyze the dynamic mechanism of its evolution from the perspective of institutional change.

The first section of this paper provides an overview of the development trajectory of Wusong port, which focuses on its function and location changes. The second section briefly discusses the shifting power network that had historically governed the port and analyses relationship between the port and the city. The third section explores the planning of the Wusong port in different historical periods. The impact of administrative zoning adjustment is particularly mentioned, since the changes of the function of Wusong port were always accompanied by it. This article provides evidence that government-led port exploitation plays a great role in the fundamental change of Wusong port -- from a naval port, to a commercial port, to an industrial port, and finally an international cruise port.

The Land Reclamation Along the Hai-Ho River and the Birth of Modern Tianjin (1897-1937)

Rui Ma (The University of Hong Kong)

Within the early decades of the twentieth century, the so-called "hypercolony" Tianjin transformed from a traditional trade terminal to a modern city. The size of settlement expanded more than 10 times during these years which made Tianjin the second largest city in China at that time. Existing research from the perspective of planning and architecture rarely study water environment and topography of the city, and mostly see them as neglect bearer. And the research tends to treat the chaotic structure of the city as a reflection of the disorganized administration and the result of isolated planning on individual concessions. This paper will examine the important role of natural environment in the birth of modern Tianjin, compare Chinese traditional attitude to nature and modern concept of hygiene, and argue that the aquatic environment and topographic condition along the Hai-Ho River at that time limit any large-scale planning and construction to be formulated or implemented. The planning and construction of the concessions was made and carried out step by step after the reclamation of the land along the river.

A new proposal that fill pools and swamps in the hinterland with sediments pumped from the riverbed opened a new stage of land reclamation. It was a byproduct of the Hai-Ho Conservancy Commission (HHCC), a cross-administrative executive authority established in 1897, with its main task of maintaining river navigation through the means of dredging, bend cutting off, and ice breaking. For the sake of the introduction of the new method and new technology, the buildable land doubled within 30 years, which triggered the booming of planning and construction. For this special terrain condition, the general linear relationship between site selections, planning, land reclamation, and construction evolved into a complex interaction. Focusing on the concessions and native areas on the west bank of the Hai-Ho River, the paper will examine the complex relationship and the role of land reclamation in the process of the compelling construction, i.e. the birth of the modern city.

Reimagining the Metropolitan Harbors of the 1960s Through Sub-Center Creation: The Case of New York City and the New Jersey Meadows

Sevin Yildiz (Barnard College, Columbia University)

This paper focuses on the sub-center discussion of the 1960s, as it was seen in many metropolitan centers around the world. The establishment of Port Authority of New York and New Jersey, which was a joint regional governance body established in 1921, pushed both states sharing the same harbor to reconceptualize the organization in the greater metropolitan region. As the primary port facilities of the harbor migrated to Newark-Elizabeth in the 1950s, and the port facilities became a jointly run bi-state operation, a new possibility for re-centralization arose. Around the same time, the newly emerging “systems thinking” in planning theory, challenged the planners’ way of studying the components of metropolitan urban growth. The proponents of “systems thinking” called for a revisiting in the way different clusters in the metropolitan region interacted and were interconnected. They asked for a reevaluation of how land uses shape growth axes and how existing sub-regions could be better linked. The case study presented here will be New York Harbor’s relationship to a vast site called New Jersey Meadowlands, formerly known as the “most valuable real estate in the world,” in northern New Jersey. In the light of revisiting this specific moment in planning history, this paper asks the following questions: How were new sub-center ideals negotiated in New York metropolitan core, in the 1960s, and between two states, during the decade leading up to federal environmental regulations? Who were the policy and plan movers of this era in pushing for a systems approach? One of the sub-center migration sites during this period was New Jersey Meadowlands region, situated in Northern New Jersey and only 5 miles away from mid-Manhattan. The conceptual shift in the Meadowlands’ planning since the 1920s had incrementally rendered New York City less potent as an actor in a possible development scenario. However, the changing ecological imperatives of the 1960s and new policy mobilizers introduced a fresh approach, which eventually would shape planning priorities and would reconnect these fringe ecologies to the metropolis.

HISTORICAL WATERFRONT OF RIO DE JANEIRO: cartography of landfills and new rehabilitation perspectives of the port area

Fabiana Izaga (Federal University of Rio de Janeiro - Graduate Program on Urbanism) and Amanda Silveira (Federal University of Rio de Janeiro - Graduate Program on Urbanism)

This article seeks to analyse recent urban transformations and the conceptual bases that have been in force in the Urban Rehabilitation Project of Rio de Janeiro's waterfront. An attempt is made at establishing a connection between the development of the area, the evolution of the city's history, the activities carried out at the port, and its conversion to new uses. An analysis of the spatial transformations is done, especially in the 7-year (2009-16) span of the initial implementation of the ongoing 'Porto Maravilha' [Marvel Port] urban project, with the mapping of new and old urban fabric and infrastructure; bibliographical research on historiographical studies, city administration players, and technicians to unveil processes that concern urban projects as contemporary tools for land valuation. As a conclusion, we point that despite the major work recently carried out as a product of the Urban Operation Consortium Law guidelines, only 9% of the urban land stock has been negotiated, contradicting even the pessimistic forecasts of 50%. The area lacks an Integrated Urban Plan with a public policy approach, especially to foster housing as a key element for liveable neighbourhoods and a stronger connection with the green infrastructure of the Guanabara Bay ecosystem



Institutional changes and the Shifting Power Network: Planning Wusong Port from 1898 to 1999

Hao Jiang*, Li Hou**

* *Tongji University, jiangguorong@163.com*

** *Associate Professor, Tongji University, houli@tongji.edu.cn*

In this paper, the authors introduce the issue of institution as a factor of considerable significance. Based on field investigation and historical geography analysis, inquiring port plans, policy documents, laws and regulations as the basic historical data, the authors try to review the process of developing Wusong Port in the twentieth century and analyse the dynamic mechanism of its evolution from the perspective of institutional changes. The first section of this paper provides an overview of the development trajectory of Wusong Port, which focuses on its functions and locations changes. The second section briefly discusses the shifting power network that had historically governed the port and analyses relationship between the port and the city. The impact of administrative zoning adjustment is particularly mentioned, since the changes of the function of Wusong port were always accompanied by it. The third section explores the planning of the Wusong port in different historical periods. This article provides evidence that government-led port exploitation plays a great role in the fundamental change of Wusong Port -- from a naval port, to a commercial port, to an industrial port, and finally an international cruise port.

Keywords: Wusong Port, historical evolution, Port city, Management institution, Power networks

Introduction

As centres of exchange where different cultures and different environments meet, at the boundary between land and sea, port cities have long fascinated geographers, economists, sociologists and historians. (Tan, 2007) With the development of world ports, the research hotspots experienced the port city spatial relationship (Bird, 1963), the evolution of the port cities of the colonies (Taaffe E J, Morrill R L, Gould P R, 1963; Hoyle, 1968), the evolution of the hub ports and their systems (Hayuth, 1987), the port city interface (Hayuth, 1982; Hoyle, 1989), in the academic field. Since 1980s, the research on institutions of ports has become a hot topic (Amin and Thrift, 1994; Brooks 2004; Notteboom 2005; Pallis and Syriopoulos, 2007; J Wang A. Ng 2004), some scholars had begun to attribute the power of port and urban development to institutions (Jacobs and Hall Gonz les and, 2007; Healey, 2005) in recent years.

These institutions consist both of formal rules (e.g. constitutions, laws, and property rights) and informal rules (e.g. customs, traditions, or codes of conduct) that shape the actions of individuals, organizations, groups or other actors. (Daamen T A and Vries I, 2013) It is difficult to adopt a general method for institutional analysis of port cities, for China's unique national conditions and historical progress. Therefore, the authors mainly study the different policies and means adopted by the governments in the management and planning of Wusong port in different historical periods, as well as the role changes of the Port Authority in these activities.

Wusong, named after the Wusong Estuary located at the intersection of Yangtze River and the Huangpu River, has always been regarded as a treasure land for development due to its excellent traffic conditions. Early in the Guangxu period of the Qing Dynasty, it had been a port town for the transshipments of goods, with customs, railways, wharfs and post offices being built¹. Wusong had a high reputation abroad in the early twentieth century, while some foreigners had not heard about the location of Shaanxi, Gansu and other provinces, but everyone knew Wusong². However, the development of Wusong port had been very slow during a long historical period. The reasons are complex, but one reason that cannot be ignored is that its development is related to institutional changes and the shifting power network. So it is necessary to interpret its special and complex situation in a perspective of institutional changes. The Qing Government made Wusong as the first trade port self-determinately in order to maintain the sovereignty in 1898, and formulated a plan to construct a commercial port. This marks the end of its unrestrained development stage, that's why we choose this time point as the beginning of this research.



From a fishing port to an international cruise port: function transformations of Wusong Port

In this paper, Wusong Port refers to a series of wharves, berths, harbour operational zones etc established in Wusong area in history. Historically, its main functions and locations of have undergone many vicissitudes(fig.1). Its function transformations can be divided into five stages, from the fishing port, naval port, commercial port, industrial port and then to the international cruise port, almost the epitome of various types of port functions in China. (Lin Tuo and Zhang Xiugui, 2008) Its trajectory of space migration is different from the classical Any-port model, and its change process could be characterized by jumping. (Shen Li, 2013)

Before Wusong became a town, it had already been a fishing village market described as *three hotels in the ten stores and twice seafood listed on a day*. The fishing wharves were mainly distributed on both sides of the Yunzao Creek, while Wusong town expanded behind the wharves. After the Opium War, the military function of Wusong port gradually became prominent. It's closed to the urban area of Shanghai, if we lose, the safety of the city will be directly threatened. In 1870, the Qing government set the Wusong Navy Camp and built a wharf. Since then, Wusong port began to extend along the Huangpu River and the Yangtze River estuary.

In late nineteenth century, the Qing government independently opened port in Wusong to avoid Western Powers advancing into the Wusong area. Viceroy of Liangjiang Liu Kunyi take Supervisor of the Self-strengthening Army Service Department Shen Dunhe's proposal to dynamite Wusong Fort Barbette in order to facilitate business activities³. This marks a shift from a naval port to a commercial port. Wusong Port became a centre of land-and-water coordinated transport.

After the founding of the PRC, Wusong Port began the transition to an industrial port as Wusong area is regarded as an important industrial area of Shanghai. In November 1959, Shanghai Port 9th Harbour Operation Zone was established on the west side of the Huangpu River in Zhanghuabang. Shanghai Port 10th Harbour Operation Zone began to establish in 1973, and then the two harbour operation zones became the international container port of Shanghai. Starting from 1980s, Wusong International Cruise Port located in the Paotaiwan water of the Yangtze River began to be planned. It is the busiest international cruise home port for the Asia Pacific region after the completion of the construction.

Several repetitions of the establishment and revocation of Wusong administrative area

As a governing and policy tool, the status of administrative division in China is more critical than other countries. To analyse the development of Wusong port, we should pay close mention to the influence of the administrative division adjustment, which makes it be taken into consideration in the overall pattern of Shanghai, from an outpost.

In the late Qing Dynasty, Wusong Port was located in Wusong Town, while Wusong town was subordinate to Baoshan County of Taicang state, Jiangsu Province. At the beginning of Shanghai's opening port, Wusong was eyed by Western powers⁴. Wusong's administrative jurisdiction didn't belong to Shanghai, so foreign businessmen could not carry out commercial activities in Wusong area. From the 1870s, Western Powers one after another to request to open the Wusong as a commercial port and expand the scope of their concession, but the Qing government did not agree. Qing government regarded the development of Wusong port as a mean against the Shanghai concessions controlled by Western powers.

In 1927, Shanghai Special Administrative City was established. In subsequent year, Wusong was divided into a part of Shanghai city by the government of the Republic of China, which was promoted to Wusong district. Wusong Port was delimited into the overall framework of the urban development of Shanghai. Because of the existence of Wusong outpost, the connection between Wusong and Shanghai County was strengthened. In order to meet the economic need, the government of the Republic of China made a positive response to an administrative division adjustment and promoted the original administrative unit of Wusong Town, which belonged to Baoshan County, to become an administrative unit of Shanghai. (Wang Liehui,2013) More importantly, as the first mayor

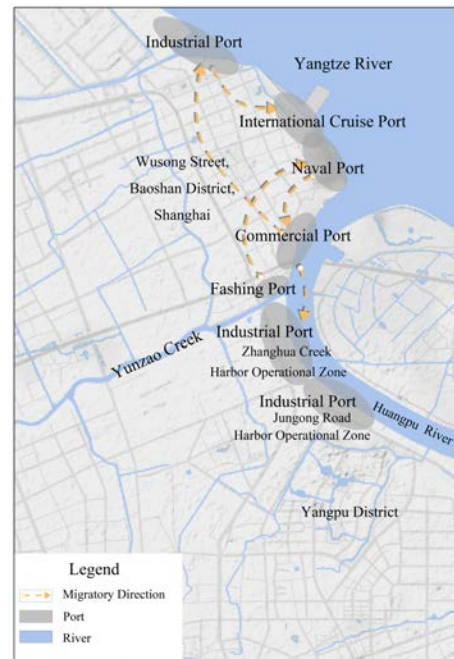


Figure 1: Changes of functions and locations of Wusong Port



of Shanghai Huang Fu proposed, to build a port at Wusong, and open up a new city between Wusong and Concession, to weaken the importance of concessions⁵.

After the founding of the PRC, Wusong District experienced establishments and revocations for three times. Three different Wusong District had three different functions, in three different areas, reflected the trend of Wusong Port's functions in the process of urbanization. The first establishment of Wusong District was helpful for the Shanghai municipal government to organize and manage the development of port and port industry. In January 1960, because of the need to build an iron and steel industrial base, the Wusong District dominated by iron and steel industry was rebuilt across the Huangpu River. In the first half of 1964, the industry under the leadership and management of Wusong district was put under the administration of the relevant industrial bureaus and companies of Shanghai, the establishment of the district system was revoked. In order to enhance the regional service for the construction of Baogang in 1978, the Shanghai Baogang Regional Office was established. Wusong District of the urban area was set up again in 1980 on the basis of the Baogang Regional Office. This laid the institutional foundation for Wusong to develop an industrial port. Wusong District was merged with Baoshan County in 1988, Wusong Port highlighted service function under the framework of coordinating the relationship between urban and rural areas, a water and land transport hub and urban comprehensive service centre.

Shifting Power Network

Wusong Port has experienced more than 100 years of developments since the first independent opening, across the three periods, the late Qing Dynasty and the Republic of China, People's Republic of China, with its management institutions changes continuously. In different historical periods, the institutions involved in port management and their management rights are different.

In the late Qing Dynasty and the early Republic of China, there was no specialized institution to manage Wusong port. The land and water area, foreign mooring area and Chinese ship mooring area of Wusong port were managed by separate institutions. Lack of specialized port management institution resulted in low administrative efficiency, and the development and construction of port were basically in a spontaneous state. According to statistics, half of Wusong wharves were donated by local businessmen. At that time, Shanghai Port was actually in the hands of the foreign port manager under the Commissioner of Customs.

After 1920s, the government of the Republic of China realized the fact that there was no specialized port management institution, which was not conducive to the planned development of Shanghai Port. In 1927, the Special Municipal Government of Shanghai decided to set up Shanghai Port Authority to conduct unified management of the port. In the next year, Wusong was divided into Shanghai. Wusong Port was placed under the management of Shanghai Port Authority. However, due to the obstruction of Shanghai customs, Shanghai Port Authority did not actually control the management of all the wharves. In fact, the Shanghai government could only manage Chinese vessels, wharves and warehouses in Nanshi Area. By the end of 1930, Shanghai Port Authority had no choice but to revoke. The dispute of port management right ended with the failure of the Chinese government. In 1937, Shanghai Customs, Police Office, Pilotage Office, Junpu Bureau, etc. were under the control of Japan after the Japanese occupation of Shanghai.

Before liberation, Wusong port had been under the control of the imperialist and bureaucratic bourgeoisie, and more than 10 units, such as Shanghai Customs, Junpu Bureau and the Political Bureau, scramble for the port and compete for each other. The semi-colonial feature was most prominent in the port management system, which was dominated by foreigners. Wharves and warehouses were decentralized, controlled by several enterprises from different countries. This had resulted in the development of Wusong stay in the ideal.

In May 1949, Shanghai was liberated. The People Government retracted all kinds of sovereignty of imperialism and illegal occupation of our country, including the ship diversion, navigation administration and channel dredging, which ended the chaos in the management of Wusong Port, which was caused by the imperialism for decades. In 1954, the jurisdiction of the port authority under the Ministry of Transport was clearly stipulated in the form of a decree after the promulgation of the Provisional Regulations of the People's Republic of China on Port Management. According to this law, it has gradually established and formed a combination of government and enterprise, and a management system of production, aviation and service units. It has played an important positive role in developing port production and strengthening port management. In order to make the port management institution to adapt to the need of development and change, the central government has made eleven changes to the administrative institution of the port authority from 1950s to 1980s. The main change is the affiliation of port, which changes periodically between the Ministry of Communications (the central government) and the local government. In 1980s, the state's port management institution has undergone major changes. In 1986, Shanghai Port has been put under the control of the local government, and the management institution of "central and local government dual leadership and local government management" was carried out.



Planning Wusong Port in the context of confrontation between China and Western Powers

The planned construction of the Wusong Port began in the late Qing Dynasty, the Qing government once open the commercial port autonomously, promoting Wusong city development. But it failed for a variety of reasons. Dr Sun Yat-sen also showed the idea of transferring the Shanghai port to the lower Huangpu River in his famous work *The International Development of China*, unfortunately, it failed again. Since then, the government of the Republic of China has also attached great importance to transfer the port to the lower Huangpu River and Wusong in the planning of the Chinese community. The government had made a lot of plans for the construction of the port, but most of them had been shelved and forgotten. It failed to carry out owing to the backward technological conditions and chaotic political situation at that time. Even if some of the schemes were executed, there was little effect.

Liu Kunyi asked the Qing government to open Wusong as a commercial port autonomously in 1898. Wusong became a trading city different from Shanghai concession and allowed foreign businessmen to conduct business there and began to plan for constructions. This made the Chinese people very optimistic about Wusong Port to be a large seaport, but it was not as expected. The purpose of the Qing government to open Wusong Port was to develop it into a port competing with Shanghai Port, but the existing Western Powers with a vested interest Shanghai was obviously unwilling to see such a situation. The opening of Wusong Port stimulated Western Powers to be more concerned about dredging the Huangpu River to improve the shipping conditions of Shanghai port, and wrote relevant clauses into 1901 Treaty ending the Boxer War. (Wu Qiang, 2016) The dredging of Huangpu River made Wusong lost the chance to compete with Shanghai concession.

After entering the Republic of China, industrial development in Wusong area provided an opportunity for Wusong to open its port second time. Early 1920s, Zhang Jian put forward the *Outline of the Wusong Opening Plan*, pointed out that the displacement of the ocean-going vessels had increased greatly, and cannot enter the Huangpu River. Wharves should be built at Wusong. Otherwise it will be detrimental to international transportation⁶. In 1927, special municipal government of Shanghai was founded. The central government believes that China's military, economic and transportation issues should focus on Shanghai⁷. But at that time, Shanghai municipal government could not complete the development of all the city of Shanghai due to the existence of the concessions, it could only focus on the development of the Chinese region, and began to formally put forward the urban planning, this is the Greater Shanghai Plan. The urban planning and construction of Shanghai had a clear political intention of starting from the founding of its municipal government. (Hou Li and Wang Yibing, 2015) The plan determined that the new commercial port is open in the south of Wusong town along the Huangpu River, a place with deep water. Pudong coastline of the Huangpu River was planned as an expansion zone of the commercial port area to completely avoid the influence of the concessions. The central government believes that once the Wusong built, wharves around the concession will be wasted⁸.

In 1937, the Japanese occupation of Shanghai attempted to turn Shanghai into a large port that plundered China's large quantity of raw materials and output commodities. In 1938, the fake revival Bureau was planning to establish a large port in Wusong to make the 10000 ton cargo ship to shore directly in the *Shanghai Urban Construction Plan* (later renamed the *Shanghai new Urban Construction Plan*). After the establishment of the Shanghai Port Consolidation Committee in September 1946, it began to discuss the formulation of the great Shanghai port construction plan. In September 1947, the Committee's work group wrote *Outline of the Construction Plan for the Port of Five Years*. At the same time, the Great Shanghai Urban Plan Committee began to attach great importance to the

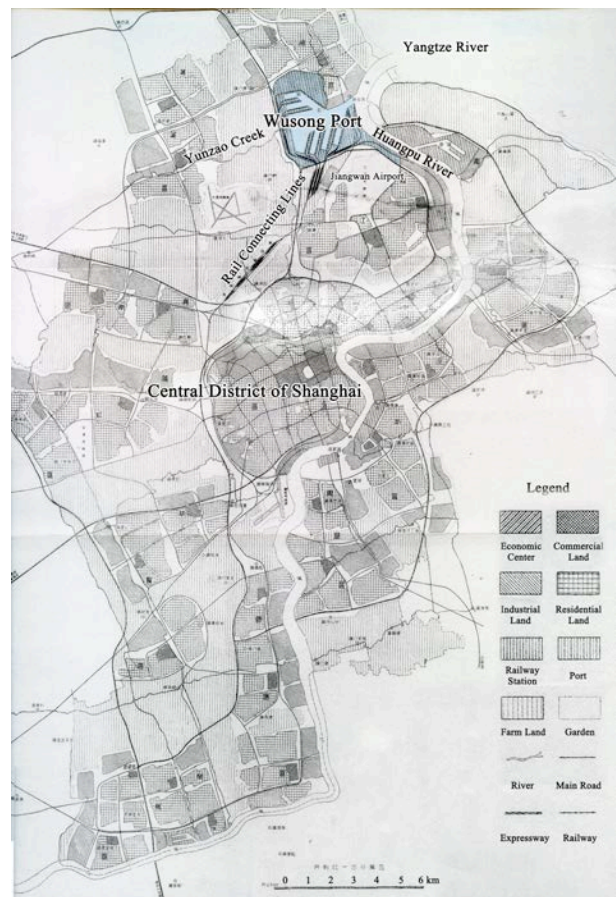


Figure 2: Port planning in the Greater Shanghai Plans: the third draft



importance of port planning, and put forward the *Preliminary Research Report on the Shanghai Port* and the *Wusong Port Plan Research Report*.

In addition to thinking that Huangpu River needs to dredge regularly to navigate, they considered that only Wusong, deep river and wide river, is the ideal position of the inner river port⁹, build a port at Wusong can avoid all the shortcomings at that time¹⁰, so the Shanghai port will gradually transfer to Wusong. In addition, Wusong port covers an area of nineteen square kilometers, with a throughput of one hundred million tons per year, some of which can be classified as free port when needed¹¹. More importantly, planners believed that the wharves of different sizes along the Huangpu River represent countless private interests, the establishment of a dig-in basin(fig.2) in Wusong was conducive to improve management efficiency. Although these plans are based on the detailed investigation of the Shanghai port maladies, and in the process of planning, it had learned from Europe's Dutch Port Region and North German Port Region and La Plata Port Region in South America, it could only be shelved at that time.

Planning Wusong Port promoted by the central and local governments

In the early days of the founding of new China, Shanghai was listed as an industrial city by the central government. In order to cooperate with the development of the city, port development of Shanghai also had strong industrial port orientation. The Wusong still serves as a port of Shanghai, in management, planning and construction¹².

In 1951, Shanghai Municipal Construction Committee compiled the “Shanghai Development Direction Map” (Draft), planned an excavated port reserve at the intersection of the Huangpu River and Yunzao Creek proposed the long-term interests. But in 1953, the Soviet expert Mukhin came to Shanghai to guide the planning of the general map of Shanghai city, he proposed to make full use of the existing facilities and the reservation of deep water shoreline and construct an ocean water and land combined port in the area of Zhanghuabang¹³. This idea was eventually implemented. In 1950s, development of Wusong Industrial Area promoted the construction of Wusong port. In Shanghai Master Plan(1959), we can clearly see the intention of Wusong port serving the Wusong Industrial Area.(fig. 3)

In order to coordinate with the policy to develop the city, reorganize and adjust the old urban industry and gradually build the satellite town in the periphery, so as to create conditions for some quay shoreline in the urban area, Shanghai Port Authority has compiled a brief report (Draft) of the Shanghai port planning (1962)¹⁴, and then the Shanghai Municipal People's Committee put forward a report on the design task book on the construction of Zhanghuabang wharf¹⁵. It planned to lay out 20 berths of 10000 tons and set up a special railway line in the port area. In 1959, the construction of Zhanghuabang wharf began. After that, Shanghai Port Authority put forward a three years' construction plan that 8 berths were built at Zhanghuabang in 1960-1962¹⁶. In 1973, the Jungong Road Harbour Operational Zone of Wusong Port was built, Wusong Port became an international container port.

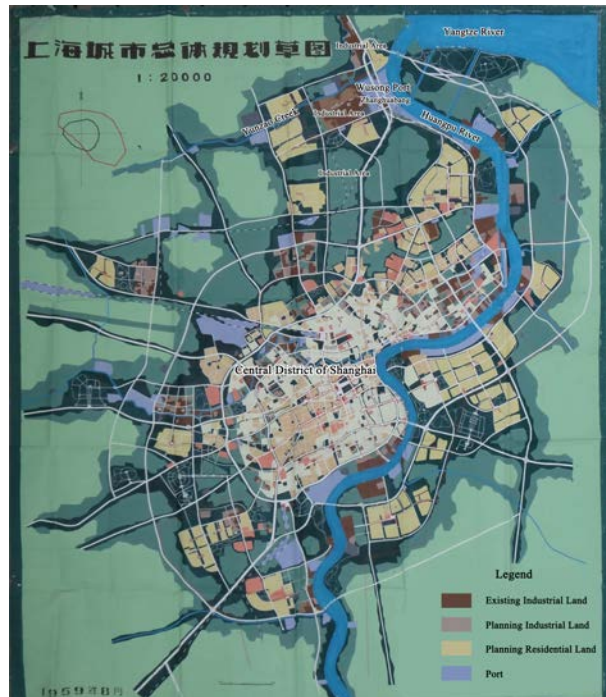


Figure 3: Draft of Shanghai Master Plan,1959

In 1973, Premier Zhou Enlai issued the call of “three years' change of the port's appearance”. The first wave of port construction in China appeared. In the same year, the State Council port construction conference proposed the requirements for the preparation of the fifth five-year plan and vision of port construction. Shanghai had set up a leading group for the construction of port with a branch named the Office of the Port Construction (also known as the Planning Office) which is affiliated with Shanghai Port Authority. In July 1974, Office of the Port Construction made a report on the ten year development plan of the port. The draft proposed the sixth five-year during the construction of the new port near Wusong Estuary. The wharf in the latest port can be operated jointly with the Zhanghuabang and Jungong Road wharves which are conducive to production scheduling¹⁷.

In 1982, Shanghai Municipal People's Government approved the location of international cruise port in Wusong area, and the length of the coastline was 330 meters. In 1987, the Ministry of Communications approved the



approval of a new international passenger and cargo berths in Wusong District. In 1986, the State Council approved the Shanghai Master Plan in which the local government proposed to actively improve the passenger transport facilities and the establishment of Wusong International Cruise Port is one of the principal measures. What's more, it pointed out the final direction of development of Shanghai port is to build new port out of the Huangpu River. Since then, Wusong ceased to be the focus of port planning.

Conclusion

In the development process of Wusong Port institution played a key role. Before liberation, Wusong had not been fully developed, with a good location conditions. The biggest reason says there was no institutional support. Although the government of the Qing Dynasty and the Republic of China have realized the importance of port construction, the driving factors of Wusong construction were more like market power without taking a tough measure to intervene.

Before liberation, Wusong Port was always in the whirlpool of various complicated political power struggles, and went up in the struggle between the old institution and the Western power. Wusong Port had always been in a weak position in competition with the traditional Shanghai port, just like the weakness in the struggle between the local government and Western Powers. The prosperity of Shanghai port is mainly based on the transportation trading system at the core of foreign enterprises. Western Powers did not want to see an uncontrolled Wusong Port and Wusong City, so they took numerous measures to crack down on the development of Wusong. The local government failed to develop Wusong Port due to various factors, but Western Powers occupy Shanghai was a major reason why Wusong Port is difficult to develop at that time.

During 1950s-1980s, the planned economy and the closed political and economic institution in China had restricted the development of Wusong Port to a certain extent. However, China's central government had constantly introduced new policies, and Shanghai's local governments had also adopted various adaptations to meet the need of development. This institution was constantly debugged, which many countries had never been tried or dare not try (Wang, 2010). Dynamic policy environment was a major factor to Wusong planning formulation and implementation.

Some scholars believe that the port management institution and the incomplete decentralization of port management right in China restrict the full utilization of port advantages. (Shi Youfu, 2003) Although the management and development of Wusong Port had been controversial between the central and local government, but when scrutinizing the planning since the founding of the People's Republic of China, it could be seen that the central and local governments had a common role in promoting the development of Wusong port without too much institutional resistance. Although the central government had issued various policy documents, the port law was promulgated until 2003, which created the system conditions for the development of Wusong port to a certain extent.

It is obvious that Wusong port has been not planned by the central government. It is formulated by Shanghai Port Authority and the relevant departments of the Shanghai local government through discussion, and then central government approved it. This is primarily due to the port development trend to market-oriented, and affected by more and more local factors, which are further reflected in the construction of Shanghai Yangshan port.

Acknowledgements

I cordially thank those many people at Shanghai Archive who helped in identifying materials for this paper.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Hao Jiang is a postgraduate student in College of Architecture and Urban Planning, Tongji University. His research interests involve history of modern urban planning and design, port city planning. His master thesis focuses on the construction of Wusong port and spatial evolution of Shanghai, supervised by Prof. Li Hou.

Li Hou is Associate Professor of Urban Planning at Tongji University. She is an expert member of Shanghai Planning Commission. As an urban scholar, Li's research interests involve history of modern urban planning and design, urban governance and politics as well as planning laws.



Endnotes

- ¹ Sha Sipeng. *Chronicles of Shanghai Famous Town*. Shanghai Academy of Social Science Press, 2003.
- ² *Outline of the Wusong Opening Plan*, "Shenbao" January 1, 1923, sixth edition.
- ³ *Wusong Fort Barbette File*, Shanghai archives, archival code: Y6-1-117.
- ⁴ The British Consul in Shanghai, George Balfour, has delimited the Huangpu water front from Shanghai county to Wusong Estuary, about 13 miles long, as part of the port area of Shanghai port.
- ⁵ Shen Yi. *An Account in Shen Yi's own words*. Biography Literature Press, The 74 year edition of the Republic of China. 108
- ⁶ *Outline of the Wusong Opening Plan*, "Shenbao" January 1, 1923, sixth edition.
- ⁷ *A grand ceremony of the Shanghai municipal government establishment yesterday, the admonition from national government representative Jiang Commander*, Shenbao, July 8, 1927, thirteenth edition.
- ⁸ *The central area of great Shanghai*, Shenbao, November 12, 1929, thirteenth edition.
- ⁹ Shanghai Urban Planning and Design Research Institute, *The Great Shanghai Plans*, the next volume (photocopied Edition), 505-506, Shanghai: Tongji University press, 2014.
- ¹⁰ Shanghai Urban Planning and Design Research Institute, *The Great Shanghai Plans*, the next volume (photocopied Edition), 88-95, Shanghai: Tongji University press, 2014.
- ¹¹ Shanghai Urban Planning and Design Research Institute, *The Great Shanghai Plans*, the next volume (photocopied Edition), 505-506, Shanghai: Tongji University press, 2014.
- ¹² The documents of Shanghai Port Authority, Municipal Finance and Economics Committee, East China Military and Political Committee on the division of the Shanghai Port area, Shanghai archives, archival code: B1-1-1234.
- ¹³ Sun Ping, *Chronicles of Shanghai urban planning*, Shanghai Academy of Social Sciences Press, 1999.
- ¹⁴ *Shanghai Port Bureau's draft report on Shanghai Port planning and the opinions of the Central Transportation Department*. Shanghai archives, archival code: B7-2-255.
- ¹⁵ *The People's Committee of Shanghai's report on the task book of construction design of Zhonghuabang port*, Shanghai Port, Shanghai archives, archival code: B1-1-1466-26.
- ¹⁶ *The draft of Shanghai Port Administration Bureau's opinions on Submitting Shanghai Port's main port construction from 1960 to 1962, please examining and checking the draft*, Shanghai archives, archival code: A54-2-749-6.
- ¹⁷ *The Revolutionary Committee of Shanghai Port bureau's planning of the development of Shanghai Port for ten years (1976-1985)*. Shanghai archives, archival code: B246-2-1127-3.

Bibliography

- Amin, A., & Thrift, N. (1994). *Globalization. Institutions and regional development in Europe*. Oxford: University of Oxford Press.
- Brooks M R. The Governance Structure of Ports. *Review of Network Economics*, 2004, 3(2):168-183.
- Chen Yun. The Research on Shanghai Wusong area in modern China (1898 -1937), Shanghai Normal University, 2007.
- Daamen T A, Vries I. Governing the European port-city interface: institutional impacts on spatial projects between city and port. *Journal of Transport Geography*, 2013, 27(33):4-13.
- Hou Li, Wang Yibing. Greater Shanghai Plans (1946-1949): Planning Visions and Practice of a Modern Chinese Metropolis. *Urban Planning*, 2015, 39(10):16-23.
- Hoyle B S. The port-city interface: Trends, problems and examples. *Geoforum*, 1989, 20(4): 429-435.
- Hayuth Y. *The Port-Urban Interface: an Area in Transition*. *Area*, 1982, 14(3): 219-224.
- Lin Tuo, Zhang Xiugui. The Cultural Evolution of the "First Portal of the Yangtze River": History, Phase and Ma Xueqiang, Focus on institution: A perspective of study the history of Shanghai, *Memories and Archives*, 2001 (6): 30-31.
- Office of Shanghai Chronicles. *Chronicles of Shanghai Famous Town*, Shanghai Academy of Social Sciences Press, 2003.
- Taaffe E J, Morrill R L, Gould P R. Transport Expansion in Underdeveloped Countries: A Comparative Analysis. *Geographical Review*, 1963, 53(4):503-529.
- Shen Li. Port Function Transformation and the Spatial Organization Optimization of Port-City Interface: a Case Study of Wusong, the First Portal of the Yangtze River. *Economic Geography*, 2013, 33(11):63-69.



Shi Youfu, The relationship of the port and the city and port mechanism reform, *China Ports*, 2003 (1): 14-16.

Sun Ping, *Chronicles of Shanghai Urban Planning*, Shanghai Academy of Social Sciences Press, 1999.

Tan, T. Y. Port cities and hinterlands: A comparative study of Singapore and Calcutta. *Political Geography*, 26(7), 851–865.

Wang J J, *The interaction and development of Chinese port and city*, Southeast University Press, 2010.

Wang J J, Ng K Y, Olivier D. Port governance in China: a review of policies in an era of internationalizing port management practices. *Transport Policy*, 2004, 11(3):237-250.

Wang Liehui. Outport and Urban Development: Centered on Shanghai and Tianjin. *Areal Research and Development*, 2013,(6):24-28.

Wang Liehui, Summary on Spatial Structure of Overseas Port-City, *City Planning Review*, 2010, 34 (11):58 – 60.

Wu Qiang. *A study of the relationship between Shanghai city and its port in modern times. (1843~1937)*, Science Press, 2016.

Zhang Yan. *Shanghai Port Encyclopedia* (1990 edition), Shanghai: Shanghai Scientific and Technological Literature Press, 1991.

Zhang Mengtian, Wang Chengjin, Wang Chenglong, Regional evolution, function evolvment and driving mechanism in the development of Shanghai Port, *Geographical Research*, 2016,35 (09): 1767-1782.

Image sources

Figure 1: The author changes drawing according to Shen Li's map: Shen Li. Port Function Transformation and the Spatial Organization Optimization of Port-City Interface: a Case Study of Wusong, the First Portal of the Yangtze River. *Economic Geography*, 2013, 33(11):63-69.

Figure 2: Sun Ping, *Chronicles of Shanghai Urban Planning*, Shanghai Academy of Social Sciences Press, 1999:84.

Figure 3: A archive of Shanghai Urban Planning and Design Research, the Greater Shanghai Plans.



The Land Reclamation Along the Hai-Ho River and the Birth of Modern Tianjin (1897-1937)

Rui Ma*

* PhD, Department of Architecture, The University of Hong Kong. Email: ray.von.hk@gmail.com

Within the early decades of the twentieth century, the city of Tianjin transformed from a traditional trade terminal to a modern city. The size of settlement expanded more than 10 times during these years which made Tianjin the second largest city in China at that time. For the special natural environment, the topography cannot be neglected in this process. By analyzing of the aquatic environment and topographic condition along the Hai-Ho River, comparing Chinese traditional attitude to water and modern concept of hygiene, and reviewing urban development of concessions before 20th century, this paper argue that land reclamation was a vital and necessary work in building a modern city. Using archive of land filling of Hai-Ho Conservancy Commission, the paper explores the process of land reclamation along the Hai-Ho River and examines the important role of the commission, new filling method and technology in this process. It then focuses on the development of the concessions on the west bank of the river and examines how the land filling evolved in the complex relationship and played an important role.

Keywords: Hai-Ho River, modern Tianjin, Hai-Ho Conservancy Commission, land reclamation

Introduction

As an agriculture-based society, China, in its long history, saw water control a fundamental means to rule the empire. This concept, which was rooted in Chinese Confusion traditions, constructed a centralized state power that guided public works in the process of transforming water environment. The massive constructions of canals were used to support the expansion of agricultural production and to maintain the complex and subtle relationships among navigation, irrigation and flood control.¹ The Grand Canal, which connected the capital and *Jiangnan*(江南) area, was vital to the safety of purveyance. The routes of the canal altered with the locations of capital. Since the capital moved to Beijing in Yuan Dynasty, the settlement of Tianjin emerged for the sake of its location, which is the intersection of the Grand Canal and the Hai-Ho River, and played a role of trade terminal that providing transportation by canal or by sea.

In order to reduce the large amount of manpower and resources in maintaining the canal transportation system, the Beijing court tried to improve the irrigation condition in the Hai-Ho Plain to gain self-sufficient for several times. But the occasional harvests around the capital could not replace the purveyance from *Jiangnan*.² Hence, the rulers of Beijing implemented a policy called *Bao yun ji cao* (保运济漕), means the irrigation and water control had to subject to navigation of the Grand Canal. The plain, especially low-lying cities such as Tianjin, Hejian, and Baoding, had been flooded frequently.³

Within this natural environment, Tianjin and its rural area have formed particular morphological features. *Jinmen Baojia Tushuo* (津门保甲图说), which published in 1846, shows 3 features of the city form in mid-late Qing Dynasty (Figure 1).

(1) The area around the intersection of the Grand Canal and the Hai-Ho River, which was called *San cha he kou* (三岔河口), was the most densely populated area in the city. It was also the key place that plays the role of trade terminal. To the southwest of *San cha he kou* located a walled city, which had been built in 1404 in Ming Dynasty to ensure the safety of the canal transportation system. These two areas constituted the main body of the city and also occupied the biggest highland of the region. There were two ponds in the south of the walled-city, which connected with city moat and wetlands in the southern suburbs through the water gates on the wall. There were no clear boundaries between nature and man-made environment, which shows Chinese traditional philosophy of moderation and harmony.

(2) Most of the villages and buildings located along rivers. On one hand, due to the sediments brought by the rivers and perennial levee constructions, the terrain along the rivers was relatively high. On the other hand, rivers provide fish and transportation to villagers.

(3) The villages those relatively far from rivers were located on many platforms, which were surrounded by marshlands and ponds. These wetlands would become flood discharge areas when summer is coming.

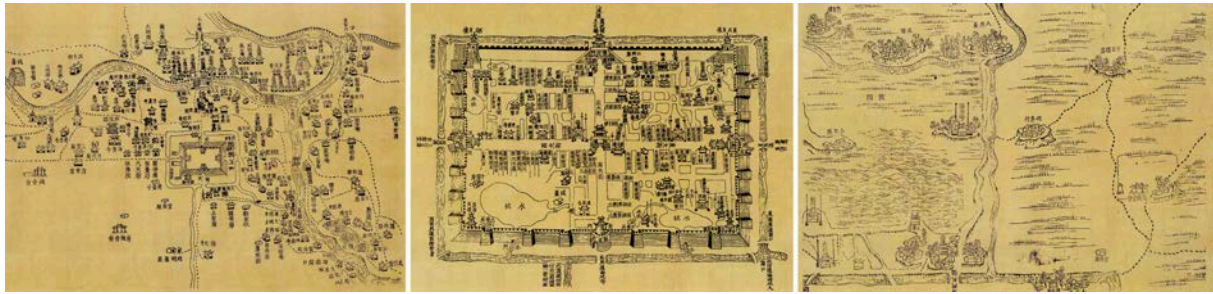


Figure 1: The urban form of Tianjin and its rural area, the walled city, and villages in southern suburbs. Portions of *Jinmen Baojia Tushuo*.

The First Opium War forced the Qing Dynasty of China to open its doors to the world. And Tianjin was opened as a treaty port after the Beijing Convention was signed in 1860. Up to 9 countries had designated concessions in Tianjin. The role of the city changed during era and the urban scale expanded unprecedentedly. Meanwhile, the human-nature relationship as described above also got a significant transformation. Existing research of urban history mentioned this course briefly while historic geography studied this from a macro perspective.⁴ But in the field of urban planning history, researchers rarely integrate water environment and topography of the city in their study. They see the transformation as neglect bearer of human activity and tend to treat the chaotic structure of the city as a reflection of the disorganized administration and the result of isolated planning on individual concessions.⁵ This paper emphasizes that natural environment and its transformation deeply engaged in the birth of modern Tianjin, and argues that the aquatic environment and topographic condition along the Hai-Ho River at that time limit any large-scale planning and construction to be formulated or implemented and the planning and construction of the concessions was made and carried out step by step after the reclamation of the land along the river.

The Designation of Concessions and their Development in the Early Years

Concession	British	U.S.	French	German	Japanese	Russian	Italian	Belgian	Austro-Hungarian
Phase 1	1860 460mu	1860 131mu	1861 360mu						
Phase 2	1897 1630mu			1895 1034mu	1896 1667 mu				
Phase 3	1902: 131mu (annex American concession) 1903: 3928 mu		1900 2300mu	1901 3200 mu	1900 400 mu	1900 5971 mu	1902 771 mu	1902 747 mu	1902 1030 mu
Total Area	6149 mu		2660 mu	4234 mu	2067 mu	5971 mu	771 mu	747 mu	1030 mu

Table 1: Three phases of the designation of concessions and their areas. Excluding illegal occupied areas.

Source: Tianjin local history editorial commission, <http://www.tjdfz.org.cn/tjtz/zjz/hdykz/index.shtml> (accessed Feb 12, 2018)

The designation of concessions in Tianjin includes 3 phases (Table 1). The first one began at the Anglo-French occupation of 1860 during the Second Opium War. British captain Charles G. Gordon cooperated with French Lieutenant de Vaisseau de Trèves investigated the areas outside the native city and selected a parcel of land at *Zi-zhu-lin* (紫竹林) on the west bank of the Hai-Ho River.⁶ The United State subsequently delineated its concession to the south of the British Concession. The Chinese defeat in China-Japan war in 1894 gave opportunities to Germany and Japan to establish their concessions in Tianjin and Great Britain to extend its concession zone. From the walled city on the north, Japanese, French, British, American, and German concessions, all adjacent to each other, occupied the west bank of the upper reaches of the Hai-Ho river. The designation of concessions got its culmination after the Boxer Rebellion in 1900. Russia, Italy, Austria-Hungary, and Belgium followed examples of Britain and France and measured land on the east bank of the river. And the existing settlements also extended their territories several blocks inland. By 1902, Tianjin had become a “fragmented city”⁷ with concessions up to 23629 mu in area, which was nearly 17 times that of the native walled city.



Although the scope was large, the topographic condition limited the development of the concessions. The riverbank area such as *Zi zhu lin* was originally less-developed area dotted with ponds, vegetable gardens, and a few huts.⁸ And the inland area was much lower, with immense shallow and swamp. An aerial view taken by the French military shows topography along the river around 1900 (Figure 2). On the east bank of the river (the site of Italian and Austria-Hungarian Concessions) stacks piles of salt, the villages inland are surrounded by a lot of



Figure 2: Terrain of Tianjin along the Hai-Ho River around 1900.

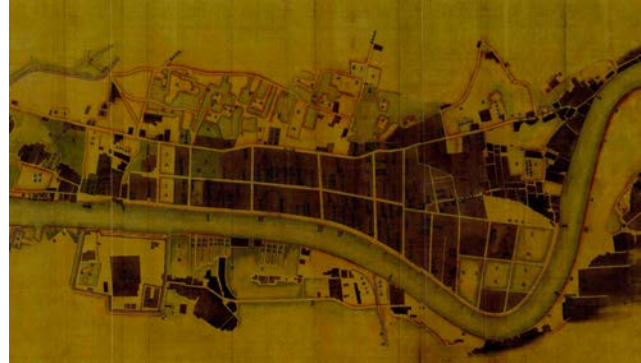


Figure 3: The construction of the original concessions in 1888 and the surrounding topography.

ponds. On the other side, where is the site of Japanese Concession and Nanshi Area, is full of boundless wetlands. Obviously, the terrain condition was not suitable to modern construction. Furthermore, the natural environment, which was against modern concept of hygiene, was considered unsanitary and threats to public health. Hence, the land, as an 1897 Japanese report depicted, need “a lot of projects to reclaim.”⁹

As soon as the concession was settled, British engineer Gordon made a grid plan with three roads parallel and four roads perpendicular to the river. The site was divided into 10 blocks and 35 pieces of land.¹⁰ This plan was undoubtedly based on the experiences and images of what a colonial city should be and had the advantage of quick rental and rapid construction. But how to deal with the muddy land was an unavoidable issue. In the prior years, the concession governments used the same methods as the Chinese did to fill land. The landowner entrusted a contractor to hire labor to dig and transport soil from land nearby. The mud was dumped on the construction site and left to dry.¹¹ But the cost of this method was high and efficiency was low. During the first 30 years, only 60% of the land had been constructed in the three original concessions. And most of them were in the British settlement (Figure 3). The condition of slow development had not improved even until all the concessions had been designated. A 1908 map shows that, the land has been built is less than a quarter of concession territories and is mainly concentrated on the west bank of the Hai-Ho River. Any construction and expansion would require parting the water from the land. The environment delayed the development of concession.¹² Meanwhile, the traditional methods, i.e. digging in nearby land, meant created a new pond while eliminating an old one. The concession governments had to prohibit digging in the concession.¹³ This dilemma only changed until the establishment of the Hai-Ho Conservancy and the introduction of new method and technology.

The Hai-Ho Conservancy Commission and the Land Reclamation Along the Hai-Ho River

The original intention of establishing a concession in Tianjin was to set a nearby base to cast influence over the capital of Qing Dynasty. After several decades of development, the city's trade status had become more prominent. The *Zi zhu lin* Port played a role to incorporate Tianjin and North China into a global market. The number of steamers that arrived at the port increased from 111 in 1861 to 688 in 1895. And the tonnage increased by almost 23 times.¹⁴ But Tianjin was not a natural port. The watercourse between the city and the sea was shallow and winding, which was not navigable to ocean-going steamers. And the course at times silted up in summer when flood brought large amount of sediment from upper reaches and distributaries. The navigation condition seriously deteriorated at the end of the 19th century.

“During the summer of 1889 the Hai-Ho was said to be more difficult to navigate than during any season since the port had been opened...”



The 18th International Planning History Society Conference - Yokohama, July 2018

... 1896 was one of the worst in the history of the port. For more than seven months steamers were unable to come to the Bund, and the outlook was so serious that not only Foreigners, but even Chinese, began to take alarm.”¹⁵

The navigation of the Hai-Ho River vitally affected the dream of making Tianjin a modern treaty port and the general welfare of the city. Both foreigners and Chinese eager to find a satisfactory solution of this “chronic local trouble.”¹⁶ Along with the suspension of canal transportation, the focus of conservancy shifted from the Grand Canal to the Hai-Ho River. In 1897, the Hai-Ho Conservancy Commission established. It was an organization that bridge Chinese government, Customs, foreign concessions, and merchants. The Commission reorganized as the Hai-Ho Conservancy Board after the Boxer Rebellion. Its main task was to improve the navigation condition of the Hai-Ho River by modern methods and technology. The Commission’s jobs contained two parts, public works and routine maintenance. The former included the rounding off of many of the bends between Tianjin and the sea, and the building of a system of locks on the distributary canals to keep as much water in the Hai-Ho River as possible. The latter included ice breaking to realize winter navigation and dredging at the mainstream of the river. In the first few years, the dredged sediment was transported and dumped in the deeper part of riverbed. But this cannot reduce the total amount of sediment in the river, which increased the risk of silting in the near future. When HHCC suffered from the inability to dispose the sediment, the concessions that gradually developed from riverbank to inland were bothered by the lack of soil for land reclamation. In 1905, Commissioner T. T. H. Ferguson, Representative of Customs, saw the opportunity and proposed to sell sediment from the river to the concessions as fill for the low-lying lands. ¹⁷

“The Commission, during 1906, proposes to dispose of all spoil dredged within a convenient distance by bringing it in boats into the Canal leading from the old University to the *Hai Kuang Ssu*(海光寺) and selling it at any place on that canal to landowners for raising or filling in purposes.”¹⁸

This proposal, later named “Hinterland Filling Scheme,” implemented firstly in the British concession. A boat carrying sediment dredged from the river navigated through the Canal to a large pond at the end of Meadows Road. About 14,000 *fang* of earth was deposited. Half of the pond was reclaimed.¹⁹ In the following year, the HHCC introduced pumping stations to replace human labor. They built floating pumping stations and directed the dredged soil to the pond through pipes. Dredging, pumping, and filling, all cooperated with each other, worked according to the amount the foreign municipal administrations reported. From 1907 to 1909, all the dredged sediment had been pumped and filled into the ponds, which were mainly in the British and French Concession. This provisional pumping station kept in working until 1910 and was replaced by new pumping plants. In the test of filling in Deutsche Niederlassungs Gesellschaft property, 130 m³ of silt was discharged into the pond in 13 minutes.²⁰ The efficiency of filling was highly increased. The annual quantity of silt that dredged and filled in the following decades was several times that of previous years.

The filling first implemented in the British and French Concession and then spread to the German, Japanese Concession, and native areas. By Japan’s invasion in 1937, the land along the upper reaches of Hai-Ho was almost accomplished. And the focus of work gradually shifted to the downstream area of Tanggu. From 1902 to 1937, the total quantity of sediment dredged in the Harbour was 4,095,440 *fang* and 96% of that was filled in hinterland (Table 2). The altitude of land raised by an average of 1 to 2 meters. The work laid the foundations of road construction and land investment in the low-lying areas and directly connected the conservancy activities with urban development.

Year	No. of fang dredged in Harbour	Quantity disposed by dumping	Quantity for filling in Tianjin	Filling Areas	Filling Methods
1902	12,000	12,000 river	--	--	--
1903	43,800	43,800 ”	--	--	--
1904	59,000	59,000 ”	--	--	--
1905	48,500	48,500 ”	--	--	--
1906	14,000	--	14,000	British Concession	By boat
1907	11,000	--	11,000	British and French Con.	Pumped by Provisional Plant
1908	20,000	--	20,000	British and French Con.	”
1909	12,783	--	12,783	British Con.	”
1910	40,250	1,664 river	38,586	British, French and German Con.	Pumped by New Plant
1911	61,390	420 ”	60,970	French and German Con.	”
1912	63,720	9,835 ”	53,885	French and German Con.	”
1913	90,766	--	90,766	French and German Con.	”
1914	100,275	--	110,275	French and German Con.	”
1915	162,088	--	162,088	French, German and Japanese Con.	”
1916	302,605	--	302,605	British, French, German and	”



				Japanese Con.	
1917	115,412	--	115,412	British, German and Japanese Con.	''
1918	23,810	3,140 river	20,670	Japanese Con.	''
1919	252,137	8,152 ''	243,985	British and Japanese Con.	''
1920	198,525	500 ''	198,025	British and Japanese Con.	''
1921	170,712	1,775 ''	168,937	British Con. and Nanshi	''
1922	209,754	1,320 ''	208,434	British Con. and Nanshi	''
1923	85,779	680 ''	155,169*	British Con. and Nanshi	''
1924	171,465	680 ''	170,785	British Con.	''
1925	6,230	2,970 ''	86,480**	British Con.	''
1926	161,020	1,505 ''	159,515	British Con. and Tanggu Port	''
1927	209,000	--	209,000	British Con.	''
1928	140,000	--	140,000	British Con. and Tanggu Port	''
1929	179,422	62,035 ''	117,387	British Con. and Tanggu Port	''
1930	107,750	--	107,750	British Con. and Tanggu A. P.Co.	''
1931	139,162	4,195 ''	134,967	British Con. and Tanggu A. P.Co.	''
1932	168,520	16,215 ''	152,305	British Con. Chentangzhuang and Tanggu A. P.Co.	''
1933	101,445	13,445 ''	88,000	British Con. Chentangzhuang and Tanggu A. P.Co.	''
1934	108,255	3,640 ''	104,615	British Con. Chentangzhuang and Hezhuangzi	''
1935	184,615	4,135 ''	180,480	British Con., 1 st Special District and Chentangzhuang	''
1936	208,390	6,070 ''	202,320	1 st Special District and Chentangzhuang	''
1937	111,860	4,310 ''	107,550	1 st Special District	''
Total	4,095,440	309,986	3,938,744		

Table 2. Quantity of Material Dredged in Tianjin Harbour and Filled in Hinterland

* 70,070 were dredged at Tombs Bend Cutting ** 83,220 were supplied from dredging outside Harbor limits

1 Fang = 100 cub. Feet English = 2.83 cub. Meter

Source: HHCC Report for 1937. TMA. W0001-1-000113. and Zhang, Shuming, ed. *Tianjin Tudi Kaifa Lishi Tushuo (A pictorial history of land development in Tianjin)*. Tianjin: Tianjin Renmin Press, 1998. 88-89.

The Evolving Relationship among Site Selections, Planning, Land Reclamation, and Construction

For the special terrain condition along the Hai-Ho River, most of the land for construction was reclaimed. And there was not an administrative authority that had power to organize urban development of all districts, the general linear relationship among site selection, planning, land reclamation, and construction evolved into a complex interaction (Figure 4). The following session will focus on the concessions on the west bank of the river and examine the complex relationship and the role of topography and land reclamation played in the process of urban development.

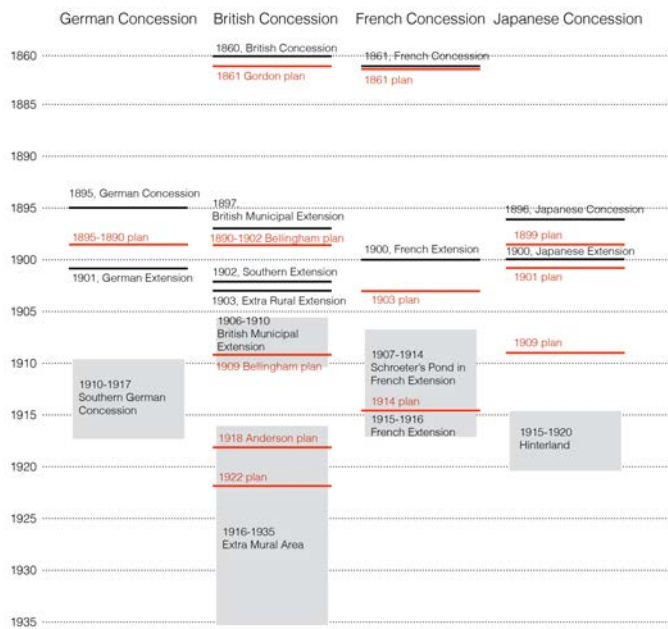


Figure 4: The complex relationship among site selection, planning, and land reclamation.



Figure 5: The terrain elements that defined the concessions boundaries.

The first mode that topography and land reclamation integrated in the process is that, the terrain defined the boundary of concession and affected its expansion. A conspicuous geographical element can be a reference for demarcation in a wilderness and also became a means for Chinese authorities to restrict the illegal expansion of the concessions. The elements in Tianjin case include the Hai-Ho River, *Haitatao* (海大道), Mud Wall Canal, and *Hai Kuang Ssu Road* (海光寺大道). *Haitatao*, which had existed from Ming Dynasty, connected the riverbank to the south of the walled city and *Taku* (大沽) by the sea. The road, together with the Hai-Ho River, defined the West-East boundaries of the original British, French, and American concessions. The Mud Wall and Mud Wall Canal were fortifications that built by General Sengge Rinchen (僧格林沁) in 1860. The Canal connected the Southern Canal and the Hai-Ho River to the south of the city. The Mud Wall Canal, as a solid element, defined the southern boundaries of the British Municipal Extension, the French Extension, and the Japanese concession for a long time. And its irregular path had profoundly affected the urban pattern of these concessions. As to the *Hai Kuang Ssu Road*, it was a means used by Chinese authorities to limit the further expansion of the concessions. It was originally a country path, and then in 1918 reconstructed into a dyke to protect the city from flood. In 1937, Mayor *Chang Tzu-chung* (张自忠) rebuilt the road and sent police to patrol to prevent the illegal cross-border constructions from Japanese and French Concessions.²¹ The scope of the concessions expanded from the river to the inland step by step. And the complex boundaries laid the foundation for a collage of urban patterns (Figure 5).



The procedure of site selections, planning, land reclamation, and construction implemented in the original concessions of Great Britain, France and Germany. Although the traditional method of filling slowed the speed of construction, the concessions all developed according to the plans that made at the time when concessions established. The filling of southern area of the German Concession followed the new method. From 1910 to 1917, about 155,400 *fang* of sediment pumped into the ponds according to the original plan.²² Urban construction started accordingly. These concessions, adjacent to each other within a limited scope, all had clear boundaries as reference to make plans. And these plans also had sufficient time to be implemented. Therefore, although belonged to different administrative authorities and developed in different time, these concessions formed a clear, well-organized and interconnected urban pattern.

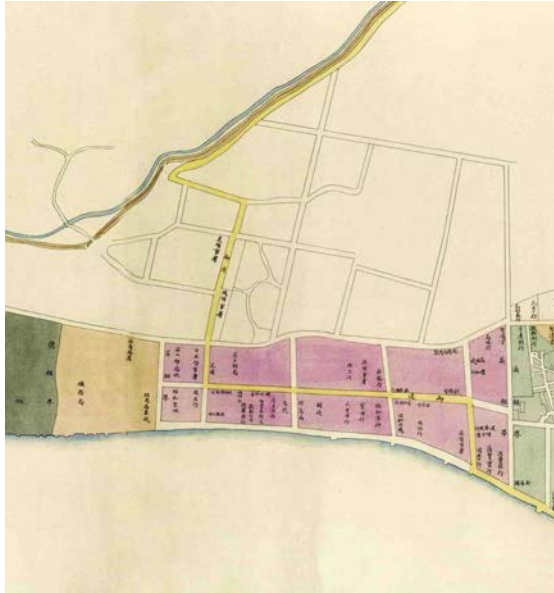


Figure 6: Map of 1895 shows the pattern in the later B.M.E.

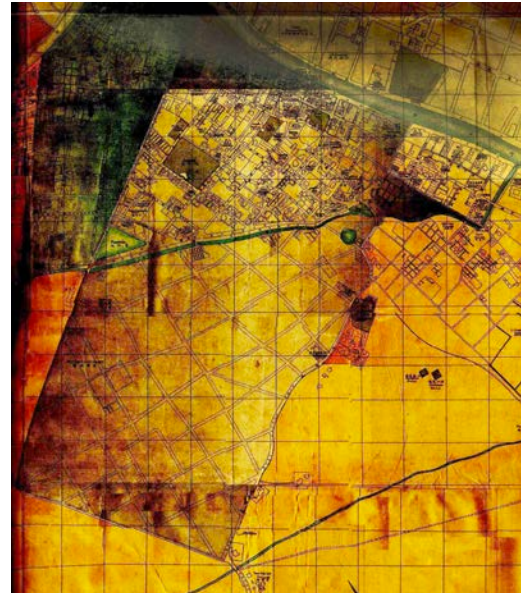


Figure 7: Map of 1913 shows the pattern of B.M.E. and Bellingham's sketch plan for E.M.A

The third mode that topography and land reclamation integrated in urban development is that, scattered cross-border constructions deeply affected by terrain condition and these constructions then as fait accompli affected the following planning. The development of British Municipal Extension applied a typical example. The land within original British Concession had been fully developed in 1880s. Custom Commissioner Gustav von Detring led British merchants and British Municipal Council to buy land outside the concession. When the B.M.E was granted by Chinese government in 1897, half of land had been occupied and developed.²³ This kind of construction, which was dispersed and in small-scale, was not able to carry out large-scale transformation of the land. Hence, the construction of roads and buildings must follow the texture of the site, which was the most convenient way to purchase and reclaim land. The comparison of maps of 1888, 1895 and 1913 (Figure 3, Figure 6, Figure 7) shows that the road system of B.M.E. had been formed before 1895 and the structure continued the pattern of tombs, vegetable gardens, ponds, and paths depicted in the 1888 map. Researcher indicates that British Municipal Council engineer A.W.H. Bellingham made the B.M.E plan between 1890 and 1902.²⁴ Obviously, this plan was deeply affected by topographical condition and existing constructions but not followed the road system, which parallel or perpendicular to the river, of the original settlement.

The last mode, which is the most significant one, that land reclamation influence urban development is that, the original plan that based on topographic condition modified after the land had been reclaimed. Mr. Bellingham made a sketch plan for the Extra Mural Area in early 1900s. Different from his plan for B.M.E., which was made based on status quo, the E.M.A plan was an idea ahead of any actual construction. The plan, on its northeast part, continued the grid structure that of B.M.E., and gradually rotated the grid to achieve North-South orthogonality. Due to the lack of detailed topographic map of the E.M.A., it is difficult to tell if his design was based on consideration of topographic condition, like the former one did. But obviously his plan applied a possibility that break through the concession's boundaries to formulate a structure that shifted from the riverbank to hinterland. But this plan also had obvious shortcomings. The conflict between the ideal grid and irregular border created lots of triangular blocks, which were difficult to develop (Figure 7). The filling of the E.M.A. started in 1916 when the technology was mature enough to reclaim a land as large as the E.M.A. It is also hard to tell whether the



advanced technology made the B.M.C. have the ability to ignore the status quo or they just gave up the previous idea of building a city beyond the boundaries. The Council proposed a plan in 1918 and another modified one in 1922, which guided urban development of E.M.A. in the following decades.



Figure 8: Plan for French Extension, 1903.



Figure 9: Map of French Concession in 1928.

There was similar case in the French Concession. The French Municipal Council proposed a version of plan in 1903 after the French Extension granted by Chinese government. This was a compromised plan that connected existing roads in B.M.E. and roads in Japanese Concession's riverfront area. The sparse roads bypassed the big ponds in the site as much as possible (Figure 8). This plan had been overturned after the Schroeter's Pond had been filled in 1914. The new plan, with denser road network and higher developing intensity, laid the foundation for building this area into a commercial center in the future (Figure 9).



The changes in the planning of the Japanese concession are even more significant. There were more low-lying lands and marshes in the hinterland of the Japanese Concession than in the British and French ones. For this reason, the original plan proposed to transform the low-lying land near *Hai Kuang Ssu* into big ponds, which could be used to irrigate and develop fisheries. The soil dug from the ponds could be used to fill the land in other area of the concession (Figure 10).²⁵ The land reclamation focused on the riverbank area by traditional filling method in the following few years. The HHCC's new method of land filling applied possibility to reclaim the hinterland. The Japanese municipal authority modified the plan in 1909. The new plan simply extended the existing roads to the Canal and Hai Kuang Ssu with no consideration of the ponds on the site (Figure 11).

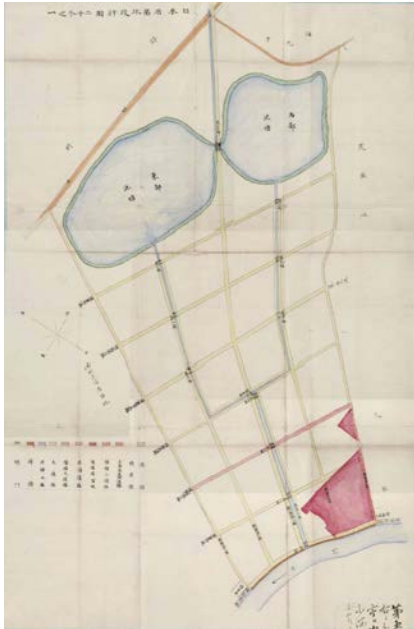


Figure 10: Original sketch plan of Japanese Concession.

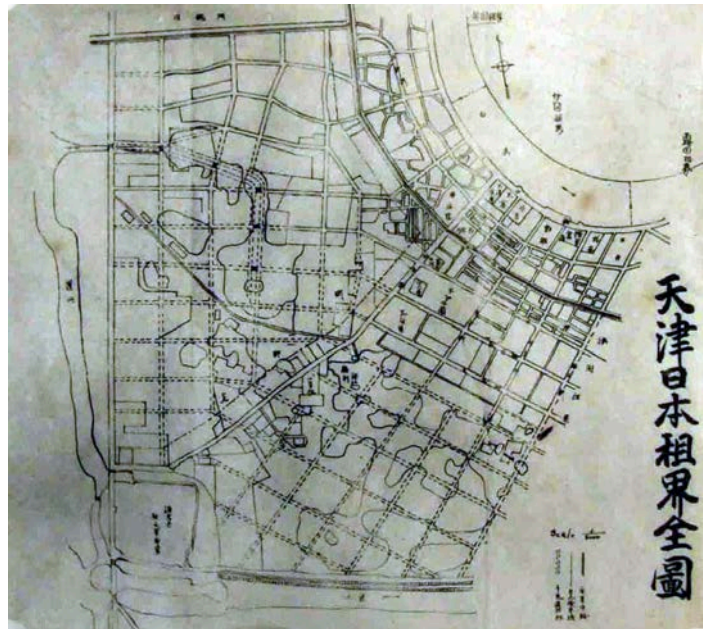


Figure 11: Map of Japanese Concession in 1928 shows the roads extended to the hinterland.

Conclusion

From 1860 to 1945, Tianjin had a history with concessions for more than 80 years. The driving force for designation and development of the concessions shifted from political deterrence to trade. For the sake of huge population poured into the city during different wars, the force then changed to real estate development. And the booming of modernization and construction occurred from that time, i.e. early decades of the 20th century. The terrain of Tianjin cannot fulfil the large-scale construction and the modern concept of hygiene. Hence, the land reclamation became precondition and foundation to the further development of the city. The establishment of HHCC and its introduction of modern method of land filling, which created lots of land, realized the need and the birth of modern Tianjin. The terrain condition of Tianjin made land reclamation a key role in the process of urban development. It significantly influenced the site selection, urban planning, and construction and produced a collage of urban patterns.

Acknowledgements

The author would like to thank Shuwei Liu, collector, Guodong Chen of Tianjin University, Kang Wang of Beijing Architecture Design Institute, Ning Gong of Tsinghua University, and Mengjun Liu of Nankai University, whose advices on archives have contributed to improving this paper.

Disclosure Statement

No potential conflict of interest was reported by the author.



Endnotes

- 1 Joseph Needham, *Science and Civilisation in China*, vol 4, part 3 (London: Cambridge University Press, 1971), 265.
- 2 Ch'ao-ting Chi, *Key Economic Areas in Chinese History: As Revealed in the Development of Public Works for Water-control* (G. Allen & Unwin, Ltd, 1936), 137.
- 3 Changsong Wang, "Research on the Treatment of Haihe River and the Process of Tianjin Port Space Shifting in Modern Times." (PhD diss., Peking University, 2011), 31.
- 4 See: Haiyan Liu, *Kongjian Yu Shehui: Jindai Tianjin Chengshi De Yanbian* (空间与社会: 近代天津城市的演变). (Tianjin: Tianjin Academy of Social Sciences Press, 2003), Shuwei Luo, *Jindai Tianjin Chengshi Shi* (近代天津城市史). (Beijing: China Social Sciences Press, 1993), Changsong Wang, "Research on the Treatment of Haihe River and the Process of Tianjin Port Space Shifting in Modern Times." (PhD diss., Peking University, 2011), Wang, Ai. "City of the river: the Hai River and the construction of Tianjin, 1897-1948." (PhD. diss., Washington State University, 2014).
- 5 In fact, a large number of studies on individual concessions unintentionally sperate the city into isolated islands.
- 6 O. D. Rasmussen, *Tientsin: An Illustrated Outline History* (Tientsin: Tientsin Press, 1925), 34.
- 7 Gail Hershatter, *The Workers of Tianjin, 1900–1949* (Stanford: Stanford University Press, 1986), 25.
- 8 Rasmussen, *Tientsin*, 34.
- 9 "Report of Tianjin settelment" in Attachment of Japanese settlements in China, the part of Tianjin, vol.1. Diplomatic Archives of the Ministry of Foreign Affairs of Japan.
- 10 "Plan of British Concession, Tientsin". The National Archives, UK. MPKK 1/50/9.
- 11 Rasmussen, *Tientsin*, 56.
- 12 Ruth Rogaski, *Hygienic Modernity: Meanings of Health and Disease in Treaty-port China* (Berkeley: University of California Press, 2004), 215.
- 13 Tianjin CPPCC historical data research committee, *Selective historical documents of history and culture of Tianjin* (天津文史资料选辑), vol.46. (Tianjin: Tianjin Renmin Press, 1989), 164.
- 14 Huabin Li, *History of Tianjin Port, volumes of ancient and early-modern times* (Beijing: Renmin Jiaotong Press, 1986), 75.
- 15 "History of the Hal-Ho Conservancy Commission, 1905". Tianjin Municipal Archives. W0001-1-007692.
- 16 HHCC, Report for 1895. TMA. W0001-1-000106.
- 17 North China Conservancy Commission, "Brief History of Hai-Ho Conservancy Bereau" *North China Conservancy Monthly*, vol.2, 10 (1929) :129.
- 18 HHCC, Report for 1905. TMA. W0001-1-001600.
- 19 HHCC, Report for 1906. TMA. W0001-1-000117.
- 20 HHCC, Report for 1910. TMA. W0001-1-000121.
- 21 Tian Li, "Study on the History of Urban Development of the French Concession in Tianjin, 1861-1943" (PhD. diss., Tianjin University, 2015), 57.
- 22 HHCC, Archives of Land Filling. TMA. W0003-1-000203.
- 23 Keqiang Shang and Haiyan Liu, *Research on the Society of Tianjin Concessions* (Tianjin: Tianjin Renmin Press, 1996), 68.
- 24 Guodong Chen, "Expansion of British Concessions and Contested Collages of Nine Concessions: Town Planning of the British Concession in Tianjin, 1860-1943" *Urban Planning Forum*, no.2 (2017): 109.
- 25 "Secret document no.12" in Attachment of Japanese settlements in China, the part of Tianjin, vol.1. Diplomatic Archives of the Ministry of Foreign Affairs of Japan.

Bibliography

- Chen, Guodong. "Expansion of British Concessions and Contested Collages of Nine Concessions: Town Planning of the British Concession in Tianjin, 1860-1943" *Urban Planning Forum*, no.2 (2017): 104-112.
- Chi, Ch'ao-ting. *Key Economic Areas in Chinese History: As Revealed in the Development of Public Works for Water-control*. G. Allen & Unwin, Ltd, 1936.
- Hershatter, Gail. *The Workers of Tianjin, 1900–1949*. Stanford: Stanford University Press, 1986.
- HHCC, Archives of Land Filling. TMA. W0003-1-000203.



HHCC, Report for 1895. TMA. W0001-1-000106.

HHCC, Report for 1905. TMA. W0001-1-001600.

HHCC, Report for 1906. TMA. W0001-1-000117.

HHCC, Report for 1910. TMA. W0001-1-000121.

“History of the Hal-Ho Conservancy Commission, 1905”. Tianjin Municipal Archives. W0001-1-007692.

Li, Huabin. *History of Tianjin Port, volumes of ancient and early-modern times*. Beijing: Renmin Jiaotong Press, 1986.

Li, Tian. “Study on the History of Urban Development of the French Concession in Tianjin, 1861-1943.” PhD diss., Tianjin University, 2015.

Needham, Joseph. *Science and Civilisation in China*, vol 4, part 3. London: Cambridge University Press, 1971.

North China Conservancy Commission. “Brief History of Hai-Ho Conservancy Bureau.” *North China Conservancy Monthly*, vol.2, 10 (1929): 125-132.

“Plan of British Concession, Tientsin”. The National Archives, UK. MPKK 1/50/9.

Rasmussen, O. D. *Tientsin: An Illustrated Outline History*. Tientsin: Tientsin Press, 1925.

“Report of Tianjin settlement” in Attachment of Japanese settlements in China, the part of Tianjin, vol.1. Diplomatic Archives of the Ministry of Foreign Affairs of Japan.

Rogaski, Ruth. *Hygienic Modernity: Meanings of Health and Disease in Treaty-port China*. Berkeley: University of California Press, 2004.

Shang, Keqiang and Haiyan Liu. *Research on the Society of Tianjin Concessions*. Tianjin: Tianjin Renmin Press, 1996.

Tianjin CPPCC historical data research committee. *Selective historical documents of history and culture of Tianjin* (天津文史资料选辑), vol.46. Tianjin: Tianjin Renmin Press, 1989.

Wang, Changsong. “Research on the Treatment of Haihe River and the Process of Tianjin Port Space Shifting in Modern Times.” PhD diss., Peking University, 2011.

Image sources

Figure 1: *Jinmen Baojia Tushuo* (津门保甲图说). Tianjin Library Collections.

Figure 2: *La Chine a terre et en ballon*. Paris: Berger-Levrault & cie, 1902.

Figure 3: Portion of *Map of Tianjin to Zi zhu lin*. Li, Zurao, ed. *Tianjin Chengshi Lishi Ditu Ji* (Urban Historical Atlas of Tianjin). Tianjin: Tianjin Guji Press, 2004.

Figure 4: Drawn by author based on archives.

Figure 5: Drawn by author based on archives.

Figure 6: Portion of *Map of British, French, and German Concessions*. Li, Zurao, ed. *Tianjin Chengshi Lishi Ditu Ji* (Urban Historical Atlas of Tianjin). Tianjin: Tianjin Guji Press, 2004: 71.

Figure 7: Portion of *Map of Tientsin in 1913*. Li, Zurao, ed. *Tianjin Chengshi Lishi Ditu Ji* (Urban Historical Atlas of Tianjin). Tianjin: Tianjin Guji Press, 2004: 88.

Figure 8: Chicago University collections. <http://www.lib.uchicago.edu/collections/maps/asian-cities/G7824-T5-1903-G7-W.html>. Quoted in Tian Li, “Study on the French Concession,” 122.

Figure 9: Article 34, Archive du Consulat de Tientsin, CADN. Quoted in Tian Li, “Study on the French Concession,” 124.

Figure 10: Attachment of Japanese settlements in China, the part of Tianjin, vol.1. Diplomatic Archives of the Ministry of Foreign Affairs of Japan.

Figure 11: *Album of Tianjin Flood*. Tianjin Japanese Militia, 1935.



The 18th International Planning History Society Conference - Yokohama, July 2018



HISTORICAL WATERFRONT OF RIO DE JANEIRO: cartography of landfills and new rehabilitation perspectives of the port area

Fabiana Generoso de Izaga *

Amanda Barbosa da Silveira **

* Associate Professor at Rio de Janeiro Federal University: fabizaga@gmail.com

** Architect and Urbanist: amanda-bsilveira@hotmail.com

This article seeks to analyse recent urban transformations and the conceptual bases that have been in force in the Urban Rehabilitation Project of Rio de Janeiro's waterfront. An attempt is made at establishing a connection between the development of the area, the evolution of the city's history, the activities carried out at the port, and its conversion to new uses. An analysis of the spatial transformations is done, especially in the 7-year (2009-16) span of the initial implementation of the ongoing 'Porto Maravilha' [Marvel Port] urban project, with the mapping of new and old urban fabric and infrastructure; bibliographical research on historiographical studies, city administration players, and technicians to unveil processes that concern urban projects as contemporary tools for land valuation. As a conclusion, we point that despite the major work recently carried out as a product of the Urban Operation Consortium Law guidelines, only 9% of the urban land stock has been negotiated, contradicting even the pessimistic forecasts of 50%. The area lacks an Integrated Urban Plan with a public policy approach, especially to foster housing as a key element for liveable neighbourhoods and a stronger connection with the green infrastructure of the Guanabara Bay ecosystem.

Keywords: waterfront; landfills; cartography; urban rehabilitation; Rio de Janeiro.

Introduction

The main central area of Rio de Janeiro has seen countless changes in its 450+ years of age, and remains as an important element of centrality of the city in the 21st century. The renewed waterfront of the city, a place where several urbanistic interventions have been made, as part of the urban rehabilitation programme that was in force from 2009 to 2016, when the city hosted the 2016 Olympic and Paralympic Games is now a space fraught with a high degree of uncertainty as regards its capacity to transform the economy of the city and contribute towards the reorganisation of the inner city region, with its 12 million inhabitants. However, as a space of contact between the water and the urban domains, as discussed by Alemany and Andreatta¹, the Rio de Janeiro waterfront has its own peculiar features with many urbanistic possibilities, for its touching the historical centre of the city, and its potential to create new spaces for culture, trade, services and residences, along with its special aspects as regards the environment and the landscape.

This paper seeks to ask about the reach of the recent transformations and the bases on which the main instruments for a new development sit on, a development effort that has been operating on Rio's waterfront. We seek to establish points of intersection between the development of the area, and the evolution of the city's history as a whole, along the activities of the port and its conversion into new uses. We will undertake a discussion on the spatial transformations, considering the original implementation of port activities in that place, in 1910, in relation to the present day, especially the works done in the 7 years of the initial implementation of the ongoing 'Porto Maravilha' (PM) urban project (2009-2016). In order to carry out our analyses we rely on studies of the history of the urban evolution of the city developed by Abreu, Lamarão, Sisson, and Pereira & Izaga² along with those that deal with the aspects of cartography and the plans for the city of Rio de Janeiro documented by Andreatta and Czajkowski³. To discuss the proposals contained in the PM project we resort to an in-depth analysis of articles produced by governments, chiefly those from technicians and players related to the City administration such as Arraes & Silva and Dias⁴, relating them to research work that seeks to identify processes related to urban planning as an instrument for land valuation as argued by Sarue and Belisário⁵. Our research aims to reflect on the relationships between the new and old urban fabric and the new visions for urban development, their new methods and approaches. As a conclusion, we point that despite the major work recently



carried out as a product of the Urban Operation Consortium Law guidelines, only 9% of the urban land stock has been negotiated, contradicting even the pessimistic forecasts of 50%. The area lacks an Integrated Urban Plan with a public policy approach, especially to foster housing as a key element for liveable neighbourhoods and a stronger connection with the green infrastructure of the Guanabara Bay ecosystem. This would provide a more sustainable urban vision to the waterfront itself and also of it as an important element of a complex metropolis such as Rio de Janeiro.

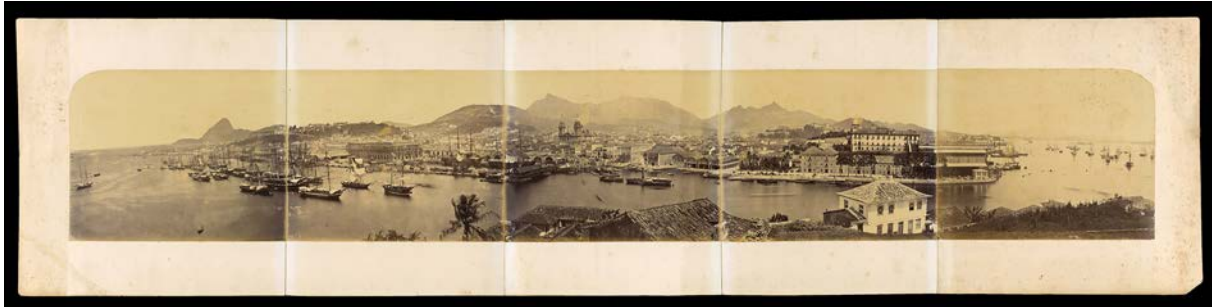


Figure 1: Historical panorama of Rio's waterfront central area. Source: National Library of Rio de Janeiro, RJ, ca. 1865.

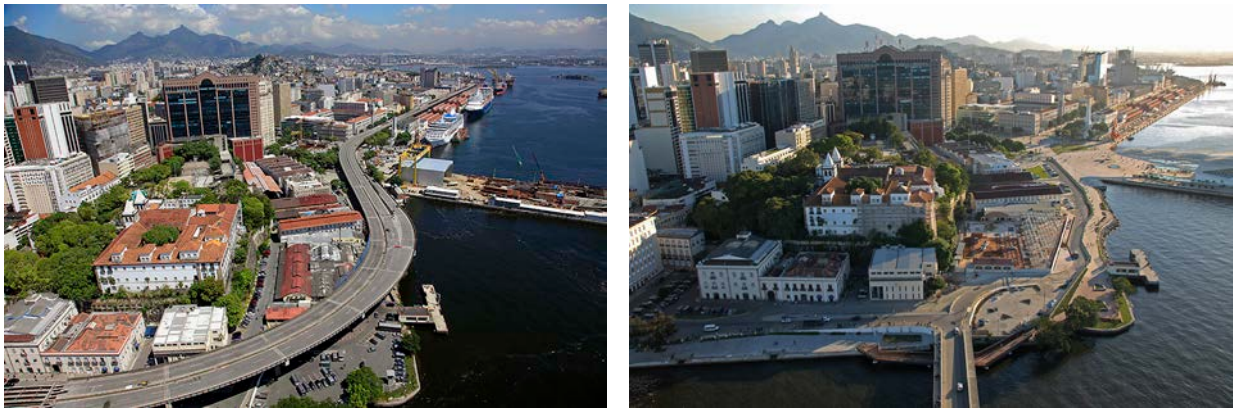


Figure 2: Actual panorama of Rio's waterfront central area from Orla Conde (Conde Waterfront), in 2014 and in 2016. Source: 'Porto Maravilha' webpage, 2018.

Rio de Janeiro, the central area and its historical waterfront

Rio de Janeiro is a metropolis with 11,945,532 people, consisting of 21 municipalities, with 6,520,000 of them living in the main city. Its central, historical area, where the CBD - Central Business District - is located, and which contains important equipments such as the headquarters of large State-owned corporations (National Oil and Gas Company - Petrobrás; National Bank for Economic and Social Development - BNDES), still holds its relevance in the 21st century as the area that attracts the majority of urban flows, where 75% of all the jobs are found and one with the highest real estate prices. To the North from it, on the borders of the 'Baía de Guanabara' [Bay] and at the old port area, and stretching east, along its border, a new Urban Rehabilitation Project [Projeto de Reabilitação Urbana] was set up in Rio's waterfront.

An extensive list of transformations was carried out in the central area during the 20th century. New ways were opened on top of colonial urban fabric (Figs. 3 & 4) (Avenida Rio Branco [1905]; Avenida Presidente Vargas, [1944]), hills were levelled [Morro do Castelo (Hill) in 1922 leading to the appearance of the borough of Castelo], and the construction of a modern port on its North face. According to Lamarão⁶, from 1904 to 1911 the place that once had docking bays and boarding decks is transformed into a specialised port area, of exclusive use, at a time when this function reached a higher technical level in the capitalist moves towards modernisation. With the aim of attending to the requirements needed for international trade in a port operation 1.2mi square metres are added with landfills into the sea. The port area works led to the redefinition of the entire urban domain in the central part of the city, where it was seen as the basis from which an ample restructuring of the central area and of the city would take place. In a process aimed at establishing hierarchies and impose segregation, Lamarão and



Abreu⁷ argue that the city sought to overcome its colonial, slavery-dependent condition to enter a new cycle of modernisation of a markedly capitalist nature.

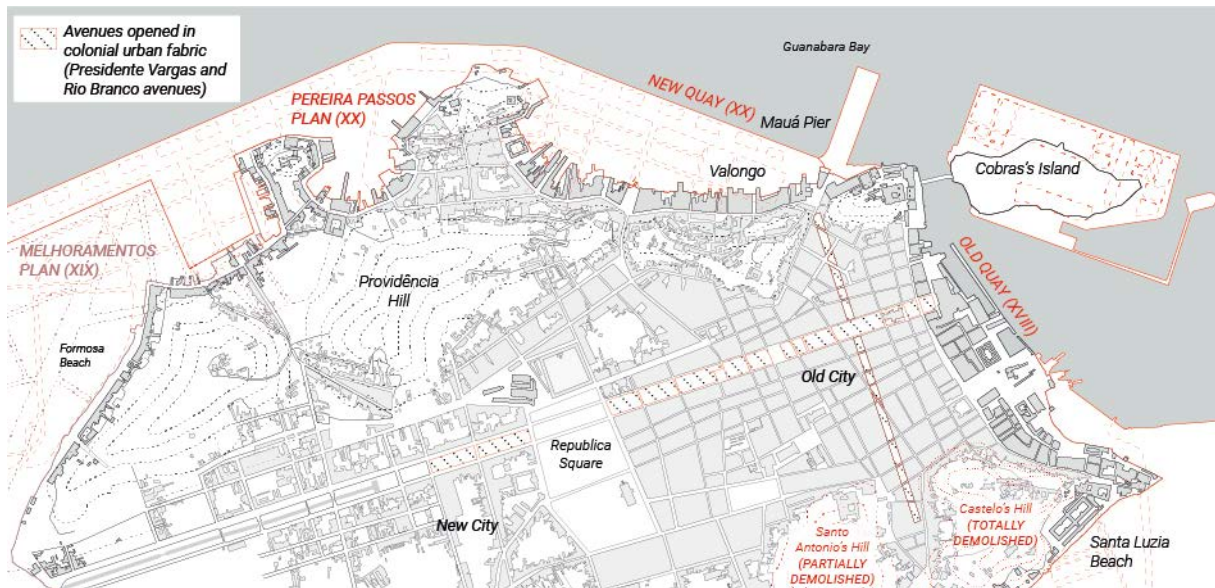


Figure 3: Urban fabric in 1866 and main urban transformations ('Melhoramentos' Plan and Pereira Passos Plan) of the Central and Port Area of Rio de Janeiro in the late 19th and early 20th centuries. Source: authors, 2018

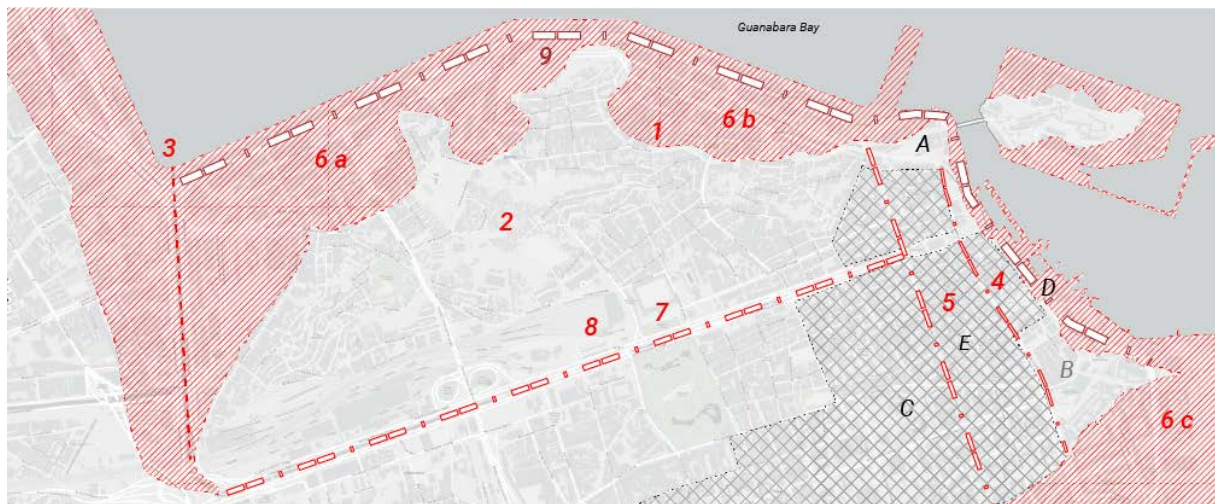


Figure 4: Main elements of the Central and Port Area in Rio de Janeiro in the late 19th and 20th centuries. Source: authors, 2018.

Key: 1 – Original coastline; 2 - Providência Hill – Where the first favela in Rio is located; 3 – “Mangue” Channel (1906) - Drainage works of marshland areas; 4 – Rua Primeiro de Março, or “Right St” [Rua Direita] – Rio's first main street (1600's); 5 - Av. Rio Branco, or Av. Central (1904-1905) opened in the colonial urban fabric (1600's); 6 – Successive Landfills. a: drainage (1904), b: port improvements(1910), c: area originated from the demolition of Morro do Castelo [Hill] (1922); 7 - Av. Presidente Vargas (1944), opened in the colonial urban fabric (1600's); 8 - Grand Central Station - Train Terminal (mid 1800's); 9 – Perimetral Flyover Viaduct. A - Saint Benedict Monastery(1590) - Benedictines; B - College of the Jesuits and Saint Sebastian Church (1567) - Jesuits, demolished along with Castelo Hill (1922); C - Saint Anthony Monastery (1608) - Franciscans; D - Old Quay (1779) - Rio's first dock; E - Rio's CBD (2018).

From the second half of the 20th century, the central area would see two cycles of redefinition of its functionalities. The one marked by the emptying of the residential areas that were re-located to the shores at the city's South End. The second one took place in the 1980s, marked by a resistance to the movements imposed by the previous cycle, which sought through heritage preservation initiatives to discontinue the processes of



deterioration that emptied the area. The reorganisation of the port logistics, with the construction of the new port of Itaguaí in 1982 would lead to a fall in the rates of use of a number of warehouses and an abandonment of a sizeable part of the old retro-port area. Still, between years 1957 and 1978 a flyover viaduct is built, named Perimeter Way [Perimetral] which aimed to clear traffic flows into and out of the Central area, but that actually further disfigures an area that already was going through a process of decay, as discussed by Izaga⁸.

The port area scenario, in the early 20th century at the time that preceded the rehabilitation works, was one where its isolation and abandonment were greatly intensified and, although it lied next to the CBD, its land was 75% owned by the Federal [Central] Government, something that hampered and slowed the possibilities of renovation. To this picture, a larger context of dispute in the network of centralities in the city of Rio de Janeiro was in effect, where the borough of Barra da Tijuca, a new settlement west of the city - planned by Brazilian architect Lucio Costa on the 1970's pushes to be a more affluent residential area, along with a network of services.

It is then that, from 2009 when the city is chosen to host the 2016 Olympic and Paralympic Games that new political movements and alignments become possible, and real opportunities for investments are seen by economic agents related to real estate and financial market, in a movement to reorganise the old port area.

The port area and the 'Porto Maravilha' (Marvel Port) Project

The debate on port areas' rehabilitation in modern cities has been presented by Hall and Castells & Borja⁹ as a typology of large urban projects that appear as instruments to face changes to the means of production of society in the late 20th century. In the old port areas, usually located in the central parts of the cities, the model used for urban renewal became attractive for new investment, to generate income, and see improvements to the infrastructure, apart from leveraging the tourist potential. Examples of waterfront rehabilitation in cities such as Baltimore (US), Barcelona (Catalunya), Rotterdam (The Netherlands), Cape Town (South Africa), Hong Kong (P.R.C.) and, in Latin America, in Buenos Aires (Argentina) have become accepted as reference cases of success by Andreatta¹⁰, albeit in different urban realities and inserted in cities of all sizes.

In Rio de Janeiro, despite the fact that an ample debate took place from the 1980s onwards, it saw proposals with little realism that disregarded players such as, for example, the 'Companhia Docas' do Rio de Janeiro [Company] to which the Brazilian Central Government had transferred in 1987 the responsibility for all cargo handling, in a concession agreement. In year 2000, the City Administration made some sporadic interventions in land that had been left free after railway infrastructure work, building there 'Cidade do Samba' [City] (space destined for Carnival artefacts and equipment construction) and a space for sports practices, named Vila Olímpica [Olympic Village], as well as some informal areas urbanisation in neighbouring boroughs, through the Favela-Bairro Programme [Slum Upgrading Programme]. And indeed, it is only when the alignment of the Central, State and City governments finally happens as they join forces to concentrate on the preparation of the city to host large international events that an effective effort to prepare a project takes place.

The city of Rio de Janeiro then launched a rehabilitation programme in the shape of a complex public and private partnership named 'Porto Maravilha' [Marvel Port], and embarked on the largest pool-based intervention of the country of a port area. In order to define the area for rehabilitation, or the AEIS - Special Urbanistic Interest Area - to the original port area is added the neighbouring boroughs, taking the total to 5mi square metres. The OUC - Urban Operation Consortium - Law that governs the 'Porto Maravilha' (pursuant to Supplementary Law no. 101/2009, from the City of Rio de Janeiro), was passed in 2009 and is the main instrument that triggered the intense transformations that would take place along the following 7 years: two new museums designed by renowned architects, the re-qualification of the public spaces along the nearly 3 kilometres of docks and surrounding areas, 2 LRT light rail tram lines totalling 28 kilometres, and the excavation work to build 3.5km of tunnels that, in connection with the infrastructure work done, that included the imploding and demolition of the 7 km-long flyover structure that ran peripheral to the docks and shoreline (Perimeter Line).

Supplementary Law No. 101/2009 altered the City's Director Plan [Plano Diretor] with the creation of specific urban policy instruments for the AEIS - Special Urbanistic Interest Area - land that changed the parameters of land use and for the granting of extra rights for construction, amongst others. From the issuing of CEPACs - Certificates for Potential Construction - which represent 'virtual land' and that correspond to approximately 4mi square metres added for construction, the operation proposes a density increase with verticalisation. The construction heights allowed in some sections (50 floors) are completely unusual and lie outside the economic scenario and Rio de Janeiro landscape. The Law also created the Port of Rio Area Development Company [Companhia de Desenvolvimento Urbano da Região do Porto do Rio (CDURP)], responsible for the management of the OUC and for the articulation between the remaining public and private bodies, along with the



New Port Utility Company (the consortium awarded the contract after a public tender procedure, consisting of construction companies), in charge of carrying out the construction work and providing the infrastructure services from 2011 to 2026.

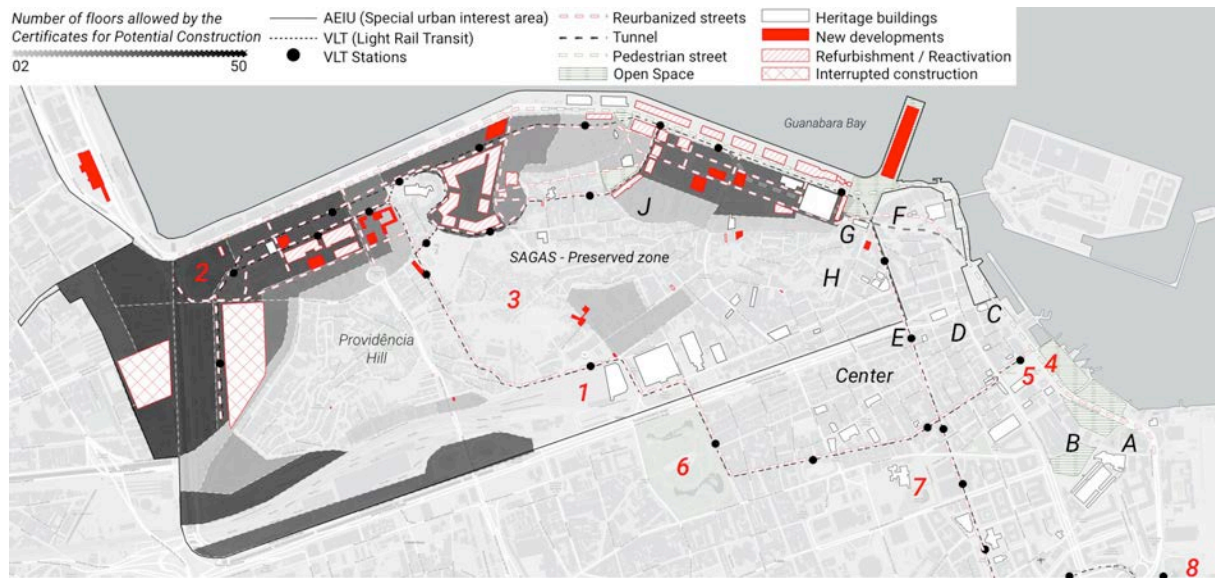


Figure 5: Part of the Central Area of Rio de Janeiro and 'Porto Maravilha (Marvel Port) Rehabilitation Project and the New Public Space Project, heritage protected buildings and new developments. Source: authors, 2018.

Key - 1 – Grand Central Station - Train Terminal (mid 1800's); 2 – Central Bus Station "NovoRio"; 3 – Providência Hill – Where the first favela in Rio is located; 4 – Water Transport Terminal: Ferry to Niteroi; 5 – 15 th of November Square: Old Largo do Paço; 6 – República Square; 7 – Carioca Square; 8 – Santos Dumont Airport; A - National Historic Museum; B – Image and Sound Museum; C – France Brasil Cultural Centre; D - Banco do Brasil Cultural Centre; E – Candelária Church; F - Saint Benedict Monastery(1590) – Benedictines; G – Mauá Square/ Rio's Art Museum/ 'A Noite' building; H – Conceição Hill; I – Mauá Pier/ Amanhã Museum; J – Fluminense Old Mill.

The CEPACs were offered in a tender procedure in one single lot on June 13, 2011 and bought by public company CAIXA – 'Caixa Econômica Federal' - the Brazilian Savings Bank for R\$3.5bi, via a fund workers contribute, namely the FGTS - Labour Guarantee Fund - which made the banking institution the biggest investor in the project. For the first time in history the FGTS funds were invested in an urban consortium-based operation. The CAIXA savings bank, which is a public bank, also undertook to covering the costs associated with the recuperation of the infrastructure and the maintenance costs of the public services for the 15 years of the contract's effectiveness and, in return, started to manage the issuing of the CEPACs and to have priority in the acquisition of the land in the region that formerly belonged to the Brazilian Federal [Central] Government.

To summarize, the structure of Supplementary Law no. 101/2009, on which the 'Porto Maravilha' OUC project is based, defines major urban and infrastructure principles, urban general guidelines, perimeters on which it has applicability, overall construction parameters and a management structure to have independency from the planning structure of the City of Rio. A list of bold objectives was later announced, grouped in four main items: infrastructure; housing; environment and culture and tourism. Where outstands the recuperation of urban infrastructure and transportation, the improvement of current housing conditions and attraction of new residents, preservation and improvement of the environment, new sidewalks squares and parks, and the creation of a new Tourist Pole for the city, with the recovery of the existing historical and cultural heritage and the new cultural, entertainment and education equipments. However, these objectives were never a part of an Integrated Urban Plan, remaining more as an umbrella to coordinate independent initiatives, not having a method to regulate their connection and fulfilment, which left them greatly unattended.

'Porto Maravilha' (Marvel Port) Project, a public policy?

The 'Porto Maravilha' OUC, as it focused on the policies for urban entrepreneurship, acted in a complex and diffuse manner as regards the initiatives aimed at a process of rehabilitation of urban spaces. The land, acquired in Stock Exchange operations, was done with taxpayers' money drawn from the FGTS fund, ending up by paying the very capital of the companies involved. The process that led to the acquisition of the property, along with the



modelling of the parameters for their use, produced a real estate valuation, which predominantly channelled the acquisition of that space to corporate use, to tourism and to entertainment industries.

Cities' construction process is riddled with recurring conflicts and tensions between public and private interests, environment and heritage, which brings the debate on the right to the city to the spot, especially when the main intervening party and agent is the public authority, which leads to the questioning of what is done, and of whom it is aimed at. In the case of the OUC it is possible to see that the official discourse overlaps that of the urban marketing, evident in the discourse of City Office for Urbanism Director Sergio Dias¹¹, which on one hand emphasizes a concern with the historical and cultural heritage of the region whilst defends a series of construction principles with another set of priorities.

In 2017 the City Office for Urbanism, Infrastructure and Housing conditioned the heritage listing of any building in the 'Porto Maravilha' area to the approval of the consortium of companies (New Port Utility Company) then granted right to carry out the renovation work of the infrastructure of the area. With the valuation of the property, as a result of the infrastructure investment done, this resolution gives even more power to the real-estate interests entertained by the pool of companies attracted to it, which then get to have the final say on what is listed and what is not.

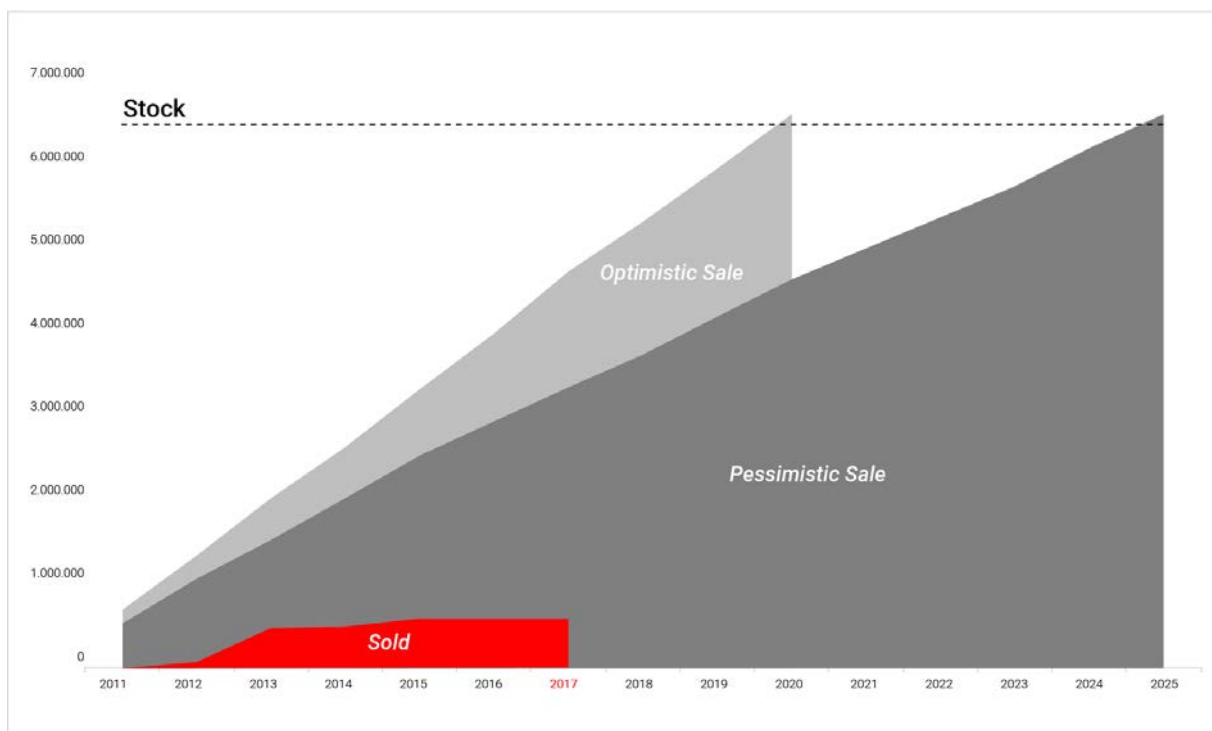


Figure 6: Sale of certificates of additional construction potential (CEPACs).

If the OUC had the real goal of increasing the resident population in the area, based on mechanisms of tax and urban incentives, the reality would be quite different when we compare the huge number of commercial projects with the very few of a residential kind. The financial leverage that guarantees profitability to the agreements executed with the private companies comes from the use of public funds, drawn from the money paid by the taxpayer. But the land was stripped of any relevance in public policies as it is offered to private enterprises of the real-estate kind, which operate to set what the urban space will be like, as they impose their abstract order on the use of the land and prioritise the profitability of their own assets.

As regards the financial operation as a priority, the issues related to the unequal distribution of the territory are placed under the spot, particularly the themes of density and verticalisation. The benefits of dense areas such as space vitality, urban infrastructure optimisation, active mobility, linked to a reduction of the dependency on cars are not acquired in an immediate way with the verticalisation model being proposed. Moreover, it fits like a glove to corporate spaces occupation and much less to mid-sized residential units, which have most demand. Therefore, it would be the governments' role to establish measures that would better regulate processes, better shaping the occupation of the territory to allow mix of uses, and catering to the demands of the populations that live in the vicinity.



The crisis that gripped the country in 2014 had a significant effect on the real estate market that, until then, was experiencing a sizeable growth. With it, the OUC started to face hardship in the sale of its CEPACs and with it opened a breach to other operations such as, for example, the exchanging of property in its negotiations to burdened granting. Our research mapped through the now available OUC documents that whilst an optimistic forecast of the feasibility studies made by the CDURP considered that in 2017 more than 70% of its stock would have been sold, a pessimistic outlook put it at 50%. However, based on the quarterly results of CDURP¹², our research identified a figure of only 9% of the stock negotiated until 2017 (Fig. 6). In the absence of an Integrated Urban Plan and a clear set of goals engendered in public interest to be accomplished in a determined time lapse, these figures reveal a performance indicator. They evidence a distorted optimism of a real estate private project, but that used public money as the main leverage, thus making the State to bear its financial investment risks and losses. For the city, the worse loss certainly is having a void overpriced land in a central area. The empty areas acquired at low prices from the Federal Government became abstract financial assets, where the profit is reserved for the investors that have no commitment whatsoever with the construction of the place

Final Considerations on the possibilities for the future of Rio de Janeiro's Waterfront

It is quite likely that the greatest benefits had from the recent urbanisation work on the waterfront of Rio de Janeiro and from the 'Porto Maravilha' OUC, lies in the re-qualification of the public spaces and in the new continuity that was implemented between the old central area, the sea and the 'Baia de Guanabara' [Bay]. Of the public spaces contained within the OUC, we can point the Cais do Valongo [Quay] (1811-1831), old place of disembarkation and trading of African slaves, discovered during recent infrastructure work and preserved as a place of memory for Black African culture. It is however located in an inner space and its original relation of proximity with the water was lost. To the warehouses in the dock area common public cannot access. This means that there is no open public space within the OUC area on the shoreline.

To conclude, and regarding the rehabilitation of Rio de Janeiro's waterfront in the last 7 years, from its installation to the present days, it is possible to say that the urbanistic instrument of the 'Porto Maravilha' OUC, as proposed, through its guidelines, has been unable to steer the elaboration of an Integrated Urban Plan for the area and to promote the full rehabilitation of the old port area of Rio de Janeiro. With residential occupation that could attract commerce, services, and leisure, something that has not happened. Although an important section of the city's history came to attention, cultural values of the existing neighbouring boroughs have not yet been properly valued. Finally, with only 9% of the CEPAC's stock being sold we fear that the 'Porto Maravilha' OUC could become a new barrier, placed between the sea and the city. Re-directing the instruments of the OUC would provide a more sustainable urban vision not only to the waterfront itself, but also of its features, as an important element that could favour the re-organisation of a fragmented and complex metropolis such as Rio de Janeiro.

Disclosure Statement

No potential conflict of interest was reported by the authors.

Notes on contributor(s)

Fabiana Generoso de Izaga. Associate Professor at Federal University of Rio de Janeiro (2006), and at the Graduate Program on Urbanism Prourb/FAU-UFRJ. Architect and Urbanist (1991), Master in Visual Arts (2001), PhD in Urbanism (2009) UFRJ. Leads research at LAURBAM (Research Lab on Urbanism and the Environment) at Prourb/FAU-UFRJ.

Amanda Barbosa da Silveira. Architect and Urbanist (2016) at the Faculty of Architecture and Urbanism of the Federal University of Rio de Janeiro. Integrates team at the LAURBAM (Research Lab on Urbanism and the Environment) at Prourb/FAU-UFRJ.

Bibliography

Abreu, Maurício de A. *Evolução urbana do Rio de Janeiro*. 4. ed. Rio de Janeiro: IPP, 2006. [1987].

Alemany, Joan. *El puerto de Barcelona: un pasdo, un futuro*. 2ed. Ampliada. Barcelona: Lunwerg Editores/ Port de Barcelona, 2002.

Alvarenga, Ana Carmem. *Novo padrão imobiliário no Rio de Janeiro*. In: Schluger & Danowski. *Cidades em transformação*. Rio de Janeiro: Edições de Janeiro, 2014. P. 98-11



The 18th International Planning History Society Conference - Yokohama, July 2018

Andreata, Verena (org.). *Porto Maravilha. Rio de Janeiro e mais seis casos de sucesso de revitalização portuária*. Rio de Janeiro: Casa da Palavra, 2010.

_____. *Atlas Andreata – Atlas dos Planos Urbanísticos do Rio de Janeiro de Beaurepaire-Rohan ao Plano Estratégico*. Rio de Janeiro: Editora Mauad, 2008.

_____. *Cidades quadradas, paraísos circulares: os planos urbanísticos do Rio de Janeiro no século XIX*. Rio de Janeiro: Editora Mauad, 2006.

Arraes, Jorge; Silva, Alberto. *Porto Maravilha: permanências e mudanças*. In: Schluger & Danowski. *Cidades em transformação*. Rio de Janeiro: Edições de Janeiro, 2014.p.74-89.

Belisário, Adriano. *A outra história do Porto Maravilha*. Disponível em: < <https://apublica.org/2016/08/a-outra-historia-do-porto-maravilha/>>. Accessed: January 2018.

Castells, Manuel; Borja, Jordi. *As cidades como atores políticos*. *Revista Novos Estudos no 45*. Centro Brasileiro de Análise e Planejamento (Cebrap). São Paulo: Editora Paula Montero, 1996

Corner, James. *The ecological imagination. Life in the city and the public realm*. In: Steiner, F.; Thompson, G; Carbonell, A. *Nature and Cities. The ecological imperative in urban design and planning*. Cambridge, MA: The Lincoln Institute of Land Policy, 2016.

Czajkowski, Jorge. *Do cosmógrafo ao satélite. Mapas da cidade do Rio de Janeiro*. Rio de Janeiro: Centro de Arquitetura e Urbanismo, 2000.

Companhia de Desenvolvimento Urbano da Região do Porto do Rio de Janeiro CDURP Website. <http://www.portomaravilha.com.br/cdurp>. Accessed: January, 2018.

Dias, Sérgio. Rio de Janeiro e o Porto Maravilha. In: Andreata, Verena (org.). *Porto Maravilha. Rio de Janeiro e mais seis casos de sucesso de revitalização portuária*. Rio de Janeiro: Casa da Palavra, 2010. pp. 211-231

Herce, Manuel. *El negocio del territorio – Evaluación y perspectivas de la ciudad moderna*. Madrid: Alianza Editorial, 2013.

Brazilian Census Instituto Brasileiro de Geografia e Estatística IBGE (2010). < <https://censo2010.ibge.gov.br/>> Accessed: January 2018.

Izaga, Fabiana. *Mobilidade e Centralidade no Rio de Janeiro*. Tese de Doutorado, Programa de Pós-graduação em urbanismo – Proureb, Universidade Federal do Rio de Janeiro, 2009.

Izaga, Fabiana. *Os infortúnios da Perimetral e as aspirações das vias urbanas nas novas dinâmicas territoriais do Rio de Janeiro pós grandes eventos*. In: Nobre E.; D’Ottaviano C. XVII Encontro Nacional da Associação de Pós-Graduação e Pesquisa em Planejamento regional. São Paulo: Faculdade de Arquitetura e Urbanismo da Universidade de São Paulo, 2017. ISBN: 978-85-8089-103-4.

Izaga, Fabiana; Fagerlande, Sergio Moraes Rego. *Nova Vitalidade ou Museificação? O Veículo Leve sobre Trilhos (VLT) e as recentes dinâmicas de valorização do patrimônio e do turismo na área central do Rio de Janeiro*. In: IV Seminário Internacional · Academia de Escolas de Arquitetura e Urbanismo de Língua Portuguesa AEAULP, 2017, Belo Horizonte. A língua que habitamos. Belo Horizonte: Academia de Escolas de Arquitetura e Urbanismo de Língua Portuguesa, 2017. v.I. p.323 333.

Hall, Peter. *Cidades do Amanhã: uma história intelectual do planejamento e do projeto urbanos no século XX*. São Paulo: editora Perspectiva, 2013.

Lamarão, Sérgio Tadeu de Niemeyer. *Dos trapiches ao porto. Um estudo sobre a área portuária do Rio de Janeiro*. Rio de Janeiro: Secretaria Municipal de Cultura da Cidade do Rio de Janeiro. Coleção Biblioteca carioca Vol. 17, 1991.

National Heritage Institute IPHAN Website. < http://cmsportal.iphan.gov.br/uploads/ckfinder/arquivos/Porto%20Maravilha_Ivo%20Barreto.pdf>. Accessed: February 2018.

Pereira Margareth da Silva; Izaga, Fabiana. *Macau//Rio. Portuguese urban matrix of waterfronts in transformation*. AEULP - IV International Seminar-A Língua Que Habitamos - Paisagens Culturais- A paisagem produtiva como patrimônio. Belo Horizonte: AEULP, 2017. ISBN: 978-154702308.



'Porto Maravilha' OUC Website . <http://www.portomaravilha.com.br/relatorios_trimestrais> Accessed: January 2018

Rodrigue, Jean-Paul; et. al. *The Geography of Transport Systems*. New York: Routledge, 2006.

Sarue, Betina. *Grandes projetos urbanos e a governança de metrópoles: o caso do Porto Maravilha do Rio de Janeiro*. Thesis in Political Science. São Paulo: Universidade de São Paulo, 2015. Website. <<http://www.teses.usp.br/teses/disponiveis/8/8131/tde-11012016-145212/pt-br.php>>. Accessed: February 2018.

Sisson, Rachel. *Espaço e Poder. Os três centros do Rio de Janeiro e a chegada da Corte Portuguesa*. Rio de Janeiro: Arco, 2008.

Wilheim, Jorge. *Cidade, patrimônio e legado*. In Shluger, Ephim; Danowski, Miriam (orgs.). *Cidades em transformação: Rio de Janeiro, Buenos Aires, Cidade do Cabo, Nova York, Londres, Havana*. Rio de Janeiro: Edições de Janeiro, 2014.

Image sources

Figure 1: Historical panorama of Rio's waterfront central area. [PANORAMA da cidade do Rio de Janeiro]. Rio de Janeiro, RJ: [s.n.], ca. 1865. 1 grav, litogr., col, 36,7 x 95,1. Source: National Library of Rio de Janeiro. <http://acervo.bndigital.bn.br/sophia/index.asp?codigo_sophia=7928> Accessed: January 2018.

Figure 2: Actual panorama of Rio's waterfront central area from Orla Conde, in 2014 and in 2016. Photo: Bruno Bartholini. Source: Porto Maravilha webpage. <http://portomaravilha.com.br/fotos_videos/g/22>. Accessed: January 2018.

Figure 3: Urban fabric in 1866 and main urban transformations ('Melhoramentos' Plan and Pereira Passos Plan) of the Central and Port Area of Rio de Janeiro in the late 19th and early 20th centuries. Scheme based on the original collection of Edward Botto, Plan of the City of Rio de Janeiro. <http://objdigital.bn.br/acervo_digital/div_cartografia/cart326448/cart326448.pdf>. Authors, 2018.

Source: authors, 2018.

Figure 4: Main elements of the Central and Port Area in Rio de Janeiro in the late 19th and 20th centuries. Source: authors, 2018.

Figure 5: Scheme based on maps of the Porto Maravilha's official website. Source: authors, 2018.

Figure 6: Chart based on the quarterly reports and the economic feasibility study of the Urban Development Company of the Region of Rio de Janeiro's Port (CDURP). Source: authors, 2018.

¹ Alemany, Joan. *El puerto de Barcelona: un pasado, un futuro*. 2ed. Ampliada. (Barcelona: Lunwerg Editores/ Port de Barcelona, 2002). Andreatta, Verena (org.). *Porto Maravilha. Rio de Janeiro e mais seis casos de sucesso de revitalização portuária*. (Rio de Janeiro: Casa da Palavra, 2010)

² Abreu, Maurício de A. *Evolução urbana do Rio de Janeiro*. 4. ed. (Rio de Janeiro: IPP, 2006. [1987]). Lamarão, Sérgio Tadeu de Niemeyer. *Dos trapiches ao porto. Um estudo sobre a área portuária do Rio de Janeiro*. (Rio de Janeiro: Secretaria Municipal de Cultura da Cidade do Rio de Janeiro. Coleção Biblioteca carioca Vol. 17, 1991). Sisson, Rachel. *Espaço e Poder. Os três centros do Rio de Janeiro e a chegada da Corte Portuguesa*. (Rio de Janeiro: Arco, 2008). Pereira Margareth da Silva; Izaga, Fabiana. *Macau//Rio. Portuguese urban matrix of waterfronts in transformation*. AEULP - IV International Seminar-A Língua Que Habitamos - Paisagens Culturais- A paisagem produtiva como patrimônio. (Belo Horizonte: AEULP, 2017. ISBN: 978-154702308).

³ Andreatta, Verena. *Atlas Andreatta – Atlas dos Planos Urbanísticos do Rio de Janeiro de Beaurepaire-Rohan ao Plano Estratégico* (Rio de Janeiro: Editora Mauad, 2008). _____. *Cidades quadradas, paraísos circulares: os planos urbanísticos do Rio de Janeiro no século XIX*. (Rio de Janeiro: Editora Mauad, 2006). Czajkowsk, Jorge. *Do cosmógrafo ao satélite. Mapas da cidade do Rio de Janeiro*. (Rio de Janeiro: Centro de Arquitetura e Urbanismo, 2000).

⁴ Arraes, Jorge; Silva, Alberto. *Porto Maravilha: permanências e mudanças*. In: Schluger & Danowski. *Cidades em transformação*. (Rio de Janeiro: Edições de Janeiro, 2014)p.74-89. Dias, Sérgio. *Rio de Janeiro e o Porto Maravilha*. In: Andreatta, Verena (org.). *Porto Maravilha. Rio de Janeiro e mais seis casos de sucesso de revitalização portuária*. (Rio de Janeiro: Casa da Palavra, 2010), 211-231.

⁵ Belisário, Adriano. *A outra história do Porto Maravilha*. Disponível em: <<https://apublica.org/2016/08/a-outra-historia-do-porto-maravilha/>>. Accessed: January 2018. Sarue, Betina. *Grandes projetos urbanos e a governança de metrópoles: o caso do Porto Maravilha do Rio de Janeiro*. Thesis in Political Science. (São Paulo: Universidade de São Paulo, 2015).

⁶ Lamarão, Sérgio Tadeu de Niemeyer. *Dos trapiches ao porto. Um estudo sobre a área portuária do Rio de Janeiro*. (Rio de Janeiro: Secretaria Municipal de Cultura da Cidade do Rio de Janeiro. Coleção Biblioteca carioca Vol. 17, 1991), 13.



⁷ id. Ib. Abreu, Maurício de A. *Evolução urbana do Rio de Janeiro*. 4. ed. (Rio de Janeiro: IPP, 2006. [1987]), 67.

⁸ Izaga, Fabiana. *Os infortúnios da Perimetral e as aspirações das vias urbanas nas novas dinâmicas territoriais do Rio de Janeiro pós grandes eventos*. In: Nobre E.; D'Ottaviano C. XVII Encontro Nacional da Associação de Pós-Graduação e Pesquisa em Planejamento regional. (São Paulo: Faculdade de Arquitetura e Urbanismo da Universidade de São Paulo, 2017).

⁹ Hall, Peter. *Cidades do Amanhã: uma história intelectual do planejamento e do projeto urbanos no século XX*. (São Paulo: editora Perspectiva, 2013). Castells, Manuel; Borja, Jordi. *As cidades como atores políticos*. *Revista Novos Estudos no 45*. Centro Brasileiro de Análise e Planejamento (Cebap). (São Paulo: Editora Paula Montero, 1996).

¹⁰ Andreatta, Verena (org.). *Porto Maravilha. Rio de Janeiro e mais seis casos de sucesso de revitalização portuária*. (Rio de Janeiro: Casa da Palavra, 2010), 13.

¹¹ Dias, Sérgio. Rio de Janeiro e o Porto Maravilha. In: Andreatta, Verena (org.). *Porto Maravilha. Rio de Janeiro e mais seis casos de sucesso de revitalização portuária*. (Rio de Janeiro: Casa da Palavra, 2010.), 211-231

¹² CDURP at <http://portomaravilha.com.br/relatorios_trimestrais>



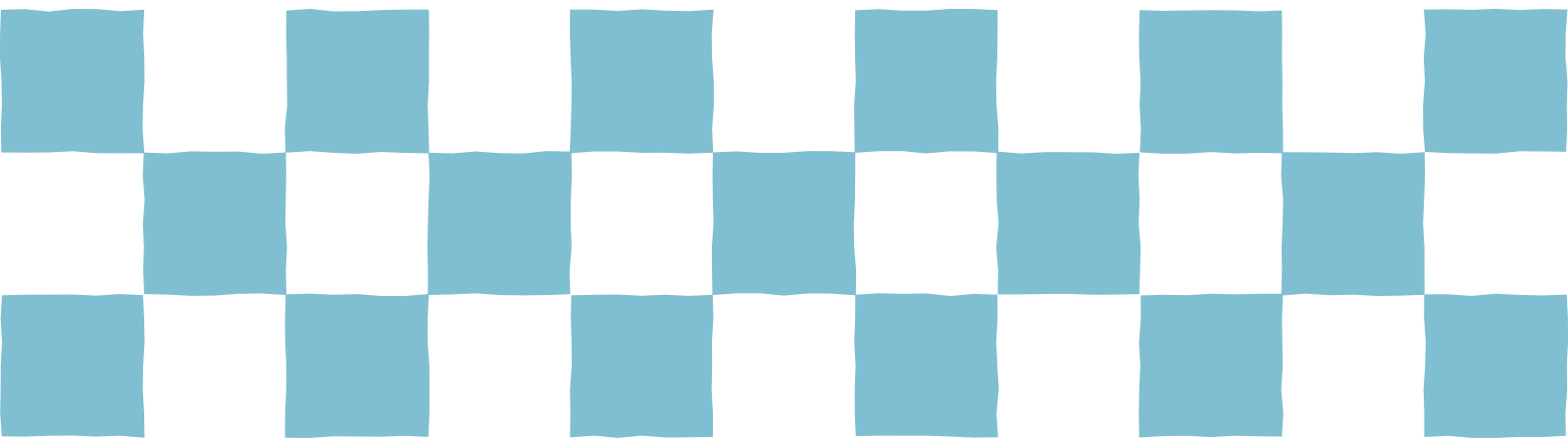
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

20 The Anglo Imperial City



Neoclassicism, Nationalism, and the Limits of the American Imperium in Havana, San Juan, and Manila

Joseph Hartman (University of Missouri - Kansas City)

Neoclassical formalism embodied an aesthetic response to a new U.S. dominion in the ex-colonies of Spain after the Spanish-American War of 1898. This essay will examine three civic buildings constructed in Havana, San Juan, and Manila each originally intended as seats of the legislature, and patronized by local civic leaders under the auspices of the United States during the late 1920s. The Federal style exhibited in those exemplars of Caribbean and Pacific civic architecture activated a complicated network of reproduction and simulacrum within the urbanization efforts of the American Imperium and more local assertions of nationalism and self-governance. Cuba's Capitolio, unveiled in 1929, was a near-replica of the Capitol in Washington D.C.; Puerto Rico's Capitolio, also inaugurated in 1929, employed designs nearly identical to Cuba's; and the Philippines' Legislative Building, completed in 1926 and formerly proposed as a Capitol under Daniel Burnham's unfinished 1905 plan, featured an iconic Beaux-Arts temple façade. Drawing from shared geographies and cultures, the Spanish Caribbean examples were necessarily distinct from the Legislative Building of Manila. Nonetheless, the buildings also displayed remarkable parallels in their respective histories and designs. With the support of U.S. financial and political interests, local architects trained in the United States and Europe created the design for each building (Raul Otero, Rafael Carmoega, Juan M. Arellano, among others). They employed a mixture of indigenous symbolism with "universal" signifiers of Western democracy. So too, each building exemplified, to varying degrees, typologies of quintessential North American Capitols, Statehouses, and Legislative Buildings, as seen in the porticos, copulas, rotundas, and symmetrical wings of legislative houses in Minnesota, Texas, and many other states. Unveiled within three years of one another under the administration of U.S. President Calvin Coolidge and used variously as sites for legislation and political ceremonies: The similarities in the three buildings reveal an untold history that moves beyond common narratives of monument cataloguing and Western appropriations. This essay, to that end, aims to compare and contrast the buildings within the specific historic and political contexts of Cuba, Puerto Rico, and the Philippines at the time of their inauguration in the late 1920s. This paper will argue that these replications expressed a vision of local identity negotiated around the strictures of Empire. Like contemporary works of the British Empire (Sir Edwin Lutyens' 1931 design of the Viceroy's house and urban plan of New Delhi), the neoclassic buildings incorporated symbols of local sovereignty and indigeneity. These symbols coupled with neoclassic designs allowed nationalist narratives to interrogate shared histories of imperial hegemony and Spanish colonialism. The three buildings each registered the capitalist ambitions of the United States, but also Cuban, Puerto Rican, and Filipino assertions of national identity and autonomy in the period context of the early twentieth century.

Tayabas: The First Filipino City Beautiful Plan

Ian Morley (The Chinese University of Hong Kong)

The historiography of the City Beautiful in the Philippines has, in broad terms, been dominated by two American planners, Daniel Burnham and William E. Parsons. In some ways this is to be expected: both individuals were known to have strong personalities; Burnham's monumental 1905 plans for Manila and Baguio were central to a new urban design paradigm being manufactured in the country, a planning model which replaced the Spanish colonial model based in the Law of the Indies (1573); and, Parsons from 1906 to 1914 as Consulting Architect to the Philippine Commission propagated the City Beautiful via comprehensive city plans and grand civic centre projects. But where in the Philippine City Beautiful narrative do Filipino planners fit? To date their role in the city planning picture during the American colonial era has been, at best, portrayed as minimal. However, given the author's recent uncovering of new planning works by Filipinos it is pertinent to ask if planning historiography needs to be revised?

Focusing upon one Filipino architect, Arcadio Arellano (1872-1920), this paper examines a city plan bypassed by written history. As a Filipino who from 1901 advised the American colonial government on matters associated with architectural design, Arellano in 1919 composed a city plan for Tayabas. Sponsored by a local civic organization the city plan was the first Filipino City Beautiful scheme. Consequently, in the context of its rediscovery and, thinking historically, known political transitions in the Philippines in 1916, the city plan offers a fresh opportunity to appraise how Filipinos utilized grand city planning to promote social progress in the run-up to the establishment of the Philippine Commonwealth (in 1935). Moreover themes currently non-existent in City Beautiful historiography can be brought forward as part of new planning history discourse. These include the culture of plan making, planning education, and the role of Filipino nationalism in the Philippines.

To sum up, to date only very limited attention has been given in the chronicle of the City Beautiful in the Philippines to Filipino architect-planners. Where thought has been given to Filipinos typically it focuses upon one person, Juan Arellano, and one scheme, his 1930 Iloilo city plan. Yet, as this paper will demonstrate, there is a need to reconsider the contribution of Filipinos to the development of city planning in the Philippines. The historiography of city planning in the Philippines should thus not be as one dimensional as presently is: after all by 1919, just three years after the American promise of self-rule in the future, not only were Filipinos known to be composing grand city plans, e.g. for Tayabas, but they were also responsible for all public planning projects in the country.

Canberra: An Antipodean America

Christine Ellem (Queen's College, The University of Melbourne)

Amongst the early 20th century capital city building projects of New World settler societies, Canberra remains distinct as the most fully realized, large-scale version of City Beautiful design. The Griffins' City Beautiful inspiration had travelled from Paris via Chicago to Washington DC with Burnham, and from there traced out other lines of cultural traffic as well— in Baguio, Manila, Pretoria and New Delhi. But if the City Beautiful style was the hallmark of American Imperialism, exemplified in Burnham's Washington DC redesign, heavy with the symbolism of Athenian reinvention and the cultural legitimation of a new world democracy set to expand outwards, then the Griffins' vision of Canberra used the style instead to articulate a capital for a new, independent and vigorously democratic nation-state with a self-conscious sense of mission. The geometric formalism and classicism of the City Beautiful was indigenised; put in the service of existing landforms and celebrated the aesthetics of native flora. It was, essentially, an American interpretation of Australia; as a modern, democratic nation-building project. But Canberra's final design and development reflected the ambivalence of settler capitalist identity. The affective pull of the British Commonwealth leavened much of the nationalist energy of the original design, and famously, the Griffins' model was only partly taken up. A hundred years later, Canberra's story is still largely told in narrow terms, as a parochial tale of either the boorish pragmatism of bureaucrats, or as the tragic tale of a bold national vision, failed by the incomplete nationalism of Australians themselves. Placing Canberra in the context of other capital city building projects during the period offers a better understanding of the complex overlays of imperialism, national projects and regional identities at play in new world settler societies. The story of Canberra's design and development points not to an incomplete sense of nationalism, but to unresolved and unresolvable tensions inherent within the Australian nation building project. As a settler society, Australia looked simultaneously back to Britain and beyond it. Canberra's design also fed into other lines of cultural traffic; it facilitated the cross fertilization of British and American planning projects via Lutyens plan for New Delhi, British imperialism's last gasp before Indian independence in turn appropriated the capital for its own national project. The visionaries behind Canberra's design may have been enthusiasts of an American style of independent democracy, but given the complexities of New World settler identities, they would never have the last word. Even today, Canberra as a symbol of the Australian national project remains malleable, as various Indigenous challenges to it, both authorized and unauthorised, demonstrate. Now, as always, Canberra is an ongoing conversation, between competing ideas of Australian identity and nationhood.



Tayabas: The First Filipino City Beautiful Plan

Ian Morley

Department of History, Chinese University of Hong Kong, Hong Kong SAR; ianmorley@arts.cuhk.edu.hk

The historiography of the City Beautiful in the Philippines has, in broad terms, been dominated by two American planners, Daniel Burnham and William E. Parsons. In some ways this is to be expected: both individuals were known to have strong personalities; Burnham's monumental 1905 plans for Manila and Baguio were central to a new urban design paradigm being manufactured in the country, a planning model which replaced the Spanish colonial spatial model based in the Law of the Indies (1573); and, Parsons from 1906 to 1914 as Consulting Architect to the Philippine Commission propagated the City Beautiful via comprehensive city plans and grand civic centre projects. But where in the Philippine City Beautiful narrative do Filipino planners fit? To date their role in the city planning picture during the American colonial era has been, at best, portrayed as minimal. However, given the author's recent uncovering of new planning works by Filipinos, e.g. in Tayabas and Iloilo Province, is it pertinent to ask if planning historiography needs to be revised?

Keywords: City Beautiful, the Philippines, American Colonization, Filipino architects, nationhood.

Introduction

City planning was a fundamental component of American colonial governance in the Philippines. It was used from the early-1900s to help 'uplift' and 'civilize' local society, and to additionally aid the American regime to demonstrate to Filipinos that a different cultural and political era had begun: urban designing in this political-cultural framework was used to not only remodel cities' built fabrics so that they could be 'modern', but to also turn life within them away from church-lined plazas dating from the Spanish colonial period (1565-1898). However, what is generally not known about planning activity in the country during the American colonial era was that, from 1919, it was undertaken solely by Filipinos. They, to be brief, made use of the need to alter the urban form so as to capture, and thus articulate in built form, changing social and political values in Philippine society.

The narrative of modern urban planning practice in the Philippines, or more precisely City Beautiful-inspired city planning, commenced in 1905. In that year Daniel Burnham produced two major city plans, for Manila and Baguio, and these in the following years acted as a model which Consultant Architect William E. Parsons propagated throughout the country in the form of comprehensive plans (for Cebu and Zamboanga), plus new civic districts within provincial capital cities. Yet, so as to bolster the 'uplifting' of local civilisation, from 1913 the colonial civil service was Filipinised. Incorporating Filipinos into the upper levels of the colonial bureaucracy this process of political assimilation was sped up in August 1916 when the Jones Act was passed. It declared the American objective of retreating from the Philippines in the future and, in conjunction, to recognise Philippine independence "as soon as stable government can be established therein".

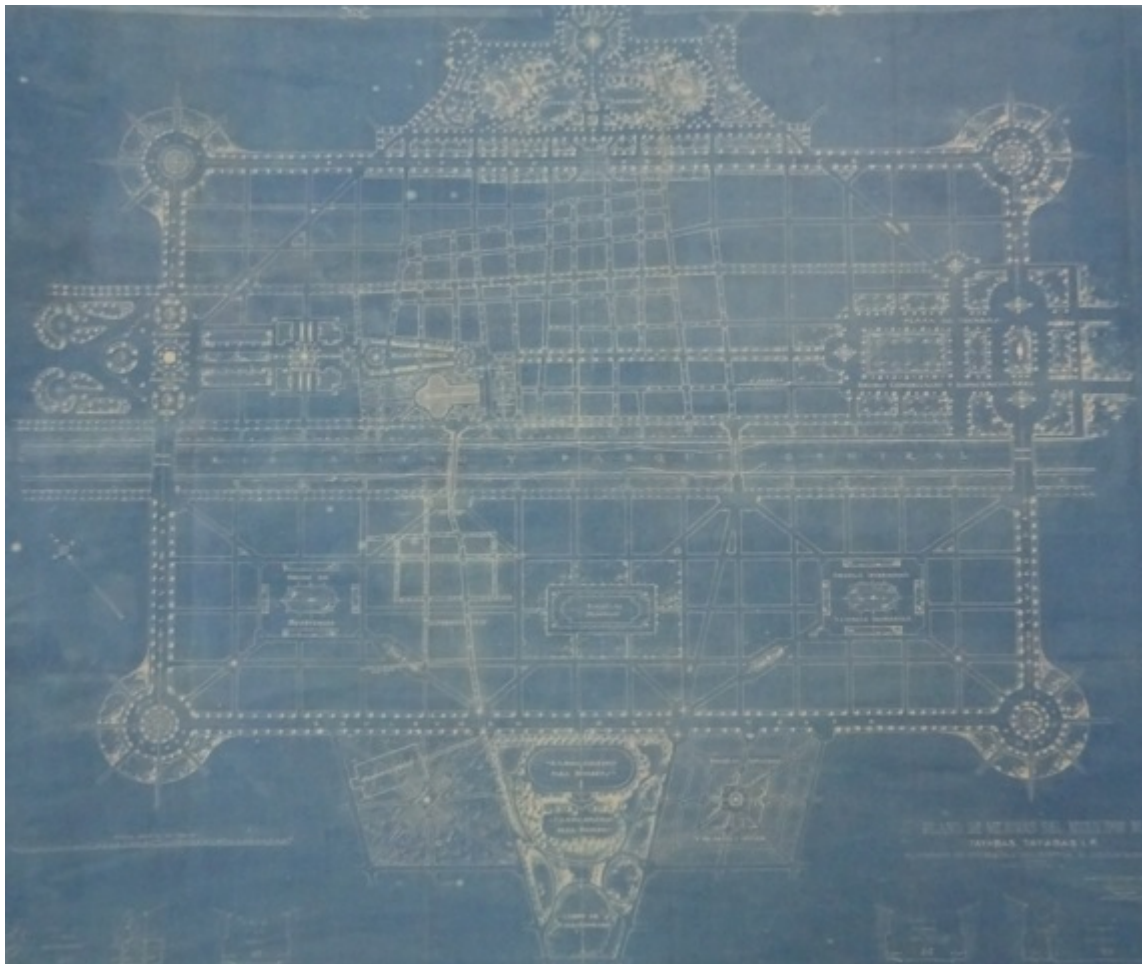
Permitting Filipinos to hold key administrative positions so that they could make a greater contribution to colonial governance, Filipinization resulted in far more than the mere substitution of American civil service personnel with Filipinos. It resulted in two major governmental changes: firstly, it granted opportunity for Filipinos to, for the first time, sway the regime's capacity to reshape local life; and, secondly, it helped modify government policies more towards Filipino priorities. Certainly in the Bureau of Public Works' (BPW) Division of Architecture, the department responsible for designing public buildings, spaces and, when necessary city plans, this advancement was evident by 1919 when Juan Arellano and Tomas Mapua were appointed as Consultant Architects. Yet the first major articulation of the Filipino city planning came via a private source, a civic group based in Tayabas, which commissioned Juan Arellano's brother, Arcadio, to create a plan for the city. It was produced in 1919. Even though the plan, financed by the Club de Los 33, was never implemented it nevertheless has importance: it helps historians to rethink Filipino planning influence, which up to now, has been missing from the story of American empire, and City Beautiful; it grants new opportunity to evaluate how Filipinos utilized City Beautiful planning to promote social progress, *and* to articulate their sense of national identity in the run-up to the establishment of the Philippine Commonwealth in 1935.



Arcadio Arellano and the 1919 Tayabas Plan

Broadly understood as a pioneer of Philippine architecture little is actually known of Arcadio Arellano's urban design work. Whilst it is recognised that in 1901 he became the first Filipino to be employed by the American colonial government as an architectural advisor, what has been researched of Arellano by-and-large explains his professional activities through the medium of changing architectural forms during the American colonial era. To date little has been investigated of, for instance, his role in preparing plans for monuments to Philippine revolutionaries. Charged by the colonial government in 1915 with this task after Act No. 2494 was passed, Arellano's work from that time evidently provoked him to consider larger scale matters of environmental surveying and design. As such the planning of Tayabas in 1919 – Figure 1 - represented a logical, natural professional development. But why a plan for this small-sized city? A number of points must be appreciated. To begin with it is known that Arellano held patriotic leanings. He was related to a revolutionary hero, Deodato de la Cruz Arellano; was in the Philippine Engineering Corps during the latter stages of the 1896 Revolution; and, in 1908, he designed the Mausoleum of the Veterans of the Revolution in Manila's North Cemetery. Moreover, Tayabas was by 1919 a city with a national reputation owing to it, on one hand, having resisted the Spanish colonial forces prior, during, and after the Philippine Revolution and, on the other hand, in 1912 and 1916 its citizens helping elect Vicente Lukbán as Provincial Governor. He was a well-known protagonist for Filipino freedoms and independence.

Figure 1. The 1919 Tayabas plan by Arcadio Arellano. The river axis through the plan runs north-east to south-west.





Titled the *Plan of Improvements of the Municipality of Tayabas, Tayabas Philippine Islands Accompanied With a Descriptive Report to the Municipal Council*, Arellano's plan sought to completely alter a settlement with a history dating back to the pre-colonial period. Advancing some of the environmental design notions introduced into the Philippines by Daniel Burnham in 1905, e.g. park systems, a road layout mixing narrow streets with lengthy tree-lined boulevards, the laying out of large symmetrically-formed public spaces, etc., Arellano's concept was to expand Tayabas's Spanish colonial era grid layout in the form of a rectangle measuring about 1.9 kilometres in length by 1.3 kilometres in breadth. At the four corners of this configuration were to be sited roundabouts, surrounded by park areas, from which a number of roadways – they being positioned geometrically - dispersed into neighbouring urban districts or the surrounding countryside. Demarcating the city on its northern, southern, western, and eastern flanks with broad tree-lined boulevards, running north-south through the middle of the built environment was the Alitao River: in Arellano's planning proposal its formerly meandering banks were to be straightened and greened so as to form the Central Park. Such a feature was original to urban planning in the Philippines at that time.

Arellano's Tayabas plan incorporated a number of environmental features: a road system arranged in a grid pattern; the placing of monuments at the centre of plazas; the development of a commercial district; a civic centre; and a park system. For example, situated midway along the East Boulevard and West Boulevard were large-sized green spaces. They terminated the western and eastern ends of the principal east-west alignments in the city plan: the position of the axis in the eastern section of the city plan directly corresponded with the site of the Rizal Monument (erected in 1915 by the Club de Los 33).

A primary element of Arellano's plan was to enlarge the existing pattern of roads. The grid configuration of the Spanish settlement was preserved in the 1919 planning proposal albeit with new roadways intersecting at greater distances than existing ones so that larger blocks of land could be created. Yet one major transition was apparent. There was to now be four types of roads – see Figure 2: Type A Boulevards; Type B Avenues; Type C and Type D Streets with each having a different width and cross-section. Noticeably for types A and B, the widest roadways, they were designed as tree-lined parkways.

Figure 2. Road types in the Tayabas plan by Arcadio Arellano.





In terms of the siting of the four road types they were to be put into particular parts of Tayabas's built environment. For example, Type A boulevards were to be located on each side of the Central Park, and at the four edges of the urban sprawl. These peripheral thoroughfares thereby functioned as ring roads to enrich circulation between the different districts of the settlement. Type B avenues, of which there was to be only two in the city plan, likewise granted direct links between different quarters of the city but also provided grand vistas to prominent public buildings and spaces. The vast majority of roadways, categories C and D, had no additional role other than, it seems, permitting easy navigation throughout the urban environment. With additional regard to the Type B avenues they, of substantial length, were to connect the most important civic edifices in Tayabas, i.e. the Municipal Capitol and Municipal Group, to the business district at the opposite/southern end of the city. These roadways, Municipal Avenue and Manuel Quezon Avenue, akin to almost all roads in the city plan, were straight in form.

In keeping with early-twentieth century American logic that urban planning was an indispensable component of a progressive society, the Tayabas plan enunciated what a spatially organized and civic-minded, modern community was. Demonstrating that city planning included much more than physically arranging a built environment, Arellano's scheme promoted municipal sentiment which, in the post-Jones Act context, assisted Filipinos to disclose to their colonial masters that they were capable of successfully managing cities, and accordingly society at large. The north-south axis from the Municipal Capitol to Plaza de Tayabas – Figure 3 – was crucial in this regard. Not dominating the city plan but nevertheless helping present the existence of civic spirit the ability of citizens to see along Municipal Avenue to public edifices and the business district let them be aware of four matters: first, citizens could appreciate that public authority was being operated by elected Filipinos to protect and develop life, health, and property as part of the advancement of local civilization; second, the vista southwards along Municipal Avenue to the business district informed people of the enlargement of the local economy and the possibility of affluence hitherto unimaginable; third, to look along Municipal Avenue meant seeing buildings, monuments, and spaces belonging to a distinct people and their culture, and in this context impressive vistas along the thoroughfare helped elicit civic esteem and pride in the nation; and, finally, new monuments and existing ones served to present tangible images of Filipinos historically associated with the pursuit of self-determination which, following political developments in 1916, was guaranteed by the Americans to be forthcoming. Notably too, given the passing of new laws by the American colonial government from 1898, new civic rituals were to take place (on new public holidays in the new spaces) about the monuments dedicated to national heroes, i.e. the individuals who, pre-1898, had fought against Spanish oppression and/or helped promote Filipino civil rights at that time.

Figure 3. Plan of the axis between the Municipal Capitol and the Plaza de Tayabas.



The Broader Philippine Planning Picture, c.1916-1935

The Tayabas city plan, although not implemented, must not be seen as an isolated design proposal. Rather it must be seen as the opening act of a new planning narrative: one determined from 1919 by Filipino rather than American actors. Yet very limited research has been undertaken on city planning by Filipinos during the years between the passing of the Jones Act and the establishment of the Philippine Commonwealth. In the light of this fact the following section of the paper outlines urban design activities by Filipinos employed in the BPW. From 1919 to 1935 city planning by Filipinos took on a number of forms. These included comprehensive city planning, zoning planning, the designing of new civic districts, and the revitalizing of Spanish colonial plazas. So that an introduction to the Philippine situation at that time can be tendered focus is now put upon one major city, Iloilo, and one territory, Iloilo Province.



In historiography Juan Arellano's 1930 *Proposed Development Plan of the City of Iloilo and Vicinity* is noted as being the first city plan by a Filipino. Evidently such a 'fact' is fundamentally flawed given the author's recent uncovering of Arcadio Arellano's 1919 Tayabas scheme. Furthermore Juan Arellano's planning activity in Iloilo began in 1926, not 1930 – see Figure 4. In the 1930 plan, Arellano's 4th version of the scheme, Iloilo's built environment was characterized by its riverbank development, an urban sprawl incorporating once isolated villages, a major arterial boulevard about the suburbs, the establishment of a suburban prison, farms, and cemetery, plus a large elliptical-shaped park laid out immediately north of the Iloilo River. A civic core and exposition grounds, respectively situated north and south of the river, were also evident in the scheme. However in the original/1926 plan the banks of the waterway were left undeveloped and outlying communities not integrated into the built fabric of the municipality. Additionally the major arterial boulevard circumventing the city was absent, as was the development of land in Mandurriao, the drainage canal and park in Molo, and the train station and airport south of La Paz. The generic road layout was different as well. The 1926 plan contained a large volume of straight roads so that blocks of land could have, for the most part, four straight sides. In the 1930 plan curved roads could be seen in many districts, the large plaza near the mouth of the Iloilo River was also omitted, and where in the 1926 plan a cemetery was to be sited north of the waterway a large elliptical park could be seen in the 1930 scheme.

Figure 4. Top: The 1926 plan, and (bottom) 1930 plan for Iloilo by Juan Arellano.

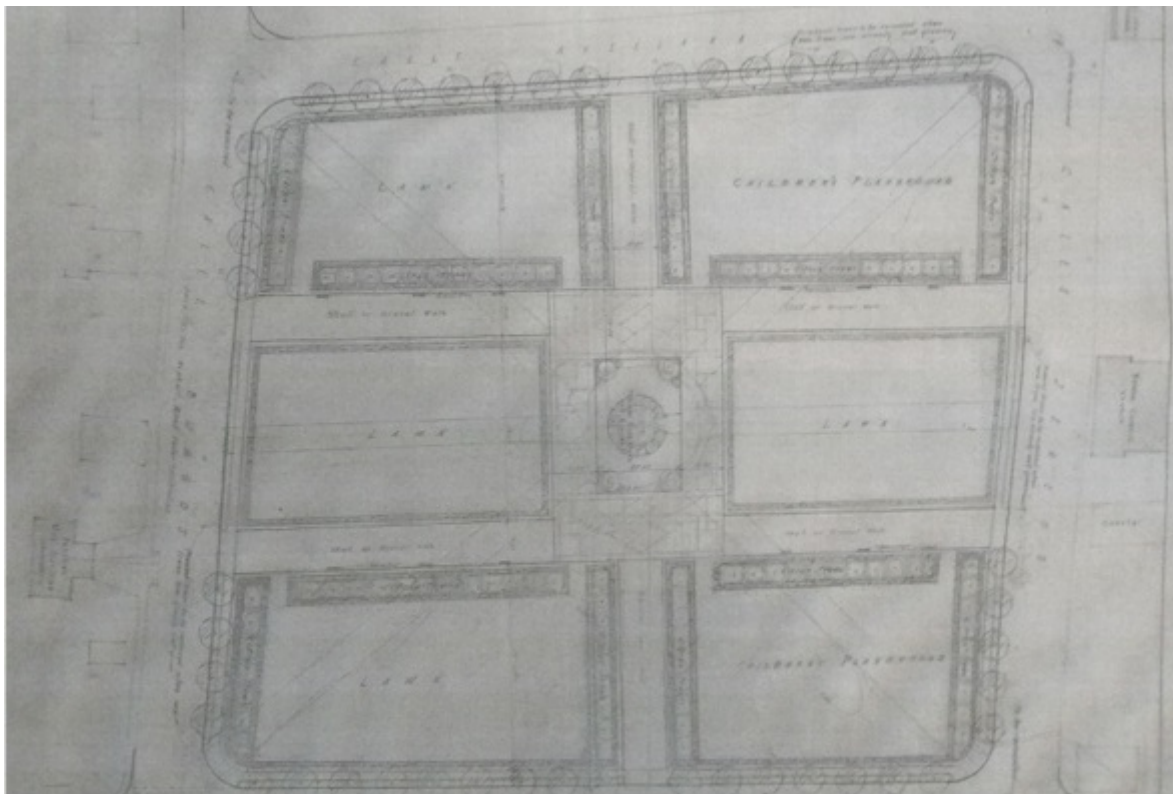




With respect to Arellano's 1926 plan, three features determined the city layout. First, there was the use of land zoning. Residential Zones, for instance, were to be developed throughout the city. Second, approximately 500 metres north of the Iloilo River, there was a circular plaza (with monument). It was to be surrounded by eight symmetrically-shaped blocks of land. In proximity to the space was the Carnival Ground with green areas positioned at its western and eastern sides. From the plaza roads dispersed through three Residential Zones to the urban fringe where additional green spaces were located. Grand vistas to/from the plaza and its monument were, therefore, created. Third, south of the Iloilo River was the new civic centre. Situated about 1.5 kms to the west of the business district the civic core was organized with a major central axis. Presenting an impressive vista north to the Iloilo River and south to the Iloilo Strait the axis was accentuated by the siting of two public buildings, the Market Buildings and City Hall, and numerous green spaces along it. Surrounded on four sides by a Residential Zone four major roadways led to/from the site of the City Hall: one roadway headed west to Molo; another went east to downtown; two roads headed northwards. One of these north-bound thoroughfares went toward the cemetery, the other to the aforementioned plaza and Carnival Ground.

In the light of Juan Arellano's Iloilo scheme being comprehensive in nature, and BPW finances having to be spread amongst a large number of environmental projects throughout the Philippines – in 1929, for example, the Division of Architecture designed/constructed 319 structures - it was executed in sections. These included the laying out of the north-bound roadway from the City Hall to the Carnival Grounds, and the construction in 1933 of the City Hall. Now used by the University of the Philippines-Visayas, the City Hall was once the largest building in the Visayas Region, and has been noted as being the sole surviving architectural landmark of Arellano's city plan. With sculptures by Ricardo Monti on its front elevation, and sitting originally within a 16 hectare plot, the classically-designed building is imposing. But in spatial terms by the late-1930s, as part of the undertaking of Arellano's city plan, dozens of plazas in communities surrounding Iloilo had been revitalized - at least 14 of which had been redesigned by Juan Arellano. Significantly, these plaza renewal schemes, and similar projects in other provinces, as yet have not been acknowledged in Philippine planning historiography. So, by discussing and explaining these government-funded projects a more truthful grasp of what urban designing by Filipinos occurred, and greater cognisance of planning's value to American colonial governance can transpire.

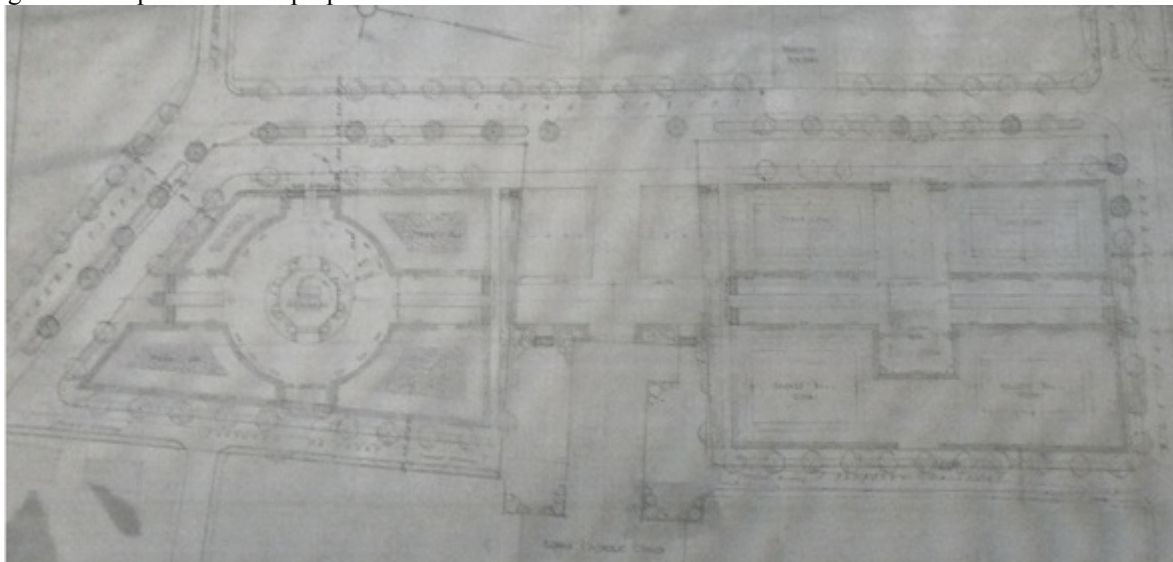
Figure 5. The plaza renewal project for La Paz.





Between 1933 and 1935 29 Spanish colonial plazas were redesigned in Iloilo Province. No other region in the Philippines was subject to so much urban planning activity at that time. Such schemes varied in character, and could on one hand be somewhat simple in nature, e.g. laying out symmetrically-formed lawns about a centrally-placed bandstand in the plaza in La Paz – Figure 5, or laying out a tennis court, children’s playground and erecting a bandstand in proximity to the Church in Leganes, and arranging lawns about a monument in the plaza in Miagao. On the other hand, some plaza redevelopment schemes were somewhat more complex in nature, such as those in Lumbanao and Tigbauan which included the construction of a number of architectural features as well as the arranging of green spaces: in Lumbanao, for instance, the Spanish colonial era space was lined on its sides by thin green lawns into which, on the west and east sides of the plaza, were planted trees. With most of the plaza being greened/transformed into lawns for lounging or playgrounds for children, the central axes of the space were arranged to directly correspond with the grid plan of the settlement and the position of the nearby Church. For example, the central north-south axis of the plaza which corresponded with the centre of the Church, was given the same width as the roadway directly to the south of the space, which the central east-west axis which was marked by two monuments and a bandstand aligned with the locations of two nearby roadways. Thus as a citizen was to travel about the central core of Lumbanao vistas were to be formed to the new architectural features in the space, and when approaching the plaza from the south, the church’s main elevation in the background framing the view of the bandstand and green spaces about it. Evidently when approaching the plaza from either the east or west citizens were able to view the plaza and the monuments within it.

Figure 6. The plaza renewal proposal for Arevalo.



As to why plaza redevelopment projects were a fundamental of Filipino urban designing a basic grasp of the use of the spaces, and in turn reference to Filipinos architects’ appropriation of an imagined, soon-to-be self-ruling nation is necessary. Whilst some scholars of Philippine Studies have indicated that during the American colonial period Filipinos rejected Spanish heritage from a planning perspective this is not true: after the Jones Act’s passing, and the Filipinisation of the colonial bureaucracy, existing urban spaces were utilized for the first time by Filipino architect-planners to help promote a sense of nationhood. Since through their education in the US and work experience in the BPW Filipino architects had learnt that architectural and environmental reforms were central to the American modernisation of the Philippines, the renewal of spaces alongside grand city plans post-1916 provided opportunity to nationalise/decolonise local cityscapes. With respect to the architecture of Capitols and other nationally important edifices, the use of decorative pediments that referenced *La Madre Filipina* (Mother Philippines) along with native characters helped to voice in built form a fresh interpretation of the developing nation as it headed towards independence. Furthermore, these new artistic references in the setting of political evolution, were suggestive of the expanding Filipino pursuit of liberty and happiness. As such redesigned plazas provided, literally and figuratively, a setting into which Filipino architects could articulate *the new construction of their own nation, one not American but Filipino*. Moreover, as an upshot of this actuality, the postcolonial historiography that encourages the viewpoint that Filipino post-1898 sought to partition and remove their Spanish heritage, given that it was viewed as something that should not be preserved, is flawed.



Such a way of thinking is unsound. Spanish spaces were to be kept but redefined in terms of use and meaning. The historiography, in particular, draws no reference to the changing use of plazas and the redesign of plazas after Act No. 3482 was passed: the Act (dated 1928) encouraged municipalities to consider issues associated with urban environmental design, and in turn developed common bonds between people within their urban communities. Development plans associated with renewing existing plazas became a staple of BPW public works from that time and can be seen in Iloilo Province settlements that included Pavia, Arevalo, Barotac Nueva, Carles, and Pototan. As places typically ignored within historiography, akin to the aforementioned Tayabas, there is a need to re-evaluate both the context and implementation/form/meaning of city planning in the Philippines during the American colonial period. Furthermore, in this intellectual milieu, it is appropriate to ask what factors influenced the approach of the Filipino designers? Until now, in written history, the answer lies in just one factor: Filipinos who worked in the BPW had received Beaux Arts-inspired education in the US. But is this grasp of Philippine planning history so simple?

To grant a broader account of the Philippine City Beautiful there is a need to check the Filipinos' renewal of plazas after Act No. 3482. Historically, of course, plazas were the hub of Philippine communities. Within the spaces, traditionally, social and religious celebrations occurred. However, during the American colonial era, with the construction of new monuments within the spaces, and with the establishment of new public holidays as well as in 1916 the kick-starting of decolonization, urban spaces became 'nationalized'. Crucially as part of this process the erection of new monuments to national heroes became entwined with the 'progressiveness' of local culture, and the broadening social understanding of matters associated with the quest for freedoms and civil rights. Consequently, not only did the erection of a new monument help tie in the local place to the national framework, a cultural environment associated from the late-1800s with Filipino emancipation, but now it also acted as a symbol of community prosperity and civic advancement. Whereas during the Spanish colonial era urban spaces had been directly connected to the Catholic Church, and so by the 1900s seen as part of its social control over the populace, firstly after 1898 under American 'benevolent assimilation' the spaces became used for secular activities and, secondly, from 1919 they became venues to advertise the growth of the Filipino nation as it headed towards self-rule. Hence to develop a maybe elaborate, but at least well-kept plaza, was a sign of a thriving, and indeed civically alert community. Part of this articulation of progress, evidently, was tied to the BPW architects who not only reshaped the physical structure of places but also designed within them statues and bandstands: as to why bandstands became important to social progress it must not be forgot that they were where local politicians made speeches to local people on days of civic celebration. As such bandstands were platforms for local democracy to be, literally, voiced at key dates in the calendar. As a result, as indicated at first by the 1919 Tayabas plan, should Filipinos wish to show to their colonial masters their capacity to express civic pride, spatially organized environments could also present an awareness that Filipinos had come to understand what public authority was for, and what 'public good', i.e. the cornerstone of democracy, was.

Conclusion

For about half of the American colonial period city planning, of a form shaped by contemporary American practices, was undertaken solely by Filipinos. Beginning in Tayabas the process of reforming the Philippine cityscape was vital to Filipinos demonstrating their evolving sense of nationhood but also the presence of public authority in their hands, and it post-1916 being applied for the benefit of the general public. Significantly as well, much of this planning activity has not been written about in Planning History, and as an outcome the role of city planning to colonial governance is not yet fully explained nor important schemes comprehensively discussed. As such many planning projects throughout the country have not been integrated as yet into historiography. This author's research takes a small step to address this problem.

The Filipinization of the City Beautiful, as this work has presented, entailed far more than Filipinos for the first time being urban designers in their homeland. The changing nature of City Beautiful urbanism post-1916, an articulation of the colonial state realigning itself, helped to supply opportunities for Filipino national identity to be put into built form and revealed how nationalist architects working within the BPW's Division of Architecture were successful in modifying the design form of built fabrics to this end. As a consequence, two matters need recognizing: first, the role of Filipinos within the working of the American empire during the 1900s needs reiterating. To date their function has barely been acknowledged. Their role was much more than incidental. Second, the historiography of the City Beautiful, as schemes by Filipinos from 1919 show, needs to extend beyond Manila and Baguio. Many town and city plans were composed pre-1935, and such was the volume of plaza renewal schemes that they topped three figures by the early-1930s. Thus, if the US was the spiritual home of the City Beautiful then the heart of its application was, arguably, in the Philippines.



Acknowledgements

The author wishes to express his gratitude to the Hong Kong Research Grants Council's General Research Fund from which research associated with this paper was undertaken.

Disclosure Statement

Sections of this paper are taken from the forthcoming paper, "The First Filipino City Beautiful Plans", in *Planning Perspectives*.

Notes on contributor(s)

Ian Morley is an Associate Professor in the Department of History at the Chinese University of Hong Kong. He has published widely on the design of city environments during the American colonial period in the Philippines. In June 2018 his new book, *Cities and Nationhood: American Imperialism and Urban Design in the Philippines, 1898-1916*, was published by the University of Hawaii Press.

Bibliography

- Anastacio, Leia Casteñeda. *The Foundations of the Modern Philippine State*. New York: Cambridge University Press, 2016.
- Brody, David. "Building Empire: Architecture and American Imperialism in the Philippines." *Journal of Asian American Studies* 4, no. 2 (2001), 123-45.
- Burnham, Daniel H. "Report on Proposed Improvements at Manila." *6th Annual Report of the Philippine Commission, Part I*. Washington, DC: Government Printing Office, 1906.
- Cameron, H. F. "Provincial Centers in the Philippines." *Quarterly Bulletin, Bureau of Public Works* 5, no. 3 (1914): 3-11.
- Hart, Donn V. *The Philippine Plaza Complex: A Focal Point in Cultural Change*. New Haven: Yale University Southeast Asian Studies, 1955.
- Hines, Thomas. "The Imperial Facade: Daniel H. Burnham and American Architectural Planning in the Philippines." *Pacific Historical Review* 41, no. 1 (1972), 33-53.
- Hines, Thomas. "American Modernism in the Philippines: The Forgotten Architecture of William E. Parsons." *Journal of the Society of Architectural Historians* 32, no. 4 (1973): 216-26.
- Klassen, Winand W. *Architecture in the Philippines. Filipino Building in a Cross-cultural Context*. Cebu: University of San Carlos Press, 1986.
- Madrid, Randy M. *Urban Landscape, Structural Transformation and other Developmental Concerns in Iloilo City from the 19th Century to the Present*. Iloilo: Center for West Visayan Studies, University of the Philippines-Visayas, 2003.
- Morley, Ian. "Modern Urban Designing in the Philippines, 1898-1916." *Philippine Studies* 64, no. 1 (2016): 3-42.
- Morley, Ian. "The First Filipino City Beautiful Plans", forthcoming paper in *Planning Perspectives*. Currently available online at <https://www.tandfonline.com/doi/abs/10.1080/02665433.2018.1423639>.
- Rico, Joel Vivero. *Architectural Legacies: National Artists of the Philippines*. Makati City, Philippines: Philippine Institute of Architects, 2016.



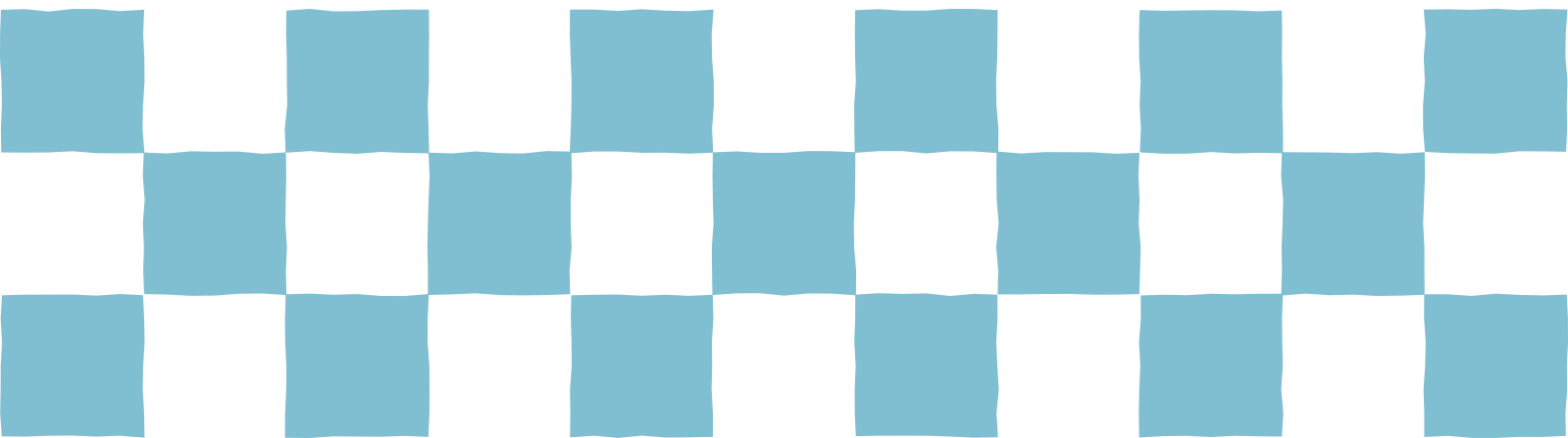
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

21 Urban Vision and Planning Heritage



Sir Christopher Wren's Iconic London Plan

Michael Hebbert (University College London)

Immediately after the 1666 Great Fire of London, the distinguished architect Sir Christopher Wren sought to persuade King Charles II to rebuild the devastated city according to the best principles of baroque urbanism, with wide straight streets, axial symmetry, monumental endpoints, and a waterfront integrated to the street system with open quaysides. A pictorial postage stamp of 2016 showing the architect presenting his drawing to the monarch offers one of the few representations of a town plan in philatelic history.

Several such schemes circulated in the aftermath of the Fire of London. Wren's was rejected by the Crown and the City Corporation and might have been expected to disappear into a historical footnote. But instead it was seized upon by his son and grandson as a scandal of lost opportunity. A noble vision had been 'unhappily defeated by faction', long-term design sacrificed to short-term commercial advantage. The plan became widely reproduced by print-makers and gained iconic significance, influencing street improvements in eighteenth century London, providing a symbolic focus for nineteenth century public health reformers and late-Victorian advocates of municipal autonomy. Wren's plan featured prominently in the debates around postwar reconstruction of London in the mid-twentieth century. It continued to be illustrated in published editions of Sir Patrick Abercrombie's *Town and Country Planning* as recently as the 1960s, and was invoked in the urban design controversies involving the Prince of Wales and the real estate companies behind the redevelopment of Paternoster Square around the year 2000.

My paper aims to tell for the first time the history of this iconic plan. It will trace its genesis in the Renaissance expression of mastery over urban space through geometrical principles of order, harmony and proportion, and explain its long afterlife, showing the perennial appeal, for reasons that changed over the centuries, of Wren's iconic visualization of the city as an architectural ensemble.

The paper contributes in two ways to the conference theme of 'looking at the world history of planning'. Firstly, it offers an important case study in the world history of Baroque urbanism. And secondly, it addresses a neglected episode in the history of one of the world's great harbour cities.

The Role of Post-war Reconstruction Planning in Hiroshima's Image-shift to a Peace Memorial City

Allam Alkazei (University of Tsukuba) and Kosuke Matsubara (University of Tsukuba)

In the wake of war, cities' path to recovery is hindered by a large-scale destruction which is usually combined with issues such as post-war financial difficulties, and complex property rights. During reconstruction, urban areas encounter different drivers of recovery that define the future direction of their urban development. In the case of Hiroshima, the city had an important role as a military industrial centre in Japan since the end of the nineteenth century. However, its atomic bombing during the Second World War marked an end for that era of Hiroshima's history. Therefore, the infamous atomic destruction and the need for a post-war image-shift in Hiroshima ushered the way for its reconstruction as a "Peace Memorial City". This article links the history of planning of Hiroshima with its current state in an endeavour to highlight what Hiroshima's experience could offer other to-be-rebuilt cities. Based on field and archival survey, the article aims to clarify how the reconstruction process has paved the way for the image-shift of Hiroshima to a Peace Memorial City. It argues that Hiroshima's reconstruction illustrates an example where reconstruction planning was an actor in the image transformation using memorialism as a driver of recovery.

Studies on the Relation to plan-making of Conception of Hiroshima Peace City Construction Plan after the winning of Hiroshima Peace Memorial Park Competition by Kenzo Tange

Norioki Ishimaru (Institution for Hiroshima Shoji & Area Reliving)

It was already well known that Architect Kenzo Tange (& his associate group) won the first prize of Peace Memorial Park in Hiroshima held in 1949. After the competition, Tange made a great contribution not only to realize Peace Memorial Park Design but also to make Hiroshima City Reconstruction Plan as Peace City. This paper aims to make it clear how Peace City Construction Plan in Hiroshima was planned through the several plan documents and at the same time how Kenzo Tange, had related and contributed to the plan-making of that Plan. Kenzo Tange had proposed his idea and carried the plan through Peace City Construction Plan. Tange presented unique planning concept and purpose among together Hiroshima City planners. But those almost ideas was not always admitted by city planners or administrative stuffs.

In Japan, early after the world war Second, many war damaged cities begun to plan reconstruction Plan. When Tange joined to city planning team and presented to city planning project, almost Hiroshima reconstruction plan has been already completed. Then Tange's mission was limited. At the same time, Hiroshima was enacted under new law, in 1949 "Hiroshima Peace Memorial City Construction Law", under the special system, based on New Constitution, strongly oriented by GHQ. Then, Hiroshima was favored with financial condition than other war-damaged city. Hiroshima has fairly received national properties or special assistant support. Tange's concept was changed from Peace memorial Park Plan to peace memorial city plan. For example one hundred wide road were constructed under usual construction system, but Tange intended to construct it as peace boulevard road, namely special national support.

In those days, civil engineering was major field reforming infrastructure facilities. Those plans were not landscaping design but civil engineering plan such as widening roads and parks or putting into land readjustment plan. Then architect mission was very limited. Tange made his best to broadening field. Tange's original design was sea-side park plan near Ujina and air-port plan cited Kan-non area not Yoshijima. Partially Tange's plan was accepted, but almost plans were not.

Tange was working in his house through the night together with city stuffs and his institute stuffs. And he by himself wrote and presented planning documents, then we can admit his writing letter.

At that time, Tange studied many subjects, then contributed in designing national-wide or city-wide facilities, such as Ehime Prefectural Office and big scale Olympic facilities. And he gained his abilities through the influence of many administrative stuffs or government officers.

This paper makes it clear how city plan planed by architect has meanig

Contribution of the Planning Heritage in Anatolia for a Sustainable Future

Seher Erbey (Yıldız Technical University) and Zekiye Yenen (Yıldız Technical University)

It is stated that the degradation of the ecosystem in the last century, due to human activities, has not been experienced throughout the history (Gremmen, 1997; Jenks, 1996)

The global challenges -the most important one is the climate change- has pushed all countries to think about sustainable development (UN, 2015) Hence, in last thirty years, "alternative development models" have been sought in order to prevent conflict between 'conservation' and 'development' (Recife Declaration, 1996; Çahantimur, 2007)

Sustainability is a relationship among social responsibility, environmental harmony and economic feasibility (Riddel, 2004; Moughtin, 2005; Brandon, 2005)

The most basic definition for the concept of 'sustainable development', which has been used since Cocoyoc Declaration (Redclift, 2005; WCED, 1987) is explained in Our Common Future Report by the Brundtland Commission. Accordingly, "sustainable development is such a phenomenon that meets necessities of today's generation without interfering the needs of humanity in the future".

Survivors has been connected to the "place" relevant to protection capability of that special environment of themselves and the social, economic and cultural system they produced. This is an interaction between the geography/environment and the place; than the settlement starts the production of its inhabitants.

Based on these two assumptions, a research question such as "traditional settlements has the characteristics we need for sustainable future" could be stated. Therefore, this study focuses on the planning background which has been experienced in Anatolia under the reign of Ottoman Empire. The Turks have the responsibility of managing a society who believed that new system established respecting the culture specific in Anatolia. The most basic point that Ottomans managed the society was the relationship with geography. The community, although having different origins and dynamics, produced similar "places" in a common ground like geography. Production of economic, social, political and cultural interaction and the system continued at the basis of that planning approach during the Ottoman era.

This paper studies the similarities between the urban planning approach of the Ottoman period and the sustainable planning approaches developed today. The results obtained will be evaluated under the following headings.

- Lessons learned by Turks who have migrated to Anatolia from former civilizations,
- Achievements of this accumulation in the context of universal planning approaches,
- Application of the results of this evaluation to sustainable planning.

The conclusions of this paper -strengthened by the researches of authors in Boyabat, Edirne, Bursa, Kastamonu, Bergama, Eyüp- are;

- The settlements in Anatolia take advantages of geography utmost both locating the city in early period and the development of urban pattern,
- This planning heritage is a key address for the sustainable urban life for 'model' planning approaches for the 21th. century city.



The Role of Post-war Reconstruction Planning in Hiroshima's Image-shift to a Peace Memorial City

Allam Alkazei*, Kosuke Matsubara **

* *Department of Policy and Planning Sciences, University of Tsukuba, s1730146@s.tsukuba.ac.jp*

** *Department of Policy and Planning Sciences, University of Tsukuba, matsub@sk.tsukuba.ac.jp*

In the wake of war, cities' path to recovery is hindered by a large-scale destruction which is usually combined with issues such as post-war financial difficulties, and complex property rights. During reconstruction, urban areas encounter different drivers of recovery that define the future direction of their urban development. In the case of Hiroshima, the city had an important role as a military industrial centre in Japan since the end of the nineteenth century. However, its atomic bombing during the Second World War marked an end for that era of Hiroshima's history. Therefore, the infamous atomic destruction and the need for a post-war image-shift in Hiroshima ushered the way for its reconstruction as a "Peace Memorial City". This article links the history of planning of Hiroshima with its current state in an endeavour to highlight what Hiroshima's experience could offer other to-be-rebuilt cities. Based on field and archival survey, the article aims to clarify how the reconstruction process has paved the way for the image-shift of Hiroshima to a Peace Memorial City. It argues that Hiroshima's reconstruction illustrates an example where reconstruction planning was an actor in the image transformation using memorialism as a driver of recovery.

Keywords: Reconstruction planning, Image-shift, Memorialism, Hiroshima.

Introduction

Since the start of this decade, there has been a rise in the number of conflict-affected areas¹. A "storm" of hostilities in many urban areas has caused a staggering amount of destruction around the world especially in the Middle East and North Africa². The conflict-prone situation and the prolonged uncertainty make the path for reconstruction undetermined and full of challenges. These facts emphasize the importance of learning from previous reconstruction experiences. A key example of post-conflict recovery is the rebuilding of Hiroshima after the atomic bombing on August 6th, 1945.

Since the end of the nineteenth century, Hiroshima has had an important role as a military, industrial, educational centre in Japan which has set the city's path towards modernization³. The industrial development in the Japanese cities at that period was accompanied with a development in the city planning domain as well through the implementation of the first planning system in 1919⁴, which later was applied in Hiroshima in July 1923⁵. The bombing of Hiroshima has marked a new era in the city's development due to the large devastation the took the lives of 140,000 of its residents by the end of 1945⁶. After its staggering destruction, Hiroshima was able not only to rebuild the damaged areas but also to reinvent itself as a peace symbol.

The article sheds the light on how reconstruction planning has shaped Hiroshima into a memorial city. It also argues that choosing *memorialism* as a driver for recovery has not only set the direction of planning during the reconstruction period but also it was used as a catalyst for recovery. After setting the theoretical background, the article examines the changes in urban form during the reconstruction period.

Drivers of recovery

Cities after conflict often follow different paths of reconstruction based on the dominant drivers guiding their recovery. Those drivers and their associated planning practices depend on the attitude of authorities towards the memory of the event (warfare, natural disaster...etc.), and the tendency towards conversation or new development as illustrated in figure 1.

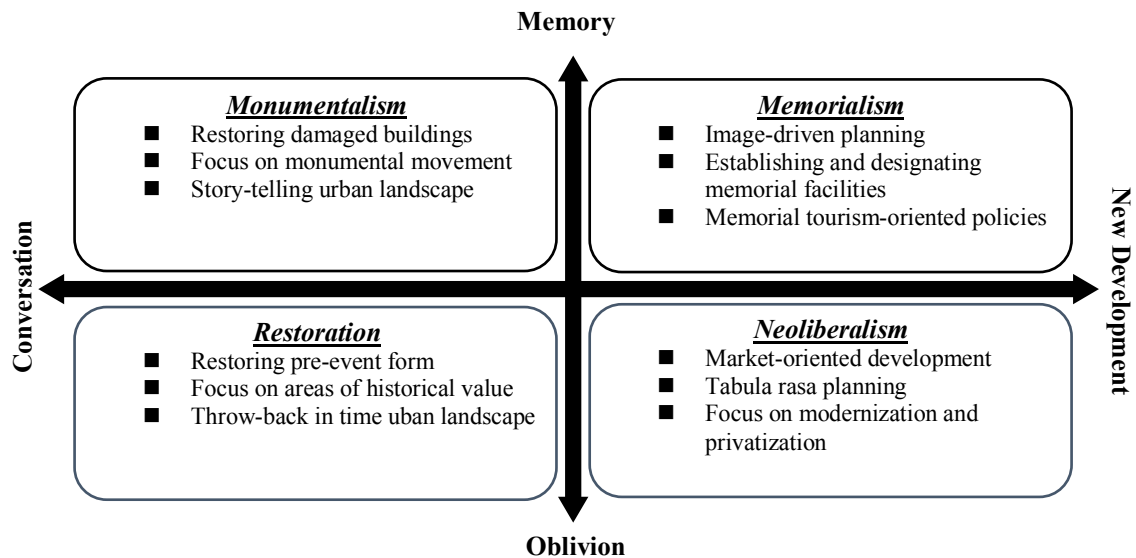


Figure 1. Drivers of recovery

Reconstruction of some post-conflict areas has been carried out with a sense of *oblivion*. An example of a recovery focusing on new development with a deliberate avoidance of the memory of the event could be seen in the redevelopment of Downtown Beirut after the Lebanese Civil War (1975-1990). The private redevelopment has followed a tabula rasa planning approach driven by market-oriented *neoliberal* policies. As a result, it marginalized state institutions and set privatized planning as the paradigm in the city centre⁷. In harmony with the context of ‘political and psychological amnesia’ following the civil war⁸, the redevelopment makes it difficult for visitors to imagine that the city centre was once a battlefield. Another example of recovery where the memory of the event was washed away by *restoration* could be seen in Old Town Warsaw after WWII. In an attempt to protect the Polish architecture from “western influences”⁹, the recovery was done in a “creative reconstruction” way which pushed back the Old Town to pre-1830 and erased the changes happening after that date because it did not suit the ruling realist socialist ideology at that time¹⁰.

On the other end of the memory spectrum, other reconstruction examples have chosen to include a reference to the event in the recovery process. The unification of Berlin illustrates a case where *monumentalism* was behind the conservation of conflict-related elements. The recovery efforts recognized the return of Berlin Wall to the city’s landscape after the memory-erasing “critical reconstruction” policies failed to express the story of change in Berlin¹¹. By doing so, the wall was used as a vessel to evoke strong images of the city’s memory and transition¹². As for Hiroshima’s reconstruction, it illustrates a memory-informed new development case of recovery. Among the 215 Japanese cities bombed during the events of WWII¹³, Hiroshima demonstrates an example of *memorialism*-driven reconstruction despite the almost “clean slate” rebuilding imposed by the massive destruction of the atomic bombing.

City’s image, brand and identity

In terms of how a city is perceived, scholars have used several terms such as the city’s image, brand, and identity. The notion of the city’s image goes back to Lynch’s seminal book *The Image of the City*. Lynch defines imageability as the ‘quality in a physical object which gives it a high probability of evoking a strong image in any given observer.’¹⁴. Scholars argued that a ‘strong and identifiable image’ has a positive influence on the satisfaction of visiting a place¹⁵. As for the city’s brand, scholars have defined city branding as ‘a set of actions aimed to improve the competitiveness of the city internationally ...’¹⁶. Finally, identity is what distinguishes a city and makes it unique, i.e. ‘the extent to which a person can recognize or recall a place as being distinct from other places’¹⁷. Scholars have also pointed out the existing interrelation between the three notions by arguing that city’s brand and identity are based on its image whether it is positive or negative¹⁸, which per se varies among the type of visitors (city residents, domestic tourists, international tourists)¹⁹. Therefore, it could be inferred that the city’s image is how it is seen by its occupants, its brand is how it presents itself, and its identity is what makes it distinguishable from other cities. Thus, the process of image-shift cannot be done by planning alone (city’s side), but it also requires a shift in how occupants perceive the changes in the urban environment (occupant’s side). Examples of image reinvention could be seen in some post-industrial western cities^{20 21}. Hiroshima’s reconstruction demonstrates a war-damaged military industrial city that reinvented itself as a symbol of peace.



Previous research

The reconstruction in Japan after the Second World War has been thoroughly discussed in the literature. Scholars have highlighted several features of reconstruction such as the continuity in central planning before and after the war²²; the project completion ratio-based evaluation of reconstruction^{23 24}; and the remaining vulnerabilities of Japanese cities to disasters despite the reconstruction²⁵. Furthermore, the infamous destruction of Hiroshima has drawn particular interest to its recovery and resulted in a large body of literature on its urban development. Scholarship has examined how reconstruction ideas were dispersed and debated in the immediate years after the bombing, and how later they all merged into one direction²⁶. Research also discussed how the architecture of reconstruction, most referred to by Kenzo Tange's Peace Memorial Park, has introduced a Japanese modernity that 'would be culturally authentic and contemporary'²⁷. Additionally, the role of transnational urbanism and how it has contributed to the reconstruction of Hiroshima were also explored in the literature regarding reconstruction advisors advocating conservation²⁸; their western inspired plans for areas in Hiroshima²⁹; and the reflection of western modernists in Tange's design of the peace memorial museum³⁰. The debate on post-war Hiroshima and reconstruction planning emphasized the importance of policy decisions in the 'construction new identity'³¹, however, it was also argued that the post-war identity per se might have created sites of 'dark tourism'³². This article elaborates on the debate on how reconstruction has changed Hiroshima's image after the bombing.

Methodology

The article is based on a literature survey of primary sources and field survey. Data collection and field survey were conducted in August 2017. Primary resources were obtained from Hiroshima City Archives, Hiroshima City Hall (Naka Ward), and Hiroshima Central Library. The article discusses the planning development of Central Hiroshima as a case study namely the area in Naka Ward located Northern of the Peace Boulevard, mainly discussing road planning and land-use change. It also clarifies the transition in planning by comparing the situation before the war (figure 2), with the current state³³.

Findings

After several reconstruction plans being set in the immediate years after the bombing, the Peace Memorial City Construction Law was promulgated in 1949 as a framework for reconstruction. The law and the later formulated Peace Memorial City Construction Plan in 1952 used *memorialism* as a vessel for the recovery which was expressed through: roads planning, land-use change, and conservation policies.

Roads planning

History of transportation planning in Hiroshima goes back to 1928 when the urban roads planning was fixed³⁴. After the bombing, reconstruction planning was based on a grid-type roads network in a consistent manner with the pre-war planning (figure 3). Since the *modus operandi* in Japanese urban planning is to carry land readjustment, plans were made in which the designated damaged territory was divided into two sectors: western sector carried out by the prefecture, and eastern sector carried out by the city.

The national government issued the Basic Policy for Reconstruction of War-damaged Areas in December 1945 to provide the guidelines for reconstruction. In terms of transportation planning, the basic policy allowed the planning of roads with 50 to 100 meters width when necessary for beautification and disaster prevention³⁵. Many damaged cities around Japan, including Hiroshima, saw this as an opportunity to plan ambitious 100-meter roads, however, later most of the plans were scaled-down or abandoned due to feasibility and financial difficulties³⁶.

The reason why Hiroshima's 100-meter road, currently known as the Peace Boulevard (figure 4), was realized lies in its symbolic value for the city³⁷. Furthermore, the road's importance comes also from a contextual necessity since it was originally a wartime plan as a firebreak for disaster prevention. This illustrates how a military project

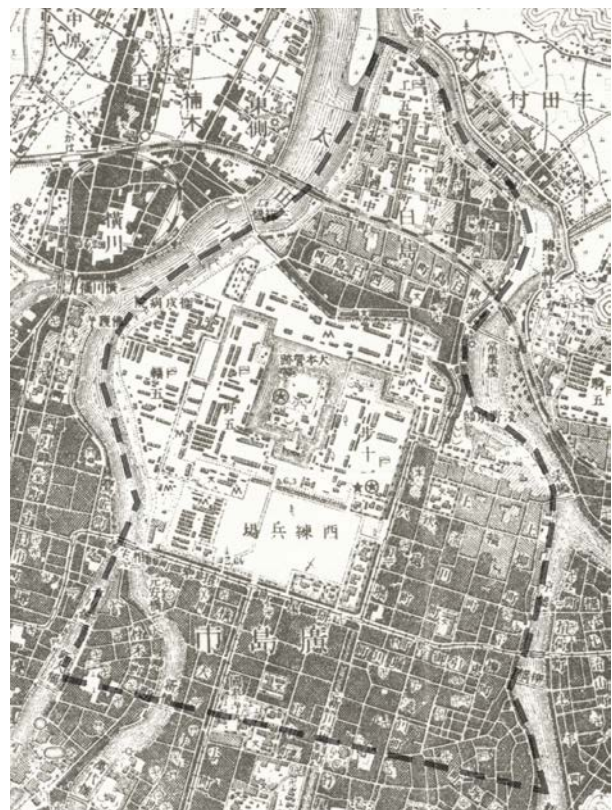


Figure 2. Pre-war Central Hiroshima (1930)



before the bombing was turned into a symbol of peace through the reconstruction³⁸. Former mayor Shinzo Hamai has described the purpose of the plan in his memoir:

“if the central area had an East-West division, the city could be divided into twelve blocks by the rivers and empty land. Even if a major fire takes place, it could be contained within one block.”³⁹

Another important feature of the reconstruction is the influence of cross-cultural planning at that time. As other post-war reconstruction projects have fuelled the flow of international planning professionals⁴⁰, reconstruction in Hiroshima shows an example of transnational urbanism where foreign advisors have contributed to the planning. Stanley Archibald Jarvie from the British Commonwealth Forces (BCOF) was assigned as a reconstruction advisor in Hiroshima during the occupation of Japan. Jarvie proposed a plan for Hakushima district that integrated western planning concepts⁴¹. He proposed fewer blocks and wider curved paths rather than the grid-type plan proposed by the city’s plan. However, Jarvie’s proposal was not implemented since the city’s officials considered it unsuitable for a Japanese urban context^{42 43}.

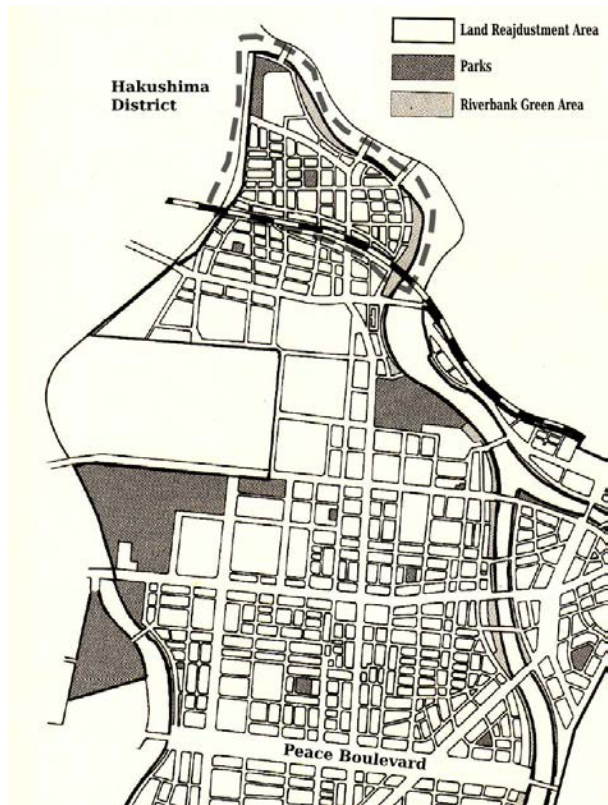


Figure 3. Land readjustment plan for Central Hiroshima



Figure 4. Peace Boulevard in Hiroshima

Land-use transformation

Land-use planning was first decided in Hiroshima in 1927 then modified several times until reconstruction planning was decided in March 1949⁴⁴. The Peace Memorial City Construction Plan later integrated major changes of land-use as a part of the turn-over to a new era for the city. These changes were largely affected by the dominant movement towards memorialism. A well-known example is the transformation of Nakajima District after its devastation by the atomic bombing. The once vibrant commercial district was used to memorialize the disaster by turning it into a Peace Memorial Park.

This memorial park was also a part of a large effort to increase green spaces through reconstruction. Planning authorities in Hiroshima city and prefecture wanted to follow international standards for parks in Hiroshima⁴⁵. On the national level, the government stated in the Basic Policy for Reconstruction of War-damaged Areas that reconstruction plans are required to allocate ten per cent of the city area for green spaces⁴⁶. However, for a city such as Hiroshima where rivers constitute a vital part of the urban environment, reconstruction plans allocated green areas along the riverside as well. The plan of 1952 proposed riverbank greenbelts with a total area of 21.32 ha (13.14 in the East and 8.18 in the West)⁴⁷.

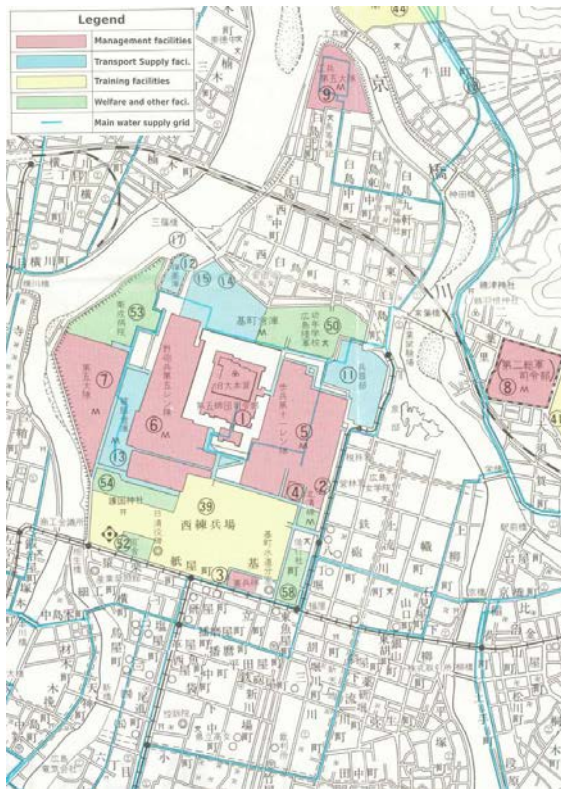


Figure 5. Military-use lands in Central Hiroshima

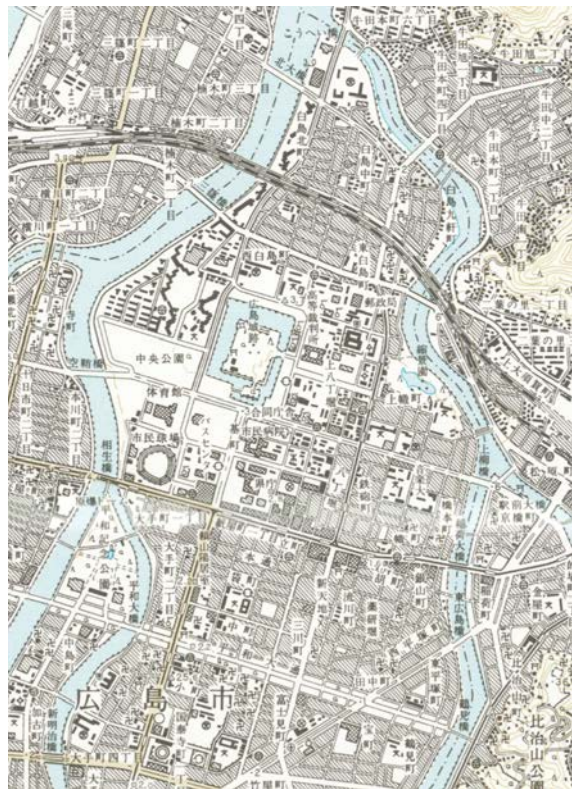


Figure 6. Map of Central Hiroshima in 1981

Another major example of land-use transformation could be seen in Motomachi District, a once military-use area in Central Hiroshima. The Peace Memorial City Construction Law facilitated the transfer of ownership of previously military-use lands from the national government to the city⁴⁸ (figure 5). For Hiroshima, the military lands, which constituted 9.3 per cent of the city area at that time⁴⁹, did not only have an obsolete purpose but also were unsuitable for the new image of Hiroshima as a symbol of peace. The military lands of Motomachi have kept the district “detached from ordinary citizens’ daily lives”⁵⁰. After the bombing, illegal houses built in Motomachi, and their fire-prone environment, were a long-lasting challenge for reconstruction in the city. It took reconstruction efforts up to the late 1970s to reintegrate the military lands in the district by turning them into civic facilities, parks, and public housing.



Figure 7. Former military lands in Motomachi District (left: public housing and Chuo park – right: Hiroshima Green Arena)

Early reconstruction plans designated the southern part of Motomachi district for the Chuo Park by allocating 70.48 ha of land⁵¹, but later those plans were scaled-down to clear the way for housing. Public housing was built to respond to the dire housing shortage at that time (figure 6). After demolishing the illegal housing, the construction of mid-rise public housing continued from 1956 up to 1968⁵². Later, a plan for high-rise housing was made by Masato Otaka which showed another example of cross-cultural urbanism manifested by piloti-style design and rooftop gardens⁵³. Currently, the once militarized district contains several civic facilities such as Hiroshima Central Library, Hiroshima Museum of Art, and sports facilities (figure 7). By the end of the reconstruction era,



the military character of Motomachi District has been abandoned, however, currently, the district is facing challenges such as deteriorating buildings and ageing residents⁵⁴.

A comparison was made between the current state and the pre-war urban form to shed the light on how reconstruction has ultimately changed Central Hiroshima as illustrated in figure 8⁵⁵. It could be concluded that post-war planning generally kept the original grid-type network structure while adding smaller divisions to the existing blocks. However, the areas with major transformations, namely: former Motomachi District, Nakajima District and, Peace Boulevard, have witnessed almost a complete change in use, road network, and block divisions.

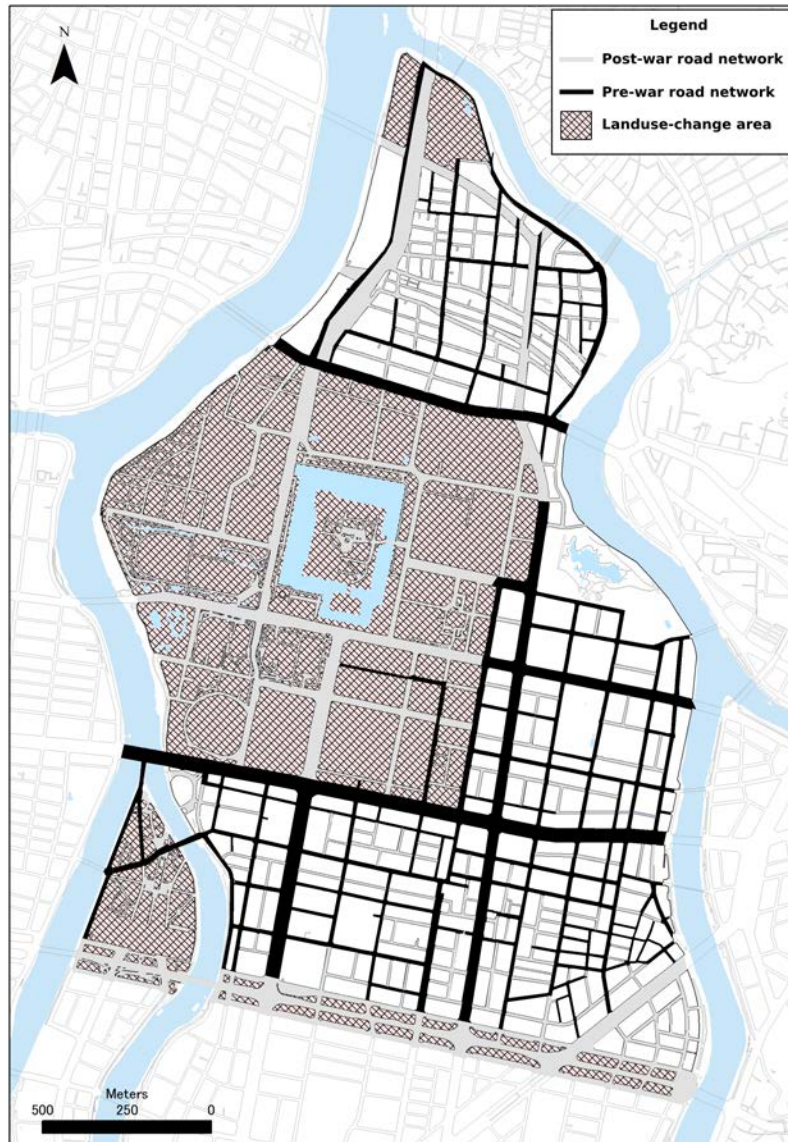


Figure 8. Changes in road network and land-use in Central Hiroshima⁵⁶

Conservation and memorialism

The vision of a memorial city was not only advocated locally but also it was pushed forward by international actors as well. At that time, the Allied Forces in the GHQ closely followed and shaped the financials of reconstruction in Japan⁵⁷, however, they provided the green light for rebuilding Hiroshima as a memorial city⁵⁸. Mayor Hamai has mentioned how Justin Williams, Chief of Legislative Division of GHQ, personally wanted to secure the approval of the GHQ when he was presented with the Peace Memorial City Construction Law proposal⁵⁹. Therefore, the foreign role in memorialism demonstrates another aspect of the international contribution in Hiroshima's recovery, which per se adds to the long existing transnational flow of planning ideas between Japan and overseas as seen in earlier times in the design of Nara and Kyoto, or in more recent examples such as the revival of Ginza in 1873⁶⁰. A key expression of the memorial vision is shown in Tange's design of the Peace Memorial Park which was not only a "major vector in cross-cultural exchange"⁶¹, but also it was a marriage of conservation and memorialism.



The calls for conservation and memorialism especially by reconstruction advisors Australian Stanley Jarvie and American John Montgomery⁶², their expression in Tange's design, and having a clear vision and a solid framework, are all factors that helped the reconstruction become a catalyst for recovery which ultimately established the city's memorial facilities among the most popular touristic sites in the country⁶³.



Figure 9. Memorial facilities in Central Hiroshima (left: Peace Memorial Park – right: Former Bank of Japan, Hiroshima branch)

Conclusion

Hiroshima's choice of memorialism as a driver of recovery was vividly materialized in reconstruction planning. Roads planning aimed to achieve objectives such as disaster prevention and symbolism while keeping pre-war planning practices. Several areas have had major land-use transformation as seen in the reintegration of military-use lands in Motomachi back into the citizens' life. Memorialism kept a reference to the memory of the bombing by establishing memorial facilities and conserving atomic monuments despite the almost clean slate reconstruction.

Transnational urbanism has had an important contribution to the reconstruction of Hiroshima. This contribution could be seen in the influence of western concepts in Tange's and Otaka's designs, getting the green light to build a memorial city from the GHQ, and the proposals of foreign reconstruction advisors. The flow of planning ideas in Hiroshima's reconstruction could arguably be described as a case of *synthetic borrowing* as demonstrated by the adoption of conservation and memorial ideas while discarding Jarvie's Hakushima plan⁶⁴.

The reconstruction of Hiroshima was able to memorialize the atomic bombing even through new development which distinguishes the way the city was rebuilt from other examples. Hiroshima's choice of memorialism has played a role as a catalyst for recovery that ultimately turned the once a militarized city into a popular touristic destination. However, some areas such as Motomachi District that went through a major transformation is currently under stagnation, and how this transformation has impacted its urban vitality is yet to be investigated.

Acknowledgements

The authors would like to thank City Hall of Naka-ku in Hiroshima, Hiroshima City Archives, and Hiroshima Central Library for their cooperation in providing documents and allowing the use of their facilities.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Allam Alkazei: a doctoral student in the Policy and Planning Department at University of Tsukuba, Japan. His research interests include post-disaster reconstruction, urban renewal, and urban redevelopment. He has carried out research on conflict-affected cities such as Beirut and Hiroshima. He is currently carrying out research on the impact of reconstruction planning on post-recovery urban vitality.

Kosuke Matsubara: an associate professor in the Policy and Planning Sciences Department at University of Tsukuba. His research interests are: urban conservation based on international exchange and technical cooperation, urban planning history in the Middle East and the North Africa. He is the author of the book: *Conservation et Modernisation de la ville historique de Fès, Maroc*



Endnotes

- ¹ Kendra Dupuy et al., "Trends in Armed Conflict, 1946-2016," (2017). 2.
- ² Monty G. Marshall and Gabrielle C. Elzinga-Marshall, "Global Report 2017: Conflict, Governance, and State Fragility," (2017).1.
- ³ Hiroshima Peace Memorial Museum, *The Spirit of Hiroshima: An Introduction to the Atomic Bomb Tragedy* (City of Hiroshima, 1999).14-15.
- ⁴ André Sorensen, *The Making of Urban Japan: Cities and Planning from Edo to the Twenty First Century* (Routledge, 2005).114.
- ⁵ Hiroshima Toshiseikatsu Kenkyuukai, *Reconstruction of Hiroshima: Pictorial History of Forty Years since Atomic Bombing* (Hiroshima city, 1985). 15.
- ⁶ Hiroshima for Global Peace Plan Joint Project Executive Committee, "Hiroshima's Path to Reconstruction," (2015). 7.
- ⁷ Heiko Schmid, "Privatized Urbanity or a Politicized Society? Reconstruction in Beirut after the Civil War," *European Planning Studies* 14, no. 3 (2006). 378.
- ⁸ Hashim Sarkis, "A Vital void: Reconstructions of Downtown Beirut," in *The Resilient City: How Modern Cities Recover from Disaster*, ed. Lawrence J. Vale and Thomas J. Campanella (Oxford University Press, 2005). 283.
- ⁹ Juliusz A. Chrościcki and Andrzej Rottermund, *Atlas of Warsaw's Architecture* (Arkady, 1978). 145.
- ¹⁰ Jasper Goldman, "Warsaw: Reconstruction as Propaganda," in *The Resilient City: How Modern Cities Recover from Disaster*, ed. Lawrence J. Vale and Thomas J. Campanella (Oxford University Press, 2005). 141-2.
- ¹¹ Alexander Tölle, "Urban Identity Policies in Berlin: From Critical Reconstruction to Reconstructing the Wall," *Cities* 27, no. 5 (2010). 356.
- ¹² Gizem Caner and Fulin Bölen, "Urban Planning Approaches in Divided Cities," *A| ZITU Journal of the Faculty of Architecture* 13, no. 1 (2016). 145.
- ¹³ Yorifusa Ishida, "Japanese Cities and Planning in the Reconstruction Period: 1945-55," in *Rebuilding Urban Japan after 1945*, ed. Jeffrey M. Diefendorf and Ishida Yorifusa Carola Hein (Palgrave Macmillan UK, 2003).
- ¹⁴ Kevin Lynch, *A Theory of Good City Form* (MIT Press, 1981). 9.
- ¹⁵ Müge Riza, Naciye Doratli, and Mukaddes Fasli, "City Branding and Identity," *Procedia-Social and Behavioral Sciences* 35 (2012). 294.
- ¹⁶ Viktorija Prilenska, "City Branding as a Tool for Urban Regeneration: Towards a Theoretical Framework," *Scientific journal of Riga Technical University. Ser.10. Architecture and urban planning*, no. 2012/6 (2012). 15.
- ¹⁷ Kevin Lynch, *A Theory of Good City Form*.131.
- ¹⁸ Riza, Doratli, and Fasli, "City Branding and Identity." 294.
- ¹⁹ Greg Richards and Julie Wilson, "The Impact of Cultural Events on City Image: Rotterdam, Cultural Capital of Europe 2001," *Urban studies* 41, no. 10 (2004). 1946.
- ²⁰ Ronan Paddison, "City Marketing, Image Reconstruction and Urban Regeneration," *Ibid.*30, no. 2 (1993). 343.
- ²¹ Deborah Peel and Greg Lloyd, "New Communicative Challenges: Dundee, Place Branding and the Reconstruction of a City Image," *Town Planning Review* 79, no. 5 (2008). 527.
- ²² Sorensen, *The Making of Urban Japan: Cities and Planning from Edo to the Twenty First Century*. 158.
- ²³ Ishida, "Japanese Cities and Planning in the Reconstruction Period: 1945-55." 41.
- ²⁴ Jeremy D. Alden and Hirofumi Abe, "Some Strengths and Weaknesses of Japanese Urban Planning," in *Planning for Cities and Regions in Japan*, ed. Ian Masser Philip Shapira, David W. Edgington (Liverpool University Press, 1994). 24.
- ²⁵ Ishida, "Japanese Cities and Planning in the Reconstruction Period: 1945-55." 43.
- ²⁶ Norioki Ishimaru, "A Study on the Formation Process and the Transition Of "Peace Memorial City" As a Planning Idea in Hiroshima," *Journal of the City Planning Institute of Japan* 43, no. 3 (2008). 192.
- ²⁷ Hyunjung Cho, "Hiroshima Peace Memorial Park and the Making of Japanese Postwar Architecture," *Journal of Architectural Education* 66, no. 1 (2012). 81.
- ²⁸ Norioki Ishimaru, "A Study on the Planning Ideas Proposed by Reconstruction Adviser John D. Montgomery and Its Playing Role in the Reconstruction Planning for War-Damaged Area in Hiroshima," *Journal of the City Planning Institute of Japan* 44, no. 3 (2009). 834.
- ²⁹ Norioki Ishimaru, "A Study on the Planning Ideas Proposed by Reconstruction Adviser S.A. Jervie and Its Playing Role in the Reconstruction Planning for War-Damaged Area in Hiroshima," *Journal of the City Planning Institute of Japan* 46, no. 3 (2011). 300.
- ³⁰ Carola Hein, "Hiroshima: The Atomic Bomb and Kenzo Tange's Hiroshima Peace Center," in *Out of Ground Zero: Case Studies in Urban Reinvention*, ed. Joan Ockman (Temple Hoyne Buell Center for the Study of American Architecture, 2002). 70.
- ³¹ Hideaki Shinoda, "Post-War Reconstruction of Hiroshima as a Case of Peacebuilding," *IPSHU English Research Report Series*, no. 22 (2008). 22.
- ³² Ran Zwigenberg, "The Atomic City: Military Tourism and Urban Identity in Postwar Hiroshima," *American Quarterly* 68, no. 3 (2016). 638.
- ³³ Current state was assumed based on the most recent GIS data and overlapped with georeferenced historical maps using ArcGIS 10.4.1.
- ³⁴ Norioki Ishimaru, "Reconstructing Hiroshima and Preserving the Reconstructed City," in *Rebuilding Urban Japan after 1945*, ed. Jeffrey M. Diefendorf and Ishida Yorifusa Carola Hein (Palgrave Macmillan UK, 2003). 87.
- ³⁵ Kensetsusho, *Sensai Fukkoushi: Kensetsushohen*, vol. 3 (Toshi Keikaku Kyoukai 1958). 1-4. Sensaichi Fukkou Keikaku Kihon Houshin: 4, - (1) - ha.
- ³⁶ Norioki Ishimaru, "On Planning Condition of One-Hundred-Meter Road as Wide Road and Its Transition in the Reconstruction Planning for War-Damaged Area - a Comparative Study on One-Hundred-Meter Road Planning and Its Reduction-or-Changes in the Nationwide Case with in Hiroshima Case -," *Journal of the City Planning Institute of Japan* 47, no. 3 (2012). 1080.
- ³⁷ *Ibid.*, 1080.
- ³⁸ Hein, "Hiroshima: The Atomic Bomb and Kenzo Tange's Hiroshima Peace Center." 69.
- ³⁹ Shinzo Hamai, *Genbaku Shichou - Fukkoku-Ban* (Shift Project, 2011). 78. [Author's translation from Japanese]
- ⁴⁰ Rosemary Wakeman, "Rethinking Postwar Planning History," *Planning Perspectives* 29, no. 2 (2014). 153.
- ⁴¹ Anonymous, "Plan to Rebuild Hiroshima: Australian Architect's Ambition," *The West Australian*, Monday December 22nd 1947.
- ⁴² Ishimaru, "A Study on the Planning Ideas Proposed by Reconstruction Adviser S.A. Jervie and Its Playing Role in the Reconstruction Planning for War-Damaged Area in Hiroshima." 300.



- ⁴³ Norioki Ishimaru, "Studies on Actual Condition of Main Subject of Agenda and Discussion in Land Readjustment Committee for Post-War Reconstruction - by Means of Examining Committee Agenda of Hiroshima East Area Land Readjustment," *Journal of the City Planning Institute of Japan* 50, no. 3 (2015): 793
- ⁴⁴ Hiroshima city, *Hiroshima Shinshi: toshibunkahen* (Hiroshima city, 1983): 49.
- ⁴⁵ Hiroshima for Global Peace Plan Joint Project Executive Committee (Hiroshima Prefecture and The City of Hiroshima), "Learning from Hiroshima's Reconstruction Experience: Reborn from the Ashes," (2015): 35.
- ⁴⁶ Kensetsusho, *Sensai Fukkoushi: Kensetsushohen*. 1-4. Sensaichi Fukkou Keikaku Kihon Houshin: 4, - (2) – ro.
- ⁴⁷ Hiroshima for Global Peace Plan Joint Project Executive Committee (Hiroshima Prefecture and The City of Hiroshima), "Learning from Hiroshima's Reconstruction Experience: Reborn from the Ashes." 61.
- ⁴⁸ Sensai Fukkou Jigyoushi Henshuu Kenkyukai and Hiroshimashi Toshiseibikyoku Toshiseibibu Kukakuseirika, *Sensai fukkou Jigyoushi* (Hiroshima city, 1995). 51. Article 4.
- ⁴⁹ Hiroshima city, *Hiroshima Shinshi: chirihen* (Hiroshima city, 1983): 59.
- ⁵⁰ Hiroshima for Global Peace Plan Joint Project Executive Committee (Hiroshima Prefecture and The City of Hiroshima), "Learning from Hiroshima's Reconstruction Experience: Reborn from the Ashes." 63.
- ⁵¹ Kensetsusho, *Sensai fukkoushi: Daikyukan Toshihen Vi - Kensetsushohen* (Oozora, 1991): 372.
- ⁵² Hiroshima for Global Peace Plan Joint Project Executive Committee (Hiroshima Prefecture and The City of Hiroshima), "Learning from Hiroshima's Reconstruction Experience: Reborn from the Ashes." 65.
- ⁵³ *Ibid.* 69.
- ⁵⁴ Hiroshima Toshiseibikyoku Toshiseikakuka, *Hiroshimashi Toshiseikaku Masutaa Puran* (Hiroshima city, 2013): 77.
- ⁵⁵ The comparison was made based on the most recent GIS data obtained from Geospatial Information Authority of Japan [download date: 2018/01/01] with pre-war situation based on: 1) City of Hiroshima, Hiroshima Shinshi Shiryohen III (Chizuhen), – I Shigaihattenzu. 1984 [situation on 1930]. 2) Kenkyukai, Hiroshima Toshiseikatsu. Reconstruction of Hiroshima: Pictorial History of Forty Years since Atomic Bombing. Hiroshima city, 1985. Pg 14. [situation in 1940].
- ⁵⁶ Notes on the figure: [1] Parts of the Peace Boulevard have existed before the war and the project per se has started even before the bombing, however, due to the road's big role as part of the reconstruction process it was considered as a post-war road. [2] Roads were considered pre-war roads even if they were widened later unless they only existed partially.
- ⁵⁷ Ishimaru, "Reconstructing Hiroshima and Preserving the Reconstructed City." 94.
- ⁵⁸ *Ibid.* 95.
- ⁵⁹ Hamai, *Genbaku Shichou - Fukkoku-Ban*. 159.
- ⁶⁰ Carola Hein, "Japanese Cities in Global Context," (SAGE Publications Sage CA: Los Angeles, CA, 2016): 3.
- ⁶¹ *Ibid.* 8.
- ⁶² Ishimaru, "A Study on the Formation Process and the Transition Of "Peace Memorial City" As a Planning Idea in Hiroshima." 189
- ⁶³ Nihon Ginkou Hiroshimashiten, "Toukei Kara Mita Hiroshimaken Kankoukyaku No Tokuchou," (Nihon Ginkou Hiroshimashiten, 2014): 1.
- ⁶⁴ Stephen V. Ward, "Re-Examining the International Diffusion of Planning," in *Urban Planning in a Changing World: The Twentieth Century Experience*, ed. Robert Freestone (Taylor & Francis, 2000): 45.

Bibliography

- Alden, Jeremy D., and Hirofumi Abe. "Some Strengths and Weaknesses of Japanese Urban Planning." In *Planning for Cities and Regions in Japan*, edited by Ian Masser Philip Shapira, David W. Edgington: Liverpool University Press, 1994.
- Anonymous. "Plan to Rebuild Hiroshima: Australian Architect's Ambition." *The West Australian*, Monday December 22nd 1947, 15.
- Caner, Gizem, and Fulin Bölen. "Urban Planning Approaches in Divided Cities." *A|Z ITU Journal of the Faculty of Architecture* 13, no. 1 (2016): 139-56.
- Cho, Hyunjung. "Hiroshima Peace Memorial Park and the Making of Japanese Postwar Architecture." *Journal of Architectural Education* 66, no. 1 (2012): 72-83.
- Chrościcki, Juliusz A., and Andrzej Rottermund. *Atlas of Warsaw's Architecture*. Arkady, 1978.
- Dupuy, Kendra, Scott Gates, Håvard Mokleiv Nygård, Ida Rudolfson, Siri Aas Rustad, Håvard Strand, and Henrik Urdal. "Trends in Armed Conflict, 1946-2016." 2017.
- Goldman, Jasper. "Warsaw: Reconstruction as Propaganda." Chap. 6 In *The Resilient City: How Modern Cities Recover from Disaster*, edited by Lawrence J. Vale and Thomas J. Campanella, 135-58: Oxford University Press, 2005.
- Hamai, Shinzo. *Genbaku Shichou - Fukkoku-Ban*. Shift Project, 2011.
- Hein, Carola. "Hiroshima: The Atomic Bomb and Kenzo Tange's Hiroshima Peace Center." In *Out of Ground Zero: Case Studies in Urban Reinvention*, edited by Joan Ockman, 61-83: Temple Hoyne Buell Center for the Study of American Architecture, 2002.
- . "Japanese Cities in Global Context." SAGE Publications Sage CA: Los Angeles, CA, 2016.
- Hiroshima city. *Hiroshima Shinshi: chirihen*. Hiroshima city, 1983.
- . *Hiroshima Shinshi: toshibunkahen*. Hiroshima city, 1983.
- Hiroshima for Global Peace Plan Joint Project Executive Committee. "Hiroshima's Path to Reconstruction." 2015.
- Hiroshima for Global Peace Plan Joint Project Executive Committee (Hiroshima Prefecture and The City of Hiroshima). "Learning from Hiroshima's Reconstruction Experience: Reborn from the Ashes." 2015.
- Hiroshima Peace Memorial Museum. *The Spirit of Hiroshima: An Introduction to the Atomic Bomb Tragedy*. City of Hiroshima, 1999.



The 18th International Planning History Society Conference - Yokohama, July 2018

- Hiroshima Toshiseibikyoku Toshikeikakuka. *Hiroshimashi Toshikeikaku Masutaa Puran*. Hiroshima city, 2013.
- Ishida, Yorifusa. "Japanese Cities and Planning in the Reconstruction Period: 1945-55." In *Rebuilding Urban Japan after 1945*, edited by Jeffrey M. Diefendorf and Ishida Yorifusa Carola Hein: Palgrave Macmillan UK, 2003.
- Ishimaru, Norioki. "A Study on the Formation Process and the Transition Of "Peace Memorial City" As a Planning Idea in Hiroshima." *Journal of the City Planning Institute of Japan* 43, no. 3 (2008): 187-92.
- . "A Study on the Planning Ideas Proposed by Reconstruction Adviser John D. Montgomery and Its Playing Role in the Reconstruction Planning for War-Damaged Area in Hiroshima." *Journal of the City Planning Institute of Japan* 44, no. 3 (2009): 829-34.
- . "A Study on the Planning Ideas Proposed by Reconstruction Adviser S.A. Jervie and Its Playing Role in the Reconstruction Planning for War-Damaged Area in Hiroshima." *Journal of the City Planning Institute of Japan* 46, no. 3 (2011): 295-300.
- . "On Planning Condition of One-Hundred-Meter Road as Wide Road and Its Transition in the Reconstruction Planning for War-Damaged Area - a Comparative Study on One-Hundred-Meter Road Planning and Its Reduction-or-Changes in the Nationwide Case with in Hiroshima Case -." *Journal of the City Planning Institute of Japan* 47, no. 3 (2012): 1075-80.
- . "Reconstructing Hiroshima and Preserving the Reconstructed City." In *Rebuilding Urban Japan after 1945*, edited by Jeffrey M. Diefendorf and Ishida Yorifusa Carola Hein: Palgrave Macmillan UK, 2003.
- . "Studies on Actual Condition of Main Subject of Agenda and Discussion in Land Readjustment Committee for Post-War Reconstruction - by Means of Examining Committee Agenda of Hiroshima East Area Land Readjustment." *Journal of the City Planning Institute of Japan* 50, no. 3 (2015): 788-93.
- Kenkyukai, Hiroshima Toshiseikatsu. *Reconstruction of Hiroshima : Pictorial History of Forty Years since Atomic Bombing*. Hiroshima city, 1985.
- Kensetsusho. *Sensai Fukkoushi: Kensetsushohen*. Vol. 3: Toshi Keikaku Kyokai 1958.
- . *Sensai fukkoushi: Daikyukan Toshihen Vi - Kensetsushohen*. Oozora, 1991.
- Lynch, Kevin. *A Theory of Good City Form*. MIT Press, 1981.
- Marshall, Monty G., and Gabrielle C. Elzinga-Marshall. "Global Report 2017: Conflict, Governance, and State Fragility." 2017.
- Nihon Ginkou Hiroshimashiten. "Toukei Kara Mita Hiroshimaken Kankoukyaku No Tokuchou." Nihon Ginkou Hiroshimashiten, 2014.
- Paddison, Ronan. "City Marketing, Image Reconstruction and Urban Regeneration." *Urban studies* 30, no. 2 (1993): 339-49.
- Peel, Deborah, and Greg Lloyd. "New Communicative Challenges: Dundee, Place Branding and the Reconstruction of a City Image." *Town Planning Review* 79, no. 5 (2008): 507-32.
- Prilenska, Viktorija. "City Branding as a Tool for Urban Regeneration: Towards a Theoretical Framework." *Scientific journal of Riga Technical University. Ser.10. Architecture and urban planning*, no. 2012/6 (2012): 12-16.
- Richards, Greg, and Julie Wilson. "The Impact of Cultural Events on City Image: Rotterdam, Cultural Capital of Europe 2001." *Urban studies* 41, no. 10 (2004): 1931-51.
- Riza, Müge, Naciye Doratli, and Mukaddes Fasli. "City Branding and Identity." *Procedia-Social and Behavioral Sciences* 35 (2012): 293-300.
- Sarkis, Hashim. "A Vital void: Reconstructions of Downtown Beirut." Chap. 12 In *The Resilient City: How Modern Cities Recover from Disaster*, edited by Lawrence J. Vale and Thomas J. Campanella, 281-97: Oxford University Press, 2005.
- Schmid, Heiko. "Privatized Urbanity or a Politicized Society? Reconstruction in Beirut after the Civil War." *European Planning Studies* 14, no. 3 (2006): 365-81.
- Sensai Fukkou Jigyoushi Henshuu Kenkyukai, and Hiroshimashi Toshiseibikyoku Toshiseibibu Kukakuseirika. *Sensai fukkou Jigyoushi*. Hiroshima city, 1995.
- Shinoda, Hideaki. "Post-War Reconstruction of Hiroshima as a Case of Peacebuilding." *IPSHU English Research Report Series*, no. 22 (2008): 2-24.
- Sorensen, André. *The Making of Urban Japan: Cities and Planning from Edo to the Twenty First Century*. Routledge, 2005.
- Tölle, Alexander. "Urban Identity Policies in Berlin: From Critical Reconstruction to Reconstructing the Wall." *Cities* 27, no. 5 (2010): 348-57.
- Wakeman, Rosemary. "Rethinking Postwar Planning History." *Planning Perspectives* 29, no. 2 (2014): 153-63.
- Ward, Stephen V. "Re-Examining the International Diffusion of Planning." Chap. 3 In *Urban Planning in a Changing World: The Twentieth Century Experience*, edited by Robert Freestone, 40-60: Taylor & Francis, 2000.
- Zwigenberg, Ran. "The Atomic City: Military Tourism and Urban Identity in Postwar Hiroshima." *American Quarterly* 68, no. 3 (2016): 617-42.



Image sources

Figure 1: Author's construct

Figure 2: City of Hiroshima, Hiroshima Shinshi Shiryouhen III (Chizuhen), – I Shigaihattenzu. 1984.

Figure 3: Sensai Fukkou Jigyoushi Henshuu Kenkyuukai, and Hiroshimashi Toshiseibikyoku Toshiseibibu Kukakuseirika. Sensai fukkou Jigyou-Shi. Hiroshima city, 1995. 67.

Figure 4: Captured by author

Figure 5: City of Hiroshima, Hiroshima Shinshi Shiryouhen III (Chizuhen), – III Dainiji Sekaitaisenji Gunyoushisetsu Haichizu. 1984.

Figure 6: City of Hiroshima, Hiroshima Shinshi Shiryouhen III (Chizuhen), – I Shigaihattenzu. 1984.

Figure 7: Captured by author

Figure 8: Author's construct

Figure 9: Captured by author



Studies on the Relation to plan-making of Conception of Hiroshima Peace City Construction Plan after the winning of Hiroshima Peace Memorial Park Competition by Kenzo Tange

Norioki ISHIMARU*

**Doctor of Engineering, Institute of Researching Hiroshima Several and Area Reviving / nisimar5@hotmail.com*

Keywords: Hiroshima Peace Memorial City Construction Law, Hiroshima Peace City Construction Plan, Architect Kenzo Tange, Planning Document, Peace Memorial Facilities, Plan-making by Architect

The price winning proposal by Architect Kenzo Tange (and his associate group) for the Peace Memorial Park competition in Hiroshima in 1949 is well known and extensively documented. Less research exists on the planning of the Peace Memorial Park Design and the Hiroshima City Reconstruction Plan focused on the concept of the Peace City. This paper examines the process of the preparation of the Peace City Construction Plan in Hiroshima between 1949 and 1952. It analyses several planning documents and explores how Kenzo Tange contributed to the plan-making in collaboration with staff from the Hiroshima City office and other members of the business community. It argues that while parts of the plan were already set before Tange's arrival in Hiroshima, he and his staff had a large impact on select aspects of the plan. Tange proposed his unique planning concept and purpose to Hiroshima City planners and members of the business community and several of his ideas were realized. The analysis of various drafts and plans, points to specific areas where the input of Tange is visible, notably in more idealistic visions, more English wording, and also in the specification of building structures. The paper also highlights the particular impact from planning staff, notably focused on the implementation and funding of the plan. In conclusion, the paper demonstrates the need for a careful analysis of the process from vision to plan and the interaction between external architects and their visions and local planning agencies and their needs and requirements.

1. Introduction

Hiroshima was the first atomic-bombed city on August 6 1945, in the world(Fig.1). The Peace Memorial Park Competition in Hiroshima was held in 1949. Architect Kenzo Tange (& his associate group) won the first prize and the competition proposal(Fig.2) was realized with little revision shortly thereafter.



FIG. 1 ATOMIC-BOMBED AREA FROM THE SKY

After the competition, Tange contributed to the realization of Peace Memorial Park Design and the less known Hiroshima City Reconstruction Plan that promoted the idea of Hiroshima as Peace City. Tange who worked on Hiroshima Peace City Construction Plan was in close relation with Hiroshima city planners or administrative staff.



FIG. 2 FIRST PRIZE PROPOSAL BY KENZO TANGE

Numerous architectural professionals and theorists have commented on the prize-winning project by Kenzo Tange for Hiroshima Peace Memorial Park Competition. They have extensively written about the construction of Peace Memorial Park and on the design of Peace Memorial Museum. But, much less is known about the ways in which Tange collaborated with Hiroshima city staff and other stakeholders to produce and implement Hiroshima City Construction Plan that promoted the idea of Hiroshima as Peace City. This paper clarifies how the Peace City Construction Plan in



Hiroshima evolved through several plan documents and explores Tange's relation to Peace City Construction Plan.

2. Purpose, Method and Past Results of Study

In Hiroshima, there were several planning documents through the process of planning and carrying of Reconstruction Plan for War damaged Area. Examining those documents closely shows clear that a unique frame-work of plan-making was developed and functioned.

Kenzo Tange and his associates played an important role through the process of decision making and worked closely with the authorities. Then, aim of this paper is how Architect Tange was related to plan making of city planning.

Through examining of planning documents, this paper shows how several subjects guided the process of planning and implementing the Reconstruction Plan for War damaged Area. While Tange and his associates played an important role through the process, the final plan and its implementation are the result of the collaboration with local authorities and other business and architectural subjects. The purpose of this paper is to grasp the contents and meaning of the plan proposed by Tange as well as the characteristics, effect and persuasiveness of plan-making activities by Tange.

In connection with the past study concerned, there are "New History of Hiroshima/Volume of Urban Culture" (compiled by Hiroshima Municipal, published in 1983), "40 Years History after Hiroshima Bombing/Reconstruction of City"(compiled by Study Group of Researching Urban Life Hiroshima, published 1985), "Hiroshima's Path to Reconstruction"(Edited and Published by "Hiroshima for Global Peace" Plan joint Project Executive Committee, in 2015) and so on. Those referred to contents of Tange's participation in plan-making of Hiroshima Reconstruction Plan, but they did not describe concretely, but only appearing on the stage of planning process. Namely, existing document has so far ignored the role of Tange in the realization of the plans.¹ These mentioned only a little the role of Tange.

3 . Evaluation of Hiroshima Peace City Construction Planning Documents (1949-1950)

The Original Hiroshima Reconstruction Plan for War Damaged Areas legally implemented as Street Plan, Park Plan and Land Re-adjustment Area & Enterprise in October or November, 1946. The Plan named "Hiroshima Reconstruction Plan for War Damaged Area", was the same in name and form as that of other ones of war-damaged cities. In 1946, when Tange was invited as a part-time planner of Agency of War Damage Reconstruction to join the city planning team, the Hiroshima reconstruction plan had been almost completed.

This detailed knowledge of Hiroshima planning would facilitate his participation in the Peace Memorial Park Competition of 1949 and help his involvement in Peace City Construction Plan, the construction of Peace Memorial Museum and Peace Memorial Hall.

Tange's role increased when Hiroshima Peace Memorial City Construction Law as special law system was enacted by the Diet, and enforced in August 1949. This Law provided additional national funding for the rebuilding and turned Hiroshima into an exceptional case of post-war reconstruction. It also served as foundation for the establishment of the "Hiroshima Peace Memorial City Construction Plan". During the process of elaborating the final plan Tange's original concept changed from Peace Memorial Park Plan to Peace Memorial City Plan or Peace City Plan. The final outcome is effectively a combination of local

¹ See, for example, "New History of Hiroshima/Volume of Urban Culture" (compiled by Hiroshima Municipal, published in 1983), "40 Years History after Hiroshima Bombing/Reconstruction of City"(compiled by Study Group of Researching Urban Life Hiroshima, published 1985), "Hiroshima's Path to Reconstruction"(Edited and Published by "Hiroshima for Global Peace" Plan joint Project Executive Committee, in 2015



planning, existing before Tange’s arrival, and novel ideas by Tange and his group. The one-hundred-meter-wide road stands as an example. It was already under construction during the war as a fire break and projected right after the war to be constructed using the land readjustment system.² In Tange’s plan it appears as “Peace Boulevard” to be realized with special national support. Then, what is the role of Tange? There are several questions how some architect should plan city plan not but architectural design.

In May 1949, Hiroshima Peace Memorial City Construction Law as special law system was enacted by the Diet, and enforced in August that year. The planning framework in Hiroshima was exceptional and City Plan as “Hiroshima Peace Memorial City Construction Plan” was decided and realized. Tange’s original concept changed from Peace Memorial Park Plan to Peace Memorial City Plan.

The Original Hiroshima Reconstruction Plan for war damaged area was legally decided upon as Street Plan, Park Plan and Land Re-adjustment Area & Enterprise in October or November, 1946. This planning system was under the same system with other war-damaged city. The decided Plan named “Hiroshima City Reconstruction Plan”, and the name was same as other ones of war-damaged cities.

To receive national special assistance, Hiroshima City Planning Authority settled on several plans and compiled planning document(**Table 1**). The documents examined include Hiroshima Peace Memorial City Construction General Plan, Hiroshima Peace City Construction Proposal, and Hiroshima Peace Construction

TABLE 1 LIST AND BASIC DATA OF PLANNING DOCUMENTS RELATED HIROSHIMA PEACE CITY PLAN

Planning Document Number	Name of Plan	Key organization of Planning	Announcement Period of planning	Format and volume of planning document
Planning Document ①	Hiroshima Peace Memorial City Construction General Plan(proposal)	The City of Hiroshima	September 23, 1949	8 pages with main text, 23 tables, 4 figures, 37pages totally on B5-size
Planning Document ②	Hiroshima Peace Memorial City Construction Enterprise Plan	The City of Hiroshima	October 3, 1949	9 pages with main text on B5-size, 27 tables and figures on B4-size
Planning Document ③	Hiroshima Peace City Construction Proposal in 1949 version	Mayor Office of the City of Hiroshima	from February to March, 1950(inexactly)	199 pages with main text (including figures and tables) on B4-size
Planning Document ④	Hiroshima Peace City Construction tentative Proposal	Mayor Office the City of Hiroshima	April, 1950	185 pages with main text (including figures and tables) on B4-size
Planning Document ⑤	Hiroshima Peace City Construction Proposal	Mayor Office of he City of Hiroshima	April, 1950	92 pages with main text (including figures and tables) on B4-size
Planning Document ⑥	Hiroshima Peace City Construction Proposal	Mayor Office of the City of Hiroshima City	October, 1950	140 pages with main text (including figures and tables) on B4-size
Planning Document ⑦	Comments as to Hiroshima Peace Memorial City Plan	Special Committee of Hiroshima Peace Memorial Construction	August 6, 1951	Several pages

² Hein, Carola. "Hiroshima. The Atomic Bomb and Kenzo Tange'S Hiroshima Peace Center." In *Out of Ground Zero. Case Studies in Urban Reinvention*, edited by Joan Ockman, 62-83. New York, München: Temple Hoyne Buell Center for the Study of American Architecture Columbia University, Prestel, 2002; Hein, Carola. "Tange Kenzo’s Proposal for Rebuilding Hiroshima." In *Cartographic Japan: A History in Maps*, edited by Kären Wigen, Sugimoto Fumiko and Cary Karacas. Chicago: University of Chicago Press, 2016.



Tentative Proposal all of which are preserved in Hiroshima Official Archives or the Hiroshima City Library. Table 1 shows these documents in chronological order from Planning Document ① to Planning Document⑥. The first two proposals date respectively from September and October, 1949. They are followed by three proposals, and finally the Construction Plan in April and October, 1950. This analysis focuses on the role of Tange in these changes. Tange himself was working in his house through the night together with laboratory staffs and the planner from the city to write and present planning documents.

There were 6 main Planning Documents and one Committee Document. Planning Document① (the cover page is shown on Fig. 3), Planning Document ③ (Fig.4), Planning Document④ (Fig. 5), and Planning Document⑥ (Fig. 6) are entitled “Peace Memorial City Construction Plan” or “Peace City Construction Plan”.

The first Planning Document① was compiled in September, 1949 immediately after the enactment of the Hiroshima Peace Memorial City Construction Law in August, 1949. Table 2 shows the main contents of this plan. It is based on The City Planning Act, the Special City Planning Act and Peace Memorial Construction

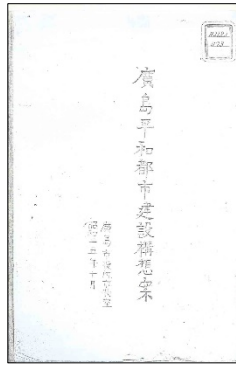


FIG. 3 COVER PAGE OF PLANNING DOCUMENT ①

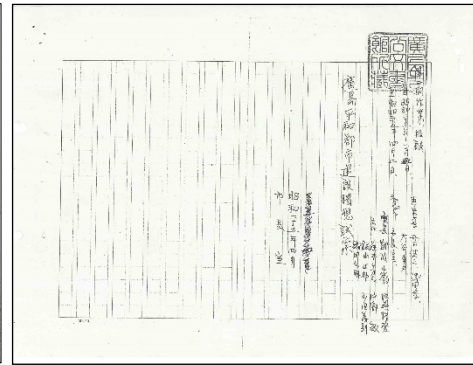


FIG. 4 COVER PAGE OF PLANNING DOCUMENT ③

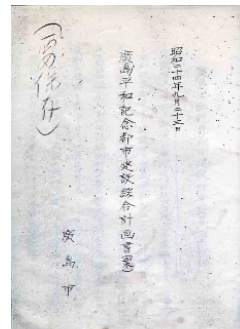


FIG. 5 COVER PAGE OF PLANNING DOCUMENT ④



FIG.6 COVER PAGE OF PLANNING DOCUMENT ⑥

TABLE 2 SUMMARY OF PLANNING DOCUMENT ①

Planning system, Ground of planning	Basic principle of planning	Main contents of planning	Remarks, and special remarkable characteristics
Necessity of Planning Document on the enactment of Hiroshima Peace Memorial Construction Law, especially in relation to Article 2	Planning Based on City Planning Act and Special City Planning Act, and especially planning of peace memorial facilities	① According to Article 1, “therefor, the plan of constructing ideal peace memorial city to answer public opinion of world human being and to contribute establishing eternal peace should be planned ② To construct Nakajima Park named Peace Memorial Park as Peace Memorial Facilities, 37000 Tsubo area in width ③ In the Park, to set up Peace Memorial Hall and Scientific memorial Hall, ④ To plan and evaluate 100-meter road as a peace memorial road which run through from east to west ⑤ To plan cultural facilities as international peace memorial city ⑥ Enterprise rough cost of total reconstruction city plan for war-damaged area estimate 2,790,000,000 yen and 1,960,000,000yen as Peace Memorial City Construction Cost in detail account, 16,000,000,000yen as peace memorial facilities ⑦ As financial plan, the project absolutely could not be realized under the regional financial project, then under national support and national land disposal this enterprise must be promoted based on Article 3 and 4 ⑧ Policy of preserving old Hiroshima Prefectural Industrial Promotion Hall so-called “Genbaku Dome” which was mentioned by Peace Memorial Facilities Plan	The very early stage plan in September, 1949 Short sentence as a whole in document Peace Memorial City Construction at this stage Concept of Preservation of Atomic Bombed Dome



Law all of which already employed the term Peace Memorial Facilities. The document contains the main elements of the later realization, such as the Peace Memorial Park, Peace Memorial Hall and Scientific Memorial Hall. More remarkably, the 100-meter-wide road was renamed Peace Memorial Road. It is very remarkable that the idea of the preserving the ruin of the Hiroshima Memorial Hall (the A-Bomb dome) was expressed. It also includes concrete thoughts about the necessarily national funding for the project. It is not clear how important the participation of Tange was at this stage.

TABLE 3 SUMMARY OF PETION FOR RECONSTRUCTION UNDER NATIONAL GOVERNMENTAL MANEGEMENT

Process of preparing the petition	Main contents of the Petition and Petition Paper	Remarkable Characteristics
Original petition for reconstruction of under government management in December, 1948 Then, the petition was collected in February, 1949, but this was not presented	<p>① In preface, it was described that Hiroshima War Damage has a historical meaning of warning toward all people, but that to construct memorial city for international peace means nearly impossible for regional condition.</p> <p>② Those are reason, "International historical meaning of the Hiroshima war damage", "Public opinion from world human being", "construction of a model modern city", "construction of tourist city Hiroshima and national-wide economy meaning", "the foundational enterprise and national meaning", "require urgent completion", and "fiscal measures." And so on.</p> <p>③ I hang up a peace commemoration institution and also concrete urban facilities, and suppose that I will prepare international cultural facilities, such as peace memorial halls (a large meeting ground, an atomic bomb data petition room, a peace tower, etc.), a fine-arts Palazzo, an athenaeum, and a scientific inquiry organization, Peace Memorial Park and into it.</p>	<p>① The expression of "public opinion of world human being" is prominent</p> <p>② The direct expression "peace memorial city construction" was not appeared</p> <p>③ The demand of Peace memorial city facilities was not placed in front of basic enterprise, but was involved among them.</p> <p>④ Especially already basic information for competition of Peace Memorial Park was hidden, and at that time it was ready for competition to comes true</p>

By the way, as to whether Planning Document① was original or not, the contents of Planning Document① is very similar to "Petition for Reconstruction under National Governmental Management" as **Table 3** shows. In this Petition Document, we can find out the name of Peace Memorial Park and Peace Memorial Hall as Peace Memorial Facilities. That is to say, the source of Peace City Construction Planning was petition for Reconstruction under National Government Management.

Although Planning Document② is almost the same with Planning Document① for appearances, there are small differences between both in their contents, as **Table 4** shows. That is to say, the biggest basic difference is the changing of the framework of planning term to five years plan. The reason of this changing is under the national government request, and as the one more reason, the total planning budget become remarkably large sum without 5 year limited term plan.

TABLE4 SUMMARY OF DIFERENCE BETWEEN PLANNING DOCUMENT① AND PLANNING DOCUMENT②

Difference panning Document ① and Planning Document ②	The Meaning and the influence
1. In Planning document ② Peace Memorial Park 257,000-Tsubo in area together Nakajima Park and Central Park is an enterprise which symbolizes to be peace city Hiroshima, it was necessary to set up here the peace memorial hall, the cenotaph, the athletic-sports field, etc. namely, Peace Memorial Park should be magnified here and contribute to global peace.	1. Tange's Hiroshima proposal was linked to the enlarging zone which is expanded from Peace Memorial Park and includes Central Park. Especially, the object of planning drawing together with Tange was Peace Park expanded area.
2. In Planning Document ① plan was the peace memorial hall and the scientific memorial hall, but in Planning Document ②, plan was the international conference hall and the atomic bomb museum, and scientific survey laboratory room, etc. in a peace memorial hall. As a monument the large arch and memorial tower to hang the bell of peace", and namely, the name of facilities were expanded.	2. The implementation design for execution of competition advanced, in Planning Document ② Peace Memorial Pavilion and scientific memorial hall was not suitable, and the name of facilities changed to International Conference Hall, Atomic Exhibition Museum, Scientific Survey Laboratory, Memorial Cenotaph,
3. In planning Document ②, a new item among the text appeared such as incidental facilities the old prefectural industrial promotion hall to be preserved.	3. Preservation of old Prefectural Industrial Promotion Hall was changed to gradually bigger theme.
4. Therefore, in Planning Document ② as the basic urgent enterprise the total amount was limited within 5 years length plan, then as the recovery program table, total cost of the proposal enterprise was summed up 5100billion yen.	4. As the fiscal plan, the cost of Peace Memorial facilities summed up to 710billion and a part of enterprise for five years will be taken into as a national budget.



TABLE 5 SUMMARY OF PLANNING DOCUMENT③

Planning System Planning Grounds	Basic Principle of Planning	Main contents of Planning(extract)	Note, special Outstanding Characteristics
Planning Organization is Mayor's room. First period of Planning work is from 1 November 1949 to 4 March 1950, and working stuff are Kenzo Tange and Takashi Asada as Tokyo University members, and Oda as an assistant engineer and Fujimoto as a director, The basis of a proposal is the same as the planning document①	The same principle as planning document①, with the unique intention	①writing clearly Article1 of Peace Memorial City Law, and running with poet of Edmond Branden(pp.1-2) ②on the preface writing both Peace Nation Construction of Declaration of Constitution and Article1 of Peace Memorial City Construction Law(pp.3-4) ③to Construct Hiroshima Peace City is the public opinion and the hope of the world people (p.6) ④on the Chapter1 adopting "Hiroshima as Peace City", describing "the idea of Peace City", "the aim of Peace and Construction", "the Reason for constructing Hiroshima as Peace City", and "the Subject of Peace City Construction"(pp.10-34) ⑤ concretely speaking, describing problem of civilization and peace with "to release atomic power", specifically discussing "How Hiroshima should be"(pp.10-18) ⑥as the reason why construct Hiroshima as Peace City, there are four reasons, one is the world historical reason and lesson, one is world public opinion that make Hiroshima the peace center in the world, one is that Hiroshima is the symbol of new Japan, and one is Hiroshima has Geographical conditions which Hiroshima can be built as new city ⑦there is a long preface sentence, before going into the contents of the main text(pp.16-31) the words and phrases of .(pp.1-31) ⑧ with word mixing English, introducing foreign examples, there is some characteristics ⑨as Peace Pavilion facilities, concretely indicates Peace Pavilion itself, Peace Arch, Cenotaph temple, Peace Square and Atomic Bombed Remains(pp.35-41) ⑩concretely speaking Peace pavilion Facilities are P3eace Pavilion itself, Peace Arch, memorial cenotaph, Peace Square and Atomic Bombed Remains ⑪by calling 100-meter road peace Peace Boulevard, the extents of Peace City Construction Plan and Peace Facilities is spread	Expression of "to release nuclear power" is outstanding Many oversea conceptions such as the poetry of the Edmund Branden and President Truman declaration, General MacArthur's message, introduction of the global peace day committee, proposal by Tamm Dealing and so on are quoted Necessity of facility is explained from the name of facility but from function or role of facility Total volume of planning document become to remarkably large size

The "Hiroshima Peace Memorial Construction General Plan"①, "Hiroshima Peace City Construction Proposal"② or the same tentative proposal till . Kenzo Tange who is an architect, and the member of the group were involved. However, the subject called the influence or effect not being necessarily clear was also left behind. Then, how Tange had participated to city planning or what was the role of Tange are the question to solve.

4. Tange's Participation

Thus, from Planning Document① and ②, the stage changed to the following Planning Document③,④), and⑤. As shown Planning Document③ in Table 5, the big conversion will be made here .

Planning Document③ of "Peace City Construction Plan" is B4-size(legal-size) in report size, 199 pages in report volume, and compiled by Mayor Room, as 1949 editions. This document was not printed in typing, but in handwriting. As Fig. 7 shows, planning period had been written down on the cover page, that is "from November 1, Showa 24(1949) to February 4, Showa 25(1950)", namely that is the first working term, and planning stuff are "Ota assistant engineer, Kanayama assistant engineer, and Fujimoto director belonging to Mayor Room". At the same time, the signature of "Kenzo Tange and Takashi Asada belonging to Tokyo University" has been written down on the upper part of the cover page (Fig. 8). Perhaps this signature was handwritten by own handwriting.

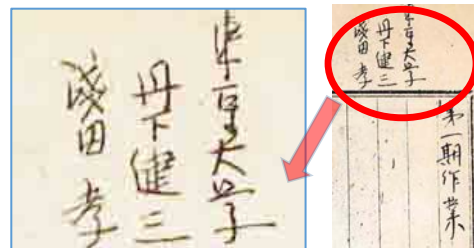


FIG.8 SIGNATURE OF KENZO TANGE AND TAKASHI ASADA

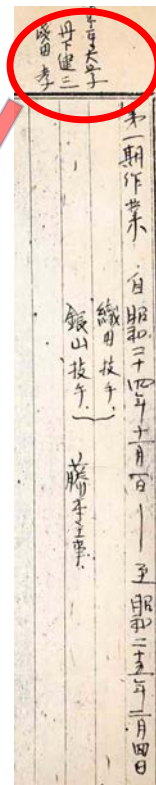


FIG. 7 A PART OF COVER PAGE OF PLANNING DOCUMENT ④



By the way, Tange sent several times his letter to Hiroshima Mayor Office Room, namely to Mayor Hamai and for example, by the letter dated on December 1, 1949, he wrote their schedule of working for plan-making from December 2. The member of working staff are Fujimoto, Oda and Kanayama. They were working at Tange's House and later their name by themselves on cover page of Planning Document above mentioned.

Then, what is the result of planning by Tange participation?

Table 6 Difference between Planning Document③ and Planning Document④

Difference between Planning Document③ and Planning Document④	The Meaning and the Influence
1. Hiroshima Peace City Construction Proposal③ express clearly the period April 1951(Syouwa26) and planning body mayor office	1. There is enough effort to settle the format.
2 On the Cover page, working and polishing is the second term, and the period is "from February 5, 1950(Syowa25) to April 2, 1950(Syowa25), and the planners are Kenzo Tange, Takashi Asada and Sachio Asada", "mayor Office Boss Iwao Nanba, Katutoshi Kato, director Chimata Fujimoto, Toshi Nakano, Kyosuke Kanayama, Yoshinori Yamada Yoshinori and Kimiaki Oda".	2. It was supposed that mayor office system must be settled down.
3. As the name of Mayor Office Boss Iwao Nanba, in the title page there ia "Declining" which reports midterm presentation".	3. At the result, there is enough system in the mayor office
4. On the middle cover page, there is 1949 ^{er} version and 1950 ^{er} version, then that is not complete revision.	4. It shows now shifting version process.
5. In the Planning Document③, many points are eliminated and revised by correct line, then, it remains the state of rough draft, but planning documents④ was made a fair copy as the united whole.	5. Now planning document has been settled down fomally,
6. In October, 1945, the speech in English of President Truman was quoted.	6. The intention to quote the long sentence was not clear.
7. Among the second half of contents after Chapter3, many are corrected or erased, are not always enough polished.	7. A fair copy had completed halfway, the latter half was not incomplete.

The remarkable tendency of Planning Document③ expressed often the philosophical ideas and using the plenty of foreign languages and foreigner's statement, that is, in the Tange's own way. Another characteristics are to adapt land use planning method which Tange Group had accumulated and to quote space image from his competition result. Those characteristics are remarkable difference from Planning Document① and Planning Document②. For example, Planning Document③ many time expressed "liberation of nuclear" (release atomic energy), as meaning of "the idea of a Peace city". Under this expression, victory of human wisdom, public opinion and hope (trust) of world humankind was connected with Peace City Construction of Hiroshima. General MacArthur's message was succeeded to the petition of Reconstruction National Enterprise. On the whole, hope of world humankind was succeeded, at the same time, new thinking and working was piled up. Moreover, new ideas were proposed such as Peace Boulevard, bridges, Peace memorial plantation, in addition to Peace Hall and Peace Park as Peace Facilities. Not only cultural facilities (an athenaeum, a science museum, an art museum, an open-air theater, a scientific facility) but recreation facilities (facilities for courtesies rest, comfort and joy, health, health, and just like athletic exercise) have also included them. Namely, by Tange Group many facilities were proposed to add under the new budge system. That is Planning Document③.

One more large difference is Park Planning. Both Nakajima Park and Central Park(Chuo-Kouen) were big park category, then, new Park Planning is Central Park(Chuo Kouen) only as big park, and another Nakajima Park was changed to Memorial Facilities category. It was not clear whether this idea was proposed under the suggestion from Tange group or from Mayor Room Staff itself. That framework was settled down at the stage of October6, 1949, then, Park Planning System was decided by Mayor Room Staff itself. Under the Park Planning System and the Memorial Facilities System, later, Tange had presented his drawings to CIAM that had held on London. Next step is from the following Planning Document③ to Planning Document④, as shown in **Table 6**, that is, the big conversion will be made here.

Acording to the letter written by Tange, "Mayor Staff were coming up to Tokyo to work planning" was reported. The working place was Tange's own house, too. The first working term work was done on December, 1949 and second working term was from February 4 to April in 1950. Then, Planning Document ③ was compiled on 1949 fiscal year and Planning Document④ was sumarized on next 1950 fiscal year.



Planning Staff are Kenzo Tange, Takashi Asada, and Sachio Otani belonging to Tokyo University, and Iwao Nanba, Kastuto Kato, Chimata Fujimoto, Toshi Nakano, Kyosuke Kanayama, Yoshinori Yamada and Kimiaki Oda belonging to Hiroshima Mayor Room. From first planning term, planning organization changed remarkably systematically (Fig.9).

Here, Tange's and Asada's signature was supposed to be written by own letter, as Fig.10 shows. Tange himself had related to Planning Document③ and wrote the report of planning, and Asada and Otani assisted Tange. Of course, city stuffs supported Tange group, as a beautifier or a rewriting performer. Although Planning Document④ was not remarkably different from Planning Document③, but there are basic differences from mutual. The Planning Document③ has remained incorrect part which must be rewritten, but Planning Document④ has been already corrected, namely a revised version. As for the main differences between Planning Document③ and Planning Document④, there is President Truman's declaration which is quoted in Document④, as it is in English.

Planning Document⑤ was planned later, and the word of "tentative" faded out, then the title of plan change to "Peace City Construction Plan". The content of this plan is not so much different from Planning Document③ or ④.

As for Planning Document⑥, main problem was succeeded from "Hiroshima as Peace city" and "the central subject of Peace City Construction Program" which was settled down on Planning Document ③ and ④. Peace facilities, with its function and area scale were succeeded from document ③,④. This Planning Document⑥ calls together Nakajima Park and Central Park Peace

Park, one hundred meter road Peace Boulevard, and established the conception of Peace Arch designed by Tange. However, English word presentation used in Planning Document③ and ④ is deleted in Planning Document⑥, namely Tange style disappear and on the contrary apply the administrative official presentation.

5. Conclusion—The Meaning and the Role of Tange’s Participation

Hiroshima Peace Memorial City Construction Plan" was formally authorized on March 31, 1952. The procedure demanded about three years after the legislation of "Peace Memorial City Construction Law" in 1949, and the plan was summarized, in this process, Hiroshima Peace Memorial City Construction Law and Tange’s Participation was chronology as Table7 show.

On the stage of Planning Document① and ②, we cannot specify to Tange's participation to Hiroshima Peace City Plan. As that period was too immediately after Peace Memorial Park Competition, it was supposed that Tange’s participation was not completed. In the view of the contents of Planning Document①,②, we cannot confirm Tange’s presentation technic such as English key words or famous expression. While, on the cover

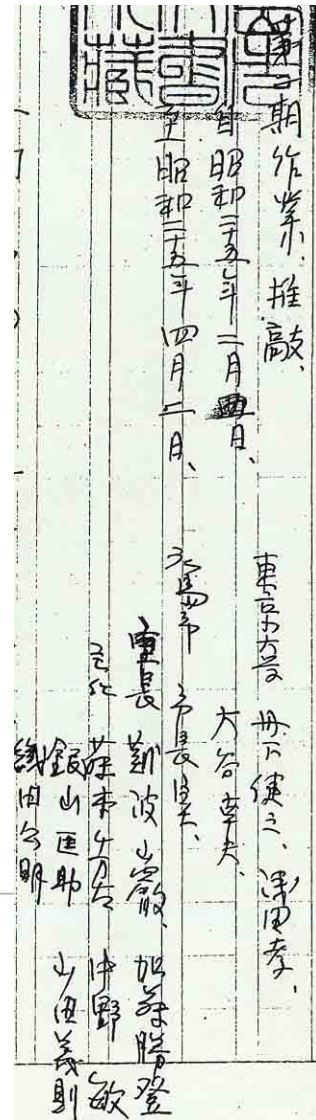


FIG.9 A PART OF COVER PAGE OF PLANNING DOCUMENT④



FIG.10 SIGNATURE ON THE PLANNING DOCUMENT④



page of Planning Document, as the first planning term the signature of Kenzo Tange and Takashi Asada were recorded, and as the second planning term the signature of Yukio Otani's was added. On the other hand, depending on the different Tange letter, planning works at Tange's residence at that time was confirmed.

Then, what is the meaning of Tange participation to planning works?

When the some unique keywords appears in planning Document③,④, moreover main tendencies of planning appears as **Table8**, shows, many characteristics are pointed out. At first, in Document participated by Tange, many English words were used in planning document. Moreover unique expression such as "nuclear release" and "victory of human wisdom" often appeared in the city planning field. President Truman's message, General MacArthur's message, etc. was quoted, that is, with unusually governmental expression. Those expression was looked over ordinary in the architectural field, but in the field of city planning those sophisticated expression is in the seldom case.

Moreover, the logic built by Tange as "Hiroshima as Peace city" is not a simple expression, but a rhetoric one. Quoting foreign language and foreign affairs shows a tendency of high blow, and they are personal expression, not social and public expression.

TABLE 7 HIROSHIMA PEACE MEMORIAL CONSTRUCTION LAW AND TIME TABLE ON TANGE'S PARTICIPATION TO PLANNING

Period Y.M.D	Participation	Mayor Office Participation	National Participation
1949. 8. 6	TangeG Proposal won	Announcement of Hiroshima Peace Memorial Park Competition	Proclamation of Hiroshima Peace Memorial City Construction Act
1949. 9. 23		Hiroshima Peace Memorial City Construction General Plan	
1949. 10. 3		Hiroshima Peace Memorial City Construction Enterprise Plan	
1949. 11. 1	Kenzo Tange, Takashi Asada	Hiroshima Peace City Construction Proposal First Term Working Mayor Office Oda Engineer, Kanayama Engineer, Fujimoto director	
~ 1950. 2. 4			
1950. 2. 5	KenzoTange, Takashi Asada	Hiroshima Peace City Construction Proposal Second Term Working&Polishing, Mayor Office Boss Nanba, Fujimoto Kanayama Oda, Fujimoto Kato and Yamada	
~ 1950. 4. 2	,Sachio Otani		
1950. 4. 2		Hiroshima Peace City Ploposal Iwao Nanba(Midterm Presentation)	
1950. 10		Hiroshima Peace CityConstruction Proposal Iwao Nanba	
1962. 3. 29		Fomal Hiroshima Peace Memorial City Construction Plan through Fortyth City Planning Hiroshima Regional Committee	
1952. 6. 5			Notice of Hiroshima Peace Memorial City ConstructionPlan

TABLE 8 KEYWORDS AND PLANNING TENDENCY OF PLANNING DOCUMENT③ AND PLANNING DOCUMENT④

Planning Document	Planning Document③	Planning Document④, especially difference from Document③
Keywords used in the Document	release atomic energy, victory of human wisdom, President Truman, World Peace Day, Tam Dering, Daniel Burnham, atomic period, peace pavilion, beautiful trace of old building, peace green way, boulevard, no hinged arch, two hinged arch, symbol of Japan rebirth, peace memorial nursery, child cultural center, Ujina Area sea-side park, Japanese-American pavilion, general subject of peace city construction, special district for public office, special district for education, building of Community, Atomic Bomb Statement by President	Basically the same of right advert, English keywords remarkably attached to Japanese keywords
Remarkable Planning Tendency	following land use Plan planned by as a part time planner of Reconstruction Authority of war-damage, especially idea following to special district for public office, special district for education, idea of rebuilding of community proposed by Gropius, aware of importance of Airport site, explanation of necessity of peace delegation, introduction of characteristic examples of oversea permanent bridge, to reclaim sea shore land about area 36.36ha then to establish there sea-shore park area	a quotation of Truman's president message just as a long sentence, a quotation of MacArthur Japanese message, as it is, at Hiroshima Peace Memorial Ceremony, detail description of international movement for World Peace day, maintaining the plan of peace arch



In the early years after the Second World War, many Japanese war damaged cities began to plan for reconstruction. In those days, civil engineering focused on reforming infrastructure facilities. Such plans were not geared to aesthetics, but rather focused on widening roads and creating parks through land readjustment enterprise. Those all representation were not by Tange and Asada, but if without participation of Tange and Asada, those expression came to the formal of planning document by no means. Subsequently, although the planning document ④ of a "Peace Memorial Hiroshima City Construction Law Tentative Plan" are not the planning document③ and a differentness thing fundamentally, since differences among some are found, I will observe only there (Table 6). The planning document④ was summarized with in April, 1950. If the plan by which the name of planning time and the charge ? was written in the cover also here remains and the portion is clipped, I have become as it is shown in Fig. 6. namely, -- being referred to as "from-February 5, Showa 25 to April 2, Showa 25" as the second term work and polish as shown in Fig. 7 -- as a name -- "University of Tokyo Kenzo Tange, Takashi Asada, and Sachio Otani Hiroshima mayor staff room? Iwao Nanba, Katsuto Kato, and chief Chimata Fujimoto, Nakano, and Kyusuke Kanayama I am indicated as Yoshinori Yamada and Kimiaki Oda." It turns out that Yukio Otani joined in the University of Tokyo when saying from the previous plan③, and the below section head staff increased in number also at the burgomaster room. I can respond now systematically.

On November 1, 1949 or on February 4, 1950, Hiroshima Peace City Construction Plan were published. Kenzo Tange and Takashi Asada, engineer Ota, engineer Kanayama, and director Fujimoto were working together. In April 2, 1950, Kenzo Tange, Takashi Asada, Yukio Otani, Iwao Namba, Chimata Fujimoto, Kyosuke Kanayama, Kimiaki Oda, Katsuto Kato, Toshi Nakano, and Yoshinori Yamada were working together October, 1950, Hiroshima Peace City Construction Proposal was edited. Then on March 29, 1952, city planning council committee decided regally Hiroshima Peace Memorial City Construction Program Determination.

In the planning document① and the planning document② were compiled soon after the competition. Then, Tange's participation was hard. And in the planning document③ and ④, planning term was recorded as the 1st work term and the 2nd work term, and the name of Kenzo Tange, Takashi Asada, and Yukio Otani name were also added behind. Tange and Asada were signed.

However, Tange's Participation was estimated that by using the keyword of "Peace" Tange intend to realize many plans for peace enterprise. After enacting Hiroshima Peace Memorial City Construction Law, the range, which the benefit of this law extend to, attains to the maximum level, If the word of "Peace" were used in Peace Memorial Construction Plan, the construction enterprise, was supposed, would be built by a high grant rate. Tange did not always accommodate to that condition, but to same extent he would like to utilize the condition without persuading the other war-damaged cities by proposing new planning idea.

As mentioned above, many proposals from Peace Memorial City Construction Plan to Peace City Construction Plan are set up, and finally Peace City Construction Plan authorized legally. Perhaps, Tange's did not prefer the ward of "Memorial". He understood memorial as the meaning of negative stance.

In this way, since Tange participated to land use plan decision as a part-time of War Reconstruction Authority after the war, he played an important role in Hiroshima Peace City Plan, not always winning the first prize of Peace Memorial Park Competition, but also participating to Peace City Construction Plan. However in Japan administrative plan such as city panning is planned by civil engineers not but architects planner. Especially reconstruction planning was planned for land readjustment mainly. In those days city plan was not comprehensive, and especially lack the point of view architectural of landscaping urban space. As a result, many planning ideas proposed by Tange were not ignored or carried out.

Tange's participation to Hiroshima on the whole, as shown in **Fig9**, will can be evaluated from various points of view-point, participation to Peace City Construction Plan was powerful support to the reconstruction of



Hiroshima, and especially the construction of Peace Memorial Hall and Peace Memorial Park became profitable. If Peace Memorial Park had been constructed independently, reconstruction itself extremely insufficient, supposed. Furthermore, quite a long later, the experience by some architect in Hiroshima played the role of suggestion to city planning of a Japan. Then, we must say that Tange's Participation was never meaningless.

If Tange's participation is twined around popular evaluation, many of contents of a proposal can be entitled the term "peace", and I can say that I tried to aim at realization. After peace city method enactment, I expanded the range which this law

attains to, and the tendency for "peace" to be entitled became strong noting that the method of a receptacle and many proposals were related to peace city construction in a subsidy and national property onerous payment legislation -- a law -- immediately after, when peace was entitled even by the road, I thought that I was built by a high grant rate. Although the Tange side was not necessarily flattered at it, I have not resulted till the place which shows a proposal idea so that other war devastation cities may be convinced.

As mentioned above, many planning ideas for the peace city construction after enacting Peace Memorial City Construction Law are set up, and among them, it was important that peace memorial city construction program had prepared for the legal authorized one, and that as the result Tange's participation had played the fundamental role.

In this way, since Tange participated in land use planning of Hiroshima as a part-time planner of Reconstruction Authority for War Damaged Area early after the war, he took part in the Hiroshima Reconstruction Council Committee, and had entried into and won the Peace Memorial Park Competition, and moreover has finished the positive role for Peace City Construction Plan. Especially, participation into Peace City Construction Plan resulted in powerful support at the reconstructing process of Hiroshima, and also the construction of Peace Memorial Museum or Peace Memorial Hall supported mutually.

However, how Tange's participation had given authority or power was not clear. That is, Tange's contribution to Peace City Construction Plan was not formal or official. Historically, Tange's contribution was not always evaluated

Of course, I proposed here Tange's works and the effect, but it is very difficult to estimate the power relationship which moved real history of city formation (Fig. 11). However the fact that Architect Tange had

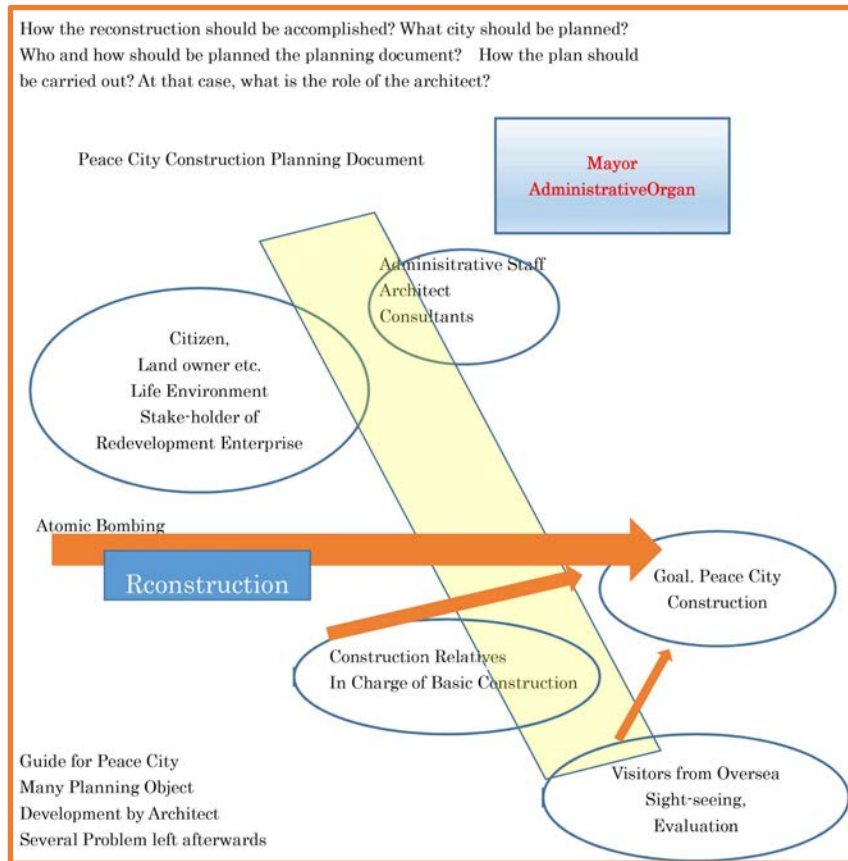


FIG.9 TANGE'S PARTICIPATION TO PEACE CITY CONSTRUCTION PLAN



The 18th International Planning History Society Conference - Yokohama, July 2018

participated Hiroshima Peace City Construction Plan was extremely important experience for post-war reconstruction planning in Japan.

In the early years after the Second World War, many Japanese war damaged cities began to plan for reconstruction. In those days, civil engineering focused on reforming infrastructure facilities. Such plans were not geared to aesthetics, but rather focused on widening roads and creating parks through land readjustment enterprise.

In the field of an architectural design, the books for promoting construction of a building centering on the plan are drawn up. The competition is materialized by using the figure of a building as a plat, and expressing and competing for it in the very most conspicuous form for collecting into books behind. On the other hand in city planning, the plan which I write in to a proposal idea, the various contents of a proposal, or an assumption budget centering on idea drawings, such as a road as what specifies city construction, and a park, and which was expressed variously is drawn up. This production of a plan is an act called planning, is a result of the business of people in connection with a proposal, and is a result.

Bibliography

- 1) Architectural Institute of Japan "Journal of Architecture and Building Science" (Merged Number of October and November, 1949)
- 2) The City of Hiroshima "Pictorial History of Forty Years since Atomic Bombing" (The City of Hiroshima, published in 1985)
- 3) The City of Hiroshima "New History of Hiroshima/Volume of Urban Culture" (The City of Hiroshima, published in 1983)
- 4) "Hiroshima Peace Memorial City Construction Plan" was admitted in March, 1972
- 5) Noriaki ISHIMARU et.al : Learning from Hiroshima's Reconstruction Experience-Reborn from the Ashes (Hiroshima for Global Peace Plan Joint Project Executive Committee (Hiroshima Prefecture and The City of Hiroshima), 2015)
- 6) "CIAM8" was held in the London suburbs (Hojjiston) in June, 1951.

Referencing

Hiroshima Municipal compiled "New History of Hiroshima/Volume of Urban Culture" (published in 1983)
Study Group of Researching Urban Life Hiroshima compiled "40 Years History after Hiroshima Bombing/Reconstruction of City" (published in 1985)
Hiroshima for Global Peace Plan joint Project Executive Committee edited "Hiroshima's Path to Reconstruction" (published in 2015)



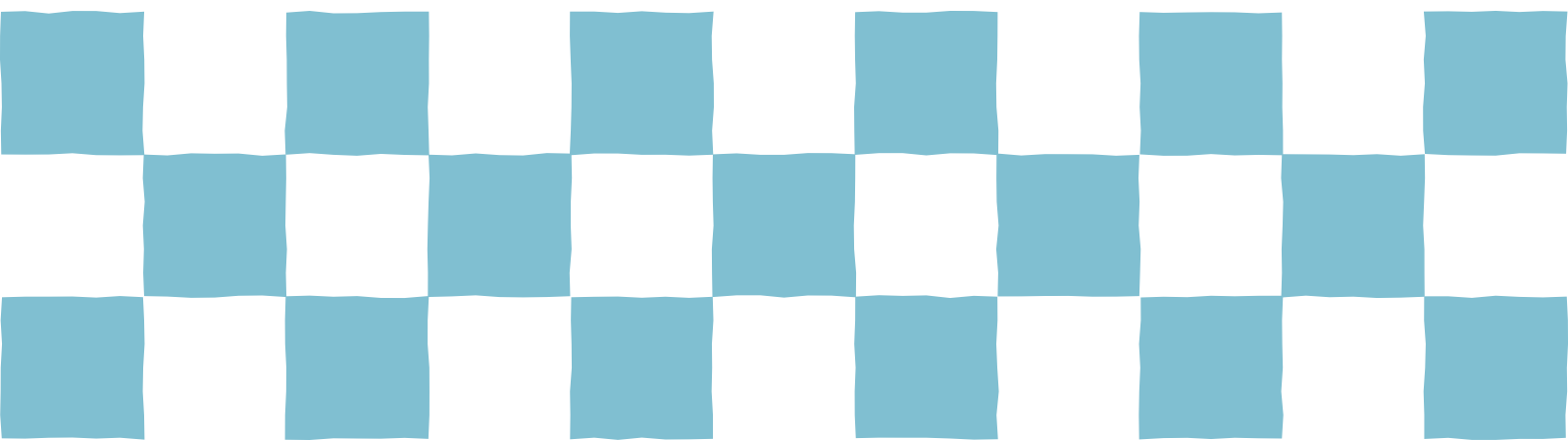
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

22 Comparison of Urban Form Between Asian Cities



A Comparative Study on the Construction Mechanism of Urban Public Space in Modern Shanghai and Yokohama

Wang Yan (Tongji university), Zhou Xiangpin (Tongji university) and Zhou Teng (Tongji University)

In the 19th century, with the development of foreign trades, Shanghai and Yokohama opened to the world, became the window and bridge to introduce the European and American culture to China and Japan. Different from traditional Chinese and Japanese cities, Shanghai and Yokohama had been influenced and Intervened by the western urban planning Thoughts and practices, and then built in a very short period of time. Modern Shanghai and Yokohama both are important gateway in East Asia, the geographical environment, historical background of colonialism, the reorganization of the political system and so on are similar, so the two cities have showed some similarities in modern development and evolution . But different management systems, conceptual cognitions and political systems have also led to differences in city construction. Based on the view of public space, this paper compares the material space of modern Shanghai and Yokohama in urban form, architecture scene and park space, and tries to analyse the similarities and differences of the management system, concept cognition and political system behind public space.

Wall and Floor oriented Areal Spatial Conception and the Formation of Supergrid and Superblock Structure in Chinese and Japanese Planning

Xiaofei Chen (The University of Sydney)

The Supergrid and Superblock form is one of the most important planning structures that should be recognized in the history of East Asian planning culture. Together, they constitute a grid-and-cell urban structure that is especially evident in China and Japan, where its origins are ancient. The Supergrid is a large-scale network of wide roads that defines a series of cells or Superblocks, each containing a network of narrower streets. Despite having different names and forms in various periods of time, this structure is not well understood and mostly taken for granted in the planning of modern cities in that region without realizing its inseparable relationship to culture. My paper explores the similarities and differences of Chinese and Japanese spatial conceptions and how they influence the formation of Superblock structures in the two countries. It will first examine the visualization and expression of space: in the ideogram, calligraphy and painting, and how a similar spatial conception is further expressed and physicalized in the creation of architecture, city design, and planning in the two countries. Adapting from Ashihara' s conceptual framework of architectural space in China and Japan, related respectively to wall and floor, the second section of the study explores how various cultural predispositions influence the formation of the morphology of Superblocks and how these structures in the two countries are transformed through history. This study concludes that the Supergrid and Superblock phenomenon is rooted deeply in Eastern spatial practice and culture. It is formed under the influence of the same Eastern Areal (lateral) thinking that underpins a multidimensional spatial conception, which is common to both countries. However, different spatial demarcations that are oriented towards the 'wall' (China) and 'floor' (Japan) lead to divergent Superblock forms in the two countries. This Areal thinking appears to be the counterpart of the Western linear thinking and reflects a different inclination in spatial thinking that is strongly determinant to the formation of different types of Superblock in the modern Eastern and Western cities. This paper emphasizes the importance and persistent of culture in the formation of urban structure and how culture should feature more prominently in shaping our understanding of urban structure.

Comparative study of planning history, spatial development and sociological significance of the back alley in Yangon and Singapore

Tomoko Matsushita (The University of Tokyo), Kimiro Meguro (The University of Tokyo) and Aya Kubota (The University of Tokyo)

In the center of Yangon, Myanmar, there is a long-neglected space, even considered an eye-sore that people literally tried to hide called Back Drainage Space (BDS); long, narrow alleys typically 5m by 250m, running north-south behind city blocks in the Central Business District. This research attempts to recognize the significance and potential of the BDS as a heritage and public space, and the important future potential role in urban renewal of Yangon. This is a comparison study that identifies links and commonalities between two harbor cities of former British colonies and indicates the historical and sociological significance of the BDS to provide insights and useful suggestions towards innovative and people-centered development of the city of Yangon.

Yangon's original plan was created by a surgeon named Dr. Montgomerie in 1852 who, considering the flood prone, low-lying nature of Rangoon, included the idea of BDS to provide a sanitary living environment with proper drainage, sewage system and ventilation. These thin strips of urban space were implemented and largely remain today, although mostly closed and underutilized. However, in recent rapid urban transformation since the country was democratized in 2012, the potential of BDS as valuable public space has slowly been recognized.

Although its background and current state differs from Yangon, there is a similar space called backlane in the city of Singapore. The city was planned 30 years earlier than Rangoon in 1822 by Raffles and Dr. Montgomerie was involved in the town planning then as a secretary to the Town Committee. Backlane was not included in the initial plan, and traditional shophouses were built back to back without alleys. After years of development, by the early 1900s with growing concern for worsening living conditions in the overcrowded central area, the idea of backlane was introduced as a slum clearance policy by a public health officer Dr. Simpson who proposed to cut the back of existing buildings to create open space to gain light, ventilation and also control over the residents. Unlike Yangon, most backlanes are lost today, however studies have revealed their past sociological significance; what the space was meant for and how it served the local community. Some contemporary projects revitalizing the backlanes can also provide useful insights and suggestions on how Yangon should deal with the BDS.

Yangon and Singapore have similarities as harbor cities colonized by the British after the Industrial Revolution in south-east Asia, but this study reveals other less-known commonalities, such as the importance of the idea of sanitation, creation of BDS or backlanes and their evolution as informal socializing space for the community. The study investigates further in an attempt to find out how the two cities may have influenced each other and what Yangon can learn from the path Singapore has taken towards people-centered development in the future.



A Comparative Study on the Construction Mechanism of Urban Public Space in Modern Shanghai and Yokohama

Wang Yan*, Zhou Xiangpin**, Zhou Teng***

* PhD, Department of Landscape Architecture, Tongji University, 196388013@qq.com

** Assistant Professor, Department of Landscape Architecture, Tongji University, zhouxpmail@sina.com

*** Master Student, Department of Landscape Architecture, Tongji University, 649864429@qq.com

In the 19th century, after experienced the " open port " and " port opening ", Shanghai and Yokohama opened to the world, became the important ports for Europe and the United States in East Asia. In the view of different historical geography, background and management, Shanghai and Yokohama show different development processes and characteristics. On the basis of briefing the modern urban and social background of Shanghai and Yokohama, this paper analyses the similarities and differences from the aspects of urban forms, architecture scene, park space, based on these, try to conclude the reasons from the system policy, concept cognition, and the management feedback, supposes to place the studies in a broader perspective, understands the construction mechanism of the Modern East Asian cities.

Keywords: Modern, Yokohama, Shanghai, Urban Public Space

Introduction

The book *Amherst Tour 1832* is regarded to be the earliest western record of modern Shanghai. Maclellan (1899), Montalto (1909), Lanning and Couling (1921), Fredet and Jean (1929), Pott (1928), Miller (1937), Hauser (1940) and Murphey (1953) also explained the modern Shanghai in their own aspects. Since 1930, Chinese scholars began to study modern Shanghai, Yazi Liu wrote the *Shanghai History* and the *Shanghai History Series*, Zhenchang Tang wrote the *Shanghai History* in 1988. The *Shanghai Modern Urban Studies* edited by Zhongli Zhang, made a general exposition of the modern Shanghai. Later, the sociology, economics, political scholars started to focus on modern Shanghai. As to the modern Yokohama, *The Yokohama Guide* written by Griffis and William Elliot in 1874, introduced Yokohama to the world. At the beginning of 21st century, Japanese scholars started to study Yokohama, Yuzo Kato described the Yokohama's history in *The City of Yokohama: Past and Present*. In 1997, Chinese and Japanese scholars held a joint research. Based on these research, this paper compares the material space of modern Shanghai and Yokohama in urban form, architecture scene and park space, tries to analyse the similarities and differences of the management system, concept cognition and political system behind public space.

1. Modern Shanghai and Yokohama City Development

The rise of Shanghai is due to the port open. After the First Opium War, Shanghai "opened" as one of the five ports. *The Land Regulations* (1845) wrote, "the land that located in the north of Yangjingbang, south of Lijiachang to the British businessman, for the construction of buildings and residences¹". Later, the American and French also encroached on land. After several expansions, the Shanghai International Settlement reached to 33503 Mow, the French Concession extended to Zikawei (Figure 1). In 1927, Shanghai National Government set up, the Chinese government combined the Chinese and Western style into the new town planning -- *Great Shanghai Plan*. On the eve of the founding the People's Republic of China, the *Great Shanghai Metropolitan Plan I/II/III* showed the importance of concession area in the city construction.

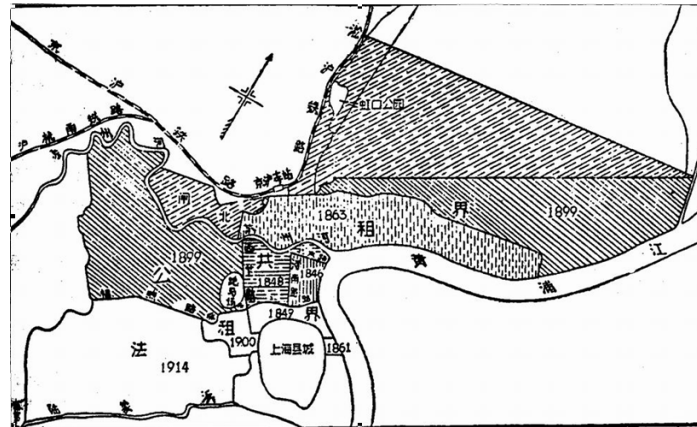


Fig.1 The Extended map of the Shanghai Concessions

If the “opening” transformed Shanghai from a general town that located in the empire’s border into a world-class metropolis, the Yokohama’s “opening” meant “the emerge of the city”. “Yokohama was a semi farm and fishing village. The hōgunate intended to catch up with the date of Port-Opening and stepped up the construction of the city²⁾”. In 1858, The *Treaty of Peace and Amity* stipulated the opening of the five ports. However, the Tokugawa shogunate decided that port facilities should be built in Yokohama instead. And the "customs house" was rented to the foreigners. In the early Meiji period, Yokohama developed into a prosperity modern city. In 1889, Yokohama built the city, and mainly around the port area of Kannai, Yamate and Yamashita (Figure 2). Subsequent decades, the Kanto Earthquake and US Air Raids slowed the pace of urban expansion.

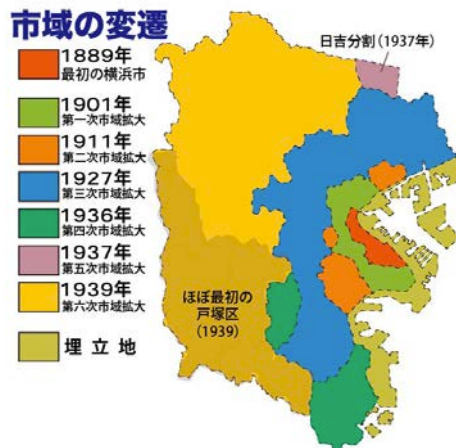


Fig.2 The Extended map of Yokohama

2. Comparison of Urban Public Space between Modern Shanghai and Yokohama

2.1 Urban Form

The concessions were the core of modern Shanghai. The construction of urban spaces was carried out around the shipping trade. The foreigners cared more about the timeliness and Functional, resulted in the collapsible layout in early concessions. From the 1960s, “building roads cross the border” was an important way for the expansion, land use continued to divide and sectorization go apparent. The International Settlement spared. The French Concession extended to zikawei. In the 1920s, the *Great Shanghai Plan*, which absorbed modern Western planning theory, used a radial and circular stitching pattern, showing a completely different urban form from the traditional Chinese town form. The impact of the *Great Shanghai Plan* on urban form had been lasting until the 1940s and even became a paradigm for the Japanese *Shanghai Metropolitan Plan* during the “Island Period”.

In order to build Yokohama into a port city, the shogunate built port facilities like roads, bridges, ports and other instalments, the Yamashita foreigner residential districts become similar to the Tokugawa town. In the early days of opening, Yokohama was bounded by the “customs house,” and the west was given to the foreigners, the east was the Yokohama village, both sides were in similar forms. The Shogunate developed a variety of land preferential policies to attract the Japanese to develop Yokohama, Kannai quickly became the Business centre. In



1889, Yokohama became a real city, the port area became the original form of Yokohama city. Later, Yokohama city expanded to 400 square kilometers.

2.2 Architecture Scene

In the early opening times, the couch-style that came from Europe to the Southeast Asia became the main style in Shanghai. At the beginning of 1860s, the foreigners began to hire some skilled architects for designing, and imported materials from overseas. The Bund was “full of gorgeous buildings”, Some of the buildings were imitated Greek temples, and some were imitation of the royal palace of Italy. In the 1920s, Chinese architects began to explore the modern architectural design in Shanghai. Although the Chinese architects mastered the western modern architecture technology and skills gradually, the design style was still subjected to conservative traditional ideology. For example, Dong Dayou used the traditional Chinese roof on the top of a Western-style building, try to build a symbol of government authority and stability (Figure 3). In the 1940s, the American modern style became the mainstream style.



Fig.3 Bird's-Eye view of the cluster along the Bund in 1930



Fig.4 National Shanghai Municipal Government Building

At the beginning, Yokohama was built in a traditional Edo style. After the opening, buildings began to appear strong western style, especially in the Yamate and Yamashita settlements, buildings were designed by foreign architects, “Renaissance”, “Gothic”, “Baroque” and other styles appeared Simultaneously. Yokohama became the source of westernization in Japan. After the Meiji Restoration (1868), the open social environment created a background for architectural development. “Imitate the western style” was prevailed in the Japanese folk³. At the end of the 19th century, the modernist architecture emerged. The native Japanese designers mastered the orthodox form of western architecture, and soon there emerged a large number of architects, such as Yamaguchi Hanroku, Tsumaki Yorinaka and so on⁴. In 1904, the Yokohama Specie Bank Ltd designed by Tsumaki Yorinaka was built in Yokohama, the building was New-Baroque style (Figure 4). Yokohama gradually became a laboratory of the modern style.



Fig.5 Yokohama Bund in front of the Grand Hotel



Fig.6 Yokohama Specie Bank Ltd

2.3 Park Space

In the 1860s, on the ground of “the public welfare”, the British Consuls set up the first park--Public Park (1868). The western modern concept of entertainment, park style and management system were introduced to China, and stimulate the transform of traditional gardens. In the late 19th century, parks extended other concession areas. The park types varied, there were community park (Quinsan Square, 1898; Wayside Park, 1911), athletic park (Public Recreation Ground, 1898, Hongkew Recreation Ground, 1909), recreation park (Jessifield Park, 1914), children's park (Tifeng Road Children's Playground, 1917, Nanyang Road Children's Playground, 1922) and many other types. The French Concession also began to build parks with the meaning of “Decorating the City” , such as Koukaza Park (1909), Verdun Park (1917) and Petain Park (1926). With the influence of the concession parks, Chinese began to make park a part in the town planning. The Chinese community set up the Military Road Memorial Park (1919), Xuehua Park (1928) and so on. The *Great Shanghai Plan* also included the park plan -- The First Park (1932).

In 1866, the foreign ministers signed the *Yokohama Settlement Renovation and Racecourse Cemetery Contract* with shogunate, and put forward the requirements of the construction of park. Until 1869 when the Japanese government gave the foreigners about 6,000 pyeong of land to build park, named Public Park (Yamate Park). In 1876, the foreigners established the “This Side and That Side Park (Yokohama Park). With the influence of the settlement park, the local private businessmen began to build commercial park, for example the sanenkaiken park. At the beginning of the 20th century, the types of Yokohama modern parks varied, including the Memorial Park - Kamonyama Park (1914) and the Children's Playground -Yokohama Children's Playground (1929). After the Kanto Earthquake, the Yokohama City Council set up Yamashita Park (1930), Motomachi Park (1930) and Kanagawa Park (1930) in the post-disaster ruins. In the 1940s, Tokiwa Park (1942), Gumyoji Park (1943), Tsunashima Park (1944) were set up as the defend green tract of land.

2.4 Comparison

Urban form

Modern Shanghai and Yokohama had excellent geographical location and port advantages, based on these opportunities, Shanghai and Yokohama absorbed a lot of capital both from home and abroad. Shanghai and Yokohama developed rapidly and became world-class port and metropolis in a very short of time. The differences between them are: 1) The builders of urban space in modern Shanghai were mainly the foreigners; and the builder of Yokohama was the Japanese government. 2) The development of modern urban space in Shanghai was achieved through the expansion of the concession for a long time; the modern Yokohama set restrictions for foreigners, and the settlements only played indirect roles in promoting the development of urban form, not the main force. (Table.1)



		Shanghai	Yokohama
Difference	Builder	Foreign Powers	Japanese Government
	Style	Western style — Chinese and Western combined	Edo style — Western style — Japanese and Western combined — Modernist style
	Main Area	Concessions	Japanese Community
Similarities	Original Position	Port Area	
	Construction Content	Roads system、Bridge	

Table.1 Comparison of Urban Forms between modern Shanghai and Yokohama

Architecture scene

Both Shanghai and Yokohama were affected by the western architectural ideology and material skills. The differences are: 1) Although Shanghai gained access to western modernism earlier than Yokohama, it did not form a definite value orientation; even Yokohama was enlightened late, the Japanese modernist architectural tendencies were clarified after the new culture movement. 2) Western designers or architecture studios monopolized the construction market of modern Shanghai for a long time, the Chinese native designers raised late, and they still pursuit the Western style more or less; However, the native Japanese architects realized the initiative early, laid the foundation for the flourishing development of Japanese architecture (Table.2).

		Shanghai	Yokohama
Difference	Style Evolution	Western style — Chinese and Western combined	Western style — Modernist style
	Designer	Western architects have been more active, native architects imitated	Western architects in the early period, native architects took the initiative later
	Value Cognition	Swing between the West and the Traditional	With the influence of Western-style get into modernism
Similarities	Western Influence	Style, technology, materials are affected by Western architecture	

Table.2 Comparison of Architectural Scene between Modern Shanghai and Yokohama

Park space

In order to meet the health and entertainment needs, Foreigners set up the Public Park in Shanghai and Yokohama. The foreign parks promoted the rise of private self-built commercial park indirectly, such as Shanghai's Zhang Shuhe Garden, Yokohama's Sanenkaiken Park. However, there were some differences: 1) The concession management department and the concession parks were the most important construction subjects and construction contents of Shanghai Modern Park; The Yokohama modern park is derived from the settlement park, but the Yokohama municipal government started to build their own park quite soon. 2) Concessions and the Chinese communities handled their own funds, while Yokohama government took charge of the constructions. 3) As to the park types, Yokohama has set up defend green tract of land because of natural and war factors, became an early sample of disaster prevention green space (Table. 3).



		Shanghai	Yokohama
Difference	Builder	Concession — folk — concessions and the Chinese community at the same time to build the park	Western style— Modernist style
	Sources of funds	The concession and the Chinese community are fragmented	Yokohama government support
	Park type	Athletic park, suburban park, children's park and so on	Defense green tract of land as park
Similarities	Origin	Public park in concession or settlement	
	Influence	Changed people's entertainment concepts, public ideas	
	Park Opening	only open to foreigners in early period	
	Status	Is the early model or source of modern park in both countries	

Table.3 Comparison of Park Space between Modern Shanghai and Yokohama

3. Comparison of Construction Mechanism of Urban Public Space between modern Shanghai and Yokohama

3.1 The Management System

On the impact of colonialism, Asian countries suffered different fates. Some of them were completely reduced to the colonies of Western countries, such as India. Some turned into a semi-colonial, such as China. Moreover, other countries like Japan, although the sovereignty of them had been undermined, they still remained independent and even developed into a powerful country⁵. The British Consul, Sir Rutherford Alcock who successively served in Shanghai and Yokohama, frankly stated, "In Shanghai, there were more expensive price of land, because construction of all of the river bank, the pier and the road were been funded by the lessee, while in Yokohama all of them are constructed by Japanese government, and the lessee of land have no those responsibilities⁶".

Department of administration

In 1845, the *Land regulation* given the principal of "Planning Together", showed that the diaspora in concession were the main body of construction, the West were also responsible for the source of funds, design and implementation, management, and maintenance of municipal construction of concession. The Chinese government abandoned the right to construct and manage the concession. After the 1880s, they even grew into independent institutions as equal as the Chinese government. Different from Shanghai, <Land regulation of the Kanagawa Port in 1860> stated, "The Japanese government need to regularly maintain urban roads and terminals and, if necessary, to build sewers⁷". It showed that the main body of the management was the kanagawa government.

Situation of administration. There were three forces of management (the Municipal of Shanghai International Settlement, Municipale de la Concession Française de Changhai and the local community), took charge of their own regions independently, which result in a local orderly but overall disorder. Differently, the foreign powers forced the Shogunate to sign the <Yokohama Residence Book>, declared the independence of the residence and establishment of the General Court in charge of the affairs of the residence. After 1866, due to lack of funds, the foreigners gave up the autonomy of residence, so the modern Yokohama was under administration of Japanese government.

Source of funds

The background of the three divisions coexistence of shanghai decided the varied source of fund for construction. Along with the increase in residents of concession, higher taxes made the management organization of the concession enhance greatly enough to be afford municipal expenditure. In contrast, Yokohama had always been controlled by the government, taxes in the residential area were completely control by the local government of kanagawa.

Local management system. There were different attitudes toward to the western management system in Shanghai and Yokohama. Since the establishment of the National Government, They kept a Top-to-Down management



system, while in Japan, the political management system was more westernized, the Yokohama government provided more development space for the public.(Table.4)

		Shanghai	Yokohama
Difference	management authority	The government has voluntarily abandoned the concession	The government insists on adhering to its own sovereignty
	Management organization	Foreign residents , the Municipal of Shanghai International Settlement , the Shanghai government	Shogunate , the kanagawa government — Foreigner Council —Yokohama Government
	The source of funds	Westerners take use of tax and china offer partly support	The shogunate government take charge of it , take advantage of high price of land
	management situation	The three individuals	The Yokohama government
	Foreign organization	the Municipal of Shanghai International Settlement , Municipale de la Concession Française de Changhai: powerful	Short-lived Foreign Council, powerless
	Impact on the local	The top-down management system	after the Meiji restoration , the political management system westernized
Similarity	Westerners autonomous	Foreign powers both had self-governing periods in the concession and residence areas	

Table.4 Comparison of The Management system between Modern Shanghai and Yokohama

3.2 The Concept of Cognitive

Utensil culture

In the early of opening, both Shanghai and Yokohama showed resistance to foreign cultures. In the 19th century, it was still in a passive state of acceptance or even relatively exclusive stage, for example, in 1881, there began to appear tap water in Shanghai, but “Chinese users were fresh, and even doubted that the water was toxic and harmful and better not to use it⁸”. It was same in Japan, they rejected request of opening port of westerners at beginning, but then they immediately showed crazy pursuits for the western culture as long as they realized it was "advanced" soon.

Spiritual culture

Similar with Utensil culture, the acceptance of spiritual culture was even slower. At the end of the 19th century, people with lofty ideals advocated learning western culture, but the management system gave the elite little voice. In contrast, after the Meiji restoration, there were more active attitudes in Japan, encouraged the people to learn and absorb advanced western utensil and culture. The Meiji government combined the concept of Western Urban Planning with the problems of their own cities, triggered an upsurge of reform, and the government and non-governmental organizations spontaneously put into practice(Table. 5).

		Shanghai	Yokohama
Difference	Utensil culture	Passive acceptance	active acceptance
	Spiritual culture	resistance	The government and the people jointly promote it, The Meiji restoration
Similarity	In the early for the foreign culture are excluded		

Table.5 Comparison of the Concept of Cognitive between modern Shanghai and Yokohama

3.3 The Policy and System



System foundation. Since the opening of the port, the land regulations can be regarded as the earliest planning document and the first new law and urban planning law in modern Shanghai. After the opening of Yokohama, the foreign consuls and the shogunate signed the *Land Regulations of Kanagawa*, which was the basis for the negotiations between the early shoguns and the aliens.

Land management.

Chinese landlords had rights to deal with foreigners directly, which indirectly offered the potentiality for expansion of the concessions. Relatively, the shogunate acquired ownership of all land of Yokohama prior to the opening of the port, and the farmers could only use land in the form of a contract, which increased the difficulties of self-expansion of the settlement. When the city of Yokohama was founded, it repossessed the reservation and acquired ownership of all the existing land.

Settlement situation.

After the Taiping Heavenly Kingdom and the Small Knife event, Chinese people flocked to the concessions, which led the settlement formation from separation of Chinese and foreigners to the mixed residence, and the Chinese people that living in the concessions became the main source of the taxes, and the forced the expansion and development of concessions. Oppositely, owing to the lack of local labor and capital, the strength of the residence had been unable to compete with the Yokohama government, which restricted the expansion of the settlement indirectly (Table.6).

		Shanghai	Yokohama
Difference	Land system	Westerners and landlords directly trade, the government does not take part	The land is owned by the government and the government and the West trade
	Settlement system	mixed residence of Chinese and foreigners	Separated residence of Japanese and foreigner
Similarity	The "Land Regulation" become the basis for the two cities to contact with foreigners		

Table.6 Comparison of The Policy and System between Modern Shanghai and Yokohama

Conclusion

Under the impact of advanced civilization, both Shanghai and Yokohama had completely finished the process of urban modernization or urban formation in a short period of time, showing a leap-style development process with characteristics of colonialism. On the basis of investigating the material form and construction mechanism of public space in modern Yokohama and Shanghai, the following conclusions are obtained: 1) The same geographical location, port resource and social background make the two cities have similarities in the external performance of urban public space. Modern urbanization processes are both derived from the foreigner settlement; Western architectural form have been the mainstream for a long period of time; Advanced materials and techniques have promoted the rapid development of architecture technology; Public Park became the early model and source of two cities and even modern parks in the two countries, changing the concept of entertainment, health, and public in the country. 2) There are difference in urban forms、architecture scene and park space between the two cities, and main performance are the builders, sources of funds, style and other aspects of rheology. 3) Different management systems, conceptual awareness and policy systems are the main causes of this discrepancy.

Referencing

- 1.Xiong Yuezhi. *Shanghai General History*. Shanghai: Shanghai People's Press, 1999, 2.
- 2.Maybon, Ch. B. *Histoire de la Concession Française de Changhai*. Paris: Librairie Plon,1929, 18.
- 3.Chen Congzhou, Zhang Ming. *The History of Shanghai Modern Architecture*. Shanghai: Sanlian Bookstore Shanghai Branch Press,1988,225.
4. Masaharu Muramatsu . *History of Modern Architectural*. Tokyo: Akkin Press,1978 :204.
- 5.Zheng Zuan. "The opening and urban formation of Shanghai and Yokohama." *Journal of Urban History*, Z1 (1998):2.
- 6.Alcock to Vyse, "1861.10.19," *The Japan Herald*, Jannuray18, 1862.



7. Yūzō Katō, Yokohama Shiritsu Daigaku. *Yokohama past and present*. Yokohama: Yokohama City University, 1990:102.
8. Sun Shiwen, "The Modern History of Shanghai Urban Planning". *Journal of Urban Planning*, no.2(1995):10-17.
9. Hu Xianghan. *Shanghai Xiao Zhi*. Shanghai: Shanghai Ancient Press, 1989: 2.
10. Editor, "Brief News," *The North-China Daily News (1864-1951)*, March 2, 1908.
11. Yokohama City Planning and Adjustment Bureau. *Development process of port city Yokohama*. Yokohama : Yokohama City Planning and Adjustment Bureau, 1981 : 23.
12. Lian Yuqiang, "Analyze the Urban Planning Laws in 'Land Regulation'". *Journal of East China Normal University (Philosophy and Social Sciences)*, no.5(2010):52-57.
13. Shanghai Archives. *Shanghai and Yokohama*. Shanghai: East China Normal University Press, 1997:126.

Acknowledgements

This Paper is supported by the Shanghai Social Science Fund Project "Researching on the space evolution of shanghai public gardens in modern times."

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributors

With a considerable research of gardens in modern china, it is possible to understand how the social and culture factors influenced the spatial pattern and garden types in modern China. Yan's research in this field, she concentrates specifically on public gardens in modern Shanghai and influences on the open space in our cities. For this paper, Zhou Teng help with the translation, and Zhou Xiangpin gave valuable advices.

Bibliography

1. John Wharton Maclellan. *The Story of Shanghai From the Opening of the Port to Foreign Trade* (1889). New York: Cornell University Library, 2009.
2. Jesus C A M D. *Historic Shanghai*. Shanghai: Shanghai Mercury, 1909
3. Lanning G, Couling S. *The history of Shanghai*. Shanghai: Shanghai Municipal Council by Kelly & Walsh, 1921.
4. Fredet, Jean. *Histoire de la concession Francaise de Changhai*. Paris: Librairie Plon, 1929.
5. Pott F L H. *A short history of Shanghai*. Beijing: China International Press, 1928.
6. G.E. Miller. *Shanghai: The Paradise of Adventurers*. New York: Orsay Pub. House Inc, 1937.
7. Hauser E O. *Shanghai: City for Sale*. New York: Harcourt, Brace and Co, 1940.
8. Murphey R. MAPS. "Shanghai: Key to Modern China. *International Journal*, 1953, 9(2):168.
9. Shanghai Archives. *Shanghai and Yokohama - Two open cities in modern Asia*. Shanghai: Shanghai Science and Technology Press, 1997.
10. Xiong Yuezhi. *Shanghai General History*. Shanghai: Shanghai People's Press, 1999.
11. Chen Congzhou, Zhang Ming. *The History of Shanghai Modern Architecture*. Shanghai: Sanlian Bookstore Shanghai Branch Press, 1988.
12. Yūzō Katō, Yokohama Shiritsu Daigaku. *Yokohama past and present*. Yokohama: Yokohama City University, 1990.

Image sources

- Figure 1: History of the Shanghai Academy of Social Sciences. *Shanghai History Collection*. Shanghai: Shanghai People 's Press, 1980:7.
- Figure 2: Yokohama Harbor Bureau. <http://www.city.yokohama.lg.jp/shimin/kuren/18/database/division.html>.
- Figure 3: Shanghai Urban Planning Exhibition Center
- Figure 4: Shanghai Achieves
- Figure 5: Museum of Fine Arts, Boston
- Figure 6: Kanagawa Prefectural Museum of History Collection

Table sources

All the tables in this paper are drawn by the author.



¹Wang Tieya. *Compilation of the Old Contract*. Beijing: Sanlian Life New Reading Bookstore Press, 1957, 65-67.

²Kanzaki Akisuke, Hideaki Oki, Kinji Fukushima. *History of Kanagawa Prefecture*. Yamakawa: Yamakawa Press, 1996, 260.

³Masaharu Muramatsu . *History of Modern Architectural*. Tokyo: Akkin Press, 1978 :200.

⁴Masaharu Muramatsu . *History of Modern Architectural*. Tokyo: Akkin Press, 1978 :204.

⁵Zheng Zuan. "The opening and urban formation of Shanghai and Yokohama". *Journal of Urban History*, Z1 (1998):2.

⁶Alcock to Vyse, "1861.10.19," *The Japan Herald*, Jannuray18, 1862.

⁷Yūzō Katō, Yokohama Shiritsu Daigaku. *Yokohama past and present*. Yokohama: Yokohama City University, 1990:102.

⁸Hu Xianghan. *Shanghai Xiao Zhi*. Shanghai: Shanghai Ancient Press, 1989: 2.



Comparative study of planning history, spatial development and sociological significance of the back alley in Yangon and Singapore

Tomoko Matsushita*, Kimiro Meguro**, Aya Kubota***

* *Project Researcher, International Center for Urban Safety Engineering, Institute of Industrial Science, The University of Tokyo, matsu-t@iis.u-tokyo.ac.jp*

** *Professor, International Center for Urban Safety Engineering, Institute of Industrial Science, The University of Tokyo, meguro@iis.u-tokyo.ac.jp*

*** *Project Professor, Department of Urban Planning, The University of Tokyo, ak@td.t.u-tokyo.ac.jp*

A comparison of two similar types of back alley spaces: Back Drainage Space (BDS) in Yangon and Back-lane in Singapore, is conducted to find out if there are any relationships between their spatial development and lessons that can be learned from the precedent case in Singapore. Commonalities and differences of the back alley are identified by comparing the historical urban context of their formation and development in British colonial cities. The findings suggest that the back alley spaces in both cities, despite divergent circumstances and development after independence, possess common traits as interstitial space between public and private, with a unique way of spatial management based on informal, mutual agreement, which suggests some useful ideas when considering the role of these spaces in the redevelopment of Yangon in the near future.

Keywords: Back Drainage Space, British colonial city, back alley, Yangon, Singapore, urban renewal

Introduction

In the centre of Yangon, Myanmar, there is a long-neglected space, even considered an eyesore, called Back Drainage Space (BDS), dark and dingy, long and narrow in proportion, typically 5 meters wide by 250 meter long, running north-south behind entire city blocks throughout the Central Business District (CBD). A similar type of space called Back-lane, behind so-called shophouse, an architectural style of Chinese merchants commonly found in Asian countries, is creating part of the scenes in highly touristic areas in Singapore. The two cities share a background as former British colonies that flourished during the 19th to early 20th century as Southeast Asian harbours. Reflecting post-industrial revolution concerns for diseases caused by crowded urban environments, both back alleys were created for the purpose of sanitation. While BDS in Yangon are still largely intact today as originally implemented, many of Singapore's Back-lanes have been lost in the course of modernization, buried among high-rise buildings. Recognizing the potential of this under-utilized urban heritage as an important asset for the rapidly changing city of Yangon, the authors selected the two cities as targets of this study with the goal of gaining useful lessons from the precedents of back alley in Singapore that could inform the development of BDS in Yangon. As there are no previous studies on BDS and limited materials on related subjects, the authors relied on information from accounts of residents and semi-structured interviews with the local community and authorities. For Singapore's back-lanes, facts and analysis are based on literature which provided important information to support the core of this paper. First the two cities are compared in terms of their history of urban formation, development, use and sociological significance of the back alley, then commonalities and differences are identified to draw insights that may be useful in considering the urban renewal of Yangon City in the near future.

Comparison

Urban formation of Yangon: reclaiming land and the problem of sanitation

When Yangon was seized under British colonial rule in 1852 after the second Anglo-Burmese war, it was a small trading town, ruled by King Alaungpaya, with some roads and timber houses on stilts, suffering from frequent floods. Europeans who saw Yangon at that time depicted it as having poor housing, lack of proper drainage and insanitary conditions.¹ A rough sketch by Grant who visited Yangon from 1836 to 1849 shows a road leading up to the great pagoda, Shwe Dagon Pagoda, located inland and also a number of religious buildings such as an Armenian Church, a Roman Catholic Church and a few mosques near the port, indicating that the town's population was diverse before colonization.² Yangon was mostly destroyed during the war, so there were no pre-existing buildings of any value or city layout to follow.³



A medical doctor Dr. Montgomerie⁴, gave the original idea for the city's planning after coming to Yangon with the troops in 1852. Although he was not an architect or urban planner, it was common in the late 19th century for doctors and public health experts to have dominant role in the planning of colonial cities⁵ and Montgomerie was quite confident because of his experience serving as a Secretary to a Town Committee in Singapore from its beginning in 1819 to 1842 prior to coming to Yangon.⁶ He proposed a new city plan that reflected a general British philosophy of colonial urbanism with wide streets in a grid pattern which symbolized human order and was intended to encourage proper ventilation, prevent spread of fire, and reduce congestion which could cause insanitary conditions and spread of crime⁷. Based on this idea, Fraser⁸ revised and drafted the plan and Phayre⁹ accepted them for implementation.

Montgomerie was specifically concerned about the drainage system as the city suffered from frequent floods since pre-colonial times, and proposed "that down the centre of each block of buildings a narrow lane or back-drainage-space should be placed, along which a sewer should be carried to the river"¹⁰(Figure 1)." The idea was to implement fifteen-foot-wide canals and reservoirs to collect water during high tide and to use that to flush the sewers to the river once a day to keep the city free of stagnant water. The canal was never realized because of the potential of contaminating the river water significantly¹¹ however the Back Drainage Space was implemented as one can see in almost every block of the city today, years later after the problem of sanitation became a serious issue.

To construct the new city, Yangon had to reclaim much of its land, about two to three feet in height, which was largely below high-flood levels surrounded by swamps, creeks and lagoons.¹² By then all property in Yangon belonged to the government and revenue from selling city property was used to finance reclamation work. The reclamation was delayed due to a lack of funds while at the same time the city outgrew the originally planned population of 33,000, especially with the drastic increase of the Indian population recorded in the census from 15,677 in 1872, 16 % of the total population of 98,138, to 66,077 in 1881, 49 % of the total population of 134,176.¹³ Many of those who supported the growth and prosperity of Yangon were crammed into small, swampy areas and "housed under the worst possible conditions".¹⁴ Without proper systems for water supply and drainage, the city suffered from great losses caused by fire as well as high death rates due to unsanitary conditions. In 1887, a proper sewage system was finally introduced and a hydro-pneumatic system installed by the British company Messrs. Shone & Ault is still in use today, 140 years later.¹⁵ Yangon was as dense and crowded as cities in India at that time but the planning of BDS contributed to better conditions in the city. As Pearn wrote "Rangoon was fortunate in that Fraser's scheme provided some 43 per cent of open space in the form of roads and back drainage spaces, a circumstance which moderated the evil of overcrowding as known in Indian cities."¹⁶

BDS: the users' stories

Due to a lack of official documentation about BDS, the authors relied on the accounts of the residents who shared stories of their childhood that go back as early as the 1960s. Semi-structured interviews were conducted by the authors with six groups of residents including local communities and authorities¹⁷. 1988 was the year of nationwide protests and it turned out to be a turning point for the BDS as well. In the early days, the CBD was low density with low-rise buildings where most neighbours knew each other, so BDS was not only used for drainage purposes but some residents used it as a place to socialize, sit and relax, a playground for children and passageways to visit neighbours or relatives' houses (Figure 2). The city government cleaned it regularly since it is a public property and the drainage and sewage system functioned according to its designed capacity. However, after 1988, gradually the situation changed as society underwent instability following the uprising. The Yangon City Development Committee was established around this time in 1990 and a large amount of new construction was realized, many owners took the opportunity to maximize values by building high-rises up to eight stories with rentable units. As a result, an influx of new residents from around the country crowded the downtown area and residents could no longer identify their neighbours' faces. Consequently crime rate increased, and finally the ward council decided to shut the BDS for security reasons (Figure 3). When the BDS were closed, people stopped using them and started to put trash there. Some owners may not have upgraded their sewage system properly when they increased the number of units, which caused overflow and it made the BDS an even more unpleasant place. So there was a common experience of many of residents that the BDS was closed for security reasons and when it became unused, it became a 'trash alley' eventually.

Situations may differ depending on the location. There was an interesting story about a street vendor who ran his business as a tea shop in the BDS for twenty years. Because it is a public space, officially one is not allowed to use or occupy the space for any activities including washing, cooking, running a business or storing a generator.

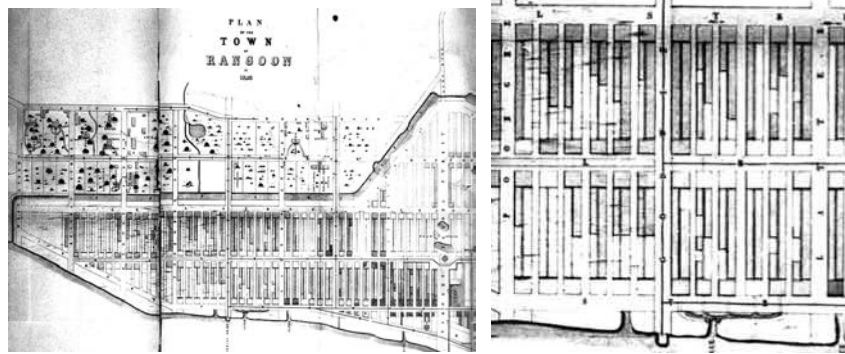


Figure 1: *Plan of the town of Rangoon in 1856 showing the grid pattern with BDS laid out in every block.* (Enlarged partial plan on the right) [London: s.n, 1856]

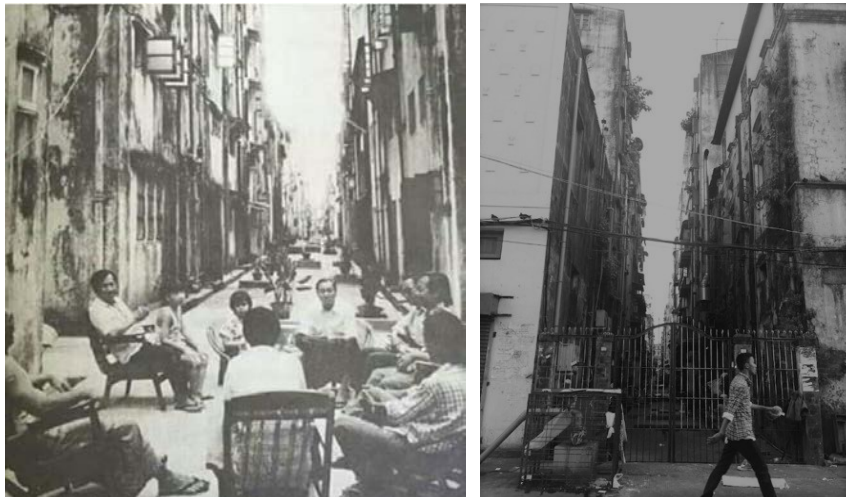


Figure 2 (Left): *BDS in the past with residents socializing.* [Yangon: s.n.]

Figure 3 (Right): *BDS today, closed by the fence, seen from a sidewalk.* (Photo by T. Matsushita, 2016)

Yet one occasionally finds such scenes in the BDS. There seems to be a number of informal or unofficial agreements between the users and authorities and it seems to be accepted as long as there is no harm to others; it may even benefit the neighbours by acting as a safeguard for the community.

Urban formation of Singapore: Spatial segregation and concentration

Malacca was occupied by the Portuguese in 1511 then by the Dutch in 1641. When the British came to Singapore in 1819, it was still a small fishing village, described as a dense forest with approximately twenty plantations built by the Chinese.¹⁸ Raffles¹⁹ came to negotiate with the Malay Sultan on trading rights and after the agreement was made successfully, he immediately set out for the new settlement, appointed the Town Committee in 1822 and instructed the basic land-use patterns. Raffles' idea was to make a clear separation between the government, commercial uses, Europeans, and different ethnic groups namely Arabs, Malays, Bugis, Javanese and Chinese, based on expediency and his belief that close integration of different ethnic groups may create conflict.²⁰ Many of Raffles' decisions were based on his experience in England and his knowledge of colonial India and as Edwards describes, "consideration of health, safety, and fear of native contamination all suggested proper separation of the European community from the Chinese and native quarter."²¹ Priority was given to the merchants and specific guidelines were given for building forms and materials, including shophouses which were the main type of buildings in Singapore until the 1960s.²²

Back-lanes: 'innovation in the war against disease' and its failure

The city was growing rapidly and on the surface life seemed pleasant and prosperous, especially for the Europeans and rich merchants living in suburbs, however Chinese people who made up 70 % of the population in 1901 lived in crowded, insanitary condition,²³ described by Yeoh as "subdivided tenements, makeshift cubicles and back-to-back shophouses."²⁴ Although the bottom line problem was a lack of adequate housing, instead of providing more



houses, the government focused on issues of overcrowding and lack of sanitation of those shophouses. Committee members came up with an idea to create back-lanes to bring light and air into congested dwelling areas²⁵. In 1906, a public health officer W. J. R. Simpson²⁶ was invited by the government as an 'outside and independent expert' to investigate the sanitary conditions and causes of high mortality in the city of Singapore.²⁷ Simpson pointed out the problem of those shophouses built back-to-back lacking multiple egress to allow for scavenging and drainage and recommended the creation of back lanes "not less than 15 feet, and not more than 20 feet wide for the purpose of scavenging and drainage."²⁸ Not only did he recommend stopping construction of new shophouses without back-lanes, but also demolishing rear of existing shophouses to create new back-lanes in existing neighbourhoods (Figure 4). He indicated five useful points that they: 1) facilitate drainage and scavenging; 2) add air space between the buildings; 3) prevent encroachments; 4) form alignment at the back; and 5) define the limits of the boundary of each plot.²⁹ The government considered it 'the latest spatial innovation in the war against disease (Figure 5), a spatial technique of combating 'the enemy' by using what Foucault calls 'power through transparency' or 'subjection through illumination'.³⁰ This operation would not only provide light to the residents but also to give authorities access to spaces which used to be private, hidden behind the public eye.

The law was passed and the government proposed the implementation of a total of 252 back-lanes between 1910 and 1947, mostly in Chinatown, Kampong Glam and Little India.³¹ However only 22 back-lanes were completed in 1918 and the government realized that this on-site, piecemeal solution could not solve the problem and the scheme failed, due to a number of reasons but cost being the major factor, for both compensation and construction.³² The residents also resisted this unrealistic idea forcing them to give up already tight living space while the authorities did not understand the local culture and customs in which they lived.³³ In 1927, the Singapore Improvement Trust was established to oversee various kinds of urban improvement schemes and gradually the back-lane scheme was abandoned and high-rise public housing projects eventually replaced the low-rise shophouse buildings.

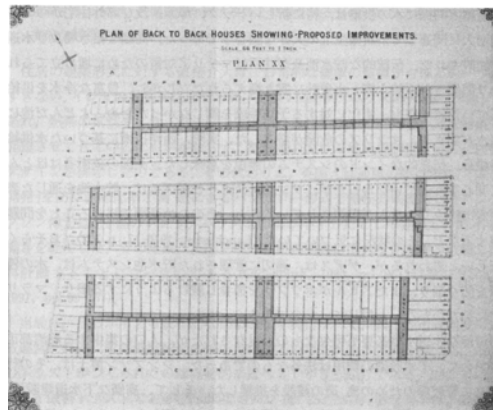


Figure 4: Simpson, W. R. C. *Plan of back to back shophouses highlighting the area to be demolished as a proposed back-lane scheme.* [London: s.n, 1907]



Figure 5 (Left): Yeoh, Brenda S. A. *'The latest spatial innovation in the war against disease' according to the government, the photo shows the demolition of the back of the shophouses to create back-lane.* [Singapore: s.n, 2003]

Figure 6 (Right): Chong, Ho Kong, Eun, Valerie Lim Nyuk. *Back-lane as used by the residents.* [Singapore: s.n, 1992]



Back-lanes as ‘contested regions’ with informal negotiation

Although the back-lane scheme may not have been a good solution to the housing problem, a fascinating sociological phenomenon was observed as a result of implementing the scheme. Residents displayed a sense of territoriality, for example by leaving visual markers of ownership, fighting for their right to use the space as before, while a certain level of indifference was also observed as the spaces were exposed to unexpected vandalism (Figure 6). In response to various acts of ‘colonization’ by the residents, the authorities would then place visual markers such as yellow lines on the ground for parking lots or pillars at the entrance physically delineating the boundary of public and private. The residents could also display their territoriality by just giving hard stares at the ‘encroachers’ such as authorities or passers-by.³⁴ Although the back-lanes became a ‘contested region’ where residents and authorities struggled to gain control over one another, the authorities were not too fussy about how the residents used the space. The residents in Chinatown often informed each other of approaching officials to prepare themselves, while inspectors overlooked minor offenses as long as residents followed basic standards and kept the place clean.³⁵ This kind of mutually beneficial, informal deal kept them both happy and the place tidy. Aside from the territorial issue, the back-lanes possessed both qualities of public and private, an intermediate space providing quieter, slower and more intimate atmosphere compared to fast, busy and formal front streets, more enclosed with a sense of comfort and protection while not totally closed, allowing for random encounters with employees or family members who may step out for a break from their work or daily routines.

Analysis: commonalities and differences

Sanitation issue

Sanitation was a serious issue for both cities and back alleys were part of the solutions to this common issue. Both cities experienced difficulty managing increasing populations necessary to support the growing cities while providing decent housing and necessary infrastructure for them. Such problems happened in the areas where ethnic groups were living, Indians in the case of Yangon and Chinese in Singapore; their tenements were often extremely congested and insanitary with inadequate drainage systems. However, displacing those who worked in the central area to suburbs was not realistic thus such conditions were considered to be a ‘necessary evil’.³⁶

Montgomerie, though he was a surgeon, having served in the Town Committee in Singapore from the beginning of colonization in 1819 to 1842, came to Yangon in 1852. Maxim speculates that Montgomerie might have taken the waterfront design concept of Singapore and transplanted it directly to Yangon as Strand Road, considering the importance of creating visual impact at the arrival from the sea.³⁷ The authors speculate another possible linkage that Montgomerie who introduced the idea of BDS in Yangon could have been inspired after experiencing the early construction of the Chinatown in Singapore and its consequences with back-to-back shophouses in swampy areas.

Colonization of the alley, the ‘contested region’

Both alleys were used beyond their original functions, as a place of socialization or an extension of personal space as they shared a similar nature as an intermediary zone between public and private; this allowed residents to take their liberty and enjoy ‘colonizing’ the back alley. The case in Singapore showed how the residents and the authorities made an informal deal regarding the use of the space by ‘checking each other’ while the case in Yangon also revealed that a similar mechanism existed between the residents and the authorities.

Spatial segregation

When Raffles instructed the basic land allotment of Singapore, the intention was clear to segregate ethnic groups spatially to avoid conflicts while there was no indication of intended segregation in the original plan of Yangon, at least within the CBD. In Singapore, building guidelines were developed for those areas where Chinese merchants lived, and this led to the development of a specific colonial architectural style known as the shophouses.³⁸ In Yangon, spatial demarcation by ethnic groups was not directly indicated, however similar ethnic groups clustered together, creating designated areas within the city which can be recognized today, along with remaining architecture of distinctive characteristics such as row houses, Chinese temples, or mosques.³⁹

Modernization and the back alley

Looking at today’s back alleys in both cities, perhaps it is not possible to tell that one was planned and implemented from the beginning, while the other was not planned but implemented later, as a countermeasure to worsening



living conditions. Both alleys were used by residents as semi-private spaces at one point but took different paths thereafter. After the failure of the Back-lane scheme, many of the back-lanes in Singapore have disappeared together with the demolition of shophouses during the process of adapting a modern, high-rise housing scheme. However, starting in the late 1970s discussion about the conservation of historical districts began and in 1986, the Conservation Master Plan was announced and the central area became designated as a “Historic District.” Today’s Chinatown is one of the popular tourist attractions and the exotic feeling is enhanced by street cafés that are recreated to make the place feel more ‘original.’ The remaining shophouses and the attached back-lanes, though visually may be the same as before, have lost the original characteristics as a place for local people with dual functions for home and work. It has been transformed from being a place for ordinary people to a place for tourists.

Some fear that Chinatown in Singapore would eventually be reduced to a mere theme park, if not already. The big debate is whether the place should function as a residential or touristic landscape or both? Singapore Heritage Society argues that it should incorporate the residential community in order to keep the place alive and save the collective memory of the common people.⁴⁰

In Yangon, since their closure in the 1990s until recently, BDS were dirty and dangerous places, an eyesore to most people. Although many buildings were rebuilt in the 1990s, transforming the landscape drastically from low-rise to high-rise, BDS remained intact, perhaps due to the existence of the 140-year-old sewage system lying under most BDS in CBD. In Yangon one can still see the local people enjoying food from street vendors and casual tea meetings on the roadside or in the BDS, giving distinctive characters and liveliness to the place.

Conclusion

In this comparative study of the back alleys in two cities, the authors found that in both cases, despite divergent circumstances and development after independence, possess common traits as interstitial space between public and private. A unique way of spatial management based on informal, mutual agreements between residents and authorities seems to have existed in both cases, though further study with a comprehensive survey with various stakeholders is needed to verify the historical facts. The example of Singapore’s gentrified Chinatown today raised an important question, who should the place be made for? Further studies are needed to re-examine the meaning and the spatial value of the BDS and what kind of management strategy may be suitable for Yangon.

Acknowledgements

We would like to express our sincere gratitude to the residents and local authorities from Kyauktada, Lanmadaw and Pabedan Township, Myanmar students and the Social Enterprise Doh Eain for their support and cooperation in conducting interviews. The field survey was made possible by the opportunity provided by the Science and Technology Research partnership for Sustainable Development (SATREPS) program in Myanmar supported by the Japan Science and Technology Agency (JST) and Japan International Cooperation Agency (JICA).

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributors

Tomoko Matsushita is a project researcher at the International Center for Urban Safety Engineering, Institute of Industrial Science, the University of Tokyo. Her research interests include post-disaster housing reconstruction and the participatory process in creating sustainable living environments. Currently she works as a member of the SATREPS program, looking at the evaluation of urban vulnerability of Yangon. She received B.A. in Architecture from the University of Washington and Master in Civil Engineering at the University of Tokyo.

Aya Kubota is project professor at the Territorial Design Studies Unit of the University of Tokyo, from where she received her BA, MA and PhD in Urban Engineering. Her research interest ranges from community development projects in small historical towns to major metropolitan areas, with particular interests in creating sustainable living environments. She is a member of numerous municipal and administrative committees that cover topics as diverse as urban planning, townscape preservation, environmental improvement, conservation, urban development and housing.

Kimiro Meguro is a professor and a director of the International Center for Urban Safety Engineering, Institute of Industrial Science, University of Tokyo. As an expert in earthquake engineering, he has a wide range of research fields in disaster management and urban safety from structural measures to non-structural measures. He holds a



The 18th International Planning History Society Conference - Yokohama, July 2018

PhD from the University of Tokyo and has been serving as a core member of a number of committees for disaster management under national and local governmental bodies, private sectors and academia.

- ¹ Sarah Heminway Maxim, *"The Resemblance in external appearance: the colonial project in Kuala Lumpur and Rangoon"* (PhD diss., Cornell University, 1992), 24.
- ² Colesworthy Grant, *Rough pencillings of a rough trip to Rangoon in 1846* (Calcutta: Thacker, Spink and Co., 1853)
- ³ B. R. Pearn, *A History of Rangoon* (Rangoon: American Baptist Mission Press, 1939), Chapter Nine; The planning of the modern city, 182.
- ⁴ Dr. William Montgomerie (1797-1859) was a superintendent surgeon during the Anglo-Burmese War.
- ⁵ Robert Home, *Of Planting and Planning: The making of British colonial cities, trans. Shuji Funo* (London: Taylor & Francis Books, Ltd. 1997), 73.
- ⁶ Pearn, *A History of Rangoon*, Chapter Nine; The planning of the modern city, 183.
- ⁷ Home summarized eight components of the British model of colonial town planning which included "4. Wide streets laid out in geometric, usually gridiron form, usually on an area of one square mile (2.6 km²)" and "6. Standard-sized, rectangular plots, spacious in comparison with those in British towns of the time." Robert Home, *Of Planting and Planning: The making of British colonial cities* (London: E & FN Spon, 1997), 10, 15-27.
- ⁸ Alexander Fraser, Lieutenant of Bengal Engineer.
- ⁹ Arthur Purves Phayre, Colonel who used to be an officer in the Bengal Army, came to Rangoon in December 1852.
- ¹⁰ Pearn, *A History of Rangoon*, Chapter Nine; The planning of the modern city, 183.
- ¹¹ *Ibid*, Chapter Ten; Modern Rangoon: 1855-1874, 199.
- ¹² *Ibid*, Chapter Ten; Modern Rangoon: 1855-1874, 199.
- ¹³ *Ibid*, Chapter Eleven; Modern Rangoon: 1874-1882, 234.
- ¹⁴ *Ibid*, Chapter Eleven; Modern Rangoon: 1874-1882, 236.
- ¹⁵ *Ibid*, Chapter Twelve; Modern Rangoon: 1882-1898, 255.
- ¹⁶ *Ibid*, Chapter Thirteen; Modern Rangoon: 1898-1938, 276.
- ¹⁷ Before conducting the semi-structured surveys, the authors conducted field surveys to understand the physical characteristics and spatial distribution of the BDS and then two questionnaire surveys with multiple choice were carried out, one in February 2017 to sixteen residents randomly selected by the authors in the neighborhood, another one in May 2017 to forty four households selected randomly from the list of residents of the 4th ward in Lanmadaw Township. Based on the experience and information acquired by these preliminary surveys, the interview questions were prepared and the authors conducted long, semi-structured interviews to a total of thirty two residents including the ward officers and parliamentary members in three Townships in the CBD namely Lanmadaw, Pabedan and Kyaukhada Township from July to August 2017. The summary and analysis of the survey is to be published in another paper due to space constraint therefore this paper illustrates main points from the findings. The subjects were selected by the community leaders, average age is fifty five years old, predominantly male, Buddhist (two females, six Muslims out of thirty two total subjects).
- ¹⁸ O. J. Dale, *Urban Planning in Singapore: The transformation of a city* (Oxford: Oxford University Press, 1999), 12-13.
- ¹⁹ Sir Thomas Stamford Raffles (1781-1826) is known as a founder of modern Singapore who implemented Raffles Town Plan (Jackson Plan) formulated in late 1822.
- ²⁰ Dale, *Urban Planning in Singapore: The transformation of a city*, 14-15.
- ²¹ Edwards, *The Singapore House and Residential Life 1819-1939*, 27.
- ²² Dale, *Urban Planning in Singapore: The transformation of a city*, 15.
- ²³ *Ibid*, 20-21.
- ²⁴ Brenda S. A. Yeoh, "From Colonial Neglect to Post-Independence Heritage: the housing landscape in the central area of Singapore," *City & Society* 12 (1) (June 2000): 103-124, <https://doi.org/10.1525/city.2000.12.1.103>.
- ²⁵ Yeoh, "From Colonial Neglect to Post-Independence Heritage: the housing landscape in the central area of Singapore," 105.
- ²⁶ William John Ritchie Simpson (1855-1931) a former Health Officer of Calcutta during 1886 - 1897.
- ²⁷ Brenda S. A. Yeoh, *Contesting space in colonial Singapore; Power relations and the urban built environment* (Singapore: Singapore University Press, 2003), 149.
- ²⁸ W. J. R. Simpson, *The principles of hygiene as applied to tropical and sub-tropical climates and the principles of personal hygiene in them as applied to Europeans* (London: John Bale, Sons & Danielsson, Ltd., 1908), 307.
- ²⁹ *Ibid*, 307-308.
- ³⁰ Yeoh, *Contesting space in colonial Singapore; Power relations and the urban built environment*, 149.
- ³¹ Ho Kong Chong and Valerie Lim Nyuk Eun, "Backlanes as Contested Regions: Construction and Control of Physical Space," in *Public Space: Design, Use and Management* ed. Chua Beng-Huat and Normal Edwards (Singapore: Singapore University Press, 1992), 42.
- ³² Housing Difficulties Report Vol.1 (1918), A9.
- ³³ Yeoh, "From Colonial Neglect to Post-Independence Heritage: the housing landscape in the central area of Singapore," 107-109.
- ³⁴ Chong and Lim, "Backlanes as Contested Regions: Construction and Control of Physical Space," 46.
- ³⁵ *Ibid*, 50.
- ³⁶ Noriyuki Osada, *Housing the Rangoon Poor: Indians, Burmese, and Town Planning in Colonial Burma*, IDE Discussion Paper No. 561 (Institute of Developing Economies, 2016), 10.
- ³⁷ Maxim, *"The Resemblance in external appearance: the colonial project in Kuala Lumpur and Rangoon"*, 41-46.
- ³⁸ Hideo Izumida, "Historical study on the colonial cities of Southeast Asia and their architecture Part 1. Singapore's Town Planning and Shophouse," *Journal of Architecture, planning and environmental engineering* No. 413 (July 1990): 168.
- ³⁹ Shoichi Ota, "Report on the row house in Yangon- Report of inventory research of modern architecture in Yangon," *AIJ Conference* (September 2015): 80.
- ⁴⁰ Yeoh, "From Colonial Neglect to Post-Independence Heritage: the housing landscape in the central area of Singapore," 120.

Bibliography

Chong, Ho Kong, Eun, Valerie Lim Nyuk. *Backlanes as Contested Regions: Construction and Control of Physical Space*. Singapore: Singapore University Press, 1992.

Dale, O. J. *Urban Planning in Singapore: The transformation of a city*. Malaysia: Oxford University Press, 1999.



Edwards, Norman. *The Singapore House and Residential Life 1819 -1939*. New York: Oxford University Press, 1990.

Grant, Colesworthy. *Rough pencillings of a rough trip to Rangoon in 1846*. Calcutta: Thacker, Spink and Co., 1853.

Housing Difficulties Report Vol.1, 1918.

Izumida, Hideo. *Historical study on the colonial cities of Southeast Asia and their architecture Part 1. Singapore's Town Planning and Shophouse*, Tokyo: Architectural Institute of Japan, Journal of Archit. Plann. Environ. Engng, AIJ, No. 413, July 1990.

Maxim, Sarah Heminway. *The Resemblance in external appearance: the colonial project in Kuala Lumpur and Rangoon; A dissertation presented to the Faculty of the Graduate School of Cornell University*. New York: Cornell University, 1992.

Osada, Noriyuki. *Housing the Rangoon Poor: Indians, Burmese, and Town Planning in Colonial Burma*, IDE Discussion Paper No. 561, 2016.

Ota, Shoichi. *Report on the row house in Yangon- Report of inventory research of modern architecture in Yangon*. AIJ Conference Proceeding, September 2015.

Pearn, B. R. *A History of Rangoon*. Rangoon: American Baptist Mission Press, 1939.

Simpson, W. J. R. *The principles of hygiene as applied to tropical and sub-tropical climates and the principles of personal hygiene in them as applied to Europeans*. London: John Bale, Sons & Danielsson, Ltd., 1908.

Yeoh, Brenda S. A. *From Colonial Neglect to Post-Independence Heritage: the housing landscape in the central area of Singapore, City & Society 2000*. The American Anthropological Association, 2000.

Yeoh, Brenda S. A. *Contesting space in colonial Singapore; Power relations and the urban built environment*. Singapore: Singapore University Press, 2003.

Image sources

Figure 1: British Library, India Office Records [IOR/V/10/2].

Figure 2: Photo provided by a member of Yangon Heritage Trust. Year and location unknown.

Figure 3: Photo taken by the author in Lanmadaw Township, Yangon in 2016.

Figure 4: Simpson, W. R. C., *Report on the Sanitary Conditions of Singapore*. London: Waterloo, 1907.

Figure 5: Yeoh, Brenda S. A. *Contesting space in colonial Singapore; Power relations and the urban built environment*. Singapore: Singapore University Press, 2003.

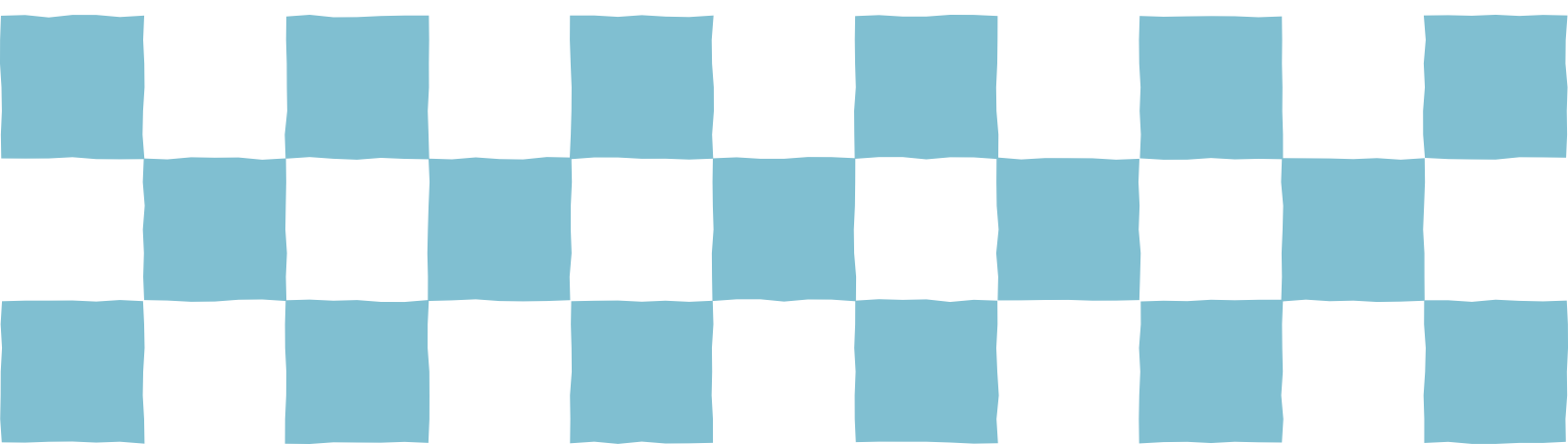
Figure 6: Chong, Ho Kong, Eun, Valerie Lim Nyuk. *Backlanes as Contested Regions: Construction and Control of Physical Space*. Singapore: Singapore University Press, 1992.



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

23 **Examining the scope of
industrial-oriented global
planning history from Asian
perspective**



The application of city planning theory to industrial development in Japan – Another introduction process of garden city theory and neighborhood theory –

Shigeo Nakano (Osaka City Univ.)

The companies that operated factories were forced to deal with city planning and the housing policy integrally because providing workers with dwellings was as indispensable as developing other parts of a city infrastructure such as developing premises for factories and constructing roads. In a company town, above all, the task of constructing a company town was a major undertaking because there were scarcely any private companies that supplied workers with the large number of houses needed. In the following sections, this paper describes the history of housing policies that were closely linked with the planning of industrial cities by discussing the case of Kurabo Industries Ltd. (hereafter referred to as “Kurabo”) as a representative example of the spinning industry, and that of Hitachi, Ltd. as a representative example of heavy industry. This paper is intended to reorganize this information by adding newly unearthed facts and analyzing anew how housing measures devised by companies through the application of advanced city development theory should be positioned. The construction of company housing is important in respect to the efforts that a company makes to develop an industry and in that it has been planned integrally with city planning as development of an industrial infrastructure.

JAPANESE STUDENTS' STUDIES AT THE ÉCOLE CENTRALE DES ARTS ET MANUFACTURES IN PARIS IN THE 1870S AND ITS IMPACT ON URBAN PLANNING

Junne Kikata (Kagoshima University) and Ken Nakae (Graduate School of Engineering, Kobe University)

INTRODUCTION

In 1875, seven years after the Meiji Restoration (1868), the new government of Japan officially started dispatching students abroad with the hope of introducing advanced Western technical knowledge to the nation's development. With regard to the field of civil engineering (*doboku-kougaku*), it is a well-known fact that young elites were selected and sent to France to study at the *École Centrale des Arts et Manufactures* in Paris (hereafter ECAM) between 1876 and 1879. This study discusses the features of technical education at ECAM during that period and reconsiders its impact on the planning history of Japan through the practices of its students after their return. The main focus is on the lectures of professor *Émile Muller* (1823 ~ 1889) and the activities of his disciple *Hanroku Yamaguchi* (1858 ~ 1900)

SIGNIFICANCE OF ÉMILE MULLER'S INSTRUCTION

ECAM provided specialized courses on construction technology (including architecture and public works), which was a single, integrated course titled *Construction Civiles* in the school's foundation year of 1829. During the semester of 1877–78, when the Japanese students attended, the course *Construction Civiles* was taught by Muller as one of the divided courses along with *Travaux Publics* and *Éléments d'Architecture*. Muller is known as the architect of the workers' housing suburb of Mulhouse (*la cité ouvrière de Mulhouse*) and for his contribution to research on workers' housing. A Japanese student's hand-written notebook proves that Muller's planning concept of workers' housing was surely taught in his course. We consider that this was one of the earliest evidence of the direct introduction of planning ideas to Japan.

ECAM GRADUATES' CONTRIBUTION TO OSAKA'S INDUSTRIALIZATION

Yamaguchi pursued his internship at Muller's ceramic factory in Ivry after his graduation from ECAM. After returning to Japan, he first worked at the Ministry of Education (*Monbu-shō*), and then turned to private enterprises of industrial capital in Osaka. Yamaguchi finally drafted the plan for Osaka in 1899. It was an industrially oriented extension plan toward the New Osaka Port, which was to be supervised by his Paris colleagues: *Koi Furuichi* and *Tadao Okino*. This unrealized plan is considered to be one of the pioneering Japanese city plans, though it still requires contextualization, especially regarding the learning and practices of ECAM graduates.

DISCUSSION

It is important to recognize that in Japan's early Meiji era, Western industrialization was acquired from multiple sources (England, Holland, France, Germany, U.S., etc.) and driven by multilayered structures (public/private, central/regional, authorized/unauthorized). In the field of urban planning, the French track has not been considered to be a major and continuous part of learning although, as presented, it was surely the earliest introduction track of planning ideas and played an important part in the industrial development of Osaka, through consultations with ECAM graduates. ECAM's targeted education seems to be effective at this stage, though further discussion is needed on its historical impact with regard to its limitation.

Spatial-temporal evolution of modern urban industry in China from 1840 to 1949

Jie He (School of Architecture, Tianjin University) and Jing Liu (School of Architecture, Tianjin University)

The research team collects data of important typical factories and mines established in 1840-1949 to create a historical geographic information system (GIS) database of modern China urban industry. Purpose of this database is to support an integrated recognition on historical value of modern China urban industrial heritages. Through the GIS database, spatial statistics and analysis are operated to investigate the spatial-temporal evolution and distribution pattern of modern industry development in China. Analytical results shown that modern industrial classifications in China had been evolving and increasing gradually and affected by natural, institutional, traffic, ideological, market forces, capital, wars and other factors as a whole, while the dominant factors varied over time. In general, distribution of Chinese modern industry is in a north-to-south layout. The geographical mean centers of modern industrial development shifts from the north to the south, then to the west, and finally back to the east region during the study period. The analysis illustrates that distribution of factories and mines is in a positive spatial auto-correlation and agglomeration pattern. Among these centers, the most agglomerated cities, including Shenyang, Tianjin, Shanghai, Wuhan, Chongqing and Guangzhou, are also typical industrial cities where population gathered. The methodology and techniques applied can improve accuracy of extracting the entire spatial-temporal phenomena from abstract data and support better understanding through GIS data visualization. Furthermore, these new approaches also serve as supplement references as well as are able to testify traditional literature studies.



The application of city planning theory to industrial development in Japan

– Another introduction process of garden city and neighborhood theory –

Shigeo Nakano *

**Prof., Graduate school of human life science, Osaka City University, Ph.D. in urban and regional planning, nakano@osaka-cu.ac.jp*

The purpose of this paper is clearly the roots of garden city theory and neighborhood theory in Japanese company town, case study on Kurabo and Hitachi company housing plan. This paper is analyzing how housing measures devised by companies through the application of advanced city development theory should be positioned.

In conclusion, the historical positions of the two cases discussed in this paper in the overview of city planning history have been charted in this paper. The Kurashiki case indicates that Magosaburo Ohara developed a garden city theory from the concept of a company town like a workers' village expanded to a city as a whole. On the other hand, Yoshikazu Uchida, who introduced neighborhood theory to Katsuta. Although the two cases discussed in the paper were not authorized as official city plans, they are well established in the Japanese history of city planning as examples that involve garden city theory and neighborhood theory.

Keywords: Ohara Magosaburo, Uchida Yoshikazu, garden city, neighbourhood theory.

Introduction

“National wealth and military power” is the slogan under which Japan labored during the course of its efforts to become a modern nation. This journey started at the end of the First World War during the “special providence” period, during which Japan experienced an unprecedented economic boom—starting with the spinning industry and culminating in heavy industry—that propelled the nation down the road toward becoming an industrialized nation in the true sense of the word. Of particular note was the resulting phenomenon under which urban populations increased rapidly due to the influx of factory workers, an influx that created serious urban problems, especially in the six major cities of the time. In order to resolve these issues, the former City Planning Act was promulgated together with Urban Building Law on April 5, 1919. Along with these legal measures, Japan started implementing a housing policy that governed public housing and housing associations during the middle of the Taisho period (1912–1926) to prepare housing for factory workers. Although the City Planning Act and the housing policy intrinsically needed to proceed hand in hand, each was discussed and planned independently. As a result, Japanese city planning started without the vital issue of its fragile relationship with a government housing policy being resolved, which lead to housing shortages.

However, the companies that operated factories were forced to deal with city planning and the housing policy integrally because providing workers with dwellings was as indispensable as developing other parts of a city infrastructure such as developing premises for factories and constructing roads. In a company town, above all, the task of constructing a company town was a major undertaking because there were scarcely any private companies that supplied workers with the large number of houses needed. In the following sections, this paper describes the history of housing policies that were closely linked with the planning of industrial cities by discussing the case of Kurabo Industries Ltd. (hereafter referred to as “Kurabo”) as a representative example of the spinning industry, and that of Hitachi, Ltd. as a representative example of heavy industry.

The author has already published material detailing how Kurashiki, the home of Kurabo, innovatively introduced the garden city theory; and the case of Katsuta, where the Mito plant of Hitachi, Ltd. is located, that introduced the neighborhood theory progressively. This paper is intended to reorganize this information by adding newly unearthed facts and analyzing anew how housing measures devised by companies through the application of advanced city development theory should be positioned.

1. Garden city-type company housing constructed by Kurabo and Magosaburo Ohara

Kurabo Industries Ltd., founded on March 9, 1888, built the Kurashiki mill currently known as Kurashiki Ivy Square in 1889. The company employed female workers who lived in commutable suburban areas in its early days, but found itself suffering from a labor shortage as production increased. To remedy this, it acquired land adjacent to the mill and constructed dormitories to be used both for workplaces and living spaces in 1896. Each of the dormitories was designed to house a sizeable number of female workers in a large room. As depicted in the “Sad

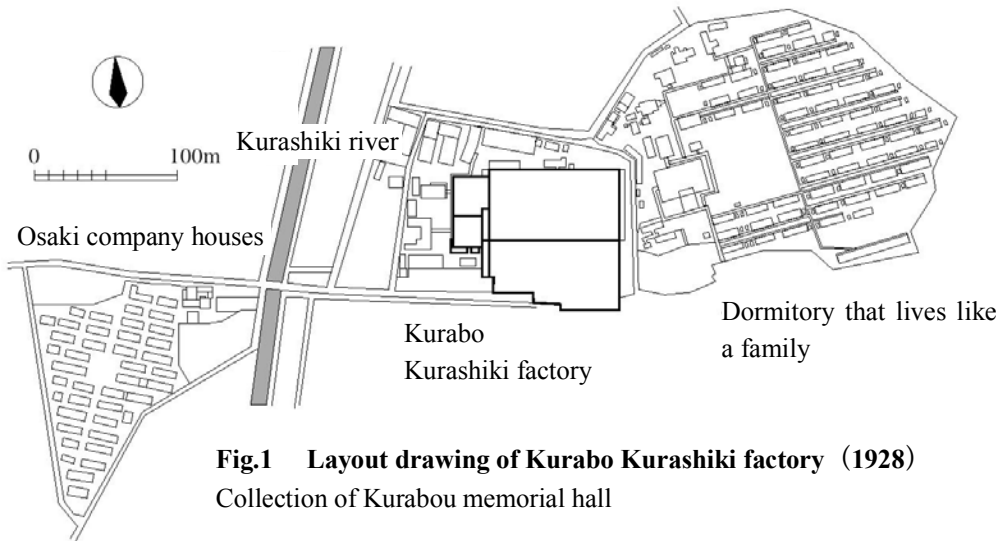


Fig.1 Layout drawing of Kurabo Kurashiki factory (1928)
Collection of Kurabou memorial hall

Story of a Girl Factory Worker” (a non-fictional novel written by Wakizo Hosoi in 1925), they were defective from a sanitary point of view and, to nobody’s surprise, these insanitary conditions led to an outbreak of typhoid fever in 1906, for which the first president of Kurabo, Koshiro Ohara, was forced to take responsibility by resigning.

This was the background to Magosaburo Ohara’s inauguration as the second president of the company. He initiated a thorough makeover of the dormitories and started the construction of 76 “family-like” dormitory buildings in 1908 (Fig.1). Each one of the 76 buildings was a small dormitory consisting of four rooms, and female workers lived in each room like a family. Each building was sited parallel to the next from the viewpoint of sanitation and receiving daylight, and flowerbeds were planted between the buildings so that the female workers could enjoy gardening. Ohara calculated that the improvements made to the dormitories would pay for themselves because they would enable female workers to work for a longer period of time and because they allowed his company to develop skilled workers, which would lead to higher production efficiency, although doing so required a high initial investment to cover the high construction costs.

Toward the end of the Meiji period (1868–1912), Ohara planned to construct the Masu mill (currently Mitsui Outlet Park Kurashiki) in order to expand the company. A vast area of land adjacent to the north side of Kurashiki Station was chosen for the easy access it would provide to railway transportation, and construction was completed in 1915. At the same time, Ohara set up a human resources study group and conducted research on methods of employing workers. In those days, it was general practice to employ migrant female workers in the spinning industry. Ohara’s research made it clear that constructing company houses where workers could live with their family members would permit them to work after getting married, and enable the company to develop many more skilled workers. Responding to the research results, a company town called “garden city company housing” was planned for the Masu mill. A garden city-type company house was a small one-story house with a floor space of about 10-tsubo (33 square meters), and 440 units in 110 buildings were completed by July 1915. Each house had a vegetable garden to let residents get friendly with the soil, and was the earliest example of company housing with a vegetable garden.

What is noteworthy is why the catchphrase “garden city,” often used for suburban housing, was used for company housing. As is well known, the concept of “garden city” was advocated by Ebenezer Howard. It is a famous planning theory that spread throughout the world together with the concept of “garden suburb.” However, Howard’s garden city concept—without any modifications—was not introduced to Japan until the end of the Meiji period. “Garden City,” published by volunteers of a local bureau of the Home Ministry in 1907, was the first Japanese book to introduce the concept of “garden city.” However, this book was written by summarizing not Howard’s original book “Garden City of To-Morrow” but “Garden Cities in Theory and Practice” written by Alfred Richard Sennett. What should be noted here is the fact that the garden city imagined in Sennett’s book was an industrial village like Bournville or Port Sunlight.

A recent survey has revealed that “Garden City” was in Ohara’s library, and it is not difficult to imagine Ohara thinking about industrial cities in foreign countries with this book in his hand. Ohara organized Sunday lectures to improve the civic culture of Kurashiki, and he invited Tokiyoshi Yokoi, a professor at Tokyo Imperial University, to the 58th lecture, which was held in August 1910, and Yokoi was quick to order a copy of Howard’s book. While Howard’s garden city theory is a “measure to make a city a rural area,” Yokoi thought that it was important to import the taste of the city into rural areas.” Kosuke Tomeoka, from Takahashi City in Okayama Prefecture, was invited to the 59th lecture. Although Tomeoka is now known as the pioneer of social welfare, he worked as a part-



time employee of a local bureau of the Home Ministry when “Garden City” was published. He was extremely interested in Sennett’s book, “Garden cities in Theory and Practice”, which was listed in the bibliography, and it was he who asked the Home Ministry to order a copy of Sennett’s book.

In the manner described above, Ohara became very interested in garden city theory through books and lectures, so it was a natural consequence for him to want to apply garden city theory to his company housing. In his book “Birth of City Planning,” Shunichi Watanabe points out that garden city theorists back in those days uniformly placed emphasis on improving agriculture, and this was a very attractive planning theory for Ohara, who operated a business in the rural area of Kurashiki. Even although he mistook Sennett’s intended vision, the “garden city-type company housing” constructed together with the Masu mill is positioned as the first case in which garden city theory was materialized in Japan.

However, the policy of letting workers live in company houses with their family members was abandoned in the midst of excessive competition. In the

course of time, dormitories were repeatedly improved until they finally became very similar to standard apartments. Kazue Yakushiji, who was an architect and then an architectural adviser to Kurabo, visited young Charles Edouard Jeanneret-Gris abroad and collected information from him. Charles Edouard Jeanneret-Gris, commonly known as Le Corbusier, was a European architect and urban planner and one of the pioneers of what is now called “modern architecture.” (In fact, Yakushiji is reportedly the first Japanese to have met Corbusier.) While Ohara maintained his position of improving housing for female employees, he was not able to go against the current of the times.

Against this background, Ohara was forced to compromise on his philosophy of garden city-like company housing, but the author believes that the image created by the phrase “garden city” lived on in Kurashiki for the reasons listed below. Ohara, the person who introduced the garden city theory to Kurashiki, became involved in city planning for Kurashiki as a whole as part of the industrial development of Kurashiki during the latter half of the Taisho period (1912–1926). He was inaugurated as a member of the Road Committee and engaged in suburban development by founding his own company, and he then promoted road improvements and urban reform by donating a large sum of money. Ohara contacted Rintaro Naoki, who was then manager of the City Planning Division of Osaka, and asked him to construct an industrial city centered on Kurashiki. Naoki went abroad immediately before he addressed Kurabo’s industrial city plan and visited the First Garden City, Letchworth, officially Letchworth Garden City, in Hertfordshire, England under Howard’s guidance and was impressed with it. Naoki was contacted by Ohara immediately after he returned to Japan. The whereabouts of the design for the road plan and the written statement that Naoki submitted to the Kurashiki Council in January 1923 remain unknown, but it can well be presumed that he tried to apply what he had seen in Letchworth to Kurashiki, which was to construct an industrial village that had space for both work and life with due consideration paid to Ohara’s wishes. What the author wishes to introduce as collateral evidence for this assumption is a section in “Reading of Garden City” that summarized the lectures given by Hideaki Ishikawa (Fig.3). Ishikawa visited Kurashiki in the early days of the Showa period (1926–1989) after the series of industrial developments planned by Ohara had been completed, and he made the following comments upon comparing Kurashiki and Letchworth:

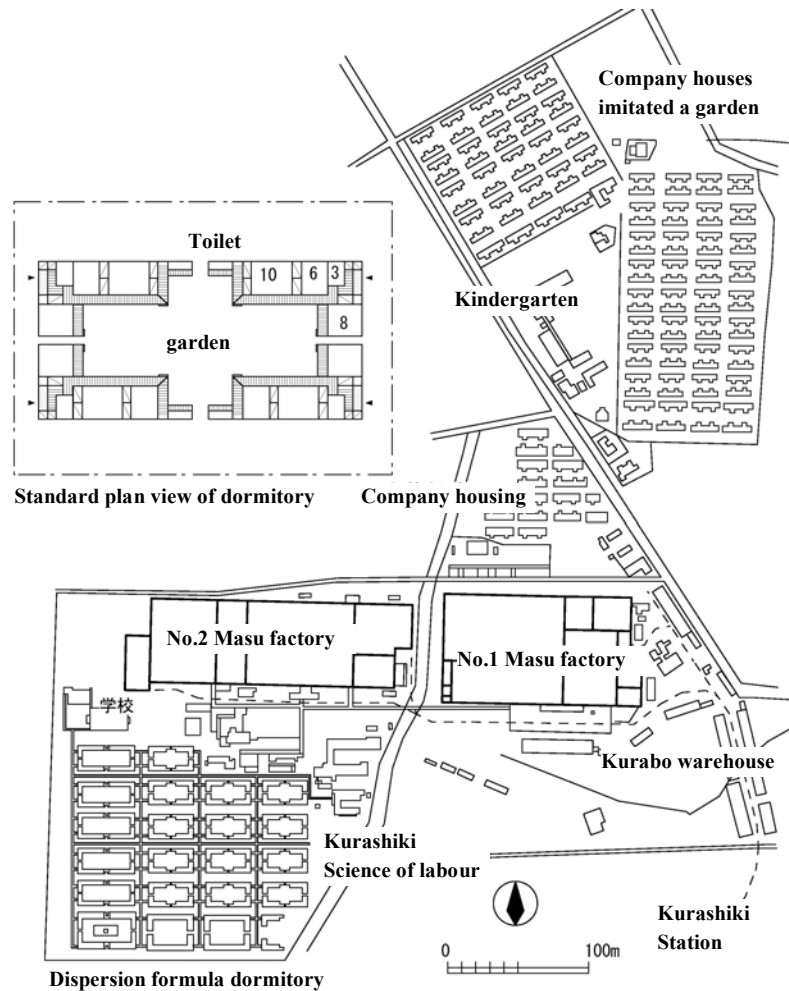


Fig.2 Layout drawing of Kurabo Masu factory (1928)

Collection of Kurabou memorial hall



“Probably, everyone involved in city planning in Japan presumed that Kurashiki should be the place to construct a garden city or city based on the garden city concept in Japan.”

“What is interesting is that Kurashiki adopted the radiation and circulation system for its road networks as Letchworth did (Actually the system in Kurashiki is better than the one in Letchworth in terms of height). Kurashiki’s city center had five radial lines that intersect each other, although it did not have 12 radial lines as Letchworth did.

Comparing the two cities solely by their maps indicates that Kurashiki’s organization is the spitting image of Letchworth, including the factory location.”

As described above, what impressed Hideaki Ishikawa—who actually visited Kurashiki and walked around the town—was the radiation- and circulation-type road network, which was similar to that in Letchworth.



Fig.3 Hideaki Ishikawa (1931) Reading of Garden city Collection of Kurashiki central library

2. Industrial development by Hitachi, Ltd. and the housing plan of Yoshikazu Uchida

Hitachi, Ltd., which became independent of Hitachi Mining in 1920, expanded its business in the northern part of Ibaraki Prefecture, starting at Hitachi and later embracing the towns of Katsuta and Takahagi, and built an industrial area referred to as the “Hitachi Kingdom” prior to the Second World War during the Showa period (1926–1989). What drove the expansion was the growing military demand during the war, and Hitachi’s industrial development was strongly promoted hand-in-hand with the national policy as represented by the new concept of industrial city planning.

Hitachi City, which is Hitachi’s home, did not place much importance on city planning prior to the war. Newspapers of the day lamented the situation that houses for workers were being constructed in a disorderly manner within the city and that road construction was one step behind. Hitachi made donations to promote civil engineering and help the construction industry remedy the lamentable infrastructure, but this failed to achieve the expected results by means of renovating the existing urban district. In light of this bitter experience in Hitachi City, Hitachi subsequently placed a stronger emphasis on city planning as a way to improve the industrial infrastructure. In 1939, a project to construct a new industrial city was planned as a national policy when the Taga plant (currently Hitachi City) was constructed anew, and a semicircular urban district was constructed thanks to a donation from Hitachi and a subsidy from the central government. Following the construction of Hitachi City, the construction of an industrial city was planned in Katsuta.

It was Yoshikazu Uchida, a professor of Tokyo Imperial University, who actually addressed the industrial city plan for Katsuta. Uchida had already drawn up several housing plans for Hitachi, Ltd. in partnership with his colleague Etsusaburo Ichimasu, and his students Eika Takayama and Yoshifumi Uchida. For Ouse and Hanayama, company districts were constructed basically as planned (Fig.4). Hitachi asked Uchida to devise a plan because it thought it was necessary to draw up an industrial plan that covered the neighborhood areas instead of a housing plan limited to company housing as it had done before.

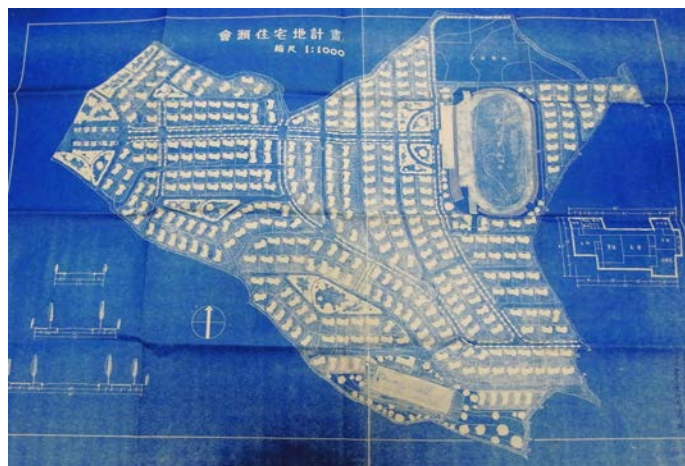


Fig.4 Ouse company houses, Hitachi Ltd. Collection of Tokyo Metropolitan Archives, Document of Uchida Yoshikazu



In November 1939, Uchida visited Katsuta with his son Yoshifumi and completed the initial plan the following year (Fig.6). With some modifications, the plan was finalized by March 1940 (Fig.7).

According to Uchida’s recollection, he drew up the plan for Katsuta by making reference to Stadt des KdF-Wagens bei Fallersleben (currently Volkswagen’s company town of Wolfsburg, as designed by Peter Koller)(Fig.5). Comparing Katsuta’s industrial city planning with the plan drawing of KdF-Wagens reveals that these two plans share the same basic city organization, such as the arrangement of factories and stations and the double radial belt line. The design details show that planning units were set up to make it possible to construct housing areas in stages. The first housing area was designed to accommodate 10,000 people (having been increased from the original 8,000), with green areas to separate roadways from sidewalks. The plan for the arrangement of houses was partly based on a plan from Harvard University contained in “Samples of Division of Residential Lot in Foreign Countries,” which was edited by Uchida and summarized by Takayama. In short, Katsuta’s industrial city planning was created with reference to housing area planning in Western countries. In particular, in view of the fact that the idea of a planning unit and the separation of roadways and sidewalks were incorporated in the planning, it can well be imaged that Katsuta’s plan was more or less affected by the “neighboring housing theory” as advocated by Clarence Perry.

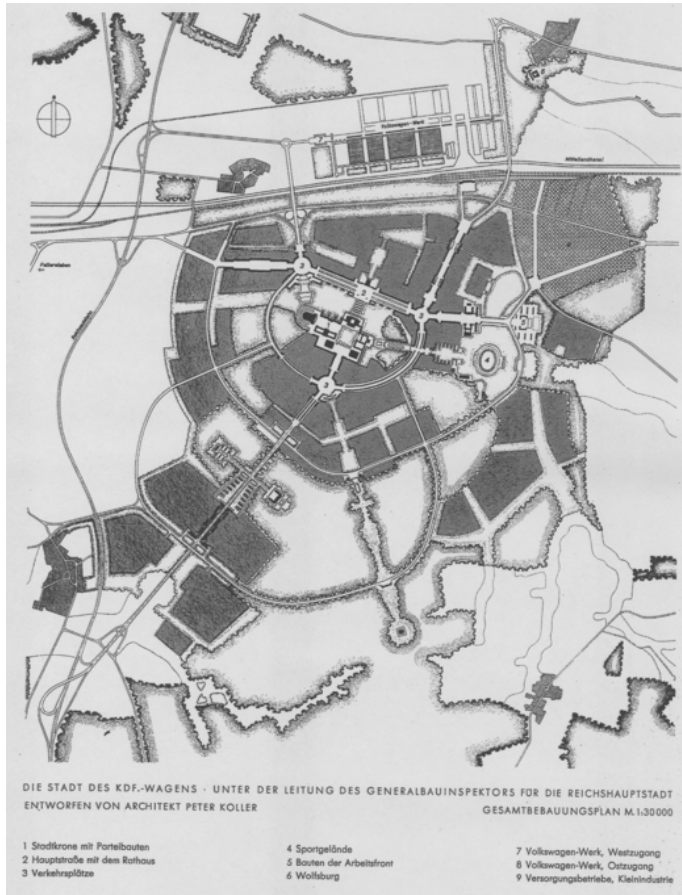


Fig.5 Peter Koller (1939) “Die Stadt des Kdf-Wagens”, “Die Kunst im Dritten Reich” vol.3 Collection of Tokyo Metropolitan Archives, Document of Uchida yoshikazu

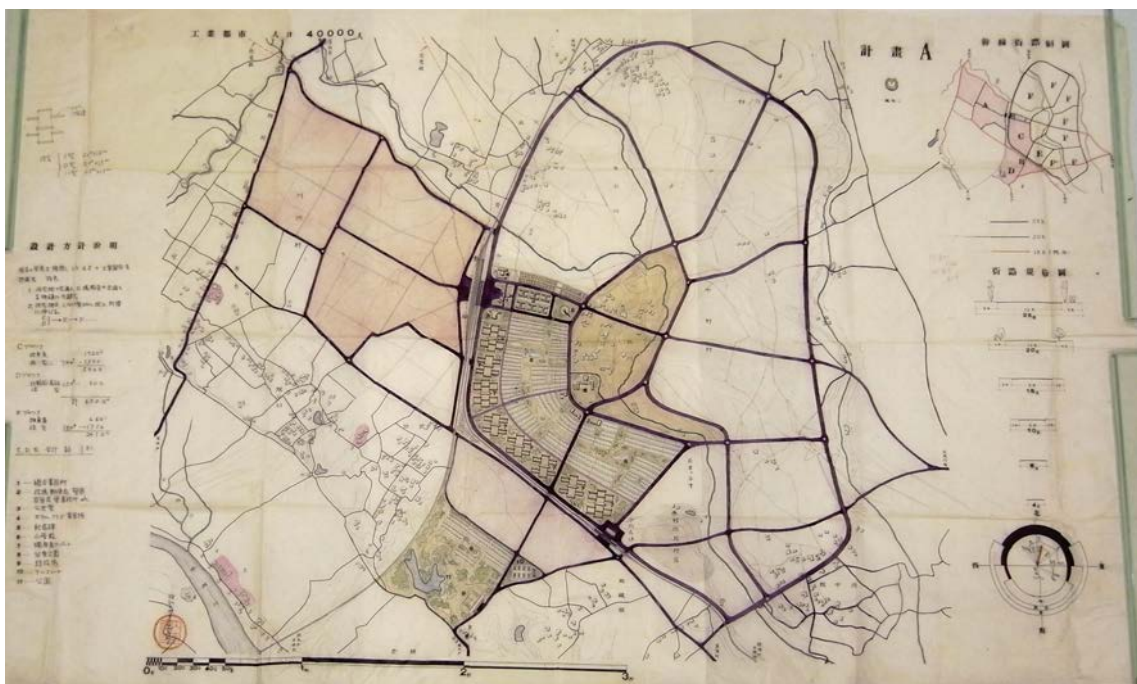


Fig.6 Katsuta Industrial city plan by Uchida Yoshikazu Collection of Tokyo Metropolitan Archives, Document of Uchida Yoshikazu

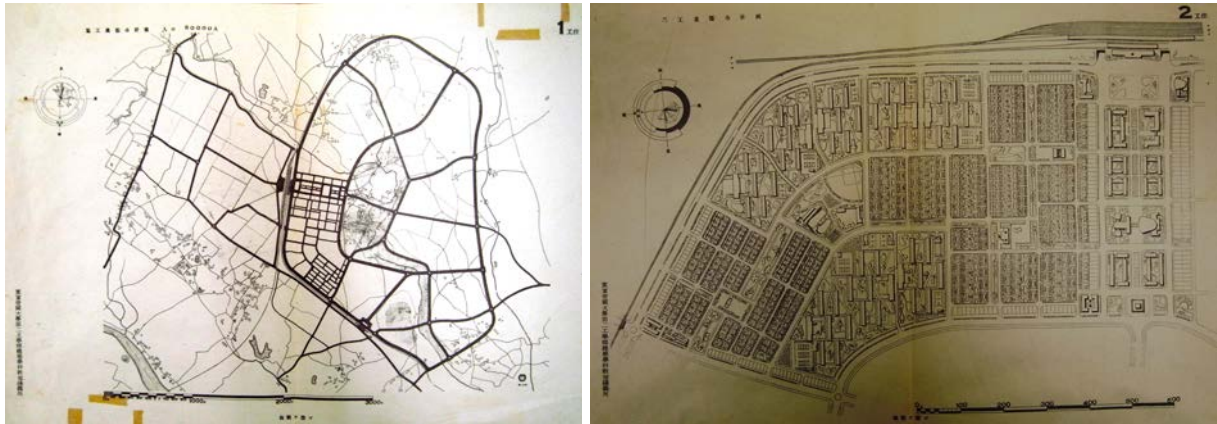


Fig.7 The final plan of Katsuta Industrial city designed by Uchida Yoshikazu
Collection of Tokyo Metropolitan Archives, Document of Uchida Yoshikazu



Fig.8 Katsuta legal city plan of land readjustment instituted by Ibaraki city planning council
Collection of Ibaraki Prefecture Archives

Here, the trends of Uchida in neighborhood theory are organized. As is well known, he created a magnificent city and village plan by applying neighborhood theory in Datong under the colonial regime in 1938, one year before he addressed the industrial city planning of Katsuta. As Uchida introduced the details himself in “Journal of Architecture and Building Science,” he applied the neighborhood planning of Detroit—included in “Samples of Divisions of Residential Lot in Foreign Countries”—to his housing arrangement plan that laid out the configuration of the planning units. He conducted a series of research and study projects for the Housing Problem Committee of the Architecture Institute of Japan beginning in June 1939 and the Architecture Division of the Japan Life and Culture Academic Society beginning in March 1942, and made proposals on planning units by bringing together outstanding members in the field of city planning for housing planning. The author presumes that these discussions were very important in the sense that they became the original models of planning standards for war-damage reconstruction and that they became the original model of neighborhood theory because they were applied to the theory of new town development. The industrial city planning for Katsuta was not released due to various



reasons, but it can be positioned as the first example of the implementation of a residential neighborhood in Japan apart from the innovative approaches made by the GHQ. However, Uchida's industrial city planning was not realized as originally planned, and only part of the company town was constructed in accordance with block planning.

The draft of the official city plan for Katsuta was concluded by the end of 1941, indicating that it was evaluated highly as a model case of industrial city planning, despite the fact that Katsuta was not designated as a new industrial city in the first collection of the "research report of housing conditions." In Katsuta, the project started with the construction of major city streets, but the base of new city construction was the land readjustment project that was planned and decided in November 1943.

The "Map of Lot Adjustment of Area Subject to City Planning in Katsuta" (Fig.8) shows that it obviously does not agree with the industrial city plan created by Uchida. However, it shows that green areas were laid out everywhere inside the area and that planning units were set up by encircling the residential area. This was explained in a discussion by the local Ibaraki committee of city planning with the comment, "Each area is regarded as a neighborhood unit for an elementary school zone for between 8,000 and 10,000 people," indicating that a school zone was used as a neighborhood unit. The residential neighborhood for a population between 8,000 and 10,000 people is exactly the same planning unit as used in residential neighborhoods today. In addition, the comment, "The plan was to construct a garden city by encircling it with a green area comprising paddy fields and mountain forests" indicates that the city planned to encircle the garden city with a green belt as a garden city does. Thus, a city-planning map that merges garden city theory and neighborhood theory can be said to be the goal in city planning prior to the Second World War.

In Katsuta, which secured wide parks and green areas in this way, the ratio of parks to lot area is set higher than 5% and that of green spaces to lot area is set higher than 15%. These two figures were much higher than the standards set by the Home Ministry in "Guidelines on the Construction of a New Industrial City" (each of the ratios of parks and green spaces is set higher than 5%). The guidelines clearly state that an urban district should be divided into lots, each of which is about 1 square kilometer, by a wide street, water channel, banking, railway, park, green area, etc., and an elementary school and a market should be constructed to establish a neighborhood unit for the daily lives of citizens. They are probably the planning standards in which the concept of a residential neighborhood appeared for the first time, and they were set at a higher level than the planning standards for land readjustment.

As discussed above, only a small part of Uchida's industrial city plan was incorporated in the arrangement plan for a company town, and it was not reflected directly in the official city planning. Nonetheless, it can be said that the series of plans in Katsuta during the war were basically devised under the influence of a neighborhood theory.

Conclusion

Garden city theory and neighborhood theory can be said to be theories known to everyone involved in city planning. The first cases discussed in the textbooks for those who specializes city planning are Den-en-Chofu for garden city theory and Senri New Town for neighborhood theory. Both garden city theory and neighborhood theory are already well established as planning theories indispensable to the development of new towns and residential suburbs. In contrast, the innovative approaches to garden city theory and neighborhood theory in industrial cities discussed in this paper are scarcely known. This is probably because mistaken visions were implemented without any change, and because the two approaches have not been particularly well documented, and were realized only in part. However, the fact remains that industrial development by a company is not particularly significant in the history of city planning as it is intrinsically classified as an academic field for the public because city planning as industrial development by a company is considered to be an investment by a private company. The construction of company housing is important in respect to the efforts that a company makes to develop an industry and in that it has been planned integrally with city planning as development of an industrial infrastructure. This contrasts with an official city plan implemented independently of a housing policy. It deserves special mention that industrial city planning by companies introduced advanced planning theory from abroad—ahead of public city planning—in the development process. Although the two cases discussed in the paper were not authorized as official city plans, they are well established in the Japanese history of city planning as examples that involve garden city theory and neighborhood theory.

In conclusion, the historical positions of the two cases discussed in this paper in the overview of city planning history have been charted in this paper. The Kurashiki case indicates that Magosaburo Ohara developed a garden city theory from the concept of a company town like a workers' village expanded to a city as a whole, although this is only a presumption based on collateral evidence. This agrees with the acceptance process of the garden city theory in Japan. The image of an industrial village when it spread to Japan during the end of the Meiji period (1868–1912) gradually prevailed as the planning theory for residential suburbs. It was Den-en-Chofu being constructed on a full scale that made the concept of a garden city widely known. Of course, it goes without saying that garden city theory was originally a planning theory for an entire city and should not have been applied only to the development of a residential suburb. Ohara's industrial city planning, aiming to construct a city for both



work and life during the middle of the Taisho period, was not intended to construct a garden city, but it has gone down in history as constructing a city to realize the idea of offering a site for work and life, and has been evaluated as being closest to the garden city envisaged by Hideaki Ishikawa. If so, Kurashiki should be regarded as the original garden city in Japan. However, the idea of developing an entire city into a garden city did not spread substantially in Japan, and the image of developing residential suburbs full of greenery was established as a catchphrase. As a result, Ohara's approach to garden city theory fell into oblivion as a barren flower.

On the other hand, Yoshikazu Uchida, who introduced neighborhood theory to Katsuta, discussed specific figures for a residential neighborhood in the Housing Problem Committee and the Japan Life and Culture Academic Society. Goro Ito, who was a member of Uchida's study group, promoted the construction of new industrial cities in the Home Ministry and presumably drafted "Guidelines on the Construction of a New Industrial City." As a result, the concept of a residential neighborhood was incorporated into planning standards. After the end of the Second World War, the Architectural Institute of Japan submitted "Proposal on City Planning and Housing Measures in the Post-War Period" to the prime minister and the War Damage Reconstruction Institute. The Proposal talked about the control of large cities and the industrialization of local areas, and wrote about "Organizing borders between living areas by setting up a residential neighborhood" as a specific proposal. This specific proposal was taken into account for war-damage reconstruction. It is clear that the specific planning standards of war-damage reconstruction was rooted in the research on residential neighborhoods that Uchida and his colleagues conducted during the war. That is, the planning unit of a residential neighborhood was recognized as the basic standard, while the postwar period inherited the contents of city planning developed during the war. Katsuta was merely a case of applying the cases of residential neighborhood implemented by Datong City Plan, but it can be positioned as the starting line from which neighborhood theory spread and became established substantially in postwar Japan.

Reference

- 1) KOSHIZAWA, Akira (1987), Housing policy and city planning during WWII, Wartime economy, Yamakawa Shuppansha Ltd., pp.257-288 (in Japanese).
- 2) ISHIDA, Yorifusa (1987), Centennial Japanese city planning history, Japan Institute of Local Government (in Japanese).
- 3) ISHIDA Yorifusa(1990), Japanese industrial villages and a reformist factory owner, Planning Perspectives, No.5, pp.295-305.
- 4) WATANABE Shunichi(1993), The birth of city planning, Japanese Toshi-keikaku(in Japanese).
- 5) KOSHIZAWA, Akira (2005), Reconstruction planning, ChuoKoron Shinsya Inc.(in Japanese).
- 6) NAKANO, Shigeo (2009), Planning history of company town, University of Tsukuba press (in Japanese).
- 7) NAKANO, Shigeo (2011), Dormitories and company houses of KURABO Industries Ltd. before WWII related to Ohara Magosaburo's housing policy~The workers houses of spinning industry in modern Japan, No.1~, J. Archit. Plann., AIJ, No.659, pp.193-202. (in Japanese).
- 8) NAKANO, Shigeo (2015), The relationship between the company housing of Hitachi, Ltd. and the residential neighborhood plans of Yoshikazu Uchida during WWII~A case study on the Hitachi, Taga and Mito works of Hitachi, Ltd.~, J. Archit. Plann., AIJ, No.708, pp.441-451. (in Japanese)

Acknowledgement

This work was supported by Grant-in-Aid for Scientific Research(B), Grant Number 15H04098, 15H04106.



Japanese Students' Studies at the École Centrale des Arts et Manufactures in Paris in the 1870s and its Impact on Urban Planning

Junne Kikata*, Ken Nakae**

* *Ph.D., Department of Architecture, Kagoshima University, kikata@aae.kagoshima-u.ac.jp*

** *D. Eng., Department of Architecture, Kobe University, nakae@kobe-u.ac.jp*

Between 1876 and 1879, young Japanese elites in the field of construction were selected by the government and sent to France to study at the École Centrale des Arts et Manufactures in Paris (hereafter ÉCAM). This study discusses the features of technical education at ÉCAM during that period and reconsiders its impact on the planning history of Japan through the practices of its students after their return. It focuses on the activities of Hanroku Yamaguchi (1858-1900) who finally drafted the Plan for Ōsaka in 1899, unrealized but one of the pioneering Japanese city plans. The Plan was strongly associated with public works which was to be supervised by his Paris colleagues—Kōi Furuichi and Tadao Okino—and with his practice on industrial buildings in Ōsaka. Its distinguished feature was industry-oriented design associated with his learning in France. Moreover, this paper discusses the limitations and scope of the transmission and localization of planning ideas.

Keywords: Japan, Ōsaka, École Centrale des Arts et Manufactures, industrial village, extension plan

Introduction

It is important to recognize that in the early Meiji era (1868-1890s), Japan underwent Western industrialization influenced by multiple sources (England, Holland, France, Germany, the U.S., etc.) and this development was driven by multi-layered structures (public/private, central/regional, authorized/unauthorized). This gives rise to the question whether this involved the transmission of urban planning ideas. If yes, a selection process must have been adopted (consciously or unconsciously) since these countries had different planning traditions. Stephen Ward identified three major concerns regarding the international diffusion of planning and proposed a typology of diffusion¹. Ward identified early twentieth-century Japan's case as an example of 'undiluted borrowing'. Recognizing the context, 'the rapid modernization of Japan from the later nineteenth century, which encouraged a fairly systematic trawling of the advanced Western countries for progressive practices which could be adopted', Ward noted that 'the possibilities of conscious selection or synthesis were quite limited', and pointed that 'Japanese planners...had always looked to the West as a whole'. Although we appreciate this important recognition of the general tendency of the Japanese understanding of the West, we think that it is still important to study specific cases, especially in the early phase, and analyse the limitations of the planning and the reasons they generated historical results as summarized by Ward.

On the other hand, in our previous study, we demonstrated that the Western concept of the industrial village had been accepted in various contexts in Japan². The analysis of business travels, which increased rapidly in the 1890s, suggested that these trips enabled Japanese businesses to assimilate concepts and practical information concerning Western industrial villages. Interestingly, several related practices of industrial development emerged in Japan at the turn of the twentieth century. Simultaneously, the Garden City concept also emerged with the first publication of Ebenezer Howard's *To-morrow* in 1898. The concept of the industrial village was thus acquired from multiple sources by the private business sector on their own initiative.

Japanese Students of the École Centrale des Arts et Manufactures (ÉCAM) in Paris in the 1870s

This paper focuses on the Japanese students who studied at ÉCAM in Paris, between 1876 and 1879. The historical importance of their study is already well known, since the dispatch of Kōi Furuichi (1854-1934), Tadao Okino (1854-1921), and Hanroku Yamaguchi (1858-1900) was the first organized dispatch of students overseas by Monbu-shō (Ministry of Education) of Japan in this field, after the reformation of their scholarship policy. Moreover, because of the fame they achieved after their contribution to the development of 'Doboku Kougaku' (civil engineering/public works)³, the Japan Society of Civil Engineering conducted substantial studies on Furuichi's and Okino's works⁴. Although these studies focused on their work in specific fields, they are helpful to understand the whole picture of their learning and career.



Comparatively speaking, studies on Yamaguchi are quite fragmentary, although he is the most important person in relation to the planning as he drafted the Plan for Ōsaka in 1899. Since the 1980s, the Plan for Ōsaka has been addressed by several authors, for example, Tamaoki (1979)⁵; Miwa (1989)⁶, who tried to establish Yamaguchi as the originator of Ōsaka's planning; Hori (1992), who briefly introduced Yamaguchi as 'the first architect and planner in Japan'⁷; the Planning Bureau of Ōsaka City (1989)⁸ and Nishikawa et al. (1989)⁹, who mainly focused on street planning; and Arai and Ozawa (2014), who focused only on park planning¹⁰. The most precise understanding was obtained by Y. Ishida (2001)¹¹, who recognized the importance of Yamaguchi's learning in France and the context, Ōsaka's industrialization, but it lacks actual proof. Further, the Plan for Ōsaka drafted in 1899 has also been introduced in foreign languages¹², though, as Fouquet (2013) commented, shortage of works written in French hinders accurate discussion¹³.

One important reason for the general lack of studies on Yamaguchi is his illness and death at the young age of 42. This obviously shortened his career and limited his output (practices and writings), as well as hindered the attempts of later generations to completely understand his work. Moreover, his achievements during his illness were relatively underestimated. Another important reason for this lack is probably that some authors emphasized his status as 'the first architect in Japan'¹⁴. Although partly true, this preconception led to the fragmentation of existing studies. Yamaguchi's works on school buildings during his career at Monbushō Eizen Ka (the Construction Department of the Ministry of Education)¹⁵, and his last and most spectacular work of Hyogo Prefectural Office have been highly appreciated; however, his simple works—industrial buildings of factories in the Kansai area—have not been given enough attention. A comprehensive study on Western-style architecture in the Kansai area by J. Ishida (1996)¹⁶ placed Yamaguchi's contribution in historical context, though it also did not focus on industrial buildings such as factories.

Nevertheless, with regard to understanding the learning of Japanese students, including Yamaguchi, at ÉCAM, such works of industrial buildings are important as they more suitably reflect their learning at ÉCAM. Horiuchi's case study (2003) accurately observed and discussed the practical education in France obtained by Yamaguchi and Katsutarō Inabata, the founder of Muslin Mill Co. Ltd., and their collaboration in Ōsaka¹⁷.

Significance of Émile Muller's Teaching at ÉCAM

ÉCAM was founded in 1829. It introduced new theoretical and methodological principles of education in response to the drastic change in social and economic circumstances due to industrialization in France, particularly, the nature of building programs¹⁸. This can be briefly described as the 'invention of Industrial Sciences (Sciences Industrielles)', as the interface between basic principles and industrial practice¹⁹. In the construction field, ÉCAM provided specialized courses on construction technology (including architecture and public works), which was a single, integrated course titled 'Construction Civiles' in the school's foundation year. During the 1877-78 semester, when the Japanese students were at ÉCAM, 'Construction Civiles' was taught by Professor Émile Muller (1823-1889), along with 'Travaux Publics' taught by Antoine Boutiller (1828-1918) and 'Éléments d'Architecture' taught by René Demimuid (1835-1881).

Muller is known as the architect of the workers' housing suburb of Mulhouse (la cité ouvrière de Mulhouse). Its construction started in 1853, and it is regarded as one of the earliest examples of industry-oriented housing development in France. He is also recognized for his contribution to research on workers' housing such as *Les Habitations Ouvrières En Tous Pays: Situation En 1878, Avenir (Workers' Housing in All Countries: Situation in 1878, Future)*²⁰, co-written by Émile Cacheux, an ÉCAM graduate. This book included an international comparison of workers' housing and received an award in the world exposition of 1878. Moreover, he is known as an entrepreneur, the founder of la Grande Tuilerie d'Ivry (the Grand Tile Factory of Ivry) located in Ivry-sur-Seine in the outskirts of Paris at the Seine riverfront²¹. Importantly, Yamaguchi did his apprenticeship at Muller's factory in Ivry in 1880 after his graduation from ÉCAM. One of Yamaguchi's ÉCAM classmates, Tadao Okino, in his biographical introduction of Yamaguchi, states that 'Yamaguchi learned the methods of tile and architectural terra-cotta production under Muller's kind instruction'²².

Muller was a typical reformist engineer who was deeply committed to the social and economic issues of construction. His character is reflected in his commitment to workers' housing and his role in the increasing use of ceramic, motivated by the invention of economic but durable architectural materials to replace stone, the limited natural resource that also has faults. Moreover, he was regarded as a reformer of education at ÉCAM. In 1846, Muller was appointed as the professor of 'Construction Civiles', as the first graduate of the school. Before Muller, former professors of 'Construction Civiles', including Charles Mary (1791-1870), were all from École Polytechnique, known for its highly theoretical education. Muller was considered a model civil engineer, as imagined by ÉCAM's founders, and a social and industrial reformer²³.



Contents of Émile Muller's Course 'Construction Civiles'

The detailed educational contents of ÉCAM can be known today, thanks to the richness of the Archive of l'École Central of Arts and Manufactures²⁴. Even in Japan, we can understand it partly through Kōi Furuichi's handwritten notebook and textbooks preserved at Furuichi Bunko (Kōi Furuichi Archives) of the University of Tokyo²⁵. We consulted Furuichi's notebooks and textbooks on three courses related to construction engineering, especially on the course 'Construction Civiles' taught by Muller, and were able to understand the entire contents. 'Construction Civiles' includes fifty-two lessons, which were taught between 3 September 1877 and 11 May 1878. By referring to Furuichi's notebooks and a historical record of the school, we confirmed that Muller's course included the following contents: *étude des matériaux de construction* (study on construction materials), *charpente* (structural framework), *éléments d'architecture et historique* (architectural elements and history), *étude des locaux d'habitation et des locaux d'industriels* (housing and industrial premises), *hygiène de l'habitation* (hygiene of housing), and *direction des chantiers, devis, cahier des charges*, etc. (direction of construction site, estimation, specification documents, etc.)²⁶.

The first chapter on construction materials started by introducing the physical characteristics of stone, describing its faults, including frost damage (*gélivité*). The materials included mortar, glass, ceramic, wood, paint, plating, etc., and their physical and chemical characteristics, as well as usage, were described. The next chapter on structural framework dealt with wood, steel, and mixed structures, which were explained with examples of traditional and contemporary architecture. The chapter on architectural elements explained the architectural principle with three keywords: *de la solidité* (solidity), *de la commodité* (commodity), and *de la beauté* (beauty). About beauty, Muller stated that 'There is no law or precept to give on the subject of what constitutes beauty. The base of the art is truth'²⁷.

These contents are important when considering the impact of Muller's architectural education on the Japanese students, although regarding planning, the following chapters are more important. The chapter on housing and industrial premises dealt with the following types of facilities: warehouse, dock, spinning mill, textile mill, public bath and wash-house, hospital and hospice, housing, and workers' housing. This clearly shows that Muller's course was industry-oriented. Each building program was explained with numerical evidence, with a notification saying 'one has to consider the economic side'²⁸. Regarding housing, Muller commented that 'the history of housing... gives an idea of each period's civilization'²⁹. On workers' housing, Muller explained the rise of this issue from the 1850s; *Cité ouvrières* (Workers' City) had produced a unique impact. Muller described the impossibility of Workers' City in a big city; however, he indicated that it could achieve success in a provincial city and stated that 'the first idea is to give back the workers their own (house), and this institution acted on the moral situation of the workers'³⁰. Finally, he referred to the Workers' City of Mulhouse.

Here, we can confirm that Muller's planning concept for workers' housing was surely taught in his course. This is probably one of the earliest evidence of the direct introduction of planning ideas for workers' housing.

Influence of Émile Muller's Course on Yamaguchi's Industrial Buildings

Yamaguchi returned to work in the Kansai area in 1894 as an associate at Kuwahara Engineering Office in Ōsaka, which was an association of seven university graduates, Kouno, Fujii, Yamaguchi, Oka, and others. They specialized in architecture, railways, mining, machinery, and were the leading figures in each fields. The office looked 'like a complete advisor of the industrial world of West Japan'³¹. Eleven projects, after 1894, were listed as part of Yamaguchi's works, edited by Tadao Okino in his biographical account of Yamaguchi (**Table 1**). Among them, only Hyogo Prefectural Office is a public building; others are private office buildings or industrial buildings. This paper focuses on three factories in Ōsaka and considers the influence of Muller's course on Yamaguchi's works.

- Nihon Seitō Kabushiki Gaisha (Japan Sugar Refining Co. Ltd., completed in 1898)

The factory of Nihon Seitō was located in the north of Ōsaka on the Yodogawa riverfront. Yamaguchi designed the 1,980-square-meter factory building, constructed with steel-framed brick walls. The Period Reports of Nihon Seitō clarifies the factory construction process and the circumstances of Kuwahara Office's participation in building design, namely, Yamaguchi's participation. The company selected a refining machine for purchase based on the documents and drawings sent from Europe, and finally, when the machine was ordered, Yamaguchi designed the factory building referring to the machine drawings³². Yamaguchi had learnt factory design at ÉCAM in Muller's course and through practices outside of school. In addition, he had also learnt about machinery. The task of building this factory shows how Yamaguchi's learning suited actual practice.



Table 1: Yamaguchi’s Architectural Works listed in *Yamaguchi Hakushi Kenchiku Zushū*

project name	higher normal school	higher school of commerce	college of science, the Imperial Univ.	the first high school	the second high school	Yokohama-Shokin Bank, Kobe branch	factory of Nihon Boushoku Co.Ltd.	Meiji life insurance Co.Ltd., Osaka	factory of Nihon Sugar Refinery Co.Ltd.	the Locomotive Manufacturing Co.Ltd.	the Muslin Mill Co. Ltd.	Nihon fire insurance Co.Ltd.	foreign engineers' house Yahata Steel	Hyakusanju Bank main office	Hyogo Prefectural Hall	Nihon Post Bank main office
location	Tokyo	Tokyo	Tokyo	Tokyo	Sendai	Kobe	Nishinomiya	Osaka	Osaka	Osaka	Osaka	Osaka	Chikuzen, Fukuoka	Osaka	Kobe	Osaka
structural materials	brick	brick	brick	wood/brick	wood/brick	brick	brick	brick	brick/steel frame	brick	brick	brick	wood	brick	brick	brick
floors	1, 2	2	2	1, 2	1, 2	2	1	2	(1)	1	2	1	2	2	2	2
specific materials	-	-	-	-	-	granite (quin, lintel) bronze (cornice) tile roof	brick chimney (height 45m) tile roof	granite (quin, lintel) basement floor slate roof	brick chimney (height 36m) steel sash	granite (quin, lintel) bronze (cornice) tile roof	brick chimney (height 36m) tile roof	granite (quin, lintel) tile roof	tile roof	granite (quin, lintel) bronze (cornice) flat roof	granite (quin, lintel) bronze (cornice) slate roof	bronze (cornice) slate roof
floor areas (㎡)	1270.5 (main building) 564.3 (physics labo.)	349.8 (office building)	1815.0	1910.7 (main building) 1527.9 (phy./che. labo.) 1815.0 (dormitory) 3187.8 (prep. class room)	795.9 (main building) 818.4 (phy./che. labo.) 115.5 (storage.) 570.9 (auditorium)	627.0	10309.2	495.0	1980.0	330.0	13530.0 (approx.)	264.0	429.0	660.0	2244.0	396.0
total (㎡)	1834.8	349.8	1815.0	8441.4	7121.4	627.0	10309.2	495.0	1980.0	330.0	13530.0	264.0	429.0	660.0	2244.0	396.0
my of construction starting	Jul/1884	Oct/1885	Nov/1885	Apr/1887	Jun/1888	Feb/1894	Jan/1896	Fev/1896	May/1897	May/1897	Dec/1897	May/1897	May/1898	Oct/1898	Jan/1899	Jun/1900
my of completion	Mar/1887	Jun/1886	Dec/1890	Feb/1890	Oct/1891	Dec/1896	Dec/1896	Jun/1899	May/1898	Jun/1898	Jul/1900	Jun/1898	Aug/1898	Jul/1901	May/1902	Jan/1902
current condition	not existing	not existing	not existing	not existing	not existing except auditorium	not existing	not existing	not existing	not existing	not existing	not existing	not existing	not existing	not existing	existing(restored)	not existing
notes	-	-	-	co-working with Masamichi Kuru	co-working with Masamichi Kuru	design by Shogoro Sige, construction supervising by Yamaguchi	-	design by Magoichi Noguchi, construction supervising by Yamaguchi	-	-	co-working with Shogoro Sige	-	-	-	Kanetoku Akiyoshi succeeded the work after Yamaguchi's death	-

Figure 1 shows the resemblance between Nihon Seitō factory building and a cross-section drawing of an existing factory building in Paris from Mullers’ educational materials (*Croquis de Cours des Constructions Civiles*). This is a visible example of the reflection of Yamaguchi’s learning in France, especially from Muller’s course, in his works.

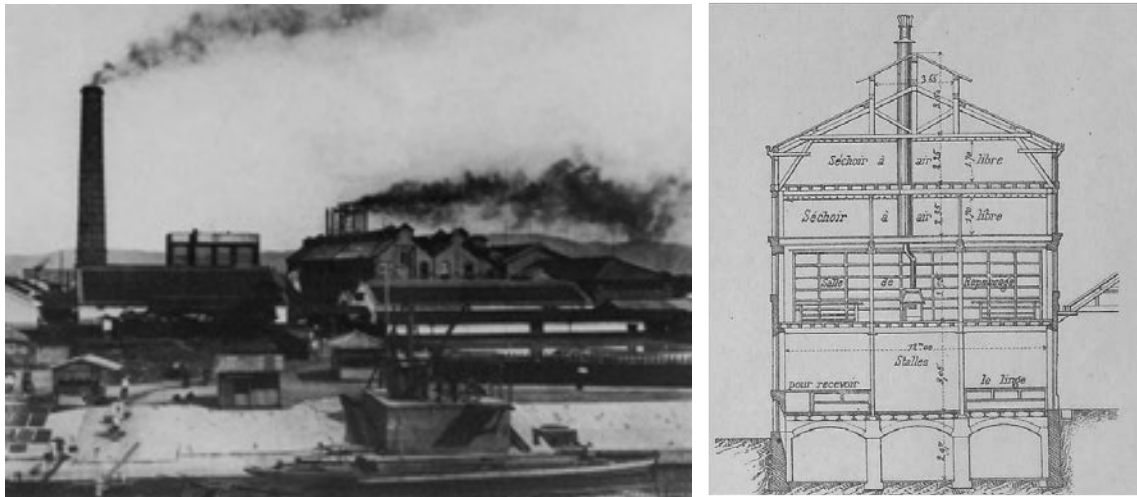


Figure 1: Comparison between the appearance of the Nihon Seitō factory (left) and a drawing from Muller’s educational materials (right)

• Kishaseizō Kabushiki Gaisha (Locomotive Manufacturing Co. Ltd., completed in 1897)

The Kishaseizō factory was located in the west of Ōsaka on the Ajigawa riverfront, next to Nishinari Railways’ Ajigawa Station in the northwest, on 66,000 square meters of land donated by Mr Kichiemon Sumitomo. Of this, 33,000 square meters was designated for the headquarters and factory site. Yamaguchi designed the 330-square-meter main office building, a two-story brick structure, including a granite quoin, arch, and cornice. This building no longer exists, although it survived until the 1980s. It was a simple but stylish building with arched windows. Not much is known about this small building now, so we did not examine it in detail, though we think this architectural design deserves further consideration regarding the design theory taught by Muller.



• Mosulin Bōshoku Kabusiki Gaisha (Muslin Mill Co. Ltd., completed in 1900)

The Muslin Mill factory was located in the north of Ōsaka in front of a newly developed drainage canal (today's Shin Yodogawa). It was founded by Katsutarō Inabata, who was dispatched to France by the Kyoto Prefectural government and studied textile, dyeing, and applied chemistry in Lyon. A previous study by Tatsuo Horiuchi examines the significance of his career in relation to that of Yamaguchi³³. Here, we focus on buildings and their programs. Yamaguchi's Architectural Works listed in *Yamaguchi Hakushi Kenchiku Zushū* reported that Yamaguchi designed more than 13,530 square meters of one-story brick factory buildings. More exactly, there were 11659.6 square meters of brick factory buildings, and 3985.7 square meters of wooden annexes (including housing, welfare facilities); a total of 15645.3 square meters³⁴. The numbers do not match perfectly, though we proceed our discussion with the assumption that Yamaguchi coordinated all construction work³⁵.



Figure 2: Aerial view of the Muslin Mill Ōsaka Factory

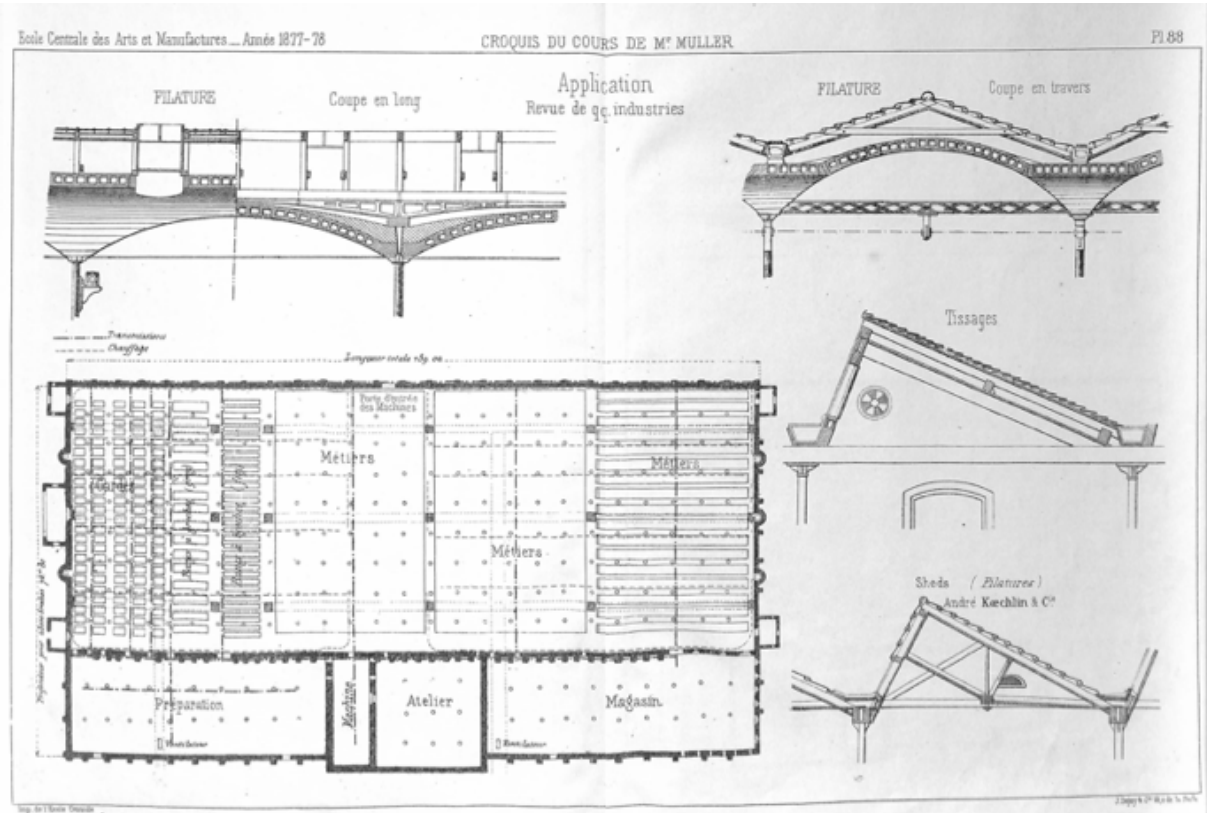


Figure 3: A drawing from Muller's educational materials showing a 'filature' (textile mill)

The factory building was a typical textile mill construction taught in Muller's course (Figures 2, 3). The substantial buildings of housing and welfare facilities are of more interest. There were five two-story buildings for workers'



housing (Figure 4). Reportedly, there were more than 100 rooms of approximately 20 square meters on the ground and first floors for female workers' accommodation³⁶. These and other welfare facilities were connected by covered corridors, equipped with lavatories with hot and cold water³⁷. There were large dining rooms, 14.4 m wide and 61.2 m deep, of wooden truss structure³⁸. Moreover, there were apparently various shops and kiosks which were 'extremely convenient, as if a town is condensed here'³⁹. In addition, there was a company hospital and a cattle farm and aviary (Figure 5). Milk and eggs from the cattle farm and aviary were provided to the hospital for patients' nourishment⁴⁰.

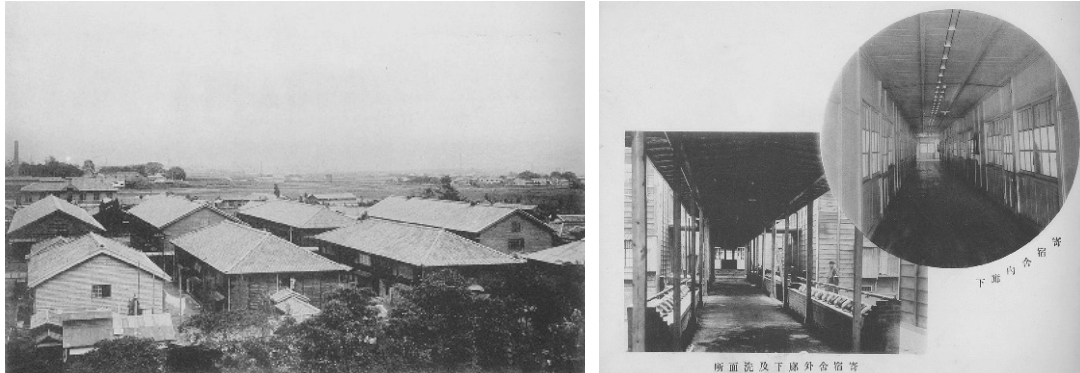


Figure 4: Workers' housing of the Muslin Mill

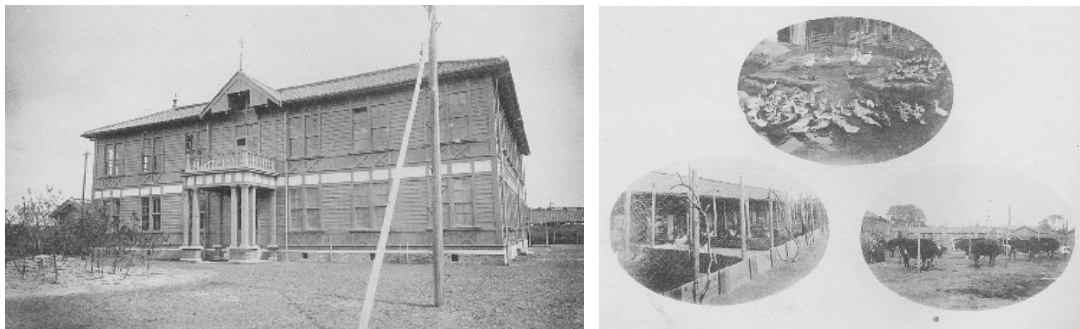


Figure 5: Hospital (left), and cattle farm and aviary (right) of the Muslin Mill

These welfare facilities, responsible for the complete care of workers' life and health, were a typically paternalistic way of managing a factory. Notably, this system was developed by Inabata and Yamaguchi, both trained in France. Undoubtedly, they were both aware of the same kind of existing European practices. Yamaguchi, especially, had surely learnt how to plan workers' housing in Muller's course, although the concept of Muslin Mill's housing and welfare facilities was quite different from that of Muller's Workers' City of Mulhouse. The latter aimed to make workers' families independent by giving them land and house as a reward for their diligence, which made it innovative. As we confirmed earlier, the Japanese students, including Yamaguchi, were surely taught this in Muller's course. Conversely, Muslin Mill's facilities were almost the opposite, as they aimed at offering full patronage to the workers. These two places targeted different workers—Muslin Mill's target was only young, single female workers from the countryside—which can be considered the reason for this difference or for the rejection of the Mulhouse system in Muslin Mill. In any case, it is an important question regarding the impact of learning from Muller's course.

The Plan for Ōsaka in 1899

Regarding Ōsaka, major issues related to public works since the 1870s have been discussed; for example, the improvement of Yodogawa river, which carried large quantities of sand from an upper stream that originated in the Kyoto region. Another issue was the development of a new Ōsaka Port, historically located at the mouth of Yodogawa river, and which was facing problems due to dredge works before encountering a new challenge—the rise of Kobe Port from 1868, located in the same region and designated as a new open-port by the former Japanese government. Moreover, the flood of Yodogawa river in 1885 spurred the public authority to take concrete measures. During that period, in the 1890s, the people in charge of this matter were Kōi Furuichi, Vice President and Chief of the Engineering Affairs of the Ministry of Interior, and Tadao Okino, a specialized and experienced engineer for river improvement at the Department of Engineering. Okino proposed a river improvement plan in 1895 and implemented the new drainage canal (Shin Yodogawa) under Furuichi's approval. Around the same time, Furuichi



approved the new Ōsaka Port plan in 1894, originally proposed by Cornelis Johannes van Doorn⁴¹, with a definite amendment. Naturally, these two projects were closely related, though Furuichi and Okino's final solution was to separate and simplify them (**Figure 6**).

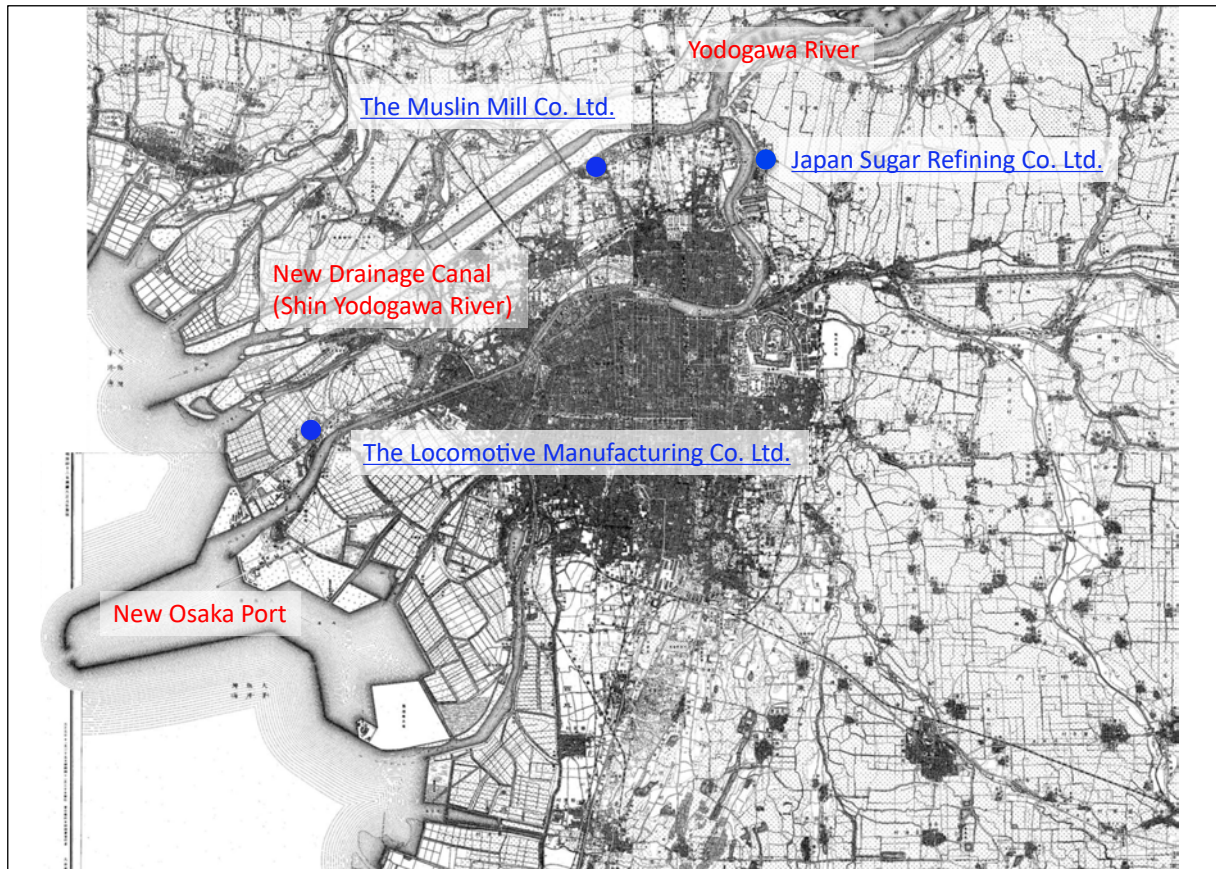


Figure 6: Geographical map of Ōsaka in 1908-1909, showing major public works and locations of Yamaguchi's factory works

We will now return to Yamaguchi's works. The three factories, Nihon Seitō, Kisha seizō, and Muslin Mill, were all located on riverfronts in the outskirts of Ōsaka, and the sites were therefore stable due to the river improvement project. Yamaguchi finally enacted the Plan for Ōsaka in 1899, starting with the new Ōsaka Port. Yamaguchi's works in Ōsaka were strongly associated with his ÉCAM classmates' public works. Original documents reveal the details of Yamaguchi's proposal for the Plan for Ōsaka⁴². Of these, 'Ōsaka Shinsetsu-shigai Sekkei Setsumei Sho (the Description of the Plan for Ōsaka)' by Yamaguchi reveals his planning concept in detail, corresponding to each proposed work—186 lines of streets, 29 areas of parks, and 17 lines of canals.

After comprehensively analysing it, we think that the most important feature of Yamaguchi's proposal is demonstrated in the composition of the planned elements, primarily the distribution of canals and land use of canal fronts (**Figure 7**). In the then newly annexed municipal area between Ajigawa and Shirinashigawa rivers, two lines of first-class canals (width 45 m) running east to west were proposed to connect both rivers. Three second-class canals (width 32.4 m), running north to south at right angles, were proposed. Supported by other second and third-class canals, also at right angles, an extended area was covered by a well-ordered canal network. All canal fronts were opened to future utilization, without locating streets directly along the canal. About the land use of canal fronts, Yamaguchi stated the following:

The canal bank is the most useful space for citizens' utilizations. First, it is necessary for the collection and distribution of freights. It is also the best site to build warehouses. Further, a gentle slope from the waterfront helps load and unload heavy and large ship cargos... Therefore, I decided not to construct streets on the canal front, but to preserve substantial space on the banks... With regard to the location, I set 50 Ken (90 m) or 100 Ken (180 m) in depth of the canal front block⁴³.

This idea shows the most important feature of Yamaguchi's planning, that is, an industry-oriented design. Moreover, we can assume the influence of the education and practical observation at ÉCAM and France, for



example, at Muller's brick factory in Ivry Port, located on the Seine riverfront, where there was a wide bank space with a gentle slope and some factory facilities at the riverfront.



Figure 7: Plan for Ōsaka in 1899 (above), and closeup of the newly annexed area (retouched by authors)

Conclusion

Our findings are as follows. 1) Yamaguchi's works were influenced by his learning at ÉCAM, especially his later works of industrial buildings in Ōsaka. 2) His Plan for Ōsaka in 1899 was strongly associated with public works conducted by his ÉCAM classmates Kōi Furuichi and Tadao Okino, and its distinctive feature was industry-oriented design. 3) Yamaguchi's design for the then newly annexed municipal area of Ōsaka resembles that of Ivry Port in the outskirts of Paris where he did his apprenticeship at Émile Muller's factory. We can assume that not only his studies in school but also such practical learning had helped develop Yamaguchi's professional conviction. However, there is still scope to further our understanding of the whole picture of ÉCAM's off-school education.

Additionally, we observed the outstanding consistency and accuracy of Yamaguchi's design from an architectural to an urban scale. Future research should consider in more detail whether this was a typical outcome of education at ÉCAM or the result of Yamaguchi's personal talent.

Moreover, a general question needs to be discussed further—how can one evaluate the impact of the Japanese ÉCAM students' learning in France on the planning history of Japan? Since Yamaguchi's Plan for Ōsaka was not realized, we should also consider its limitations. These can be divided into *external* and *internal limitations*. External limitations include historical circumstances, such as Yamaguchi's death at a young age, political atmosphere⁴⁴, and lack of social recognition for advanced planning, for example, social and economic requirements (the central government was still interested in the beautification of the townscape) and the importance of extension plan (the main concern in that period was the urban improvement plan). Internal limitations include those regarding the ideas and concepts learned from France. First, the highbrow ideas of ÉCAM, such as '*la science industrielle est une, et tout industriel doit la connaître en son entier*'⁴⁵ (*industrial science is one, and every industrialist must have its knowledge as a whole*), seemed too idealistic and were difficult to adopt in the Japanese industrial world of that period, which struggled to catch up with both imported knowledge and the reformation of traditional technology. Moreover, we could not observe a clear influence of Muller's concept of workers' housing on Yamaguchi's works in this regard. We instead identified another external limitation here—differences in the maturity of industry and labour market—and observed Yamaguchi's powerlessness or disinterest in housing reform, to which his mentor Muller devoted his career.

Acknowledgements

This study was supported by the Maeda Engineering Foundation Research Grant and JSPS KAKENHI Grant Number 15H04106. The presentation was supported by JSPS KAKENHI Grant Number 18H01617. We would like to thank Dr Naoki Hirai, for providing his precious private collection related to the Muslin Mill for our research, and Editage (www.editage.jp) and Bo Causer of Kagoshima University, for English language editing.



Disclosure Statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Junne Kikata serves as a professor at Kagoshima University. He won the CPIJ Research Award in 2004, and the RECAJ Best Writing Award in 2010, for his work on the history of campus planning in Japan.

Ken Nakae serves as an associate professor at Kobe University. He won First Prize at the 19th Nisshin Kogyo Architectural Design Competition in 1993 and received a doctoral degree from Kobe University in 2009. His thesis examined the architectural design theory of Hugo Häring.

Endnotes

¹ “the mechanisms of diffusion, the extent to which ideas and practices are changed in their diffusion, the fundamental causation of diffusion”, Stephen Ward (2000), Re-examining the international diffusion of planning, in Robert Freestone (ed.), *Urban Planning in a Changing World – the Twenty Century Experience*, London: Taylor & Francis, 2000, p.44

² Junne Kikata, Ken Nakae, et al., Assimilation of the industrial village concept by Japanese business circles at the turn of the twentieth century, *International Planning History Society Proceedings*, vol.17 (2) , pp.353-364, July 2016

³ *Doboku Kōgaku* is commonly translated to *Civil Engineering* in English in Japan, though in French sense, the term *Génie Civil* signifies “non-military engineering” more distinctively from military engineering. *Travaux Publics (public works)* is another term commonly used in French. In this paper, we use the right English word in the right place, matched to the original use in French context. See Doboku Toshokan ed. (2004), p. 26

⁴ Doboku Toshokan ed., *Furuichi Kōi to Sono Jidai (Furuichi Kōi and His Times)*, Tokyo: Doboku gakkai, 2004
Doboku Toshokan ed., *Okino tadao to meiji kaishū (Okino tadao and Meiji River improvements)*, Tokyo: Doboku gakkai, 2010

⁵ Toyojirō Tamaoki, *Ōsaka Kensetsu-shi Yawa*, Ōsaka : Ōsaka Toshi Kokai, , 1980

⁶ Masahisa Miwa, *Midōsuji to Yamaguchi Hanroku*, Tokyo: Nihon Fudōsan Kenkyūjo, 1989

⁷ Takeyoshi Hori, Yamaguchi Hanroku -Toshi Keikaku who's who- (32), *City planning review, CPIJ, 1992*

⁸ Planning Bureau of Ōsaka City, Ōsaka no Machizukuri -Kinou, Kyou, Asu-, Ōsaka City, 1989, pp. 46-47

⁹ Koji Nishikawa ed., *Machi ni Sumau -Ōsaka Toshi Jūtaku-shi*, Tokyo: Heibon-sha, 1989

¹⁰ Shihona ARAI, Asae OZAWA, Urban design plan for new boundary of Ōsaka city by Hanroku Yamaguchi, *Summaries of technical papers of annual meeting Architectural Institute of Japan (Kinki)*, 2014.9, pp.513-514

¹¹ Yorifusa Ishida, Local Initiatives and Decentralization of Planning Power in Japan, *Comprehensive Urban Studies*, No.74, Center for Urban Studies, Tokyo Metropolitan University, 2001, pp. 23-45

¹² For example, André Sorensen, *The Making of Urban Japan: Cities and Planning from Edo to the Twenty First Century*, Abingdon: Routledge, 2002. p. 77., Annie Lagarde Fouquet, Hanroku Yamaguchi (1858-1900) promo 1879 -Architecte et urbaniste japonais, *Centraliens*, N° 628, août/septembre 2013, p. 54-66

¹³ Annie Lagarde Fouquet, Quand les fils de samouraïs étudiaient à l'École Centrale, [http://www.academia.edu/13370033/ Quand les fils de Samouraï venaient étudier à l'Ecole Centrale des Arts et Manufacture de Paris](http://www.academia.edu/13370033/Quand_les_fils_de_Samouraï_venaient_étudier_à_l'Ecole_Centrale_des_Arts_et_Manufacture_de_Paris)

¹⁴ Hajime Nakamura ed., *[Nihon Saisho no Kenchiku-ka] Yamaguchi Hanroku – documents and notes*, Tokyo : Tōhō Kenkyu-kai, 1980., Kazuo Yamamoto, Nihon Saisho no Kenchiku-ka Yamaguchi Hanroku Syōden, *Sumitomo Shiryōkan Geppō*, Vol.25, Sumitomo Shiryō-kan, 1994 pp.113-133

¹⁵ Miyamoto (1987) clarified the total activity of Monbushō Eisen-Ka, and Yamaguchi's leading role in this organization, Masaaki Miyamoto, *Nihon no Daigaku Kyanpasu Seiritsu-Shi*, Fukuoka : Kyūshū University Press, 1989

¹⁶ Jun-ichiro Ishida, *Kansai no Kindai Kenchiku*, Tokyo : Chuō Kouron Bijutsu Shuppan, 1996



- ¹⁷ Tatsuo Horiuchi, Urbanism and technical education from the viewpoint of history of Japanese-French exchange : Case of Yamaguchi Hanroku and Inabata Katsutarō, *Junbun Kenkyū (Studies in the humanities)*, the journal of the Literary Association of Ōsaka City University, Vol. 53, No.3, 2003, pp. 165-179
- ¹⁸ On the architectural education at the ÉCAM, Françoise Hamon, *Construire pour l'industrie: Enseigner l'architecture industrielle à l'École centrale des arts et manufactures: 1832-1914*, thèse de doctorat présentée à l'Université de Paris IV, 1997, is the most comprehensive work.
- ¹⁹ Ulrich Plafmutter, *The Making of the Modern Architect and Engineer –The origins and development of a scientific and industrially oriented education–*, Basel: Birkhäuser, 2000.
- ²⁰ Émile Muller et Émile Cacheaux, *Les Habitations Ouvrières en tous pays : situation en 1878. Avenir*, Paris : J. Dejeu & Cie., 1879
- ²¹ On Muller's factory in Ivry, see ; *L'Exposition, La Grande Tuilerie d'Ivry, le beau et l'utile*, Archives municipales d'Ivry-sur-Seine, 2009
- ²² *Yamaguchi Hakushi Kenchiku Zushū*, publisher/published year unknown, National Diet Library Digital Collections, info:ndljp/pid/846382
- ²³ Françoise Hamon, Muller, réformateur social et industriel, Jean-François Belhoste dir., *le Paris des Centraliens : Bâtisseurs et entrepreneurs*, Paris : Action Artistique de la Ville de Paris, 2008, pp. 190-195
- ²⁴ Archives de l'École centrale des arts et manufactures de Paris (1820-2016), Archives Nationales
- ²⁵ Furuichi Kōi Bunko, Libraries for Engineering and Information Science and Technology, the University of Tokyo.
- ²⁶ Léon Guillet, *Cent Ans de la Vie de L'École Centrale des Arts et Manufactures 1829-1929*, Paris : Brunoff, 1929 p. 126
- ²⁷ 'Il n'y a ni loi ni précepte à donner ou sujet de ce qui constitué le beau. La base de l'art est la vérité.' Note of Cours de Constructions Civiles par M. Muller, Furuichi Kōi Bunko, the University of Tokyo
- ²⁸ 'Il f.(aut) prendre le côté économique.' *ibid.*
- ²⁹ 'L'histoire des habitations ... , donner à l'idée de la civilisation de chaque époque.' *ibid.*
- ³⁰ 'L'idée première est de rendre l'ouvrier propriétaire, et cette institution a agit sur la situation morale des ouvriers.' *ibid.*
- ³¹ *Kōgyō no Nippon (the Industrial Japan)*, Vol. 9, No. 10 (1 Oct, 1924)
- ³² 2nd Period Report of Japan Sugar Refining Co. Ltd. (from 1 July, 1896 to 31 December), 3rd Period Report of Japan Sugar Refining Co. Ltd. (from 1 January 1897 to 30 June 1897), *Shibusawa Eiichi Biographical Materials*, Vol. 11, pp.191-192 (online)
- ³³ *ibid.* 17
- ³⁴ *Introduction of the Muslin Mill Co. Ltd.* (a commercial pamphlet, c.1902, private collection)
- ³⁵ It is known that another architect/builder named Shōgorō Shige participated to the construction of the Muslin Mill factory (Ishida, *ibid.* 16). Yamaguchi and Shige worked together in other projects too including Kisha Seizō. Therefore the extent of Yamaguchi's participation for each projects remains to be examined further. Nevertheless, as for the Muslin Mill, there was a special background to be considered, the connection between Yamaguchi and Inabata (Horiuchi 2003, *ibid.* 17). Therefore, we assume that Yamaguchi's participation extended over the entire project, especially in the conceptual work.
- ³⁶ *Picture Album of the Muslin Mill Co. Ltd* (c.1903, private collection)
- ³⁷ *ibid.*
- ³⁸ *ibid.*
- ³⁹ *ibid.*
- ⁴⁰ *ibid.*
- ⁴¹ Cornelis Johannes van Doorn (1837 –1906) was a Dutch engineer and foreign advisor to Meiji period Japan.
- ⁴² Hanroku Yamaguchi, *Ōsaka-shi Sinsetsu Sigai Sekkei Setsumei-sho (the Description of Plan for Ōsaka)*, 1899, a collection of Historiographical Institute, the University of Tokyo., Hanroku Yamaguchi, *Ōsaka-Shi Shin Sigai*



Sinsetsu Horikawa, Gairo, Kōen Hayami, 1899, ibid., Hanroku Yamaguchi, Ōsaka Shinsigai Sekkei Tōshinsho oyobi Toshō Mokuroku, 1899, ibid., The City of Ōsaka, Ōsaka-Shi Shin Gairo Sekkei Zenzu, 1899, National Diet Library Digital Collections, info:ndljp/pid/845733

⁴³ *Ōsaka Shinsetsu-shigai Sekkei Setsumei Sho (the Description of Plan for Ōsaka in 1899) ibid.*

⁴⁴ For example, in the academic field of Architecture, dominance of the *English School* (Fujimori 1993) led by Josiah Conder and his pupil Kingo Tatsuno had become decisive when Tatsuno assigned to the professor of Architecture of the Imperial University and the first president of Zouka Gakkai (today's Architectural Institute of Japan) in 1886. However at that moment, the dean of the School of Engineering, Imperial University was Furuichi. It is reported that there were some conflicts between Tatsuno and the School of Engineering on Tatsuno's working condition (Shimizu 2015). And in this atmosphere, a slander about Yamaguchi was presented when he appointed to the Construction Department of the Ministry of Education, saying that he was not educated as a genuine architect (by Kōzō Kawai, qtd. in Tatsutarō Nakamura, 1936).

⁴⁵ *École centrale des arts et manufactures, Prospectus, Paris : Chez Béchét jeune, 1829, p.19 (qtd. in Doboku Toshokan ed., 2004, p.31)*

Bibliography

Arai, Shihona and Ozawa, Asae. Urban design plan for new boundary of Ōsaka city by Hanroku Yamaguchi. *Summaries of technical papers of annual meeting Architectural Institute of Japan (Kinki)*. 2014, pp. 513-514.

Archives municipales d'Ivry-sur-Seine ed. *L'Exposition, La Grande Tuilerie d'Ivry, le beau et l'utile*. Archives municipales d'Ivry-sur-Seine, 2009.

Belhoste, Jean-François dir. *le Paris des Centraliens: Bâtisseurs et entrepreneurs*. Paris: Action Artistique de la Ville de Paris, 2008.

Belhoste, Jean-François, Émile Muller (1823-1889), Ingénieur Alsacien, Promoteur de la Céramique Décorative, Lamard, Pierre et Stoskopf Nicolas dir. *Art & Industrie (XVIII^e-XXI^e siècle). Actes des quarrièmes Journées d'histoire industrielle de Mulhouse et Belfort*. Paris: A. et J. Picard, 2010.

Bullock, Nicolas and Read, James, *The Movement for Housing Reform in Germany and France, 1840-1914*. Cambridge: Cambridge University Press, 2011.

Doboku Toshokan ed. *Furuichi Kōi to Sono Jidai (Furuichi Kōi and His Times)*. Tokyo: Doboku Gakkai, 2004.

Doboku Toshokan ed. *Okino tadao to meiji kaishū (Okino tadao and Meiji River improvements)*. Tokyo: Doboku Gakkai, 2010.

Guillet, Léon, *Cent Ans de la Vie de L'École Centrale des Arts et Manufactures 1829-1929*. Paris: Brunoff, 1929.

Fouquet, Annie Lagarde, Hanroku Yamaguchi (1858-1900) promo 1879 - Architecte et urbaniste japonais. *Centraliens*, No. 628, août/septembre 2013.

Fouquet, Annie Lagarde. Quand les fils de samourais étudiaient à l'École Centrale. http://www.academia.edu/13370033/Quand_les_fils_de_Samourai_venaient_etudier_a_l'Ecole_Centrale_des_Arts_et_Manufacture_de_Paris

Freestone, Robert ed. *Urban Planning in a Changing World: The Twentieth Century Experience*. London: Taylor & Francis, 2000.

Fujimori, Terunobu. *Nihon no Kindai Kenchiku*. Tokyo: Iwanami Shoten, 1993.

Garner, John. *The Company Town: Architecture and Society in the Early Industrial Age*. Oxford University Press, 1992.

Hamon, Françoise. *Construire pour l'industrie: Enseigner l'architecture industrielle à l'École centrale des arts et manufactures: 1832-1914*. thèse de doctorat présentée à l'Université de Paris IV, 1997.

Hori, Takeyoshi, Yamaguchi Hanroku - Toshi Keikaku who's who - (32), *City planning review, CPIJ*, 1992.

Horiuchi, Tatsuo. Urbanism and technical education from the viewpoint of history of Japanese-French exchange: Case of Yamaguchi Hanroku and Inabata Katsutarō. *Junbun Kenkyu (Studies in the humanities)*. *The Journal of the Literary Association of Ōsaka City University*. Vol. 53, No. 3, 2003, pp. 165-179.



- Horiuchi, Tatsuo. *Furansu Gijutsu-Kyoiku Seiritsu-shi no Kenkyu: Ecole Polytechnique to Gijyutsusha Yousei*, Tokyo: Taka Shuppan, 1997.
- Ishida, Jun-ichirō, *Kansai no Kindai Kenchiku*. Tokyo: Chuō Kouron Bijutsu Shuppan, 1996.
- Ishida, Yorifusa. Local Initiatives and Decentralization of Planning Power in Japan. *Comprehensive Urban Studies*. No. 74, Center for Urban Studies, Tokyo Metropolitan University, 2001, pp. 23-45.
- Ishida, Yorifusa. Japanese industrial villages and a reformist factory owner. *Planning Perspectives*, Vol. 5, 1990, pp. 295-305.
- Miwa, Masahisa. *Midōsuji to Yamaguchi Hanroku*, Tokyo: Nihon Fudōsan Kenkyūjo, 1989.
- Miyamoto, Masaaki. *Nihon no Daigaku Kyanpasu Seiritsu-Shi*, Fukuoka: Kyūshū University Press, 1989.
- Muller, Émile and Cacheaux, Émile. *Les Habitations Ouvrières en tous pays: Situation en 1878. Avenir*, Paris: J. Dejeu & Cie., 1879.
- Nakamura, Hajime ed. [Nihon Saisho no Kenchiku-ka] Yamaguchi Hanroku – documents and notes, Tokyo: Tōhō Kenkyu-kai, 1980.
- Nakamura, Tatsutarō, Kenchiku Kai Ochibo Biroi, *Kenchiku Zasshi (Journal of Architecture and Building Science, AIJ)*, Vol.50, No. 618, p.185
- Nasr, Joe and Volait, Mercedes eds. *Urbanism: Imported or Exported?* Chichester: John Wiley & Sons, 2003.
- Nègre, Valérie. Architecture et construction dans les cours de l'École centrale des arts et manufactures (1833-1864) et du Conservatoire national des arts et métiers (1854-1894), in *Bibliothèques d'atelier. Édition et enseignement de l'architecture*, Paris 1785-1871, Paris, INHA, 2011.
- Nishikawa, Koji ed. *Machi ni Sumau - Ōsaka Toshi Jūtaku-shi*. Tokyo: Heibon-sha, 1989.
- Pfammatter, Ulrich, *The Making of the Modern Architect and Engineer – The origins and development of a scientific and industrially oriented education –*, Basel: Birkhäuser, 2000.
- Planning Bureau of Ōsaka City, *Ōsaka no Machizukuri - Kinou*, Kyō, Asu-, Ōsaka City, 1989, pp. 46-47.
- Sorensen, André. *The Making of Urban Japan: Cities and Planning from Edo to the Twenty-First Century*, Abingdon: Routledge, 2002.
- Stern, Robert A. M. et al. *Paradise Planned: The Garden Suburb and the Modern City*. New York: The Monacelli Press, 2013.
- Tamaoki, Toyojirō. *Ōsaka Kensetsu-shi Yawa*. Ōsaka: Ōsaka Toshi Kokai, 1980.
- Kazuo Yamamoto. Nihon Saisho no Kenchiku-ka Yamaguchi Hanroku Syōden. Sumitomo Shiryōkan Geppō, Vol. 25, Sumitomo Shiryō-kan, 1994, pp. 113-133.
- Yamaguchi Hakushi Kenchiku Zushū*. Publisher/published year unknown. National Diet Library Digital Collections, info: ndljp/pid/846382.

Image sources

Figure 1: Left: Ōsaka Prefectural Government ed., *Picture Album of Ōsaka Prefecture*. 1914. National Diet Library Digital Collections, info: ndljp/pid/966056. Right: *Croquis du Cours de M^r Muller*, Pl 84, École Centrale des Arts et Manufactures, Année 1877-78, Kōi Furuichi Archives, the University of Tokyo

Figure 2: *Muslin Boshoku Kaisha [Muslin Mill]* (a commercial pamphlet), c. 1902, private collection

Figure 3: *Croquis du Cours de M^r Muller*, Pl 88, École Centrale des Arts et Manufactures, Année 1877-78, Kōi Furuichi Archives, the University of Tokyo

Figure 4: *Picture Album of the Muslin Mill Co. Ltd*, c. 1903, private collection

Figure 5: *Picture Album of the Muslin Mill Co. Ltd*, c. 1903, private collection

Figure 6: the Imperial Japanese Army, Official Topographical Map in 1/20,000, 1908-1909 retouched by authors.

Figure 7: The City of Ōsaka, *Ōsaka-Shi Shin Gairo Sekkei Zenzu*, 1899, National Diet Library Digital Collections, info: ndljp/pid/845733. Its closeup retouched by authors.



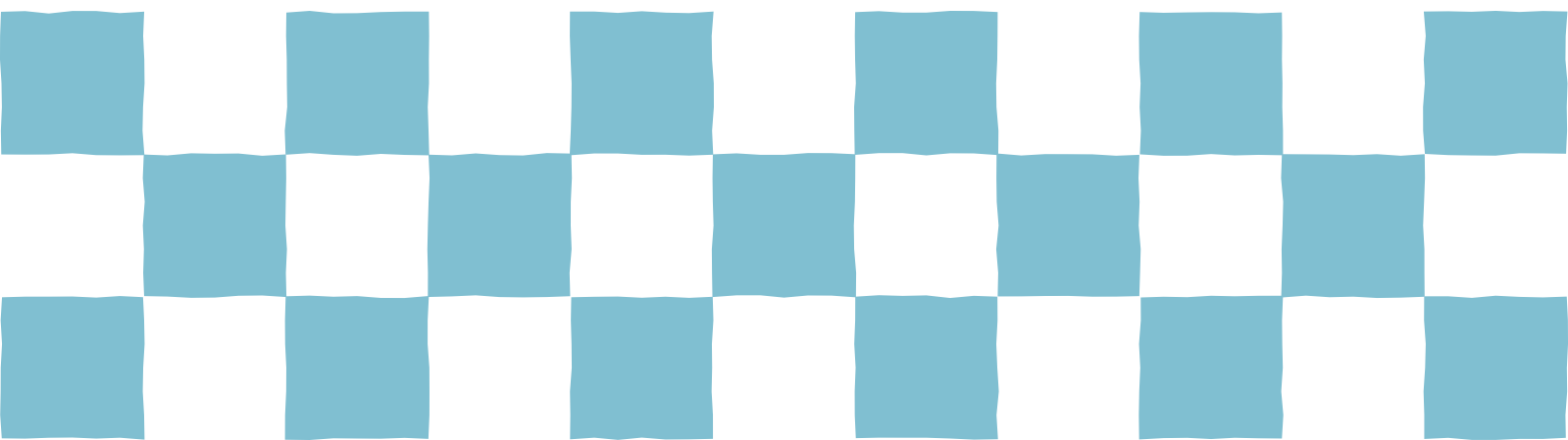
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

24 Heritage and Urban Regeneration



Why has the polluted canal been conserved?: The planning history of Fugan Unga in Toyama, Japan.

Hiroyoshi Sano (Kanazawa Seiryō University)

Fugan Unga is the famous canal planned by city planner Kanichi Akashi, the excavation of the canal was completed in 1935. Now, the canal is widely known as open space of the central city of Toyama, attracting citizens and tourists. The canal was originally planned as transportation route for the surrounding factories, aimed for industrial development of Toyama city. However, the main route of transportation had changed from ships to automobiles in 1970s, and the meaning of industrial canal was gradually losing. At the same time, sewage contamination of the canal had grown into a serious problem. Therefore, the canal had been planned to fill up and develop the roads and public facilities in 1979.

5 years after, a city planner had insisted to drop the fill-up plan, and proposed the regeneration of the waterfront as the park attracting citizens and tourists. In 1997, the canal was opened as a waterfront park (Fugan Unga Kansui Koen), triggered by the proposal. This paper aims to clarify the process of change from the fill-up plan to the regeneration of the canal, and discusses why the canal was conserved through the document research and interview to the planner in charge of the regeneration plan at that time.

GREYFIELD DEVELOPMENTS: DISSONANT ASSEMBLAGE OF HERITAGE IN THE CITY

Vidhu Gandhi (Extent Heritage Pty. Ltd)

Greyfield sites have long been considered as viable built assets in urban areas providing readily available sites equipped in terms of infrastructure and amenities that can be employed to generate more liveable and much needed spaces in the centre of cities. Redevelopment of greyfield sites such as shopping malls, abandoned municipal properties, and old carparks into museums, community centres and housing demonstrates the potential of these sites. At the larger urban scale the approach toward greyfield sites involves regeneration of larger sites, blocks or entire precincts in the middle of cities that have the potential of being developed via urban infill. The role of heritage conservation in this urban renewal process is often relegated to individual greyfield sites, with the larger redevelopments especially those earmarked for housing, often perceiving heritage as a “barrier” to the overall consolidation and development processes of these larger sites in the city. This largely theoretical paper will explore differences in the approaches toward heritage and greyfield developments by examining the formation of diverse identities and sense of place that is employed and generated by the development of these places.

Drawing upon studies of regeneration of brownfield sites, the paper will demonstrate that aspects of heritage character and sense of place that are often associated with brownfields are equally applicable, and employed in individual greyfield developments. Simultaneously, the paper will explore larger greyfield developments and the market based idea of identity that is focused on, in the move away from suburban to urban living, with the intention of providing greater accessibility and the promise of greener and more sustainable environments in the centre of cities. The idea of heritage character and a sense of placemaking which builds on the idea of heritage is missing in these larger ventures. However, rather than term the former as more heritage sensitive than the latter, the paper will argue that both individual smaller scale and larger scale greyfield developments are needed in the “assemblage” of heritage places in a city. The ideas of “places as assemblage” as encompassing “the flows of everyday life; the narratives that are expressed through them; and the desires, hopes and fears that are invested in them” will be examined against the backdrop of “dissonance” in heritage so as to better understand the often conflicting ideas of heritage character and identity associated with greyfield developments.

“I’m a fan of the Ouseburn, you know”: The History of Heritage-led Regeneration in the Ouseburn Valley, Newcastle upon Tyne

Loes Veldpaus (Newcastle University) and John Pendlebury (Newcastle University)

In this paper we will discuss the history of the heritage-led and culture-led regeneration of the Ouseburn Valley, a post-industrial area located close to the city centre of Newcastle upon Tyne (UK)

The research combines semi-structured interviews with local activists and stakeholders, observations, and policy analysis. We analyse how history and sense of place come together and are connected in imaginations about the area’s future, shaping the process of urban development. We explore how the continuous process of revitalising and upgrading of the area is portrayed and framed by the various stakeholders, and how it becomes part of the history mobilised in urban regeneration.

The Ouseburn Valley is presented as the cradle of the Industrial Revolution on Tyneside and once had a significant residential population of workers. More recently Ouseburn became a leftover and marginalised area, described as isolated, forgotten, and passed by. Since the 1980s the area began to develop a community of artists and creative sector-based urban rehabilitation developed in the momentum in the 1990s. In the 2000s major development interests including volume house builders took an interest in the area until this was dissipated by the financial crisis. Post-crisis, the area is now confronted with a new wave of development.

Our interviews reveal how within this history, issues of planning legacy and heritage management are intertwined with a strong affective and long-lasting attachment to place. Great passion is shown for example, for the alternative gritty histories and the quirky atmosphere. However, not everyone mobilises the same history, as some have a great passion for the early industrialisation of the area, or for the environmental and geographical historical setting. These different pasts have both developed through and are interwoven in the various projects, plans and policies that have been developed over the past decades. Recent pasts are included in heritage narratives just as much as long gone histories.

The vision of key stakeholders is for development to respond to the character formed by the area’s industrial history as well as its ‘alternative’ pasts. Development co-exists with a continued industrial uses, such as a scrapyards and a timber yard. But there is also a focus on industrial aesthetics and materiality, bordering on the exploitation of working-class histories for the current users (young professionals, hipsters) and residents (higher socio-economic groups)

As such, we will explore how histories, memories, and nostalgia are carefully woven into the sense of place, whilst operationalized in conservation planning, in a constant balancing act between gentrification and regeneration, and we reflect on how this affects heritage management and urban governance.

A Vision for Arts Led Urban Renewal in Adelaide and the City West Campus of the University of South Australia

Christine Garnaut (University of South Australia)

Various perspectives on universities and urban renewal in the post-industrial era are considered in the international literature. These include universities’ roles as drivers of physical environmental change and of economic and social improvement; their relationships, and sometimes tensions, with immediate and wider neighbours; and the social, infrastructure, economic, cultural, educational, and local environmental sustainability benefits of a university’s presence for a city and its residents. One theme within the literature on the economic and cultural contributions of universities is their potential and actual role in the evolution and development of arts and cultural quarters. This paper considers that topic in relation to the University of South Australia’s City West campus that opened in 1997 in an area of Adelaide known as the West End. The campus was built adjacent to an emerging arts complex. Soon after UniSA announced its decision to move to the new location, the Adelaide City Council commissioned the West End Urban Development Strategy to optimise the benefits of the university’s presence in the West End. This paper introduces and reviews that strategy and a subsequent, related, initiative of the City Council and the South Australian Government to establish the West End as an arts and cultural quarter.



A Vision for Arts Led Urban Renewal in Adelaide and the City West Campus of the University of South Australia

Author name: Christine Garnaut

*Author affiliation: School of Art, Architecture and Design, University of South Australia
christine.garnaut@unisa.edu.au*

Various perspectives on universities and urban renewal in the post-industrial era are considered in the international literature. These include universities' roles as drivers of physical environmental change and of economic and social improvement; their relationships, and sometimes tensions, with immediate and wider neighbours; and the social, infrastructure, economic, cultural, educational, and local environmental sustainability benefits of a university's presence for a city and its residents. One theme within the literature on universities' economic and cultural contributions is their potential and actual role in the evolution and development of arts and cultural quarters. This paper considers that topic in relation to the University of South Australia's City West campus that opened in 1997 in an area of Adelaide known as the West End. The campus was built adjacent to an emerging arts complex. Soon after UniSA announced its decision to move to the new location, the Adelaide City Council commissioned the West End Urban Development Strategy to optimise the benefits of the university's presence. This paper introduces and reviews that Strategy and a subsequent, related, initiative of the City Council and the South Australian Government to establish the West End as an arts and cultural quarter.

Keywords: urban vision; urban renewal; cultural quarters; University of South Australia, City West campus

Introduction

The diverse international literature on the post-industrial city in the last decades of the twentieth century in Europe, North America and Australia paints a complex and richly-textured picture of the particular ways in which those countries responded to a range of circumstances stemming from three broad impulses. One was industrial and economic decline that resulted amongst other outcomes in the loss of established manufacturing and commercial bases and consequently in unemployment, decentralisation, 'urban dereliction' and the 'need to find a use for land that has lost its [previous] use'.¹ These circumstances led in turn to initiatives to 're-centre'² cities, a phenomenon common in the 1980s and 1990s. A second impulse was new economic frameworks including neo-liberalist ideologies, the rise of new economies, as in Asia, and of the European Union, and deregulation and the opening up of international trade, tourist and investment markets. A third impulse was altered governance structures underpinned by neo-corporatist ideology and by neo-liberalism – the privatisation of public services and utilities, decreased government provision of public housing and increased private sector investment in that area, deregulated planning, a lack of public participation in the planning process, and the birth of urban development corporations and public-private partnerships to drive urban development projects.³

One subset of the literature on the post-industrial city investigates efforts at revitalisation as cities internationally endeavoured to find new footings and to establish and market their place locally and globally, but within shifting social, technological, political and economic conditions as well as in an increasingly competitive urban milieu. Several major strands emerge including one considering ways in which cities became 'entrepreneurial',⁴ underwent exceptional transformation as, for example, in the cases of Barcelona and Bilbao, 'reinvented themselves to attract new flows of capital investment',⁵ and rebranded, marketed and sold themselves and their distinctive profile and place qualities.

Another significant strand in the urban revitalisation literature is scholarship on regeneration through cultural planning which draws on both existing and new work on the culture of cities; on the production and consumption of design, and on their interrelationship and contributions to what Julier labels the 'culture of design';⁶ on the development of the creative city and of cultural quarters; and on design-led approaches to urban regeneration.⁷ Contributing to the last strand is yet another literature on the creative industries and design economy and their pivotal role in cultural regeneration, defined by Wansborough and Mageean as a process of 'restoring and improving the quality of urban life through the enhancement and development of the unique characteristics of a place and its people'.⁸ The contribution of universities to cultural regeneration is considered within this strand, for example by Dempsey,⁹ as is their part in a larger conversation about 'urban renewal and the university'.¹⁰ The last topic has been considered from a variety of perspectives including the opportunity not only for physical



improvement of degraded areas and their environs but also the social, economic, cultural, educational and local environmental sustainability benefits of a university's presence for a city, its residents and wider community.¹¹

This paper responds to the topic of universities and urban and cultural regeneration exploring it through a case study of the part played by the University of South Australia's City West campus in Adelaide, South Australia, to the revitalisation of the area where the campus has been purpose-built from the late 1990s. In particular, the paper introduces the West End Urban Development Strategy (1996) and a related drive for arts led urban renewal and a cultural quarter in Adelaide's West End. The discussion draws out selected outcomes and initial conclusions about the contributions of the City West campus to both initiatives.

Adelaide and its West End

Adelaide, the capital city of South Australia, was established as a colony of Britain in 1836. The selected site was located on the traditional lands of the Kaurna people of the Adelaide Plains. The physical plan was for a place laid out using the conventional grid form and divided into two sectors, each with sites allocated for public squares; parklands enveloped the whole entity. One sector was on the northern and one on the southern side of a river later named the River Torrens. The earliest settlement was in the northwest corner of the part to the north of the river. Densely populated from the outset, it quickly assumed a mixed-use character. Its geographical location contributed to the name by which it was (and is) popularly known – the West End.

Hindley Street, a key east-west vehicular and pedestrian thoroughfare in the West End, was the city's principal commercial street in the founding decades of the colony. It was bisected by Morphett Street that ran north-south and over time created a physical divide between its (Hindley Street's) western and eastern ends. Following World War Two, Hindley Street was a focal place for migrants to establish retail and café businesses. Through the 1960s and 1970s, while retaining a retail function, Hindley Street East and the section of the street immediately west of Morphett Street increasingly emerged as the city's premier entertainment and tourist destination with hotels, nightclubs, cinemas and amusement parlours being the key attractions.¹² Meanwhile, the street's western end continued to accommodate industry, entertainment, commercial and residential functions. As Hindley Street East refocused its uses, it assumed a chameleon-like guise, presenting a generally sedate side by day, but a less desirable side by night. Incidents of crime and anti-social behaviour were common.¹³

Hindley Street's reputation was further tarnished, and enhanced, as the century wore on due to diminishing investment in property maintenance and upgrades by owners most of whom were private individuals and often absentee landlords rather than resident traders, and by degradation of the public realm.¹⁴ With its image and private investment at a low point, several factors coalesced in the mid 1990s to generate a renewed vision and an urban revitalisation strategy for Hindley Street and the West End at large. The principal factor was 'the decision of the University of South Australia to build its City West Campus in the heart of the precinct.'¹⁵

The University of South Australia

The University of South Australia (UniSA) was established in 1991. A product of the era of the Unified National System (1988-1996) in Australian tertiary education, UniSA was born through the amalgamation of several existing institutions. Significant space constraints on its existing city campus forced the UniSA Council to look for accommodation alternatives and in 1993 it decided to build a brand new campus in the West End.¹⁶ The selected site was immediately west of Morphett Street and adjacent to a recently opened arts complex that utilised heritage listed buildings as well as new structures (Figure 1). The complex included the Lion Arts Centre, the Jam Factory with studios for craft practitioners and a retail outlet, the offices and gallery of the Experimental Art Foundation and two cinemas.

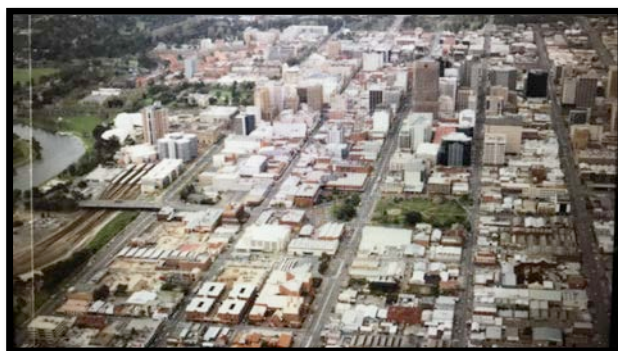


Figure 1: Aerial view Adelaide west c1994 showing location of UniSA City West campus, middle lower left.



A mix of privately owned warehouses, retail outlets, restaurants and public entertainment places in various physical states occupied the proposed campus site.¹⁷ Some owners elected to retain their properties so the new campus was planned around them. In February 1997 UniSA moved into eight purpose-designed buildings with the intention of expanding the campus footprint in future years, a process that continues two decades later.¹⁸ Two major streets, North Terrace, the city's cultural boulevard and the northern boundary of the central business district, and Hindley Street bounded the campus (Figure 2). Its frontage was to North Terrace. Due to security concerns, the campus was secured by gates, which were locked after hours, and gave it a 'fortress' like appearance.¹⁹

The opening of UniSA's City West campus Stage One brought approximately 5,000 additional people to the West End. Amongst them were students and staff of the Faculty of Art, Architecture and Design.²⁰ Although the Faculty's entire Visual Art academic staff and student cohort did not move to City West until the completion of Stage Two in 2005, their imminent presence would lend partial weight to the late 1990s rationale for an arts and cultural quarter in the West End. Ahead of the consolidation of Visual Arts on the City West campus, however, UniSA's Art Museum (from 2007 the Anne & Gordon Samstag Museum of Art) moved to the city from its suburban location at Underdale, about 5 kilometres west of the city centre, to a former warehouse on a site earmarked for the Stage Two development. The warehouse fronted North Terrace and was refurbished specifically for the Art Museum's use. The Museum's relocation not only 'breathed new life into its programs' but also pointed to a cultural role for UniSA, and to the opportunity for it to engage with audiences and communities beyond those traditionally associated with universities.²¹

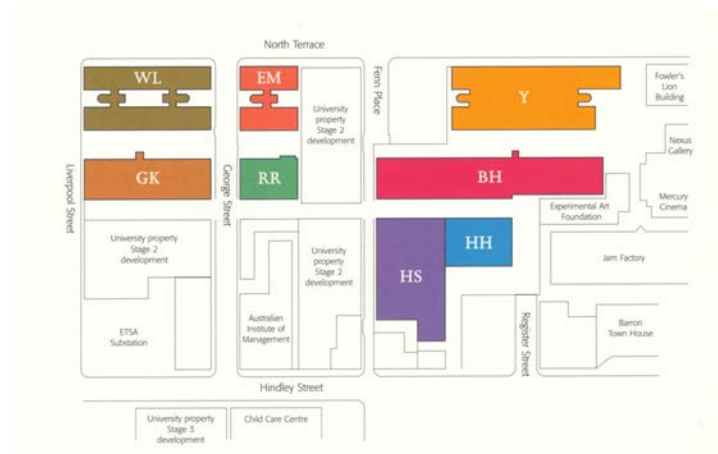


Figure 2: City West campus plan showing location of new buildings and future proposed development, the location of the existing arts complex and sites retained by private owners.

West End Urban Development Strategy

The Adelaide City Council commissioned local firm HASSELL to prepare the West End Urban Development Strategy that was finalised in 1996. Its brief was to develop a process for co-ordinating proposed and future public and private investment in the West End.²² Although the particular driver was UniSA's decision to move to the precinct, there were others. Firstly, TAFE (Technical and Further Education) Light Square, an existing neighbouring provider of tertiary education, commenced a substantial expansion of its premises and also announced that it planned to construct a new building for a Centre for the Performing Arts two blocks to the south-east of the City West site. Secondly, various state government and Adelaide City Council strategic programmes were in train as part of a larger vision, sometimes referred to as 'the "globalisation" of Adelaide',²³ to promote Adelaide to national and international business, as well as tourist, markets. One was a review of the City of Adelaide Plan that had guided Adelaide's development since 1976. Another was the Adelaide 21 Project that focused on the regeneration of the city centre and related sites like North Terrace.²⁴ One component of its vision was of Adelaide as 'The City of Creative Imagination' in which 'the creative industries' were promoted and developed, an ambition that became significant in shaping the state and local government's view of the West End of the future.²⁵ Thirdly amongst the other drivers for the West End Urban Development Strategy were 'the pressing issues within the Precinct: progressive dis-investment, poor image, declining population [and] under-developed private landholdings and the public realm'.²⁶ A related imperative was the appropriate management of social issues and behavioural problems associated mainly with the locality's places of public entertainment.



HASSELL carried out extensive consultation to produce the West End Urban Development Strategy. It identified the key agencies and stakeholders and employed surveys and workshops with specific foci and target groups as the main means to elicit information about perceptions of the West End; identify its strengths; suggest improvements; propose opportunities for its economic development; and to prepare a vision statement, and its underpinning strategies and actions, and establish key directions for the strategy's future implementation.²⁷ Representatives of UniSA were closely involved in the consultation. The Vision that emerged from the process explained, ambitiously in terms of the time frame, that:

By the year 2000, the West End Precinct, Hindley Street and its environs will have international recognition as a special area within the City. It will be recognised for its creativity, education excellence, its renewed sense of community pride and its contribution to the City's economic revitalisation. It will have achieved this through problem solving, leadership, collaboration, risk taking, investment and innovation.²⁸

To guide the Adelaide City Council in implementing the West End revitalisation Strategy, the consultants proposed an 'integrated strategic framework' based on ten broad objectives. These related to: the image of and access to the precinct; the creation of a cohesive social, business and education community; the provision of safe and affordable inner city residential accommodation; recognition of the key economic drivers for precinct revitalisation being professional development for management, application of information technology and delivery of performing and visual arts; creative approaches to precinct governance and management; the revitalisation of old buildings, removal of 'poor/obsolete development', and the introduction of new streetscapes to enhance the built environment; recognition of the history and heritage of the area in any redevelopment programmes; revitalisation being driven by local, state and federal government partnerships; and the commitment of the beneficiaries of the precinct's revitalisation to ownership of that process.²⁹ The West End Urban Development Strategy Final Report considered all of the objectives in detail providing current contextual information and setting goals, implementation strategies and priority actions for each.

The Arts and UniSA in the West End Urban Development Strategy

The Final Report was peppered with references to the UniSA City West campus along with recommendations as to how its presence could be optimised 'to maximise the benefits'³⁰ to the West End from economic, urban design, urban art, precinct image and property development perspectives. The consultants argued in part that 'The Arts and Education will be strong factors in the revitalisation of the Precinct and will complement the existing business community.'³¹ A section of the economic development discussion focused on practical ways in which that could occur. One was for a 'World Centre for Training in Performing and Visual Arts'. A set of strategies for achieving that goal centred on various proposed collaborations including a forum between the Adelaide City Council, UniSA, the proposed Centre for the Performing Arts, organisations in the existing arts complex adjacent to the City West campus, as well as appropriate existing businesses in Hindley Street and the West End. Potential indicative actions were to co-develop proposals, for example for new galleries and performance venues in the precinct, and to co-campaign for the Adelaide Festival and Adelaide Fringe offices to re-locate to the West End.

The urban art section made various mentions of the opportunity to work with the Faculty of Art, Architecture and Design to address the general absence of public art in the precinct.³² Recommendations about ways in which UniSA students could contribute included through the installation of art works at significant spots in the local streetscape and at entry points to the City West campus, murals on buildings, temporary sculpture installations, and the establishment of a permanent open air gallery via a partnership with the Art Gallery of South Australia and the Adelaide City Council.

West End Urban Development Strategy: urban renewal outcomes

The West End Urban Development Strategy was described as 'a comprehensive initiative to address social, economic and physical issues in the West End'.³³ It was well received not only by the Council but also by the state government and local community including business, individual and institutional interests represented by the Adelaide West End Association. Adelaide City Council approved it in 1996. The processes of developing and implementing the Strategy created considerable momentum not only within the City Council but also within state government departments and in the arts sector generally.

Several reports were commissioned: a crime prevention report for the West End; a tenancy plan to improve the vacancy rate (29% in 1997) on Hindley Street and to achieve a balanced mix of 'shopping, education and entertainment';³⁴ an urban design concept plan to better integrate Hindley Street East and nearby Light Square; and a strategy for accommodating people who lived in boarding and rooming houses in the West End and who may have been displaced as the precinct was redeveloped.³⁵ Amongst outcomes that flowed from the reports, the Adelaide City Council allocated significant capital works funding to effect urban design improvements including



paving, lighting and tree planting in Hindley Street and Light Square. It also instigated a West End building improvement programme in addition to its Heritage Incentive Scheme. The improvement programme led to the restoration of the façade of West's Coffee Palace, a local heritage place with significant presence on Hindley Street East (Figure 3).³⁶ Additionally, through the endeavours of the City Council's West End Strategic Taskforce, attention was directed to the management of licensed premises. The Hindley Street tenancy mix was altered and the number of tattoo and pinball parlours and motorcycle shops was reduced markedly.³⁷



Figure 3: Hindley Street East, Adelaide, South Australia c.1984. West's Coffee Palace is 19th century red brick building on left

West End arts and cultural quarter

In 1999, as the West End Urban Development Strategy was being implemented, the Adelaide City Council and South Australian Government jointly launched an Arts Led Urban Renewal initiative for the West End.³⁸ By then other government as well as privately funded new commercial and hotel accommodation projects and urban renewal schemes were underway on North Terrace neighbouring the West End and in the Riverbank (River Torrens) precinct a short walk away (Figure 4). Also, the first stage of a report for the West End Arts Co-location Project, commissioned to ascertain the demand for and capacity to accommodate artists moving in to the West End, was complete and had confirmed the availability of appropriate venues.³⁹

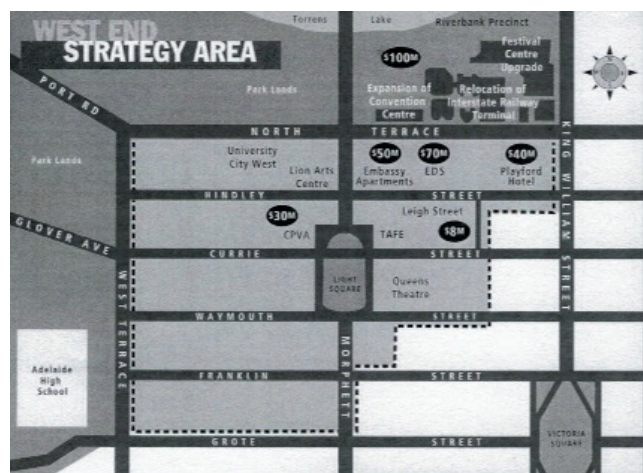


Figure 4: West End Arts Led Urban Renewal Initiative, Strategy Area, showing existing location and cost of new building development in the vicinity of the West End.



Additionally, by the time that the Arts Led Urban Renewal initiative was announced, several prominent arts related organisations and entities had moved into the West End, amongst them the Adelaide Festival and Fringe Festival offices and the Community Arts Network. The state government department Arts SA, comprising 60 staff, was poised to relocate to the restored and refurbished West's Coffee Palace. Before long, 'the largest employer of artists in the state', the Adelaide Symphony Orchestra, would take up residence, too, in rehearsal and recording studios in a former cinema.⁴⁰ The momentum for renewal was fuelled as well by Shop@rt, a program of exhibitions in the windows of vacant shops in the West End, regular festivals and an arts market and a substantial redevelopment of heritage buildings and the public realm in Leigh Street, which connected Hindley Street with major roads to its north and south.⁴¹

Pointing to the existing and growing 'critical mass' of arts-based organisations, agencies, networks and infrastructure in Hindley Street East, as well as to the presence on the western side of Morphett Street of education institutions UniSA and TAFE, and respectively their Faculty of Art, Architecture and Design and Centre for Performing Arts, the South Australian Government and the Adelaide City Council expressed their aspiration to 'create a precinct for artists' in the West End.⁴² They cited arts and cultural quarters in international cities in Europe, Canada and the United States as examples of what could be achieved.⁴³ But the arts led renewal of the West End did not occur as envisaged. By 2002, three years after the launch of the initiative, it was clear that 'momentum ... [had] ground to a halt and [in 2004] the current trend ... [was] for artists to leave the area.'⁴⁴ This situation occurred despite the survival of various existing venues for cultural activities and the opening of some new ones, cultural events continuing, and artists and designers, arts organisations and providers of tertiary education in the arts having their bases on or near Hindley Street.

Montgomery has evaluated and investigated reasons for the demise of the Arts Led Urban Renewal initiative and refers to a number of structural and policy factors. These include the type of day and night-time activities that occurred on and in the vicinity of Hindley Street and the fact that they were not perceived as 'complementary'; the street's 'less savoury' night-time image; private ownership of a significant number of premises and, despite the existence of a tenancy management plan, artists' inability to pay the prices charged by private landlords; and the absence of 'specific enterprise or development programmes for the arts and cultural industries in South Australia', and of an 'overall West End cultural development or arts programme' and consequently of marketing and audience development for the arts in the West End.⁴⁵ Regarding public investment in the arts in South Australia, in a 2007 interview Greg Mackie, local arts champion and an influential independent bookshop owner in the West End, reflected on the reality of emerging and competing challenges for government like health care, alluded to the current situation and foreshadowed a future decline, since realised, in public investment in the arts in South Australia.⁴⁶

Conclusion

This paper has explored the topic of universities and urban and cultural regeneration through a case study of the role of the University of South Australia's City West campus in the revitalisation of Adelaide's West End in the late twentieth and early twenty-first century. The paper introduced the West End Urban Development Strategy (1996) and an Arts Led Urban Renewal initiative (1999) that included a vision for an arts and cultural quarter in the West End. Following are initial conclusions about the contributions of the City West campus to these endeavours.

The South Australian Government and the Adelaide City Council regarded the substantial financial commitment of the University of South Australia in Adelaide's West End as a critical stimulus to encourage future investment in that part of the city. Their confidence in that prospect led the City Council to implement a multi-pronged urban revitalisation strategy which, among other outcomes, aimed to improve the public realm, tackle safety concerns, address the negative image of Hindley Street, and promote community collaborations and partnerships that would benefit the precinct from social, economic, educational and tourism perspectives. As a result of the strategy, various public realm improvements were achieved but shifting the image of Hindley Street was far more problematic. Indeed, more than a decade later, one commentator observed that the east end of the street was being referred to locally as a 'wild west warzone'.⁴⁷ UniSA has continued to invest in the precinct on the western side of Morphett Street. In the last decade in particular it has expanded its footprint to the south side of Hindley Street and the north side of North Terrace (Figure 5). The South Australian Government and the University of Adelaide have invested also in the City West vicinity in a bio-medical precinct that occupies an extensive area on the north side of North Terrace. These new developments have brought thousands more people to the area. They have led to the extension of an existing tram line to provide public transport to the doors of each of the major institutions and they have been a catalyst for many new businesses, mostly eateries, on Hindley Street and North Terrace.



Figure 5: North Terrace looking west from Morphett Street showing UniSA City West campus (opened 1997) left and Cancer Research Building right (opened 2018) and University of Adelaide Medical School (opened 2017), middle right. The new Royal Adelaide Hospital (not in view) (opened 2017) is to the west of the Medical School.

The location of the Faculty of Art, Architecture and Design at City West was perceived as presenting an opportunity for staff and students associated with its various programmes to engage collaboratively with arts organisations and entities located in the precinct. Such collaborations continue to flourish for example with its near neighbours including the Jam Factory. Montgomery noted that ‘The presence of so many design and arts students was seen as a significant opportunity for the growth of new creative businesses and also for smaller-scale leisure and retail.’⁴⁸ And the Faculty’s staff and students and the presence of the Art Museum were counted amongst the ‘critical mass’ that helped convince the Adelaide City Council and the South Australian Government of the viability of an arts and cultural quarter in the West End. However, in reality, in UniSA’s early years at City West, students spent the minimum time on campus. Outside of designated study commitments there was little in the way of amenities to hold them at the university or in its environs. ‘The campus was merely a functional location; a place for study, the precinct: a place to park the car. Student engagement with their surroundings was minimal’⁴⁹ Perceived and actual physical deterrents emerged, too, in relation to accessing the creative premises and activities on Hindley Street East. Although not far from them geographically, the university campus and the complex containing the Lion Arts Centre, Jam Factory and other arts organisations were (and are) separated from them by Morphett Street. A major road carrying six lanes of traffic, Morphett Street, was (and is) like ‘a wall’ preventing easy and fluid access within the precinct.⁵⁰

Recent developments at and in the environs of UniSA’s City West campus suggest that the campus has contributed to a gradual process of physical revitalisation of the West End and most especially of Hindley Street and North Terrace west of Morphett Street. Since UniSA moved to City West, staff and students associated with its Architecture, Design and Visual Arts programs have engaged in various ways with arts and cultural opportunities in the West End and wider city precincts. The recent formation of the School of Creative Industries at UniSA and its potential relocation to City West raises the possibility of establishing a substantial and diverse critical mass of creative people and associated activities in and around Hindley Street West. In time, that may give cause to revisit the idea of an arts and cultural quarter in Adelaide’s West End.

Acknowledgements

The author acknowledges research assistance by Louise Bird. Research for this paper was supported by an Australian Research Council Discovery Project Grant (DP 160100364) “Campus: Building Modern Australian Universities”.



Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Christine Garnaut is Associate Research Professor in Planning and Architectural History in the School of Art, Architecture and Design at the University of South Australia, Adelaide, Australia where she is Director of the Architecture Museum and of the Australian Housing and Urban Research Institute Research Centre. She is Vice-President/President Elect and Membership Secretary of the International Planning History Society. Her research focuses mostly on Australian 20th century planning and architectural history.

Endnotes

- ¹ Ian Colquhoun, *Urban Regeneration in International Perspective* (London: B.T. Batsford, 1995): 11; Graham Crist, "Future Cities," *Monument*, no.71 (2006): 79
- ² John Montgomery, *The New Wealth of Cities: City Dynamics and the Fifth Wave* (Aldershot: Ashgate, 2007): 293.
- ³ Peter Hall, *Cities in Civilisation* (London: Phoenix, 1998); Stephen Ward, *Planning the Twentieth-Century City* (Chichester: John Wiley & Sons, 2002); Robert Freestone, *Urban Nation: Australia's Planning Heritage* (Canberra: CSIRO Publishing, 2010).
- ⁴ Tim Hall and Phil Hubbard, *The Entrepreneurial City* (Chichester: John Wiley & Sons, 1998).
- ⁵ Kim Dovey, *Fluid City: Transforming Melbourne's Urban Waterfront* (Sydney: UNSW Press, 2005): 1.
- ⁶ Guy Julier, *The Culture of Design* (London: SAGE, 2000).
- ⁷ For example, see on the production and consumption of design Julier, *The Culture of Design*; on the development of the creative city Richard Florida, *The Rise of the Creative Class* (New York: Basic Books, 2002); Charles Landry and Franco Bianchini, *The Creative City* (London: Demos with Comedia, 1995); on cultural quarters Montgomery, 2007, Simon Roodhouse, *Cultural Quarters: Principles and Practice* (Bristol: Intellect 2007); on design-led approaches to urban regeneration David Bell and Mark Jayne, "'Design-led' Urban Regeneration: A Critical Perspective," *Local Economy* 18 no. 2 (2003): 121-134.
- ⁸ Matthew Wansborough and Andrea Mageean, "The Role of Urban Design in Cultural Regeneration," *Journal of Urban Design* 5, no. 2 (2010): 181.
- ⁹ Anna Dempsey, "New Bedford Resurgent: A New England Town-Gown Story," *Journal of Urban History*, 4 no. 2 (2015): 207-226.
- ¹⁰ K. Ashworth, "Urban Renewal and the University: A Tool for Campus Expansion and Neighbourhood Improvement," *The Journal of Higher Education* 35 no. 9 (1964): 493.
- ¹¹ See for example, Melhuish, Claire, "Case Studies in University-led Urban Regeneration". 2015. UCL Urban Laboratory; Montgomery, *The New Wealth of Cities*; S Mosier, "Does the Gown Help the Town? Examining Town-Gown Relationship Influence on Local Environmental Sustainability in the United States," *Journal of Public Administration* 38 (2015): 769-781. Margaret P. O'Mara, "Beyond Town and Gown: University Economic Engagement and the Legacy of the Urban Crisis," *Journal of Technology Transfer*, 37 (2012): 234-250.
- ¹² Corporation of the City of Adelaide, "Hindley Street Precinct" Action Project 23, (Adelaide: Corporation of the City of Adelaide, [1979]): 1, 8-10.
- ¹³ John Montgomery "Cultural Quarters as Mechanisms for Urban Regeneration. Part 2: A Review of Four Cultural Quarters in the UK, Ireland and Australia", *Planning Practice & Research* 19, no. 1 (2004): 12.
- ¹⁴ Author unknown, "'It's about people, not brands': an interview with Greg Mackie", *Connect – the magazine of the Australian Business Arts Foundation*, no. 5 (2007): 10.
- ¹⁵ Hassell Pty Ltd, "West End Development Strategy Final Report", (July 1996), ii.
- ¹⁶ Alison Mackinnon, *A New Kid on the Block: The University of South Australia in the National Unified System* (Melbourne: MUP, 2016), 106-07.
- ¹⁷ Lisa Kolinac, "An Urban Design Analysis of the University of South Australia City West Campus" (Graduate Diploma in Urban and Regional Planning thesis, University of South Australia, 1995): 10.
- ¹⁸ University of South Australia, *City West Campus* (Adelaide: Public Affairs Office, UniSA, 1997): np.
- ¹⁹ Montgomery, "Cultural quarters", 12.
- ²⁰ The Faculty of Art, Architecture and Design comprised the South Australian School of Art and the Louis Laybourne Smith School of Architecture and Design.
- ²¹ Ross Wolfe (ed), *The Samstag Legacy: An Artist's Bequest* (Adelaide: University of South Australia/Samstag Museum, 2016), 298.
- ²² HASSELL, "West End", I.
- ²³ *Ibid.*
- ²⁴ Adelaide 21 Steering Committee and Project Team, *Adelaide 21: City Centre Strategy for the New Era* (Adelaide: Council of the City of Adelaide, 1996).
- ²⁵ Montgomery, 'Cultural Quarters', 14.
- ²⁶ HASSELL, "West End", i.
- ²⁷ *Ibid.*, 4-6.
- ²⁸ *Ibid.*, 8.
- ²⁹ *Ibid.*, 8-9.
- ³⁰ City of Adelaide, et al, "West End Arts Led Urban Renewal", 1999, 2.
- ³¹ Hassell, "West End", 27.
- ³² *Ibid.*, 39-41.
- ³³ Steering Committee, "West End Arts Co-location Project: Creating a Precinct for Artists" (Adelaide, 1998), 3.
- ³⁴ City of Adelaide, et al, "West End", 1999, 15.
- ³⁵ Steering Committee, "West End Arts Co-location Project", 3-4.
- ³⁶ City of Adelaide et al, "West End", 4-5.
- ³⁷ *Ibid.*, 15.



³⁸ City of Adelaide, "West End Arts", *Ibid.*, 7.

³⁹ Steering Committee, "West End Arts Co-location Project", 1.

⁴⁰ Author unknown, 'Interview', 10.

⁴¹ Montgomery, "Cultural quarters", 12.

⁴² City of Adelaide et al, "West End", 7.

⁴³ *Ibid.*, 7.

⁴⁴ Montgomery, "Cultural quarters", 14.

⁴⁵ *Ibid.*, 18-23.

⁴⁶ Author unknown, "It's about people", 10-11.

⁴⁷ B. Littlely, 'Walk on the Wild Side' *The Advertiser*, 10.

⁴⁸ Montgomery, "Cultural quarters", 22.

⁴⁹ Jane Lawrence and Andrew Wallace, "Some Things should be Universal 24/7: Cultures of care in design education", Australia Council of University Art and Design Schools conference proceedings, (Adelaide: ACUADS, 2015): np.

⁵⁰ Andrew Wallace, President, Adelaide West End Association, pers. comm., 8 June 2018.

Bibliography

Adelaide 21 Steering Committee and Project Team. *Adelaide 21: City Centre Strategy for the New Era*. Adelaide: Council of the City of Adelaide, 1996.

Ashworth, K. "Urban Renewal and the University: A Tool for Campus Expansion and Neighbourhood Improvement," *The Journal of Higher Education* 35, no. 9 (1964): 493-496.

Author unknown. "It's about people, not brands": an interview with Greg Mackie', *Connect – the magazine of the Australian Business Arts Foundation*, no. 5 (2007): 10-11.

Bell, David and Jayne, Mark. "'Design-led' Urban Regeneration: A Critical Perspective", *Local Economy* 18, no. 2 (2003): 121-134.

Colquhoun, Ian. *Urban Regeneration in International Perspective*. London: B.T. Batsford, 1995.

Corporation of the City of Adelaide. "Hindley Street Precinct Action Project 23". Adelaide: Corporation of the City of Adelaide, [1979].

City of Adelaide, Adelaide West End, Arts SA, "West End Arts Led Urban Renewal", 1999.

Crist, Graham. "Future Cities." *Monument* no. 71 (2006): 78-79.

Dempsey, Anna. "New Bedford Resurgent: A New England Town-Gown Story." *Journal of Urban History* 4 no. 2 (2015): 207-226.

Dovey, Kim. *Fluid City: Transforming Melbourne's Urban Waterfront*. Sydney: UNSW Press, 2005.

Florida, Richard. *The Rise of the Creative Class*. New York: Basic Books, 2002.

Freestone, Robert. *Urban Nation: Australia's Planning Heritage*. Canberra: CSIRO Publishing, 2010.

Hall, Tim and Hubbard, Phil. *The Entrepreneurial City*. Chichester: John Wiley & Sons, 1998.

Hassell Pty Ltd. "West End Development Strategy Final Report", July 1996.

Julier, Guy. *The Culture of Design*. London: SAGE, 2000.

Kolinac, Lisa. "An Urban Design Analysis of the University of South Australia City West Campus." Graduate Diploma in Urban and Regional Planning thesis, University of South Australia, 1995.

Landry, Charles and Bianchini, Franco. *The Creative City*. London: Demos with Comedia, 1995.

Lawrence, Jane and Wallace, Andrew. "Some Things should be Universal 24/7: Cultures of care in design education", Australia Council of University Art and Design Schools Conference Proceedings, Adelaide: ACUADS, 2015, np.

Littlely, B. 'Walk on the Wild Side' *The Advertiser*, 2010.



Mackinnon, Alison. *A New Kid on the Block: The University of South Australia in the National Unified System*. Melbourne: MUP, 2016.

Melhuish, Claire. Case Studies in University-led Urban Regeneration. UCL Urban Laboratory, 2015. Available from: https://www.ucl.ac.uk/urbanlab/docs/Case_Studies_in_University-led_Urban_Regeneration.pdf [Accessed 21 August 2017].

Montgomery, John. "Cultural Quarters as Mechanisms for Urban Regeneration. Part 2: A Review of Four Cultural Quarters in the UK, Ireland and Australia." *Planning Practice & Research* 19, no.1 (2004): 3-31.

Montgomery, John. *The New Wealth of Cities: City Dynamics and the Fifth Wave*. Aldershot: Ashgate, 2007.

Mosier, Samantha. "Does the Gown Help the Town? Examining Town-Gown Relationship Influence on Local Environmental Sustainability in the United States." *Journal of Public Administration* 38, (2015): 769-781.

O'Mara, Margaret P. "Beyond Town and Gown: University Economic Engagement and the Legacy of the Urban Crisis." *Journal of Technology Transfer* 37 (2012): 234-250.

Roodhouse, Simon *Cultural Quarters: Principles and Practice*. Bristol: Intellect 2007.

University of South Australia. *City West Campus*. Adelaide: Public Affairs Office, 1997.

Wolfe, Ross (ed). *The Samstag Legacy: An Artist's Bequest*. Adelaide: University of South Australia/Samstag Museum, 2016.

Wansborough, Matthew and Mageean, Andrea. "The Role of Urban Design in Cultural Regeneration." *Journal of Urban Design* 5, no. 2 (2010): 181-197.

Image sources

Figure 1: Messenger Press Album, State Library of South Australia B71876/138.

Figure 2: University of South Australia. *City West Campus* (Adelaide: Public Affairs Office, UniSA, 1997): np.

Figure 3: Whitelock, Derrick. *Adelaide: From Colony to Jubilee A Sense of Difference* (Adelaide: Savaas Publishing, 1985): np.

Figure 4: City of Adelaide, Adelaide West End, Arts SA, "West End Arts Led Urban Renewal", 1999, 3.

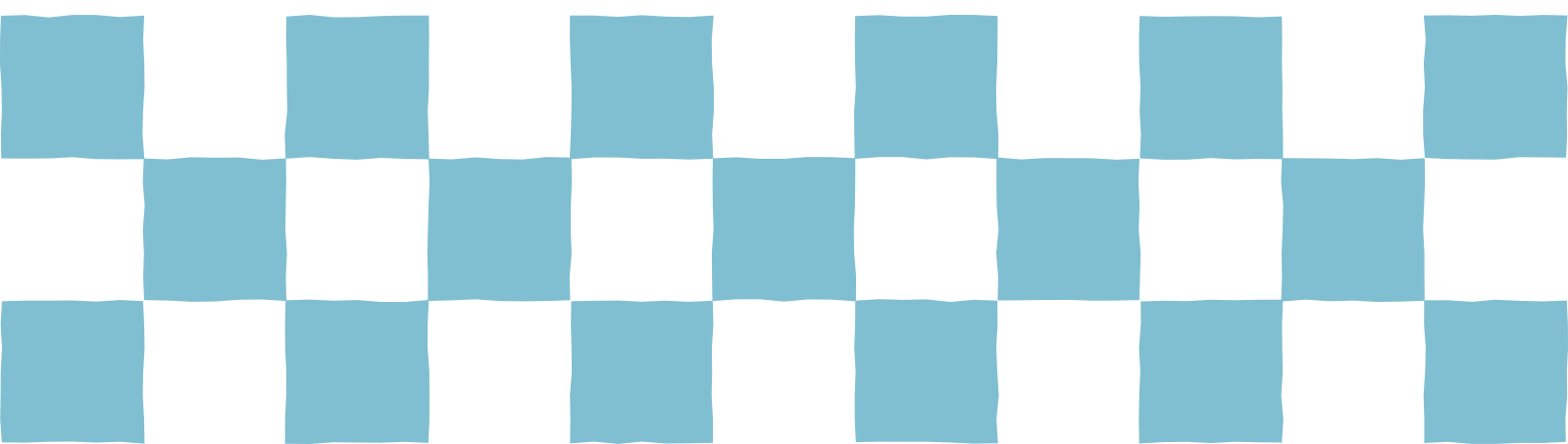
Figure 5: Photographer Christine Garnaut, 2018.



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

25 **Adaptation and Resiliency
of Socialist Planning in
Transitional Economies:
China, Hungary, Poland, and
Russia**



The 'socialist post-socialist': Urban planning in Hungary during the first two decades following its 1989 regime change

Daniel Kiss (ETH Zurich, Institute for Urban Design)

This paper will introduce the socialist spatial planning regime's conspicuous persistence in Hungary after 1989, and explain both its causes and effects within the framework of the rapid and excessive post-socialist decentralization of resources and authority. The paper enriches the discourse by discussing the planning regime's transformation crisis from the perspective of its persistence rather than its accelerated atomization during the post-socialist transition.

In 1968, the 'New Economic Mechanism', an all-around restructuring of the planning and commanding of the socialist economy was introduced in Hungary, reducing the role of central planning and increasing corporate autonomy. With this shift towards market socialism, the decentralization of spatial planning has also taken its first steps. This culminated in transferring the right of enacting General Urban Plans from the central government to the city councils. While the fragmentation of the political and economic systems accelerated following the fall of socialism, the modes and instruments of spatial planning proved more resilient against the transformation drive.

In the first seven years following the regime change, spatial planning regulations and instruments inherited from socialism (e.g. the 1964 Building Law and Budapest's General Urban Plan from 1988) remained in force. In this period, the large-scale state projects shaping the growth of the socialist city were replaced by innumerable small-scale space appropriations, incremental in their dimensions, and difficult to control, particularly in a climate dominated by the social imperative for deregulation and market liberalization. The inherited instruments were not only unable to fulfill their purpose amid these new conditions but also left the public hand for long without a coherent vision on how Budapest should develop. Only in 1997 was the first post-socialist General Urban Plan published, just preceding the enacting of a new Building Law later in the same year. This sequencing proved to be ill-fated, since the new law was to adjust the modus operandi of settlement planning, replacing the GUP with the Settlement Structure Plan and delegating some of its tasks to district-level instruments. This lack of clarity in the division of authority and competence between different public agencies resulted in regulative loopholes, which were especially precarious in the face of the conflicts of interests between these agencies becoming more open. It was not until the mid 2000s that the instruments of urban planning were finally harmonized with the requirements of the market economy, the 1997 Building Law, and the European Union's spatial planning norms. Notwithstanding the unusually rapid systemic transformation, the adjustment of the policies and methods of urban planning to the new circumstances of the market economy and decentralized power geometry took a conspicuously long time. In this period the public hand has lost its ability to generate and keep structural changes under its full control. This, in its turn, has given private developers the overhand and, thus, resulted in a rather laissez-faire type urban development, characterized by the lack of significant top-down restructuring of the city and by the proliferation of business-dominated development projects not integrated into any grand urban design.

Planning Transition Beyond Socialism: From Poland to China and Back

Piotr Bujas (TRACE - Central European Architectural Research Think-tank), Alicja Gzowska (Uniwersytet Warszawski), Li Hou (Tongji University) and Łukasz Stanek (The University of Manchester)

This talk discusses the uneven dynamics of knowledge transfer between two socialist countries, Poland and China, in the 1950s and in the 1980s by following the trajectory of Piotr Zaremba, Polish urban and regional planner and head of the Postgraduate Course of Urban and Regional Planning for Developing Countries which opened in 1965 at the University of Technology in Szczecin (Poland). Zaremba worked in PRC as an educator, designer and consultant in two periods: during the 1950s, when the modernisation of the country was developed according to the Soviet model; and during the 1980s, thus during the controlled opening of China towards the capitalist market.

The first engagement, which included leading regional planning teams, consulting development plans and lecturing was based on specific experiences of Poland's post war reconstruction and modernisation, and its survey contributes to a more nuanced view on the circulation of international planning models in China before the Sino-Soviet split. The second engagement as an organizer and leader of courses and seminars in China, and in particular Zaremba's planning of harbour cities in the Guangdong province and special economic zones was relying on Zaremba's wide international experience, including his work as UN consultant.

By comparing both phases of Zaremba's engagement, we will argue that actors from Poland, more than transferring a specifically socialist model of development, acted as mediators between China and international planning culture, to which they themselves contributed. This mediation included the last decade of the cold war, when Polish and Chinese planners envisaged a spatial framework for the transition beyond socialism. Learning from his experience in the PRC, by the late 1980s Zaremba aimed at transferring the Chinese experience to Poland by delivering detailed plans of the special economic zone in Szczecin.

Local Adjustment with Path-dependence: the Governance Structure Shift and Spatial Responding in Chinese Third-front City since 1980s

Zhendong Luo (Nanjing university) and Biyao Zhu (Nanjing university)

To better understand urbanization and urban change, especially inner relationships between spatial phenomena and institutional factors, an urgent claim for planning historians has been reinforcing theoretical framing and more systematic comparative studies, which is also the primary task in Chinese planning history scholarship. That is to show how Chinese urbanization expresses the complex and changing relationship between a strong central government and market forces. Here is one kind of cities called Third-front city, making a pure sample to understand Chinese modern institutional design and related spatial phenomena. Such cities were first built for war-preparing in remote Midwestern China in 1960s, under compulsory power and planned arrangement from central government, which seems not a sustainable mode by general acknowledgement. Yet those cities have still went through transformation and gained follow-up development. With the perspective of historical institutionalism, we assume there exists the interaction of institutional path dependence and endogenous incremental change. This paper takes one typical of them, Shiyuan in Hubei Province for empirical study. From the Socialist planned economy stage (1960s to 1970s) to China's Reform stage (since 1980s), we mainly explore how government structural change effected the city's development outcomes as a core institutional factor, especially where planning got involved. We find that the initial institutional system dominated by central government had ensured rapid rise of Third-front city in early stage, while producing path dependence and long-term urban spatial influences. In face of transformation, general environment of modest reformation in China had provided enough buffer space for new institutions; On the other hand, despite path dependence in terms of industry pattern, finance structure, administrative power and so on, new local actors' seeking for incremental changes within original institutional framework also generated transformative effects.

Sotsgorod (Socialistic city) of Today and Tomorrow: Soviet Legacy in Common Trends and Challenges of Contemporary Urban Development and Planning in China and Russia

Fedor Kudryavtsev (Moscow Institute of Architecture) and Li Hou (Tongji University)

Urban planning of Soviet time was not just rules, documents and plans. It was a comprehensive understanding of what socialist city or "sotsgorod" is and how it should be in the future. This holistic vision was further spread around the world and had a strong impact on global urbanization. Transfer of planning standards, practices and urban forms from USSR to PRC in 50s of XX century proves ambition of "sotsgorod" as "built for the sake of the working people" to become a global alternative to any other city built before.

Comparative study on modern planning practice in Russia and China and case-study on evolution of factory town of Red East Tractor plant in Luoyang have confirmed that Soviet legacy is still relevant to contemporary urban planning and strongly influences its future in both countries. Common traits can be preliminary sort out as following:

- preserved built-up forms (Red East factory and workers housing in Luoyang, neighborhoods of Wuhan Iron and Steel group and similar patterns of Kharkov, Magnitogorsk and other Soviet cities, 5-story housing blocks in Shanghai and Moscow)
- city layouts, planned in 50s and adapted for new built-up forms and functions (Jiànxi qū district in Luoyang) or left untouched till now as in many Russian cities (Volzhsky, Elektrostal, etc)
- Soviet time planning concepts evolving to modern forms of main streets, new high-rise housing blocks, cityscape, etc. (Main thoroughfares and new peripheral high-rising housing areas in Moscow and Beijing)
- planning thinking and language, adapted to new context but basically preserved: comprehensive planning at big scale with clear functional zoning (New Moscow and Chengdu Tianfu New Area projects), terms and notions of integrated socio-economic and spatial planning (Guangzhou Eastern Bay Area project case and Soviet regional planning schemes of 70s and 80s)
- common challenges of national city system like Third front cities in China and industrial "monocities" in Russia

Given findings raise an issue of valuation of this legacy for planning theory and nowadays practice in order to elaborate adequate policy for its use, development or denial. Soviet time planning appeared to be as part of world history as well global phenomenon to be engaged into contemporary planning discourse. Components of formerly comprehensive "sotsgorod" concept should be sorted out and valued accordingly to their impact and relevance to future development. It is presumed that installation of detailed comparative research on socialist planning influence and heritage globally and between China and Russia in particular can strongly contribute to fulfillment of this task.



Local Adjustment with Path-dependence: the Governance Structure Shift and Spatial Responding in Chinese Third-front City since 1980s

Zhendong Luo*, Biyao Zhu**

* *Department of Urban and Regional Planning, Nanjing University, China, luozhendong@nju.edu.cn*

** *Shanghai Branch of China Academy of Urban planning and Design, China, verazhu1990@qq.com*

A primary task of Chinese planning historians is to show how Chinese urbanization expresses the complex and changing relationship between a strong central government and market forces. Here is one kind of cities called Third-front city, making a pure sample to understand Chinese modern institutional design and related spatial phenomena. Such cities were first built for war-preparing in remote Midwestern China in 1960s, under compulsory power and planned arrangement from central government, which seems not a sustainable mode by general acknowledgement. Yet those cities have still went through transformation and gained follow-up development. With the perspective of historical institutionalism, we assume there exists the interaction of institutional path dependence and endogenous incremental change. This paper takes one typical of them, Shiyan in Hubei Province for empirical study. From the Socialist planned economy stage (1960s to 1970s) to China's Reform stage (since 1980s), we mainly explore how government structural change effected the city's development outcomes as a core institutional factor, especially where planning got involved. We find that the initial institutional system dominated by central government had ensured rapid rise of Third-front city in early stage, while producing path dependence and long-term urban spatial influences. In face of transformation, general environment of modest reformation in China had provided enough buffer space for new institutions; On the other hand, despite path dependence in terms of industry pattern, finance structure, administrative power and so on, new local actors' seeking for incremental changes within original institutional framework also generated transformative effects.

Keywords: central-local government relationship, planning history, path dependence, Third-front city

Introduction

In the common transition environment of globalization and capitalization, places with different institutional backgrounds will always make quite varied choices. This is largely due to factors such as their different stage of economic and technical development, the division of power between local, state and central governments, constitutional protections and traditions of property rights, and type of urban system, and so on¹. This inconsistency has been confirmed in the process and phenomenon of contemporary urban development, especially in some developing countries and emerging market countries, which cannot be explained by the traditional geographical location theory². Incompletely rational choices made in specific space-time scenario can have significant impact on urban space evolution, via intervention in local institutional arrangements including administrative power structure, capital accumulation mode and policy efficiency³. Therefore, taking the time dimension as one of determining factors rather than simply static labels in research about urban planning and constructions, it might help to better understand how those important historic events changed local urbanisation procedure, and how their influences had been inherited and evolved during later changes. Actually, this is also where the core value of planning history research lies, instead of just 'telling stories'⁴.

Unlike in western context, China's reformation is more like a process seeking balance in terms of both local-central government relationship and planned-market economy, changing from the status of highly centralized socialism to a compromise towards decentralization. So planning history research in China shall provide a valuable model for major socialist countries or even other developing countries. Many research with regards to Chinese urban

¹ Sorensen A. *Taking Path Dependence Seriously* (Planning Perspectives, 2015).

² Savitch H. *Cities in the International Marketplace* (Shanghai: Gezhi Press & Shanghai People's Press, 2013).

³ Pal A. *Doing Evolutionary in Economic Geography* (Economic Geography, 2016).

⁴ Sorensen A. *Taking Path Dependence Seriously* (Planning Perspectives, 2015).



planning after 1949 has pointed to the influence of the Soviet Union^{5,6}, but the practice of socialist planned economy system in many places actually underwent local adjustment, which generated corresponding institutional legacies that played key roles in Chinese reform and opening up, which then set an example as institutional transition of pragmatism and gradualism⁷. There have been studies on the evolution of urban planning against the background of China's transition from a planned economy to a market economy, most of which pointed out a fact that Chinese urban planning is path dependent due to its strong government-dominated political origin^{8,9,10,11,12}.

Indeed, the planning history of most Chinese cities contains complex historical background factors from home and abroad, and this adds difficulties to distinguishing real endogenous institutional innovations to explain 'purely Chinese model'. Luckily there is a special kind of Chinese modern cities called 'the Third-front city', built for war-preparing during the Third-front Constructions from 1960s to 1970s, making an ideal example for analysing Chinese special process and characteristics of planning evolution¹³. Those cities locate in inland area far away from national boundaries, and were mostly accompanied by the constructions of the Republic's large industrial plants at that time, especially in fields as iron and steel, petrochemical, machinery, transportation equipment and army defence. Some cities even developed from deserted land to big or medium sized cities¹⁴. The main question here is, early establishment of Third-front city largely benefited from the compulsory power and strictly planned arrangement of central government, which seems not a sustainable mode for a city's development by normal sense from a market economy view. Yet such city mostly went through the follow-up reform and opening up after 1980s with their own ways. Why and how?

To cope with this question, related concepts of historical institutionalism (HI) are introduced in the next section (especially the concept 'path dependence'), while a logical framework is provided to interpret how governance transition and spatial evolution interact with each other in the Third-front city. The following two parts of this paper are for empirical study with one typical Third-front city, Shiyan in Hubei Province. The third section tells about the specific governance structure in Shiyan under circumstances of planned economy and 'the Third-front Constructions', along with its spatial effects on urban planning. The fourth section then explores how Shiyan's governance structure react to the nation's overall institutional transition during Reform Period after 1980s, paying key attention to some prominent path dependence factors and the ways new governance actors managed to live with them.

Characteristic of institution-space interaction in the Third-front city: from view of historical institutionalism

Interpret urban planning history by institution

The theory of historical institutionalism branches from new institutional economics. It stands up for the very viewpoint that both institutional stasis and change matter in urban political dynamics. As a typical capitalist economic landscape, cities are strongly geospatial dependent. Urban phenomenon are shaped by multiple actors' interaction in social relations, behaviour patterns and policy process, which are always generated from specific historical conditions¹⁵. Since the design of institution can be seen as resource allocation based on power relationship, planning history then can be told as a history of institution-building under urban political coalitions of different scales and levels. Urban property capital, its quality, liquidity, risk structure, and profit margins are all shaped by place-specific compromises with regard to who pays for what; which risks are socialized; how infrastructure is delivered, paid for, and maintained; and how public services are provided. Particularly important is the specification of the rules that apply to new capital investment in urban space, and the distribution of the costs and benefits of such investment, which are reflected by local industrial arrangement, fiscal arrangement, spatial strategy and so on.

⁵ Andrusz G D. *Cities after Socialism* (Blackwell, 1996).

⁶ HOU Li. *Urbanisation in the First Thirty Years of PRC* (Urban Planning Forum, 2010).

⁷ WU Fulong. *Transition and Reconstruction* (Nanjing: Southeast University Press, 2007).

⁸ Abramson, D. B. *Urban Planning in China* (Journal of the American Planning Association, 2006).

⁹ Xu, J. *Socialist Urban Planning in Transition* (Third World Planning Review, 1998).

¹⁰ Ng, M. K. and W.-S. Tang. *Theorizing Urban Planning in a Transitional Economy* (Town Planning Review 2004).

¹¹ NING Yuemin. *New Urbanisation Process* (Acta Geographica Sinica, 1998).

¹² SHEN Guangyao. *Review on the Studies of Urban Governance* (Urban Problems, 2012).

¹³ HUANG Li. *Planning and Development for Third-Front Cities* (Urban Planning Forum, 2013).

¹⁴ ZHOU Mingchang. *The Third Line Construction* (Researches in Chinese Economic History (1964-1980), 2014).

¹⁵ Boschma R. *The Handbook of Evolutionary Economic Geography* (Cheltenham & Northampton: Edward Elgar, 2010).



'Path dependence' is the core idea in historical institutionalism. In a particular local historical process, some external critical junctures marked by major historical events will always contribute to specific institutional choices, and at the same time certain form of political coalitions in favor of this newly-set institutional framework. Yet change does occur after that, while some institutions are harder to change than others and that such differences in openness to and patterns of change can have profound impacts on urban outcomes¹⁶. On condition of that, later institutional adjustment tends to adopt an incremental and moderate way rather than a radical change, with consent to the validity of existing institutional framework. Thus urban transition in real situation often presents as an evolving procedure with constantly feedbacks or adjustments between institutional design and spatial outcomes.

Special central-local relationship as the core of path dependence in Third-front City

As 'important legacy' of Chinese urban planning and construction during the planned economy, the value of Third-front cities has been emphasized by many planning history researchers in China^{17,18,19}. Some have further managed to dig the institutional roots behind those cities planning characteristics^{20,21}, but there is still lack of exploration towards the subsequent functions of path dependence factors in reform period (also known as 'post Third-front Constructions' period). This can be partly attributed to the limitation of theoretical perspective which used to regard institutions as controlled variables, so that we could only discuss the planned economy and the market-oriented reform separately. Now the application of historical institutionalism might help a lot to break through such limitation.

Urban space is moreover a political expression²², that is, the way politics acts on urban development is through arrangements for land and its overlying spatial structures by urban governance actors (who have power rights and benefit from urban space)²³. Our discussion about the Third-front city follows this theoretical logic as well. Despite that in Soviet-style socialist planned economy, individual is reduced to a passive and minimal state and private property rights are abolished²⁴. Although resources are allocated by plans, or more accurately by bureaucrats, they nonetheless need to be controlled by some organizations that then put them into consumption or production. That is, there are still de facto property rights, which inevitably give rise to property interests. These property interests may be held by a factory, a school or even a government agency. In a Third-front city as Shiyang, such organization compound took the shape of 'the Third-front enterprise'. However, it was actually not an enterprise in the real sense, but a vertical dispatch department set up by the central government for the construction of large industrial bases at local. Therefore, 'the Third-front enterprise' had got dual role as an industrial entity and both a local government agency, which made it the central knot between governments of different levels and between government- enterprises. This had then led to multifaceted intertwined status of central-local government relationship in the Third-front cities, making a starting point for path dependence (Fig.1).

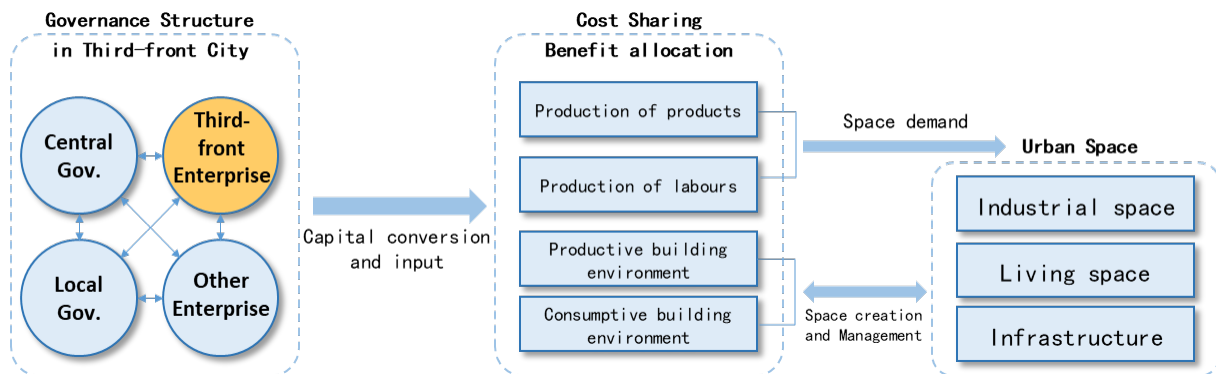


Figure 1: the interaction machine between governance and space in the Third-front city

¹⁶ Boschma R. *The Emerging Empirics of Evolutionary Economic Geography* (Journal of Economic Geography, 2011).
¹⁷ HU Jun. *Chinese Cities: Patterns and the Evolution* (Beijing: China Architecture and Building Press, 1995).
¹⁸ LI Baihao. *Planning History of Modern Chinese Cities* (Nanjing: Southeast University, 2003).
¹⁹ DONG Jianhong. *History of Chinese Urban Constructions* (Beijing: China Architecture and Building Press, 2004).
²⁰ ZHANG Jingxiang. *New China Urban & Rural Planning Thoughts* (Nanjing: Southeast University Press, 2013).
²¹ HUANG Li. *Planning and Development for Third-Front Cities* (Urban Planning Forum, 2013).
²² Davies S J. *Theories of Urban Politics* (Shanghai: Gezhi Press & Shanghai People's Press, 2013).
²³ ZHANG Jingxiang. *Spatial Governance* (City Planning Review, 2014).
²⁴ Hayek, F. A. *The Road to Serfdom*. Chicago (IL: University of Chicago Press, 1944).



Planned economy period: the ‘enclave’ of central government and the formation of path dependence

Chinese central government had been investing enthusiastically towards Third-front cities from 1964 to late 1970s. At this period, Third-front cities were essentially more like the implementation bases of the “Comprehensive Plan for Regional Industrial Construction”²⁵, and therefore were set up completely surrounding the state’s production units, with needed labour force and their living facilities, which totally was ‘the socialist style’. The City of Shiyuan was selected then as the location of Chinese second automobile factory, one of SPUs. This implementation changed Shiyuan from a remote deep-hill village to a large-scale specialized industrial city.

‘State-owned enterprises(SOE)’ as the foundation of exotic specialized industries

Once located in some place, large-scale industrial projects will have profound impacts in terms of investment return, industrial chains and bringing other sub-sectors²⁶. During the Third-front Constructions, industrial projects launched basically shared the above characteristic of significant positive externality, which was further magnified by the State’s centralized and monopolistic investment. For example, Chinese second automobile factory (referred to as ‘the SOE’ here), which was a military-oriented enterprise directly subordinated to the State Council’s machinery industry authority, providing products nation-wide, was totally ‘airborne’ to Shiyuan when there was no modern industrial departments. Under the state’s strict supervision and support towards the whole operation process including production and sales, capital withdrawal, and financial flow, the SOE achieved dramatic development and became the absolute pillar industry of Shiyuan. This process brought profound influence toward Shiyuan from two perspectives. On one hand, the SOE in Shiyuan restricted local economic development. The profit of the SOE went directly to the central government, leaving the local of Shiyuan in a dilemma of lacking financial income from its profit. In the meanwhile, Shiyuan also had difficulties to adopt other industries since the pillar industry had dominant impact on local economy. On the other hand, the SOE lay industrial foundation for Shiyuan. Under the strong promotion of relevant national policies, the SOE had received fully support from the entire country for raw material, personnel, technology, and other aspects. The complete industrial chain and national leading technology had provided Shiyuan the potential and opportunity of becoming an ‘automobile city’.

Administrative structure: close connection with central government and integrated leadership by the local and the SOE

Third-front cities like Shiyuan at first did not have much political resources except for exploitable land, due to their weak linkage with capital city and other cities in the same province. When the SOE settled in Shiyuan, a strong linkage between the local and central government had been created robustly. In order to form a streamlined administrative structure between local and the central government, a unique administrative system had been introduced. The technical and administrative leader of the SOE also undertook the position of the party and governance leader of the Shiyuan city. Under this administrative system, central government provided more direct guidance and support towards the city development via the SOE. For example, the leader sought tens of million funds directly from the central government specifically for the setting up of local education, health care, culture, sports, public security, fire protection, residents’ committees, the People's Armed Forces, real estate, telecommunication, and warfare, which boost local development dramatically. In addition, since the leader was granted rights of both city and SOE construction, he could arrange local personnel and industry more efficiently. One manifest practice was encouraging family members of SOE staff to participate in local production industry cooperating with the Second automobile factory, and in other service and commercial work unit. By this means, the special administrative system created a self-sufficient society by providing products and services for the producer group, which succeeded in intensive use of local resources and providing stable life quality for residents at the same time.

Spatial Effect: fragmented land use pattern based on industrial clusters

The decade from 1973 to 1982 was the crucial developing period for Shiyuan. During this decade, the State Ministry of Finance allocated 47.1 million Yuan in the fundamental urban infrastructure construction for Shiyuan. Under this circumstance, Shiyuan benefited from the vast investment in rapid urban expansion, while was constrained strictly in the urban development pattern planned by central government at the same time. For air defence considerations, central government set 23 sub-factories of the SOE scattered in 8-10 mountain valleys with a total spatial range of approximately 10-22 km connected by massive mountain roads, bridges, and railway lines²⁷. This industrial spatial

²⁵ SUN Yingdan. *A Study on the Development and Planning of Chinese Three-line Cities* (Wuhan: Wuhan University of Technology, 2010).

²⁶ CAI Jianming. *The Research into Chinese Urbanization Dynamics and Strategies* (Progress in Geography, 1997).

²⁷ WANG Xingping. *History of Industrial Space Planning and Design in Modern China* (Nanjing: Southeast University Press, 2014).



distribution affected the spatial pattern of urban region profoundly. At planned economy era in China, residential area and supporting living facilities were in coordinate with production sectors to provide sufficient services under the guidance of a rigid rule. Shiyang's residential area and facilities therefore followed the pattern of industrial cluster land use, and formed a fragmented urban pattern with 8 separating functional clusters separately every 3-5km. Under this basic urban development pattern, hospitals, primary and secondary schools, other service facilities, and warehousing and freight yard land were all set by time in 8 clusters respectively (Fig.2). Later industries settlement was also attracted adjacent to original clusters, which enhanced this scattered pattern. Although this fragmented spatial pattern was not economic rationality, it still developed smoothly relying on the leaning financial support by central government.

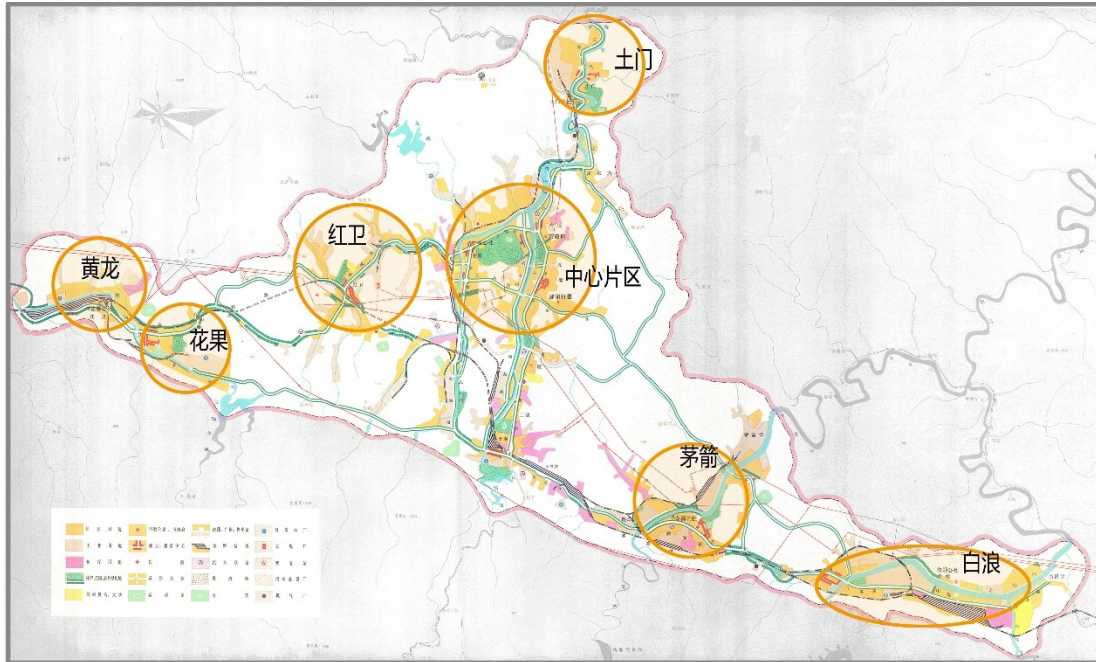


Figure 2: Urban structural plan organized for the priority of each factory

Reform period: 'the return of local authorities' and their compromise to path dependence

Overall institutional environment change in China began from the early 1980s with decentralization as its fundamental characteristics²⁸, both in administrative and economical territories²⁹. Local government was a pure local branch of the state in the planned economy, but in the market economy it would enjoy much higher degree of local autonomy and have many more functions. In the meantime, thanks to the termination of the wartime planned economic policy, the nation's investments for Third-front industry projects had been cut down greatly. As a natural result, Third-front cities were not that tightly bound to the central government, then 'the return of local authorities' in governance system became a must to ensure those cities' succeeding development. But in fact, Third-front cities mostly witnessed a situation where local actors showed inertial dependence towards central government via the existence of 'Third-front Enterprises', while making some incremental institutional adjustments within the original governance framework. This in a sense provided enough buffer zone for the Third-front city to go through transition steadily, as things went in Shiyang.

Sustained overflow effect and political say by the Third-front Enterprise

The special system design of integrating local city with enterprise in Shiyang ended in 1982, and local government of Shiyang officially established. The Chinese Second automobile factory was no longer an all-round dispatched agency responsible for Shiyang City, beginning to show more market-oriented interest demands itself. Yet as the nation's important assets still, Chinese Second automobile factory could consistently get indirect support from the central government in many ways like produce orders, technical help or brand building. This was the very economic overflow effect local city needed, so the Second automobile factory and its related industries had taken dominance in Shiyang's production system for a long time (Tab. 1). Above that, benefited from administrative resources accumulated during the planned economy, Shiyang had remained some political privileges in negotiating

²⁸ LUO Zhendong. *Metropolitan Development in China* (Beijing: China Architecture & Building Press, 2007).

²⁹ LI Yanyi. *Central-Local Relationships and Local Governance Revolution in China* (People's Forum, 2014).



with the central government. Even a lot of early local government members were former leaders of the Second automobile factory. They helped seek for several important projects for Shiyang city, including the Automotive Industry College set up by National Ministry of Education, talent introduction policy towards nation-wide, and convenience in international trade, which were quite rare for inland cities like Shiyang.

		<i>Number of enterprises</i>	<i>Output value</i>	<i>Fixed assets value</i>
		<i>(10 thousand yuan)</i>		
Vehicle manufacturing	Dongfeng Automobile (former: Chinese Second Automobile)	3	1971120	1512401
	Other local enterprises	13	654752	82600
Assembly	body	3	66303	9800
	Axle	6	55929	17521
	Frame	4	41586	20749
	Exhaust & Transmission	4	78348	78733
	Mould	2	35205	8423
Parts manufacturing		134	575296	291570

Table 1: Enterprises of automobile industries in Shiyang (2008) .

Local government's struggle in interweaving administrative and property relationship

In the state owned assets system of China, the rights of property and income are attributed to governments by levels. During the former planned economy, to facilitate the central government's control on the Second automobile factory, the administrative level of Shiyang had actually been promoted higher than the province level. When it came to the reform period, some mismatches had popped up then: the financial income of the Second automobile factory belonged to the central and the Hubei Province government; the part of local collective enterprises belonged to the Yunyang Region (approximately the range of Shiyang Metropolitan Area nowadays); thus the city of Shiyang could only rely on little revenue from agriculture and business departments, which made it hard for the local government of Shiyang to organize the city's planning and constructions. By 1990s, the gap in public services grew larger and larger between the Second automobile factory system-inside and the local. Faced with this problem, the local government actively took advantage of institutional legacies by the Third-front Constructions and made a policy towards sharing public service responsibilities between government and enterprise. The specific practice is that, the Second automobile factory first organized a 'Shiyang management department', embodying all those non-business affairs and public services such as infrastructure, energy supply, education, medical care, accommodation, entertainment and so on; According to later operating conditions, these functional units could be passed to corresponding administrative sections, or seek asset merging with local enterprise actors.

Spatial adjustments: tiny change with regards to original urban spatial pattern

Not only the governance structure, also in spatial planning, the needs of automobile industries had been put in first consideration in the reform Shiyang. In spite of the awareness that the scattered pattern in a long range was kind of wasting, the pattern was still continued in later planning drafts, with tiny advices of combining adjacent production clusters into comparative multi-functional zones (Fig.3). In addition, to ensure a steady level of infrastructure facilitating, local government had also made the decision of joint sponsor in major facilities construction, which actually enlarged the scope of Second automobile factory in local Shiyang.

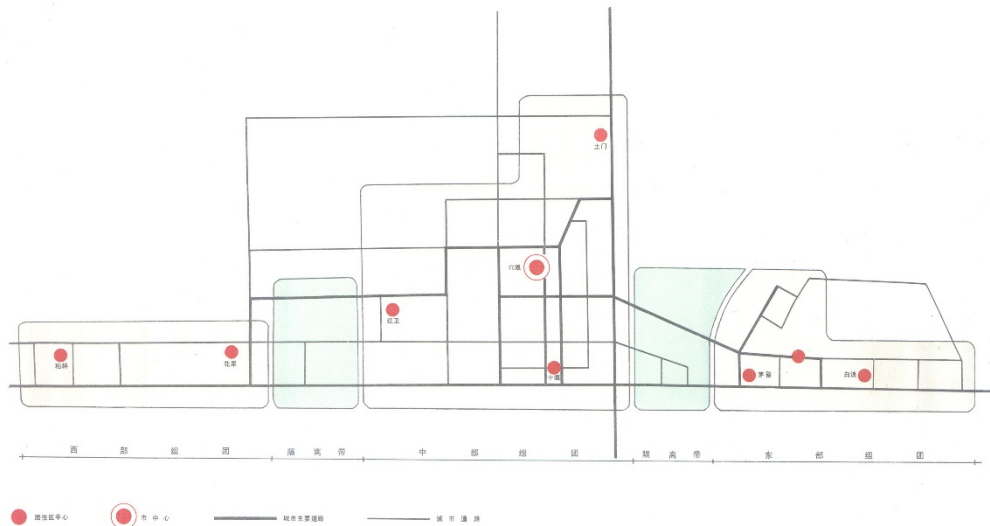


Figure 3: Urban structure of three main clusters put up during reform period.

Conclusion and Discussion

For Third-front cities, the special central-local relationship plays the core role of path dependence in its comprehensive institution system towards urban development. Especially the creation of giant-scale 'SOE' as Chinese typical doing after 1949, has proved the view that 'Once the political alliance is combined with a large enough asset owner group, it can effectively prevent the formation of another alternative alliance'.

Just as in Shiyan, the initial institutional system dominated by central government had ensured rapid rise of Third-front city in early stage, while producing path dependence and long-term urban spatial influences. In face of transformation, general environment of modest reformation in China had provided enough buffer space for new institutions; On the other hand, despite path dependence in terms of industry pattern, finance structure, administrative power and so on, new local actors' seeking for incremental changes within original institutional framework also generated transformative effects. Thus, the beings of Third-front cities, which seemed incompatible with market economy, have made their own way to strive the conflict in Chinese overall transition environment.

The geospatial dependence and institutional path dependence of urban phenomenon are in constant interaction. Only by taking historical institutional legacy seriously and figuring out how it functions among urban governance, can we come up with better ideas to help the local make effective adaptive response towards common transition.



Bibliography

- Abramson D B. *Urban Planning in China: Continuity and Change*. Journal of the American Planning Association, 2006(2): 197-215.
- Andrusz G D, Harloe M, Szelényi I. *Cities after Socialism: Urban and Regional Change and Conflict in Post-Socialist Societies*. Blackwell, 1996.
- Boschma R, Frenken K. *The Emerging Empirics of Evolutionary Economic Geography*. Journal of Economic Geography, 2011, 11(2): 295-307.
- Boschma R, Martin R. *The Handbook of Evolutionary Economic Geography*. Cheltenham & Northampton: Edward Elgar, 2010.
- CAI Jianming. *The Research into Chinese Urbanization Dynamics and Strategies*. Progress in Geography, 1997, 16(2): 9-14.
- CHEN Hao, ZHANG Jingxiang, WU Qiyang. *The Imbalance of Powers and Politics: Political Economy in Urban Redevelopment Projects during the Period of Institutional Transition*. Urban Planning Forum, 2010(5): 33-40.
- China Academy of Urban Planning and Design, Shiyang Bureau of urban planning. *The Master Plan of Shiyang 1990-2010*. 1989.
- Committee of Local Chronicles of Shiyang. *Local Chronicles of Shiyang (1866-2008)*. Beijing: Chinese Literature and History Press, 2014.
- Davies S J, Imbroscio L D. Translated by HE Yanling. *Theories of Urban Politics*. Shanghai: Gezhi Press & Shanghai People's Press, 2013.
- DONG Jianhong. *History of Chinese Urban Constructions*. Beijing: China Architecture and Building Press, 2004.
- Hayek, F. A. *The Road to Serfdom*. Chicago. IL: University of Chicago Press, 1944.
- HE Heming, ZHANG Jingxiang. *Transformative Circumstances and Government-Led Urbanization*. Urban Planning Forum, 2011(6): 36-43.
- HOU Li. *Urbanisation in the First Thirty Years of PRC: A Historical Re-examination*. Urban Planning Forum, 2010(2): 70-78.
- HU Jun. *Chinese Cities: Patterns and the Evolution*. Beijing: China Architecture and Building Press, 1995.
- HUANG Li, LI Baihao, SUN Yingdan. *Planning and Development for Third-Front Cities at the Critical Point of Paradigm Shift*. Urban Planning Forum, 2013(1): 97-103.
- LI Baihao. *Planning History of Modern Chinese Cities*. [Nanjing]: Southeast University, 2003.
- LI Yanyi. *Central-Local Relationships and Local Governance Revolution in China: from the Perspective of New Institutional Economics*. People's Forum, 2014(23): 59-61.
- LUO Zhendong. *Metropolitan Development in China: From Decentralization to Polycentric Governance*. Beijing: China Architecture & Building Press, 2007.
- Ng, M. K. and W.-S. Tang. *Theorizing Urban Planning in a Transitional Economy*. Town Planning Review 2004(2): 173-203.
- NING Yuemin. *New Urbanisation Process: the 1990s Chinese Urbanisation Dynamics and its Characteristics*. Acta Geographica Sinica, 1998, 53(5): 470-477.
- Pal A, Bhattacharjya A. *Doing Evolutionary in Economic Geography*. Economic Geography, 2016, 92(2): 123-144.
- Savitch H, Kantor P. Translated by YE Lin. *Cities in the International Marketplace: The Political Economy of Development in North America and Western Europe*. Shanghai: Gezhi Press & Shanghai People's Press, 2013.
- SHEN Guangyao. *Review on the Studies of Urban Governance*. Urban Problems, 2012(10): 81-86.
- Sorensen A. *Taking Path Dependence Seriously: an Historical Institutional Research Agenda in Planning History*. Planning Perspectives, 2015, 30(1):1-22.
- SUN Yingdan. *A Study on the Development and Planning of Chinese Three-line Cities*. [Wuhan]: Wuhan University of Technology, 2010.
- WANG Xingping, SHI Feng, ZHAO Liyuan. *History of Industrial Space Planning and Design in Modern China*.



The 18th International Planning History Society Conference - Yokohama, July 2018

Nanjing: Southeast University Press, 2014.

WU Fulong, Laurence J C Ma, ZHANG Jingxiang. *Transition and Reconstruction: Multi-dimensional Urban Development in China*. Nanjing: Southeast University Press, 2007.

Xu, J. and M. K. Ng. *Socialist Urban Planning in Transition*. *Third World Planning Review* 1998(1): 35-51.

YU Tao, ZHANG Jingxiang, YIN Jie. *The Entrepreneurial Inclination of China's City Marketing and its Effect during the Period of Transformation*. *Economic Geography*, 2009(4): 608-612.

ZHANG Jingxiang, CHEN Hao. *Spatial Governance: Political Economy of China's Urban and Rural Planning Transformation*. *City Planning Review*, 2014:11, 7.

ZHANG Jingxiang, LUO Zhendong. *New China Urban & Rural Planning Thoughts*. Nanjing: Southeast University Press, 2013.

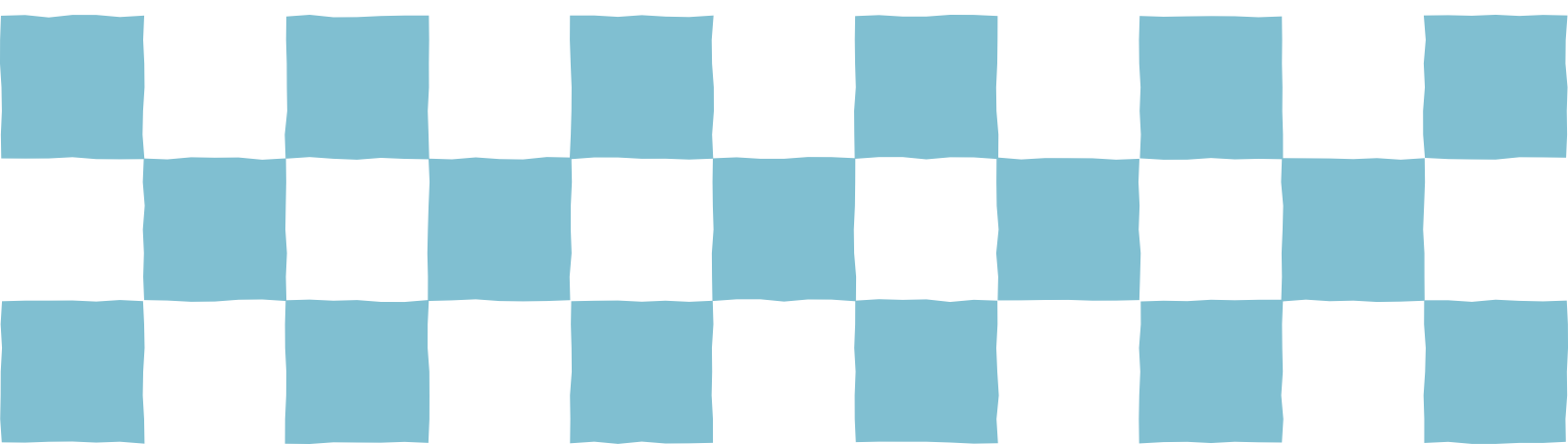
ZHOU Mingchang. *The Third Line Construction and the Development of Inner-land Cities in China*. *Researches in Chinese Economic History (1964-1980)*, 2014(1): 142-151.



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

26 Critical Junctures of Institutional Transformation: Developing theory and cases in planning history



Is the land finance system a fiscal expediency? Tracing the process China establishes the underlying institution for contemporary city planning

Nannan Xu (The University of British Columbia)

Why could China be able to urbanize with a more sufficient provision of infrastructures and less informal developments comparing to other developing countries? I argue that the reason is that the Chinese state successfully captured land value increase in the urbanization process with which needed infrastructures were funded.

How could the Chinese state capture the land value increase? It was not only because of the state landownership as a legacy of the communist revolution, but also of the institutional reforms of land management in the real estate marketization era. This paper examines with a historical institutionalist approach the 1998 revision of the Land Management Act. Taking it as a case of critical junctures, I present how the party state made land value increase accumulate towards the public fund. In the constant institutional reform process, the period that individual local officials and rural collective leaders transfer public-owned land use rights with depreciated values for personal gain, which I call the 'wild 90s', gradually terminated in the beginning of 21st century.

This paper concludes with three points: first, the land value capture institution, widely known as 'land finance (tudi caizheng)', was conventionally explained away as an expediency to the 1994 fiscal reform which substantially reduced local governments' tax income. However, the so-called land finance only became a significant source of income after 2002. An expediency should not take such a period to formulate. This research provides an alternative explanation to the formation of land finance, that the land value capture institution was a nationwide intentional arrangement of the 1998 revision of Land Management Act, instead of an expediency to fill local fiscal gap.

The second point is that the growth-machine or urban-entrepreneurialism model developed in the western neoliberal context demands three adaptations in the Chinese case. First, the power relation within it is different from that of the western cases. The state dominates. Second, the logic of coalition changes since the 1990s. Initially, local officials easily ended up with sacrificing the state interests for personal gain, but later they must work in a more institutionalized environment. The motivation of engaging with investors was shaped to be more towards raising money for infrastructure development and economic growth, which were evaluated as political achievements. The third adaptation is to take into consideration of the role of the central party state. They have always been playing the hegemonic role of the ultimate maker of the rules of game. The third point is to advocate for an expanded scope of the Chinese planning history, which has always focused on just one of the multiple 'plannings' in China: the urban and rural planning, or Chengxiang gui Hua. One has to at least understand the land management institution to see a whole picture. Aimed at broadening the scope, I intentionally examine one important critical juncture in the development of land management institution. As the multiple planning institutions have been merged into one central-government agency in March 2018, an integrated approach to their histories becomes more practically meaningful.

Land Readjustment in Denpasar, Indonesia: Critical Junctures, Effects on Land Governance and the Spatial Distribution of Land Prices

Felipe Francisco De Souza (The University of Tokyo)

After the World War II, and after the coming decades where colonialism and colonial processes came to an end, a whole new space for the diffusion of ideas and models took place and international cooperation agencies became the main drivers to support the developing world in turning new projects into reality. Among different ideas and models, land readjustment has been practiced and transferred for more than 100 years, and the last decades witnessed an unprecedented interest on such urban planning instrument. Its adaptation and implementation processes replace old approaches and precedes significant changes inside planning cultures. Critical junctures – briefly defined as a period of rupture which is hypothesized to product legacies – therefore is relevant when (1) reviewing the historical reconfiguration when Indonesia started urban land readjustment projects in Denpasar city, back 1980s, and (2) reviewing how that long-term implementation and incremental revision of the instrument – mainly supported by the Japan International Cooperation Agency – shaped the local planning system and city's environment after 30 years. In order to contribute with the understanding of potential legacies, the present paper reviews the South District of Denpasar and 4 projects to evaluate changes in land prices, comparing variation throughout time, inside and outside land readjustment project areas. When addressing how land readjustment has shaped the urban environment of Denpasar at the regional scale, most specifically, the research intends to find expressive valuation of land prices in existing land readjustment projects, comparing with areas that were urbanized without using the instrument, performing such analysis through the econometric model of "difference-in-differences." Some initial findings suggest, from the results of difference-in-differences, that land readjustment has shaped the urban environment of Denpasar by reflecting socio-economic disparities especially when comparing inside and outside project areas. Such disparities seem to be a problem because (i) the government is subsidizing these projects without cost recovery land and (ii) the government is not increasingly and properly collecting property taxes from these areas to redistribute to the society as a whole (like the Japanese government does)

The paper ends listing the research limitations and looks into a proper theoretical framework on critical junctures in order to understand the research outcomes.

How does urban legislative reform shape planning education and practice? The Institutional Agency of the 74th Amendment to the Indian Constitution

Azhar Tyabji (The University of British Columbia)

The landmark 74th Amendment to the Constitution of India (1993), which sought to devolve urban decision-making from federal and state governments to local authorities (‘panchayats’ and municipalities), is well-documented as a critical, historical juncture in the postcolonial story of Indian urban governance. But a qualitative accounting of its specific effect on planning pedagogy and practice following India’s new economic openness to Foreign Direct Investment and global competition in 1992 might raise intriguing questions to do with causality and correlation. Could we view urban legislation as the embodiment of agency, as in Latour and Appadurai’s reckoning, with a contingent ‘thingness’ that produces social consequences, giving rise to new institutions in turn? Assuming an historical-institutionalist approach, this paper argues that the genealogical trajectory to early-1990s urban legislative reform in India represents a kind of institution in and of itself, profoundly shaping planning education in the mid-1990s, and consequently forms of planning practice that have since come to define the ‘new normal’ characterized by a market neoliberalisation of knowledge production and its application to urban planning in India, albeit with profoundly moral consequences. Drawing from select narrative interviews with planning practitioners who were witness to legislative advances leading up to and after the 1993 ruling, the paper begins by speculatively setting the historical precedents to such legislation against an emergent Asian/Tiger encounter with neoliberal urbanization in the late 1980s/early 1990s (with China as one of several comparative foils)

The paper then sketches legislative impacts on planning education and practice in India, exploring the proposition that markedly-new advancements in legislation empowered new state and private planning ‘actors’ in the 1990s, driven by moral logics of the market that seemed newly at odds with the State’s hitherto-welfarist thinking. The paper reflects, in conclusion, on the methodological challenges and opportunities specific to situating legislation-as-an-institution within the overall logic of historical institutionalism, and more broadly the historical problematic of charting the moral consequences to neoliberal schools of planning thought in India.

Forks in the road: Theory and method of critical juncture analysis in planning history

Andre Sorensen (University of Toronto)

Social, political, and economic change sometimes occurs during periods of major change in which previously relatively stable structures are replaced with new approaches. Historical institutionalists refer to these turning points as critical junctures. Critical junctures are usually defined as periods of significant change which tend to occur in distinct ways in different jurisdictions, and which have enduring legacies. The suggestion is not that all change occurs in this way, as processes of incremental revision and evolution are also important. But if critical junctures sometimes produce enduring legacies, then these periods are an important topic for research and theory-building. Planning history offers many examples of such relatively short periods of significant change that produced distinct and lasting outcomes in different jurisdictions.

The study of critical junctures has been a major theme of comparative historical analysis and historical institutionalism for a quarter century, and a significant literature on critical junctures has developed in recent decades. This research has contributed to the development of robust conceptual frameworks detailing the structure and implications of such change processes, as well as the development of associated research methods, particularly for comparative historical analysis, that are valuable for planning history research. It seems clear also that planning and local governance processes experience some distinctive types of critical juncture, compared to national governance processes, such as during post-disaster recovery, major infrastructure investments, or new planning laws or mandates imposed by senior levels of government.

This paper reviews recent research in this area and develops a conceptual framework and typology of critical junctures relevant to planning and urban governance.



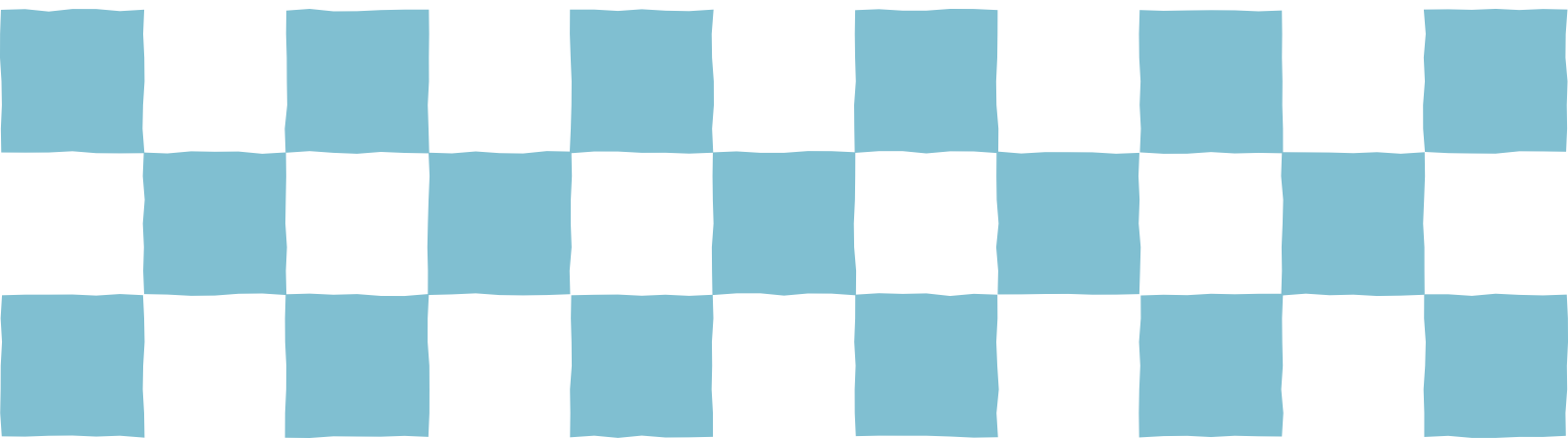
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

27 The Routledge Handbook of Planning History / Round Table



Tue. July 17, 2018

Session 6 (2:45PM-4:30PM)

Lecture Hall, Yokohama Port Opening Hall

Moderator:

Carola Hein, Professor, Delft University of Technology, The Netherlands

Participants:

John Gold, Margaret Gold, Andre Sorensen, Dirk Schubert, Stephen Ward, Clement Orillard and Stephen Ramos

Planning history is a discipline with diverse terminology, multiple interpretations and manifold applications through space and over time and the methodological and theoretical approaches towards planning history reflect that. The Handbook of Planning History starts with the assumption that planning is a flexible system rather than a fixed one. Taking a networked, cross-cultural, balanced approach, and writing from different vantage points, the Handbook explores spatial traditions and cultural landscapes. This session brings together nine authors from the handbook to present their work and to reflect on the next steps of writing planning history for the future. It first explores the development, state and goals of planning history, highlighting diverse global approaches. It then investigates the reasons for pursuing such historical investigation both in regard to past and future practice of planning and finally provides indications as to the ways in which planning history may work in the future before outlining the overall concept of the Handbook.

The authors have respectively written or contributed to the following chapters:

1. Planning History and Theory: Institutions, Comparison, and Temporal Processes, André Sorensen
2. Global Systems Foundations of the Discipline: Colonial, Post-Colonial and Other Power Structures, Robert Home
3. The Ancient Past in the Urban Present: The Use of Early Models in Urban Design, Michael E. Smith, Carola Hein
4. Urbanisme, Urbanismo, Urbanistica: Latin European Urbanism, Javier Monclús, Carmen Díez Medina
5. Planning Latin American Cities, Maria Cristina da Silva Leme, Vera Lucia Motta Rezende
6. Translating the Idioms of Japanese Planning, Carola Hein
7. Ports and Urban Waterfronts, Dirk Schubert
8. Urban Segments and Event Spaces: World' s Fairs and Olympic Sites, John R. Gold, Margaret M. Gold
9. Global Suburbanization in Planning History, André Sorensen
10. Opposition, Participation, and Community Driven Planning Histories, Dirk Schubert



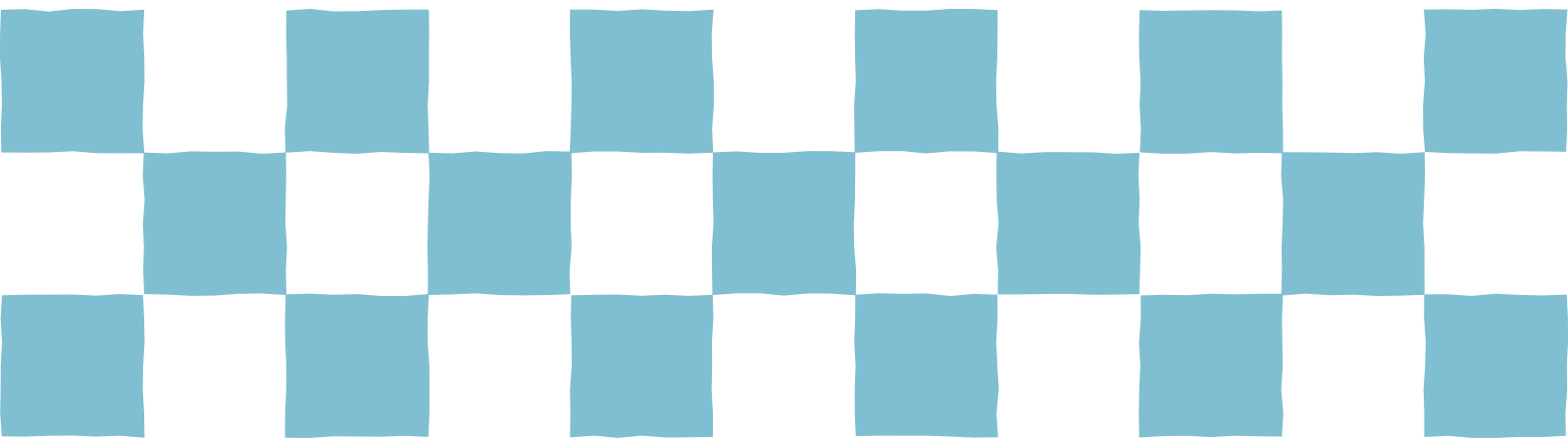
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

28 Colonial Planning in Asian Cities



History, Development and Hereafter: Planning Legacies Within the Walled City, Manila.

Claudia Isabelle Montero (The Chinese University of Hong Kong)

The quest to look for a new capital of 'New Spain' prompted the founding of a fortified city in Manila in 1571. Intramuros, which means 'within the walls', represents the beginning of planned Spanish colonial urbanism in the Philippines. For over 330 years Intramuros operated as the military, political and religious center of the Spanish colony in Southeast Asia. Developed in accordance with the Laws of the Indies (1573), Intramuros reflected the Spanish vision of an ideal urban form. However, The Intramuros' plan is distinct when compared to other Spanish colonies e.g. those in Latin America. Notwithstanding the arrival of Americans in 1898, and in 1905 City Beautiful pioneer Daniel Burnham putting forward a comprehensive city plan for Manila in which the old Spanish walls and fortified city were to be retained, thus with reference to the urban form of Manila today this paper attempts to appraise the correlation between the historical institutional planning factors and Philippine capital city's present-day status and development. Consequently, this proposal for conference aims to present the planning legacies of Intramuros, e.g. how and why it has become part of contemporary heritage discourse in Manila. Fundamentally, the paper deals with one major question: where, in the setting of Philippine heritage studies, does planning history fit? Moreover, why has the Intramuros become seen by the heritage community to articulate (in space) Filipino cultural identity when to be brief, its origins and development are Spanish, and not in any way Filipino?

Portuguese Colonial Momentum and Political Inertia: the Macao Inner Harbour Improvement Project Deadlock (1884-1919)

Regina Campinho (University of Coimbra/University of Lorraine)

In October 1919, the Governor of Macao received a formal complaint from Canton concerning the ongoing work on the Inner Harbour Improvement Project, on the grounds that reclamation was being made in Chinese waters. The unusually menacing tone of this complaint, as well as advice by his Hong Kong counterpart to suspend the dredging work, led the Governor to adjourn construction until a diplomatic solution could be found. By mid-1920 it was clear that the young and politically unstable Portuguese and Chinese Republics, the latter moreover deeply troubled by its southern provinces' separatist movements, together with the not-so-subtle British interest in the underdevelopment of Macao's harbour, wouldn't be able to reach an understanding regarding the Portuguese land and maritime borders, bringing the Inner Harbour Improvement Project to a most inglorious end. In 1922, work resumed on Macao's ocean front, far from the disputed water limits, to carry out a wholly different seaport project to be run by an international company under British influence.

This swift resolution to a forty year deadlock was providential to solve Macao's harbour accessibility problem. The wake-up call had come in 1881, with the first reports on the rise of the riverbed which was starting to prevent larger vessels to penetrate the channels leading to the Inner Harbour. At this rate, Macao would become inaccessible to seaborne trade, which struck a chord with the Portuguese imperial pride in the settlement's pre-Opium War reputation as the prime connecting entrepôt between China and the world. From 1884 to 1915, ten projects to update harbour capacity were presented by Portuguese engineers, either on central government special commissions or working in Macao's Public Works Department, aiming to turn the province from a "silting backwater" serving a supporting role in regional trade into a prosperous colony of an internationally preponderant modern Empire.

Portuguese central government had been striving to build the colonial edifice in old self-governing Macao since the 1850s by overthrowing the practice of a "divided sovereignty" established between Portuguese and Chinese local authorities in the mid-sixteenth century, and by taking control, restructuring and expanding the urban territory, mostly with the help of private Chinese initiative, capital and workforce. Increasing colonial grasp, however, eventually meant that all major projects must be backed by central government. Unfortunately, the Empire's finances didn't match its ambition and, when it came to the Inner Harbour Improvement, project after project was denied funding until full shutdown in 1919.

In this paper, examining three of these projects and the reasons they failed to materialize, we will discuss the paradox of turn-of-the-century Macao in which the colonial momentum, responsible for a notable urban renewal period in an initial "laissez-faire" stage, as well as the deployment of an array of progressive engineers, by being fundamentally at odds with the reality of the province's part in regional geopolitics, later ended up stifling that same development dynamics, perhaps irreparably, by subjecting the improvement of Macao's core infrastructure to Lisbon's endemic political indecision and lack of resources.

Urban forms at intersection of Imperialism and Colonialism: a perspective on Beirut

Nadine Hindi (Notre Dame University - Lebanon)

Towards the end of the 19th century and the WWI geopolitical aftermath, Beirut presents a case along the Eastern Mediterranean at the intersection of two major colonial powers, the Ottoman Imperialism and French Colonialism. Dissociated from the province of Damascus in 1888, Beirut was elevated to the rank of provincial capital of Wilâya, the geographical borders of which spanned the equivalent of four actual countries. Following this administrative upgrade Beirut benefited from the Tanzimat reforms and the Sultan Abdul Hamid II jubilee in 1901. This paper will highlight the implementations of these political moments on urban forms and the urban landmarks for the ruler's glory. Under the French mandate, Beirut role shifted from being provincial capital of a Wilâya part of the Ottoman Empire, to being capital of a Republic country with newly defined borders. Preceding the French Colonialism, Sultan Abdul Hamid II envisioned Westernizing some of the Ottoman Empire cities to the image of the European urban model. Alternately, the French were very enthusiastic to modernize Beirut, their prime image in the Levant. At this moment, Beirut's urban fate was at the intersection of two visions of Westernization, the late Ottoman Imperialism and the early French Colonialism. An attempt to better understand the urban implications of this turn of century intersection, will be achieved by highlighting urban forms continuities and ruptures as a methodology observed in the broader geo-political context. It is a chance to reflect on the modes of borrowing Western urban forms and examining the blurred boundaries of their planning, juxtaposition or imposition on an existing urban order. It will as well unfold in a parallel mode how each colonial power approached and applied different urban practices on their occupied territories.

From Colonial to Neoliberal: Urban planning in postcolonial Malaysia

Nurul Azlan (Delft University of Technology)

This paper argues that contemporary neoliberal planning practices in Malaysia demonstrate that there is no real break from its colonial past, since both share the similar endeavour of maximising capital through the spaces they create and destroy. Even though they may seem contradictory since the colonial ideology was based on extraction, while neoliberal planning prioritises growth, the growth that neoliberal planning produces functions and results on a similar logic of extraction as the colonial ideology. Neoliberal planning is defined as the state taking a proactive role in introducing market principles through various levels of planning reforms, which it then reinforces through repressive mechanisms available to it as a state (Baeten, 2018: 105)

Ironically, at times, under guises of heritage, the very architectural legacy of the colonial period is used to justify neoliberal planning decisions, since historical sites are viewed as a golden goose.

In this paper, I will trace the how urban planning has developed in Malaysia since the British colonial period to the present. I will particularly focus on the moment when the state, thirty years after Independence, retreated from its role to provide public service, either through privatisation of institutions, or by incentivising public service to foster growth. I will argue that this policy has shaped the urban environment into one concerned with control and surveillance, parallel to the spatial condition of the colonial period. At times, colonial spatial forms are even recreated, capitalising on nostalgia to produce spaces of consumption and leisure. Finally, I will demonstrate how notions of democracy such as freedom of expression, are reduced in Malaysia through the use of economic growth as an excuse. The paper concludes by systematically drawing the parallels between the colonial and the neoliberal, which is not only limited to abstract notions of operations and ambitions, but also how more tangible colonial legacies are utilised to enforce the neoliberal, indicating a continuity and compatibility between the two ideologies.



Portuguese Colonial Momentum and Political Inertia: the Macao Inner Harbour Improvement Project Deadlock (1884-1919)

Regina Campinho*

** PhD candidate at the Institute for Interdisciplinary Research, University of Coimbra, Portugal, and at the History of Contemporary Architecture Research Center, University of Lorraine, France
regina.da.luz.campinho@gmail.com*

From 1884 to 1915, ten projects to update Macao harbour capacity and equipment were presented by Portuguese engineers, aiming to turn the province from a “silting backwater” serving a supporting role in regional trade into a prosperous colony of an internationally preponderant modern Empire. Portuguese central government had been striving to build the colonial edifice in old self-governing Macao since the 1850s by taking control, restructuring and expanding the urban territory. Unfortunately, the Empire’s finances didn’t match its ambition and, when it came to the Inner Harbour Improvement, project after project was denied funding until full shutdown in 1919. In this paper, studying these projects and the reasons they failed to materialize, we will discuss the paradox of turn-of-the-century Macao in which the colonial momentum, responsible for a notable urban renewal period in an initial “laissez-faire” stage, as well as the deployment of an array of progressive engineers, by being fundamentally at odds with the reality of the province’s part in regional geopolitics, later ended up stifling that same development dynamics, perhaps irreparably, by subjecting the improvement of Macao’s core infrastructure to Lisbon’s endemic political indecisions and lack of resources.

Keywords: colonial urban planning, Portuguese Empire, Macao Inner Harbour.

Introduction

In October 1919, the Governor of Macao received a formal complaint from Canton concerning the ongoing work on the Inner Harbour Improvement Project, on the grounds that reclamation was being made in Chinese waters. The unusually menacing tone of this complaint, as well as advice by his Hong Kong counterpart to suspend the dredging work, led the Governor to adjourn construction until a diplomatic solution could be found. By mid-1920 it was clear that the young and politically unstable Portuguese and Chinese Republics, the latter moreover deeply troubled by its southern provinces’ separatist movements, together with the not-so-subtle British interest in the underdevelopment of Macao’s harbour, wouldn’t be able to reach an understanding regarding the Portuguese land and maritime borders, bringing the Inner Harbour Improvement Project to a most inglorious end. In 1922, work resumed on Macao’s ocean front, far from the disputed water limits, to carry out a wholly different seaport project to be run by an international company under British influence.

This swift resolution to a forty year deadlock was providential to solve Macao’s harbour accessibility problem. The wake-up call had come in 1881, with the first reports on the rise of the riverbed which was starting to prevent larger vessels to penetrate the channels leading to the Inner Harbour. At this rate, Macao would soon become inaccessible to seaborne trade, which evidently struck a chord with the Portuguese imperial pride in the settlement’s pre-Opium War reputation as the prime connecting entrepôt between China and the world. From 1884 to 1915, ten projects to update harbour capacity and equipment were presented by Portuguese engineers, either on central government special commissions or working in Macao’s Public Works Department, aiming to turn the province from a “silting backwater” serving a supporting role in regional trade into a prosperous colony of an internationally preponderant modern Empire.

Portuguese central government had been striving to build the colonial edifice in old self-governing Macao since the 1850s by overthrowing the practice of a “divided sovereignty” established between Portuguese and Chinese local authorities in the mid-sixteenth century, and by taking control, restructuring and expanding the urban territory, mostly with the help of private Chinese initiative, capital and workforce. Increasing colonial grasp, however, eventually meant that all major projects must be backed by central government. Unfortunately, the Empire’s finances didn’t match its ambition and, when it came to the Inner Harbour Improvement, project after project was denied funding until full shutdown in 1919.



In this paper, examining three of these projects and the reasons they failed to materialize, we will discuss the paradox of turn-of-the-century Macao in which the colonial momentum, responsible for a notable urban renewal period in an initial “laissez-faire” stage, as well as the deployment of an array of progressive engineers, by being fundamentally at odds with the reality of the province’s part in regional geopolitics, later ended up stifling that same development dynamics, perhaps irreparably, by subjecting the improvement of Macao’s core infrastructure to Lisbon’s endemic political indecision and lack of resources.

This discussion is part of a broader study on Portuguese overseas action and administration in 19th century and early 20th century’s so-called “age of imperialism”¹ and its burgeoning “world urban system”². It focuses on the evolution of Macao’s urban landscape during this period, particularly through the analysis of government-sponsored urban interventions, with the purpose of interpreting how the city’s changing built environment both represented and conditioned the province’s economic, social and political dynamics. While in line with recent post-colonial urban studies³, the purpose of this study is, however, less to give an insight on “modernization in the colonial context”⁴ but rather to reflect on the globalizing impact of modernization at the imperial scale, where metropolitan and overseas territories are intertwined and subjected to a similar and concomitant transformation process, stemming from the advancement and expansion of industrial science and technology.

Colonial momentum

Captain of the Port Demétrio Cinatti’s 1881 report on how the river siltation was affecting trade⁵ is generally considered to have been the turning point for the “port issue” in public opinion. Commissioned by the Overseas State Department, it accounted for the progression of the sedimentation phenomenon and its causes, predicting that by the 1900s the port of Macao would reach critically low water levels and probably face shutdown. He recommended the implementation of a moderate-scale dredging programme designed to open up sea and river channels liberating access to the piers and existing docks. To accommodate the silt product from the dredging works, he proposed that it be put to use in a new reclamation scheme in the northern part of the peninsula, narrowing the riverbed, consequently improving river flow and reducing sedimentation, while simultaneously creating new land for agriculture.

Cinatti’s report, later picked up by the Macanese press in a sort of nationalistic campaign for the improvement of harbour conditions, had come in the wake of several contacts made by Governor Joaquim José da Graça to the Minister of Overseas Territories regarding this issue. As early as 1879, Graça was writing to Lisbon suggesting that part of the province’s contribution for the imperial common fund should remain in Macao to be reinvested in harbour improvement:

This could be the beginning of a broader scale commercial and industrial development. The commercial movement in 1880 was roughly of twenty-four million *patacas*, and this year it will most probably be even bigger, judging from the last five months. The Inner Harbour is obstructed in such a way that the steamboats docked at the piers get stuck in the mud, even those that barely demand 6 feet of water. Now, cleaning up the harbour can bring two great advantages: facilitating navigation and expanding the territory. There is a bay in the river that can and must be reclaimed, for this conquered land may become excellent farmland which could result in a considerable improvement in public revenue should it be rented.⁶

By this time, work was almost completed in the latest ongoing riverfront reclamation project. With permission granted in 1877 and promoted under a concession contract by a group of mainland Chinese entrepreneurs fronted by a Macanese businessman, it also had been justified on claims of it improving public prosperity by creating new ground on which to build commercial and industrial structures, as well as public health, by eliminating an insalubrious siltation point, and even the river flow, by realigning the pier wall, thus giving the riverfront a more regular profile⁷.

As such, this 1880s pressing for an Inner Harbour Improvement Project promoted by the Portuguese Government and backed by Chinese and Macanese entrepreneurs cannot be understood outside of a colonial momentum that had been manifesting itself since the 1850s, namely in the reshaping and expanding of the urban riverfront.

Indeed, much of the post-Opium War Government reforms had had a strong land use management component, aiming at establishing Portuguese sovereignty over the Macao peninsula. Indeed, the territorial sovereignty issue as well as the blatant Chinese disinterest in the definition of any land or maritime borders would be paramount throughout the second half of the nineteenth century, particularly affecting harbour works.

The “divided sovereignty” system established since Portuguese settlement in 1557, by which both administrations coexisted and established jurisdictions each over their own subjects and affairs, became, particularly in the face of the foundation of the British Hong Kong colony, a source of violently conflicting points of view: to the Viceroy of Canton, delegate of the Qing administration in the Guangzhou province, Macao was a leased territory with no territorial waters, in which land use and construction policies remained Chinese prerogatives; to the metropolitan Portuguese Government, it needed to be more than that.



Following the 1848 eviction of the Viceroy's delegates and customs, and particularly after a great fire destroyed most of the Bazaar, Macao's most prominent Chinese district, in 1856, city ground was ready to be restructured in the colonial mold. Lacking in financial resources, however, Portuguese administration found in the prominent and well-respected local Fujian and Guangdong-born businessman, whose fortunes had thrived due to the gambling and commodity concessions system as well as coolie trade, strong allies in its urban reconstruction and expansion plan. Through consecutive reclamation projects, planned and controlled by the Portuguese Government, namely by its Public Works Department created in 1869, and thanks to Chinese capital, the Inner Harbour transformed in a period of 30 years from a muddy backyard into a (mostly) uniform city façade, welcoming vessels in brand new piers along a main avenue bordered by elegant archways (Figure 1).

As Governor Graça puts it, the 1880s in Macao were a time of prosperity and confidence. In his view, the time had come for the colony to reclaim its rightful place in the international trade routes, by making the harbour accessible, not only to the Canton and Hong Kong steamboats and other small coastal navigation, but also to the larger modern ships. Updating port capacity and facilities, improving its accessibility, and possibly gaining considerable reclaimed construction land in the same process was definitely befitting Macao's growing colonial ambition.



Figure 1: *Inner Harbour circa 1880*. Cecília Jorge and Rogério Beltrão Coelho. *Álbum Macau: Memória da Cidade* (Macao: Livros do Oriente, 2005).

The Inner Harbour Improvement Projects

1. The 1884 Adolfo Loureiro Project

The silting river presented the most obvious obstacle to this project. The predicted scale of the dredging works alone meant that, this time, local Chinese capital would not be enough to see it through. Metropolitan Government backing and financing, as well engineering, was essential, at the same time legitimizing it in the eyes of the Qing administration.

At Governor Graça's request, the Overseas State Department sent Portuguese Engineer Adolfo Loureiro in a seven month mission to Macao to study harbour conditions, from which he drew his 1884 "Preliminary study for the improvement of Macao Harbour"⁸ (Figure 2). In it, the author makes a comprehensive study of the Pearl River Delta geography, tides and weather, coming to the same conclusion as Cinatti that a permanent solution would only come from the general redirection of the conflicting currents that were causing the silt to accumulate in the city's western coast, which meant realigning the river banks well beyond the Macao peninsula. Extensive dredging would follow, using the extracted silt directly to form new reclaimed land.

Figure 3 zooms-in on the reclamation area in the northern part of the peninsula, as it presents itself in Loureiro's "Preliminary study" plan. Traditionally, Macao's border was set at the northern outpost of Portas do Cerco ("doors of the rampart"), situated at the end of a narrow isthmus connecting the peninsula to the mainland. In his effort to comprehensively work on correcting the river flow, Loureiro proposed to go beyond this point and reclaim a vast area to the north in order to create a smoothly curved river bank designed to accelerate the current.

Loureiro proposed to stabilize this reclaimed land through a series of dams connecting the old and new banks. One of these would connect the isthmus to Ilha Verde ("green island"), separating the area destined for farmland to the north of the bay, from the area destined for urbanization and docks to the south. The northern area of the peninsula had long been occupied by floodplains used as rice fields, and its riverside by the Patane shipyards. Loureiro's plan was to maintain that important industry, upgrading it to a new dock complex which could also serve as refuge in the event of a typhoon. This complex would be completed with the construction of an industrial and working-class district, connected to the city by the extension of the riverside avenue up to "Portas do Cerco" road.

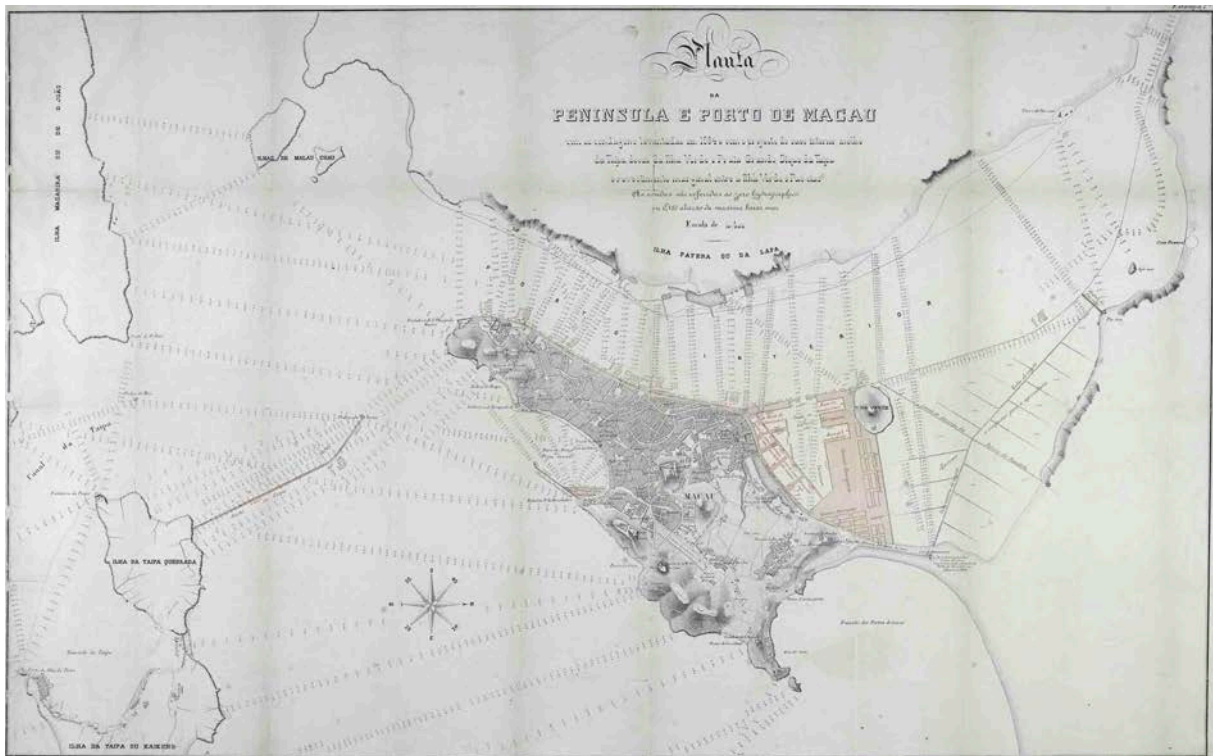


Figure 2: *Planta da Península e Porto de Macau*. Adolfo Ferreira de Loureiro, *O porto de Macau. Ante-projecto para o seu melhoramento*. Coimbra: Imprensa da Universidade, 1884.

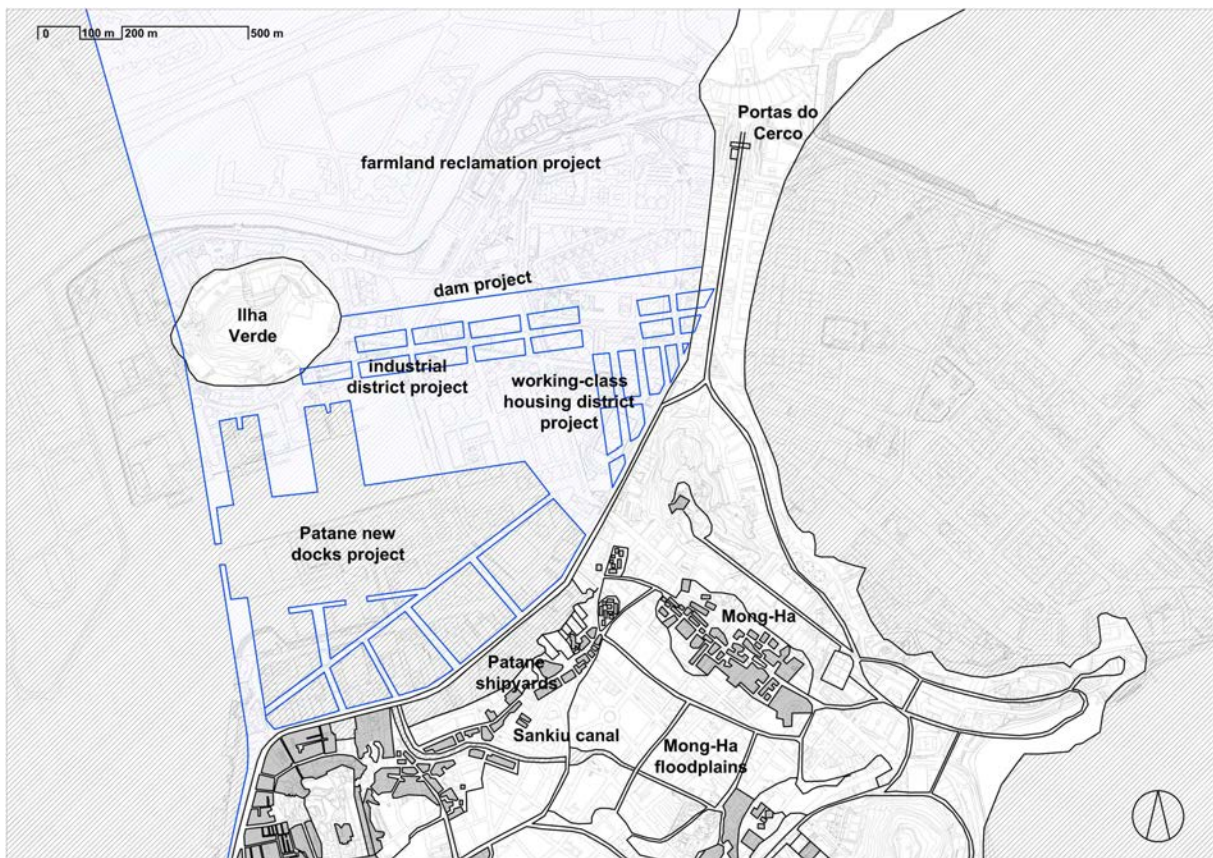


Figure 3: Zoom-in reinterpretation of Loureiro's 1884 "Preliminary study" plan (Figure 2), superimposed on Macao's 2015 cadastral map. Black: the Macao peninsula in the 1880s. Blue: Loureiro's project.



This project represented a somewhat moderate ambition for Portuguese Macao. Its aim was mainly to ameliorate the existing harbour in order to maintain, or at best slightly ameliorate, its trade dynamics. Nonetheless, it was deemed as too ambitious, too expensive, and out of touch with the province's needs. In 1886, trying to tackle the problem, Governor Firmino José da Costa appointed a special committee to study Loureiro's proposals and come up with a prioritised construction plan. Co-written by Captain of the Port Costa e Silva and Public Works Director Horta e Costa, the 1887 committee report endeavoured to tone down the "port issue":

It is undeniable that the silting problem goes back many years, having become more sensitive lately, not due to its aggravation, but because light has been shed on its effects. All the plans and ancient accounts of the province agree that the Inner Harbour was never very deep, even if it allowed entrance to ships with a larger capacity than those that access it today. In 1871, when large scale emigration [coolie trade] was done from Macao, statistics showed that 120 seagoing vessels entered the port. The movement was extraordinary then. In 1885, the same statistics show the entrance of merely 62 ships. At that time, there was great interest in coming here. Today there isn't, but we cannot truthfully claim that this decline is due to the silting of the river.⁹

The Viceroy of Canton, who had met Loureiro's demands to extend his study of the river tides onto Chinese waters with a contemptuous silence, must have manifested his disaccord regarding the projected reclamation, as the committee reported that this could not be carried out, "as it clearly affected land that didn't belong to Portugal"¹⁰. Nevertheless, the prescribed solution reprised Loureiro's idea of dredging an access channel to the Inner Harbour, using the resulting silt to construct a smaller scale docks project.

However, and apart from the 1884 concession to a group of Chinese businessmen for the construction of a single dock according to Loureiro's plan (Lam-mau dock in Figure 4), political decision dragged on. In 1889, Public Works Director Borges Cabral was still insisting on this minimum programme, appealing to the immediate acquisition of a dredger, as a sign of commitment from the Government to the success of the improvement plan:

Various attempts have been made by private initiative to undertake, partially and according to each other's convenience, parts of the reclamation works, which have not been authorized as they didn't follow Mr. Loureiro's plan. This shows how easily, when construction starts and demonstrates its value, private capitals will flow, easing the Government of its initial burden. I should add that not only the Macanese population, but the Chinese as well, accustomed as they are to the freedom that generally presides over public works in Hong Kong, regret the slow and disrupt progress of a plan on which depends the commercial and industrial development of the city and, as consequence, the well-being of its inhabitants.¹¹

The first official steps for implementing the 1887 commission's plan were taken by Governor Custódio Miguel Borja in 1890. A firm believer in the autonomy of local government, ten days after taking office he approved the project for the Ilha Verde dam (Figure 4), ordering construction to start immediately¹². In his December 1890 report, Borges Cabral summed up the general belief that the Governor's arrival would be a turning point in the Inner Harbour Improvement deadlock:

Unless we are eluded by blind optimism, we see in the commencement of these works the greatest indisputable step do give our colony a new impulse of prosperity, now with no fear of disruption. Once the Ilha Verde dam is completed, with the use of the dredged mud, vast reclamation land will necessarily follow broadening our dominions solely with the arms of peace and work.¹³

In Mai 1891, however, the Minister of Overseas Territories issued a direct telegraphed order to Governor Borja to stop any further work until a general improvement plan could be approved.¹⁴

2. The 1897 Abreu Nunes Project

The "port issue" was only picked up again in 1897 by Governor Rodrigues Galhardo and Director of Public Works Abreu Nunes, author of a revised Inner Harbour Improvement Project. As we can see in Figure 4, Abreu Nunes's propositions were still largely based in Loureiro's main ideas. The major difference lies in the greatly reduced extension of the projected farmland to the north, which Nunes limited by a new dam aligned with the Portas do Cerco border, reflecting the underlying political tensions:

The committee has chosen not to extend the new piers towards the north of Ilha Verde, having received instructions not to project any construction pertaining to the Chinese coastline. Although it shares Adolfo Loureiro's opinion that until Pac-seac the coast is still Portuguese, the fact remains that it is currently being occupied by the Chinese. It is only natural, then, that the Government would wish to maintain the status-quo.¹⁵

Another six years elapsed in discussions about which dredger to acquire and hesitations on where to start dredging, until the arrival in Macao of Governor Guedes Rebelo, a clear partisan of the Loureiro/Nunes global solution. By summer 1903, hope was rising again in public opinion that this time the Improvement Project enterprise would actually commence, which seemed to be confirmed by the Governor's dispatch to the Overseas State Department, on September 25th, of a fully updated version of the 1897 Abreu Nunes Project, to serve as the basis for an international public bid. Rebelo's governorship, however, ended abruptly after barely one year in Macao. His successor, Queirós Montenegro, decided to take a step back, considering that the approved plan would "commit the Government to immediate expenses with no guarantee of results"¹⁶. The new Governor preferred to spare the Public Works' small but sure annual budget... and buy a new dredger.



3. The 1908-1912 Castel-Branco Project

By summer 1905, the Overseas State Department had decided to send in a third party.

General Castel-Branco arrived in Macao in January 1907, serving as Overseas Public Works Inspector, in the last months of Montenegro's governorship, as new Public Works Director Miranda Guedes was starting out. Castel-Branco had a general commission to devise a General Improvement Plan for Macao, with contents ranging from potable water supply to the sewage and waste disposal systems, as well as other topics related to public hygiene and sanitation. The Inner Harbour Improvement Project was set to be the pinnacle of this would-be grand city-modernization plan.

Due to persistent health issues, however, it was only in 1912 that Castel-Branco managed to publish his own ideas concerning the port, even if Guedes and other State Department engineers had been successively commissioned to reinterpret his research in several reports since 1908.

In Figure 5 we can see that Castel-Branco's project started from Loureiro's plan, to which he added a new transformative ambition by placing the Macao railway central station in the heart of the new housing and industrial district. According to the author, only this triad of interconnected improvements would manage to change the face (and fate) of Macao: the harbour, the Macao-Canton railway, and the urban sanitation plan:

Strict obedience to this plan [he wrote] is indispensable and urgent to correct the incoherence and disorientation in the development of the city, which has already birthed much evil, threatening to give rise to severe hygienic, economic and social inconveniences. Thus will the Republic prove that our race can fructify and advance the colonies which, in current times, is of primary importance for the integrity and future prosperity of the Portuguese Motherland.¹⁷

Yet again, none of these would ever be. By April 1911, new Governor Melo Machado had already expressed his doubts about the "overly ambitious" Castel-Branco project, preferring to go ahead with a "more modest" deal he was about to break with a British dredging company. The Improvement Project was once again put on hold.

Dredging started in June 1911, putting Qing local delegates, already on edge about looming republican uprisings, on full nationalistic mode. In July, the Viceroy of Canton started raining down protests printed in the local press, stating that Portugal had no right to territorial waters and that its true purpose harbour development was surreptitiously to annex more land in the islands around the Macao peninsula. The breakout of local uprisings in October, however, probably led to a quieting down of the political contestation, as dredging seems to have proceeded as scheduled.

Governor José Carlos da Maia, arriving in June 1914, endeavored once more to take up the Castel-Branco Project, with the support of Public Works Director Faria e Maia, launching the first Patane reclamations in September 1915. One year later, however, Governor Maia was exonerated and ordered back to Lisbon, under the accusation of abuse of power. Budget was drastically cut by the metropolitan government, which led the work to a full stop in April 1917.

The very last effort to relaunch the Inner Harbour Improvement Project would be attempted by Macao-born Minister of Colonies João Tamagnini in May 1918, by separating the harbour from general Public Works management, and putting Vice-Admiral and hydrograph engineer Hugo Carvalho de Lacerda at the helm of the newly created Committee for the Improvement of Macao Harbours. Partisan of a revised Castel-Branco project, Lacerda would easily gather the support of new Governor Artur Tamagnini, the Minister's brother, to resume the reclamation work, until the full shutdown of October 1919.

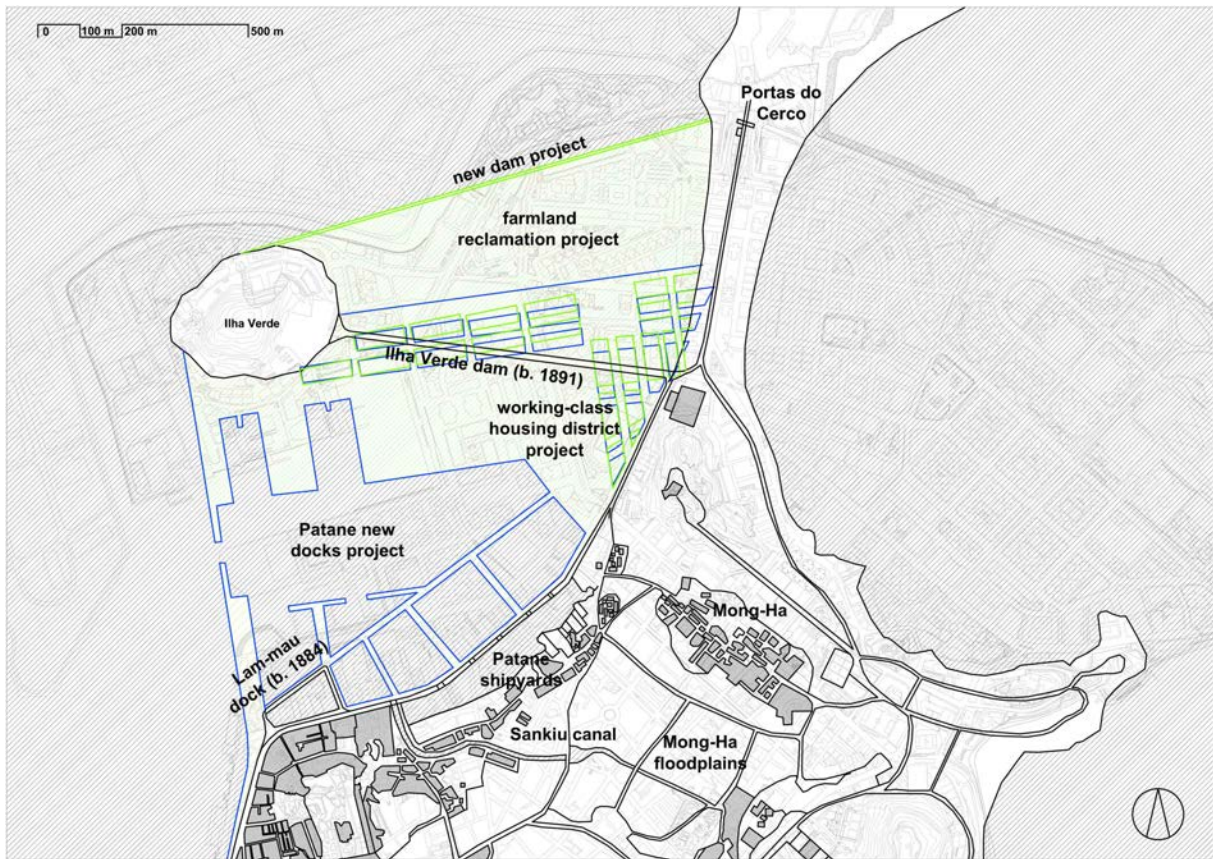


Figure 4: Zoom-in reinterpretation of Abreu Nunes' 1897 plan, superimposed on Macao's 2015 cadastral map. Black: the Macao peninsula in the 1890s. Blue: Loureiro's 1884 project. Green: Nunes' 1897 propositions.

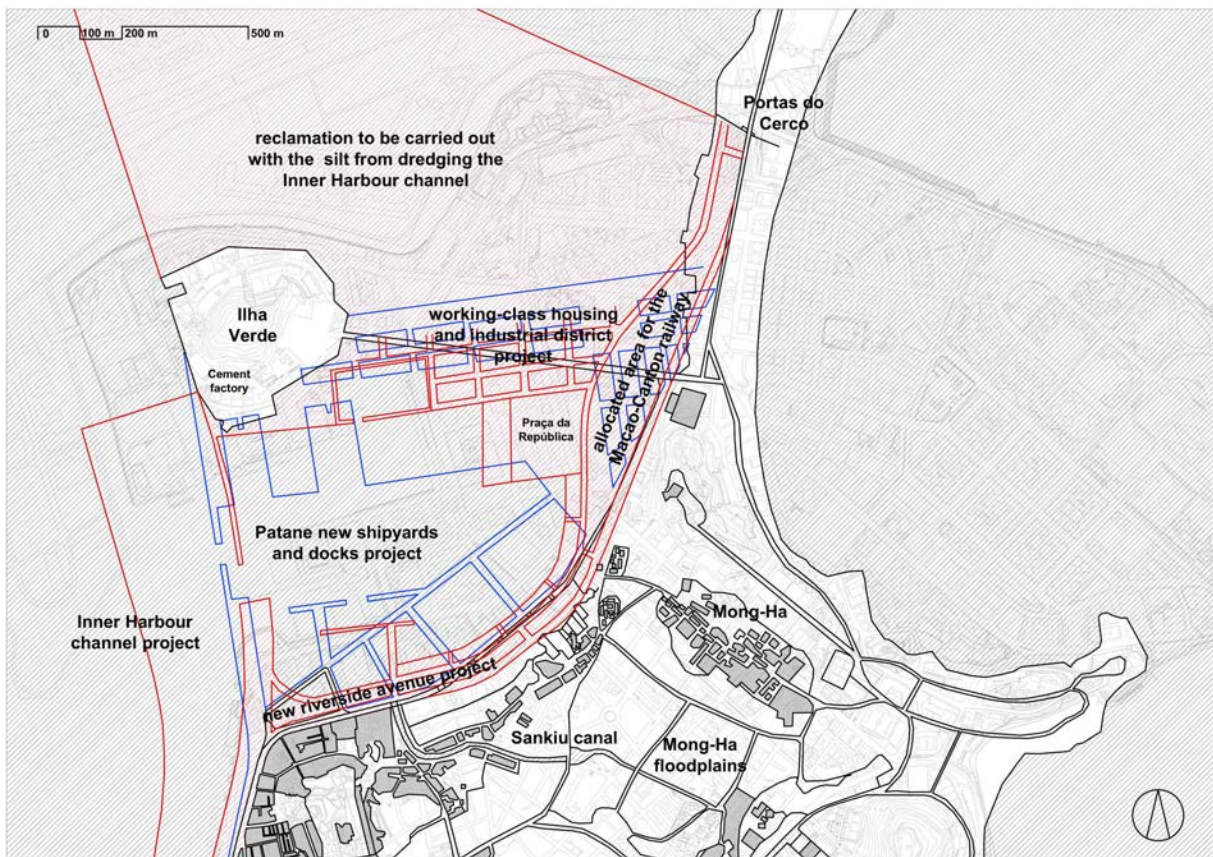


Figure 5: Zoom-in reinterpretation of Castel-Branco's 1912 plan, superimposed on Macao's 2015 cadastral map. Black: the Macao peninsula in the 1900s. Blue: Loureiro's 1884 project. Red: Castel-Branco's 1912 propositions.



Conclusion

Macao was the door through which the truth of Christianity was introduced to the Far East and the light of European science was able to radiate over this ignorant and backward portion of mankind. The germs of European Civilization, brought at the beginning to these faraway countries with the help of Portuguese trade have started to fructify abundantly. And Macao, from where the first impulse was given to this great social transformation, should it languish away little by little until complete annihilation? Surely not. Its geographical position, its numerous Chinese population and their capital, the peace, quietness and security that we enjoy, are fertile elements that could regenerate Macao and make it prosper through commerce and industry, if they are seized and directed by an administration that, forgetting the old routine, would find in the true principles of science its guiding rules.¹⁸

In our account of the Macao Inner Harbour Improvement Project forty year deadlock, we painted a picture of political inertia as a set of complex hesitations and indecisions dragging through the years. Both local and metropolitan, engaging in regional politics, but also in financial, political and social issues, it all unfolded in the global context of imperial Europe's geopolitical game of trade route domination.

Following the second half of the nineteenth century Portuguese colonial momentum, a great deal of this inertia, affecting the outcome of the Harbour as well as other grand-scale projects, was probably coming from a grave discrepancy between the positivist imagining of the colony of Macao in an equally imagined gloriously ancient Empire, as described above by the Macanese Mayor in 1883, and both realities in the context of Portuguese possessions' role in the global political and commercial networks.

As Adolfo Loureiro himself pointed out in 1895, after the First Opium War Macao had been reduced to an intermediary outpost between the interoceanic routes coming to Hong Kong and the West Pearl River Delta provinces. Nothing more, but also nothing less. Loureiro's view was that, if Portuguese imperial ambition tried to "regenerate Macao" to make it emerge from its said "languishing state", this was bound to upset not only the British but especially China: "They would start to look at us with their usual wariness, and maybe take away the advantages they grant to our harbour, as the true Chinese harbour that it is."¹⁹ The key was to embrace this role and grow from it, not try to change it.

However, in the late nineteenth century Imperial Europe's intellectual and political circles, it was commonly acknowledged that imperial powers had the duty, at home and abroad, to commit to modern enterprises like improved and connected harbours, or grand urban sanitation schemes to push forward the imagined industrial city. This impulse of nationalistic progress and modernization mostly sprang from the early-century "material improvements" philosophy promoted by French economists like Michel Chevalier²⁰, who claimed that the "true principles of science" provided unequivocal "guiding rules" for the betterment of humanity or, in this case, for the urban and social regeneration of the city, which was earnestly perceived as a civilizing mission.

This philosophy would indeed lead to important interventions in Macao, as in other metropolitan and overseas cities. Overall, though, the Portuguese Empire's meager means meant that improvement projects concerning other than the prioritized African and Indian provinces, more often than not ended up at the bottom of Public Works Departments' drawers. As engineer Lisboa Lima ironically mentioned about Timor in his 1913 report on the general lack of progress in the modernization of Portuguese imperial ports: "The State's initiative here has been little more than nothing. Any change in the betterment of the colony is of private initiative, perhaps due to the fact that Timor still isn't connected to the world, and therefore to Lisbon, by the telegraph."²¹ Maybe "a little more distance" to the overbearing metropolis would have gone a long way in keeping the 1850s colonial momentum going in Macao, allowing perhaps for a more locally consensual Harbour Improvement solution to be found.

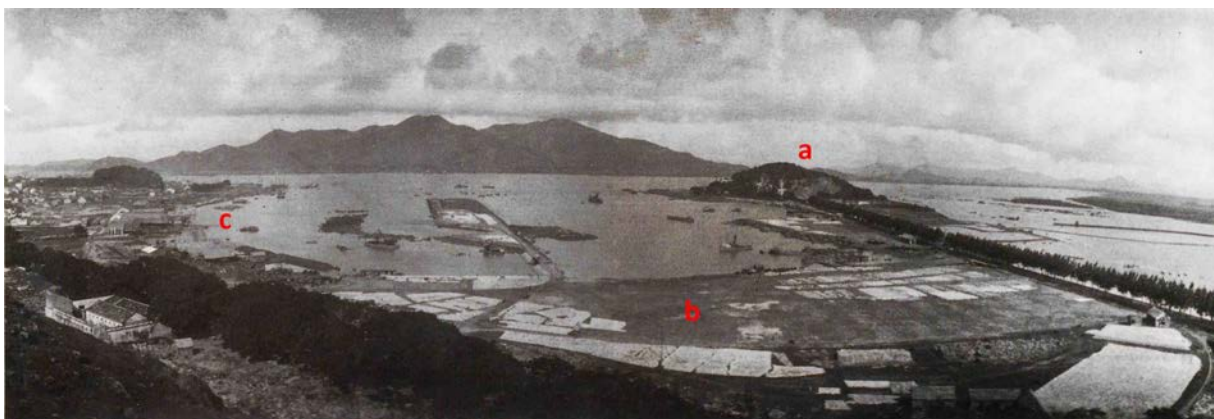


Figure 6: *Ilha Verde* circa 1920. Cecília Jorge and Rogério Beltrão Coelho. *Álbum Macau: Sítios, Gentes e Vivências* (Macao: Livros do Oriente, 1991): a. *Ilha Verde* and its 1891 dam; b. Reclamation conducted on Patane bay until 1919; c. Patane shipyards, same as they were in the 1880s.



Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Regina Campinho is a PhD candidate on “Heritage of Portuguese Influence” at Coimbra University, Portugal, with the research topic “Macao 1850-1950: Portuguese city at the decline of the empire”, in cooperation with the Architecture Schools of Nancy, France, and Porto, Portugal. Her research, funded by Lorraine University, France, Macao Foundation, China, and by the French and Portuguese Councils of University Presidents, focuses on Portuguese urban history in the nineteenth and twentieth centuries’ European imperial context. Graduate of the Architecture School of Porto, she holds a post-graduate degree in Architectural and Urban Heritage from Centre des Hautes Études de Chaillot, Paris.

Endnotes

¹ Andrew Porter, *European Imperialism 1860-1914*. (London: Palgrave Macmillan, 1994).

² Anthony D. King, *Urbanism, Colonialism and the World-Economy. Cultural and Spatial Foundations of the World Urban System*. (London: Routledge, 1991).

³ For comparative urban studies in a colonial context see the seminal works edited by Robert Ross and Gerard J. Telkamp, *Colonial cities: essays on urbanism in a colonial context*. (Dordrecht: Martinus Nijhoff Publishers, 1985) and Nezar Alsayyad, *Forms of dominance: on the architecture and urbanism of the colonial enterprise*. (Aldershot: Avebury, 1992). For monographic studies on the same post-colonial historiographic model see Brenda S. A. Yeoh, *Contesting Space in Colonial Singapore: Power Relations in the Urban Built Environment*. (Singapore: Singapore University Press, 2003), William J. Glover, *Making Lahore Modern. Constructing and Imagining a Colonial City* (Minneapolis: University of Minnesota Press, 2008) and Prashant Kidambi, *The Making of an Indian Metropolis: Colonial Governance and Public Culture in Bombay, 1890-1920*. (London: Routledge, 2016).

⁴ Glover, *Making Lahore Modern*.

⁵ Copy of letter n°10 from the Captain of the Port to the Macao Government Secretary-General, July 22nd 1881. AHU-ACL-SEMU-DGU-3R-002, Cx.0001, Overseas Historical Archive, Lisbon, Portugal.

⁶ Letter n°121 from the Governor of Macao Joaquim José da Graça to the Minister of Overseas Territories, June 15th 1881. AHU-ACL-SEMU-DGU-3R-002, Cx.0001, Overseas Historical Archive, Lisbon, Portugal.

⁷ Regina Campinho, “Modernizing Macao, the old-fashion way: Macanese and Chinese entrepreneurship in the colonial city”, *Proceedings of the Fifth International Conference of the European Architectural History Network* (Tallinn: [pending publication] 2018).

⁸ Adolfo Ferreira de Loureiro, *O porto de Macau. Ante-projecto para o seu melhoramento* (Coimbra: Imprensa da Universidade, 1884).

⁹ *Boletim da Província de Macau e Timor*, suplemento ao n°6, 16 de Fevereiro de 1887, 47-51.

¹⁰ *Ibid.*

¹¹ *Boletim da Província de Macau e Timor*, suplemento ao n°48, 3 de Dezembro de 1889, 369-376.

¹² *Boletim da Província de Macau e Timor*, n°44, 30 de Outubro de 1890, 370.

¹³ “Relatório da comissão nomeada pela portaria provincial n°157 para os estudos dos trabalhos de melhoramento do porto”, *Boletim Oficial do Governo da Província de Macau e Timor*, suplemento ao n°2, 12 de Janeiro de 1891, 11-13.

¹⁴ Note from the 3rd Office Chief of the Overseas State Department to the Minister, confirming instructions sent to the Governor of Macao by telegram, May 22nd 1891. AHU-ACL-SEMU-DGU-3R-002, Cx.0001, Overseas Historical Archive, Lisbon, Portugal.

¹⁵ “Relatório da comissão nomeada por portaria provincial n°84 de 4 de Julho último [1897] para estudar os melhoramentos indispensáveis a fazer na rada e porto de Macau”. 451-1H-SEMU-DGU-mç. Overseas Historical Archive, Lisbon, Portugal.

¹⁶ Letter n°212 from the Governor of Macao Martinho Pinto de Queirós Montenegro to the Minister of Overseas Territories, August 26th 1904. 451-1H-SEMU-DGU-mç. Overseas Historical Archive, Lisbon, Portugal.

¹⁷ José Emilio de Sant’Ana da Cunha Castel-Branco, *Projecto das obras a executar no Porto de Macau. Memória descritiva e justificativa precedida duma resenha histórica e seguida dum projecto de caderno de encargos e mais documentos para a execução das obras por empreitada* (Lisboa: Imprensa Nacional, 1913).

¹⁸ “Discurso lido pelo Exmo. Sr. Presidente do Leal Senado da Câmara de Macau, D. C. Pacheco, por ocasião da entrega da chave desta cidade ao Exmo. Sr. Governador da província Tomás de Sousa Rosa”, *Boletim da Província de Macau e Timor*, n°17, 28 de Abril de 1883, 164-166.

¹⁹ Adolfo Ferreira de Loureiro, *Macau e o seu porto. Conferência feita na Sociedade de Geografia na sessão de 4 de Novembro de 1895* (Lisboa: Imprensa Nacional, 1896).

²⁰ Michel Chevalier, *Des intérêts matériels en France. Travaux publics : routes, canaux, chemins de fer* (Paris : Charles Gosselin et W. Coquebert, 1838).

²¹ Alfredo Augusto Lisboa de Lima, “Portos comerciais portugueses e projecto das obras do Porto de Macau. Conferência realizada na Associação dos Engenheiros na sessão ordinária de 20 de Fevereiro de 1913”, *Revista de Obras Públicas e Minas*, 517/518, 3-45 (Lisboa: Associação dos Engenheiros Cívicos Portugueses, 1913).



Bibliography

Boletim da Província de Macau e Timor, nº17, 28 de Abril de 1883, 164-166.

Boletim da Província de Macau e Timor, suplemento ao nº6, 16 de Fevereiro de 1887, 47-51.

Boletim da Província de Macau e Timor, suplemento ao nº48, 3 de Dezembro de 1889, 369-376.

Boletim da Província de Macau e Timor, nº44, 30 de Outubro de 1890, 370.

Boletim Oficial do Governo da Província de Macau e Timor, suplemento ao nº2, 12 de Janeiro de 1891, 11-13.

Campinho, Regina. "Modernizing Macao, the old-fashion way: Macanese and Chinese entrepreneurship in the colonial city", *Proceedings of the Fifth International Conference of the European Architectural History Network*. Tallinn (pending publication), 2018.

Castel-Branco, José Emílio de Sant'Ana da Cunha. *Projecto das obras a executar no Porto de Macau. Memória descritiva e justificativa precedida duma resenha histórica e seguida dum projecto de caderno de encargos e mais documentos para a execução das obras por empreitada*. Lisboa: Imprensa Nacional, 1913.

Chevalier, Michel. *Des intérêts matériels en France. Travaux publics : routes, canaux, chemins de fer*. Paris : Charles Gosselin et W. Coquebert, 1838.

Glover, William J. *Making Lahore Modern. Constructing and Imagining a Colonial City*. Minneapolis: University of Minnesota Press, 2008.

Guedes, António Pinto de Miranda. "Macau. As obras do porto e a política chinesa", separata da *Revista Colonial*, 89/92/93/96/97, Lisboa: Agência Colonial, 1920.

Jorge, Cecília, and Coelho, Rogério Beltrão. *Álbum Macau: Sítios, Gentes e Vivências*. Macau: Livros do Oriente, 1991.

Jorge, Cecília, and Coelho, Rogério Beltrão. *Álbum Macau: Memória da Cidade*. Macau: Livros do Oriente, 2005.

Lima, Alfredo Augusto Lisboa de. "Portos comerciais portugueses e projecto das obras do Porto de Macau. Conferência realizada na Associação dos Engenheiros na sessão ordinária de 20 de Fevereiro de 1913", *Revista de Obras Públicas e Minas*, 517/518, 3-45. Lisboa: Associação dos Engenheiros Civis Portugueses, 1913.

Loureiro, Adolfo Ferreira de. *O porto de Macau. Ante-projecto para o seu melhoramento*. Coimbra: Imprensa da Universidade, 1884.

Loureiro, Adolfo Ferreira de. *Macau e o seu porto. Conferência feita na Sociedade de Geografia na sessão de 4 de Novembro de 1895*. Lisboa: Imprensa Nacional, 1896.

Tamagnini, João. "Sobre as obras do porto de Macau. Resumo histórico e situação actual", *Gazeta das Colónias*, Ano I, 1, 23-24. Lisboa: Empresa de Publicidade Colonial, 1924.

Image sources

Figure 1: Cecília Jorge and Rogério Beltrão Coelho. *Álbum Macau: Memória da Cidade* (Macau: Livros do Oriente, 2005).

Figure 2: Biblioteca Nacional de Portugal, Biblioteca Nacional Digital [cc-247-r], <http://purl.pt/17239> (Accessed October 6, 2016.)

Figure 3: Plan information collected from Loureiro's plan in Adolfo Ferreira de Loureiro, *O porto de Macau. Ante-projecto para o seu melhoramento* (Coimbra: Imprensa da Universidade, 1884).

Figure 4: Plan information collected from Abreu Nunes' plan in "Relatório da comissão nomeada por portaria provincial nº84 de 4 de Julho último [1897] para estudar os melhoramentos indispensáveis a fazer na rada e porto de Macau". 451-1H-SEMU-DGU-mç. Overseas Historical Archive, Lisbon, Portugal.

Figure 5: Plan information collected from Castel-Branco's plan in José Emílio de Sant'Ana da Cunha Castel-Branco, *Projecto das obras a executar no Porto de Macau. Memória descritiva e justificativa precedida duma resenha histórica e seguida dum projecto de caderno de encargos e mais documentos para a execução das obras por empreitada* (Lisboa: Imprensa Nacional, 1913).

Figure 6: Cecília Jorge and Rogério Beltrão Coelho. *Álbum Macau: Sítios, Gentes e Vivências* (Macau: Livros do Oriente, 1991).



Urban forms at intersection of Imperialism and Colonialism: a perspective on Beirut

Nadine Hindi.

PhD, Department of Architecture, FAAD - nhindi@ndu.edu.lb – Notre Dame University, NDU - Lebanon.

Towards the end of the 19th century and the WWI geopolitical aftermath, Beirut presents a case along the Eastern Mediterranean at the intersection of two major colonial powers, the Ottoman Imperialism and French Colonialism. Dissociated from the province of Damascus in 1888, Beirut was elevated to the rank of provincial capital of *Wilâya*, the geographical borders of which spanned the equivalent of four actual countries. Following this administrative upgrade Beirut benefited from the *Tanzimat* reforms and the Sultan Abdul Hamid II jubilee in 1901. This paper will highlight the implementations of these political moments on urban forms and the urban landmarks for the ruler's glory. Under the French mandate, Beirut role shifted from being provincial capital of a *Wilâya* part of the Ottoman Empire, to being capital of a Republic country with newly defined borders. Preceding the French Colonialism, Sultan Abdul Hamid II envisioned Westernizing some of the Ottoman Empire cities to the image of the European urban model. Alternately, the French were very enthusiastic to modernize Beirut, their prime image in the Levant. At this moment, Beirut's urban fate was at the intersection of two visions of Westernization, the late Ottoman Imperialism and the early French Colonialism. An attempt to better understand the urban implications of this turn of century intersection, will be achieved by highlighting urban forms continuities and ruptures as a methodology observed in the broader geo-political context. It is a chance to reflect on the modes of borrowing Western urban forms and examining the blurred boundaries of their planning, juxtaposition or imposition on an existing urban order. It will as well unfold in a parallel mode how each colonial power approached and applied different urban practices on their occupied territories.

Keywords: urban forms, colonial powers, Beirut, Westernization

Introduction

This paper will highlight Beirut's changing urban forms towards the end of the 19th century, at the intersection of Ottoman Imperial and French Colonial rules. Both ruling powers resorted to Western urban planning and practice for the improvement of cities under their rules, Beirut in this case. Preceding the French Colonialism, the Ottoman Empire envisioned Westernizing cities to the image of the European urban model. The different reasons lying behind the Ottoman will and urge for *Westernization* will be explained in this paper in the broader geo-political and administrative context of Beirut. The Imperial glory of the urban achievements didn't last long as the Ottoman Empire was fragmented and divided following the WWI geopolitical aftermath. At that turning point of history, the French ruled Lebanon and were very enthusiastic to modernize Beirut, their prime showcase in the Levant. Both the late Ottoman '*model of progress*' and the French '*mission civilisatrice*' in the Levant, Beirut being its *Vitrine du Levant*, placed Beirut among their strategic priorities¹. Accordingly, both ruling powers shared some of the urban *Westernization* features, which visibly transformed the city's landscape at the turn of the century. Applying *Tanzimat* reforms, the late Ottoman regime aimed at modernizing their major cities by *Westernizing* them. French urbanization intersected in many way this *Westernization* implications in particular at the beginning of the mandate. This paper will highlights points of convergence and divergence in the two modes of *Westernizing* for the production of city space. It will present an understanding of their urban visions and the effect of *Westernization* modes in the laying out of a Mediterranean city.

The literature on the changing geographical importance of the Eastern Mediterranean coast and the growth of cities along it has documented accurately the urban landscape of late 19th century Beirut, namely the scholar works of Hanssen (2005) and Çelik (2008). However literary works addressing the Mediterranean cities in their specific historic urban trajectory are still hesitant and thus far present an incomplete reading of the individual cities. This paper unfolds Beirut's urban transformation as a Mediterranean city, from a medieval Arabic city structure into a major port-city on the Mediterranean. The production of urban forms, their structural changes and their transformation will be approached under two main perspectives; the city as physical space and consequently as a dynamic model, and the city as part of a larger network and wider context. Observing the city as being a physical space consists of analysing the transformation of the city fabric, the evolution of the urban landscape and its



structural changes. Simultaneously, studying the city as part of a network leads to an understanding of the urban dynamics in relation to its broader geo-political context.

This paper highlights the urban forms transformations at this particular moments of history, when late Ottoman concerns about urbanism were Western-driven, followed shortly by the Westernizing practice of the French on their colonial cities. It is an opportunity to reflect on the modes of borrowing Western urban forms and to examine the blurred boundaries of their planning, overlay and imposition on an existing urban order. While the text doesn't draw primarily on the economic and socio-communal aspects, it doesn't imply by any means that they are of a lesser importance. It doesn't focus neither on the role of the political authority in imposing urban orders on occupied territories as a major indirect catalyst in shaping the city.

Contextualizing Beirut at the end of the 19th century

Beirut has been historically a city at the crossroad of different empires and played different administrative roles within different geographical boundaries and political dominations. Under the Ottoman rule, its administrative role kept on gradually rising while it was still part of the *Bilad al Sham* territories until the fall of the Ottoman Empire in the WWI aftermath. From a city under Ibrahim Pasha's rule that was annexed to the province of Damascus in 1864, it rose in the lapse of twenty-four years to become capital of *Wilaya* in 1888 (the total area of which was 30,500 km²), then capital of Greater Lebanon (Lebanon area, 10,450 km²) in 1920, as it is currently in its present-day borders. On a macro-scale, Beirut shifted from being a province within the *Bilad al Sham* territories under the Ottoman rule, into a capital within a State frontier under French rule.

Following the Sykes-Picot agreement, the Empire territories were divided into different states among Allied forces, and consequently the network of the Empire cities was modified and forced to function in a different mode, following a new geo-political context. Confined within the smaller geography of the state of Greater Lebanon, the French authority considered itself a 'mission' and a 'mandate' rather than a 'colonial' power. Earlier, when Beirut was upgraded to capital of *Wilaya*, it benefited from the *Tanzimat* reforms and the Sultan Abdul Hamid II silver jubilee in 1901, the implementations of which played the role of urban catalysts. Accordingly, Beirut became part of the network connecting the Empire's major cities. As the word *Tanzimat* mean literally 'reforms', urban reorganization, reordering and restructuring were instituted, inspired from Western urbanization concepts. Urban Westernization was thus practiced under late Ottoman rule in an ironic anticipation to the French production of urban space.

The slight overlap and intersection of these two urban moments will be tackled through this paper by presenting their effect on the city. During the early mandate period, the French continued working on the city image initiated by the Turks for the Sultan by carrying out the '*Foire-Exposition*' event of 1921. Similarly, they appropriated physically the public spaces of *Sahat* and occupied the architectural landmarks. They carried on the urban developments initiated by the Turks in the port sector and clearing of the medieval fabric of *Bayrout al-Qadima* which preceded their 'imported' urban practices. Though both powers sought Westernization in their urban design paradigm, the French character diverged substantially from the late Ottoman one. At a more advanced stage, the Mandate failed in fully implementing two successive master plans envisioned in 1932 and 1934 by French planners, respectively Danger then Delahalle.

The changing urban landscape

Several factors laid behind the rise of Beirut from a coastal medieval city into a major Port-City along the Eastern Mediterranean coast at crossroad between shipping lanes and the land routes for trade activity². This urban transformation was deeply rooted in the geo-political and administrative changes initiated during the late Ottoman period³. At that time, both Ottomans and French shared a particular interest in Beirut and worked on strategically improving the port and its surrounding area. The works on the port ran in parallel to the development of the infrastructural connections between Beirut and Damascus, a hinterland city without a seaport.

The Beirut-Damascus carriage road completed in 1863 bypassed the tortuous intramuros roads to reach the seaport and replaced the previous route that crossed *Sahat al-Burj* through *Bab al-Saraya* and *Bab el-Dabagha*. Beirut was throwing off its medieval character and moving out of its eroded walls around 1860. It grew in size along the main arteries to Damascus, Saida and Tripoli completed between 1860 and 1876. The two extramuros loose and undefined spaces at the boundaries of the medieval wall, known as *Sahls*, were urbanized gradually into *Sahat*. *Sahat al-Burj* (later to become *Sahat al-Hamidiyeh*) and *Sahat al-Sour* playing respectively the role of nodes to Damascus Tripoli and Saida. The first urban transformations started as early as 1892 with the arrival of Ismail Kemal Bey as the new *Wali* of Beirut *Wilaya*, being '*one of the leading Ottoman architectural figures in Beirut during Abdulhamid's reign*'⁴ who undertook major urban changes in the port sector. Between 1890 and 1895, a French company with local entrepreneurs undertook the port enlargement, followed in 1895 by the construction



of the 800 meters long Ottoman jetty. French authorities carried on the extension of the port between 1920 and 1929 which was strategic for the arrival of their military troops. Later on in 1934, they extended the jetty by 450 meters to mark the final change to the turn of the century Beirut waterfront landscape. The mercantile medieval port acquired a hybrid nature with the inauguration of *Orosdi Back*, the first large-scale department store along the wharf at the same year of the railway's in 1900, followed by the opening *Imperial Ottoman bank* in 1905. The advent of the coastal railway which was part of a larger rail network placed Beirut on the Muslim pilgrimage road as early as 1909 with the construction of the Beirut-Al Hijaz railroad⁵. *Locandas* and hotels multiplied along the waterfront, and the *Khan Fakhry Beh* and *Khan Antoun Beh* were different from the introverted nature of the medieval *Khan*, basically with their open ground level typology.

Urbanism transformed the port area and initiated the first piercings of big part of Souq streets in the city tortuous medieval fabric starting 1915 by the Turkish initiative⁶. The French influenced the Turkish will to modernize planning, since their presence infiltrated to Beirut since 1860, preceding their official entry to the country in 1918. They were blamed for their lack of concern for the three principles of modern urbanism, *hygiene, aesthetics and circulation*, characteristic of the French planning. Accordingly they initiated piercings the *Souq* for the purpose of ventilating the congested area. One piercing aimed at linking *Sahat al-Burj* to *Bab Idriss*, connecting the East and West sides of the city. The second piercing in the direction of the sea aimed at linking the port to the *Souq* area, ending by effectively destroying *Souk al-Fashkha*, *Souk al-Tawileh* and *al-Jamil*⁷. The rubble was used to backfill the seashore, changing the shoreline, visible in the map of 1876. Consequently, a bearing wall was constructed out of the backfill and seaside promenade of *Minet el-Husn*, which became the favourite destination for the Beirutis⁸. The French pursued the Ottoman idea of embellishment of this promenade to be named *Avenue des Français*, lined with casinos, elegant hotels, cafes and patisseries 'à la Française' and the first piece of art, le "Monument aux morts". Famous for its palm trees and wide pavement, postcards of *Avenue des Français* printed in 1925, were comparing it to *Promenade des Anglais* in Nice to promote French tourism in the *Levant*⁹. Nevertheless, *Place de l'Etoile* remains undoubtedly the proud product of this French Mandate period, following the 1932 Danger masterplan. Three concepts underlay the master plans, namely *Hygiene, Circulation and Aesthetics*, and formed the basis for the urban intervention. The destruction of parts of the *Souq* by the Turkish authorities paved the way for the final imposition of the geometrical star-shaped square on the *Bayrout al-Qadima* medieval fabric (*Figure 1*). This inspired *Haussonian* intervention disrupted radically the previous city structure¹⁰ except for the strong resistance of the Christian authorities which saved the existence of two churches. This meant that two branches of the star had to be amputated.

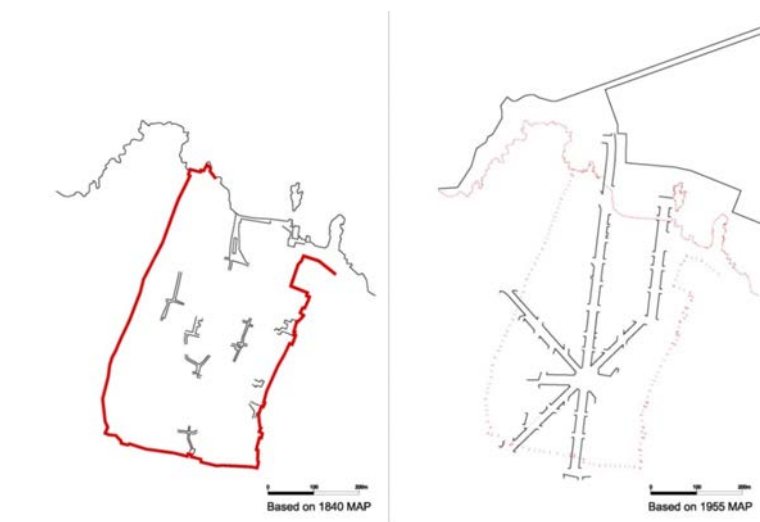


Figure 1: Fragmentation of the Souq structure to be replaced by *Place de l'Etoile* - Diagrammatic maps by author (extracted from author PhD dissertation, 2015)

The landscape and model of the city of Beirut were profoundly modified. The major development of the seaport drastically changed the medieval city landscape into a major Port-City. The subsequent structural changes in clearing the tortuous city fabric aimed at opening the old city in the direction of the sea, although its traces are still omnipresent. The Beirut-Damascus carriage road which bypassed the tortuous intramuros roads by running along the city periphery transformed deeply the city model. While the port became Beirut's major urban component the city dynamics shifted from the East to the West (*Figure 2*). Instead of reaching the port though via the Eastern *Bab el-Dabagha* and the tortuous narrow road, the wide and straight carriage road reached out the seaport from the West (*Figures 3 and 4*).

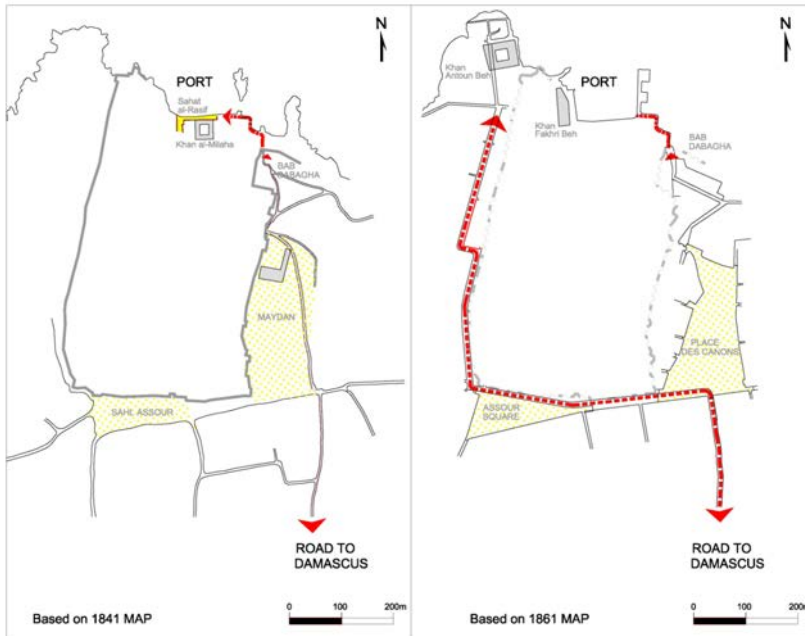


Figure 2: Shift from hinterland model to port-city model. Each map is the result of the overlapping of several maps, overlapped and combined by author.
[Base maps sources: 1841 based on Lloytved map and 1861 map based on Terre de Vincennes].



Figure 3: Initial east access to Port: Period between 1905 to 1925; Photographer Bonfils – Debbas Collection.



Figure 4: 1902, view from Grand Serail towards the port, new Damascus-Beirut road shown; Photographer Sarrafian – Debbas Collection.



The changing urban image: from *Wilaya* to Capital

Ottomanization after the *Tanzimat* went beyond the production of monumental effects and landmarks in the urban space, to achieve networking through communication and transportation. Whilst the French were confined within the borders of the state of Greater Lebanon, they boosted their image through internationalizing Beirut as their prime colonial city of the Levant. Transportation and telecommunication by means of the telegraph covered what had been the Empire Arab provinces¹¹ and brought cohesion to the Ottoman Empire territory¹². Infrastructural networking was developed with the opening of the Suez Canal in 1869 which revitalized the trade routes via the East Mediterranean and played a catalyst role in the emergence of Beirut as a port-city. As distances were shortened, Beirut's links to Istanbul and Damascus were not only infrastructural but symbolical as well. In the same year, the port railway was inaugurated, five tramway lines were inaugurated for this occasion and were operating by 1907, passing through *Sahat al-Burj*. The will for planning the square was both a tribute for the Hamidian image of Sultan Abdülhamid II and a display of late Ottoman westernization. The square was then named *Sahat al-Hamidiyeh*, known also as *Menchiyeh*, where the *Petit Serail* was built in 1883 at its end and occupied by the Turkish authorities. In addition to the port, this square served as the point of departure for the historic visit of German emperor Wilhem II to the Orient in 1898.

Architectural landmarks and monuments led to the fast transformation of the Late Ottoman cities landscape. The construction of public buildings on hilltops¹³, the urbanization of main squares in central urban locations, the construction of clock-towers across the Empire were physical and symbolic products of the Ottoman Empire's authority for unification across the Empire's territories and of the will to modernize the provincial capitals. In the year that followed the *Petit Serail*, the construction of the *Grand Serail* was completed in 1884 on Beirut's hill. On the same hill, a remarkable 25 meters high Ottoman clock-tower became the highest point in Beirut. The 8-meter ornamental *Hamidiyan fountain* was inaugurated in the middle of *Sahat Assour*, as another tribute for the Hamidian image. In the urbanized squares or *Sahat*, ornamentation replaced functionality which characterized the fountains of intramuros *Sahat* where women used to meet and collect water at the *Souq* intersections.

Beirut's Ottomanized model, the “*the jewel in the crown of the Padishah*” as German emperor Wilhem II called it, became the “*Vitrine du Levant*” as the French envisioned it at the heart of their “*mission civilisatrice*” in the *Levant*¹⁴. While the late Ottoman rule showed a concern for embellishment and monumentality as a tribute to the Hamidian rule in the first place, the French worked on further promoting the city as their image. Beirut gradually became the “*Pearl of the Middle East*”, often known in the sixties as ‘*Paris of the Orient*’ or ‘*Switzerland of the Middle East*’. After the visit of the German emperor to Beirut in 1898, the ‘*Foire-Exposition*’ event of 1921 was another milestone in its urban history (Figure 5). The idea behind the exhibition was to affirm political goodwill for the newly established Greater Lebanon, and trust between France and Lebanon¹⁵, the French being aware as well, that the region was traditionally based on trade. The ‘*Foire-Exposition*’ emphasized the importance of the city by the construction of the *Pavillon de l'état de Damas* in the heart of the city in the *Place des Canons* (previously *Sahat al-Hamidiyeh*) and gave it a more ‘*cosmopolitan*’ character (Figure 6). Beirut exposed itself as the primary French colonial city of the Levant, reflecting the cultural image of the French presence. At an international level, this event marked the importance of Beirut in the hierarchy of the colonial cities.

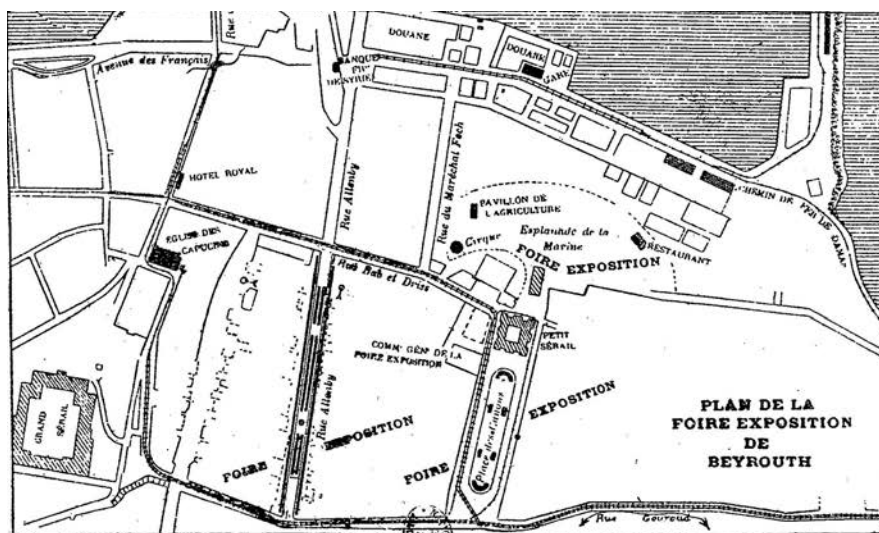


Figure 5 – Fairground Map: showing the ‘*Foire-Exposition*’, its location and indicating the transportation, roads, esplanades and even hotels (hotel Royal)

[Source: Haut Commissariat et la République Française en Syrie et au Liban. *La Syrie et le Liban en 1921. La Foire-Exposition de Beyrouth*.1922.]

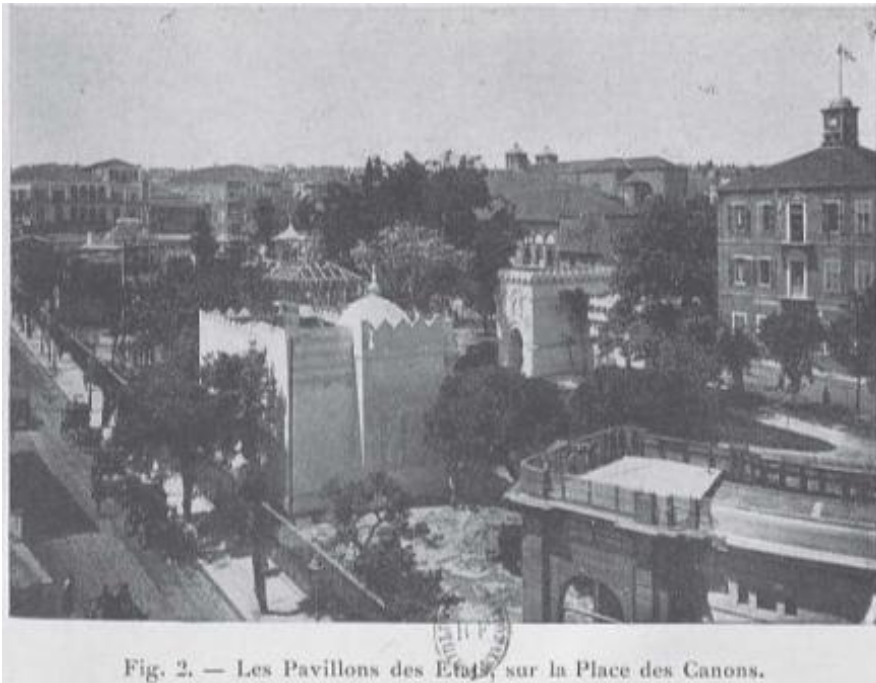


Figure 6: *le pavillon de l'état de Damas*

[Source: Haut Commissariat et la République Française en Syrie et au Liban. *La Syrie et le Liban en 1921. La Foire-Exposition de Beyrouth. 1922.*]

Conclusion

The premise that it takes powerful moments of history to bring deep changes to the city¹⁶ lies at the heart of the deep formal and structural changes of Beirut's fabric. This moment of deep urban transformations at the end of the 19th century coincided with several catalysts such as the opening of Suez Canal¹⁷, the administrative upgrade of Beirut to *Wilaya* and the Ottoman will to bring urban order as per the *Tanzimat* reforms. However the most important feature was the transformation of the city as a model, and not only as an urban fabric.

Even though the production of *Westernized* urban spaces converged at some early moments of their overlapped influence, Empire and Colonial rules diverged ideologically in their approach. The primary Imperial incentive at that time was reordering state control by connecting the fragmented territories of the Ottoman Empire and creating an unprecedented infrastructural network among Arab provinces connecting to the holy cities of Al-Hijaz (Mecca and Medina), followed by the economic concern. The modernity of this approach diverged from the French Colonial concern for boosting a cultural image of civilization. This search for an image that transcended the geographic limits, might be generated from the fact that French Colonialism in the Levant had to rule over a divided fragment of the Empire territories, which became moreover separate countries. The end of WWI marked the end of the Imperial and Colonial urges for expansion over broader geographies, to be replaced since then by different forms of control.

Two premises can conclude this paper, one concerning the process of urban *Westernization* and another one concerning the creation of city image and the representation of power. It can be concluded that French *Westernization* consisted of introducing imported urban forms and applying them on an urban fabric based on *Souq* structure, thus a different process of self-regeneration based on trade. Imperial *Westernization* consisted of a concept or ideology for modernizing through regenerating the existing urban landscape. The second premise on image and representation of power presents an interesting contrast between the Empire monumentality and the Colonial representation of cultural power using the '*Foire-Exposition*' event for changing city image. The French promoted the image of Beirut as a city of culture on the international scene inasmuch as the Ottomans used the cities to honour the image of the Sultan and the Empire. The Empire achieved a coherent City-Port model in Beirut whereby the implementations of French urban concepts and forms emanating from a different cultural process, were less successful.

Though this paper doesn't cover all the necessary aspects for an urban comparative between Imperialism and Colonialism, it may serve as a starting-point for further understanding the production and transformation of Mediterranean cities. At the crossroad between East and West, Mediterranean cities are the complex outcome of several urban models juxtaposed on top of each other, under different political rules.



Disclosure Statement

No potential conflict of interest was reported by the author.

Bibliography

- Battegay A., David J-C and Métral F. (ed.), «Formation et transformation des identités urbaines et de l'organisation des villes en Méditerranée orientale et au Moyen-Orient», *Monde Arabe Contemporain : Territoires et Mobilités*, Cahier de recherche N°5 (Gremmo, 1996): 7-16.
- Çelik, Zeynep. *Empire, Architecture, and the City: French-Ottoman Encounters, 1830-1914*. University of Washington Press, 2008.
- David, Jean-Claude, «Espace public au Moyen-Orient et dans le monde arabe, entre urbanisme et pratiques citadines» *Géocarrefour* Vol. 77 n°3, (2002): 219-224. DOI:10.3406/geoca.2002.2746. http://www.persee.fr/web/revues/home/prescript/article/geoca_1627_4873_2002_num_77_3_2746.
- Debbas, Fouad. *Beirut Our Memory, An Illustrated Tour in the Old City from 1880 to 1930*. Naufal Group Beirut: Lebanon, 1986.
- Delage, Aurélie, «La rue: espace public, quel(s) public(s) ?», *Tracés. Revue de Sciences humaines*, 5 (2009): 61-74. URL <http://traces.revues.org/3163>; DOI: 10.4000/traces.3163.
- De Vogüé, Melchior, Vte Eugène. *Syrie, Palestine, Mont Athos : Voyage au pays du passé*. Paris, 1876.
- Ghorayeb, Marlène, «Beyrouth sous mandat français, construction d'une ville moderne», *Revue du monde musulman et de la Méditerranée*, N°73-74, (1994): 327-339.
- Ghorayeb, Marlène. *Beyrouth sous mandat français, construction d'une ville moderne*. Paris: Karthala, 2014.
- Haut Commissariat et la République Française en Syrie et au Liban, *La Syrie et le Liban en 1921. La Foire-Exposition de Beyrouth. Conférences. Liste des récompenses*. Paris: Emile Larose Libraire-Éditeur, 1922.
- Hanssen, Jens. *Fin de Siècle Beirut: The Making of an Ottoman Provincial Capital*. Oxford: Clarendon Press, 2005.
- Hanssen, Jens, "Your Beirut is on my Desk: Ottomanizing Beirut under Sultan Abdulhamid II (1876-1909)", in *Projecting Beirut: Episodes of the Construction and Reconstruction of a Modern City*, ed. H. Sarkis and P. Rowe (Munich: Prestel, 1998): 41-67.
- Khalaf, Samir. *Heart of Beirut: Reclaiming the Bourj*. London: Saqi Books, 2006.
- Madanipour, Ali, "Roles and Challenges of Urban Design", *Journal of Urban Design*, Vol. 11. No. 2, (June 2006): 173-193.
- Michaud, M. and Poujoulat, M. *Correspondance d'Orient, 1830-1831, 1833-1835*, Paris, 1835. <http://www.thefouaddebbascollection.com/>, Accessed 2015.

Image sources

Figure 1: diagrams by author. Source: author PhD dissertation, 2015

Figure 2: diagrams by author. Base maps sources: 1841 based on Lloytved map and 1861 map based on Terre de Vincennes.

Figure 3: Photographer Bonfils – <http://www.thefouaddebbascollection.com/>, Accessed June, 2015.

Figure 4: Photographer Sarrafian – Debbas Collection.

Figure 5: Source: Haut Commissariat et la République Française en Syrie et au Liban. *La Syrie et le Liban en 1921. La Foire-Exposition de Beyrouth*. 1922.

Figure 6: Source: Haut Commissariat et la République Française en Syrie et au Liban. *La Syrie et le Liban en 1921. La Foire-Exposition de Beyrouth*. 1922.

Endnotes

¹ Jens Hanssen, *Fin de Siècle Beirut: The Making of an Ottoman Provincial Capital*. (Oxford: Clarendon Press, 2005), 13.

² A. Battégay, J-C David and F. Métral (ed.), «Formation et transformation des identités urbaines et de l'organisation des villes en Méditerranée orientale et au Moyen-Orient», *Monde Arabe Contemporain : Territoires et Mobilités*, Cahier de recherche N°5 (Gremmo, 1996): 7.

³ Moreover, Beirut benefited as well from the shipping revolution and introduction of steamship to improve the port. The opening of the Suez Canal revitalized the trade routes via the Eastern Mediterranean and led to the emergence of port-cities like Beirut and Haifa.

⁴ Jens Hanssen, "Your Beirut is on my Desk: Ottomanizing Beirut under Sultan Abdulhamid II (1876-1909)", in *Projecting Beirut: Episodes of the Construction and Reconstruction of a Modern City*, ed. H. Sarkis and P. Rowe (Munich: Prestel, 1998): 52.

⁵ Hanssen, *Fin de Siècle Beirut: The Making of an Ottoman Provincial Capital*, 252.

⁶ Marlène Ghorayeb, *Beyrouth sous mandat français, construction d'une ville moderne*. (Paris: Karthala, 2014), 23.

⁷ Hanssen, "Your Beirut is on my Desk", 52.

⁸ Fouad Debbas, *Beirut Our Memory, An Illustrated Tour in the Old City from 1880 to 1930*. (Beirut, Lebanon: Naufal Group, 1986), 109.

⁹ Aurélie Delage, «La rue: espace public, quel(s) public(s) ?», *Tracés. Revue de Sciences humaines*, 5 (2009): 61-74. URL <http://traces.revues.org/3163>; DOI: 10.4000/traces.3163.



The 18th International Planning History Society Conference - Yokohama, July 2018

¹⁰ Marlène Ghorayeb, «Beyrouth sous mandat français, construction d'une ville moderne», *Revue du monde musulman et de la Méditerranée*, N°73-74, (1994): 338.

¹¹ Zeynep Çelik, *Empire, Architecture, and the City: French-Ottoman Encounters, 1830-1914*. (University of Washington Press, 2008), 28.

¹² Hanssen, *Fin de Siècle Beirut: The Making of an Ottoman Provincial Capital*, 39.

¹³ *Ibid.*, 241.

¹⁴ *Ibid.*, 13.

¹⁵ The idea is underlined as a celebration of sacrifices and a compensation for the support to General Gouraud, put forth in the following terms:
Pour saisir ainsi le sens et la portée de cette publication, il faut évoquer la Foire-Exposition de Beyrouth qui apparaîtra désormais à tous ceux, Syriens, Libanais ou Français, qui ont travaillé aux côtés du général Gouraud dans les heures militantes de 1919, 1920 et 1921, comme une consécration de la Paix gagnée après tant de sacrifices.
La Foire-Exposition de Beyrouth 1921 n'a été qu'un prologue, car dans tous les domaines des actes s'accomplissent qui s'imposent.
Mais le général Gouraud l'avait aperçu dès septembre 1920, elle a été plus, elle a donné confiance.

As documented in the conferences related to the decision to set the exhibition in, Haut Commissariat et la République Française en Syrie et au Liban, *La Syrie et le Liban en 1921. La Foire-Exposition de Beyrouth. Conférences. Liste des récompenses*. (Paris: Emile Larose Libraire-Éditeur, 1922), 2-4.

¹⁶ Ali Madanipour, "Roles and Challenges of Urban Design", *Journal of Urban Design*, Vol. 11. No. 2, (June 2006: 173–193), 176.

¹⁷ Beirut benefited as well from the shipping revolution and introduction of steamship to improve the port. On another hand, the opening of the Suez Canal revitalized the trade routes via the Eastern Mediterranean and led to the emergence of port-cities like Beirut and Haifa.



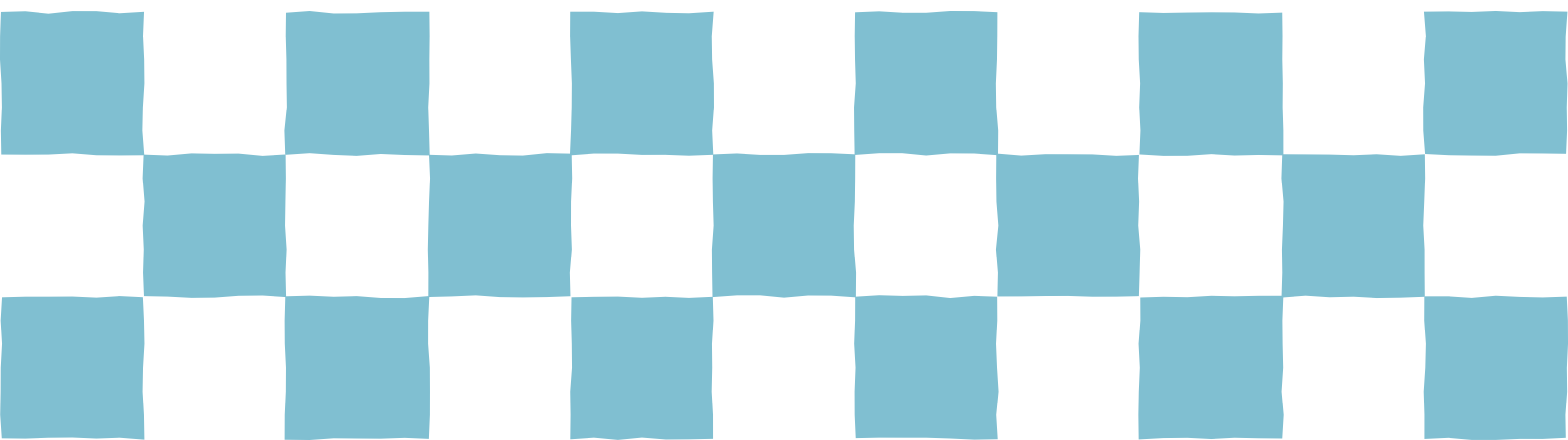
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

29 Transnational Planners and Engineers



Cross-Cultural Engineering: The Role of Dutch Civil Engineering in Modern Port Planning in Japan (1870s-1890s)

Kazumasa Iwamoto (Kyoto University) and Carola Hein (Delft University of Technology)

Civil engineering has shaped urban form and urban planning for centuries, but scholars have yet to focus on the exact relation between the two fields. This is particularly true for the Japanese case, where engineering has played a major role in the country's modernization and westernization since the mid-19th century. Engineers have taken a leading role in providing defenses against multiple natural hazards, developing new road, rail, and port infrastructures, or transforming waterways. Exploring the influence of Dutch Civil Engineers on the design and engineering of Japanese ports from the 1870s to 1890s, this paper proposes a first look at cross-cultural exchanges in civil engineering. Specifically, it aims to show how relate the civil engineering with the port city by using their investigative reports, design drawings and survey maps.

Following pressure from the United States and the appearance of the canon-laden, so-called black ships on its shores in 1854, Japan turned from an isolated country without international trade to a rapidly modernizing one with global connections. From the early 17th to the mid-19th century, Japan's contact to the world had been limited to the Nagasaki port where only Dutch and Chinese representatives had been allowed. To help with the modernization and to facilitate international trade, the Japanese government invited foreign experts, notably European and American practitioners, to lead this transformation. Dutch civil engineers appeared eminently suitable to develop water management projects including river systems, soil-erosion control structures and port basins, wharves and jetties. Focusing on the history of planning and construction of five case studies—the ports of Nobiru, Mikuni, Nagasaki, Misumi and Yokohama—this paper shows diverse patterns of cross-cultural engagement. In the case of Nobiru and Misumi, the Dutch engineers, Cornelis Johannes van Doorn, Johannes de Rijke, and Anthonie Thomas Lubertus Rouwenhorst Mulder attempted to design the port as well as an adjacent new town and land-side infrastructure. In both cases, the new port city project was not built in its entirety due to the typhoon and incomplete land infrastructure. Mikuni and Nagasaki struggled with sand deposition on river mouth, and the Dutch engineers, Johannes de Rijke and George Arnold Escher, proposed a new layout for the river, dredging the sea bottom and building a breakwater, allowing the two ports to revitalize. In the case of Yokohama, four foreign engineers participated in the design process. The design by Johannes de Rijke's was rated highly because of the stronger structure of the breakwater and a bigger basin. Ultimately, the design by the Henry Spencer Palmer, a British engineer, was chosen because of political reason.

The paper concludes that foreign practitioners greatly influenced Japan's civil engineering, in particular through the design of breakwaters and the practice of dredging. Those techniques were important in order to build basin, in fact, especially the technique of breakwater appeared in the textbook and spread to Japan. Even in ports, where the natural environment prevented port construction, or where land-side infrastructure was not built, the Dutch engineers had a great impact on Japanese port planning.

From the local experiences to the international scene: the birth of transnational urban planning expertise (Brazil and France, early XX century)

Angelo Bertoni (Aix Marseille Université)

This paper aims to explore the transnational circulation of planning models and ideas, focusing on the dialogue between the different actors and the transfer and exchange of the knowledge of urban planning on both sides of the Atlantic from 1900 to 1930.

The first part of the twentieth century was marked by the construction and affirmation of urban planning as a discipline, both in Europe and the Americas. At that time, European and North American cities were faced with the need to control their growth and build new relationships between urban and rural contexts. During the same period, cities of Latin America were faced with an unprecedented growth and the urban framework was in the process of being structured in several countries.

In these multiple contexts a new figure emerges: the expert. He was often an architect, trained in Europe and/or in the Americas, a member of international associations and a well-known practitioner. This actor was involved in various professional networks, both national and international: he based his practice on defining and adopting urban planning tools, in particular the plan. The expert was called by local governments, as Joseph Stübgen in Luxembourg or Donat-Alfred Agache in Rio de Janeiro, or he participated in international competitions, such as Henri Prost in Antwerp or Werner Hegemann in Buenos Aires.

During this period, theoretical knowledge of urban planning was gradually built, especially during the national and international conferences' debates. The circulation of ideas was ensured not only by the journals that emerged between 1910 and 1930, but also by an increasingly rich literature devoted to urban planning. The experts were actively involved in the circulation of knowledge and expertise in urban planning that they enriched with their personal experiences and exchanges with colleagues, often from foreign countries.

The objective of the paper will be to explore some professional trajectories between Europe and the Americas, focusing on Saturnino de Brito, Victor da Silva Freire, Edouard Imbeaux and Joseph Bouvard in a comparative perspective. They contributed, with their ideas and activity, to the introduction and adaptation in Brazil of town planning concepts, at that time debated in Europe and in the United States. Journals, conferences and town planning literature of these decades are the main sources for this research to provide a review on transnational dialogue among experts in urban issues.

From Paris to the world: the international practice of the Institut d'aménagement et d'urbanisme de la région parisienne/region d'Ile de France from the 1960s to the 1980s

Clement Orillard (Ecole d'Urbanisme de Paris / Lab'Urba, Université Paris-Est)

In 1960, the State created a new organism initially responsible for the study of the Paris Region, then quickly becoming charge with its planning: the Institut d' aménagement et d' urbanisme de la région parisienne (IAURP) renamed Institut d' aménagement et d' urbanisme de la region d' Ile de France (IAURIF) in 1976. Created as a foundation, it developed a new planning document, the Schéma directeur d'aménagement et d'urbanisme de la région de Paris (SDAURP) published in 1965. This document proposed not only a shift in the regional planning policy in terms of content, most notably the development of several new towns to anchor urban growth, but also in terms of methodology. It consisted of a schematic framework, rather than a detailed plan, that become quickly a reference for a renewal of planning tools at the national scale. It also became the basis for the Institute' s international practice as a consultant for municipal authorities and governments across the world. Between the 1960s and 1980s, the Institut worked on more than a dozen metropolitan planning documents and on numerous other planning studies, in Latin America, the Middle East, North Africa, Sub-Saharan Africa, and the Far East, working on cities from Buenos Aires to Shanghai. This consultancy took different forms. In some cases, it was only a limited evaluation of a document produced separately by local planners. Nevertheless, in other cases, it was a real process of co-production sometimes using the translation of the French expression "schema directeur" into "esquema director" for Buenos Aires or "master scheme" for El Cairo. Moreover, the worldwide demand for this expertise evolved during the decades analyzed. In 1984, the Institut partly used its international network built through this consultancy to co-organize a symposium about metropolitan planning named "Metropolis." This symposium, which gathered 31 local authorities, eventually led to the creation one year later of the Metropolis association which manages today the metropolitan section of United Cities and Local Governments. Indeed, the analysis of this consulting activity helps to map the worldwide use of French planning expertise during the second half of the 20th century in conjunction with the global development of metropolitan issues. The presentation proposed will carefully analyze the development of this international practice, focusing on metropolitan "schema directeur," to assess the complexity of the use of the Institute' s expertise. It will confront this analysis with a broader view of French expertise in terms of actors and time in order to try to map the dynamics of a "global French" planning culture. The presentation will use the first results of a research project undertaken during a sabbatical and draw upon the archives of the Institut and some interviews.

The Construction of Socialist City by East German Engineers in the Late-1950s Postwar Reconstruction of Hamhung

Hideo Tomita (Kyushu Sangyo University)

Very little is known about the hundreds of East German engineers who moved to the North Korean city of Hamhung in the late 1950s to help with urban reconstruction after the Korean War; they were known as the 'German Work Team Hamhung' . Their urgent mandate was to redesign Hamhung as a socialist city. However, research on cross-border propagation of city planning for mass demonstrations, such as from East Germany to North Korea, appears to be non-existent. Therefore, this study investigates the square and street network designed for mass demonstrations in Hamhung and evaluates it from a socialist city planning history perspective. For this study, we used materials left by Püschel at the Dessau Bauhaus Foundation, and semi-annual reports of the German Work Team Hamhung from the German Federal Archives. Regarding research methodology, Section 2 discusses changes in the organizational structure of the German Work Team Hamhung. In Section 3, we argue that the square and street network for mass demonstration was the greatest feature of the newly built socialist cities in the 1930s Soviet Union and early 1950s East Germany, and that Püschel had a special career in each country concerning urban planning. In Section 4, we highlight the similarity between the Hamhung and Ham Hing plans in the late 1950s.

The research findings are as follows: First, the basic plan of 1955 under the leadership of Konrad Püschel was relatively important. Second, there was a common social situation to build new socialist cities in the Soviet Union in the first half of the 1930s, East Germany in the first half of the 1950s, and North Korea in the latter half of the 1950s. Moreover, Hamhung's plan may have been influenced by Püschel' s experience to construct a socialist city in these three countries. Third, the city planning department arranged the 'central square' at the city centre and connected it with the street network, using which mass demonstrators could gather easily at the central square. In addition, the centre square was surrounded by high-rise public buildings as symbols of urban space.

Thus, the reconstruction plan of Hamhung as a socialist city in the latter half of the 1950s had similar characteristics to the socialist cities of the Soviet Union (early 1930s) and East Germany (early 1950s)

German architects contributed transnationally to the construction of socialist cities. In particular, in the case of Hamhung, the presence of Püschel was substantive. As mentioned above, although the East German engineers followed the concept and methodology in the aforementioned socialist states, they adapted them to the local circumstances that were ascertained by detailed preliminary survey work. Their activities highlight the unconsidered aspect of the global/worldwide spread of the concept and methodology of socialist city planning.



Cross-Cultural Engineering: The Role of Dutch Civil Engineering in Modern Port Planning in Japan (1870s-1890s)

Kazumasa Iwamoto*, Carola Hein**

*Kyoto University/Delft University of Technology, iwamoto.kazumasa.77x@st.kyoto-u.ac.jp

** Delft University of Technology, c.m.hein@tudelft.nl

This is particularly true for the Japanese case, where civil engineering has played a major role in the country's modernization and westernization since the mid-19th century. The design and engineering of Japanese ports from the 1870s to 1890s is a case in point. This contribution explores the degree to which civil engineering engaged with port city design by studying investigative reports, design drawings and survey maps established by Dutch civil engineers in collaboration with Japanese practitioners. It identifies three types of cross-cultural engineering. 1. Building a new port: Some Dutch engineers proposed complex projects combining water management and port basins, jetties with urban form, but these were only partially implemented. 2. Improvement of Port Functions: The Japanese engineers were particularly receptive for the design of breakwaters, the practice of dredging and the construction of basins; notably the technique of breakwaters became a staple in textbook and spread through Japan. 3: Development of the Port. The engineers developed a complete vision for a new port, but diverse reasons hindered realization, including natural features that disturbed the construction of the port. These three types stand as examples of the intricacies of cross cultural engineering in engineering and planning.

Keywords: Cross-cultural Engineering, Civil Engineering, Port Planning, Dutch Engineers.

Introduction

In 2015, Misumi port, a key site of Japan's Meiji Industrial Revolution was certified as a World Heritage by UNESCO¹. Home to Iron and Steel, Shipbuilding and Coal Mining and a symbol of industrialization of Japan in the 19th century, Misumi port is an intriguing lens for the cross-cultural exchange between Japan and the West. Designed by A.T.L. Rouwenhorst Mulder, a Dutch civil engineer, the heritage of Misumi port integrates Western engineering with Japanese expertise.

Civil engineering has shaped urban form and urban planning in Japan for a long time, drawing heavily on foreign expertise since the opening up of the country after the Meiji Restoration in 1868. The country has long been threatened by multiple natural hazards and engineering traditionally provides the necessary defences. The country's rapid modernization relied on engineered infrastructures, road, rail, port and waterways. In the 19th century, Japanese civil engineers gained expertise water management from projects such as river systems, soil-erosion control structures and ports, from Dutch civil engineers². New types of construction for river improvement were particularly important for Japanese development³. Most of the foreign engineers who were employed by Japanese government as advisors, had returned to their own countries by 1900s⁴. Since some of the Japanese who went to Europe to study engineering, returned to Japan, and Japanese engineers who worked with foreign engineers, acquired engineering skills from them. It meant that by 1900s, cross-cultural engineering was active. Mulder reported that nobody had knowledge about surveying and designing in water engineering when van Doorn arrived in Japan⁵. In order to realize urban planning and development urban form in a modern port city, building the secure water area for trade and acquiring new land for urban development was necessary. This paper explores the influence of Dutch civil engineers on the design and engineering of Japanese ports from the 1870s to the 1890s, through the lens of cross-cultural exchange in civil engineering. In other words, it aims to show how Japanese civil engineers obtained the knowledge of modern engineering necessary to build modern port cities through by examining their investigative reports, design drawings and survey maps.

After the Meiji Restoration, which saw the adoption of a new calendar system in 1868, the new Japanese government wanted to create a new industrial development policy. Toshimichi Okubo, the Secretary of the Interior, presented the policy of *Fukoku Kyohei* (Rich Country, Strong Army), which aimed to improve the educational system, the military system and the tax system, and in addition, encourage new industry. In order to implement the policy, they invited engineers from all over the world, from countries such as the Netherlands, France, the United Kingdom and the United States of America.

Dobokuryo, the governmental Department of Civil Engineering, invited only Dutch engineers, six engineers and five assistant engineers in the period 1872 to 1903. They carried out several water management projects and had the achievements such as diversion Kiso three rivers, the introduction of a water level maker, erosion and flood



Name	Nobiru	Mikuni(Sakai)	Nagasaki	Misumi	Yokohama
Cost(japanese yen)	300,000	300,000	290,000	330,000	2,000,000
Designer	Doorn	Escher, Reijke	Reijke	Mulder	Palmer(English)
Project Type	New Port City	Improvement	Improvement	New Port City	Development
Planning Scale	Port, New town	Port	River	Port, New Town, Train	Port
Presently Condition	Not Working	Working	Working	Almost Not Working	Working
Tarin	×	1911	1897	×	1872
Project term(year)	7	8	12	4	8
Completion Year	1884	1885	1893	1887	1896

Table.1 Analysis of Five Port Projects

control in the mountain. By the 1870s, modern ports had been born around the world in cities such as London and Rotterdam⁶. Some scholars argue that the starting point for the modern Japanese port was in Yokohama in 1888⁷. However, before this, a number of Dutch civil engineers had already contributed to modern port construction. This study highlights the modern Japanese port construction designed by Dutch engineers from the 1870s to the 1890s.

More concretely, this paper aims to show the relationship with and contribution of Dutch civil engineering in the building of modern ports, by focusing on the history of planning and construction using five case studies from the ports of Nobiru, Mikuni, Nagasaki, Misumi and Yokohama. This paper shows the diverse patterns of cross-cultural engagement (Table.1). The construction of these ports can be classified into three types; 1. building a new port city, 2. improvement of port functions and 3. development of a port. In the case of building a new port city, which includes Nobiru and Misumi, the Dutch engineers, Cornelis Johannes van Doorn and Anthonie Thomas Lubertus Rouwenhorst Mulder attempted to design not only the port but also an adjacent new town and land-side infrastructure. In both cases, the new port city project was not built in its entirety due, in one case to a typhoon and in another case to an incomplete land infrastructure. In the case of the improvement of a port function, which includes Mikuni (Sakai) and Nagasaki, the engineers struggled with sand deposition at the river mouth, and the Dutch engineers, George Arnold Escher and Johannes de Rijke, proposed a new layout for the river, which required dredging the seabed and building a breakwater, thus allowing the two ports to be revitalized. In the case of the development of a port, which is Yokohama, four foreign engineers participated in the design process. The topographical requirements of Yokohama was disadvantage for building new port city. However, that disadvantage was overcome by civil engineering. In the design of Yokohama port, the design of Johannes de Rijke was rated highly because of the stronger structure of the breakwater and a larger basin. Ultimately however, the design by Henry Spencer Palmer, a British engineer, was chosen due to political reasons.

Modern Port Construction Designed by Dutch Engineers

Building a New Port City: The Case of Nobiru Port

In this chapter, each type of construction, in particular those which used Dutch engineering and perspectives, are introduced through the three examples, Nobiru, Mikuni (Sakai) and Yokohama. The first case is Nobiru. Okubo presented the policy for national prosperity and defence (Fukoku Kyohei) in which, as part of the plan to encourage new industry, it was proposed to build up a new port in the Tohoku region in the North, intended for international trade, especially with the United States of America. In order to build the new port, C.J van Doorn, the Dutch civil engineer, was assigned by the public works section in 1876. The following year, van Doorn spent six months investigating the situation and concluded that the Nobiru area was the best location for building a new port, from the perspective of the sediment deposit from the river, water depth and accessibility of a land transportation system.

In those days, when deciding the location for a port construction, topographical conditions were the most important. In the case of Nobiru, choosing a river mouth meant that water depth was shallow in general. Therefore, it was difficult for steam ships to moor at Nobiru, so in his design the port was divided into an inner port and an outer port, which created significant difficulties. Thus Masanao Matsudaira, Miyagi prefecture governor, opposed the project because Nobiru was not easily accessible for ships arriving from Matsushima bay, particularly when seas were rough, as the outer port was cut off from the inner port⁸. However, van Doorn did not change his proposal, because, he argued, other places also had some weak points. In the case of Nobiru, it was possible to overcome the problem by construction. He designed an inner port as the first stage of construction, and an outer port as the second stage of construction. The contents of the design in the first stage of construction are as follows⁹. (Fig.1)

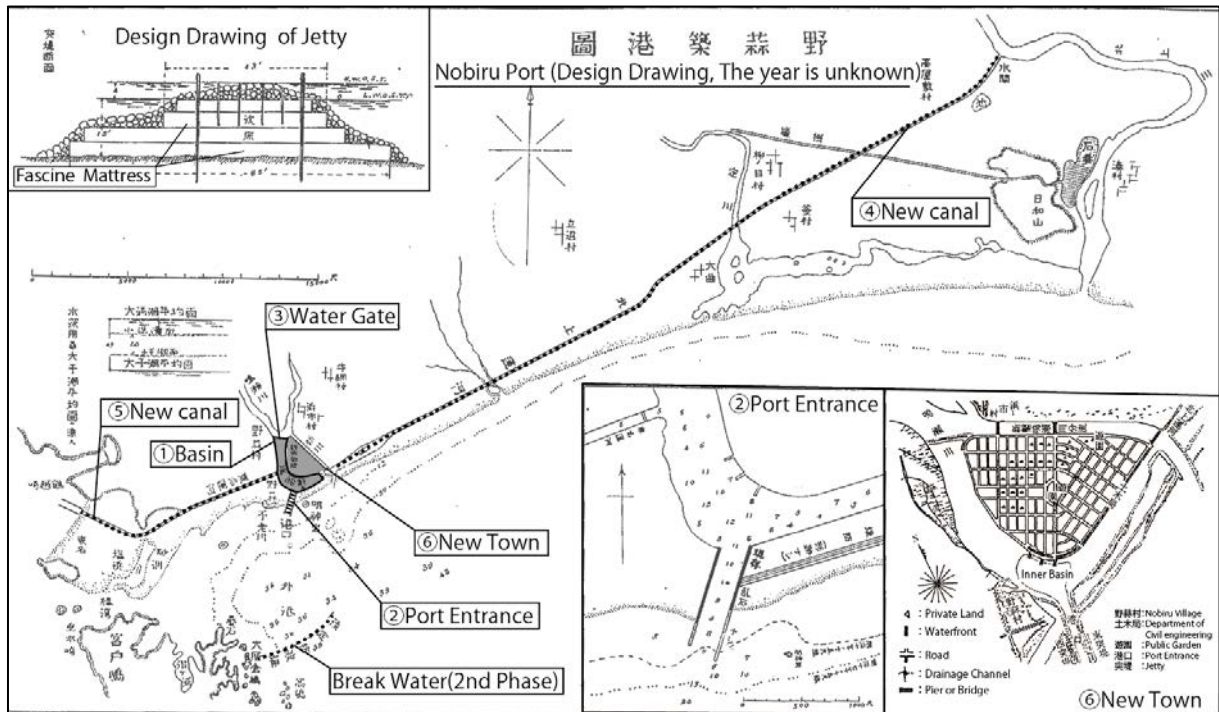


Fig.1 The Design of Nobiru Port

1. Building the basin as an inner port in the river mouth of Naruse river
2. Building the port entrance for connecting inner port and sea
3. Executing the closing and switching of Naruse river
4. Excavation of the Kitakamigawa canal between Nobiru and Kiatakamigawa
5. Excavation of the Tounan canal between Nobiru and Matsushima bay
6. Building the new town
7. Other works

In addition, the steam dredging machines, which were able to dredge 40 tons per hour, were first introduced to Japan by van Doorn¹⁰. He designed the outer port using a breakwater on the eastern edge of Miyako island and connecting it here to Nobiru port during the second stage of construction, after completing the first stage of construction.

During construction, some mistakes were made, especially in the design of the pier positioned at the port entrance, this is mainly content of the first stage construction. The piers in his design used so-called fascine mattresses, an innovation of Dutch civil engineering. The use of this structure is effective in rivers or shoals, however the coast of Nobiru was too deep. Hence the waves were stronger than in shoal areas, so the pier which used fascine mattress was destroyed by the waves. Sediment also flowed to the inner port unexpectedly. The construction started in 1878 and was completed in 1882 and incurred increased construction cost. In 1881, the new town, which was around 1.1 million square meters and build using land reclamation, was also almost completed; in this town, there were irrigation channels, streets, waterways for tugboats, bridges and dikes. Fig 1 shows newly planned urban area, which has grid street networks, three piers to connect new town and inner basin and some public gardens. The branch office of the governmental department of civil engineering, is located along the waterway. In addition, administrative offices of Miyagi prefecture and some commercial offices had already moved to the new town. From previous research, this town planning was designed by van Doorn¹¹. Thus, Dutch civil engineer's works in Japan was not only civil engineering, and they who have the skill of land reclamation and water control, have been requested to make the new town plan.

Only two years after completion, the pier was destroyed by a typhoon. Van Doorn had already returned to the Netherlands in 1882. Following the destruction of the pier A.T.L Rouwenhorst Mulder and other engineers investigated and made a plan for the restoration of Nobiru port. Mulder concluded that rather than restoring Nobiru, the port should be relocated to Onagawa bay because of the high cost of restoration and the need to alter the design. In the other words, he highlighted van Doorn's design errors, in particular the poor selection of location. Following



Mulder's report, the Japanese government decided to stop the port construction. Subsequently, everything was removed from the new town in Nobiru; nowadays, there is only a pine forest.

Improvement of Port Functions: The Case of Mikuni (Sakai) Port

Mikuni port was the first completed modern port project, designed by the Dutch engineers, Johannis de Rijke and George Arnold Escher. In the early modern times, Mikuni port had an important role as a national trade port, because it was located on the route of the Kitamae-Bune, the national trade ship¹². Mikuni town has been shaped along the Kuzuryu river since early modern times. By 1870s, the function of Mikuni port decreased due to sediment deposit from the Kuzuryu river. In other words, it led to a crisis of an abolished port from sediment deposit at the river mouth. In 1875, the people living in Mikuni town, applied to the Japanese government through Fukui prefecture to make improvement to the port. At first, the Japanese government assigned Escher to the task of designing the improvement of the Mikuni port. He started to survey and design from 1876, after which he submitted a report. According to his report, the contents of his design were building the arc breakwater for gravel run-out from the Kuzuryu river and making a basin with an average water depth of three meters within the arc breakwater. He also mentioned the structure of the arc breakwater, which should be made using fascine mattresses and stones, and the length of this was 470 meters¹³. In addition, wooden pier was designed on the arc breakwater.

After completing the design, Escher's contract with the Japanese government was terminated and he returned to the Netherlands, and de Rijke was assigned to Mikuni port project by the Japanese government. While working on the project, he changed the design because of a miscalculation in budget made by Escher and the structure of arc breakwater was weak to withstand the Japanese waves. De Rijke proposed a new design that consisted of five layers of fascine mattresses and wooden piles which were bounded by an iron chain. He also added the four spur dikes in his design. As a result of the changes in the design, construction costs tripled, meaning that the financial load on the inhabitants increased. In 1880, without the agreement of de Rijke, Mikuni port opened to trade in the middle of construction, in order to start earning the construction cost back. In 1881, part of the arc breakwater was destroyed by the strong ocean wave, making it impossible for the construction to be managed by Mikuni town and Fukui prefecture. Afterwards, the Japanese government appointed de Rijke and Japanese civil engineers to lead the construction. This project was finally completed in 1885, by which time the total construction cost had increased 7.5 times compared with Escher's original calculation. While underway, several visitors came to the site to learn about the method of this construction.

In the meantime, due to the improvement the port function as a result of the Dutch engineering, many national trade ships visited Mikuni port, however a railway was built to Mikuni town in 1911. Moreover, with an average water depth of three meters, Mikuni port was not able to accommodate big steam ships, hence most passengers and freight were carried by train¹⁴. Finally, the function of Mikuni port was changed from trade port to fishing port¹⁵. In 2003, the breakwater in Mikuni port was declared as a national important cultural property due to the excellent construction method and used Dutch engineering.

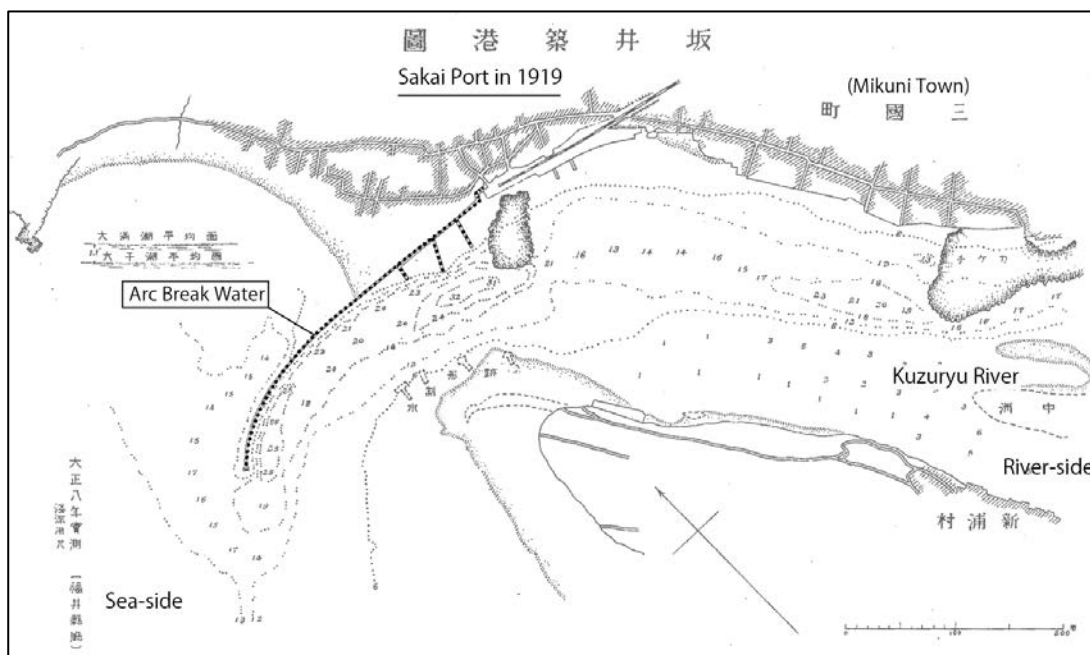


Fig.2 The Survey Drawing of Mikuni (Sakai) Port



Development of the Port: The Case of Yokohama Port

After the opening of Yokohama port in 1859, four foreign engineers participated in the design process. In general, in order to build new port, designer have to research the topographical features of potential locations, looking for a place with a suitable cove and hill, features which are important for providing protection from the wind and waves. However, Yokohama didn't meet those requirements¹⁶. In fact, when strong winds blew, it was impossible to unload goods from trade ships to the port¹⁷, making it unattractive to merchants. The Japanese government was afraid of the influence that the foreigners might have on the local people and so they tried to isolate them¹⁸. By the 1870s, some infrastructures had been built systematically in Yokohama, such as wide street between the foreign settlement and Japanese district as a means of fire spread prevention, and western style garden was also there¹⁹ (Fig.3).

In the 1870s, van Doorn, a Dutch engineer, and Brunton, a British engineer, attempted to design the new port. Both of their designs were rejected by the Japanese government because of the absence of a survey and budgetary deficit. In 1872, the first railway connection in Japan, was built from Tokyo to Yokohama, the reason for creating this route, Japanese government aimed to establish a logistics network between the port city and capital²⁰. In the 1880s, the United States of America made reparations to Japan for the Shimonoseki Campaign. By using this money, it was possible to start to work on new port project again. At the same time, two other foreign engineers started work on the design. Kanagawa Prefecture invited Henry Spencer Palmer, a British military engineer, to the

	Palmer	de Rijke
Location of Breakwater	○	○
Area of basin	△	○
Port Entrance	○	○
Height of Breakwater	○	○
The Structure of Breakwater (On Hard Ground)	○	○
The Structure of Breakwater (On Soft Ground)	×	△
Pier	○	○
Katabira River	×	○
Conclusion	×	○

○ : Consent
 △ : Revision is necessary
 × : Dissent

	Palmer	de Rijke
Forme of Breakwater (Part of North)	△	○
Forme of Breakwater (Part of East)	△	△
Location of Port Entrance	△	○
Area of Port Entrance	○	○
Ooka River	○	○
Katabira River	△	△
Location of Wharf	-	△
Link with Train	-	○
Height of Breakwater	×	△
The Structure of Breakwater	×	△
Construction Cost	×	○
Conclusion	×	○

Table.2 The Evaluation of “Furuichi and Gisaburo (Left-side)” and “Mulder (Right-side)”

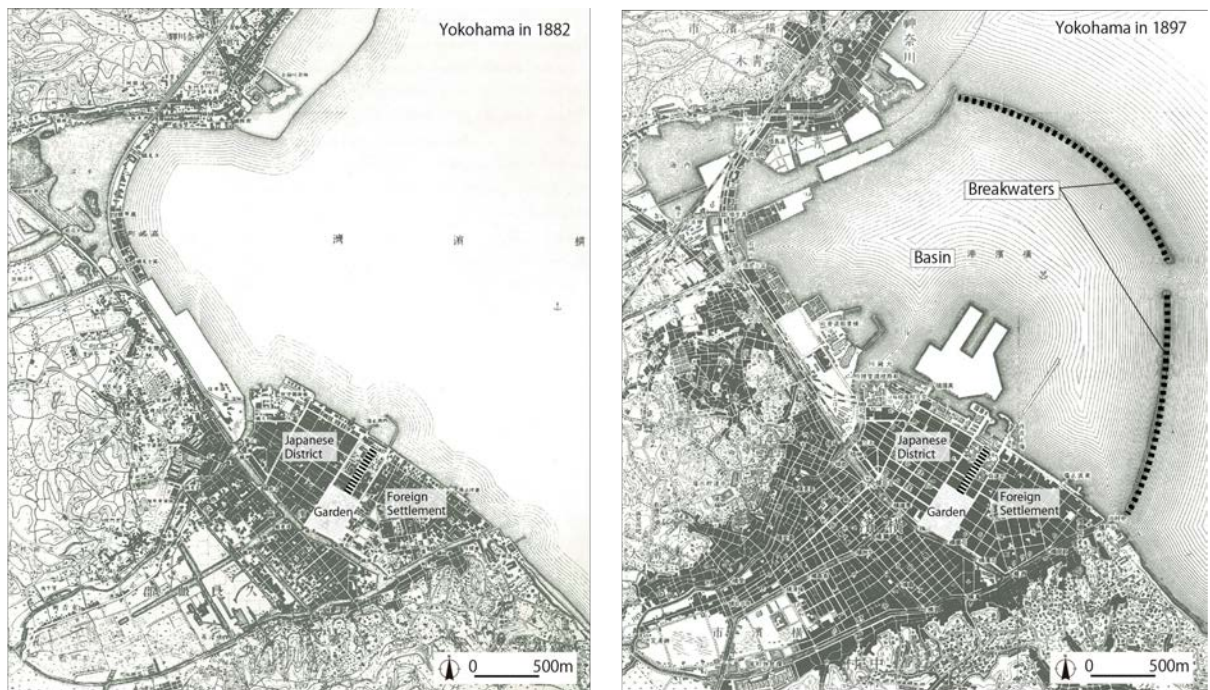


Fig.3 Yokohama Port, “Before Construction (Left-side)”, “After Construction (Right-side)”



new port project. He designed two wharves in Yokohama port, but de Rijke dissented in his plan and designed two large breakwaters to surround Yokohama port. Finally, the Foreign Office awarded the new port design to Palmer, while de Rijke was awarded the same plan by the Department of the Interior.

In 1888, three engineers, Koi Furuichi, Gisaburo Tanabe and A.T.L. Rouwenhorst Mulder, examined the two plans and according to their reports the contents of the designs were almost the identical. In fact, in both designs, Yokohama port was surrounded by two breakwaters, training dikes were to be built for the Katabira and Ooka rivers, and a pier was planned in inner harbor. The principal issue was the structure of the breakwater, especially the degree of difficulty of work and maintenance, repair and strength. In Palmer's design, the lower part of the breakwater was built in bagged concrete, and the upper part was concrete. In contrast, in de Rijke's design, the lower part of the breakwater was built with fascine mattresses, and the upper part consisted of gravel and sand and so on. Table 2 shows the opinions of the two Japanese engineers, Koi Furuichi and Gisaburo Tanabe. Especially on soft ground, when the breakwater is damaged, they indicate that Palmer's design is harder to repair than de Rijke's in terms of technique. Mulder also speaks highly of de Rijke's design, of using the fascine mattress in the breakwater, while he contradicts Palmer's design. In Mulder's report, he argued that the fascine mattress is able to adapt to any form on the seabed, that it functions long-term, has been used elsewhere in the world in place such as in Rotterdam, and that there are many suitable materials for the fascine mattress. On the other hand, Mulder mentioned that Palmer's survey result was initially incorrect, and his design was at risk of subsidence on soft ground. Finally, in case of adapting Palmer's design, Mulder believed that construction costs would exceed Palmer's calculation. This meant a budget deficit, hence he objected. For quite a while, Mulder had argued for the construction of a new port in Tokyo²¹. Therefore, as an additional remark, Mulder mentioned that proceeding with Tokyo port was a better option than improving Yokohama port due to the fact that there was plenty of land in Tokyo which was suitable for development²².

In 1889, the Japanese government ignored these opinions and decided to adopt Palmer's design (Fig3). From previous research it appears that this decision was part of a diplomatic effort aimed at the revision of an unequal treaty with the United Kingdom. However, as was expected, the breakwaters were destroyed during building work²³. After completion, the secure water area had been acquired by the building of two breakwaters, urban development continued on the hinterland and on the reclaimed land.

The influence of Dutch civil engineering on the Japanese port design

Through exploring these projects, this paper shows some examples of Dutch engineering in Japanese port construction, in particular, the design of breakwaters and the practice of dredging. In the construction of Nobiru port, van Doorn introduced Dutch steam dredging machines and used the fascine mattress to build a breakwater. In those days, most Japanese ports were located at a river mouth, therefore, dredging was necessary to maintain the function of the port. The Dutch steam dredging machines made it possible to establish and maintain the necessary water depth. Escher also introduced the fascine mattress for building the breakwater at the first modern port in Mikuni. The fascine mattress was able to adapt to slow flowing parts of the river²⁴ (Fig.4). Therefore, Japanese civil engineers used it mainly in river construction, and nowadays the fascine mattress is considered a "Japanese traditional technique"²⁵. Understandably, it is possible to use it in the port, but only for shelving the bottom. In the case of Nobiru, the water was deeper and the waves stronger. Building a breakwater in these conditions became technically possible after 1955²⁶. However, through the case of Nobiru and Mikuni, Japanese civil engineers studied and gained the knowledge of how to build an artificial basin. Grasping this concept has been very significant for Japanese port history.

In the case of Yokohama, there were two design plans, and finally the big issue was remained. In spite of the fact that some civil engineers recommended Rijke's plan for its feasibility and technical strength, Palmer's design was chosen. It is worth mentioning that the sloping-type breakwater which de Rijke designed is structurally weaker than Palmer's composite-type breakwater. However, the problem was that Japan was not able to make high quality concrete yet. Even nowadays, it is still necessary to take into consideration whether or not the materials that are used in construction are able to be prepared easily. In fact, Palmer's breakwater failed while under construction because of low quality concrete²⁷. On the other hand, there was an abundance of high quality materials available in Japan for the construction of the fascine mattress. It is pointed out that the fascine mattress was also effective in the construction of Yokohama port²⁸.

In Japanese technical book, fascine and fascine mattress appeared as progressive and useful technic in 1889²⁹. In this book, it was stated that the fascine could be used for breakwater, the base of embankment, improvement of rivers, spur dike, dam, sand control and the base of road on wetland soil. The fascine mattress provides water purification, so it can be useful for keeping the water clean and as the spawning ground for fishes and shellfishes³⁰. This means that this function is beneficial for an aquatic environmental up until now. The fascine mattress was

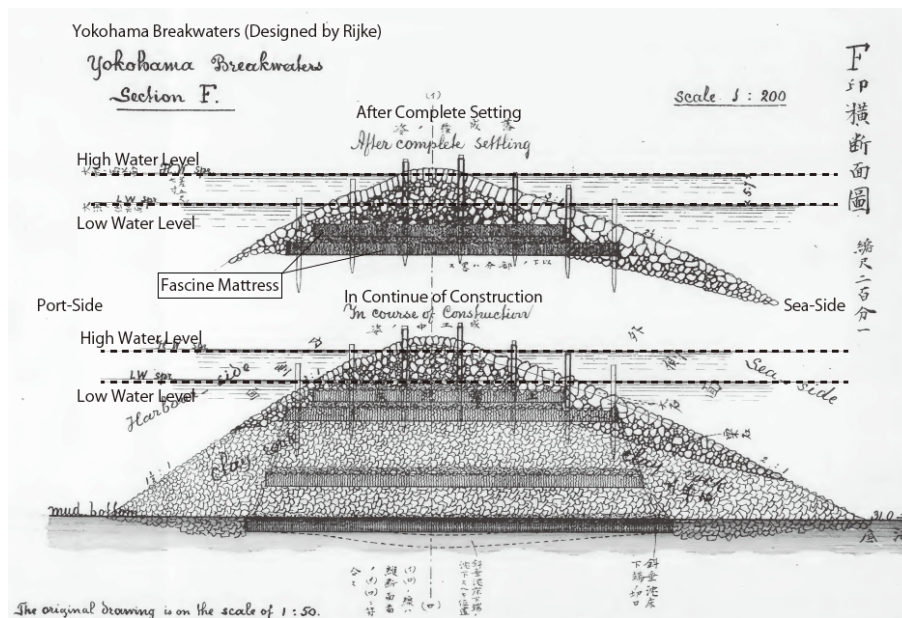


Fig.4 The Section of the Breakwater with Fascine Mattress

also used into Rotterdam port³¹ and in the Maas river in the 19th century, in the project named “Nieu Waterweg (New Water Street)”. The purpose of this project was also to make a new water way for the large ships. The point to note that Dutch civil engineers exported their modern techniques in those days to Japan. Thus, Japan obtained the modern techniques of water management through cross-cultural engineering.

Conclusion

After the opening up of the country, Japan had to adapt to international trade with the world through the building modern port. However, Japan did not possess the engineering capability to build a modern port, and so it invited Dutch civil engineers to contribute to river and port water management. As a result, they produced excellent results in river improvement projects, but on the other hand, in port projects, they were not able to build modern ports such as Yokohama port where continued to develop to the present day. However, Dutch contribution, in particular by teaching the use of the fascine mattress technique for breakwaters and in importing steam dredging machines, has been very significant for the construction of basins and the maintenance of modern port function. Through these engineering techniques, Japan was able to obtain the knowledge of how to realize the basin in the modern port for the first time.

Cross-cultural engineering was not successful in terms of importing a full system of planning and engineering. However, select technologies have been adopted, to the point where they are actually perceived as being Japanese. Exchange with foreign engineers allowed Japanese engineers to grow into their own.

Notes on contributors

Kazumasa Iwamoto is a PhD candidate in department of Civil Engineering, Kyoto University. His research topic are cross-cultural engineering and port planning through the lens of civil engineering. He has worked at TU Delft as a guest researcher, supported by MEXT, from February 2017 to March 2018. His research explores how civil engineering influence urban development and urban planning.

Carola Hein, is Professor and Head of the History of Architecture and Urban Planning, TU Delft.

Endnotes

¹ UNESCO, Decisions adopted by the World Heritage Committee at its 39th session, 2015

² Takasaki, T., Meijisyoki Oyatoi Orandajin Tyokoshi van Dorn kenkyu (The Study of van Doorn, Head Dutch Engineer, in early modern times), 2006

³ Kanbayashi, Y., Nihon No Kawa Wo Yomigaeraseta Gishi De Rijke (De Rijke, The Engineer who revived Japanese Rivers), 1999

⁴ Takahashi, Y., Nihon Doboku Gizyutu No Rekisi (The History of Japanese Civil Engineering), Tizin-Syokan, 1960

⁵ Koninklijke Bibliotheek holding, De Ingenieur (The Engineer), No5, 1887

⁶ Han Meyer, City and Port: Urban Planning as a Cultural Venture in London, Barcelona, New York, and Rotterdam. Changing Relations between Public Urban Space and Large Scale Infrastructure, Intl Books, 1999



- ⁷ Kobayashi, T., *Nihon no Minato no Rekishi (The History of Japanese Port)*, Kotu Kenkyu Kyokai, 1978
- ⁸ Okada, M., *Tohoku Kaihatsu Yawa (The Night Tale of The Development in Tohoku Region)*, Kinkoudou Shyupan Kabushiki-Kaisha
- ⁹ Hiroi, O., *Nihon Tikukou Shi (The History of Port Construction)*, Maruzen Kabushiki-Kaisha, 1927, 22-35
- ¹⁰ Nishiwaki, T., *Maboroshi No Nobiru Tikukou (The Visionary Port Construction in Nobiru)*, Fujiwara Shoten, 2012
- ¹¹ Tamura, K., *Kaihatsu No Rekishitiri (The History of Development)*, Taimeido, 1985
- ¹² Kato, T., *Kltamae-Bune Kikouti To Koeki No Monogatari (Kltamae Ship, The tale of trading and Port of Call)*, Mummyosya-Syuppan, 2002
- ¹³ Hiroi, O., *Ibid*, pp.36-47
- ¹⁴ Fikui Ken Sakai Gun Mikuni Cho Yakuba, Mikuni Cho Gaikan (The Overview of Mikuni Town), Meiji Insatsu Kabushiki-Kaisha, 1923
- ¹⁵ Mikuni Cho Shi Henshu Iinkai, Mikuni Cho Shi (The History of Mikuni Town), Yoshida Nishiki Bundou Kabushiki-Kaisha, 1964
- ¹⁶ Okamoto, T., *Ibid*, pp.200-244
- ¹⁷ Yokohama Toshi Hatten Kinenkan, *Minato Wo Meguru Nito Monogatari Edo Tokyo To Yokohama (The tale of The Two capitals, Edo and Tokyo)*, Sato Insatsu Kabushiki-Kaisha, pp.50-74,2014
- ¹⁸ Yokohamashi Kikakutyosei Kyoku, *Minatomachi Yokohama No Toshikeiseisi (The Urban Planning History of Yokohama Port City)*, Yokohamashi Kikakutyosei Kyoku, 1981
- ¹⁹ Okamoto, T., *Minatomachi No Kindai (The Port City in The Modern Times)*, Gakugei Syuppan-Sya, 2008
- ²⁰ Harada, K., *Nihon No Tetudo (The Japanese Railway)*, Sanseido, 1973
- ²¹ Mulder, *Tokyo Tikukou Ni Kansuru Mulder SHI Ikensho (The Submission of Mulder about Tokyo Port Construction)*, 1881
- ²² National Archives in Japan Holding, *Koushi Mulder Yokohama Tikukou Keikaku Iken Tekiyoku (The Abstract Submitted by Mulder about Yokohama Port Construction)*, 1888
- ²³ Kanagawa Ken, *Kanagawa Ken Shi Tushihen Roku Kindai Gendai San (The History of Kanagawa Prefecture in Modern and Present Times Vol.3)*, Dainihon Insatsu Kabushiki-Kaisha, 1981
- ²⁴ Naimu Sho Doboku Kyoku, *Doboku Kou Youroku Jin (The Abridgment of Civil Engineering Vol.3)*, Yurindou, 1881
- ²⁵ Kasen Dentou Kouhou Kenkyukai, *Kasen Dentou Kouhou (The Traditional River Technique)*, Chikikaihatsu Kenkyuzyo Kabushiki-Kaisha, 1995
- ²⁶ Suda, H., *Funadamari No Keikaku To Bouhatei No Sekouhou (Nobiru Kou) (The Planning of Basin and The Construction Method of Breakwater in Nobiru)*, 1978
- ²⁷ Yokohamashi Doboku Kyoku, *Yokohama Kou (The Yokohama Port)*, Yasuda Insatsu, 1973
- ²⁸ De Rijke Kenkyukai, *De Rijke Kenkyu vol.12 (The Study of De Rijke Vol.12)*, Chikikaihatsu Kenkyuzyo Kabushiki-Kaisha, 2002
- ²⁹ Tatumura, Y., *Sabokou Oyobi Soda kou (The Techniques of Sand Control and Fascine)*, 1889
- ³⁰ Kanbayashi, Y., *Ibid*, 76-83
- ³¹ J.G.Barnard, *The North Sea Canal of Holland and on the Improvement of Navigation from Rotterdam to the Sea to the Chief of Engineers, United States Army, Washington Government Printing Office, 1872*

Bibliography

- A. T. L. Rouwenhorst Mulder, *EEN DRIETAL ZEESTRATEN VAN DEN JAPANSCHEN ARCHIPEL (A Three Streets of The Japanese Archipelago)*, in *Tijdschrift van het Koninklijk Instituut van Ingenieurs 1892-1893*, 1893
- Carola Hein, *Port Cityscapes: Town and Harbour Development in the Global Context*, 2016
- Doboku Gakkai, *Meiji Igo Honpou Doboku To Gaizin (The Japanese Civil Engineering and The Foreigners after Meiji Era)*, Mitsuhide Sha, 1942
- G.van den Burg, *De Nieuwe Waterweg Poort van Europa (The New Waterway Gate of Europe)*, De bataafsche Leeuw, 1989
- Gasteren, L., *In Een Japanse Stroomversnelling (In a Japanese Rapids)*, euro book productions, 2000
- Honma, S., *Doboku Kyoku Oyatoi Ranzin De Rijke To Deshima (Deshima and De Rijke, The Foreign Government Advisor in Meiji Japan)*, Showadou Insatsu, 1999
- Hoshino, Y., Kitagawa, D., *Historical Research for planning and Construction of MISUMI Port*, journal of Historical Studies in Civil Engineering, vol.23, 2004, pp.95-108
- Kensetsu Sho Okayama Kasen Kozi Jimusho, *A.T.L Mulder NO Houkoku Oyobi Kankei Bunsho (The Reports and Sentences of A.T.L.Mulder)*, 1882
- Kumamoto Ken, *Kumamoto Ken Shi Kindai Vol.2 (The History of Kumamoto Prefecture in Modern Times Vol.2)*, Shukousha Insatsu Kabushiki-Kaisha, 1962
- Nagasaki Ken Doboku Ka, *Zasho Tsuzuri Nakajimagawa Henryu Kouzi Oyobi Kakyou Sekkeisho Meiji 18 Nen-Meiji 21 Nen (Assorted Reports About The Construction of Current Transformation in Nakajima River and The Design Specifications of Bridge Building)*, Nagasaki Ken, 1888
- Nagasaki Ken, *Nagasaki Kou Hozon Keikakusho Meiji 8 Nen-Dou 20 Nen (The Conservation Plan of Nagasaki Port from 1875 to 1887)*, Nagasaki Ken, 1887
- Nagasaki Shishi Henshu Iinkai, *Shin Nagasaki Shishi Vo.3 Kindaihen (The New History of Nagasaki Prefecture in Modern Times Vol.3)*, Nagasaki Shi, 2015
- Sanada, H., *Nihon Suisei Kou (The Japanese Construction of Spur Dike)*, Shin Nihon Insatsu Kabushiki-Kaisha, 1932
- Zaidanhoujin Kankou Shigen Hogo Zaidan, *Misumi Nishikou No Ishizumi Futou (The Stone Masonry Wharf in Misumi West Port)*, 1985

Image sources

- Figure 1: Hiroi, O., *Nihon Tikukou Shi (The History of Port Construction)*, Maruzen Kabushiki-Kaisha, 1927
Tamura, K., *Kaihatsu No Rekishitiri (The History of Development)*, Taimeido, 1985
- Figure 2: Hiroi, O., *Nihon Tikukou Shi (The History of Port Construction)*, Maruzen Kabushiki-Kaisha, 1927
- Figure 3: Yokohamashi Kikakutyosei Kyoku, *Minatomachi Yokohama No Toshikeiseisi (The Urban Planning History of Yokohama Port City)*, Yokohamashi Kikakutyosei Kyoku, 1981
- Figure 4: National Archives in Japan Holding, *Koushi De Rijke Yokohama Tikukou Keikaku Houkokusho (The Abstract Submitted by Mulder about Yokohama Port Construction)*, 1888



The Construction of a Socialist City by East German Engineers in the Late 1950s: Post-war Reconstruction of Hamhung

Hideo Tomita*

* *Dr. Eng., Faculty of Architecture and Civil Engineering, Kyushu Sangyo University, tomi@ip.kyusan-u.ac.jp*

In the late 1950s, hundreds of East German engineers moved to the North Korean city of Hamhung to help with urban reconstruction after the Korean War; they were known as the ‘German Work Team Hamhung’. However, research on cross-border propagation of city planning for mass demonstrations appears to be non-existent. Therefore, this study investigates the square and street network designed for mass demonstrations in Hamhung and evaluates it from a socialist city planning history perspective. The research findings revealed the following: The reconstruction plan of Hamhung as a socialist city in the latter half of the 1950s had characteristics similar to the socialist cities of the Soviet Union (early 1930s) and East Germany (early 1950s). German architects contributed transnationally to the construction of socialist cities. In particular, in the case of Hamhung, the presence of Konrad Püschel was substantive. As mentioned above, although the East German engineers followed the concept and methodology in the aforementioned socialist states, they adapted them to the local circumstances that were ascertained by detailed preliminary survey work. Their activities represent the unconsidered aspect of the global/worldwide spread of the concept and methodology of socialist city planning.

Keywords: Post-war Reconstruction, East German Engineers, 1950s, Socialist City Planning, Hamhung

1. Introduction

1.1 Post-war Reconstruction of Hamhung

In the latter half of the 1950s, hundreds of East German engineers moved to the North Korean city of Hamhung to help with urban reconstruction of war damage from the Korean War. Owing to the cooperative relationship between socialist nations, they moved to an unfamiliar world at the request of the East German government. They were known as the ‘German Work Team Hamhung’ (Deutsche Arbeitsgruppe Hamhung) and were under the control of the organization Baustab Korea (Berlin) within the Ministry of Trade (Ministerium für Außenhandel und Innerdeutschen Handel).

Konrad Püschel (1907–1997) led the city planning department for the German Work Team, beginning in 1955. After studying at the Bauhaus, he moved to the USSR together with Hannes Meyer as a member of the Bauhaus Brigade in 1931. He was involved in the new socialist city construction of the Soviet city of Orsk. He began working for the Academy of Architecture and Fine Arts at Weimar in East Germany in 1948 and was later engaged in the post-war reconstruction of Hamhung.

Hamhung, the second largest city in North Korea, located on the northern coast of the Korean Peninsula, has long been the central city in this region. During the late 1920s, with the completion of hydroelectric plants in the northern mountains, industries developed rapidly in the coastal city of Hungnam, on the outskirts of Hamhung. Later, nearly 80%–90% of Hamhung was destroyed during the three continuous years of the Korean War, between June 1950 and July 1953. In August 1953, after the armistice, the Central Committee of the Workers’ Party of Korea plenum took up the issue of post-war reconstruction, and a three-stage reconstruction plan was unveiled for actions from 1953 to 1961.

1.2 Previous Research and Study Objective

Regarding the influence of East Germany on North Korea, Frank (1996) described the outline of the central square in post-war reconstruction city plans and highlighted the influence of the Stalinallee in Berlin (now the Karl-Marx-Allee) on Püschel’s plan¹. Shin (2017), who served as an interpreter for German Work Team Hamhung at the time, noted that the urban development principle of the East Germany as strictly applied to Hamhung².



About the influence of the USSR on East Germany, the book ‘Ostkreuz’ (1999) explains East German post-war city planning ideas and their relation to Soviet city planning.³ Wakeman (2014) examined residential complex projects in the post-war reconstruction of East Germany since the 1950s and pointed to their transnational background.⁴ In addition, Kim and Jung (2017) evaluated the micro-district theory regarding the post-war reconstruction of North Korean cities in the context of socialist nations.⁵

However, research on cross-border propagation of city planning for mass demonstrations, such as from East Germany to North Korea, appears to be non-existent. Therefore, this study investigates the square and street network designed for mass demonstrations in Hamhung and evaluates it from a socialist city planning history perspective. For this study, we used materials left by Püschel at the Dessau Bauhaus Foundation and semi-annual reports of the German Work Team Hamhung from the German Federal Archives.

The study is organised as follows: Regarding research methodology, Section 2 discusses changes in the organizational structure of German Work Team Hamhung, and clarifies the position of urban planning department in the organization and achievements of Püschel, who has intermittently been a leader. In Section 3, we evince that the square and street network for mass demonstration was the greatest feature of the newly built socialist cities in the 1930s Soviet Union and early 1950s East Germany, and Püschel had a special career in each country concerning urban planning. In Section 4, we highlight the similarity between the Hamhung and Ham Hing plans in the late 1950s.

2. Organization of ‘German Work Team Hamhung’

2.1 History of Organization

German Work Team Hamhung, under the control of Baustab Korea (Berlin), submitted a report every six months to the Director of Baustab Korea. Among them, documents on organizational planning of staff members were also included (Figure 1). These materials have not been examined in previous studies and are highly useful. Specifically, the organizational structure was confirmed every six months from the second half of 1956 to the second half of 1960. From 1961 to 1962, one type of organization chart was also confirmed; however, since this organization chart was not available for every year, it was excluded from this study. These materials revealed constant changes in the organizational structure and number of experts. These changes are considered to reflect the situation at each stage of the reconstruction project.

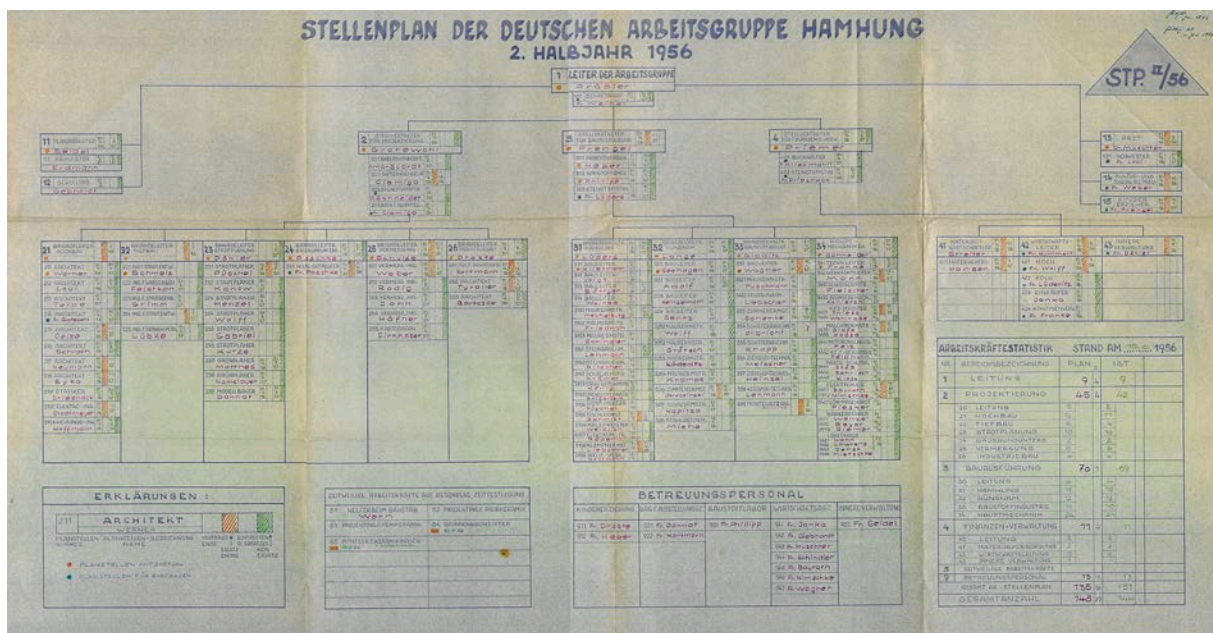


Figure 1: Organizational plan of the German Work Team Hamhung (1956)

In the latter half of 1956, the organization comprised a total of 148 members (135 experts).⁶ The leadership department (9 experts, same as below) included three sub-departments: planning (45), building and construction department (70), and administration and finance (11). In addition, a caretaker department (13) comprising the



experts' spouses was established. Despite a gradual decrease in the number of members, the organizational structure itself did not change until 1957.⁷ From 1958, the departments were abolished and reorganised into six teams: namely (1) the measurement and building site survey teams of the planning department were integrated with the urban planning team and renamed as the urban planning and measurement team.⁸ (2) As the scale of the building construction department was reduced, the department was downgraded to a team, and the construction machinery team became independent.

During the second half of 1958, the city planning and measurement team and underground construction team were integrated and reorganised into four teams.⁹ However, the integration was dissolved in the first half of 1959. In 1959, the industrial building team and the building construction team were reorganised into five teams.¹⁰

Table 1 presents the changes in the planned number of experts every six months, which has not been clarified in previous studies. As for the 1955 year without the material, Püschel described that nearly 175 experts participated in 1955.¹¹

Thus, the most experts were dispatched in 1955 at the beginning of the post-war reconstruction project; in 1958, their number was reduced to 40 experts, whereas in 1960, the number reached 60 experts.

Table 1: The planned number of experts within German Work Team Hamhung

Year	First half of the year	Second half of the year
1956	-	135
1957	100	87
1958	43	35
1959	44	53
1960	65	67

2.2 Change in Urban Planning Team

Table 2 presents the stipulated number of city planners (Stadtplaner) within German Work Team Hamhung. In the second half of 1956 and first half of 1957, the urban planning team comprised one team with ten experts. Under one team leader, there were a total of ten experts, including six city planners, two green planners, and one model maker. However, in the second half of 1957, it decreased to one city planner under one team leader.

The main framework of the post-war city planning of Hamhung was completed in 1955. According to the autobiography of Püschel, the first leader of the city planning team, the city planning team had only three experts in March 1956. Thus, during this period, there were only two experts, Püschel and Peter Doehler, in urban planning. The city planning department was headed by three prominent leaders at different time periods: Püschel (from April 1955 to December 1955 and from September 1957 to December 1958), Peter Doehler (from December 1955 to February 1957), and Erich Ressel (February 1957 to September 1957).¹²

Based on these analyses, it can be inferred that the city planning team was in the following situation: First, in 1955, the framework of the reconstruction city plan was established under the leadership of Püschel. Second, the number of city planning experts dramatically increased under the leadership of Doehler in 1956, who intensively stuffed the plans with details. Finally, in the second half of 1957, the city planning was almost completed; therefore, it can be considered that there were only one or two experts in charge of city planning. In other words, the basic plan of 1955, under the leader of Püschel, was relatively important.

Table 2: The stipulated number of city planner within German Work Team Hamhung

Year	First half of the year	Second half of the year
1956	-	6
1957	6	1
1958	1	1
1959	2	2
1960	1	1



3. Konrad Püschel's Career and Socialist City Planning in the USSR (Early 1930s) and East Germany (Early 1950s)

Püschel planned the socialist city of Hamhung with a square and a street network for mass demonstration in the latter half of the 1950s. This feature was most emphasised in the construction of socialist cities in Moscow in the early 1930s and East Germany in the early 1950s, such as Berlin and Leipzig. In reality, German architects designed and constructed socialist cities in the 1930s in the USSR, which became the model for East Germany's post-war reconstruction in the early 1950s. Püschel also experienced the construction of socialist cities in these two countries in his career. This section explains the networks of streets and central squares designed specifically to accommodate mass demonstrations in the USSR in the 1930s and in East Germany in the 1950s.

Püschel was concerned with city planning in the USSR in the early 1930s. From 1930 onward, the city of Moscow held annual design competitions for festivals in urban spaces, especially mass ceremonies and demonstrations to commemorate the Russian Revolution. Competitions for the development and reconstruction of greater Moscow (1931-32) are popular examples. For the competition, Ernst May and Hannes Meyer proposed the same idea for a mass demonstration space: First, ring road A would be widened to incorporate a green zone in which massed demonstrators would march through for revolution or May Day celebrations. Second, significant architecture would be placed at the heart of the city to accommodate mass demonstrations. In particular, Meyer proposed widening Red Square and incorporated skyscrapers in his plan.¹³

The basic reconstruction plan for Hamhung was determined in 1955. To explain the origin of Hamhung's plan, we will note some typical features of East German post-war reconstruction in the early 1950s, including concern for urban space, the setting of demonstration routes, and demonstration squares with symbolic high-rise buildings. The post-war reconstruction in 1950s East Germany was conducted simultaneously with its reconstruction as socialist cities. The following seven cities were important socialist cities in East Germany at that time: Stalinstadt (now Eisenhüttenstadt) – newly constructed as East Germany's first socialist city, Hoyerswerda – a new town built as the second socialist city, East Berlin, Dresden, Leipzig, Rostock, and Magdeburg – that respected existing urban structure and functioned as socialist cities, were included. The first two new cities were constructed near the Poland border. The plans of the socialist cities in East Germany were modelled on Soviet socialist cities and featured residential complexes, demonstration routes, and demonstration squares with high-rise buildings. These features were well organized with each other. They were furnished in newly constructed cities. In existing large East German cities, these socialist features were incorporated based on analyses of the city's structure. For example, in East Berlin, the newly designed wide street Stalinallee was part of the demonstration route. Through that route, mass demonstrators were expected to gather in the square at the former royal palace site in the centre of Berlin. The establishment of a high-rise building was planned beside the square. There were similar plans in other large East German cities such as Dresden, Leipzig, and Magdeburg.

Thus, a common social situation existed in order to build new socialist cities in the Soviet Union in the first half of the 1930s, in East Germany in the first half of the 1950s, and in North Korea in the latter half of the 1950s.

These features were also observed in the post-war reconstruction of Hamhung in North Korea as executed by East German architects in the late 1950s. The next Section discusses Hamhung's plan, explaining that it shared fundamental concepts with East German city layouts.

4. Square and Street Network for Mass Demonstrations in Hamhung

The city planning department arranged the central square at the city centre and connected it with a street network, through which mass demonstrators could gather easily at the central square. In addition, the central square was surrounded by high-rise public buildings as symbols of urban space.

4. 1. Street Network for Mass Demonstrations

In 1937, the Empire of Japan drew up a city plan for Hamhung, including new main roads and a railway station. In the early stages, the East German architects created a city plan based on the Japanese grid-based city planning (Püschel, 1959).¹⁴ However, they finally rejected this plan and produced a reconstruction plan, characterised by three gently curved radial streets, a demonstration street, and a central square at their intersection (Figure 2). The grid-based city plan was primarily rejected because of Püschel's in-depth understanding of the city form in the Korean Peninsula.¹⁵ He used a method to thoroughly investigate the planning area before city planning. It is believed that the survey results revealed gently curving radial streets that organically connected with the existing urban structure. His city planning methodology at Hamhung was completed in the following three stages: (1) Investigation of the structural characteristics of the planning area, (2) new ordering of planned space based on structural value, and (3) completion of the entire plan of post-war reconstruction of Hamhung. This methodology



was written in a report summarizing Püschel's work at Hamhung in January 1959, when he completed the city planning.

Wilhelm Pieck street and Kim Il-sung street followed the city's historical main streets. Market street and transport street, two of the three radial streets, were also based on historical roads. However, the central axis street, one of the three radial streets, was newly designed to be the new axis of the socialist city. Five-storey apartments with pitched roofs were arranged on both sides.

All these streets are connected to the Central Square (in particular Demonstration square) located at the centre of the city. Püschel described Central Square as follows.

'It (the Central Square) will be a gathering place, which calls the residents of Hamhung to rallies and demonstrations, which unites them to joyful play and dance, giving them rest and joy'.¹⁶

For a political event that involved the entire city, people gathered at the Central Square through these streets. Thus, a street network for mass demonstrations was formed around the central square.



Figure 2: Central Area of Hamhung by the city planning department of the German Work Team, October 1959

4. 2. The Central Square with High-rise Public Buildings

Püschel designed the central square as a symbol of urban space based on three considerations: first, the square's relationship with the street network; second, the construction of a twelve-storey high-rise public building (the 'central building') next to the central square (Figure 3); and third, the position of the podium relative to the demonstration street and central building.

Using this street network, mass demonstrators could gather easily at the central square. Püschel wrote as follows: 'Wide inner-city streets touch the central square. Parallel to the central building, a demonstration street leads from the sport stadium via an industrial area culture park to the podium'.¹⁷

The 'central building' contained many public facilities and organisations: the main provincial offices, party and mass organisations, city administration facilities, a main post office, city library, and provincial culture centre. Demonstrators would gather at the square in front of the central building.

The podium for the mass demonstration was arranged on the south of the square to light the speakers from behind (Figure 4). Moreover, as evident from the drawing, 'the main building gives the demonstration a dignified background from the viewpoint of podium'.¹⁸

In fact, the characteristics of Hamhung's city planning in the latter half of the 1950s were similar features seen in the reconstruction city planning in East Germany in the early 1950s. In the Stalinallee competition at East Berlin in 1951, high-rise apartments were also arranged parallel to the street. Gently curved radial streets were also seen in the design of Stalinstadt in 1951, which was built as the first socialist city in East Germany, now Eisenhüttenstadt. In East Berlin, high-rise public building projects set beside the central square were seen from 1950 onward. The building design changed from decorative in the early 1950s to non-decorative in the late 1950s, a reflection of criticism against Stalinism. Parallel to those in East Germany, the design of Hamhung's central building was also non-decorative.

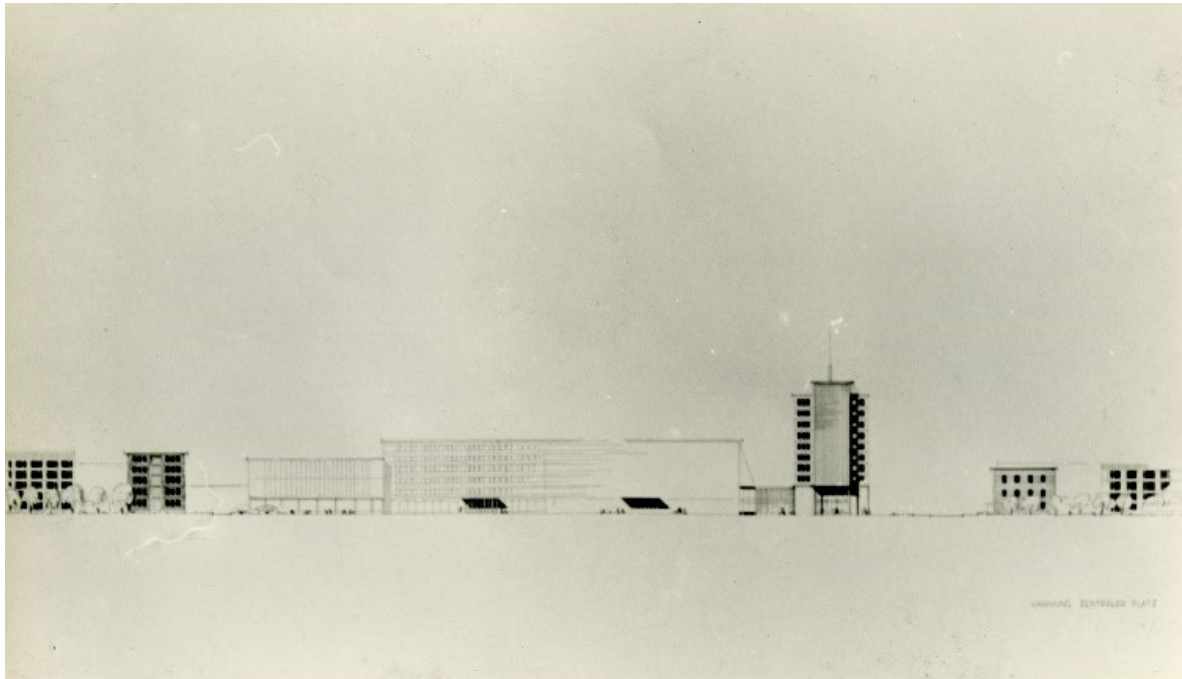


Figure 3: Central Building next to the Central Square

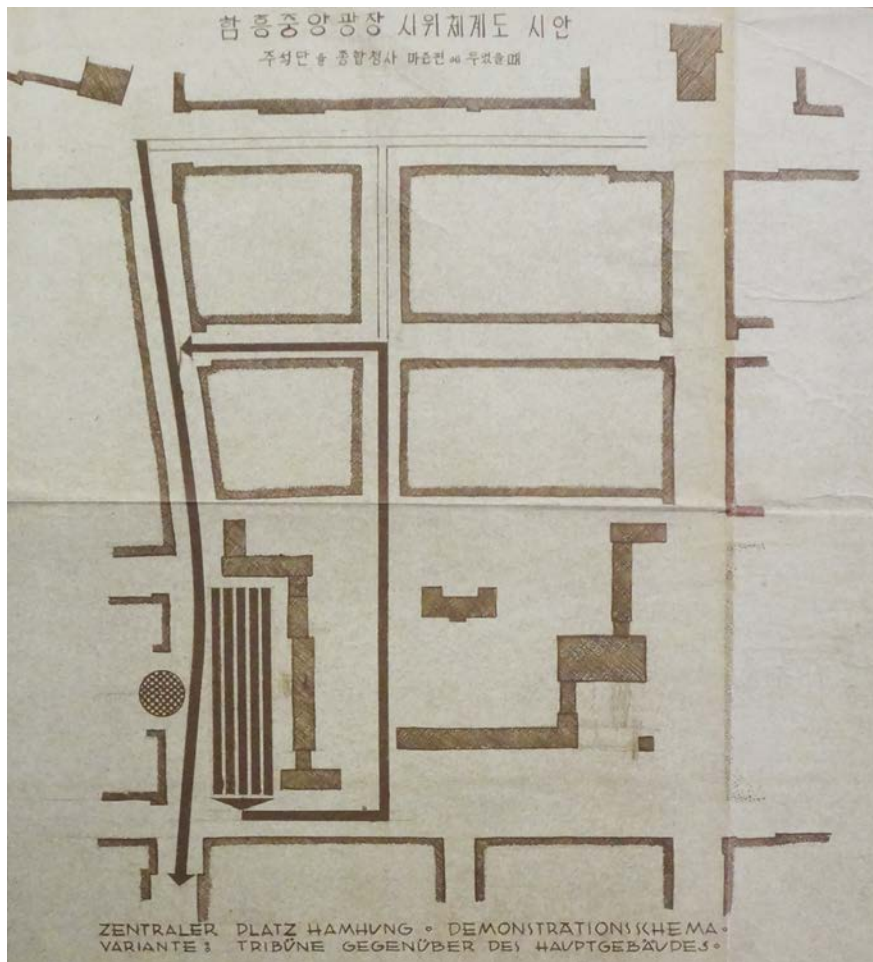


Figure 4: Demonstration route and podium



5. Conclusion

Thus, the reconstruction plan of Hamhung as a socialist city in the latter half of the 1950s had characteristics similar to the socialist cities of Soviet Union in the early 1930s and East Germany in the early 1950s.

As highlighted in Section 3, German architects influenced the reconstruction plan as a socialist city in Moscow in the early 1930s. Thus, German architects contributed transnationally to the construction of socialist cities. In particular, in the case of Hamhung, the presence of Püschel was substantive. In fact, Püschel engaged in the practice and study of socialist city planning in the 1930s USSR and 1950s East Germany, which were very advanced in terms of socialist city planning. In both the nations, streets networks and squares were very important features.

As previously mentioned, although the East German engineers followed the concept and methodology in the aforementioned socialist states, they adapted them to the local circumstances that were ascertained by detailed preliminary survey work. Their activities evince the unconsidered aspect of the global/worldwide spread of the concept and methodology of socialist city planning.

Acknowledgements

This research was supported by JSPS KAKENHI Grant Numbers 26420659, 18H01616.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Dr. Hideo Tomita (b. 1974) has been working as an Associate Professor at the Faculty of Architecture and Civil Engineering, Kyushu Sangyo University in Japan. He graduated from the doctoral course of the Graduate School of Engineering at Hiroshima University, receiving his Doctor of Engineering degree in March 2002. From 2005 to 2006, he was a guest researcher at the Bauhaus University Weimar. In 2015, he was granted the Journal of Asian Architecture and Building Engineering Best Paper Award 2014 from AIJ, AIK, and ASC. From 2016 to 2017, he was a guest researcher at the Technical Institute of Berlin.

Endnotes

¹ Frank, R., *Die DDR und Nordkorea: Der Wiederaufbau der Stadt Hamhung von 1954-1962*. Aachen: Shaker Verlag GmbH, 1996.

² Sin, Dong Sam, *Die Planung des Wiederaufbaus der Städte Hamhung und Hungnam in Nordkorea durch die DAG-Städtebaubrigade der DDR von 1955 - 1962 - eine städtebaugeschichtliche Abhandlung aus der Sicht eines Zeitzeugen*, HafenCity Universität Hamhung, 2017.

³ Durth, W., Düwel, J., and Gutschow, N. (eds.) (1999), *Ostkreuz, Architektur und Städtebau der DDR Band 1*, Frankfurt: Campus.

⁴ Wakeman, R., Was There an Ideal Socialist City? Socialist New Towns as Modern Dreamscapes, in: Diefendorf, J.M. and Ward, J. (eds.), *Transnationalism and the German City*, New York: Palgrave Macmillan, 2014, pp. 105-124.

⁵ Kim M. and Jung, I., The planning of microdistricts in post-war North Korea: space, power, and everyday life. *Planning Perspectives*, Vol. 32 (2), 2017, pp. 199-223.

⁶ Stellenplan der Deutschen Arbeitsgruppe Hamhung, 2. Halbjahr 1956. DL2, 4395 (Bd. 1), Bundesarchiv (Berlin Lichterfelde)

⁷ Stellenplan der Deutschen Arbeitsgruppe Hamhung, 1. Halbjahr 1957, 2. Halbjahr 1957. DL2, 4395 (Bd. 1), Bundesarchiv (Berlin Lichterfelde)

⁸ Deutschen Arbeitsgruppe Ham-Hung, Stellenplan I. Halbjart 1958. DL2, 4395 (Bd. 1), Bundesarchiv (Berlin Lichterfelde)

⁹ Stellenplan II./58, DL2, 4395 (Bd. 1), Bundesarchiv (Berlin Lichterfelde)

¹⁰ Stellenplan der DAG 1. Halbjahr 1959, DL2, 5359 (bd. 1), Bundesarchiv (Berlin Lichterfelde)

¹¹ Püschel, K., *Wege eines Bauhäuslers*, Dessau, Anhaltische Verlagsgesellschaft mbH, 1996, p. 116.

¹² *Op. cit.*, pp. 119-120.



¹³ Tomita, H. and Ishii, M., “The Influence of Hannes Meyer and the Bauhaus Brigade on 1930s Soviet Architecture”, *Journal of Asian Architecture and Building Engineering*, Vol. 13, No. 1, Tokyo, Architectural Institute of Japan, 2014, pp. 49-56.

¹⁴ Püschel, K., “Ein Überblick über die Entwicklung und Gestaltung Koreanischer Siedlungsanlagen”, *Wissenschaftliche Zeitschrift der Hochschule für Architektur und Bauwesen Weimar*, VI. Jahrgang, 1958/59, Heft 5, 1959, pp. 459-477.

¹⁵ Ibid.

¹⁶ Püschel, K., Ausstellung Hamhung und Hungnam, 1958, Dessau Foundation collection, I18377F.

¹⁷ Ibid.

¹⁸ Zentraler Platz Hamhung·Demonstrationsschema Variante: Tribüne mit Hauptgebäude Verbunden, date unknown, Dessau Foundation collection.

Bibliography

Durth, W., Düwel, J., and Gutschow, N. (eds.) (1999), *Ostkreuz, Architektur und Städtebau der DDR Band 1*, Frankfurt: Campus.

Frank, R., *Die DDR und Nordkorea: Der Wiederaufbau der Stadt Hamhung von 1954-1962*. Aachen: Shaker Verlag GmbH, 1996.

Kim M. and Jung, I., The planning of microdistricts in post-war North Korea: space, power, and everyday life. *Planning Perspectives*, Vol. 32 (2), 2017, pp. 199-223.

Püschel, K., “Ein Überblick über die Entwicklung und Gestaltung Koreanischer Siedlungsanlagen”, *Wissenschaftliche Zeitschrift der Hochschule für Architektur und Bauwesen Weimar*, VI. Jahrgang, 1958/59, Heft 5, 1959, pp. 459-477.

Püschel, K., *Wege eines Bauhäuslers*, Dessau, Anhaltische Verlagsgesellschaft mbH, 1996.

Sin, Dong Sam, *Die Planung des Wiederaufbaus der Städte Hamhung und Hungnam in Nordkorea durch die DAG-Städtebaubrigade der DDR von 1955 - 1962 - eine städtebaugeschichtliche Abhandlung aus der Sicht eines Zeitzeugen*, HafenCity Universität Hamhung, 2017.

Tomita, H. and Ishii, M., “The Influence of Hannes Meyer and the Bauhaus Brigade on 1930s Soviet Architecture”, *Journal of Asian Architecture and Building Engineering*, Vol. 13, No. 1, Tokyo, Architectural Institute of Japan, 2014, pp. 49-56.

Wakeman, R., Was There an Ideal Socialist City? Socialist New Towns as Modern Dreamscapes, in: Diefendorf, J.M. and Ward, J. (eds.), *Transnationalism and the German City*, New York: Palgrave Macmillan, 2014, pp. 105-124.

Image sources

Figure 1: Bundesarchiv (Berlin Lichterfelde)

Figure 2: Bauhaus Dessau Foundation

Figure 3: Bauhaus Dessau Foundation

Figure 4: Bauhaus Dessau Foundation



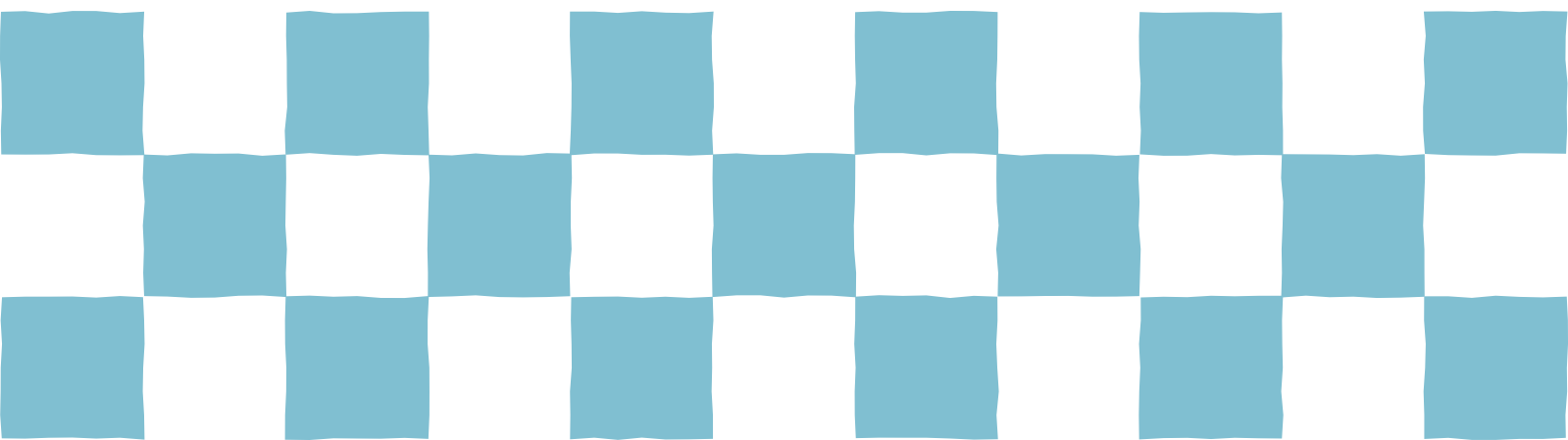
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

30 Zoning, Regulation and Guideline



Port of Resistance: The Role of Activism in Shaping Zoning Ordinances at the John F. Kennedy International Airport

Cequyna Moore (Cequyna Moore Planning Consultants)

When one thinks of a port city, harbors teeming with majestic schooners, longshoremen, and docks filled with wooden barrels come to mind. Although maritime ports continue to shape the lives of the port city, the airport has become the vehicle for high value goods that are shipped globally (www.boeing.com)

Idlewild Airport, now the John F. Kennedy International Airport, opened on the marshes of Jamaica Bay in 1948. During its opening year, 222,620 passengers, 4,580 tons of air cargo, and 1,150 tons of mail traveled through the John F. Kennedy International Airport. Today, those numbers have increased exponentially: 53,254,533 passengers, 1,343,683 tons of air cargo, and 89,162 tons of mail travel through the airport (www.panynj.gov)

During the course of nearly seventy years of existence, the airport has become one of the world's leading cargo centers. According to industry analysis, the airport is ranked seventh in the United States in regard to total air cargo handled and is ranked nineteenth worldwide (www.nyedc.com)

What role does community activism play in the shaping of ordinances and how does race and class factor into favorable outcomes for the host communities. As the influence of the airport grew, so did the environmental impacts that affect quality of life, including but not limited to, noise and air pollution, increased traffic, and the development of off-site cargo facilities. Traditionally, planning policies near the airport limited the height of buildings in order to facilitate the safe landing of aircraft. However, issues such as air and noise pollution adversely affect the neighborhoods that are located in the direct vicinity of the airport (Bednarek, 2016)

Through interviews and archival research this paper will discuss the history of Springfield Gardens, Rosedale, Laurelton, South Ozone Park, Ozone Park, Howard Beach and the Rockaway; New York City neighborhoods located in the immediate vicinity of the John F. Kennedy International Airport, and grassroots activism and legal action that influenced zoning changes near the airport. This paper can serve as a case study and resource for communities in rapidly developing areas that are balancing quality of life issues with infrastructure needs.

The Chinesization of American Zoning in the 1980s: From Shanghai Hongqiao Experiment to Wenzhou Old Town Renewal

Yun Shen (Shanghai Tongji Urban Planning and Design Institute) and Li Hou (Tongji University)

The most instrumental reform in Chinese urban planning system during the market reform in the 1980s is the introduction of so-called “regulatory detailed planning” (in Chinese pinyin, kong gui), an adaptive form of American zoning in Chinese cities. For the first three decades of People's Republic of China, based on the soviet model, master planning was considered a core instrument to arrange land use and spatial layout of cities, while detailed planning was made for direct implementation of specific projects, to “materialize” the national economic plans. Beginning from the early 1980s, with the introduction of foreign direct investment and land reform, a more regulatory approach was introduced. It borrowed the control indexes such as floor area ratio (FAR), building density, height limits from American zoning into the traditional detailed plan-making system. However, the authors argue that, regulatory detailed planning is not the simple imitation of American zoning, Chinese urban planners have selectively borrowed tools and indexes from zoning to fit in the institutional context.

The birth and later wide application of regulatory detailed planning began with local experiments, in which Shanghai and Wenzhou (a merchant town in Zhejiang Province) have had a pioneering impact. Based on archival research, mapping and interviews, this article traces the planning and development process of Shanghai Hongqiao and Wenzhou old town, and explores the original process of transplantation and localization of American zoning in Chinese cities. The experiment of introducing regulatory detailed planning showed the different process of land reform in different cities. Due to the different hierarchical status of cities in the country, local culture, the involvement of social groups and many other factors, there are also great differences in the sources of funding, investment and modes of cooperation for the construction and reconstruction between the two cities, as well as the roles and functions of the planning policies. As a show window opening to the outside world representing Shanghai, Hongqiao New Area has been selectively developed in cooperation with large foreign corporations (i.e. listed on Fortune Global 500) The redevelopment of Wenzhou old town, on the other hand, has been depended more on small-scale private capital, overseas Chinese businessmen, joint ventured with local state-owned enterprises. Nevertheless, the experiments on planning by the two municipalities were for the same purpose— seeking new sources of capital to finance urban construction.

This article argues that the introduction of regulatory detailed planning serves as a technical tool, which is rather a continuation of its past, to materialize the development goals of the cities. It has been instrumental for the governments marketing its development goals to the global market, and has provided a platform to negotiate with the private sectors, rather than representing public intervention and regulation in the US. The frequent adjustment of planning control indexes, especially FAR during the development process, reflects the testing of market acceptance and the maximizing development benefits. A new urban development control system in Chinese cities has ever since begun to establish.

Urban planning codes and urban form, a review of the Brazilian case

Luiz Carvalho Filho (Delft University of Technology)

This paper is part of an ongoing study that examines segregation patterns in urban spaces, and moreover, the influence of urban planning and 'planning by codes' in the relationship between urban form and segregation in the Brazilian City. The broader context for the study is the effect of rapid urbanisation on the spatial and social conditions in cities.

Some aspects of the recent urbanisation in Brazilian cities has been consistently described by the use of images such as 'gated city', 'anti-urban typologies', or 'the city of walls'. (Caldeira, 1996a, 1996b, 2000; Figueiredo, 2012; Netto, 2017) Such images reflect a narrative of loss (Arefi, 1999) regarding the connection between places and people. They reflect a particular pattern of segregation in cities, what is sometimes described as 'anti-urban'. As cities continue to transform following this anti-urban model, the risks of exacerbating social and spatial divides increases and possible progressive responses are made very difficult. Segregation in this context follows a new logic, no longer a mere opposition centre-periphery but a hybrid and intertwined set of "...architectural typologies, spaces and transportation systems that favour a few ways of life over all others." (Figueiredo, 2012, p. 1)

This paper is divided into two parts. First there is a description of the urban form that has been associated in previous studies with segregation in the Brazilian context. The second part explores how planning codes respond, react or even contribute to the emergence of anti-urban form.

Findings suggest that the 'planning by codes' approach has resulted in the standardisation of the city landscape, the disruption of the qualities associated with public life and increased social-spatial segregation. (Gehl Institute, 2017)

This paper describes the impact of the current planning regime and the general model of planning primarily via zoning and normative instruments on the relationship between urban form and segregation in the Brazilian city. Bernardo Secchi has emphasised the importance of investigating such processes.

'What changes down the history of the city is much more the regulatory sense and role of each device rather than the catalogue of devices, and it is through this regulating action that the city becomes a machine for social integration or exclusion as the case may be (Boano & Astolfo, 2015)

The initial phases of the research (Carvalho Filho & van Nes, 2017a, 2017b) revealed significant relations between the spatial parameters regulated on planning instruments and the emergence of several typologies of urban environments. One of these types, building with blind plinths, resonates characteristics of the anti-urban typology described in the literature (Caldeira, 1996b; Figueiredo, 2012)

Correlating in time the changes in parameters present in the planning codes with the emergence and spread of this typology demonstrates that the methodological approach of the research can identify relations not so evident currently between planning, urban form and public life.



The Chinesenization of American Zoning in the 1980s: From Shanghai Hongqiao Experiment to Wenzhou Old Town Renewal

Yun Shen*, Li Hou **

* *Shanghai Tongji Urban Planning and Design Institute, shenyun-tj@qq.com*

** *Tongji University, houli@tongji.edu.cn*

The most instrumental reform in Chinese urban planning system during the market reform in the 1980s is the introduction of so-called “regulatory detailed planning” (in Chinese pinyin, kong gui), an adaptive form of American zoning in Chinese cities. However, this episode of the reform hasn’t been closely examined from a historic and critical perspective so far. Based on archival research, mapping and interviews, this article traces the planning and development process of Shanghai Hongqiao New District and Wenzhou old town, and explores the original process of transplantation and localization of American zoning in Chinese cities. By comparing the planning and construction explorations of the two cities, we will argue that although it learned much from zoning techniques, especially the control indexes, the regulatory detailed planning is more to be a platform for local government to negotiate with the foreign businessmen and other private sectors, rather than representing public intervention and regulation in the US, and served as a technical tool to materialize the development goals of Chinese cities.

Keywords: planning history, zoning, Reform and Opening Up, Shanghai Hongqiao, Wenzhou old town renewal

Introduction

For the first three decades of People’s Republic of China, based on the soviet model, master planning was considered a core instrument to arrange land use and spatial layout of cities, while detailed planning was made for direct implementation of specific projects, to “materialize” the national economic plans. Beginning from the early 1980s, with the introduction of foreign direct investment and land reform, a more regulatory approach was introduced. It borrowed the control indexes such as floor area ratio (FAR), building density, height limits from American zoning into the traditional detailed plan-making system. Regulatory detailed planning is not the simple imitation of American zoning, Chinese urban planners have selectively borrowed tools and indexes from zoning to fit in the institutional context.

Regulatory detailed planning was conceived in the planned economy system and developed in the market economy period. Fundamentally, it is not only a technical tool for the government to manage urban land and space effectively, but also a social product under the political and economic system in a particular historical period. After its evolution of more than thirty years, regulatory detailed planning has become the core of Chinese urban planning and management system nowadays. The introduction and evolution of regulatory detailed planning are widely recorded and discussed in Chinese planning history, however, there still lack of an in-depth review with certain historical distance.

The birth and later wide application of regulatory detailed planning began with local experiments in which Shanghai and Wenzhou (a merchant town in Zhejiang Province) have had a pioneering impact. This article traces the planning and development process of Shanghai Hongqiao and Wenzhou old town. Due to the different hierarchical status of cities in the country, local culture, the involvement of social groups and many other factors, there are great differences in the sources of funding, investment and modes of cooperation for the construction and reconstruction between the two cities, as well as the roles and functions of the planning policies. As a show window opening to the outside world representing Shanghai, Hongqiao New District Area has been selectively developed in cooperation with large foreign corporations. The redevelopment of Wenzhou old town, on the other hand, has been depended more on small-scale private capital, overseas Chinese businessmen, joint ventured with local state-owned enterprises. Nevertheless, the experiments on planning by the two municipalities were for the same purpose— seeking new sources of capital to finance urban construction.



Shanghai Hongqiao New District Planning

Shanghai is one of the pioneer cities to carry out the urban planning reform in the beginning of 1980's reform and opening up. Shanghai used to be the largest trading financial centre in the Far East and the largest industrial and commercial city in China in modern times. It was also one of the most important industrial and technology bases, and the largest port and trade centre since the foundation of PRC. However, after ten years of Cultural Revolution, the economy and society in Shanghai were badly damaged. In order to develop the economy under the reform and opening policy, Shanghai government vigorously attracted foreign investment and carried out the experiment of land reform. Under the new policy, the traditional urban planning formulation also needed to change. Hongqiao New District¹ was chosen to be a pilot plot by Shanghai government to introduce foreign capital, and the new planning innovation experiment was carried out as well. Hongqiao New District Planning realized the transformation from “placing the buildings” to index control and it is considered the first experiment of regulatory detailed planning.

At the beginning of opening up, in order to expand foreign communications and attract foreign investment, Shanghai government decided to develop a “micro-district” for foreign consulates tourist hotels and international trade centre. They chose a 0.65 square kilometres site which located between the city centre and Hongqiao airport (Figure 1). There were farmlands, rural houses, several factories in that area, the municipal infrastructure were very weak (Figure 2).



Figure 1: Location of Hongqiao New District

Figure 2: Old Scene of Hongqiao New District in 1970s

According to the requirements of the relevant government departments, Shanghai Urban Planning Bureau made several rounds of detailed planning which focused on functional distribution and architectural form during 1979-1983(Figure 3&4). Retaining the thought during the planned economy period, urban planning was considered the “deepening and concrete” of planned economy, the planning institute just materialized the government plans.



Figure 3: Detailed Planning in 1980

Figure 4: Detailed Planning in 1983

In 1984, Shanghai was listed as one of the 14 coastal cities² “opening up” to the world. The Mayor Wang Daohan declared that:“ Hongqiao New District Planning has been made, the land will be provided this year”³. Then many foreign businessmen especially overseas Chinese (including Hong Kong, Macao and Taiwan compatriots) began to contact and show great interest in this area. In order to promote Hongqiao New District better, Shanghai urban planning institute adopted the international practice, completed Hongqiao New District detail planning-site layout(Figure 5).

In 1980, American female Architects Association⁴ visited China, introducing the land zoning of United States for the first time. According to the atticle written by the Office of the Chinese Architecture Society, the female



architects introduced the zoning in New York. The use of each land was formulated and specific requirements for the volume, style, greening and density of the building were put forward. Those buildings which complied with the regulations would be encouraged, and those violated the regulations would be referred to the court. Female architects called this law a "carrot and stick" approach to planning management. It aroused the interest and attention of Chinese architects at that time.

Before the formulate of the site layout planning, Shanghai Urban Planning Bureau had began to sample the land use and construction capacity in different periods in Shanghai, referred to architecture and planning regulations before and after the liberation, collected planning and architecture laws of American, Japan, H.K. to make Shanghai Technical Regulations on Land Use Management (上海市土地使用管理技术规定). Land classification, building density, building height and other control requirements were included. This site layout planning extracted eight control indexes⁵ from this Management. The index data of FAR, building density were calculated depending on the previous detailed planning. This planning adopted the internationally acceptable planning technique and broke the traditional form of detailed planning.

Overall, the new form planning referred to the land use division and index system of the American zoning, and was expressed in the form of similar zoning maps. One of the main contents of the zoning——zoning ordinance, were more absorbed in the technical regulations. On the basis of traditional detailed planning, this new plan added zoning maps and indexes, its basic research, municipal support and transportation of the detailed planning still remained. Although the index datas were the “translation” of detailed planning to a large extent, it was still a great breakthrough at that time.

The essential feature of zoning is law, the land use, building height, density and so on specified in zoning could not be easily changed. While regulatory planning was only a general technical document of the planning department then. It did not have legal status, so the indexes were easily modified for a variety of reasons.

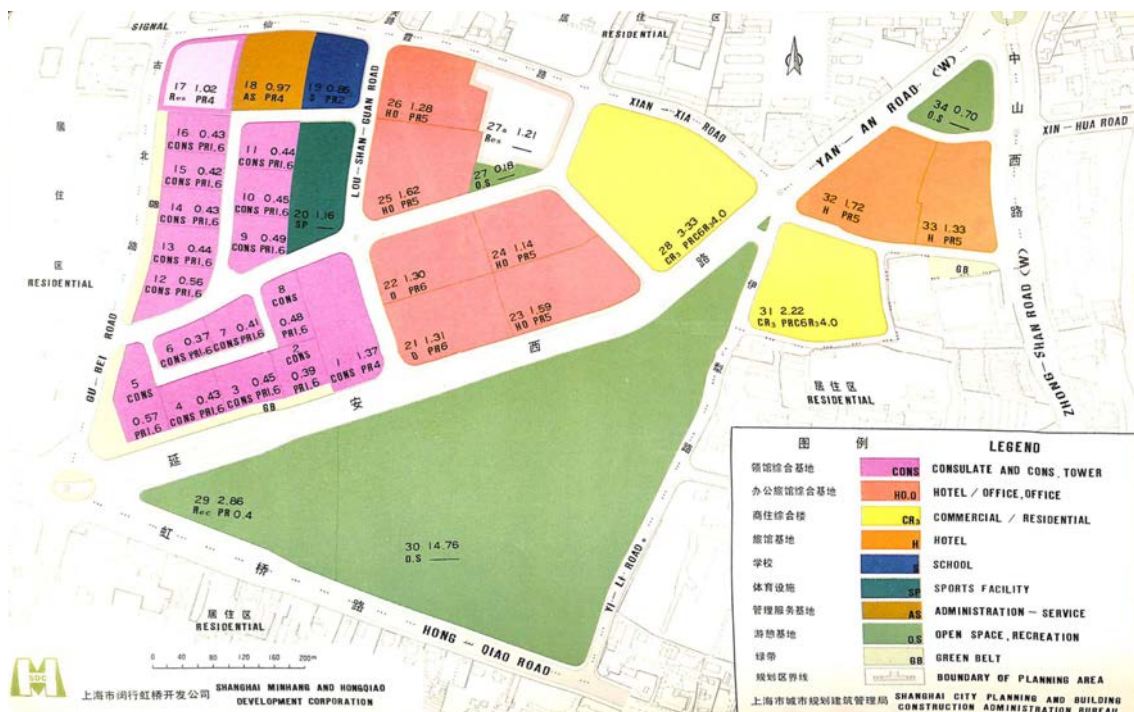


Figure 5: Shanghai Hongqiao New District Detail Planning-Site Layout, 1984

The change of the traditional planning made it easier for foreigners to understand the developing conditions of Hongqiao New District. In the late 1970s and early 1980s, the reform and opening up policy in China had just launched, government's rules and regulations were not perfect. Initially, there were only several foreign businessmen showed interest in this area, most of which were overseas Chinese and Hong Kong compatriots. Shanghai government preferred to cooperate with large foreign corporations. Take the first foreign capital project Hongqiao Hotel for example, the government agreed to cooperate with Yi Shen Industrial Corporation (伊沈实业公司)⁶ in 1979 because of Cyrus S. Eaton's abundant capital and international reputation. After a long controversy about design and cost, Cyrus S. Eaton withdrew, and then Shanghai government refused to continue cooperation with Shen Jianbai after consideration. The hotel were invested by Shanghai Municipal Tourism Administration. Before 1984, although several corporations had intention to invest, no substantive progress was made.



In 1984, Shanghai became one of the 14 coastal cities with preferential policies and measures, the new planning followed international practices of Hongqiao New District was released, and Shanghai Minhang and Hongqiao Development Co. (上海闵行虹桥开发公司)⁷ was established to organize operation of Hongqiao New district. All of these actions accelerated the pace of attracting foreign direct investments. Pacific Hotel⁸, Yongtze Hotel⁹ and New Hongqiao Mansion¹⁰ were the first joint venture projects(Figure 6&7). The planning could be easy to understand by foreigners and became the basis of negotiation.



Figure 6: Panorama of Hongqiao in 1984



Figure 7: Panorama of Hongqiao in 1987

In order to reduce risk, land readjustment and subdivision were made according to foreign developers demands, FAR of the plots chosen by foreign investors were mostly increased. In 1986, Shanghai decided to choose a plot in Hongqiao as a pilot of Land Lease. In 1988, plot 26 was called for bids at both home and abroad. The planning requirements of plot 26 were adjusted because of the bidding. The main control indexes of planning were accepted into the bid document and contract. With the deepening of land reform and Deng Xiaoping's South Tour Speech¹¹ in 1992, more and more foreign direct investments were introduced, leading to extensive modification of control indexes. the FAR and building heights of many plots were increased (Figure 8). Sino-foreign joint ventures and foreign-owned enterprises are in the majority of all the development companies (Figure 9).The foreign investment mainly came from H.K., Japan and America.



Figure 8: Far changes from 1984 to the present



Figure 9: distribution of different developers

To make a brief summary, the birth of regulatory detailed planning was to adapt to the demand of opening up, make it easier for foreigners to understand the development conditions. Although it ostensibly learned from America zoning, the planning purpose was to facilitate the city development rather than maintain public interests. The planning served as a plat for Chinese government and foreign corporations to negotiate. When the Land Lease Policy came into power since 1986, the regulatory detailed planning essential basis for land lease. However, it's worth noting that the adjustment of the control indexes were the result of negotiation between government and foreign businessmen to a large extent.

Wenzhou Old Town Renewal Regulatory Planning

Wenzhou is a city with a history of more than 1600 years, however, due to several historical reasons, there was very little investment in Wenzhou from Chinese central government since its founding in 1949. The old town located in the Midwest of Wenzhou (Figure 10) and covered an area of about 8.9 square kilometres in 1980s. The infrastructure and housing construction of the whole old town were seriously lagged behind before the reform and opening up. The progress of the old town renewal was slow in early 1980s because of the less investment from the central government and the city's development policy which focused on developing



new area. Wenzhou was one of the highest population density areas in China at that time, with old houses, crowded traffic and poor infrastructure (Figure 11). At that time, the rapid development of Wenzhou's small commodity economy had enhanced the masses' economic power and they had the ability to reconstruct the old town.



Figure 10: Location of the Old Town



Figure 11: A Bird's Eye View of the Old Town

In 1984, Wenzhou also became one of the 14 coastal cities, however, the poor infrastructure and construction of the old town couldn't keep pace with the opening up and economic development. Then Wenzhou government decided to focus on old town renewal, starting with Renmin Road reconstruction. In 1987, Wenzhou Planning Bureau made the Middle and West Renmin Road¹² Detailed Planning (Figure 12). The government considered it as a "test area" for real estate development. They expected that the reconstruction of Renmin road would attract social funds to make ends meet. Although people's market awareness were raising at that time, the planning form was still traditional, which focused on architectural forms, function and traffic.

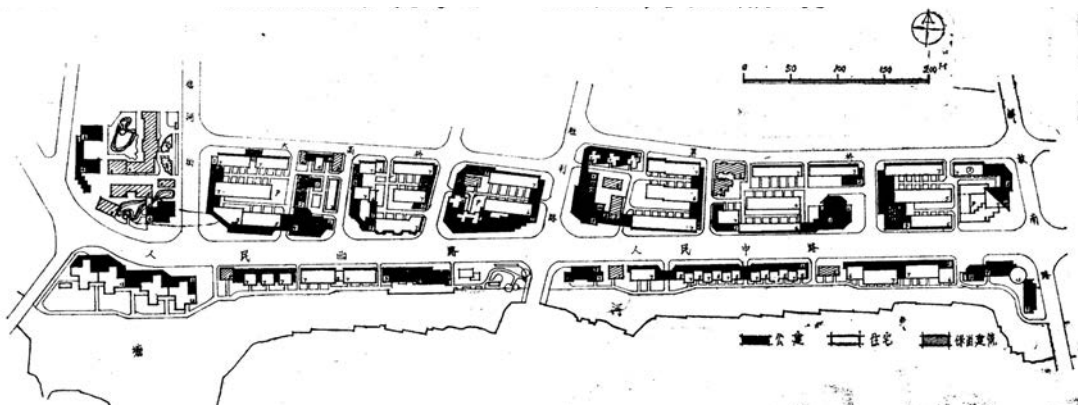


Figure 12: Middle and West Renmin Road Detailed Planning, 1987

With the development of commodity economy and serious problems of the old town, the Wenzhou planning department believed that the original planning management methods could not cope with the complicated construction and management of the old town. In 1988, Wenzhou Urban Planning Bureau began to formulate the full-coverage Old Town Renewal Regulatory Planning¹³ based on the master plan.

Since the Hongqiao New District Planning made in 1984 and gained attention after the National Conference on urban planning and design held in Lanzhou in 1986, Guilin, Shenzhen, Guangzhou and other cities also carried out experiments and made many efforts to explore the contents, expressions and control indexes of regulatory detailed planning. Ding Junqing, who participated in this planning, recalled that they learned much from American zoning and Shanghai experience, and also referred to the planning experientments in Guangzhou, Suzhou, Beijing, Hangzhou, and Nanjing etc. The Old Town Renewal Regulatory Planning integrated both the theory and technology of various regulatory detailed planning firstly and got promoted nationwide.

Instead of considering the building layout of every plot, this planning payed more attention on the whole city's integrated control. The planning could be divided into two phases: the first phase was the old town renewal regulatory planning; the second phase was the 11 blocks regulatory detailed planning which was made on basis of the first phase and was the main content of the whole planning¹⁴. The first phase was the deepening of Wenzhou Master Plan made in 1986. In order to realize the goal of reducing population and building density of the master plan, this planning reduced residential land and increased commercial and traffic land (Figure 13). Unlike the control indexes calculated on basis of detailed planning in Hongqiao New District, the determination



of FAR and other control indexe in Wenzhou old town were more complicated. Take FAR for example, the planners first forecast the total population to calculate the average FAR, and then determined the FAR of 50 areas (Figure 14), then furthermore calculated the FAR of 287 plots (Figure 15), finally they made the final adjustment according to real estate development benefits.

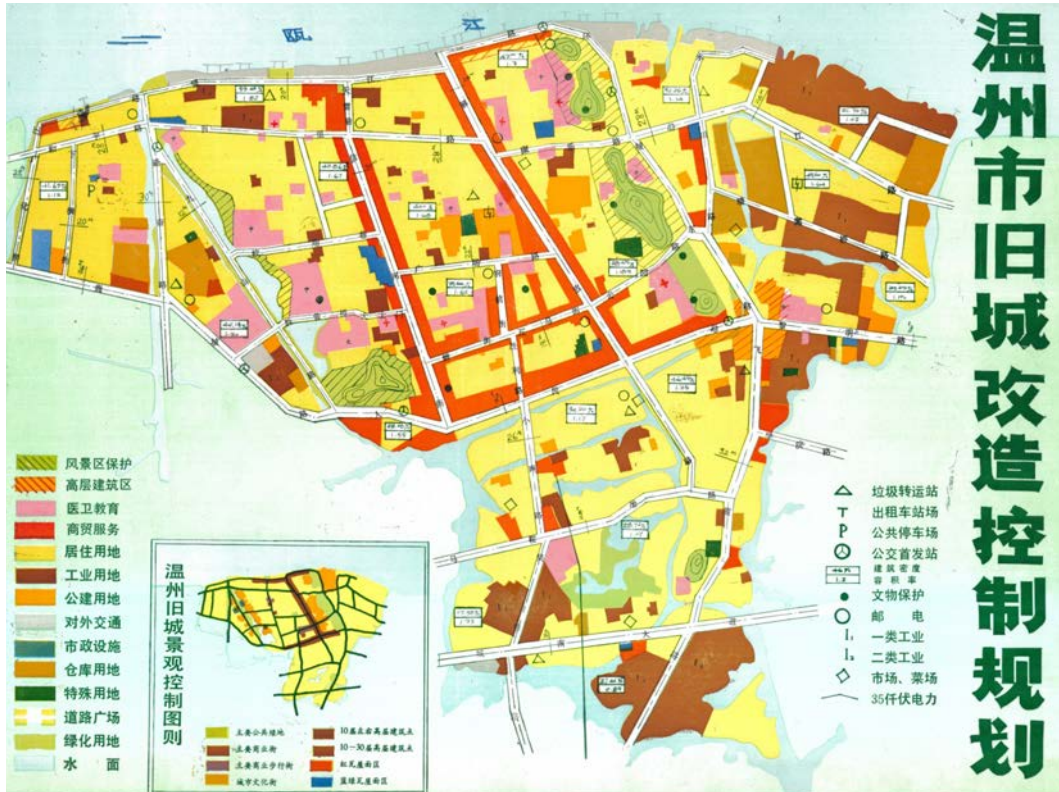


Figure 13: Land Use Planning of Wenzhou Old Town, 1988

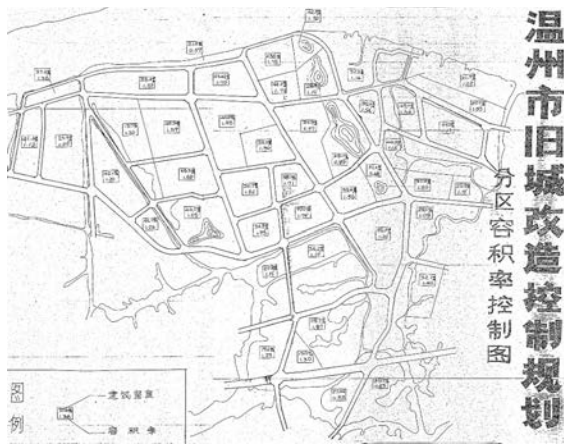


Figure 14: FAR of 50 areas, 1988

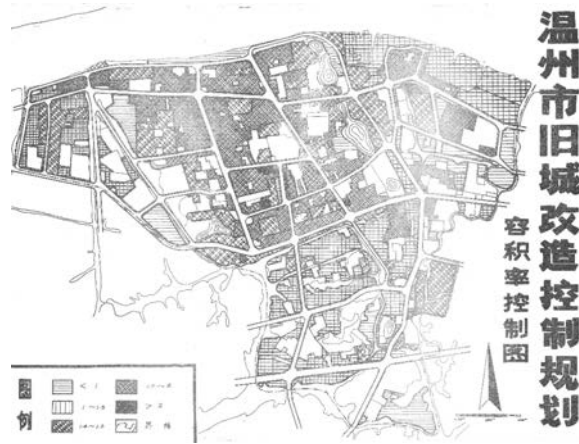


Figure 15: FAR of 287 plots, 1988

The 11 blocks regulatory detailed planning emphasized the comprehensive indexes, including land use, building density, FAR, building height, etc to achieve the quantitative control (Figure 16). Extra building density, FAR, building height along the street were added into the control indexes of residential land to improve the efficiency of land use (Table 1). The planning contents of the Renmin Road detailed planning were translated into control indexes of the 11 blocks regulatory detailed planning.



Figure 16: Zoning map of Wuma Block (a part), 1988

Land use (C)	FAR	Land use (R)	building density	FAR	building height
	building height		building density along the street	FAR along the street	building height along the street

Table 1: control indexes of commercial land and residential land

Besides the planning texts and zoning maps, the planning bureau also made Wenzhou Old Town Renewal Planning Management (trial) (温州市旧城区改造规划管理试行办法) and Wenzhou Old Town Land Use and Construction Management Technical Regulations (温州市旧城土地使用和建设管理技术规定) as the final planning outcomes. These two regulations were approved by the municipal government with the planning texts and maps. The model of Wenzhou regulatory detailed planning formulation was promoted throughout the country after the “regulatory detailed planning seminar”¹⁵ held by the national Ministry of Construction in 1991.

Compared with Hongqiao New District Planning, the content and form of Wenzhou Old Town Renewal Regulatory Planning were closer to zoning. First of all, Wenzhou realized the full coverage planning of the old town, while zoning also generally controlled the land development of the whole city. Secondly, Wenzhou closely combined the regulations with the planning, which was more similar to the main contents of zoning. The difference was that the legislation of zoning was following the principle of bottom-up, considering more about the will of local residents, and it was a comprehensive reflection of the local interests in the city; on the contrary, Wenzhou Old Town Renewal Regulatory Planning was not the will of the local residents, it was considered by the planners and local government from the overall situation, and took into account the overall needs of the city.

The reason why Wenzhou old town renewal regulatory planning got promoted is not simply for the advancement and integrity of the planning techniques, but also owe to its important effect in promoting the reconstruction of the old town. Renmin Road reconstruction was the pilot project of the whole old town, the local government proposed to push the housing commercialization to make ends meet. It chose several real estate companies¹⁶ for the contract through public bidding. Residents lived along the street would be relocated at the original place after the reconstruction. The government also set up Renmin Road Reconstruction Headquarter (人民路改建工程指挥部) to organize and coordinate the whole reconstruction project. Some planners from urban planning bureau joined the headquarter simultaneously.

In the process of renewal, several high-rise buildings constructions delayed because of the fund shortage. At that time, the national land use reform had been full swing, and the central and local government launched a series of policies to attract taiwan compatriots and other foreign capital. Since 1990, several taiwanese businessmen showed interest in the Renmin Road reconstruction and established joint ventures with local real estate



companies to conduct the construction. Then more and more joint ventures were established to develop high-rise buildings along Renmin Road. The old town renewal regulatory planning played an important role in providing development requirements and calculating the land price. The reconstruction were funded by the residents and development companies. The government obtained 30 million by leasing land from 1989 to 1992. The renewal of Renmin Road provided a great experience for the comprehensive renewal of the whole old town.



Figure 17: Scene of Renmin Road in 1992



Figure 18: Scene of Renmin Road in 2004

The old town renewal were in full swing since Deng Xiaoping's South Tour Speech in 1992. High-rise buildings were widely constructed along the main streets, especially on main intersections. They were mostly developed by joint venture real estate enterprises established by overseas Chinese of Wenzhou (Figure 19). During the development process, the FAR of many plots were increased after the negotiations. For example, the original FAR of the Global Mansion plot was 1.8, while it actually reached up to 4.9.



Figure 19: main distribution of different developers from 1980 to 1998.



The Wenzhou old town renewal regulatory detailed planning was considered the summarization and aggregation of various regulatory detailed planning experiments at that time. This planning strengthened the leading role of urban planning department in the old town renewal process. It played an important role in land leasing, land price calculation, and guiding the further planning, and also played an active role in the development and negotiation. However, the negotiations between the developers and the government often led to the modification of the planning, which aimed to maximize the interests of the two sides. The flexible regulatory detailed planning had become a tool for the local government to negotiate with the developers for the common interest to a certain extent.

Comparison and Conclusion

Here is a simple comparison of the two Chinese zoning experiments. In terms of the planning formulation, Shanghai Hongqiao New District borrowed eight control indexes from American zoning and referred the previous architecture regulations, and then “translated” the detailed planning. Wenzhou learned more experience from other cities especially Shanghai besides zoning, and emphasized the control indexes along the main streets. Both of the two experiments reformed the traditional forms of detailed planning, focused more on control indexes rather than architectural layout and emphasized economic measurement. The two plans also remained some traditional detailed planning contents and showed obvious Chinese planning characteristics.

Shanghai and Wenzhou carried out construction under the guidance of regulatory detailed planning. The similarities of the two cities were that the local government transformed from a constructor to a rule maker and city manager. Unified development institutions were established to organize the whole construction. As a show window opening to the outside world representing Shanghai, Hongqiao New District has been selectively developed in cooperation with large foreign corporations, especially those listed on Fortune Global 500. The Shanghai government would like to take Hongqiao New District as a catalyst to promote investment and opening up, and to further promote the prosperity of Shanghai economy. The foreign businessmen who came to invest also took the investment in Hongqiao New District as a springboard to enter the Chinese market. The redevelopment of Wenzhou old town, on the other hand, has been depended more on small-scale private capital, overseas Chinese businessmen, joint ventured with local state-owned enterprises. The Wenzhou government implemented the old town renewal in order more for improving the city environment and raising the living standard. The formulation and adjustment of the planning mainly focused on the feasibility of the development and considered whether it could make a profit. Most of the overseas Chinese businessmen who invested the old town renewal put their own interests first. Nevertheless, the planning experiments of the two cities were for the same purpose—seeking new sources of capital to finance urban construction.

In conclusion, the introduction of regulatory detailed planning serves as a technical tool rather than a continuation of its past, to materialize the development goals of the cities. It has been instrumental for the governments marketing its development goals to the global market, and has provided a platform to negotiate with the private sectors, rather than representing public intervention and regulation in the US. The frequent adjustment of planning control indexes, especially FAR during the development process, reflects the testing of market acceptance and the maximizing development benefits. A new urban development control system in Chinese cities has ever since begun to establish.

Acknowledgements

The authors would like to thank those many people at Shanghai Urban Planning and Design Research Institution, the Shanghai Archive, the Changning District Archive, the Wenzhou Archive and the Wenzhou Urban Construction Archive who helped in identifying materials for this paper.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributors

Yun Shen is Assistant Urban Planner at Shanghai Tongji Urban Planning & Design Institute. She graduated from Tongji University with a Master of Urban Planning in 2017. This article is based on her master thesis, which studies the birth and evolution of regulatory detailed planning since the 1980s, supervised by Prof. Li Hou.



The 18th International Planning History Society Conference - Yokohama, July 2018

Li Hou is Associate Professor of Urban Planning at Tongji University. She is an expert member of Shanghai Planning Commission. As an urban scholar, Li's research interests involve history of modern urban planning and design, urban governance and politics as well as planning laws.

Endnotes

¹ It was called "foreign micro-district" (涉外小区) in 1979, and then renamed "West Yanan Road and West Zhongshan Road area" (延安西路中山西路地区) in 1980, later renamed the "Hongqiao New District" (虹桥新区) in 1982. In 1986, this district was approved as a national economic and technological development zone.

² In order to further carry out foreign economic cooperation and technology exchange, introduce foreign capital and advanced technology, the central government opened 14 coastal cities (Tianjin, Shanghai, Dalian, Qinhuangdao, Yantai, Qingdao, Lianyungang, Nantong, Ningbo, Wenzhou, Fuzhou, Guangzhou, Zhanjiang and Lianyungang), giving preferential policy and economic management autonomy.

³ Shanghai Urban Planning and Design Research Institution. Report on "the Approval of the Hongqiao New District Planning", 1984.

⁴ From April 6 to 27 in 1980, at the invitation of Chinese Architecture Society, fifteen people from the delegation of the Chinese research group of American female Architects Association conducted a visit and academic exchange in Beijing, Shanghai, Suzhou and Guangzhou. Fifteen members of the delegation, Linda Simmons, Hu marg, Ai Dezhi and Cauchy, made several academic reports. The main contents included urban planning, residential building design, interior decoration and materials, zoning was introduced in detail.

⁵ Land use, area, building setback, building area density (floor area ratio), building density, building height, entry and exit location, garage parking area.

⁶ The company incorporated in Bermuda, Cyrus S. Eaton was the chairman, Shen Jianbai was the president.

⁷ This company re-established a joint venture called "Shanghai Hongqiao United Development Co. Ltd. (上海虹桥联合发展有限公司)" in 1985.

⁸ The first Sino foreign joint venture construction project in Hongqiao New District. It was invested by Shanghai Minhang and Hongqiao Development Co. Ltd., Shanghai Traveling Company and Japan Green Wood Construction Co. Ltd.

⁹ It was invested by Shanghai Minhang and Hongqiao Development Co. Ltd., Shanghai New Asia Limited by Share Ltd Hongkong Yun Ke International Investment Co., Ltd. and King-pai Co. Ltd.

¹⁰ The first comprehensive office building in Hongqiao. It was invested by Shanghai Minhang and Hongqiao Development Co. Ltd. and Bank of China (Hong Kong and Macao).

¹¹ From January 18 to February 21 in 1992, Deng Xiaoping visited Wuchang, Shenzhen, Zhuhai, Shanghai and other places, made a series of important speeches, known as the South talk. These speeches reiterated the necessity and importance of deepening reform and opening up and accelerating development. Deng Xiaoping's South Tour Speech marked the second wave of China's reform and opening up, which played a key role in promoting China's economic reform and social progress in 1990s.

¹² Renmin Road was a transportation, life and business main road across Wenzhou. In 1985, Wenzhou Planning Bureau made the East Renmin Road detailed planning, however, only three projects completed because of fund shortage. In the face of the development of the individual economy in Wenzhou, the public construction enthusiasm was very high, and the main traffic road in the city has widened except the Middle and West Renmin Road. The government chose it as the key point of the old town renewal, and combined with the East Renmin Road reconstruction project which had been stopped before.

¹³ Yang Xiuzhu was the deputy director of the planning bureau and served as the technical leader. The other staffs included Gao Yunguang, Yang Weifeng, Lou Shifan and other 41 people, composed of local urban planning technicians and managers.

¹⁴ Gao Yunguang (1990).

¹⁵ In 1991, the national Ministry of Construction held the "regulatory detailed planning seminar" in Wenzhou, Yang Xiuzhu reported the compilation and implementation of the old town renewal planning in Wenzhou. The representatives of Shanghai, Guangzhou and Zhuozhou introduced the compiling of their regulatory detailed planning respectively at the meeting. The practice of Wenzhou had been highly valued and recognized.

¹⁶ The real estate companies were emerging in Wenzhou since 1984, and the earliest real estate companies were funded by the government related institutes.

Bibliography

Caizhen. *The Development Trend and Direction of Regulatory Detailed planning in China*. Beijing, Qinghua University, 2004.

Chinese Architecture Society. American female Architects Association came to China for academic exchange. *Architecture Journal*, no.4 (1980) : 61-62.

Gao Yunguang. *The Application of Zoning Technology in Urban Planning and Management in China*. Shanghai: Tongji University, 1990.

Huang Fuxiang. Some Opinions on Compiling the Regulations for the Planning and Management of Shanghai's Construction Projects. *Urban Planning Forum*, no.6 (1985)



Huang Fuxiang. Comprehensive Reconstruction Detailed Planning and Regulatory of Shanghai old city. *City Planning Review*, no.6 (1989): 26-30.

Li Haoran. *Wenzhou New Transition*. Shanghai: Shanghai academy of social sciences press, 1996

Lv Guangqi, Huang Fuxiang, Li Jianeng. Strengthen the Management of Land Use Planning, Determine the Building Density reasonably. *City Planning Review*, no.3 (1985) :27-30.

Shanghai Urban Planning and Design Institute. Shanghai Hongqiao New District Planning. *City Planning Review*, no.1 (1987): 28-29.

Shi Jinchuan, Quan Xiangrong, Zhao Wei. *Institutional Change and Economic Development : Research on Wenzhou Model*. Hangzhou: Zhejiang University Press, 2002.

Shi Nan. Zoning, Regionalization, Regulatory detailed planning. *City Planning Review*, no.2 (1992): 53-57.

Sun Shouzhuang. *A review of Wenzhou*. Tianjin: Tianjin Fine arts Publishing Company, 2004.

Wenzhou Urban Planning Bureau. *Wenzhou Old Town Renewal Regulatory Planning*, 1988.

Wu Changliu. *The New Appearance of Wenzhou Urban Construction*. Hong Kong: Hong Kong Fengcai Press, 1995.

Yang Xiuzhu. Exploration of the Planning Method for the Land Use Rights transfer. *City Planning Review*, no.6 (1993):11-13.

Yang Xiuzhu. Wenzhou Old Town Renewal Regulatory Planning. *City Planning Review*, no.6 (1989): 55-59.

Image sources

Figure 1: Shanghai Archive, B1-9-1542.

Figure 2: Shanghai Changning District Archive.

Figure 3: Shanghai Archive, report of "West Yan'an Road and West Zhongshan Road Area Planning", B1-8-325.

Figure 4: Shanghai Urban Planning and Design Research Institution.

Figure 5: Ibid .

Figure 6: <http://shanghai1980.com/>

Figure 7: Ibid.

Figure 8: Diagrams by authors.

Figure 9: Diagrams by authors.

Figure 10: Wenzhou Old Town Renewal Regulatory Planning, 1988.

Figure 11: Sun Shouzhuang. *A review of Wenzhou*. Tianjin: Tianjin Fine arts Publishing Company, 2004.

Figure 12: Selection and Compilation of Urban Planning in Zhejiang Province(二) • Wenzhou special, 1987.

Figure 13: Wenzhou Old Town Renewal Regulatory Planning, 1988.

Figure 14: Ibid.

Figure 15: Ibid.

Figure 16: Ibid.

Figure 17: Sun Shouzhuang. *A review of Wenzhou*. Tianjin: Tianjin Fine arts Publishing Company, 2004.

Figure 18: Ibid.

Figure 19: Diagrams by authors.



INTERNATIONAL PLANNING HISTORY SOCIETY

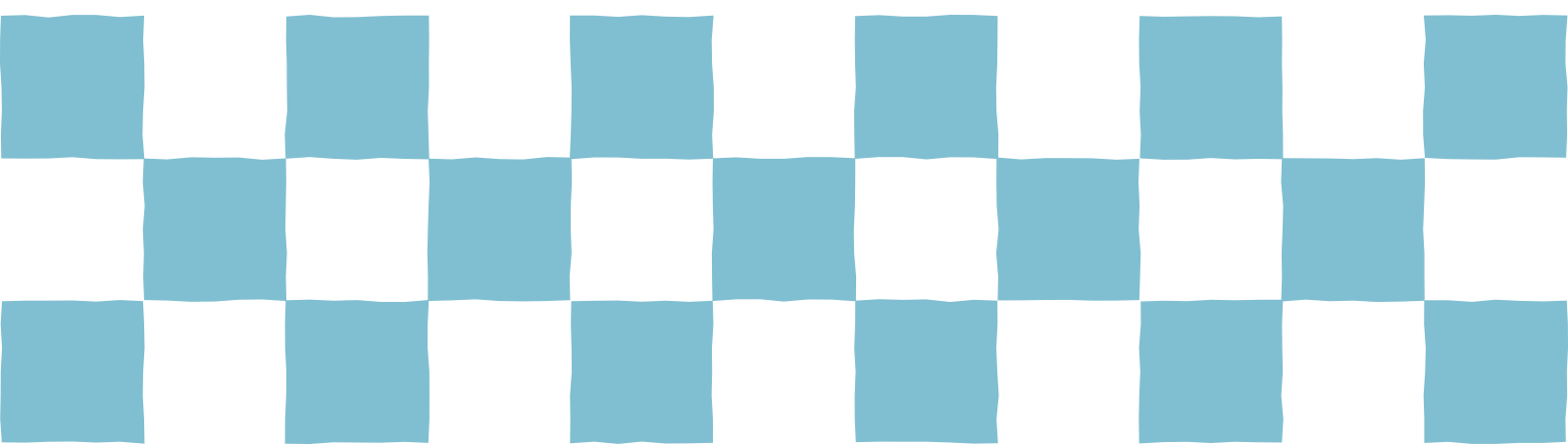
YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

31

Sustainable Urbanism and Environmental Planning



Greening the Megacity: A Critical/Historical Appraisal of Jakarta's Planning for Sustainability

Christopher Silver (University of Florida)

Since Indonesia's independence in 1950, a continuous series of comprehensive plans, donor funded studies and program, and government policies related to Jakarta's development have aimed at environmental conditions – that is “greening” -- in the emerging megacity. The most important recent policy pronouncement, Law 26/2007, set a long term (20 year) target of at least 30% of urban land maintained in green open space. In 1911, the Ministry of Public Works launched a voluntary program to accelerate attention to the environmental component of sustainability to complement the traditional emphasis of Indonesian cities largely on promoting economic development, and typically at the expense of remaining green spaces. Moreover, Indonesia has sought technical support for this initiative from the Asian Development Bank through a program entitled, “Green Cities: A Sustainable Urban Future in Indonesia.” Does Indonesia's new initiatives represent a departure from previously proposed but ultimately failed effort to realize livable, ecologically-sustainable cities or “green cities” program or is it mere rhetoric that does not advance these objectives? Whether it is rhetoric or substantive policy changes, the post-Suharto-era has seen witnessed a “green movement” and “green discourses” that represent a new type of “collaboration among experts, clusters of communities and the city government” not possible under the previous authoritarian regime.

By examining the longer legacy of “green cities” planning in Jakarta, beginning with environmental initiatives in the pre-democratic era, it is possible to assess what changes contributed to the scope of the current green movement. One part of the longstanding green agenda was maintaining green open space – the “Garden in the City” -- to ensure that the challenges of urbanization in a tropical climate with an extended “rainy season” would provide the means to handle storm water removal and spaces for recharging the ground water system. Related to this was protection for and hopefully upgrading the quality of surface water in Jakarta's vast river system covering much of the urbanizing area. Another component of greening deals with provision of sufficient infrastructure to provide adequate clean water and removal of waste water to ensure environmental qualities. And related to provision of sanitary infrastructure was the need to improve services to the vast array of population residing in the maze of kampungs that made up the bulk of Jakarta's residential settlements. Finally, it is useful to assess strategies to expand green areas through land reclamation, especially along the Jakarta waterfront, as well as within the satellite cities that accommodated the demand for new middle and upper income housing through land development practices more akin to western models than the traditional form of Jakarta and other Asian cities. Attention will also be given to related “greening” topics such as energy provision and consumption, handling air pollution and solid waste and the impact of transportation on land use. This examination of environmental planning in Jakarta since the 1950s will seek to draw connections between past planning, policy and programmatic initiatives and the present multi-pronged movement to “Go Green” and its potential to produce more livable environs.

Mitigating urban heat island effect in built environment by integrating spatial planning measures: A study in Taoyuan

Yu-Tzu Lin (Department of Urbanism, Delft University of Technology) and Chih-Yu Lee (Department of Urban Planning and Disaster Management, Ming Chuan University)

Heat waves take their toll on human health and residents' quality of life in cities. Due to the accelerated urban heat island (UHI) effect, the dense urban areas of Taipei Metropolitan Area are experiencing increasing heat stress in summers. The introduction of vegetated green and blue infrastructure at city - scale curbs O₂ levels. The integrated mitigation and adaptation strategies to limit the effects of climate change and greenhouse gas emissions are crucial to achieve sustainable cities. With Taoyuan's case study, this paper analyses the causes of the temperature change due to the rapid population growth and the impact of anthropic activities. Based on the concept of multi-functionality, we raise a holistic planning strategy according to local climate conditions, built environment, and urban form to integrate ecosystem functions and public health promotion. The strategies, divided into four aspects: green transportation system, solar energy design, wind belt design, and green and blue infrastructure (GBI) design, target to increase urban resilience to climate change, improving the coping, adaptive and mitigation capacities within dense urban area by employing holistic viewpoint. Especially integrating green infrastructures, as rain gardens or green roofs, will be an effective tool to mitigate heat stress, mitigating greenhouse gas emissions and furthering the establishment of resilient cities. Since this study is confined by the downscale data of local wind belt, we apply 3D modeling and the architecture model to enhance the feasibility of the strategies and to offer a possible urban landscape instead of a direct simulation to measure the temperature difference. It concludes by suggesting a way for planning a crisp Eco-city to mitigate urban heat effect and to optimize the potential for green infrastructure benefits is needed. Besides, for the possible implementation of the holistic strategies in the future, we supplement the conclusion by amendments for planning- and designing-related regulation revision, such as Building Technique Regulation, Regulations for the Periodical Overall Review of Urban Planning. Considering that the bottom - up initiatives can improve critical environmental and ecological conditions in dense urban areas more efficiently, how to include community efforts into planning practice in the case study will be the lesson for future research.

A Brief History of Planning for Climate Change Adaptation on the Gold Coast, Australia

Michael Howes (Griffith University) and Aysin Dedekorkut-Howes (Griffith University).

With over half a million people, the Gold Coast is currently the sixth largest city in Australia and one of the most rapidly developing urban areas in the country. Unfortunately it is also highly vulnerable to the impacts of climate change and has been hard hit by storms, flooding, heatwaves, and droughts over several decades. These kinds of impacts were forecast by both national and international risk assessments (including the Intergovernmental panel on Climate Change). Australia has a hierarchical three tiered governing system that encompasses one national (Commonwealth) government, six states (including Queensland) plus two territories, and 565 local councils. Elections occur every 3-4 years for each level, with government periodically swinging between a centre-right coalition of the Liberal-National parties and the centre-left Labor party. In the period 2007-2012 all levels of Australian government had started to take the first steps in addressing the challenges posed by the need to adapt to the impacts of climate change. The shift to centre-right governments 2012-15 saw many policies and plans reversed due to the combined effects of: gaps in the three tiered system of government; the ideology of the parties in power; powerful economic interests; electoral politics; fears of legal liability; and, the unique features of the Gold Coast. Since 2015 there has been a divergence between the different levels of government, with state-based Labor governments such as Queensland moving back into the climate change adaptation space. The science is clear: climate change is happening, the impacts are serious, and low-lying coastal settlements like the Gold Coast are highly vulnerable to its effects. The constant policy and planning reversals over the last decade, however, have made consistent long-term planning and investment in building resilience very difficult. Coastal settlements such as the Gold Coast simply cannot afford to continue this roller coaster ride much longer and their plight has major implications for the ability of democracy to address wicked problems like climate change.



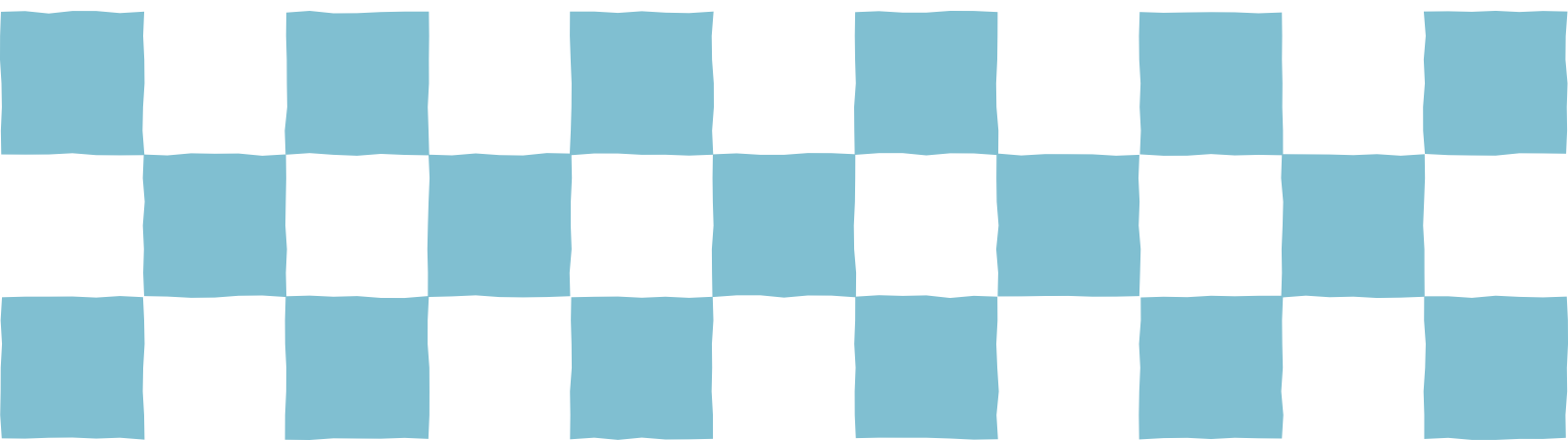
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

32 Landscape Design and Nature Conservation



Landscape architecture and environmentalism in the expansion era for Australian universities: The work of Bruce Mackenzie and Associates

Andrew Saniga (The University of Melbourne)

The 1960s and 1970s were an era of expansion of the tertiary education sector internationally with entirely new universities developed at an unprecedented pace. In the Australian context, the quintessential start-up suburban campus was usually set within a greenfield site - typically on post-agricultural land at the fringe of rapidly expanding suburbia. An effective role for landscape architecture often materialised from symbiotic relationships between architects, engineers, planners, horticulturalists, and others. A significant driver in shaping and enacting a clear vision for a distinctive quality of campus landscape came internal to university administration. Communities consisting of academic staff, administrative staff, and other interested and talented practitioners have been found to be crucial in defining a niche for landscape architects in campus design, marking a significant moment in the recognition and due regard that would be paid to a small but influential profession on the Australian scene. This paper records the themes that define the distinctive nature of the Australian condition. Focusing on campus designs by Bruce Mackenzie and Associates (BMA), the paper provides a preliminary assessment of the roles and influence of people, organisations, and events in the creation of the modern campus in Australia. It concludes that the most effective results were achieved when the landscape architect was engaged at the formative stages of campus development and had broad support inclusive of collaboration with other consultants and with university administrators and on-ground staff. A significant ingredient for success in achieving innovative results was found to be the existence within the university of communities of interested and engaged people with joint aims and ambitions for the creation of high quality campus landscapes, often in line with a culture of environmentalism. Such communities often go unheralded yet without their involvement the establishment of campus landscapes that celebrated the conservation of Australian indigenous plants and forms may not have been as readily achieved.

Water Landscape Changes and Place Perception in University Campus History: A Spatial Humanities Perspective

Jie He (School of Architecture, Tianjin University), Meng Yuan (School of Architecture, Tianjin University) and Wei Lei (School of Architecture, Tianjin University)

‘Spatial humanities’ is defined as “an explicit recognition of the reciprocal influence of geographic and constructed space on culture and society”. It “fuses traditional focus on nuance, voice, experience, text, and image with the systematic modeling and virtual reality, and links time, space, and culture dynamically” by Prof. David Bodenhamer (2011)

In the proposed research paper, the research team will introduce a project of investigating both how people’s physical daily activities and sense of place changed during the past 30 to 40 years in the Weijin Road Campus of Tianjin University, where the water landscape changed tremendously because of the rapid urbanization and campus development.

The Weijin Road Campus used to be full of ponds and lakes where are parts of a large-scale suburban wetlands network in the southwest of Tianjin built-up regions. But now this region shrank and already be enclosed by urban scopes. The Campus is a typical epitome of such urbanization and water landscape change in Tianjin. The research team integrates historical archives and oral history in a GIS database to reflect both physical and emotional changes. For the physical landscape changes, historical maps, historical aerial and satellite photos, and university planning and construction archives are overlaid to digitize water surfaces and building layouts of different stages of the campus development. This dataset serves as a base map for analysis and visualization. Meanwhile, in order to reconstruct place with people’s memories and experiences, and drew memory maps, emotion maps, and preference maps to visual that how the location, events, behavior and motivation interweave together, historical activities and place perception are derived from records by interviewing current and retired faculties, alumni, and other residents living in the campus in different ages, while current activities are gathered by site observation, route tracing and hotspot analysis.

Comparing the current and historical activity and emotional data, spatial analyses has shown that preferred campus pedestrian and gathering/resting places switches southward from a loop surrounding one lake to a more complicated water landscape integrating lakes, plaza, gardens, outdoor facilities, and functional buildings. And there’s a positive relationship between the participation and protection consciousness of landscape. The more people participate in the place, the stronger protection consciousness they have. The proposed study has tested the potential of digitizing non-structural historical records and analyzing the data spatially, as well as visualizing it to support historical interpretation.

Study on the Protection of Village Cultural Space in the Attractive landscape Area of Liupan Mountain, China

Fei Wang (School of Architecture of Southeast University; Lanzhou University of Technology), Bai Hao Li (School of Architecture of Southeast University) and Qijun Jiang (Gansu Institute of Political Science and Law School of Art Design)

This paper takes the village art and culture space in Liupan Mountain attractive landscape area as the research object. Based on local current situation, the writer sorted out several factors which lead to the formulation of art and cultural space. Methods like historical research and local field investigation were adopted to analysis the characteristics of the object from several aspects include diversity, farming, space openness, etc. The research shows that Liupan Mountain attractive landscape area is a multi-ethnic blended region, which also a reason for its prosperous economic and artistic cultures in the past time. In addition, affected by traditional farming culture, the object displays a deep integration and harmonious development of the Cultivation Culture, Frontier Culture, Buddhist Culture, Taoism Culture, Drama Culture, etc. The results lead to a conclusion that Liupan Mountain attractive landscape area should not be simply defined as "National Park" or "Attractive Tourism Area". Based on this conclusion, this paper proposed three principles: Respecting local traditional folk culture, modern science and old nature from the perspective of villiage artistic and cultural connotation; integrating the concept of "Harmony between Man and Nature" with modern development and update spirit; promoting the historical and artistic values of regional ethnic culture, classifying and adjusting measures to protect this kind of art and culture space according to local conditions. What needs to be emphasized is the concept of nature in this paper should not be limited in the traditional scope like natural scenery and geographical space. The four methods: respecting nature, maintaining the survival and development of native culture, inheriting the art and cultural space still exist in local traditional villages, and exploring new methods and policies for the movement of cultural regeneration of the village are have practical significance for the development of the village art and cultural space in attractive landscape area.

NATURE CONSERVATION PLANING APPROACH IN THE URBAN EPOCH

Balin Koyunoglu (ISTANBUL TECHNICAL UNIVERSITY) and Nuran Zeren Guler soy (ISTANBUL TECHNICAL UNIVERSITY)

When looking at the projections of 2050, the world will be urbanized. This emerging urbanization trend alters nature conservation processes. Today process is not only conserving natural sites but also sustain natural heritage in urban content. Nature is an important aspect of the contemporary city structure. Natural sites satisfy social needs and increase ecological awareness in urban societies. To that extent – in the face of increasing urbanization – nature conservation planning serve as urban planning substrate. Today, nature conservation is developed from site protection into planning systems especially in urban planning processes. Therefore, nature conservation planning history shifted from initial classical individualistic approach to inclusive ecological approach. In the 18th century, the aim was to conserve natural resources and protect valuable landscapes. In the 19th century, the focus was protection of ecosystems, biodiversity, and wildlife in natural sites and monumentalize the sites with its scenic wonders. In the 20th century, nature conservation planning became a networking discipline. Preventing fragmentation of natural sites was the intention of comprehensive and inclusive planning attempts. The concept and methodology of nature conservation planning have been evolved over centuries because the attitude on preserving and sustaining natural heritage have been changed respectively. From the Stockholm Declaration (1972) to the Rio Declaration (1992) nature conservation became a form of global partnership and gained national, regional and international recognition. At last, as the cities continue to grow and the pressure of urbanization on natural sites increases, the emerging issue became to sustain natural sites in urban fabric. As a result of this momentum, IUCN (2014) remarked current concept and methodology of nature conservation planning in the Urban Protected Area Guidelines. This study aims to constitute a literature review on history of nature conservation planning together with international declarations and recommendations determining tendencies of the time and shifting points. Methodological alternations from protection islands and buffer zones (1980) to no-take boundary design (2014) on nature conservation in the planning history will be examined comparatively. After structuring theoretical background, contemporary nature conservation planning implementations in urban areas will be assessed with innovative planning applications (such as Helsinki Green Fingers and East London Green Grid)



Landscape architecture and environmentalism in the expansion era for Australian universities: the work of Bruce Mackenzie and Associates

Andrew Saniga

Associate Professor Landscape Architecture, Planning and Urbanism, Melbourne School of Design, The University of Melbourne, ajsaniga@unimelb.edu.au

The 1960s and 1970s were an era of expansion of the tertiary education sector internationally with entirely new universities developed at an unprecedented pace. In the Australian context, the quintessential start-up suburban campus was usually set within a greenfield site - typically on post-agricultural land at the fringe of rapidly expanding suburbia. An effective role for landscape architecture often materialised from symbiotic relationships between architects, engineers, planners, horticulturalists, and others. A significant driver in shaping and enacting a clear vision for a distinctive quality of campus landscape came internal to university administration. Communities consisting of academic staff, administrative staff, and other interested and talented practitioners have been found to be crucial in defining a niche for landscape architects in campus design, marking a significant moment in the recognition and due regard that would be paid to a small but influential profession on the Australian scene.

This paper records the themes that define the distinctive nature of the Australian condition. Focusing on campus designs by Bruce Mackenzie and Associates (BMA), the paper provides a preliminary assessment of the roles and influence of people, organisations, and events in the creation of the modern campus in Australia. It concludes that the most effective results were achieved when the landscape architect was engaged at the formative stages of campus development and had broad support inclusive of collaboration with other consultants and with university administrators and on-ground staff. A significant ingredient for success in achieving innovative results was found to be the existence within the university of communities of interested and engaged people with joint aims and ambitions for the creation of high quality campus landscapes, often in line with a culture of environmentalism. Such communities often go unheralded yet without their involvement the establishment of campus landscapes that celebrated the conservation of Australian indigenous plants and forms may not have been as readily achieved.

Keywords: landscape architecture, environmentalism, Australian campuses, Bruce Mackenzie and Associates.

Introduction

This paper considers the emergence of the profession of landscape architecture in Australia in the context of a period of expansion in University campuses in the post-World War Two years. Australia followed the UK, North America and Europe, making deliberate attempts to expand the infrastructure of tertiary education. The Australian Federal Government received advice from the Murray Committee in 1957 to the effect that Australian universities were woefully unable to accommodate teaching staff and students across all manner of requirements,¹ the result of which saw the rate of new building construction double.² Total university enrolments between 1958 and 1960 grew 30% with a predicted total enrolment of over 95,000 by 1966, a clear indication of the changed attitudes towards the value of tertiary education.³ Simultaneous with new university expansion, technical and training colleges were being transformed into colleges of advanced education as a result of the Martin Committee Report in 1964, and later into universities during the Dawkins era of the late 1980s.⁴

Amidst all this change, the Australian Universities Commission (established 1959) believed that the newer universities of the 1960s had a greater capacity for expansion because they were generally located on large suburban sites.⁵ Capital grants predominantly went toward buildings,⁶ perhaps with the assumption that landscape and environmental quality would follow. However, campuses did in fact require careful site planning, an endeavour defined by North American Kevin Lynch as ‘...a design problem that lies on the boundaries between architecture, engineering, city planning, and landscape architecture.’⁷ To this ‘design problem’ could also be added socio-political contexts, including university communities and more broadly, the burgeoning environmental movement, that potentially added to the design challenge. How then did the Australian profession of landscape architecture contribute?



This paper briefly introduces the context within which the profession engaged in campus work. It will briefly discuss three contemporary campus sites that at earlier stages received landscape architectural input from the practice of Bruce Mackenzie and Associates (BMA): the University of Technology Sydney (UTS) commencing c. 1970; the University of Wollongong (UoW) from 1976 to 1987; and, the Australian Defence Force Academy (ADFA) in Canberra commencing 1981.⁸ It will pay particular attention to the UTS and the UoW for the effectiveness in manifesting BMA's design ethos in distinctive ways.

Campus landscapes in the context of an emerging profession.

The Australian profession of landscape architecture emerged in the 1960s from an array of associated disciplines – architects, planners, foresters, environmental activists and even academics. Their application to the profession remains a complex path to chart, with different motivations, interests, formal training etc.⁹ Institutionalisation under the Australian Institute of Landscape Architects (AILA) in 1966 provided a formal instrument for recognition among competing professions and bureaucracies. The AILA attempted to define a role for the practitioner, drafting membership criteria, standards of practice, and education policies. However, as sociologist Andrew Abbott has argued, it is competition for work and inter-professional relations that creates a system of professions that in turn defines a profession,¹⁰ more so than its independent steps towards institutionalisation. The complex ways in which professional territory is won, and lost, and the environments in which this occurs, Abbott argues, form a critical part of the history of any profession.

Campus landscapes received only oblique reference within the discourses of the AILA's first two conferences. At the 1969 conference held at the University of Melbourne, Richard Downing noted somewhat disparagingly of the grounds of the University of Melbourne: '...you may, of course, wonder whether we have any respect for our environment at all.'¹¹ George Seddon's analysis of the 'The Quality of Our Landscape,'¹² gave anecdotes pertaining to the campus of the University of Western Australia (UWA), its design, mismanagement, and even high art, and praised in particular the planting of the Sunken Garden. Landscape architects Lindsay Pryor, Peter Spooner and Bruce Mackenzie all presented papers at the 1969 conference, but none made mention of their campus design commissions, notwithstanding the fact that in the published proceedings Pryor's paper was illustrated with his landscape design work for La Trobe University.¹³ The 1971 conference, held in association with the Australian Conservation Foundation, was overwhelmingly concerned with conservation of urban and natural environments, yet campuses, many of which had seen dramatic success and failures in terms of environmental impact, were not included in any critical analysis.¹⁴ Despite these scratchy beginnings, campus design work from the late 1950s through the 1960s and 70s was indeed a significant professional pursuit: all the individuals cited above (and more) had been involved in planning, designing and managing Australian campuses.

As early as 1946, Pryor pioneered a role for landscape architecture within the campus of the Australian National University in Canberra. He then went on to complete commissions for numerous campuses across the eastern states and territories¹⁵ and recruited landscape architect Richard Clough, formally an employee of the National Capital Development Commission in Canberra and second president of the AILA from 1969-71. In the context of hectic site work operations typical of the period, their methods could best be described as pragmatic and direct, advising on plant species selection, preparing planting plans, and completing on-site inspections. Roles for private practitioners were pioneered in highly idiosyncratic ways. At Monash University in Clayton, no less than six landscape architects took up professional roles between 1958 and 1971, their variable successes largely the product of Monash's highly opinionated academic community, keen to shape the campus landscape to their own tastes.¹⁶ George Seddon, who was not formally a landscape architect, too had involvement in designing campus landscapes via engagement with the Grounds Committee of the UWA through which he had direct access to the University gardener and others.

A further distinction needs to be made for academics who were also landscape architects and subsequently completed landscape design on-campus. In the mid-1960s, Peter Spooner completed the 'Broadwalk' around the time he began teaching at the University of New South Wales (UNSW in Sydney). In a different mode again, in 1974 during a period of rapid growth, the UWA was among the earliest in Australia to appoint a full-time University Landscape Architect in Jean Verschuer,¹⁷ setting a precedent that lasted through to 1987 at that institution. The diverse ways in which landscape architects impacted on the Australian campus was partly a product of the newness of the profession and its unchartered professional territory at that time.

Interdependent realms of environmental idealism: Bruce Mackenzie and Associates (BMA).

The early trials and tribulations of landscape architects in campus development also occurred at a time of a global environmental movements. In Australia, formulations of environmental consciousness often mixed notions of



The 18th International Planning History Society Conference - Yokohama, July 2018

national identity and Australian indigenous landscapes, resulting in unusual alliances across groups with different philosophical and political backgrounds.¹⁸ Some within university communities identified campus landscapes as ideal theatres in which to explore Australian indigenous themes thus enabling landscape architects Bruce Mackenzie and Associates (BMA) to build a reputation. Bruce Mackenzie (born 1932) is one of Australia's most notable landscape architects and founder of the profession. In 1967, BMA were pioneering environmental design engendering Australian indigenous themes at sites such as Peacock Point (later Illoura Reserve) on Sydney Harbour, work that as recently as 2016 has been lauded by the AILA as among the 'top ten' landscapes to be produced between 1966 and 2000.¹⁹

In BMA's monograph, *Design With Landscape*,²⁰ Mackenzie explained the three campus projects the firm completed: the UTS, UoW and the ADFA. Around the time that BMA were designing UTS and UoW, Mackenzie described his own design ethos as 'idealistic purism of purpose,'²¹ meaning a bias toward Australian plants over non-Australian plants. Nationhood underpinned his thinking: 'The indigenous environment of this young nation, I believe, offers a vast potential for establishing a tradition almost totally dictated by its natural and distinctive qualities.'²² Mackenzie's pursuit of indigenous landscapes permeated BMA's campus work thus serving as important cases for gauging the firm's effectiveness.

The UTS and UoW are comparable as early 1970s to late 1980s projects, whereas the formative period for ADFA came in the 1980s. The ADFA and UTS were both new campuses on undeveloped sites, and consisted of stands of indigenous plants and pre-existing landforms. In contrast, the UoW was built upon earlier campuses developed as part of Wollongong College and Wollongong Teachers College dating from the early 1960s. These sites had been cleared agricultural land but directly abutted on the eastern boundary the Mt Keira escarpment, an area of steep land with indigenous forests, from which drainage channels that passed into the UoW site originated. Along these drainage channels were isolated specimens of indigenous trees, including a small number of fig trees, the original specimens of which ultimately did not survive building development but were replaced. In the context of the three campus's pre-existing site conditions it is interesting to note the resultant shape, form and character of the landscapes that eventuated.

At the ADFA, the site's pre-existing savannah woodland was identified as an important feature of the site by landscape architect Catherin Bull and Professor of Botany Lindsay Pryor,²³ yet Mackenzie admitted that:

...[its] retention was not to be, as the random nature of the woodland had little chance of surviving the patterning and finished levels of complex buildings, a concourse, sports fields, parade ground, roads and car parks. Only a few of the original trees survived.²⁴



Figure 1: Two very different outcomes on the one campus site. [left] Attempted reconstruction of savannah woodland (2018); and, Figure 2, [right] the highly manicured parade ground and Claret Ash planting (2018). The Australian Defence Force Academy [UNSW], Canberra, by Bruce Mackenzie and Associates.

Notwithstanding BMA's attempts to reinstate vegetation in car parks and on the outer perimeters of the ADFA campus (see Figure 1), the defining plant species of the core part of the campus (see Figure 2) was the non-Australian tree, Claret Ash (*Fraxinus raywoodii*). This choice was a compromise in response to the cooler climate of Canberra and the argument that with deciduous trees more winter sunlight would be permitted to internal spaces. However, Mackenzie later perceived the result to be conflicting in appearance and that 'a less reverent approach to Canberra's standards would be applied, and limit the cold-climate trees to only the most critical winter time places.'²⁵



The design of ADFA was led by large design and coordination teams predominantly consisting of architects and planners²⁶ with BMA's involvement commencing almost a decade after planning had commenced. Roger Johnson, who served on ADFA's Planning Co-ordination Team, praised Mackenzie's role²⁷ yet by BMA's own admission their effectiveness in advancing an environmental agenda was less certain. In this sense, the UTS and the UoW remain the more notable of BMA's commissions largely because of a more long-standing and intrinsic role.

The formulation of legacies: the UTS and the UoW.

The outcomes at the UTS and UoW stand in stark contrast to the ADFA. At the UTS (formerly known as William Balmain Teachers' College and later the Kuring-gai College of Advanced Education), BMA worked closely with project architect David Donald Turner from the NSW Government Architects Office. Turner was known to be sensitive to Australian indigenous landscapes. The site had significant vegetation and rock platforms of Hawkesbury Sandstone, qualities praised from the outset by landscape architect Allan Correy²⁸ from the Landscape Section of the New South Wales Public Works Department. Correy was one of the few landscape architects of the period who became involved in conservation debates and environmental activism²⁹ and thus aided the assembly of a unified voice for protecting the site's pre-existing qualities at the design and planning stages.

The UTS campus layout was highly compact so as to avoid impacts across the site. BMA innovatively regenerated landscapes adjacent to buildings and car parks, developing landscape plans that designated areas of indigenous plants to be protected whilst also specifying 'native seed broadcasting' to be completed by campus staff.³⁰ This essentially entailed mechanical slashing of natural heath vegetation, the stockpiling of the residue, and the subsequent re-application of this residue to bare earth so that seeds contained within could propagate distinctive reproductions of the original landscape of indigenous plant communities.³¹

Planting solely Australian native plants and working with existing natural features, BMA's plan annotations indicate the intention to achieve an appearance of naturalness: specifying planting locations at 'random centres';³² to 'clean back to bare rock wherever possible'³³ and seamlessly integrate constructed elements, like steps and walls, into natural grades (see Figures 3 and 4); and, to micro-manage the site's ongoing regeneration. In a letter to the Principal of the college, Mackenzie explained that on a recent visit to the site in 1975 he had observed '...Willow trees, Pampas Grass, and Cotoneaster...[they] can only exist in conflict with the basic theme and strength of the natural indigenous character...Could they be removed?'³⁴ Despite the Principal's preference for non-Australian plants (roses for example) and his initial hesitation over BMA's embrace of the indigenous landscape, Mackenzie claimed that over time that same principal became proud of the resultant Australian theme.³⁵

If the UTS demonstrated concerted effort at protecting and enhancing a site's pre-existing indigenous qualities, the UoW's legacy can be defined as reclaiming an indigenous landscape completely erased. In 1976 when BMA began their commission, the UoW had as early as 1973³⁶ a community of like-minded and enlightened people, notably, mathematician and UoW senior academic, Keith Tognetti.³⁷ The interested community had support from the top in Vice-Chancellor Designate Dr L. M. Birt and Estate Manager John Bell (both commencing 1973). Together they formed a multi-dimensional force at various levels of management³⁸ committed to reconstructing semblances of an indigenous landscape. Birt's personal commitment was bolstered by the fact that he lived on a property in the hills above the campus and had a garden of impressive eucalypt trees and Australian plants.³⁹

The UoW's Academic Senate saw the need to build the new University's academic stature comparative with Sydney universities and believed that a campus of distinctive environmental quality would be a competitive tool in recruiting students and staff.⁴⁰ With Birt's support, Bell enabled this to pass: he initiated the production of a Development Plan in 1974 which was completed by a team of both in-house staff and consultants of national reputation in campus development;⁴¹ he aided the establishment of a Buildings and Grounds Committee (commencing 1 January 1975) which facilitated the production of key guidelines for pedestrianisation, a ring-road configuration⁴² with car parking, the use of Australian native plants, cohesion in brick paving, and, the masking of existing buildings with trees;⁴³ he helped secure and defend⁴⁴ substantial funding for landscape,⁴⁵ and importantly, he appreciated the site's resources, like its creek lines, supporting protection because they 'provided an attractive natural feature of the landscape'.⁴⁶

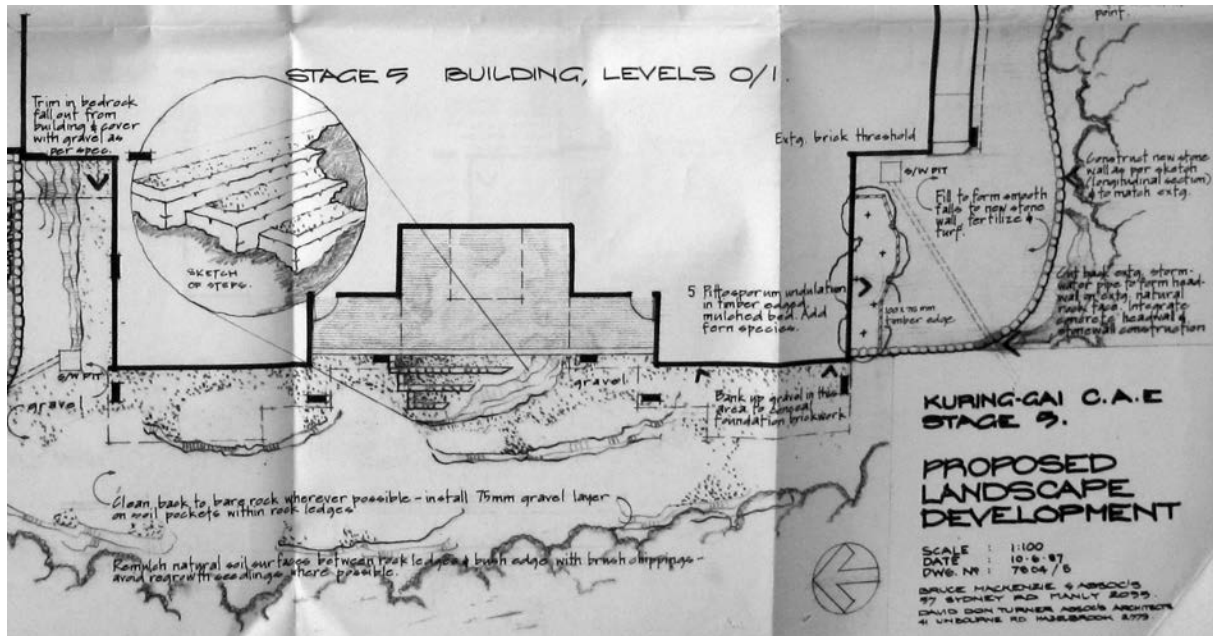


Figure 3: [top] Bruce Mackenzie and Associates, 'Kuring-Gai C.A.E Stage 5 Proposed Landscape Development', Drawing No. 7804/8, 10 June 1987; Figure 4 [bottom]: The UTS campus, 2016.

Bell's procurement in 1975 of landscape supervisor Leon Fuller and his second-in-command Bob Beattie would prove a decisive move. Leon Fuller's influence is widely regarded as a critical moment, and despite the fact that his six-year tenure was relatively short, he inculcated a landscape tradition from which others, including his successors David Walker and Martin Bramston, benefitted. Fuller was prepared to embrace an intensive planting program dedicated to indigenous plants of the Mt Keira escarpment and their propagation and use on-site to the order of 60% of all planting in his time.⁴⁷ Many of these plantings represent the earliest use of the local rainforest trees in designed landscapes. His subsequent publication on the native plants of the Wollongong region the 'Illawarra',⁴⁸ *Wollongong's Native Trees*, has been lauded in the local media as 'the definitive reference book on the region's diverse native trees.'⁴⁹ Fuller believed Bell's 'Development Plan' of December 1976 which included provisions for 'The Built Environment' and 'Landscaping'⁵⁰ was a formal instrument that expressed and gave credence to the indigenous plant theme and a degree of artistic licence.⁵¹



The 18th International Planning History Society Conference - Yokohama, July 2018

At the time [1975/6] a number of people at the university, mainly academics, felt strongly about using native plants. Dr Keith Tognetti (a mathematician at the university) was one of them. Their plan was to create a natural forest around the buildings and I believed in that vision. I could see it in my head. I had this clear picture of what it would be like.⁵²

The contribution of BMA needs to be appreciated against this backdrop of the University's in-house activities. BMA's early work included the design of car parks using Australian native plants, and in 1979, the completion of the duck pond amidst Fuller's emerging plantations after four years of intensive activity. The pond's design included vertically-placed logs as partial edging, creating an organically aligned wall⁵³ (see Figure 5). BMA contributed to the University master plan of 1987 led by architects and planners Graham, Bell and Bowman.⁵⁴ The landscape principles proposed mostly Australian indigenous species with plants indigenous to Wollongong region selectively used dependent upon suitability. A consistent plant palette was balanced with distinctive treatments for corridors, boundaries, paved areas, and, the remaining creek channel where recreational opportunities were to be provided.⁵⁵ The construction of UoW's campus landscape during the 1980s and 90s was to an in-house value in excess of \$30 million⁵⁶ and included an extensive redevelopment designed by Ian Brammer Landscape Architects for a water course and ponds (including The McKinnon Pond) that dramatically redefined an area once dominated by car park and playing fields.⁵⁷

The road to transformation of the UoW campus was not always a smooth one and the post-Birt era has had critics. For example, Vice-Chancellor Kenneth McKinnon reputedly had a relatively autocratic manner whilst overseeing a period of growth and development from the 1980s yet he nonetheless delivered a vision for landscape albeit whilst 'disbanding' previously engaged committees of management and restricting the influence of senior academics.⁵⁸ However, successive management regimes have been overwhelmingly committed to maintaining UoW's high environmental quality, ensuring adequate funds were allocated for maintenance and new landscapes, particularly post-construction of new buildings. It does appear that opinions have varied with regard to the kinds of forms that a reconstructed indigenous landscape should take within a university campus environment. The design ethos of Landscape Supervisor Martin Bramston (1984-circa 2012) from the mid-1980s onwards emphasised the 'presentation' of the campus as a park-like setting (see Figure 6) befitting a sense of order and control⁵⁹ that to an extent was different to the 1970s bid to reconstruct vignettes of natural Illawarra forest in relatively wilder states. Thus, diverging approaches may have resulted in differing views of ultimate success.⁶⁰ Regardless, the legacies of the 1970s seem all-pervasive: the current landscape guidelines include statements like: 'Plants should be 100% Australian native with approximately 50% of these being local to the Illawarra Escarpment and coastal plain.'⁶¹



Figure 5: [left] The duck pond at the University of Wollongong in 2018; Figure 6 [right]: A view of planting near Central Square, the University of Wollongong in 2018.



Conclusion

The relatively young Australian profession of landscape architecture made distinctive yet sporadic claims to the design and planning of university campuses over a two decade period from the 1960s to the 1980s. In this context, the commissions of BMA figure prominently. Examples of BMA's most effective work at the UTS and UoW begin to indicate some of the ingredients for success: consistent and ongoing involvement of one landscape consultant commencing from the early stages of development; close professional associations with architects, engineers, and planners of both in-house staff and external consultants; representation on design panels, management committees and the like; and perhaps most significantly, being able to capitalise on the joint and prolonged efforts by communities of university staff and other people all of whom had vested and common interests in attaining high quality campus environments. The significance of a broad commitment of people at multiple levels can often go unheeded. For example, the UoW's current masterplanners, MGS Architects, record the legacy of Fuller's work and Mackenzie's designs but the broader group in the academic and management community like Keith Tognetti, Kenneth Ausburn, John Steinke, Martin Bramston and many others are overlooked.⁶² Campuses are complex sites where the physical environment potentially develops in ways highly distinctive in response to the particular communities who inhabit them. It is the existence of such communities that make campuses unique environments and ideal arenas for the study of professions, shedding light on the complex negotiations that occur in the bid to develop a shared resource. Globally, the ongoing evolution of campus landscapes within increasingly urbanised centres presents critical opportunities for comparative analysis across a diverse and wide-ranging international scene.

Acknowledgements

The research presented here was funded by an Australian Research Council Discovery Grant, DP160100364, 'Campus: Building Modern Australian Universities'. Thank you to all co-investigators, including Narelle Bethune, Andrew Murray and Nicola Pullan for assisting in data collection. Thanks to correspondents who supplied and verified information, especially Bruce Mackenzie, Leon Fuller, Martin Bramston, Terry Graham, Keith Tognetti and Catherin Bull.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Andrew Saniga is Associate Professor in Landscape Architecture, Planning and Urbanism. His research and teaching focusses on landscape design, landscape history, and the conservation and management of heritage landscapes. He is a member of DOCOMOMO and a Registered Landscape Architect with the AILA.

Endnotes

¹ Murray Report, 1957, paragraph 168 referenced in: Australian Universities Commission, *Report of the Australian Universities Commission on Australian Universities, 1958-1963*, (Canberra: Commonwealth Government Printer, 1960), 7.

² Ibid., 12.

³ Ibid., 17-18.

⁴ Gwilym Croucher, Simon Marginson, Andrew Norton, and Julie Wells, *The Dawkins Revolution: 25 Years On*. (Carlton: Melbourne University Press, 2013).

⁵ Australian Universities Commission, *Second Report of the Australian Universities Commission on Australian Universities, 1961-1966*, (Canberra: Commonwealth Government Printer, 1963), 82.

⁶ See 'Capital Grants' sections of numerous Australian University Commission reports where money to be spent on new buildings is documented.

⁷ Kevin Lynch, *Site Planning*, (Cambridge Mass: The MIT Press, 1962), 3.

⁸ The UTS and UoW campuses have undergone numerous institutional name changes. For example, the UTS commenced as the William Balmain Teachers' College, then the Kuring-gai C.A.E. before becoming the University of Technology Sydney. Thus only the current campus names have been used for the sake of clarity. The ADFA is a campus of the University of New South Wales in Sydney.

⁹ See Andrew Saniga, *Making Landscape Architecture in Australia*, (Sydney: UNSW Press, 2012), 166-198.

¹⁰ Andrew Abbott, *The System of Professions: An Essay on the Division of Expert Labor*, (Chicago: The University of Chicago Press, 1988), 18-19.

¹¹ Richard Downing, "Opening Address", in *Proceedings of the Conference: The Landscape Architect and the Australian Environment conducted by the Australian Institute of Landscape Architects at the Prince Philip Theatre, the University of Melbourne, 30th August 1969* (Canberra: AILA, 1970), 9.

¹² See George Seddon, "The quality of our landscape", in *Proceedings of the Conference: The Landscape Architect and the Australian Environment conducted by the Australian Institute of Landscape Architects at the Prince Philip Theatre, the University of Melbourne, 30th*



The 18th International Planning History Society Conference - Yokohama, July 2018

August 1969 (Canberra: AILA, 1970), 13-25. See also: George Seddon, *The Old Country: Australian Landscapes, Plants and People*, (Melbourne: Cambridge University Press, 2005), 207-214.

¹³ See L. D. Pryor, "Summary – Education and Landscape Architecture", in *Proceedings of the Conference: The Landscape Architect and the Australian Environment conducted by the Australian Institute of Landscape Architects at the Prince Philip Theatre, the University of Melbourne, 30th August 1969* (Canberra: AILA, 1970), 51-55.

¹⁴ See Australian Institute of Landscape Architects and the Australian Conservation Foundation, *Landscape Architecture In Conservation: Proceedings of the Conference of the Australian Institute of Landscape Architects held in Association with the Australian Conservation Foundation, 19-22 August, Adelaide, South Australia* (Adelaide: The Griffin Press, 1971).

¹⁵ See Andrew Saniga, "Lindsay Dixon Pryor: setting foundations for Australian campus landscapes," refereed paper presented at the *Remaking Cities: 14th Biennial Urban History Planning History Conference*, RMIT Melbourne, Jan 31 – Feb 2, 2018 (proceedings in-press).

¹⁶ For the trials and tribulations of landscape architects at Monash University see Andrew Saniga, *An Uneasy Profession: defining the landscape architect in Australia, 1912-1972*, PhD Diss., (Melbourne: The University of Melbourne, 2005), 293-345.

¹⁷ Jean Verschuer, "Landscaping the grounds: 1970-80", in *A Landscape for Learning, A History of the Grounds of The University of Western Australia*, ed. George Seddon and Gillian Lilleyman (Crawley: University of Western Australia Press, 2006) 119.

¹⁸ See Libby Robin, *Defending the Little Desert: The Rise of Ecological Consciousness in Australia* (Melbourne: Melbourne University Press, 1998), 2-3.

¹⁹ Andrew Saniga, "Significant Projects 1966-2000", *Landscape Architecture Australia*, 152 (2016): 23-30. Note: this project has been recognised as highly distinguished via a number of other formal bodies such as the National Trust.

²⁰ Bruce Mackenzie, *Design With Landscape: A 50 Year Journey*, (Sydney: BruceMackenzieDesign, 2011).

²¹ Alistair Knox and Bruce Mackenzie, "The Indigenous Environment as a concept for applied landscape design", in *Proceedings of the Conference: The Landscape Architect and the Australian Environment conducted by the Australian Institute of Landscape Architects at the Prince Philip Theatre, the University of Melbourne, 30th August 1969* (Canberra: AILA, 1970), 48.

²² Knox and Mackenzie, "The Indigenous Environment as a concept for applied landscape design", 48.

²³ Catherin Bull recounted that she walked the site with Professor Pryor, from the Australian National University, noting existing conditions of landscape including trees and topographical distinctions. Catherin Bull was assisting Roy Simpson from Yuncken Freeman Architects. Catherin Bull, Interview with Andrew Saniga, 30 May 2018, Brisbane.

²⁴ Mackenzie, *Design With Landscape: A 50 Year Journey*, 197.

²⁵ *Ibid.*, 201.

²⁶ Bruce Bowden, "The Australian Defence Force Academy: A Military Campus," *Architecture Australia* (July 1987): 68-81.

²⁷ Roger Johnson, "Australian Defence Force Academy A Review," *Architecture Australia* (July 1987): 86-87.

²⁸ Mackenzie, *Design With Landscape: A 50 Year Journey*, 225-227.

²⁹ Jennifer Taylor, *Australian Architecture since 1960*, (Sydney: The Law Book Company Limited, 1986), 48-50. See also Saniga, *Making Landscape Architecture in Australia*, 171-172.

³⁰ Bruce Mackenzie and Associates [Landscape Consultants], "Kuring-Gai C.A.E. Northwest Carpark Landscape Development", Drawing No. 7505/3, undated plan [1975].

³¹ Letter from Victoria Grounds, Bruce Mackenzie & Associates to The Town Planner, Ku-ring-gai Municipal Council, Gordon, 2 September 1975.

³² Bruce Mackenzie and Associates, "Kuring-Gai College of Advanced Education Planting to Road Embankments & Associated Areas", undated plan [1975].

³³ Bruce Mackenzie and Associates, "Kuring-Gai C.A.E Stage 5 Proposed Landscape Development", Drawing No. 7804/8, 10 June 1987.

³⁴ Letter from Bruce Mackenzie, Bruce Mackenzie and Associates to The Principal, Kuring-gai CAE, Lindfield, 3 July 1975.

³⁵ Bruce Mackenzie, Letter to Andrew Saniga, 7 June 2018.

³⁶ John F Bell et al., *The University of Wollongong Development Plan* (Wollongong: University of Wollongong, 1976).

³⁷ Leon Fuller, Personal communication with Andrew Saniga, 21 April 2018. Note: this claim is generally supported from a number of sources including Landscape Supervisor Martin Bramston.

³⁸ Leon Fuller, Personal communication with Andrew Saniga, 5 February 2018; *The Long Wide Road to 87: "A University Built on Lamington Drives," blog entry by Ben Meek, June 3, 2016*. Accessed 5 Feb at: <https://hcupublishingau.wordpress.com/2016/06/03/uni-of-wollongong-built-on-lamington-drives/>; Gerard Sutton, "In Memoriam: John Bell", *Campus News University of Wollongong* 4, no. 12 (December 2009): 14.

³⁹ Leon Fuller, Personal communication with Andrew Saniga, 5 February 2018.

⁴⁰ Steinke referenced in Nick Hartgerink, *Regional Icon Global Achiever: A history of the University of Wollongong 1951 – 2011*, (Wollongong: University of Wollongong, 2011), 26.

⁴¹ Bell initially sought G. J. Harrison, University Architect at Flinders University, South Australia to act as Consultant. Harrison proposed the formulation of a Planning Team including University staff and this ended up being comprised of: John F. Bell (Estate Manager); John A. Manton (University Architect); Ronald M Kinnell (University Engineer). See Bell et al., *The University of Wollongong Development Plan*.

⁴² The concept of the ring-road was a product of Keith Tognetti's visit to the University of Lancaster in 1974 where he observed the benefits of a ring-road separating vehicular from pedestrian and bike traffic areas of the campus. See Keith Tognetti, "Some historical notes on the development of the landscape at the University of Wollongong", Unpublished manuscript (supplied to A Saniga by author), 16 May 2018.

⁴³ Bell et al., *The University of Wollongong Development Plan*, 1; Hartgerink, *Regional Icon Global Achiever*, 26.

⁴⁴ The Draft Development Plan of March 1975 attracted criticism from the Student Army who objected to the spending, arguing the money would be better spent for infrastructure and buildings etc. See: Student Army [G. Butler], "Comment on University Draft Development Plan", *University of Wollongong Campus News* 1, no. 11 (April 14, 1975): 1-4.

⁴⁵ Leon Fuller, Interview with Andrew Saniga, 12 February 2018, Wollongong; Martin Bramston, Personal communication with A Saniga, 1 March 2018.

⁴⁶ Bell et al., *The University of Wollongong Development Plan*, 12. In summary: a 1970 masterplan by planners Laurie and Heath Pty Ltd proposed that a creek that ran through the site needed to be diverted in order to allow Stage 2 of the main library to be constructed and that this be achieved by piping the creek underground some 100 metres to the east. This drew criticism and objection to the extent that a decision was made to divert the creek but not to contain it within a concrete pipe. Despite the concern for the appearance of the reconfigured creek, its shift in position had an unforeseen detrimental impact: two large fig trees that predated urbanisation by hundreds of years and had survived the early years of the campus's development were purportedly killed as a result of their water supply being impacted. Also see Jodie Duffy, "Field of dreams", *Weekender*, April 14, 2012, 8.

⁴⁷ Hartgerink, *Regional Icon Global Achiever*, 28; Duffy, "Field of dreams", 8.

⁴⁸ Leon Fuller, *Wollongong's Native Trees*, 3rd ed. (Wollongong: Big Bean Books, 2011).

⁴⁹ Michelle Hoctor, "Field guide to the landscape we love", *Illawarra Mercury*, May 12, 2012, 15.

⁵⁰ Bell et al., *The University of Wollongong Development Plan*, Sections 15 and 16.

⁵¹ Leon Fuller, Interview with Andrew Saniga, 12 February 2018, Wollongong.



⁵² Leon Fuller quoted by Duffy, "Field of dreams", 8.

⁵³ The duck pond in the central square was built in 1978/9 amid controversy: many felt the price tag of around \$80,000 was too high and that funds should have instead spent on improving education, the university's prime task. Student activism arose in a bid to bring about a decision whereby such funds would be spent procuring a new professorial position in History and Philosophy of Science, hence the protestors slogans 'F... the ducks, we want HPS.' Hartgerink, *Regional Icon Global Achiever*, 28; see also: Duffy, "Field of dreams", 8. This wall has subsequently been replaced due to deterioration of the timber over time but its reconstructed state bears strong resemblance with the original.

⁵⁴ See: Graham, Bell and Bowman, *Stage 1 Site Services Development Plan The University of Wollongong*, October 1987. This masterplan materialised in the form of a 'site services' document because the lead consultants, were sensitive to the fact that the then Vice-Chancellor, Ken McKinnon (1982-94) did not value bureaucratic entanglement or 'voluminous master plans' (Terry Graham, personal communication with Andrew Saniga, 9 March 2018).

⁵⁵ Graham, Bell and Bowman, *Stage 1 Site Services Development Plan The University of Wollongong*, October 1987, pp. 19-20 & 23.

⁵⁶ Martin Bramston, Personal communication with Andrew Saniga, 1 March 2018.

⁵⁷ See G. J. Harrison, *Review of Estate Development Plan the University of Wollongong*, The University of Wollongong, 1985, front cover.

⁵⁸ Terry Graham, Personal communication with Andrew Saniga, 20 April 2018.

⁵⁹ Martin Bramston, Personal communication with Andrew Saniga, 1 March 2018.

⁶⁰ Keith Tognetti, Personal communication with Andrew Saniga, February 2018.

⁶¹ University of Wollongong Facilities Management, *University of Wollongong Landscaping Design Guidelines and Standards* (Wollongong: University of Wollongong, 2015), 15.

⁶² See MGS Architects, UOW 2016 – 2036 Wollongong Campus Master Plan, July 2016.

Bibliography

Abbott, Andrew. *The System of Professions: An Essay on the Division of Expert Labor*. Chicago: The University of Chicago Press, 1988.

Australian Institute of Landscape Architects and the Australian Conservation Foundation. *Landscape Architecture In Conservation: Proceedings of the Conference of the Australian Institute of Landscape Architects held in Association with the Australian Conservation Foundation, 19-22 August, Adelaide, South Australia*. Adelaide: The Griffin Press, 1971.

Australian Universities Commission. *Report of the Australian Universities Commission on Australian Universities, 1958-1963*. Canberra: Commonwealth Government Printer, 1960.

Australian Universities Commission. *Second Report of the Australian Universities Commission on Australian Universities, 1961-1966*. Canberra: Commonwealth Government Printer, 1963.

Bell, John F., et al. *University of Wollongong Development Plan*. Wollongong: University of Wollongong, 1976.

Bowden, Bruce. "The Australian Defence Force Academy: A Military Campus." *Architecture Australia* (July 1987): 68-81.

Bramston, Martin. Personal communication with Andrew Saniga, 1 March 2018.

Bruce Mackenzie and Associates [Landscape Consultants]. "Kuring-Gai C.A.E. Northwest Carpark Landscape Development." Drawing No. 7505/3, undated plan [1975].

Bruce Mackenzie and Associates. Letter to The Principal, Kuring-Gai CAE, Lindfield, 3 July 1975.

Bruce Mackenzie and Associates. "Kuring-Gai College of Advanced Education Planting to Road Embankments & Associated Areas." undated plan [1975].

Bruce Mackenzie and Associates. "Kuring-Gai C.A.E Stage 5 Proposed Landscape Development." Drawing No. 7804/8, 10 June 1987.

Bull, Catherin. Interview with Andrew Saniga, 30 May 2018, Brisbane [QLD].

Croucher, Gwilym., Marginson, Simon., Norton, Andrew., and Wells, Julie. *The Dawkins Revolution: 25 Years On*. Carlton: Melbourne University Press, 2013.

Downing, Richard. "Opening Address." In *Proceedings of the Conference: The Landscape Architect and the Australian Environment conducted by the Australian Institute of Landscape Architects at the Prince Philip Theatre, the University of Melbourne, 30th August 1969*, 9-12. Canberra: AILA, 1969.

Duffy, Jodie. "Field of dreams." *Weekender*, 14 April 2012, 8.



- Fuller, Leon. Personal communication with Andrew Saniga, 5 February 2018.
- Fuller, Leon. Interview with Andrew Saniga, 12 February 2018, Wollongong.
- Fuller, Leon. Personal communication with Andrew Saniga, 21 April 2018.
- Fuller, Leon. *Wollongong's Native Trees*, 4th ed. Wollongong: Big Bean Books, 2011.
- Graham, Terry. Personal communication with Andrew Saniga, 9 March 2018.
- Graham, Terry. Personal communication with Andrew Saniga, 20 April 2018.
- Graham, Bell and Bowman. *The University of Wollongong: Stage 1 Site Services Development Plan*. Oct. 1987.
- Grounds, Victoria. Letter from Bruce Mackenzie & Associates to The Town Planner, Ku-ring-gai Municipal Council, Gordon, 2 September 1975.
- Harrison, G.J. *Review of Estate Development Plan University of Wollongong*, University of Wollongong, 1985.
- Hartgerink, Nick. *Regional Icon Global Achiever: A history of the University of Wollongong 1951 – 2011*. Wollongong: University of Wollongong, 2011.
- Hoctor, Michelle. "Field guide to the landscape we love." *Illawarra Mercury*, May 12, 2012, 15.
- Johnson, Roger. "Australian Defence Force Academy A Review." *Architecture Australia* (July 1987): 86-87.
- Knox, Alistair, Mackenzie, Bruce. "The Indigenous Environment as a concept for applied landscape design." In *Proceedings of the Conference: The Landscape Architect and the Australian Environment conducted by the Australian Institute of Landscape Architects at the Prince Philip Theatre, the University of Melbourne, 30th August 1969, 39-50*. Canberra: AILA, 1970.
- The Long Wide Road to 87; "A University Built on Lamington Drives," blog entry by Ben Meek, June 3, 2016.
- Lynch, Kevin. *Site Planning*. Cambridge Mass: The MIT Press, 1962.
- Mackenzie, Bruce. *Design With Landscape: A 50 Year Journey*. Sydney: BruceMackenzieDesign, 2011.
- Mackenzie, Bruce. Letter to Andrew Saniga. 7 June 2018.
- MGS Architects. University of Wollongong 2016 – 2036 Campus Master Plan, July 2016.
- Pryor, L. D. "Summary – Education and Landscape Architecture." In *Proceedings of the Conference: The Landscape Architect and the Australian Environment conducted by the Australian Institute of Landscape Architects at the Prince Philip Theatre, the University of Melbourne, 30th August 1969, 51-55*. Canberra: AILA, 1969.
- Robin, Libby. *Defending the Little Desert: The Rise of Ecological Consciousness in Australia*, Melbourne: Melbourne University Press, 1998, pp. 2-3.
- Saniga, Andrew. "Lindsay Dixon Pryor: setting foundations for Australian campus landscapes," refereed paper presented at the *Remaking Cities: 14th Biennial Urban History Planning History Conference*, RMIT Melbourne, Jan 31 – Feb 2, 2018 (proceedings in-press).
- Saniga, Andrew. "An Uneasy Profession: defining the landscape architect in Australia, 1912-1972." PhD Diss., The University of Melbourne, 2005.
- Saniga, Andrew. *Making Landscape Architecture in Australia*. Sydney: UNSW Press, 2012.
- Saniga, Andrew. "Significant Projects 1966-2000." *Landscape Architecture Australia* 152 (2016): 23-30.



Seddon, George. "The quality of our landscape." In *Proceedings of the Conference: The Landscape Architect and the Australian Environment conducted by the Australian Institute of Landscape Architects at the Prince Philip Theatre, the University of Melbourne, 30th August 1969*, 13-25. Canberra: AILA, 1969.

Seddon, George. *The Old Country: Australian Landscapes, Plants and People*. Melbourne: Cambridge University Press, 2005.

Student Army [G. Butler]. "Comment on University Draft Development Plan." *University of Wollongong Campus News* 1, no. 11 (April 14, 1975): 1-4.

Sutton, Gerard. "In Memoriam: John Bell." *Campus News University of Wollongong* 4, no. 12 (Dec 2009): 14.

Taylor, Jennifer. *Australian Architecture since 1960*. Sydney: The Law Book Company Limited, 1986.

Tognetti, Keith. Personal communication with Andrew Saniga, February 2018.

Tognetti, Keith. "Some historical notes on the development of the landscape at the University of Wollongong." Unpublished manuscript (supplied to A Saniga by author), 16 May 2018.

University of Wollongong Facilities Management. *University of Wollongong Landscaping Design Guidelines and Standards*. Wollongong: University of Wollongong, 2015.

Verschuer, Jean. "Landscaping the grounds: 1970-80." In *A Landscape for Learning: A History of the Grounds of the University of Western Australia*, edited by George Seddon and Gillian Lilleyman, 119-124. Crawley: University of Western Australia Press, 2006.

Image Sources

Figure 1: Andrew Saniga, 2018.

Figure 2: Andrew Saniga, 2018.

Figure 3: Bruce Mackenzie and Associates. "Kuring-Gai C.A.E Stage 5 Proposed Landscape Development." Drawing No. 7804/8, 10 June 1987.

Figure 4: Andrew Saniga, 2016.

Figure 5: Andrew Saniga, 2018.

Figure 6: Andrew Saniga, 2018.



Nature Conservation Planning Approach in The Urban Epoch

Balin Koyunoglu*, Nuran Zeren Gulersoy**

* *Ph.D. Candidate, Istanbul Technical University, Graduate School of Science, Engineering and Technology, Urban and Regional Planning Department, balinozcan@gmail.com*

** *Prof. Dr., Istanbul Technical University, Department of Urban and Regional Planning, gulersoy@itu.edu.tr*

This study explores the nature conservation planning in the urban context, an emerging issue in the process of striking a balance between natural heritage conservation and urbanization demands, by focusing on two cases: Breda City Plan in the Netherlands and Beykoz Riva Integrated Environmental Protection and Development Plan. Breda City Plan is analyzed as a reflection of a deep-rooted tradition that is sensitive to nature while Riva Beykoz Plan is analyzed as a unique example within Turkey in that regard. These cases see the development of an integrated rainwater management system by the enhancement of existing ecosystems and green urban spaces and by their connection to the adjacent protected natural areas. This study explores whether the recent implementations of nature conservation in Breda and Beykoz Riva meet IUCN guidelines for urban areas. These cases are analyzed with the IUCN Urban Protected Area Guidelines which adopts current concept and methodology of nature conservation planning in urban areas. As a result of their analysis, it is observed that they both meet the guideline criteria.

Keywords: nature conservation, urban protected areas, planning history

Introduction

According to the projections of 2050, it is evident that the world will be increasingly urbanized¹. This emerging urbanization trend has already started to alter the approaches to nature conservation and will continue to do so. Current approaches intend not only to conserve natural areas but also to sustain natural heritage in urban settings. Natural areas meet social needs and increase ecological awareness in urban societies. Thus, nature is an essential aspect of the contemporary city structure. To that regard, nature conservation planning serves as a substructure for urban planning.

An initial attempt at integrating natural areas in the urban spatial organization was made at the Third World Parks Congress in 1982². The subject of the conference was the shift in understanding of natural areas which were no longer “set aside” but casted as “components of sustainable development” in the urban pattern³. Meanwhile, the buffer zone concept was developed into a broader systematic technique called impact zone. This was followed by a zone of interaction and multi-objective land allocations. When it came to the 2000’s, no-zoning approaches started to emerge. Today, there are several models such as no-take boundary design or morphological spatial pattern analysis that consider natural areas in relation to their surroundings, especially in urban areas⁴.

This study aims to provide a literature review on the history of nature conservation planning in an urban context, exploring the issue together with international declarations and recommendations that have determined the tendencies of their time, leading to shifts in understanding. After structuring theoretical background, selected case studies will be assessed according to the Urban Protected Areas Guidelines, one of the recent nature conservation guideline focusing on urban areas. These case studies are Breda City Plan, Breda Netherlands and Beykoz, Riva Valley Integrated Environmental Protection and Development Plan, Istanbul Turkey. By providing an analysis of these cases, this study intends to find out whether the contemporary nature conservation planning implementations are compatible with the IUCN Urban Protected Area Guidelines.

The concept and methodology of nature conservation planning have been evolved over centuries due to the transformation of the attitude with regard to the preservation and sustainment of natural heritage. From the Stockholm Declaration⁵ to the Rio Declaration⁶ nature conservation became a form of global partnership, gaining national, regional and international recognition. As cities increasingly grew in time and the pressure of urbanization on natural areas increased, sustaining natural areas in the urban fabric became a key issue. As a result, International Union for Conservation of Nature adopted the current notion and methodology of nature conservation planning in the Urban Protected Area Guidelines in 2014⁷.

Consequently, the classical individualistic approach that was adopted earlier left its place to a more inclusive one. In the eighteenth century, the aim of nature conservation planning was to preserve the natural resources and protect valuable landscapes. In the nineteenth century, the focus was to protect the physical environment, sustaining the



variety of wildlife in natural areas and monumentalizing the sites with its scenic wonders. In the twentieth century, nature conservation planning became a networking discipline. In that regard, preventing fragmentation of natural sites was prioritized in the course of comprehensive and inclusive planning attempts. The following part of the study explores how the history of nature conservation planning in urban areas developed.

Alterations in the Process of Nature Conservation Planning in Urban Areas

Between 3 and 5 thousand years ago, a sophisticated urban culture emerged in Anatolia and Mesopotamia with the development of ancient cities⁸. Those cities provided the basis for systematic initiatives to be taken in urban environments. Management of productive land, irrigation, and understanding of solar system were developed and systematized, paving the way for the establishment of analytic and comprehensive relations between human and nature. As a result, natural areas were either removed from the city centers or kept at the outskirts of cities. Until the twenty-first century, cities were assumed to present a stark contrast with nature or the natural⁹. It is common knowledge that having been cultivated and invented by the hand of humans, cities were understood to stand in opposition to the wilderness. They were often described as separate from what might be considered the “natural world”.

However, today’s understanding of urban culture demonstrates a difference from the past by focusing on the notion of urban socio-nature. Socio-nature does not contrast the concepts of nature and humans but unites them by referring to them as a single concept¹⁰. In that regard, according to socio-nature, there is nothing inherently unnatural about cities. Cities are man-made environments that are integral to a broader ecological system. Hence, the previously presumed dichotomy between city and nature is rejected. For a long period, urban studies have ignored the physical nature of cities, emphasizing the social aspects rather than the ecological. However, cities can also be defined as a prism of social, economic, ecologic and cultural powers.

In the nineteenth century, there was an explicit urban park movement. Landscape architects such as Frederick Law Olmsted have left a permanent legacy in cities as a part of this movement¹¹. Urban parks used to be large open green areas that were located at the edge of a city, following the ideal of the pastoral landscape with buildings subordinate to the overall landscape. These large landscaped parks were supposed to mimic nature¹². However, they were not supposed to be as wild as nature. Urban parks were required to be in between the wildness of pure nature and civilized nature of a city. Since that movement emerged, urban parks such as the Central Park have been developed not only for their social and economic opportunities but also their aesthetic appeal. Prosperous cities are aware of the fact that nature is an essential element in creating the high-quality environment.

In the mid-twentieth century, environmental groups tackled with series of issues on nature, city and social powers. These attempts were aimed to raise public awareness about environmental degradation. With public support, they tried to secure the conservation of natural resources, preservation of wilderness areas and biodiversity in urban environments. This modern environmental movement was triggered by local, national and international non-governmental organizations. Beginning with a concern about air and water pollution, this movement grew in time to address other concerns pertaining to all landscapes and human activities. As a part of this movement, Abel Wolman introduced the notion of the metabolism of cities¹³. According to Wolman, the city is accepted as an ecological system with a quantifiable amount of environmental inputs such as energy and water and outputs such as heat, pollution, garbage, and noise. Maintaining a balance between inputs and outputs constitutes a self-sustained city.

In the late twentieth century, the context of sustainability in cities was expanded with the Stockholm Declaration and established respectively with the World Charter for Nature¹⁴, the Brundtland Report¹⁵ following the Rio Declaration¹⁶. The Brundtland Report emphasizes the necessity of combining human actions, ambitions, needs, and attempts with the environment in order to achieve sustainability in the long term¹⁷. With the Rio Declaration, sustainable cities became a developing topic, especially for planning discipline. In the same declaration, environmental protection was stated as an internal part of the development processes in the cities. The declaration addressed the issue of harmony with nature which is crucial for a healthy and productive life in urban environments. Herbert Girardet defines the sustainable city as “a city that works so well that all its citizens can meet their own needs without endangering the well-being of the natural world or the living conditions of other people, now or in the future”¹⁸. According to Girardet’s definition, the sustainable city requires the implementation of environmental-friendly standards, management objectives, and priorities equally for all the citizens.

These discussions on sustainability have raised the issues of environmental quality in urban areas. Questions of environmental quality immediately bring up the issues about social exclusion as the worst environmental conditions are imposed on the most marginal-lower-income urban areas. Disasters are also considered as a matter of social exclusion. They affect poor cities or poor parts of cities more than affluent ones. Due to the existence of economic inequity and social justice, hazards easily turn into disasters. At the beginning of the twenty-first century, Lawrence J. Vale and Thomas J. Campanella used the term “resilience” to determine a city’s ability to survive a



The 18th International Planning History Society Conference - Yokohama, July 2018

disaster, underlining four stages for recovery. These stages are an emergency response, restoration, replacement and reconstruction and development reconstruction¹⁹.

All these distinct yet connected ideas about nature conservation underline the importance of the existence and sustainability of natural areas within cities. Today, natural areas in the urban fabric are utilized to sustain, resist, and contribute to the creation of socially inclusive and healthier cities. Best management practices in nature conservation increase the quality of life in cities.

Though the conservation and protection of natural areas in cities gained importance, threats against nature did not subside but showed an increase. As a result, United Nations commissioned International Union for Conservation of Nature (IUCN) as a permanent observer in 1999²⁰. Today, IUCN has the most significant network and database for nature conservation. In 2003, United Nations Protected Sites List, which was first initiated in 1962, was officially established by IUCN and UNEP-WCMC²¹. Together with the list, protected sites categorization and management strategies are decided. With this momentum in 2014, IUCN remarked current concept and methodology of nature conservation in the Urban Protected Area Guidelines (UPAG)²². Even though the guidelines refer to urban protected areas, it draws the framework of management and enhancement of natural areas in an urban environment.

According to IUCN definition, urban protected areas are natural areas situated in or at the edge of large population centers²³. They do not include conventional urban parks with lawns, flowerbeds and sports fields²⁴. They are wilder forms of nature in the urban fabric²⁵, such as groves. There are numerous actors in charge of these areas including government, decision-makers, media, opinion leaders, and critical educational and cultural institutions. Urban sprawl and intensification of urban development are external threats. These areas are affected by crime, vandalism, littering, dumping, and light / noised pollution and subject to urban edge effects as more frequent and severe fires or the introduction of invasive alien plant species.

PEOPLE
provide access for all
engender a local sense of ownership
take advantage of volunteers and support groups
communicate carefully and use a range of communication technologies
demonstrate, facilitate and promote good environmental behaviour
demonstrate, facilitate and promote the health benefits of contact with nature and of good eating habits
prevent littering
prevent and prosecute a crime against people and property.
reduce human-wildlife interaction and conflict
control poaching
control invasive species of animals and plants
INSTITUTIONS
cooperate with agencies that have shared or adjoining jurisdictions
cooperate with institutions that have complementary missions
cast a wide net of advocates and allies
cooperate with universities in training managers for urban protected areas
learn from others' experience with collaboration
IMPROVING URBAN PROTECTED AREAS
promote and defend urban protected areas
work to make urban protected areas national and global conservation priorities
create and expand urban protected areas
promote rules and organisational cultures that respect the differences between urban and more remote protected areas
recognise that political skills are critical to the success
seek funding from a wide range of sources
take advantage of international organisations and exchanges
improve urban protected areas through research and evaluation

Table 1: Principles are stated in the IUCN UPAG.²⁶

To sustain natural areas in cities, UPAG laid down certain principles. IUCN states that these principles are relevant to urban protected areas or any open green areas in or at the edge of large population centers²⁷. In Table 1, the



principles are grouped in four categories to simplify the complexity of UPAG. They include suggestions to increase social relations with natural areas, cooperation among institutions, improvement of urban protected areas as well as a recommendation for future implementations.

These principles constitute the main aspects of sustaining natural areas in an urban environment. In order to create natural conservation in city-scale high-populated areas, IUCN recommends a network planning approach to integrate natural areas into other land-uses to increase human contact with nature²⁸. Thus, natural and built areas need to become components of a whole system harmoniously. The UPAG remarks this concept and methodology by providing access to all, increasing awareness, promoting connections to natural areas and helping infusion nature into the built environment. In the scope of this study, these remarks of the UPAG is analyzed in two cases.

Nature Conservation Planning Approaches in Case Studies of Breda and Beykoz, Istanbul

Two different case studies have been selected to discuss UPAG principles. The first case is Breda City Plan in the Netherlands. The second one is the Beykoz Riva Integrated Environmental Protection and Development Plan in Istanbul, Turkey. The city of Breda has historic urban context with water presence^{29, 30, 31}. Riva also has a historic settlement pattern including agricultural and forest areas^{32, 33, 34, 35}. Both cases are at the edge of the water bodies and face a flood risk due to several rivers. The City of Breda and Beykoz have a similar population with 324,812 and 247.284 inhabitants respectively^{36,37}. These two-medium size post-industrial settlements are both under the pressure of rapid urban development and share an environmentalist stance.

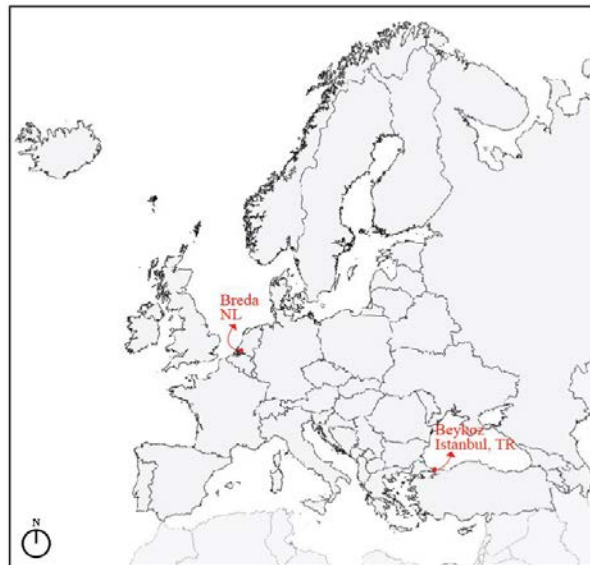


Figure 1. Location of Breda Netherlands and Beykoz Istanbul Turkey on the Europe Map

The city of Breda is located in the province of North Brabant in the southern part of the Netherlands. Breda has been pursuing sustainable urban development for thirty years in order to distinguish itself from its neighbors Rotterdam and Amsterdam³⁸. Implementations in Breda focuses on the combination of planning attractive green spaces with sustainable risk management for flooding. Urban development approaches in Breda have environmentally friendly and socially sensitive aspects. In that regard, the city establishes a forest plantation near to a local highway to compensate for carbon dioxide emission and to increase awareness about global climate change. Housing development projects (Chassé Park or Westerpark) prioritize the connection among nature, city, and agriculture. First, the green areas within the city are connected to one another, then this web of connection is tied to a larger project, called the Green Fingers, which includes a regional scale³⁹. Breda is also adjacent to the NP De Biesbosch which is protected nature reserve and the largest freshwater tidal area in Europe⁴⁰. The reason for analyzing Breda City Plan in the scope of the UPAG is to comprehend whether a traditionally successful nature-sensitive implementation will also adopt the principles.

The district of Beykoz is located in the north of the Anatolian side of the Bosphorus in the Istanbul metropolitan area. The Municipality of Beykoz is distressed by the regular flooding of Riva River. Therefore, the integrated protection and development of the Riva river and Riva valley in Beykoz are initiated by Beykoz Municipality in collaboration with a Dutch-based planning firm⁴¹ and local stakeholders. Within this framework, flood risk management and sustainable water strategy were developed together with the revitalization of the agricultural area. This project also includes the ecological and recreational development of the Riva river basin. In that regard, the construction of a new city marina, acceleration of urban development, and tourism industry are proposed. This



sustainable approach allows Beykoz to conserve its natural values and continue to be the green lung of Istanbul. This project site also includes a nature protection site (Polonezköy Nature Park) that is integrated to the development plan⁴². Beykoz Riva Integrated Environmental Protection and Development Plan is assessed according to UPAG in order to understand whether the guiding principles of UPAG support this one of the first implementations in Istanbul.

The assessment Breda and the Riva Beykoz urban plans according to IUCN's UPAG demonstrates that both implementations are in line with most of the principles (Table 2). In Breda City Plan, an existing green network of natural areas is enhanced to increase recreational activities in the urban context. The plan is carried out in cooperation with various institutions with the aim of developing an environment-friendly transportation system and creating economic opportunities. Dwellers were included in the planning and decision-making processes, and they continue to be a part of communications with the authorities for future processes.

The Riva Beykoz development plan also expands the use of public open spaces, and enhances the connection among populations, increasing access to social benefit. The development plan proposes solutions to the problem of canalization of water bodies, improving environmental quality for river basin and increasing agricultural production. It also emphasizes cultural heritage sites and increases awareness with regard to urban identity. Breda City Plan aims to improve biodiversity in an urban area and make it more durable together with green infrastructure implementation in the natural areas. It is a successful project carried out with a sensibility to protect nature in the urban context. In contrast, nature conservation has not become a key concept in urban planning in Turkey. Riva Beykoz development plan is one of the first attempts at creating an integrated environmental protection plan focusing on a river basin in an urban context. Even though these cases represent different backgrounds in terms of nature conservation, they both meet criteria of IUCN UPAG that adopt the current concept and methodology of nature conservation planning in urban areas.

Principles of the IUCN Urban Protected Areas Guidelines	Breda CP	Riva – Beykoz IEPDP
PEOPLE		
provide access for all	1	1
engender a local sense of ownership	1	1
take advantage of volunteers and support groups	1	1
communicate carefully and use a range of communication technologies	1	1
demonstrate, facilitate and promote good environmental behaviour	1	1
demonstrate, facilitate and promote the health benefits of contact with nature and of good eating habits	1	1
prevent littering	0	0
prevent and prosecute a crime against people and property.	1	1
reduce human-wildlife interaction and conflict	1	1
control poaching	1	1
control invasive species of animals and plants	0	0
INSTITUTIONS		
cooperate with agencies that have shared or adjoining jurisdictions	1	1
cooperate with institutions that have complementary missions	1	1
cast a wide net of advocates and allies	1	0
cooperate with universities in training managers for urban protected areas	0	0
learn from others' experience with collaboration	0	0
IMPROVING URBAN PROTECTED AREAS		
promote and defend urban protected areas	1	1
work to make urban protected areas national and global conservation priorities	1	0
create and expand urban protected areas	1	1
promote rules and organisational cultures that respect the differences between urban and more remote protected areas	1	1
recognise that political skills are critical to the success	1	1
seek funding from a wide range of sources	1	1
take advantage of international organisations and exchanges	0	0
improve urban protected areas through research and evaluation	1	1
	19	17

Table 2: IUCN UPAG Principles Evaluation for Breda City Plan and Riva Beykoz Integrated Environmental Protection and Development Plan, 1= exist, 0=unknown or not exist

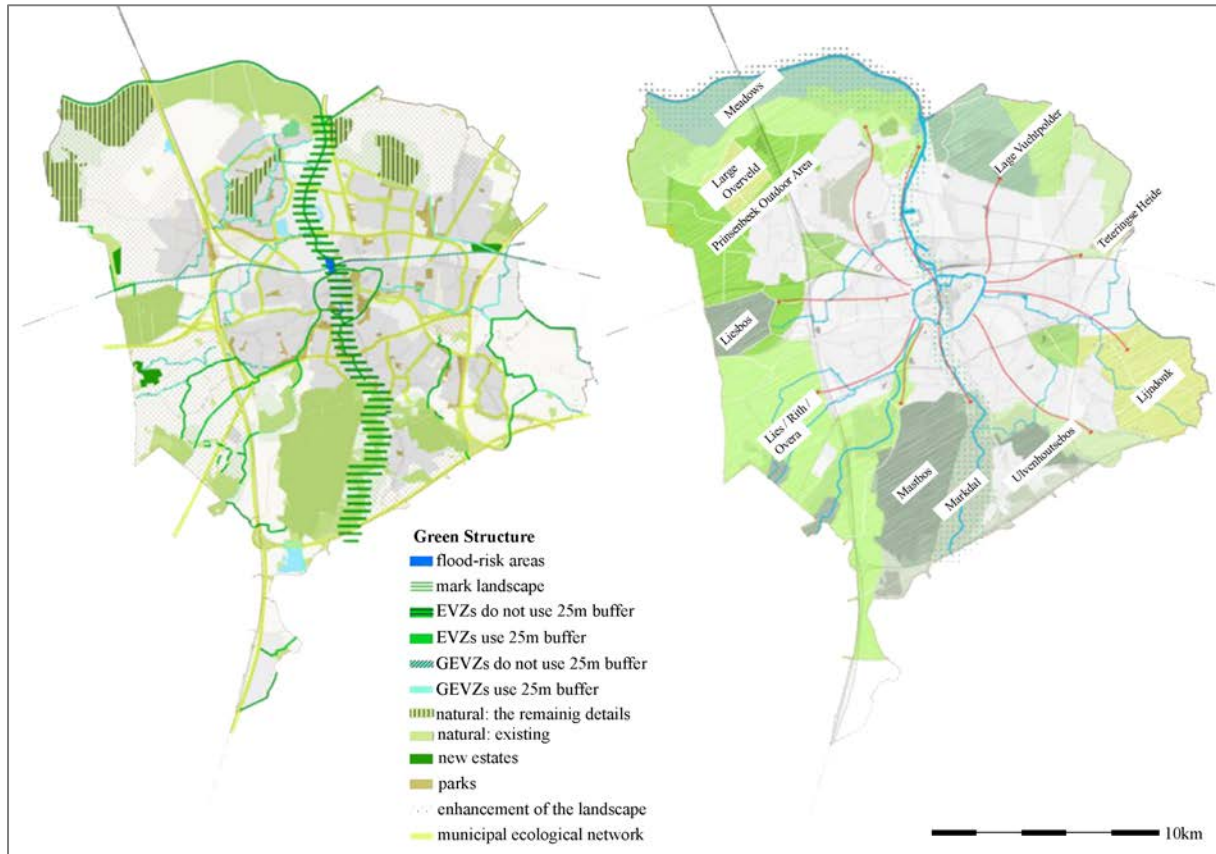


Figure 2. Breda Green Structure Plan (left) and Network Strategies (right) from Structuurvisie Breda 2030.

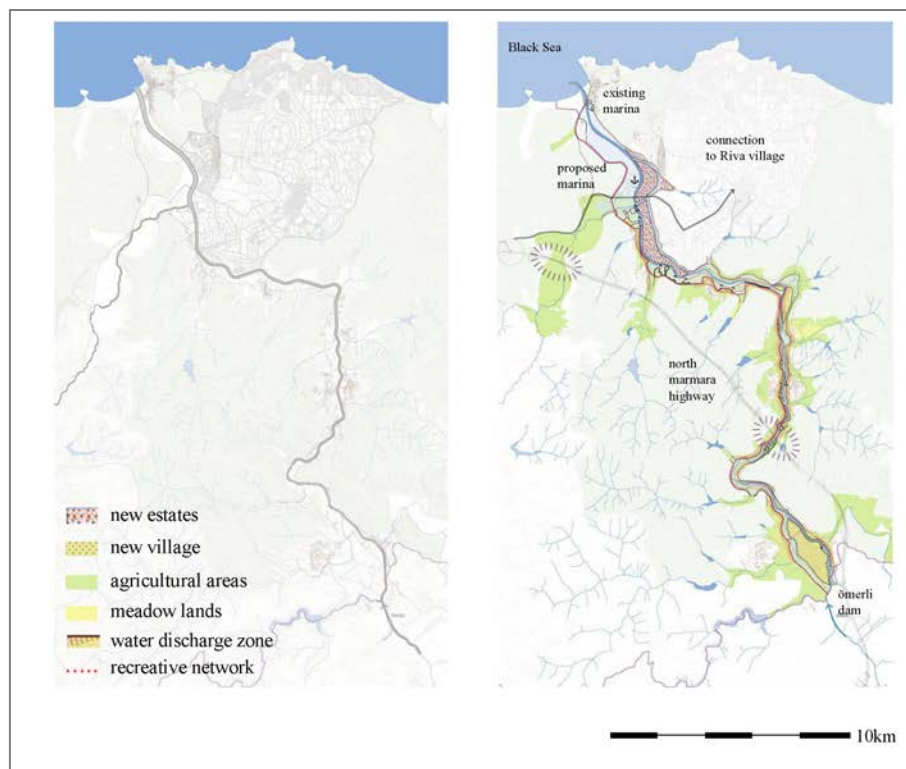


Figure 3. Canalization Project for Riva River (left) and Proposed Integrated Schematic Plan (right)



Conclusion

As cities continue to grow, nature retreats and people lose contact with nature in urban areas. Therefore, not only the protection of natural areas but also the creation of new spaces for the development of nature within the urban fabric attain crucial importance. The existence of nature in urban areas is vital for influencing, encouraging and assisting societies to conserve the integrity and diversity of nature. In addition, it ensures that any use of natural resources must be equitable and ecologically sustainable. Natural areas facilitate the connection between people and nature. Cities are where most people live, where wealth is concentrated and where communications and the media are centered. According to IUCN, political leaders are under pressure to hear what their electors have to say to them⁴³. In that regard, restoring the severed ties of urban people with nature might be possible if they are to demand from political leaders that nature conservation must be a priority.

“Earth will be protected only if urban people care about nature where they live”⁴⁴.

Considering the change in the approaches to nature conservation as the cases of Breda and Riva Beykoz demonstrate, it is possible to conclude that social needs of city dwellers can only be met and an ecological awareness among them can only be raised by enhancing the connection between nature and urban societies. As it is indicated by IUCN UPAG, today the emphasis is not only on protection of natural areas but also on the sustainment of natural heritage by increasing durability and improving life quality in urban settings. Therefore, conservation of nature is an important aspect of the contemporary city structure.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Nuran Zeren Gulersoy is a professor in Istanbul Technical University, the Department of Urban and Regional Planning. Her primary areas of interest are urban planning, urban design, urban and nature conservation. She is the member of ICOMOS, Council Member of Europa Nostra and Secretary General of IPHS (International Planning History Society).

Balin Koyunoglu is a doctorate candidate in Istanbul Technical University, Graduate School of Science, Engineering and Technology, Ph.D. Program. Her academic works focus on subjects of historic urban landscape conservation.

Endnotes

¹ The United Nations, World Urbanization Prospect (New York: United Nations Publishing, 2014).

² The International Union for Conservation of Nature, “The World National Parks Congress” (1982).

³ Ibid.

⁴ Wenwu Du, Sofia M. Penabaz-Wiley, Anthony Murithi Njeru, Isami Kinoshita, “Models and Approaches for Integrating Protected Areas with Their Surroundings: A Review of the Literature” Sustainability 7 (2015)8156.

⁵ The United Nations, “Declaration of the United Nations Conference on the Human Environment” (1972).

⁶ The United Nations Educational, Scientific and Cultural Organization, “The Rio Declaration on Environment and Development” (1992).

⁷ The International Union for Conservation of Nature, “Urban Protected Area Guidelines” (2014).

⁸ John Reader, *Şehirler* (Istanbul: Yapı Kredi Yayınları, 2007).

⁹ Lisa Benton Short, John Rennie Short, *Cities and Nature* (New York: Routledge, 2013).

¹⁰ Christopher Bear “Socio-Nature” Wiley Online Library (2017).

¹¹ John Rennie Short, *Urban Theory A Critical Assessment* (London: Palgrave, 2014), 199.

¹² Ibid.

¹³ Abel Wolman, “Metabolism of Cities” Scientific American (1965): 213, 179-190.

¹⁴ The United Nations, “World Charter for Nature” (1982).

¹⁵ The United Nations, “Report of the World Commission on Environment and Development: Our Common Future” (1987).

¹⁶ The United Nations Educational, Scientific and Cultural Organization, “The Rio Declaration on Environment and Development” (1992).

¹⁷ The United Nations, “Report of the World Commission on Environment and Development: Our Common Future” (1987).

¹⁸ Herbert Girardet, *Creating Sustainable Cities* (Devon: Green Books, 1999).

¹⁹ Lawrence J. Vale and Thomas J. Campanella, *The Resilient City: How Modern Cities Recover from Disaster* (New York: Oxford University Press, 2005).

²⁰ The United Nations General Assembly, “IUCN’s Permanent Observer Mission” (1999).

²¹ The United Nations Environment Programme “UN List of Protected Areas” (1962).

²² The International Union for Conservation of Nature, “Urban Protected Area Guidelines” (2014).

²³ Ibid.

²⁴ Ibid.

²⁵ Ibid.

²⁶ The International Union for Conservation of Nature, “Urban Protected Area Guidelines” (2014).



²⁷ Ibid.

²⁸ Lee Thomas, Julia Middleton, Adrian Phillips, *Guidelines for Management Planning of Protected Areas* (UK: Thanet Press Limited, 2003)4.

²⁹ Historic Maps of Breda by Anna van Westerstee Beek (1657-1717) and Gaspar de Baillieu (1684-1744) dated 17th century.

³⁰ Historic Maps of Breda by Herman Hugo (1588-1629) dated 1627.

³¹ Historic Maps of Breda by Joan Blaeu (1596-1673) dated 1649.

³² Historic Maps of Greece by Abraham Ortelus (1527-1598) dated 1598.

³³ Historic Maps of Greece by Gerard De Jode (1509-1591) dated 1578.

³⁴ Historic Maps of Thrace by Abraham Ortelus (1527-1598) dated 1590.

³⁵ Historic Maps of European Turkey by Pieter Van der Aa (1659-1733) dated 1713.

³⁶ Jennifer Buyck, *Greenery in the City* (Berlin: Jovis, 2015), 48.

³⁷ Fatih Kara, Arif Karatepe, "Land Use Change Analysis of Beykoz District with Remote Sensing Technologies" *Marmara Coğrafya Dergisi* 25 (2012) 382.

³⁸ Jennifer Buyck, *Greenery in the City* (Berlin: Jovis, 2015), 48.

³⁹ City of Helsinki City Planning Department, Helsinki City Plan, (Helsinki: Vaasa, 2016).

⁴⁰ Samenwerkingsverband Nationale Parken "NP de Biesbosch" 2018.

⁴¹ N+H+S Landscape Architecture, Beykoz Riva Valley Integrated Environmental Protection and Development Plan (2016).

⁴² Ministry of Forestry and Water Affairs 1st Regional Directorate, "Polonezkoy Nature Park" (1994).

⁴³ The International Union for Conservation of Nature, "Urban Protected Area Guidelines" (2014).

⁴⁴ Ministry of Forestry and Water Affairs 1st Regional Directorate, "Polonezkoy Nature Park" (1994).

Bibliography

Aa, Pieter Van der. "Historic Maps of European Turkey dated 1713" accessed May 14, 2018, <https://www.sanderusmaps.com/en/our-catalogue/detail/169019/old-antique-map-of-european-turkey-by-pieter-van-der-aa/>

Beek, Anna and Baillieu de Gaspar. "Antique Map of Breda dated 17th century" accessed May 14, 2018, https://www.123rf.com/photo_19710620_antique-map-of-breda-netherlands-atlas-of-fortifications-and-battles-by-anna-beek-and-gaspar-bailliee.html?fromid=VHMvbkFFVIZRQ3c3VG9sdUVSYTBWZz09

Bear, Christopher. "Socio-Nature" Wiley Online Library accessed March 15, 2018, <https://onlinelibrary.wiley.com/doi/10.1002/9781118786352.wbieg0212>

Blaeu, Joan. "Historic Maps of Breda dated 1649" accessed May 14, 2018, <https://www.sanderusmaps.com/en/our-catalogue/detail/163375/antique-map-of-breda-by-blaeu-j/shoppingcarta%20dded/>

Buyck, Jennifer. "Breda Au Fil de l'Eau" in *Greenery in the City*, edited by Zepf, M. 48-53. Berlin: Jovis, 2015.

City of Helsinki City Planning Department, Helsinki City Plan. Helsinki: Vaasa, 2016.

Du, Wenwu, Sofia M. Penabaz-Wiley, Anthony Murithi Njeru and Isami Kinoshita. "Models and Approaches for Integrating Protected Areas with Their Surroundings: A Review of the Literature" *Sustainability* 7 (2015): 8151-8177.

Girardet, Herbert. *Creating Sustainable Cities*. Devon: Green Books, 1999.

Herman, Hugo. "Antique Map of Breda dated 1672" accessed May 14, 2018, <https://www.ebay.com/itm/Antique-Map-FORTIFICATION-BREDA-PRINCE-OF-ORANGE-Herman-Hugo-1627-/231341669733>

Jode, Gerard De. "Historic Maps of Greece dated 1578" accessed May 14, 2018, <https://www.sanderusmaps.com/en/our-catalogue/detail/166829/old-antique-map-of-greece-by-g-de-jode>

Kara, Fatih and Arif Karatepe, "Land Use Change Analysis of Beykoz District with Remote Sensing Technologies" *Marmara Coğrafya Dergisi* 25 (2012) 378-389.

Ministry of Forestry and Water Affairs 1st Regional Directorate, "Polonezkoy Nature Park" accessed 12 May, 2018, <http://www.istanbultabiatparklari.gov.tr/tabiat-parklarimiz/tum-parklar/polonezkoy-tabiat-parki>

N+H+S Landscape Architecture, "Beykoz Riva Valley Integrated Environmental Protection and Development Plan" accessed May 15, 2018, <http://www.hnsland.nl/nl/projects/quickscan-beykoz-istanbul>

Ortelus, Abraham. "Historic Maps of Greece dated 1598" accessed May 14, 2018, <https://www.sanderusmaps.com/en/our-catalogue/detail/163933&e=antique-map-of-greece-by-ortelius-a/>

Ortelus, Abraham. "Historic Maps of Thrace dated 1590" accessed May 14, 2018, <https://sanderusmaps.com/en/our-catalogue/detail/165480/antique-map-of-ancient-thrace-by-a-ortelius>

Reader, John. *Şehirler*. Istanbul: Yapı Kredi Yayınları, 2007.

Samenwerkingsverband Nationale Parken "NP de Biesbosch" accessed May 12, 2018, <http://np-debiesbosch.nl/>

Short, John Rennie. *Urban Theory A Critical Assessment*. London: Palgrave, 2014.



Short, Lisa Benton and John Rennie Short. *Cities and Nature*. New York: Routledge, 2013.

The International Union for Conservation of Nature. "The World National Parks Congress" accessed February 22, 2018, <https://portals.iucn.org/library/node/6165>

The International Union for Conservation of Nature. "Urban Protected Area Guidelines" accessed February 22, 2018, <https://portals.iucn.org/library/sites/library/files/documents/PAG-022.pdf>.

The United Nations. "Declaration of the United Nations Conference on the Human Environment" accessed February 15, 2018, <http://www.un-documents.net/unchedec.htm>.

The United Nations General Assembly. "IUCN's Permanent Observer Mission" accessed by March 15, 2018, <https://www.iucn.org/theme/global-policy/our-work/united-nations-general-assembly>

The United Nations Environment Programme. "UN List of Protected Areas" accessed by March 15, 2018, http://old.unep-wcmc.org/un-list-of-protected-areas_269.html

The United Nations. "Report of the World Commission on Environment and Development: Our Common Future" accessed February 15, 2018, <http://www.un-documents.net/our-common-future.pdf>

The United Nations. "World Charter for Nature" accessed February 15, 2018, <http://www.un.org/documents/ga/res/37/a37r007.htm>.

The United Nations. *World Urbanization Prospect*. New York: United Nations Publishing, 2014.

The United Nations Educational, Scientific and Cultural Organization. "The Rio Declaration on Environment and Development" accessed February 15, 2018, http://www.unesco.org/education/pdf/RIO_E.PDF.

Thomas, Lee, Julia Middleton, Adrian Phillips, *Guidelines for Management Planning of Protected Areas*. UK: Thanet Press Limited, 2003. 4.

Vale, Lawrence J. and Thomas J. Campanella. *The Resilient City: How Modern Cities Recover from Disaster*. New York, Oxford University Press, 2005.

Wolman, Abel. "Metabolism of Cities" *Scientific American* 213 (165): 179 – 190.

Image sources

Figure 1: Location of Breda Netherlands and Beykoz Istanbul Turkey on the Europe Map

Figure 2: *Structuurvisie Breda 2030* (Breda: Gemeente Breda, 2013), 80-86.

Figure 3: N+H+S Landscape Architecture, "Beykoz Riva Valley Integrated Environmental Protection and Development Plan" accessed May 15, 2018, <http://www.hnsland.nl/nl/projects/quickscan-beykoz-istanbul>

Table sources

Table 1: Principles are stated in the IUCN UPAG. (California: RDS Printing, 2014), 8-9.

Table 2: IUCN UPAG Principles Evaluation for Green Fingers and Green Grid, 1= exist, 0=unknown or not exist.



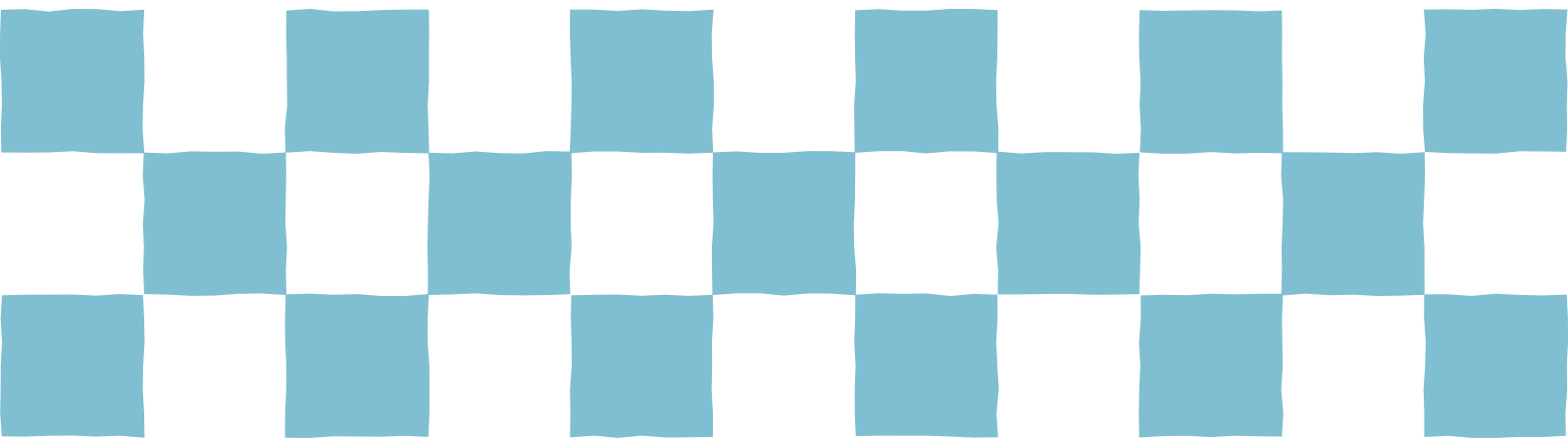
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

33 Water and City



Interaction between Water and City: Historical Legacy and Transformation of The City of Ji'ning

Lu Guo (Tsinghua University)

Ji'ning, located in the southwest of Shandong province of China, is a famous historic city with a long history and deep cultural accumulation. In Ming and Qing Dynasties (1368-1912), it was an important commercial city along Beijing-Hangzhou Grand Canal. However, in recent decades, large-scale industrial production and coal mining have been carried out in Ji'ning region, resulting in serious environmental problems, and the cultural characteristics of the city, which was gradually accumulated in the long history, are becoming increasingly blurred. It is necessary to study the historical legacy of Ji'ning in a scientific way, to excavate its characteristics and mechanism, and furthermore to learn from the legacy and explore the way of urban transformation and development.

Firstly, the historical context of the city development of Ji'ning would be teased out to excavate its driving force, including 3 steps: (1) Prehistoric Period: the primitive settlements were developed depending on the rich natural water system; (2) Lu Cultural Period (from Pre-Qin Period to Song Dynasty, 11th century BC to 13th century AD): the artificial water system had been developed gradually providing better conditions for urban development; (3) Canal Cultural Period (From Yuan to Qing Dynasty, 13th to 19th century): The Beijing-Hangzhou Grand Canal was completed promoting the development and prosperity of the region. It could be declared that the main driving force of the development of Ji'ning city in history is the interaction between city and water, the development of the water system had promoted the development of the city.

Secondly, the mechanism of the interaction between city and water would be excavated with Canal Cultural Period as an example. It could be demonstrated that a multilevel regional whole with the canal as the core had been created through the interaction of water and city, including 3 spatial scales: (1) Enrichment and development of urban and rural system; (2) Expansion and evolution of urban form; (3) Integration and change of streets and buildings.

Based on the study on the driving force and mechanism of urban development, the enlightenment from the historical legacy to the sustainable future of the contemporary city could be achieved. First, attention should be paid to the interaction between city and water, from the perspective of solving the contradiction between city and water, the comprehensive means of ecological governance and landscape modeling could be applied to improve the damaged natural environment and restore the benign interaction between human and water. Second, the regional space should be treated as a whole, a multi-scale creation of regions, cities, urban areas, streets and buildings should be carried out rather than simple city planning.

Modern Regional Development in Japan: From the Kiso River Improvement Project to City Planning of Gifu

Yoshifumi Demura (Gifu University)

Japanese modern local cities were formed by the system of urban planning which became full scale in the 20th century, controlling the urbanizing area. However, looking to the outside of the city planning system, it is obvious that the cities exist on the result of previous infrastructure developments, such as traffic lines including water transportation, the drainage systems, land improvement, disaster prevention, food supply, and energy supply. For example, Japanese great rivers were initially modified by Dutch engineers far before establishing urban infrastructures.

In order to describe the circumstances and conditions of the establishment of modern city, the transformation of causal relationship between the regional infrastructure system and the urban planning should be described. In this research process, international comparison studies must be effective, for some regional improvements in the East were carried out by technology transmitted from the West, and the insights into urban planning in the East were also influenced by the world wide stream. This research focuses on one typical example for this, the case around a local city, Gifu, Japan. The objective is to describe the aspect that the region gradually modernized in the process from the river improvement project to the urban planning in the urban area.

The sequence of projects was as following. The initial situation of downstream parts of the Kiso, Nagara, and Ibi rivers after the Meiji Restoration was the state of collective Wa-Jyu which were areas surrounded by embankment in meshed river flow. Johannis De Rijke, one of hired Dutch engineers, found out the problem of sediment flowed out of the mountainous area and planned to modify the flows letting the sand flow out to the sea. This river improvement project was from 1887 to 1911. After this project, land improvement of agricultural fields on watershed area of upper stream parts was required. This wide spread project needed to overcome conflicts between individual societies rooted of each Wa-Jyu. Then people organized new overwhelming society and constructed huge drainage system from 1926 to 1934. Gifu city situated in the upper stream of this area was about to make a system of city planning at that time, to overcome general urban drainage and environmental pollution problems derived from new factories. The drastic solution planned by the Gifu city engineer was construction of separate sewer system using the drainage system already formed by that time, from 1934 to 1943.

In this long process (1887-1943), there was not the comprehensive vision in the initial stage. The final system was formed as the consequence of emergence in the process that the social relationships among various positions reach equilibrium. The vast vision of De Rijke, perspective of the prefectural technicians, and guidance to the collaboration of the interior ministry bureaucracy, which were derived from Western or Westernized engineering, stimulated people to cooperate and share the wider scale of foundation system which was a new equilibrium among wider society. The urban planning began on the bases of vast regional system created in that way.

The river and the park: infrastructure in urban planning. Santiago de Chile at the beginning of the 20th century

Fernando Pérez-Oyarzun (Pontificia Universidad Católica de Chile)

The paper highlights the role of infrastructure in urban planning. It poses the question about virtuous associations of infrastructure and public space. Does infrastructure reduce its meaning to technical and functional dimensions, or could trigger wider and positive impacts upon the urban fabric? Examining a case study of the early 20th century, the paper suggests the possibility to conceive infrastructural projects as promoters of urban quality. The case study is Parque Forestal (Forestal Park) area in Santiago de Chile, whose origin is tightly associated with the canalization of the Mapocho River. The Park makes part of a wider modernization process. It provided the city with a new public space, allowed the creation of a renovated residential neighbourhood, and set a tendency for urban expansion and future public spaces.

Mapocho embankments were used as common pasture fields during colonial times. Local authorities had built a series of protecting walls, known as Tajamares, to prevent the floods caused by dramatic changes in the river flow. Along them, urban promenades, adorned with trees, were settled. At the end of the 19th century the area had turned into an abandoned periphery, serving, in part, as waste deposit. The river course appeared as a wide area of a variable size that eventually reached more than 200 meters width.

Benjamin Vicuña Mackenna, Intendant of the city, proposed to canalize the river and to take advantage of the liberated land, in 1872. The idea was to plant a park and build a residential area in the terrains gained to the river. The canalization was part of a wider plan, which included other infrastructure projects as well as green spaces. Vicuña Mackenna was fully aware about the economic implications of this huge project and, therefore, about the need of getting the maximum urban profit from it.

The river would be actually canalized fifteen years later, following the project of the engineer Valentín Martínez. After some public discussions, Vicuña Mackenna's proposal of planting a park and developing a residential area was implemented. The park was a key space for the centennial of the independence celebrations occurred in 1910. A new fine arts museum and a number of monuments to celebrate the occasion were installed there. The residential area was conceived as a kind of garden city, fully innovative for the urban standards of those years.

The Forestal Park transformation represents a very significant effort of the early 20th century, in order to combine infrastructure modernization and urban quality. It gave birth to one of the most appreciated areas in the city. This can be attributed to the virtuous combination of the river, the park and the residences. Other parks have emerged along the river in the following years. This tendency, inaugurated by Forestal Park, could become a green backbone for the whole city. One could expect that the highways also built along the river could have exhibited the same concern about public space, but it hasn't been always the case.



Interaction between Water and City: Historical Legacy and Transformation of The City of Ji'ning

Lu Guo*,

* Assistant Professor, School of Architecture, Tsinghua University, Beijing, China, guo_lu@126.com

Ji'ning is a famous historic city with a long history and deep cultural accumulation in Shandong Province, China, which was facing serious environmental problems and cultural crisis due to large-scale industrial production and coal mining in recent decades. It is necessary to study the historical legacy of Ji'ning in a scientific way, to excavate its context and characteristics, and furthermore to learn from the legacy and explore the way of urban transformation and development. Firstly, the historical context of the city development of Ji'ning is teased out to excavate its driving force. Secondly, the mechanism of the interaction between city and water is excavated with Canal Cultural Period as an example. Based on this, the enlightenment from the historical legacy to the sustainable future of the contemporary city is declared as a conclusion.

Keywords: Legacy, Transformation, Sustainable future, Water, the Grand Canal

Introduction

The city of Ji'ning is located in the southwest of Shandong Province, China. Governing 2 administrative districts, 2 functional areas, 2 county-level cities and 7 counties, it covers an area of 11,187 square kilometers with the population of 8,354,400. The "Ji'ning" discussed in this paper refers to Rencheng District where the administrative center locates, which is also the site of ancient Ji'ning County. Rencheng District covers an area of 651 square kilometers with the population of 1,010 thousand and it's the core region of the city of Ji'ning (Figure 1). People have lived in Ji'ning since Paleolithic period. (Figure 1) After the opening of the Grand Canal in the Yuan Dynasty (1271-1368), it has been an industrial and commercial city with prosperous economy and social culture because of the unique position as the center point of the canal. Ji'ning is a city with long history and profound civilization accumulation. However, in recent decades, a large-scale of industrial production and coal mining have been conducted in Ji'ning, which cause severe problems such as environment pollution and aging industry. The regional cultural characteristic that is accumulated and formed in history is blurred gradually and the urban development is facing the transformation. In 2014, the whole application for world inheritance of the Grand Canal got a success. The value of Ji'ning's history and culture, on the one hand, has been fully affirmed and highlighted. On the other hand, higher requirements have been raised in terms of legacy protection and transformational development of city. That inspires us to study further the historical legacy of Ji'ning with scientific methods to explore the historical context and analyze the characteristics of the development of the city. Based on this, we could get further reference from historical legacy for the development of modern city and then explore the path of city's transformational development.

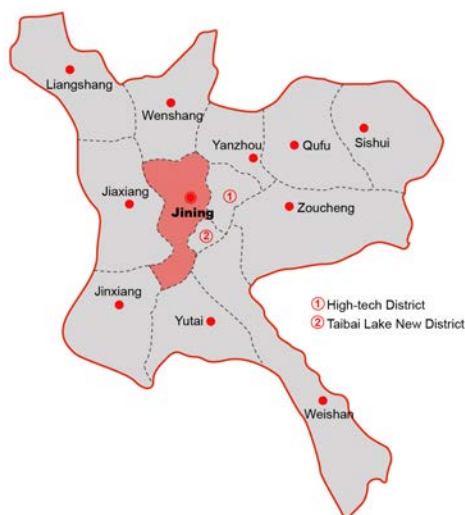


Figure 1 Location of Ji'ning and administrative division of the city of Ji'ning



The urban development historical context of Ji'ning: motivated by interaction between city and water

The history of urban development of Ji'ning could be divided into four stages broadly: prehistoric culture period, Lu culture period (Western Zhou to Song Dynasty, about 11th century BC - 13th century AD), Canal culture period (Yuan Dynasty to Qing Dynasty, about 13th century - 19th century) and Industrial civilization Period (20th century-). People have lived in Ji'ning since Palaeolithic period. A large number of early settlement sites had been founded in Ji'ning and surrounding areas, including several cultural types including Beixin, Dawenkou, Longshan and Yueshi. Tales of several legendary tribal leaders and sovereigns such as Chiyou[蚩尤], Shaohao[少昊] and Great Yu[大禹] are also spread widely nowadays in that region. Started early, the culture there was prosperous and highly diverse. Ji'ning was Rencheng State in the Pre-Qin Period. After the unification of China in Qin Dynasty (221-207BC) this area was divided into Rencheng County and Kangfu County. That was kept basically until the Southern Song Dynasty (1127-1279). During this period the main functions of Ji'ning was politics and military. It was an important part of Lu Cultural Region that took Qufu as the core. Respecting Confucianism, valuing rite and observing order were highly appreciated. After Yuan Dynasty (1271-1368), with the opening of the Grand Canal, Ji'ning, as the center point of the Grand Canal, entered its meridian period of urban development. The commercial economy was more and more flourishing, "The goods and money from Yangtze River and Huaihe River areas are all gathered there". The social culture became richer and more diverse, "Different culture from different regions is converged", "People don't depend on the agricultural production but commodity. They speculate and earn money"¹. The regional culture was converted into Canal culture which was open and attached great importance to commodity from Lu culture which was plain and respected agriculture. The modern Ji'ning is a traditional industrial city depending on resource exploitation. The industrial culture has been the main body of regional culture. The industrial and mining enterprises are everywhere and lead the urban development.

From further analysis of the driving power of urban development and evolution in each stage, we can find that the interaction between water and city is the main driving power going through the whole process of the history of urban development. The interaction between water and city forms a multilevel regional space as a whole. Since the ancient times, Ji'ning has been a region with serried water network. In early stage of regional development, people took advantage of the natural water resources simply for agricultural production and everyday life; then artificial water system came on stage gradually and large-scale water projects were built; in modern times, coal mining has caused large-scale subsidence waters. The natural landscape changes continuously. The human settlement is also in the process of gradual development: the earliest primitive settlements developed into a political and military center of a region, and then became a prosperous commercial city. Now it's a traditional industrial city which is in the process of transformation. The urban space, with the interaction between people and water, is gradually formed and developed throughout the long history.

(1) Prehistoric culture: well- developed natural water system system and emergence of original settlements

The archaeological survey and research show that the southwest of Lu where Ji'ning locates was a region with alternated rivers and lakes and thick forests from ancient times². The ancient people took advantage of the rich production and living resources provided by natural environment. They farmed and inhabited there, and also hunted for animals and fish. The early settlements sites distribute widely in Ji'ning, including Sigudui site, Chengziya site, Fenghuangtai site, Shihai site, Pipashan site, Yihe site and Danggudui site. These sites belonged to several different historical period and cultural types, such as Longshan and Dawenkou.

(2) Lu culture (Pre-Chin—Song Dynasty): artificial water system involved and development of the city

Though, there were always a great numbers of rivers and lakes in Ji'ning and the water resource was rich throughout the history, the water system changed greatly in different historical periods influenced by Yellow River. In Spring and Autumn Period(770-476 BC), people tried gradually to make the human power involved in natural environment and communicated the natural water system with artificial canals. For example, In 483BC, King Fuchai of Wu (reigned 495-473 BC) excavated canal to communicate Jihe River and Yihe River³; in 12th year of Yonghe in Eastern Jin Dynasty (356), Xun Xian (322-359) excavated the Guanghe River⁴; in 4th year of Taihe in Eastern Jin Dynasty (369), General Huan Wen(312-373) excavated the Huangong Ditch⁵; in 4th year of Kaihuang in Sui Dynasty (581AD), the Fengyan Ditch was excavated⁶. (Figure 2)

The artificial canals improved the convenience of water transport of this region and the advantage of geographical location of Ji'ning had also been enhanced. In 'Note on the Wall of Rencheng County's Hall' of Li



Bai(701-762), it is recorded that “There are 11 counties in the area of Lu. Among them Rencheng is the most strategically important section.”⁷The city developed gradually with the political and military function.

(3) Canal culture (Yuan Dynasty—Qing Dynasty): the opening of the Grand Canal and the prosperity of the whole region

From the Yuan Dynasty, along with the excavating of the Grand Canal, a series of relevant large-scale water projects were pushed, which made the rivers and lakes as well as the terrain of the whole region changed greatly. In 20th year of Zhiyuan in Yuan Dynasty (1283AD), the Jizhou River was excavated; in 26th year of Zhiyuan (1289AD), the Huitong river was excavated. The two rivers were further dredged during the period of Yongle in Ming Dynasty(1403-1424).

The opening of the Grand Canal made Ji'ning an important node on north-south communicating artery of China. Ji'ning was located at the center point of the Grand Canal, from where “one could reach Yangtze River and Huaihe River areas in south and Zhanghe River and Wei Area in north. The land and water communications gather here, which makes it a very important region”⁸. In 4th year of Xuande of Ming Dynasty (1429), the court raised the tax of 33 counties to increase the income of the central government. They were mostly well-known industrial and commercial cities with prosperous economy, such as Suzhou, Yangzhou and Yingtian(Nanjing), and Ji'ning was one of them, which indicates that Ji'ning was already one of the important economic centers of the whole country⁹. From the Yuan Dynasty, the commercial economy of Ji'ning rised rapidly and the whole region was very prosperous. However, in the 5th year of Xianfeng in Qing Dynasty (1855), the Yellow River moved northwards and grabbed the waterway of Daqing River into sea. The Grand Canal was cut off and Ji'ning was declined gradually. (Figure 2)

(4) Industrial civilization (modern times): surrounding land subsidence and the limitation to regional development

Since 1950s, Ji'ning has been an important coal base in China. Long-term coal mining caused dozens of environment problems, the most severe one of which was the large-area land subsidence. Until 2010, the area of land subsidence in the City of Ji'ning is about 23,500 ha, which accounts for 2.1% of the total land area.¹⁰ It is preliminary estimated that the collapsed area will be over 270,000 ha in 2050, which accounts for about 24% of the total land area and 50% of the cultivated area.¹¹ The urban construction land of Ji'ning will be surrounded by large-area water formed by land subsidence. (Figure 2)

The coal minning industry had accelerated the economic development of Ji'ning, but also caused serious problems: the water pollution spreads; the communication facilities and the infrastructure of water and transportation are damaged; a great amount of farming land and construction land is eroded. All of these problems threaten the regional ecological security and restrict the urban development greatly.

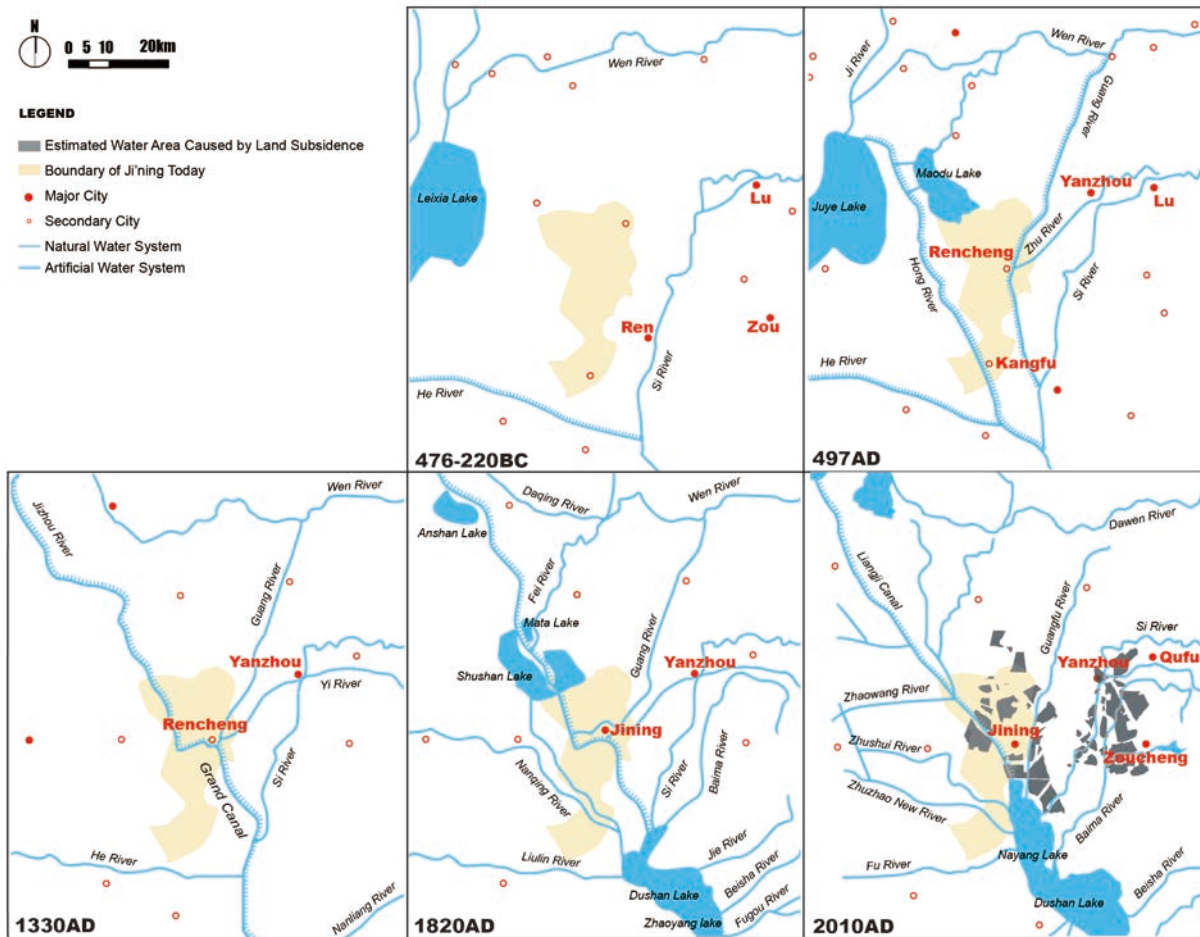


Figure 2. Evolution of the water system of Ji'ning area

Typical characteristic of Ji'ning's historical and cultural legacy: multilevel region with the canal as the core

Ji'ning has formed a series of colorful cultural landscapes in different historical periods. The canal culture period from Yuan to Qing Dynasty was the peak period of urban development, which shaped the main characteristics of the historical and cultural legacy of Ji'ning city. Through the analysis of this historical cross section, the mechanism of the interaction between the city and water can be deeply excavated, and the characteristics of the history and culture of Ji'ning city can be better understood. The excavation of the canal is the modification of the natural environment by man power, based on which, the urban and rural system, urban form, streets and buildings produced a full range of evolution and formed a multilevel region with the canal as the core.

(1)Enrichment and development of urban and rural system

The excavation of the Grand Canal had driven the formation and development of the urban and rural system in Ji'ning and surrounding areas.

On the one hand, the Grand Canal promoted comprehensive development of cities, towns and villages. Convenient water transportation promoted the prosperity of regional commercial economy. The original town scale expanded rapidly and the population increased. Nanyang, a town to the south of Ji'ning had become “a large town of over 3,000 families” from “a tiny town of 12 families”¹². A large number of emerging commercial towns had sprung up on the basis of water-gates and docks, such as Liulin Water-gate, Tongji Water-gate. They had all become small settlements “with hundreds of families”¹³. At the same time, since the Ming Dynasty (1368-1644), in the need for grain transportation and canal management, the government stationed troops in the Ji'ning area and set up Tuntian, i.e. open up wasteland and grow food grain, which gradually evolved into towns and villages later and became new elements of the regional urban and rural system. (Figure 3)

On the other hand, the canal linked these towns and villages to an organic network. As a transport artery, the canal connected towns alongside to be a transportation and economic community; at the same time, the



governance of the canal, such as the management of springs and the dredging of the channels, also required the overall cooperation among cities, towns and villages in the region to complete¹⁴, which strengthened the communication and connection among them.



Figure 3. Ji'ning and the towns along the canal in Qing Dynasty

(2) The expansion and evolution of urban form

The excavation of the canal also led to the evolution and change of the urban form of Ji'ning.

On the one hand, the city crossed the limitation of city wall and water system around and approached the direction of the Grand Canal. The docks and water-gates had become the gathering point of business and manufacture in surrounding areas. Guanxiang Areas [the neighborhood outside the city gate] developed rapidly. The Tianjing Water-gate and Zaicheng Water-gate to the south of Ji'ning were extremely important, which accelerated the Southern Guanxiang Area to be a newly developed area in a short time that was prosperous in business, comprehensively functional and culture flourishing. Other Guanxiang Areas developed in different degree according to the different space relationships with canal water-gates. (Figure 4, 5)

On the other hand, driven by aggregation effect of docks and water-gates, the function and form of the city also changed on the original basis. In the south of the city, "All kinds of goods gather here and travelling traders come and go". The economy was developed and industry and commerce were gathered. In southwest of the city, "There are many people who imitate the Pear Garden"¹⁵ and "gamble together". The habitants were almostly businessmen and craftsmen since the Grand Canal passing through this area. In northeast, most people were soldiers because the commanding agency of Ji'ning Guard in Ming Dynasty, "many people living there like drinking". The northwest was far from the canal and got the least effect, and was a sparsely populated area.¹⁶

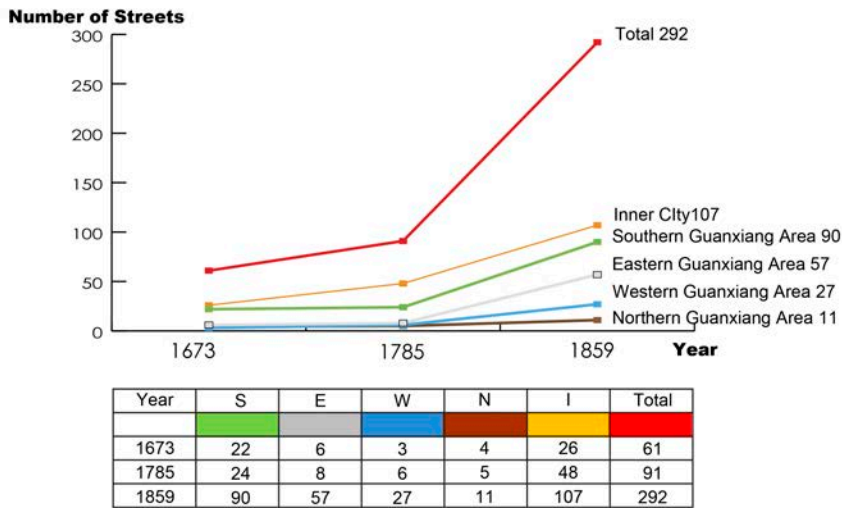


Figure 4. The number changing of streets and lanes of Ji'ning in Qing Dynasty based on the data from the Ji'ning Perfecture Annals in 1673,1785 and 1859



Figure 5. Space form of Ji'ning city in the republic of China (1927)

(3)The intigration and change of streets and buildings

The opening of canal brought the economic development and cultural communication. It also drove the change of city streets and construction.

On the one hand, the forms and functions of city streets were affected by the canal. The Grand Canal crossed the city and the street space and water were tightly integrated. Until now, there are still many streets named after bridges, docks and river ports, like Yuehebei [Cross Canal North] Road, Shunhemenwai [Along the Canal and Outside of the Gate] Street, Hewan [River Bend] Street. At the same time, the commercial development relying on grain transportation formed unique along-canal streets with specific industries, like Zhugan [Bamboo Pole] Lane, Guozi [Dessert] Lane and Pifang [Cobbler Workshop] Street.

On the other hand, due to the cultural and technical communication brought by the Grand Canal, the buildings of Ji'ning were fitted with southern characteristic on the foundation of traditional northern architectural style. Temples stand facing the canal and houses were constructed along the water, which are the typical forms of the buildings in the Yangtze River delta. At the same time, these buildings were stable and thick which was the nature of the northern architecture. Though the shops mostly have Yingshan [flush gable] roof which was



common in the North, the wind-window loft style buildings, which were the typical southern style, were also not unusual on streets. (Figure 6)



Figure 6. The traditional commercial street: Bamboo Lane

Conclusions: The inspiration to modern transformation development from historical legacy

On the basis of the study of urban development driving force and functional mechanism, we can get the inspiration to modern transformation and development from historical legacy.

First of all, historical legacy is the cultural base for the survival and development of the city, the reasonably and effectively protection of which is the first step for transformation development. On the one hand, as a cultural city with long history, the historical legacy of Ji'ning is not only indicated in Canal culture, Prehistoric culture and Lu culture had also left rich heritage. All of them formed the complete process of city development. We should extend the range of legacy protection and take consideration of the cultural legacy various historical periods as a whole. Meanwhile, Canal culture is the peak of Ji'ning historical culture and it has very important value, which was reflected in the multilevel whole region with canal as the core. Therefore, the protection of the canal legacy should not be limited to the canal only, but expanded to the integrated system of city and natural environment. The legacy protection, water system governance as well as the city environment improvement and optimization could be combined as comprehensive strategy.

At the same time, the mechanism and characteristic of Ji'ning urban development in history are rooted in the region. They are the fruits of wisdom accumulation for hundreds of years and still have enlightening significance to transformation development nowadays. On the one hand, the development of Ji'ning in history was driven by the interaction between water and city. We still have to pay attention to the relationship between water and city. Starting with solving the contradiction between people and water, different methods such as ecological management and landscape shaping could be applied comprehensively to improve the destroyed natural environment and restore the positive interaction between people and water. On this basis, industry upgrading and culture development could be promoted and the urban development would be pushed into a reasonable developing circuit again. On the other hand, the interaction between water and city not only had an effect on the two sides along the canal or within the city wall, but also influenced both the urban and rural area and created a multilevel region as a whole. In the modern times, since the city construction scale is becoming larger and larger, it is even more important to view the regional space as a whole. The approaches of transformation development of Ji'ning should not be limited in the planning and construction of city, but be extended to the comprehensive creations in the region, the multi-scale and multilevel planning and constructions of the region, city, city districts, streets and buildings should be considered as a whole to improve the quality of inhabitant environment completely.

Acknowledgements

Supported by the National Natural Science Foundation of China (Grant No.5160829)

Disclosure Statement



No potential conflict of interest was reported by the author.

Notes on contributor(s)

Dr Lu Guo has a PhD in Urban and Rural Planning from Tsinghua University (China). She is an assistant professor of Urban Planning and Design at School of Architecture, Tsinghua University and Jing Brand Fellow (2015-2016) at Needham Research Institute of Cambridge (UK). Her research and publications focus on the history of urban and regional planning of China

Endnotes

-
- ¹ MENGLEI CHEN (1650-1751) ed, *GUJI TUSHU JICHENG* [THE COMPLETE CLASSICS COLLECTION OF ANCIENT CHINA] (BEIJING: ZHONGHUA BOOK COMPANY, 1940), ZHIFANG ALLUSION VOLUME 230, YANZHOU, 16.
- ² YANGJUN HOU, "Archaeological Landform and Environment of the South-western Shandong Area Four Thousand Years Ago", *JOURNAL OF HEZE COLLEGE*, 12(2007) : 132-137.
- ³ ZHAO WEI (204-273), *COMMENTARY ON GUO YU*(SHANGHAI: SHANGHAI GUJI PRESS, 2008), VOL. 19, WU YU
- ⁴ XUANLING FANG (579-648) ed, *JIN SHU* [BOOK OF JIN], (BEIJING: ZHONGHUA BOOK COMPANY, 2000), VOL. 75, BIOGRAPHY OF XUN XIAN
- ⁵ IBID. VOL. 78, BIOGRAPHY OF HUAN WEN
- ⁶ ZHENG WEI (580-643) ed, *SUI SHU* [BOOK OF SUI], (BEIJING: ZHONGHUA BOOK COMPANY, 1973). VOL. 56, BIOGRAPHY OF XUE ZHOU
- ⁷ YOUHENG LIAO ed, *Ji'NING ZHOU ZHI* [JI'NING PREFECTURE ANNALS](1673), VOL. 8, YIWEN [LITERATURE]
- ⁸ ZONGGAN XU ed, *Ji'NING ZHILI ZHOU ZHI* [JI'NING PREFECTURE ANNALS] (1859), VOL. 2, FANGYU [HISTORICAL GEOGRAPHY]
- ⁹ *MING SHILU* [VERITABLE RECORDS OF THE MING], VOL. 56, GRAIN TRANSPORTATION.
- ¹⁰ JI'NING BUREAU OF LAND RESOURCES, *Ji'NING LAND RECLAMATION PLAN (2011-2015)*.
- ¹¹ JI'NING URBAN AND RURAL PLANNING BUREAU, *Ji'NING MASTER PLAN (2008-2030)*.
- ¹² QIAN TAN(1593-1658), *BEI YOU LU* [NORTH TOUR RECORD] (1653-1656) (BEIJING: ZHONGHUA BOOK COMPANY, 1960), 141.
- ¹³ IBID.
- ¹⁴ BOXING ZHANG(1651-1725), *JUJI YIDE* [THE FEELING OF LIVING IN JINING], (BEIJING: ZHONGHUA BOOK COMPANY, 1985), VOL. 4, DREDGE RIVERS.
- ¹⁵ The Pear Garden was the first known royal acting and musical academy in China founded during the Tang dynasty by Emperor Xuanzong (712 – 755). It is an example of a historically early institutional academy of music.
- ¹⁶ DELIN HU ed, *Ji'NING ZHILI ZHOU ZHI* [JI'NING PREFECTURE ANNALS](1785), VOL. 2, STREETS AND ROADS.

Bibliography

- Menglei, Chen (1650-1751) ed, *Gujin Tushu Jicheng* [The Complete Classics Collection Of Ancient China]. Beijing: Zhonghua Book Company, 1940.
- Xuanling, Fang (579-648) ed, *Jin Shu* [Book Of Jin], Beijing: Zhonghua Book Company, 2000.
- Yangjun Hou, "Archaeological Landform and Environment of the South-western Shandong Area Four Thousand Years Ago", *Journal Of Heze College*, 12(2007): 132-137.
- Delin, Hu ed, *Ji'ning Zhili Zhou Zhi* [Ji'ning Prefecture Annals] (1785).
- Youheng, Liao ed, *Ji'ning Zhou Zhi* [Ji'ning Prefecture Annals](1673)
- Qian, Tan (1593-1658), *Bei You Lu* [North Tour Record], Beijing: Zhonghua Book Company, 1960.
- Zhao, Wei (204-273), *Commentary On Guo Yu*, Shanghai: Shanghai Guji Press, 2008.
- Zheng, Wei (580-643) ed, *Sui Shu* [Book Of Sui], Beijing: Zhonghua Book Company, 1973.
- Zonggan, Xu ed, *Ji'ning Zhili Zhou Zhi* [Ji'ning Prefecture Annals](1859)
- Boxing, Zhang (1651-1725), *Juji Yide* [The Note of Living in Jining], Beijing: Zhonghua Book Company, 1985.

Image sources



The 18th International Planning History Society Conference - Yokohama, July 2018

Figure 3: Drawn by the author based on *Bei You Lu [North Tour Record]* of Qian Tan(1593-1658), the base map is part of the Map of Yanzhou in *Shandong Annals*(1735).

Figure 6: MEIRONG SUN ed. *Ji'ning Wenwu Guji [Historical Sites and Cultural Relics in Jining]*(BEIJING: CULTURAL RELICS PUBLISHING HOUSE, 2009), 176.



Modern Regional Development in Japan: From the Kiso River Improvement Project to the City Planning of Gifu

Yoshifumi Demura*

* *Gifu University, demu@gifu-u.ac.jp*

Although modern Japanese cities are the products of an urban planning system, this system is itself rooted in the histories of towns and provincial areas, that had previously grown in the context of local economic needs and resources. However, in the early stages of urbanisation, the new infrastructure derived from the West did not necessarily complement the existing local urban environment. This was eventually reconciled by a series of infrastructure development projects, which were presented to local city planners for feedback. This study focuses on a typical example of this process in Gifu, Japan; it presents a description of the steps by which the region was gradually modernised by means of a river improvement project that led to the implementation of urban planning.

Keywords: sewage system in city planning, river improvement project, Johannis De Rijke, waterschappen, modern technocrat, irrigation/drainage improvement project, industrial contamination.

Introduction

Modern Japanese cities are the products of an urban planning system that reached its pinnacle in the 20th century, when the urbanisation process was controlled. However, the operation of this system is rooted in the histories of individual towns and provincial areas, that had previously developed in the context of local economic needs and resources as reported by Asano¹, Nakano² or Demura³. Indeed, cities develop on the foundations of the extant infrastructure, such as roads, water transportation networks, drainage systems, food and energy resources, and land improvement and disaster prevention programmes in the larger region in which they are situated. Benevolo⁴ examined prominent examples of urban infrastructures, and Suzuki⁵'s reach encompassed water infrastructure as the basis of town formation. Tomory⁶ demonstrated that the development of the sanitation industry in London represented continuity of economic and technological progress, leading to the formation of the urban infrastructure.

In the field of hydrology, a new interdisciplinary discipline combining technical hydrology and sociology, has explored the co-evolution and self-organisation of people in the landscape (Sivapalan et al.⁷, and Seidl et al.⁸). Such linked approaches are also useful to examine themes related to planning history. It is important to investigate relationships between the growing regional infrastructure system and the urban planning process to understand the circumstances and conditions under which modern cities were established. For example, Arts et al.⁹ presented a perspective separating different types of work, such as that of 'builders and planners'. As a subject that is arguably interdisciplinary like Art's study, the present study focuses on water management, which involves not only water and sewage in the context of city planning, but also irrigation and drainage in agriculture, soil erosion prevention, flood control, and water transportation as civil engineering application, in addition to other industries such as fishing, hydropower generation, and landscape creation.

Recently Vitiello¹⁰ summarised studies that focused on planners' involvement in shaping critical infrastructure. According to his perspective, the sewers of Paris in the 1830s, New York's Croton water system that opened 1842, and the first major social and sanitary survey by Edwin Chadwick illustrate the concrete procedure for new water and waste systems. Vitiello also noted that a new cadre of municipal and consulting engineers designed urban infrastructure. He also noted that innovations in infrastructure technology often spread between cities bureaucratic route, and that infrastructure occupied a prominent position in the work of late 19th century and early 20th century planners. However, those studies tended to concentrate on urban areas as a reasonable consequence of their objectives to understand urban planning systems.

Several studies on critical regional infrastructure beyond the boundary of the urban area have been carried out by scholars in other fields, such as civil engineering and the industrial economy. Tasaki¹¹ focused on urban developments and their surrounding agricultural areas in modern Japan, and particularly on the difference between urban and rural economics, for example in terms of land prices, to explain the migration of populations to cities. Wilson¹² discussed the formation of Christchurch as an example of long-term drainage and sewage development, situated in that case on a vast swamp outside an urban area. Hoeksema¹³ clarified how land area changed historically in the Netherlands through large-scale flood protection and land reclamation, including a description of management methods. Vast landscapes such as these are beyond the conventional urban area, and may be more



familiar in the context of regional planning, as a development of city planning. Such examples may be incorporated into this study as it seeks to understand the substructure of early city planning.

It is well known in the field of civil engineering that Japan's great rivers were modified by Dutch engineers many years before the urban infrastructure was constructed. Foreign engineers did not simply apply pre-existing techniques; instead, they developed new techniques while working with local engineers at the construction site (JSCE¹⁴). Moreover, local engineers also contributed their own techniques to this creative process. These modern river modification methods, which directly or indirectly support urban operations, were intended to support huge structures and generally have considerable impact. Therefore, it is not surprising that an entirely new structure would reflect and support local land-use patterns. However, at the beginning of urbanisation, the new river modification methods did not necessarily support the existing local urban environment. Indeed, studies on modern Japan's civil engineering history mentioned cities only in passing (Ohkuma¹⁵). These differing interests were eventually reconciled when a series of infrastructure development projects, initially derived from the West, were presented to local city planners for feedback. It is especially important to understand this process, as it became the prototype of the current urban planning system.

This study focuses on a typical example of this process in Gifu, Japan; it presents a description of the steps by which the region was gradually modernised by means of a river improvement project that led to the implementation of urban planning.

Early Gifu City Planning and Sanitation

The first city planning law was enacted in Gifu in 1923. Several roads extending out from the city centre and zones for residence, commerce, and industry were planned (Figure 1). The original purpose of this plan was the creation of conditions that would promote construction of industrial factories (Demura¹⁶). It was assumed that a rail network and abundant subterranean water would encourage the textile industry to build factories near the city centre.

Nevertheless, the early goals of Gifu city planning changed dramatically. Led by Mayor Kunimatsu Matsuo, who held office from 1925 to 1946, the land devoted to industrial development decreased by about 16% (from 557 ha to 470 ha), and that devoted to residential development increased by about 57% (from 1,095 ha to 1,718 ha). The new main agenda was to use local environmental resources to create favourable conditions for housing and tourism. The reasons behind this shift in the priorities of Gifu City were the decline of the textile industry after the great depression of 1920; the new concept of a 'Tourism City', a goal that conflicting actors could share; and the Mayor's commitment to public health, hygiene, and the construction of healthy residential areas. Regarding the latter, he insisted that 'drinking water, toilets, and bathtubs'¹⁷ were necessary to prevent 'the fall of Gifu City' due to lack of sanitation, which leads to high mortality rates among infants. During the Matsuo administration, the Gifu City planning agenda included water supply projects and sewer facilities.

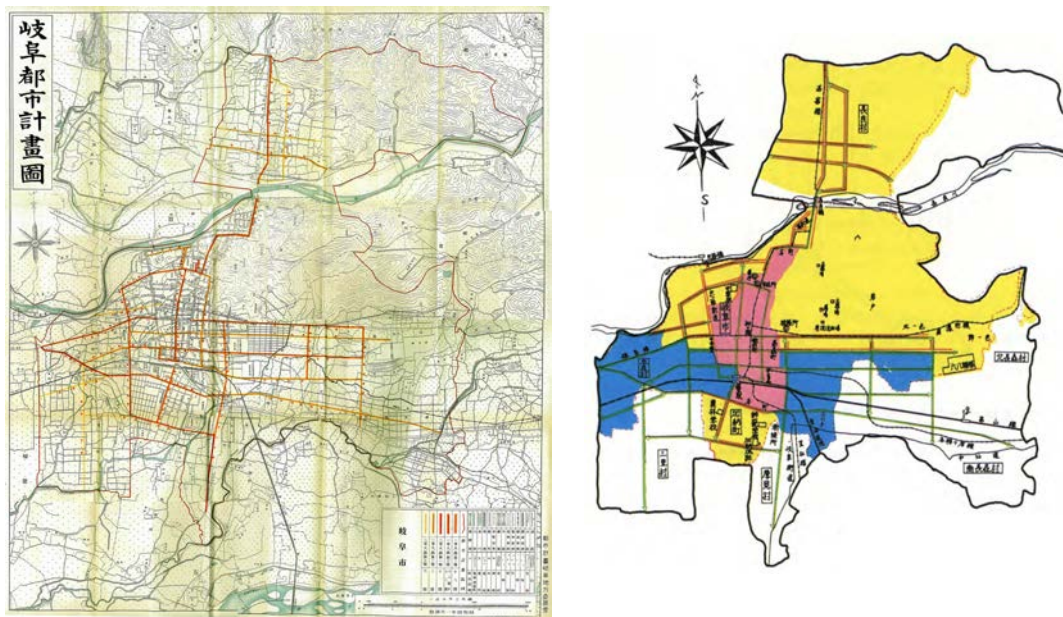


Figure 1: The Gifu City Planning Committee's *Street Network Plan of Gifu City*, issued in 1926 (left) and *Land Use Zones of Gifu City*, issued in 1927 (right). In the righthand figure, red, yellow, and blue areas indicate commercial zones, residential zones, and industrial zones, respectively.

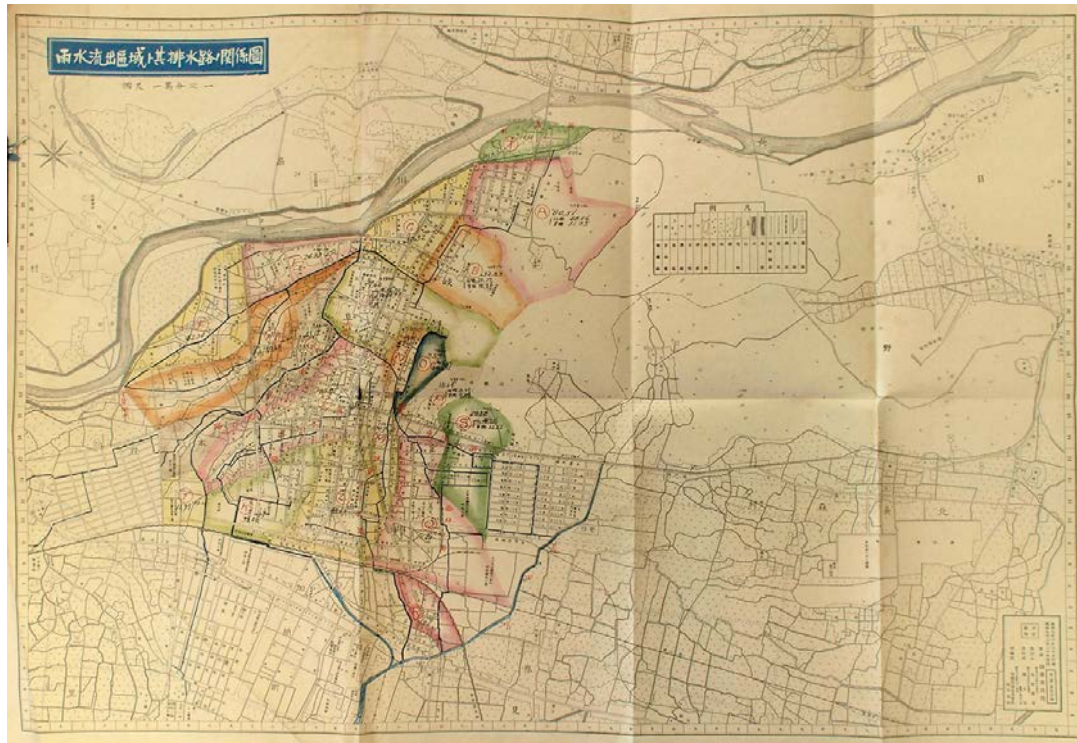


Figure 2: *The Relationship between Drainage Districts and Drainage Channels*. The same drawing was attached to a document submitted by the Home Ministry entitled *Map of the City Planning Sewage System: Drainage Districts*, together with another map, *The Sewage Plan and Trunk Pipes*. [included in Abe Nikko Kogyo Co., Ltd.]

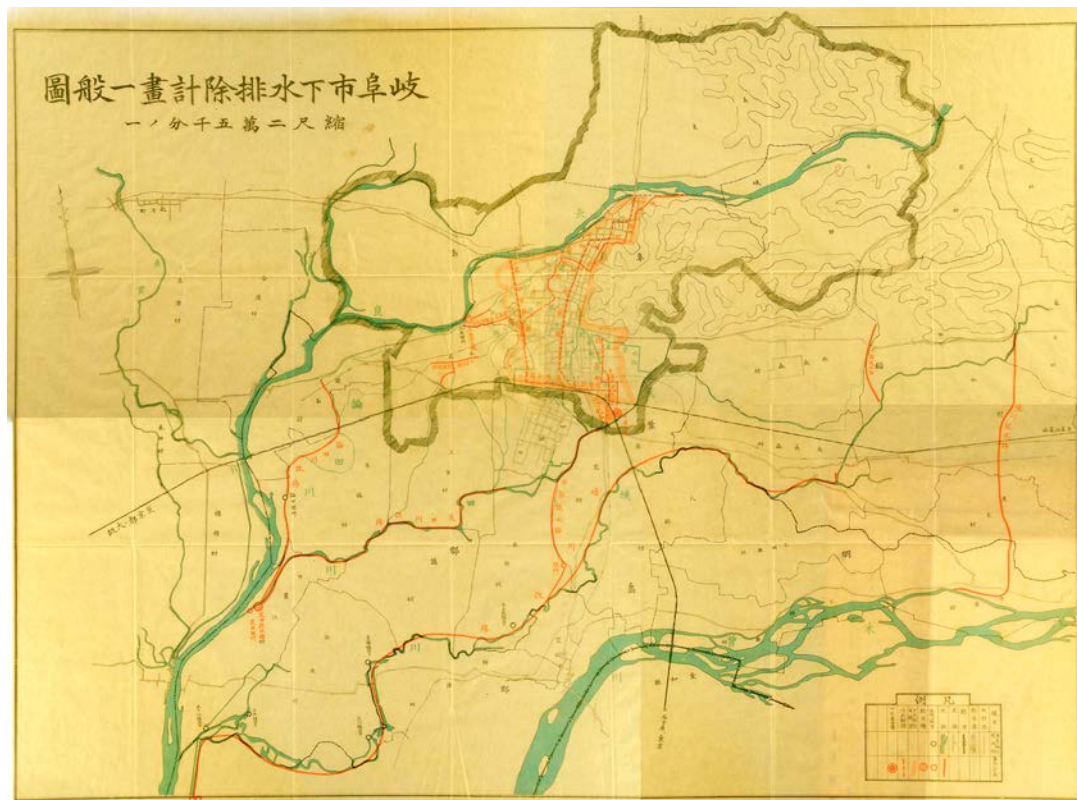


Figure 3: Genzaburo Abe. *General Map of the Gifu City Sewage System*. The area demarcated in Figure 2 is included in the centre of this large map. The boundary of the city is delineated by the grey hatched line. [Gifu City, 1935]



The sewage system was an especially huge project for the Gifu municipality. The cost of the initial plan was estimated to be 6 million yen in 1925, when the annual general budget of Gifu City was about 1 million yen. This system combined wastewater and rainwater in a large-diameter pipe¹⁸. However, the project could not be started due to insufficient funding and lack of technical ability. Then, in 1928, Mayor Matsuo announced a new plan at the Municipal Assembly in March: an unprecedented separate sewage system in which the sewage pipe was separate from the rainwater flow¹⁹. Improvements in the street gutters that collect rainwater and connect to trunk watercourses would start during the next budget year, decreasing costs.

At the same time, the mayor employed an expert engineer, Genzaburo Abe, who had been engaged in water supply construction in other areas, such as Maebashi and Takaoka. For the next 5 years, Abe was engaged to design and construct the water supply system using the subsoil water of the Nagara River as his first carrier in Gifu; at the same time, he studied and surveyed the location of the sewage system and insisted it would be possible to construct a complete, separate sewage system using existing water channels. Abe completed the design of the separate sewage system in 1932 for a cost of 2.5 million yen. His confident explanation of the project, which rested on his enthusiasm and engineering skill, facilitated its passage through the Municipal Assembly in August 1933 despite considerable opposition. The Home Minister endorsed this plan as an official Gifu City Planning project in January, 1934, and the sewage system was constructed between 1934 and 1943.

The plan that Abe and Gifu City Planning Committee submitted to the Home Ministry was drawn for a restricted area within the designated City Planning Area of 1923, as it conformed to the then-current norms, as Figure 2 shows. However, in practice, the actual plan was drawn differently. Figure 3 shows that the area went far beyond the boundary designated for city planning; indeed, the system for urban sewage was constructed as if it were situated in a huge water system. This raised questions regarding the planning of this urban water system and whether any blueprints could be found from the time before City Planning began.

Outline of the Kiso River Improvement –Johannis De Rijke’s Idea

Gifu City is situated on the alluvial fan in the middle stream of the Nagara River, which was originally twinned with the flow of the Kiso and Ibi rivers. The downstream portions of the Kiso, Nagara, and Ibi rivers had been characterised by collective polders, areas surrounded by dikes in called Wajuu, during the Meiji Restoration (from 1867) (Figure 4). At that time, the town of Gifu was situated on relatively high ground within a broad field formed by polders that stretched 50 km to the sea. The most urgent problem facing the early Meiji government involved the transition from a feudal society to a new social, economic, and political structure. Indeed, it had to develop secure transportation routes for local industries and agricultural policies to prevent disasters such as floods. That is, the major rivers, including the Kiso River, which had been allowed to flow freely during the previous feudal epoch to discourage people from travelling, had to be safely controlled. The government tried to use Western technology to achieve this goal, hiring foreign engineers as no domestic engineer had managed such a major project.

Johannis De Rijke, one of the Dutch engineers hired for this purpose, investigated the Kiso River system in 1878 and 1879 and determined that sediment flowed out of the mountainous area. He reported to the government that the networked flows had to be organised into single streams to carry the large quantities of sand contained by the river water into offshore areas. At the same time, he argued that the supply of sand from the mountainous areas should be reduced by means of planting, management, and installation of dams on small streams²⁰. Another of his reports insisted on the need to crack down on deforestation, which was a severe criticism of the then dominant Japanese tendency to act without considering consequences²¹.

According to these reports, the government immediately began to construct sabo-dams, as soil-erosion control works, in the valleys that were the source of the Kiso River²², based on designs created by De Rijke and six Japanese engineers in 1884. The river-improvement project in the lower streams, carried out from 1887 to 1911, was designed to prevent flooding, drain the fields within dikes, and improve shipping routes (Figure 4). De Rijke’s vision of these projects, which included the entire basin of the Kiso River, went far beyond the aspirations of local residents, who had known only polders.

In 1891, De Rijke announced his understanding of the main causes of flooding in Japan: the deforestation of river water sources, the frailty of the sluices separating the water used for irrigation from the river flow, the failure of high-water protection methods, the lack of knowledge of local people, and the delays in making repairs after damage. He criticised people who waited passively for the government to draw on the public budget to respond, contrasting this pattern to the Dutch tradition of ‘waterschappen’, whereby landed individuals were responsible for flood control and drainage. Even after the river improvement work began, De Rijke continued to promote public organisation and cooperation²³.

The enactment of the Water Utilization Association (WUA) Law in 1908 allowed for the establishment of an association that could provide the financial basis for project development and maintenance. In 1909, the completely



revised version of the Land Arrangement Law centred on land improvement, including irrigation and drainage systems. Both policies were strongly promoted to improve agricultural productivity²⁴. By 1911, many WUAs had been established in the area downstream of Gifu City. Although these were similar to the organisations proposed by De Rijke, each WUA had deep roots in the Wajuu community, rendering cooperation among them difficult (except for purposes of petitioning the government), leading to isolation.



Figure 4: *Kiso Nagara Ibi. Three Rivers Improvement Plan* (1900). North is to the left side; the rivers flow from left to right on this map. Gifu City is shown in the upper left corner. This map was drawn in 1/50,000 scale, based on the large map of Johannis De Rijke in 1/10,000. [housed in the Gifu Prefectural Historical Museum]

Overcoming the Scale of Wajuu – Union Integration

The drainage system was a primary problem even after completion of the Kiso River improvements in 1911. In Wajuu, polders in streams with an approximate bed slope of 1/5,000 reduced drainage efficiency, especially when the water surface of the river rose higher than the protected areas surrounded by dikes at the time of a flood. People living near polders downstream of Gifu expected the improvement project to improve the drainage in the upstream area of the Kiso River. However, the Kiso River Upstream Improvement Project did not include such improvements when it began in 1921. On the other hand, Kanichi Maekawa²⁵, a director of the Nagoya Civil Branch Office of the Home Ministry informed the aggrieved counties that, because the Home Ministry intended to improve the polders, they should discontinue their traditional practices and overcome the barriers between the people in the counties and the polders.

In December of 1924, Iwao Kira, the engineer at the Gifu Prefectural office, issued a comprehensive plan, which was framed as ‘a personal proposal’²⁶ (Figure 5). Kira designed a system with new irrigation trunk channels and clearly distinguished drainage trunk channels that efficiently exchanged water within a wide area regardless of the traditional boundary of the Wajuu. This plan reduced the amount of water from the Sakai River, which had caused flooding as a result of collecting water from the hilly land, by constructing a discharge channel directly from the upper stream of the Sakai River to the Kiso River. He also modified the route of the Sakai River so that it could serve as the drainage trunk for the whole area and discharge its flow into the Nagara River at one downstream location. In terms of the irrigation channel, as all the water was taken from the Kiso River, an almost entirely new system that did not depend on the existing system involving the Nagara River had to be constructed.

Kira’s plan proposed an approach to ‘overcoming the barriers between counties and polders’, which helped to expand the perspective of local people. Isamu Ohno, Director of Inaba County, agreed to the plan and gathered together neighbouring WUAs in January 1925. Although the design was declined by the technocrats of the Home Ministry and the Agriculture and Forest Ministry, Kira was able to improve the plan by the following year under the guidance of these technocrats to use conventional means to move water from the Nagara River, use existing water channels, and reorganise the system in a way that went beyond the purview of the small associations, to foster cooperation among the affected areas. At the same time, the affected people and organisations in the area on the left bank of the Nagara River organised a new, larger union in June of 1925. Finally, in January of 1926, Ohno and Matsuo, who had just been elected Mayor of Gifu City, established the Gifu City Inaba County



Irrigation/Drainage Water Utilization Association (Gifu/Inaba WUA), which included 25 towns and a city with five associations, to cover the entire area affected by this system²⁷.



Figure 5: Akira Kira. *Irrigation/Drainage Trunk Channel Improvement Plan for the Area between the Kiso and Nagara Rivers* (1924). Blue and red lines indicate irrigation and drainage channels respectively. The streams are of Nagara River (upper) and of Kiso River (lower). The upper hatched area is downtown Gifu City. [Ohno, 1933]

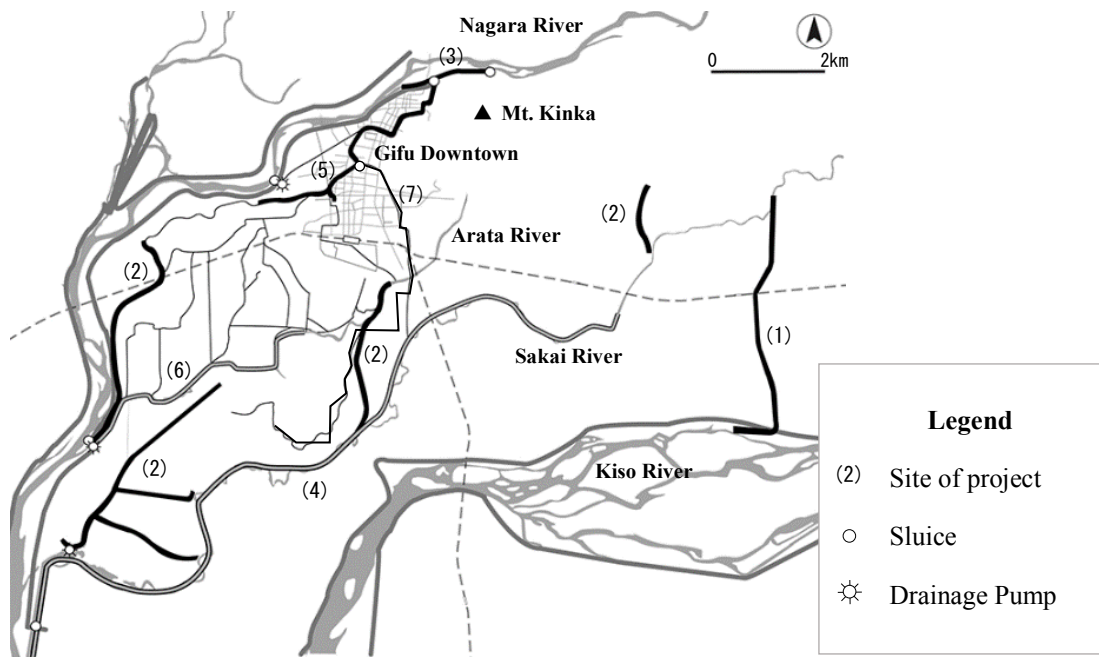


Figure 6: The series of water system improvement projects being conducted around Gifu City and the downstream area. This clarifies Figure 3.



Table 1: The series of water system improvement projects being conducted around Gifu City and the downstream area. The monetary unit is Yen in total expenses, government subsidy, prefectural subsidy, and local contribution columns. (A) and (H) are the subsidies provided by the Agriculture and Forest Ministry and the Home Ministry, respectively. This table was included in a previous study. [Demura, 2017]

Period	Project Name	Objective	Contents	Expenses	Sub. by Gov.	Sub. by Pre.	Local
(1) 1926-1931	Sakai River Drainage Improvement Project (the first stage)	Drainage Improvement	Discharge channel	1,100,000	(A) 400,000 (H) 200,000	250,000	250,000
(2) 1928-1933	The Second Stage of Sakai River Drainage Improvement Project	Drainage Improvement	Drainage Pump · Drainage Channel · Sluice	1,180,000	(A) 590,000	177,000	413,000
(3) 1931-1933	Replacement Project of Chusetsu Water Channel	Irrigation Improvement	Irrigation Channel · Sluice	251,500	under the direct control of the Home Ministry		
(4) 1932-1933	Sakai River Improvement Project	Tributary Improvement	Channel · Shorter Flow	567,000	(H) 283,500	155,925	127,575
(5) 1932-1934	Chusetsu Water Channel Improvement Project	Irrigation Improvement	Irrigation Channel	135,000	(A) 67,500	20,250	47,250
(6) 1933-1934	Arata River Improvement Project	Tributary Improvement	Channel	82,000	(H) 41,000	29,038	11,962
(7) 1935-1937	Shobo Temple Water Channel Improvement Project	Drainage Improvement	Irrigation Channel	160,000	(A) 80,000	24,000	56,000

The water system improvement projects in this area were reasonable and functional. Their results are presented in Figure 6, and Table 1 outlines the schedule and budget for each part of the project. The scale of the entire project and the discharge channel from the area upstream of the Sakai River were the same as in Kira's plan. This system first removed the excess water using the discharge channel, calculated the capacity of the drainage downstream, distributed the necessary water, and drained into the Nagara River by the mechanical force of pumps at its most downstream points. This series of construction projects was based on an understanding of the function of drainage; the irrigation plan (mainly (3), (5) and (7) in Figure 6) was not clearly outlined in the plan at the first stage of implementation. That is, intentionally or otherwise, the blueprint for the vast water-management plan for the urban water supply and drainage system in upstream areas had not yet been completed. According to the shared flexible blueprint, appropriate irrigation arrangements could be planned after the drastic improvements designed to protect against flood damage due to drainage failure had been achieved.

Conflict and Cooperation between Rural areas and the Town

Following the initial urbanisation plan, many industrial factories were built just outside the Gifu City area after World War I (Figure 7). These factories were involved mainly in textile manufacturing, including spinning, dyeing, and scouring. Although they were built just after enactment of a law regulating factories in Japan, the factories discharged their wastewater directly into the nearest water channels. This soon caused water pollution in the area downstream of the Arata River, and 'clear water changed into black water, even animals could not drink, fish disappeared except for a few which were too foul to eat'. The Fishery Society and Arata River Sluice WUA started to take action in 1923, negotiating with the prefectural government and other governmental agencies for the regulation of factory wastewater.

In June 1928, the Arata River Sluice WUA invited Shozo Toda, a Kyoto University professor of hygiene, to perform a detailed investigation of the discharge practices of factories insofar as they affected the Arata River. In September, Toda presented the results to the relevant actors, including members of the police and prefectural government officials; workers at the Agricultural Experiment Station; WUAs; industrial, civil, and sanitary engineers; village, town, and county leaders; and Mayor Matsuo of Gifu City. Toda proposed a two-pronged plan: the first initiative involved a regulation requiring cooperation from factories, and the second involved improving the water-related infrastructure in a vast area that extended to downstream areas of the Arata River²⁸.

The second part entailed additional construction to ensure a stable and sufficient volume of water. However, the intake of the 'Chusetsu Water Channel' and the only watercourse reaching the urban area from the Nagara River was almost non-functional at this time because, due to the Kiso River Improvement Project, the surface of the Nagara River became too low to flow into the channel without intervention.

In April 1930, the Gifu/Inaba WUA decided to improve the irrigation system by replacing the intake sluice of the Chusetsu Water Channel. The leaders of the municipalities and various WUAs that belonged to the Gifu/Inaba WUA reached agreement over the share that would be accorded to each municipality if the improvement project



were approved by the prefectural government as a public works project²⁹. According to this agreement, Gifu City was given the largest share, 65.8 %. (Figure 8) The aggressiveness with which Gifu City officials pursued their interests seems to have stemmed from their intention to reduce the pollution caused by industrial wastewater, as Toda had suggested. However, they should have aimed for more.

The final version of the project to improve the Chusetsu Water Channel consisted of two parts (Figure 9). The first was to widen and partially reorganise existing downstream irrigation courses; half of this project was subsidised by the Ministry of Agriculture and Forestry. The second part was to replace the intake sluice and the connection to the existing system; this proceeded as a part of the Kiso River Upstream Improvement Project, directly controlled by the Ministry of Home Affairs, which had provided compensation to the area that had suffered from the drawdown of the Nagara River. The objectives of both parts required the dilution of the industrial effluent and the need to consider the resulting surplus water; the amount of effluent from each factory was measured to determine the volume of water that would travel downstream.

The main portion of the upper part of this system was devoted to the control of flooding at the entrance to the main sluice, which was situated before water from Nagara River was taken up. This system enabled the movement of abundant water for the dilution of industrial pollution, in addition to satisfying the demands from agriculture. Additionally, the irrigation water could be stopped by the main sluice when it rained heavily; the system was also designed to collect rainwater efficiently using the capacity reserved for irrigation water. The improvements to this irrigation system were completed in May 1934.

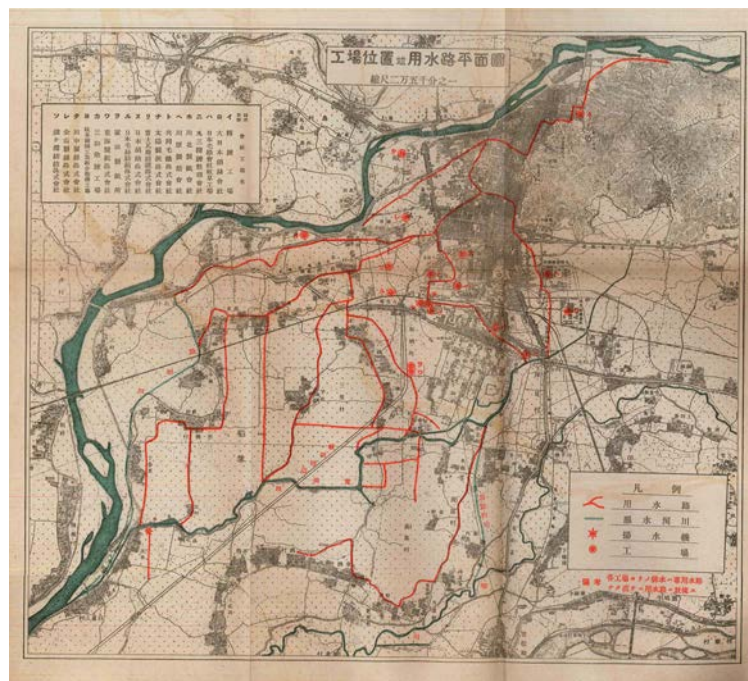


Figure 7: Arata River Sluice Water Utility Association, *Irrigation Channels and Location of Factories*. Red circles are the sites of factories, which show a strong correlation with the water course. Their location also correlates with the planned arrangement of streets, as can be seen by reference to Figure 1. [Arata River Sluice WUA, 1938]

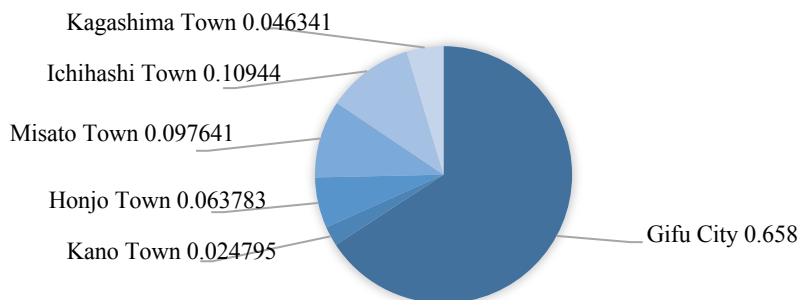


Figure 8: Share of Contributions for the Chusetsu Water Channel Improvement. The municipal leaders reached an agreement regarding the distribution of the budget on 18 June, 1930, on the assumption that the project would be approved by the prefectural government as a public works project. [Ohno, 1933]

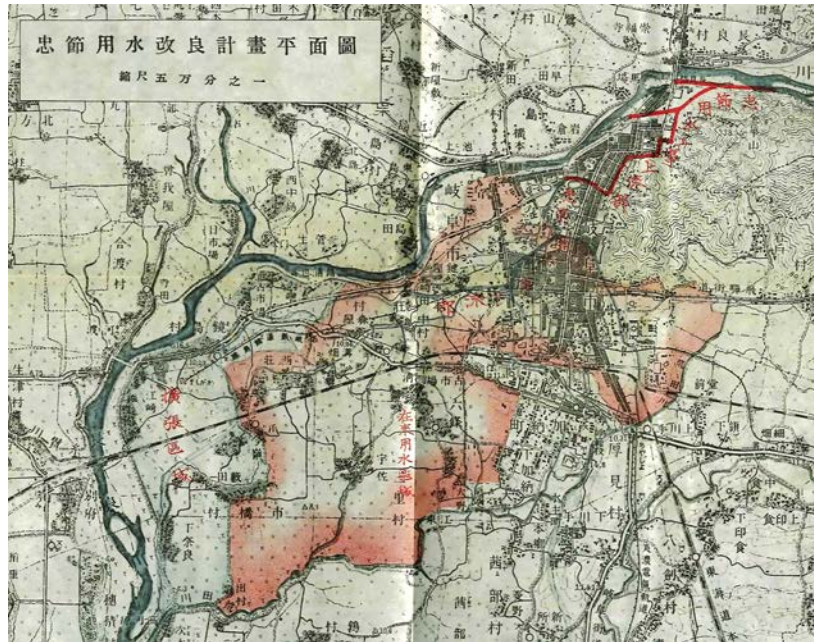


Figure 9: *Plan for Improving the Chusetsu Water Channel*. This map is drawn to a scale of 1:50,000. Red bold lines in the upper part of the figure indicate part of the Kiso River Upstream Improvement Project (denoted by as (3) in Table 1). The faint blue line indicates the lower part of the project, subsidised by the Ministry of Agriculture and Forestry (denoted by as (5) in Table 1). [Ohno, 1933]

Conclusion

Kunimatsu Matsuo articulated his concept of a separate sewage system in early 1928. He knew it was possible to establish a drainage system located downstream of the urban area because, as a mayor of Gifu City, he occupied a central position in the Gifu/Inaba WUA, founded in 1926. The engineer, Genzaburo Abe, performed research in preparation for the design of the sewage system. Matsuo was also among the most important founders of the Chusetsu Water Channel Improvement Project in 1930. At that time, it is likely that Matsuo and Abe clarified the plan for urban drainage. They would have noticed that the ability to manage rainwater could be secured, even in heavy rain, if the inflow from the Nagara River could occasionally be stopped. Moreover, the amount of water was reduced by the collection of the industrial wastewater from each factory outlet pipe. Finally, the aforementioned comprehensive vision of all the systems emerged. (Figure 10)

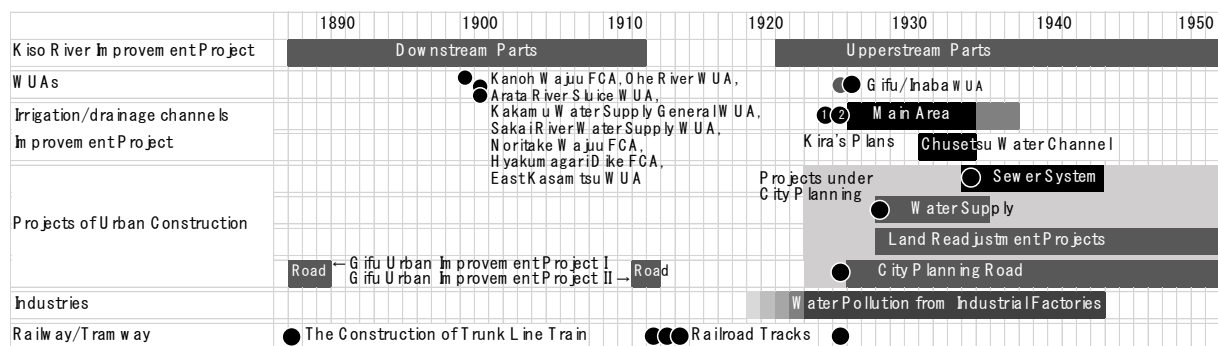


Figure 10: Modern Construction Projects in Gifu and its Downstream Area in Chronological Order. Gifu Urban Improvement Project I, and II are beyond the scope of this paper to describe; these were urban construction projects in downtown Gifu City initiated by townspeople based on a business strategy. For more information, see Demura 2012 and 2015.

The early city planning in Gifu involved a remodelling project aimed at establishing a healthy, liveable city that would complement the extant infrastructure, which had been developed based on an economic strategy. Indeed, a highly organised, modern infrastructure was needed. It was clear that the last city planner who brought sophisticated skills to these projects, which were based on the ambitious vision of Mayor Matsuo, was Genzaburo



Abe³⁰. However, they had only just finished the long process of improving the vast water system that had started in 1887. Initially, there was no comprehensive plan, and the final system emerged from the social relationships among various actors, perhaps ensuing from a new equilibrium. The vast vision was elaborated by De Rijke, the prefectural engineer Kira contributed his systematic perspective, and the technocrats of the Ministry of Home Affairs cooperated with those of the Ministry of Agriculture and Forestry to provide guidance derived from Western or Westernised engineering practices. These efforts facilitated cooperation among relevant actors, all of whom benefited from the large scale of the system; this system brought a new state of equilibrium to the wider society, and the urban planning discussed here was constituted on the vast infrastructure system that was developed for this area.

The expansion of technological and social frameworks should be more or less homogeneous across cities in Japan, and in any country whose modern history is founded on the legacy of a previous epoch that had to create a framework to resolve inherent problems. Generally, the boundaries between rural and urban areas were contested as cities started to expand. In the case of Gifu, urban construction and regional improvement had started in late 19th century. Subsequently, the process of creating a water system to serve both urban and rural areas functioned simultaneously as the process for applying modern engineering methods from the West to the local environment. The focused examination of a typical city conducted herein found that an expanded framework that considered the construction of water infrastructure amid the upheaval in linked domains, such as inter-Waju or urban-rural relations, resembled regional planning, which historically was distinct from city planning. Fluvial systems may be a relevant topic for cities located on fluvial fans, and their relevance to regional planning should be pursued as a new perspective on planning history.

Notes on contributor

Yoshifumi Demura is Associate Professor in the Department of Civil Engineering at Gifu University, Japan. He received Doctoral degree in engineering from Kyoto University in 2003. He was employed at Kyoto University as assistant professor from 2004 to 2008, then he has been employed at Gifu University, Japan as associate professor. He also experienced a visiting researcher at the University of Sheffield, UK, from 2007 to 2008. He is interested in modern history of city development, civil engineering, and landscape. *A History of Gloves* (Collaboration: Routledge, 2017), *Civil Engineering Heritage in Japan* (Collaboration: Kodan-sha, 2012).

Bibliography

- Arts, Jos, Ruud Filarski, Hans Jeekel, and Bert Toussaint. *Builders and Planners, A History of Land-use and Infrastructure Planning in the Netherlands*. Delft: Ministry of Infrastructure and the Environment, 2016.
- Asano, Junichiro. "A Study on the Planning Process of Nagano Toshi-Keikau: From 1868 to 1930." *J. Archit. Plann. Environ. Eng., AIJ*, No.557 (2002); 265-272.
- Benevolo, Leonardo. *Storia Della Città 4* (Japanese edition). Translated by Takahiko Sano and Kanji Hayashi. Tokyo: Sagami Shobo, 1983.
- Demura, Yoshifumi. "'Shikukaisei' Urban Improvement in Modern Gifu and its Operation." *J. Archit. Plann., AIJ*, Vol.77 No.677 (2012); 1643-1652.
- Demura, Yoshifumi. "The Land Readjustment Project in the Early City Planning in Gifu." *J. Archit. Plann., AIJ*, Vol.78 No.694 (2013). 2529-2536.
- Demura, Yoshifumi, and Kazumasa Iwamoto. "Development of Electric Tramway and 'Shikukaisei' Urban Improvement in Gifu, 1910-1912." *J. Archit. Plann., AIJ*, Vol.80 No.712 (2015); 1319-1327.
- Hattori, Takeshi. *Modern Local Politics and Water Use Civil Engineering*. Kyoto; Shimonkaku Shuppan, 1995.
- Hoeksema, Robert J. *Designed for Dry Feet, Flood Protection and Land Reclamation in the Netherlands*, Reston: American Society of Civil Engineers, 2006.
- Japanese Society of Civil Engineers (JSCE). *Tadao Okino and the Modern River Improvement Works in the Meiji Era*. Tokyo: JSCE, 2010.
- Nakano, Shigeo. "The Influence of Industrial Infrastructure Prepared by 'Industrial Corporation' on a Spatial Transformation of Rural City – A case study on the relation between Kurabo industries Ltd. And Kurashiki city-," *J. Archit. Plann. Environ. Eng., AIJ*, No. 544 (2001); 273-280.
- Ohkuma, Takashi. *River History of Flood and its Prevention - from Control to Acceptation*, Tokyo: Heibon-sya, 2007.



Seidl, R., and R. Barthel. "Linking Scientific Disciplines: Hydrology and Social Sciences." *Journal of Hydrology*, 550 (2017): 441-452.

Sivapalan, Murugesu, Hubert H. G. Savenije, and Günter Blöschl. "Socio-hydrology: A New Science of People and Water." *Hydrol. Process*, 26 (2012): 1270-1276.

Suzuki, Hiroyuki. "Canal City" in *Traditional City 3 Infrastructure* edited by Nobuyuki Yoshida and Tuyoshi Itoh, 3-36. Tokyo: Tokyo University Press, 2010.

Tasaki, Nobuyoshi. *Town and Country in Modern Japan - An Age of Upheaval from the 1910s to 1950s*, Tokyo: Seikyū-sha, 2012.

Tomory, Leslie. *The History of The London Water Industry 1580-1820*, Baltimore: Johns Hopkins University Press, 2017.

Vitiello, Domenic. "Planning for Infrastructure: Lifelines, Mobility, and Urban Development" in *The Routledge Handbook of Planning History* edited by Carola Hein, New York: Routledge, 2018.

Wilson, John. *Christchurch Swamp to City, A Short History of the Christchurch Drainage Board 1875-1989*, Christchurch: Christchurch Drainage Board, 1989.

Image sources

Figure 1: Gifu City Planning Committee, *Summary of Gifu City Planning* (1929), appendix (left).

Gifu City, *Reference Materials used to Designate Land Use Zones for Gifu City Planning* (1927 estimated), appendix (right).

Figure 2: Abe Nikko Kogyo Co., Ltd.

Figure 3: Genzaburo Abe, *Summary of the Gifu City Sewage Plan* (Gifu; Seinoh Insatsu, 1933), appendix.

Figure 4: Gifu Prefectural Historical Museum

Figure 5: Isamu Ohno, *Summary of the Gifu City/Inaba County Irrigation and Drainage Improvement Project and Related Projects* (Gifu; Seinoh Publish, 1933), 12.

Figure 7: Isamu Ohno, *Summary of Arata River Sluice Water Utility Association* 荒田川閘門普通水利組合誌 (Gifu; Seinoh Insatsu, 1938), appendix.

Figure 8: Isamu Ohno, *Application for the Chusetsu Water Channel Improvement Project (by municipal leaders to the administrators of Gifu City/Inaba County WUA)*, in *Summary of the Gifu City/Inaba County Irrigation and Drainage Improvement Project and Related Projects* (Gifu; Seinoh Publish, 1933), 496-498.

Figure 9: Isamu Ohno, *The Chusetsu Water Channel Improvement Project* in *Summary of the Gifu City/Inaba County Irrigation and Drainage Improvement Project and Related Projects* (Gifu; Seinoh Publish, 1933), appendix.

Endnotes

¹ Junichiro Asano, "A Study on the Planning Process of Nagano Toshi-Keikau: From 1868 to 1930," *J. Archit. Plann. Environ. Eng., AIJ*, No.557 (2002): 265-272.

² Shigeo Nakano, "The Influence of Industrial Infrastructure Prepared by "Industrial Corporation" on a Spatial Transformation of Rural City – A case study on the relation between Kurabo industries Ltd. And Kurashiki city-," *J. Archit. Plann. Environ. Eng., AIJ*, No. 544 (2001): 273-280.

³ Yoshifumi Demura, "'Shikukaisei' Urban Improvement in Modern Gifu and its Operation," *J. Archit. Plann., AIJ*, Vol.77 No.677 (2012): 1643-1652.

⁴ Leonardo Benevolo, *Storia Della Città 4 (Japanese edition)*, trans. Takahiko Sano and Kanji Hayashi (Tokyo: Sagami Shobo, 1983).

⁵ Hiroyuki Suzuki, "Canal City" in *Traditional City 3 Infrastructure*, ed. Nobuyuki Yoshida and Tuyoshi Itoh (Tokyo: Tokyo University Press, 2010), 3-36.

⁶ Leslie Tomory, *The History of The London Water Industry 1580-1820* (Baltimore: Johns Hopkins University Press, 2017).

⁷ Murugesu Sivapalan, Hubert H. G. Savenije, and Günter Blöschl, "Socio-hydrology: A New Science of People and Water," *Hydrol. Process*. 26 (2012): 1270-1276.

⁸ R. Seidl, and R. Barthel, "Linking Scientific Disciplines: Hydrology and Social Sciences," *Journal of Hydrology*, 550 (2017): 441-452.



- ⁹ Jos Arts, Ruud Filarski, Hans Jeekel, and Bert Toussaint, *Builders and Planners, A History of Land-use and Infrastructure Planning in the Netherlands*. (Delft: Ministry of Infrastructure and the Environment, 2016).
- ¹⁰ Domenic Vitiello, "Planning for Infrastructure: Lifelines, Mobility, and Urban Development," in *The Routledge Handbook of Planning History*, ed. Carola Hein (New York: Routledge, 2018): 325-337.
- ¹¹ Nobuyoshi Tasaki, *Town and Country in Modern Japan - An Age of Upheaval from the 1910s to 1950s* (Tokyo: Seikyusya, 2012).
- ¹² John Wilson, *Christchurch Swamp to City, A Short History of the Christchurch Drainage Board 1875-1989* (Christchurch: Christchurch Drainage Board, 1989).
- ¹³ Robert J. Hoeksema, *Designed for Dry Feet, Flood Protection and Land Reclamation in the Netherlands* (Reston: American Society of Civil Engineers, 2006).
- ¹⁴ Japanese Society of Civil Engineers (JSCE), *Tadao Okino and the Modern River Improvement Works in the Meiji Era* (Tokyo: JSCE, 2010).
- ¹⁵ Takashi Ohkuma, *River History of Flood and its Prevention – from Control to Acceptation 洪水と治水の河川史—水害の制圧から受容へ* (Tokyo: Heibon-sya, 2007).
- ¹⁶ Yoshifumi Demura, "The Land Readjustment Project in the Early City Planning in Gifu," *J. Archit. Plann., AIJ*, Vol.78 No.694 (2013): 2529-2536.
- ¹⁷ Kunimatsu Matsuo, *Urban Health and Hygiene 都市の保健衛生* (Gifu: Seinoh Insatsu, 1934), 3.
- ¹⁸ Although the engineers were aware of the (then) popular system in which the sewage pipe was separated from the rainwater flow, they considered this system to be uneconomical. After outlining the advantages and disadvantages of both approaches in 'The History of Water Supply' (1927), the local authorities insisted that a separate system was inappropriate for Japanese cities because it cost almost twice as much as the combined system, and they would have to construct both pipes from scratch. Indeed, a separate system was constructed in only a small part of Tokyo, Shimonoseki, and Qingdao (under Japanese rule at this time). (The three cities mentioned were not able to build complete systems, but only limited systems; a complete system had not been built in Japan at this time.) (Chujirou Moniwa, *The History of Water Supply*, Society of the Memorial Project for Doctor of Engineering Nakajima, Tokyo, 1927).
- ¹⁹ Gifu City Municipality, "An explanation of the annual budget in Showa 3" *Gifu City News*, March, 1928.
- ²⁰ Johannis De Rijke, *A General Condition of Kiso, Ibi, Nagara, and Shonai Basin*, the report to Secretary Shoichirou Ishii, April 1, 1878.
- ²¹ Johannis De Rijke, *A Matter of Forests to the North of Gifu in Kiso Basin*, the report to Secretary Shoichirou Ishii, November 27, 1879.
- ²² However, the government soon suspended this sabo project because it needed more money for the downstream improvements planned by De Rijke.
- ²³ Johannis De Rijke, "An Opinion on Japanese Flood Control," *Flood Control Magazine 治水雑誌*, Vol. 5 (1891): 30–34.
- ²⁴ Takeshi Hattori, *Modern Local Politics and Water Use Civil Engineering* (Kyoto: Shimonkaku Shuppan, 1995).
- ²⁵ He was the father of Kunio Maekawa, who was a disciple of Le Corbusier.
- ²⁶ The epoch after World War I was characterised by food shortages and occasional heavy floods, and the Cabinet, which was supported by rural landowners, strongly promoted efforts to increase food production by improving irrigation, drainage, and flood control measures. The Emergency Water Control Committee, formed in 1921, developed the National Flood Control Plan, which proposed improvements in agricultural water use, in addition to raising the subsidy rate of the National Treasury. Communications regarding river administration matters concerned with water management were divided into river issues, under the directive of the Home Ministry, and irrigation/drainage, under the Ministry of Agriculture and Forestry. This national effort led directly to the unprecedented 50% subsidy for the Irrigation/Drainage Trunk Channel Improvement Project, issued by the Food Director in 1923, which affected 500 cho-bu (495.9 ha) of agricultural land. This plan, which was developed by Kira, was designed to distribute the subsidy. (Yoshifumi Demura: *Repair Work at the Branches of Kisogawa River and Land Improvements - the Process of Building Cooperation to Acquire a Modern Water System -*, Journal of Japan Society of Civil Engineers, Ser. D2, JSPS, 73(1), 54-62, 2017; see also Tokai Agricultural Administration, *The History of Kisogawa Basin Agricultural Water Use*, Nagoya, 1980).
- ²⁷ The petitions to the Home Ministry organised by a committee of the Gifu/Inaba WUA finally led to the development of a clear plan that requested the Diet to allot another unprecedented 50% subsidy to the Repair Work Project at the tributaries of the Kiso River in 1928. Added to the Irrigation/Drainage Trunk Channel Improvement Project, this area received a substantial budgetary allocation and became widely known due to its dependence on the authority of both the Agriculture and Forestry Ministry and the Home Ministry (Demura, 2017).
- ²⁸ Keiichi Ishigure, *The Problem of Factory Wastewater Contamination* (Gifu: Seinoh Publish, 1934), 36–39.
- ²⁹ Isamu Ohno, "The Chusetsu Water Channel Improvement Project" in *The Summary of the Gifu City/Inaba County Irrigation and Drainage Improvement Project and its Related Projects* (Gifu: Seinoh Publish, 1933), 487–547.
- ³⁰ Kunimatsu Matsuo, "The expectation to the Projects of the Civil Engineering," *Water Utilization and Civil Engineering 水利と土木*, Vol. 5, No. 7 (1932): 13–14.



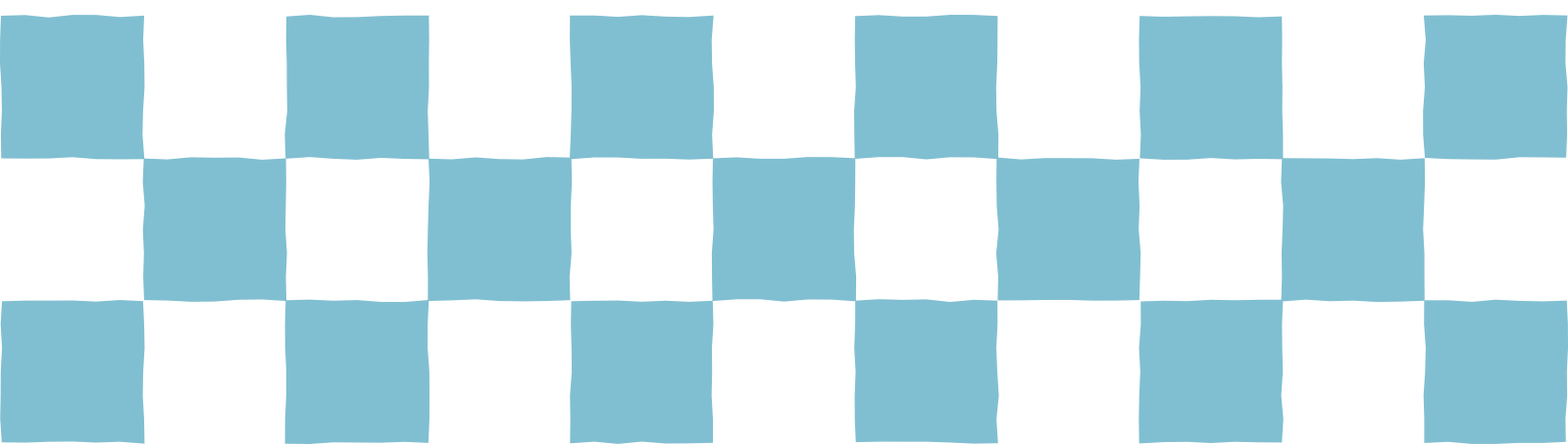
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

34 Transformation and Management of Urban Communities



The Characteristics and Changes in Residential-Industrial Mixed Buildings in the Taito Leather Industrial District in Tokyo

Megumi Hamada (The University of Tokyo), Naoto Nakajima (The University of Tokyo) and Yukio Nishimura (The University of Tokyo)

In recent years, the urban area in Tokyo is facing the issue of disaster prevention, particularly in areas having a high wood density. The recent developments in the existing urban industry are destroying the local community network and its spatial characteristics, and weakening the local industries due to the change in industrial structure. So, there is a need to discuss that how to renew the existing urban area while simultaneously creating a sustainable urban and local industry space.

The present study aimed to examine the special characteristics of leather industry establishments in the area and grasp the trend of the present Residential-Industrial mixed-use spaces in Tokyo. By discussing the results based on the historical industrial transition, we intend to extract the inherited essence in the renewal process of urban Residential-Industrial mixed-use areas depending on the popular will.

Located near the big consumption area, the leather industry is a sustainable industry as it uses the by-product of meats consumed by urban people. The target area, Northern Taito Ward, is an area where the leather industry was established during the early modern times, which were dominated by the wholesale and secondary processing industry on a family scale. Individual buildings in which residence and workshop functions are combined are a popular style in this area.

We analyzed the architectural characteristics of 155 leather industry buildings on site. Based on the results of the field survey, we created four building types for analysis.

A1 Wooden and low-rise buildings built as residence and workshop functions that are combined in the ratio of 1:1.

A2 Non-wooden and low-rise buildings rebuilt as residence and workshop functions that are combined in the ratio of 1:1.

A3 Non-wooden and middle- to high-rise buildings rebuilt as residence and workshop functions that are combined in a ratio of multiple:1.

B1 Non-wooden and middle- to high-rise buildings rebuilt for workshop functions only.

It was found that A2 type building style is the most popular style in this area. In part, some tenants enter the low-rise part of apartment houses (A3)

Both are Residential-Industrial mixed-use buildings, which have been renewed keeping the industrial and community networks at the ground level.

In addition, there is a trend of separating the access flow lines to each residence and workshop functions by making different entrances in A2/A3 type buildings.

The results of the field survey indicated that one part of the buildings in the target area has been spontaneously and personally renewed to non-wooden buildings on the assumption of Residential-Industrial mixed-use. Whether a building is rebuilt under Residential-Industrial mixed or separated style is related to the position of the establishment in the leather industrial structure. In the case of Residential-Industrial mixed renewed buildings, there is a spatial expression that shows the divergence of distance between job and housing, as they are still in the same building.

Study on the Comparative Analysis on the Process of Consensus-Making in Area Councils in France

Kumi Eguchi (Kyushu University) and Shota Tokunaga (Kyushu University)

In Japan, nowadays bottom-up styled participative urban planning through intermediate organizations more and more becomes in trend. The trend started by the Law Concerning the Promotion of Specific Non-Profit Organization Activities in 1998 after the evaluation of the activities of groups of inhabitants in the Great Hanshin Awaji Earthquake in 1995. Also the Landscape Act of 2004 permitted them to concern the management of the landscape plan if they are nominated as the landscape management organization. However, only 6 NPOs are nominated in Tokyo, Ibaraki, Nara, Tottori and Shimane today. In France, these intermediate organizations of the inhabitants are designated as the Area Councils (Conseil de quartier: CQ) by the Law of the Democracy of Proximity (loi relative à la démocratie de proximité) of 2002. They are based on the history of groups of inhabitants formed since 1920s' in Grenoble. They are obliged to be instituted in the communes with more than 80,000 populations. This is defined by the 23rd article of the law as in the communes with more than 80,000 inhabitants, the municipal council fixes the every area, which constitute the commune. Municipal council fixes their composition and the functional mode. The Area Councils are able to be consulted by the Mayor and are able to give him or her the propositions about the every question concerning the area from the point view of the city politics. This system deserves the attention in the trend of the decentralization and local deterioration. However, we have not had the sufficient studies yet even in France. We think that we are able to have the efficient suggestion for Japan for the democracy of proximity. This study aims to clarify the contemporary situation, effectiveness and political process of the Area Councils to have the suggestion for Japan with the political point of view. As a research subject, we choose the Area Councils in Paris and Lyon. This is because that the 122 Area Councils in Paris have diverse activities and compositions and I have already clarified a part of their effectiveness for the urban policy. They are suggested to be the representative example. On the other hand, the City of Lyon has 36 Area Councils and they have 7 concertations for the consensus-making of the ZAC projects. As a research method, our research team visits each municipal council, has interview and collect the documents and proceedings. As a result, I clarified the concrete situation of the area councils and analyzed the examples as follows. The Area Council of the 11th ward in Paris is freely composed by all people residing, studying or exercising a professional or associative activity. It works as the consulting council for the great project such as Truillot Garden and Breguet block. For the conclusion, the Area Councils in France have strong impact and certain effectiveness on the participative urban planning which Japan need to refer to.

Transformation of Urban Communities from Within: Inhabitants' Role in Urban Planning of Shanghai After 1998

Kaiyi Zhu (Delft University of Technology)

Inhabitants living in historic neighborhoods seldom have subjective initiative within urban transformation as a result of their selfness generated from the Chinese sociocultural tradition. Urban planning in China has been government behavior since the end of feudal dynasties. Moreover, most planning strategies proposed by government under the unique housing and land ownership in China largely reflect the hierarchy and centralization of local authorities. Since the commercialization of housing in 1998, conflicts between residents and government have increasingly prominent and intensified. This paper investigates inhabitants' participation, attitudes, appealingness within multiple urban transformation in historic Lilong neighborhoods (also known as Shanghai Alleyway House) of Shanghai, and their impacts on shifting urban forms in and around each specific neighborhoods. Thereinto, considering the bottom-up project of urban renewal in Number 210 of Taikang Road (also known as Tianzi Fang) as an unwonted example dominated by inhabitants, this research mainly looks at the changing role and effects of residents in such urban transformation after 1998. It also explores residents' reaction in other Lilong neighborhoods, which are situated in different administrative districts with varied economic, cultural, demographic and educational conditions, such as Chunyang Li and Ruikang Li in Hongkou District. Through a methodology of comparative study, it first investigates the flexibility of inhabitants' participation in urban planning of historic neighborhoods of Shanghai and their changing roles; it then examines reasons that make inhabitants' participation ineffective in most urban transformation cases. Urban transformation in historic neighborhoods located in different places of Shanghai are facing an unbalanced development as a consequence of varied economic growth rates. Between the end of the Twentieth Century and the beginning of the Twenty-first Century, historic neighborhoods in Huangpu District have largely transformed. Number 210 in Taikang Road is the production of the game among different stakeholders. There are many stakeholders who have appeared at different stages throughout the transformation; local residents and famous artists were indeed major stakeholders who first participated in this urban renewal project in 2002. Since 2017, as a result of the Shanghai government's strategical plan, repair and renovation works of historic dwellings in Hongkou District have been in full swing. However, according to pilot interviews during investigation in Chunyang Li and Ruikang Li, residents do not pay close attention to urban planning in their living areas, nor willing to face urban transformation; moreover, some inhabitants even drew emotions of contradictory, though they are suffering low living conditions. Tentative conclusions indicate that transformation in historic urban communities from within is rare in China, and the reasons could be that residents' subjective initiative has been low and negative, although legislative frameworks and political situations can bring in boundedness within residents' practices; furthermore, as a result of the residents' mistrust and resistance to the local authorities, cooperation between them has been complicated and challenging. Inhabitants, as a principle part of integration in every specific historic neighborhood, it is essential to explore and promote their positive participation during urban transformation.

Temporary dwellings as successful informal suburban development: the case of Sydney 1945 to 1960

Nicola Pullan (The University of New South Wales)

The occupation of temporary or makeshift dwellings when there is a shortage of affordable housing is a global phenomenon. Until recently, the vast majority of urban planning literature has tended to convey that this type of informal urbanism existed only in the global south. However, a number of scholarly and popular publications on suburbanisation have indicated that informal urbanism in the form of makeshift housing on purchased residential land has had a presence in many countries in the global north throughout the twentieth century, the best-documented exemplars being the construction of self-help housing situated on the outskirts of newly-industrialising cities in France and Canada during the inter-war period and as makeshift seasonal accommodation in the UK. Comparable studies indicate that similar dwellings emerged as unapproved housing in suburban extensions to the capital cities of Greece and Portugal during the 1950s and 1960s, and persist today as the ever-expanding colonia settlements of the US-Mexico border region. Occasional references to temporary dwellings in the Australian housing literature indicate that informal urban development existed at a significant scale on the fringes of most towns and cities in Australia during the two decades immediately following world war two, however this form of suburbanisation has not yet been investigated in any detail. Drawing on documents from government departments and interviews with residents, this paper surveys the phenomenon as it played out between 1945 and 1960 in the outer suburbs of metropolitan Sydney. The research highlights the existence of a distinctive Australian story and compares this with the circumstances which surrounded the international instances of informal housing mentioned previously. The paper concludes by suggesting that, contrasting with the previously-mentioned instances of informal urbanism which occurred during the early twentieth-century, the unprecedented social, political and economic contexts which prevailed in post-war Sydney enabled otherwise un-financial households to acquire un-serviced land in areas without public infrastructure and to construct makeshift dwellings that were within their financial means, and to use the situation as a positive interim step towards successful ownership of an approved, more conventional, and permanent home.



Transformation of Urban Communities from Within: Residents' Role in Lilong's Attributive Switch Between Market-led Commodity and State-controlled Property

Kaiyi Zhu*, Carola Hein**

* *PhD Candidate, Department of Architecture, K.Zhu-1@tudelft.nl*

** *Professor, Department of Architecture, C.M.Hein@tudelft.nl*

The state has owned most historical buildings since the establishment of the People's Republic of China (PRC). Residents within are entitled to the right to use the house in the form of a lease. After entering a free trade housing market in 1988, residents in historic neighbourhoods of Shanghai have been suffering uncertainty of their identities. Residents' role, responsibilities and obligations within urban transformation, has always been in suspense and strongly affected by multiple stakeholders' decisions. Based on an analysis of the relationship between the native residents and the historic Lilong communities they are living in, this paper examines stakeholders' heritage approaches in three typical transforming project, to explore residents' mobility and behaviour within varied urban transformation and socio-economic development. Through a literature review, fieldwork and a pilot study in Xintiandi, Tianzifang and Chunyangli districts, urban transformation in historic urban communities from within is found literally rare in China. This paper argues that residents could not clarify their role by living in urban heritage, neither obtaining house-ownership to define their position nor being treated as one component of urban heritage. Government in China has been indeed the character who mediates between all stakeholders and bears the most burden.

Keywords: urban transformation, Lilong houses, historic urban communities, native residents, participation, housing policy, government, intangible heritage

Introduction

The evolution of urban community in Shanghai has almost reflected this city's history of migration. Developing from a fishing village to a marvellous metropolis, the old town of Shanghai was originally enclosed by fortified walls and surrounded by swamp, cultivated land and the Huangpu River at the east (Figure 1). Different from most traditional Chinese old towns, not planned in a square urban texture and straight roads, the urban growth has followed a more organic and natural pattern. Such spontaneous expanding status settled the inclusiveness of foreign intervention in Shanghai. Discovering this characteristic of the city, settlers from Europe and United States exploited great business opportunities from burgeoning mercantile communities, which were established as a result of social rebellions and population increase; they consequently created a real estate market in Shanghai for the first time by exposing commercial housing to international trade. Lilong houses (alleyway houses, 里弄) were indeed the products led by such marketing environment¹. The former free trade market of Lilong houses was prohibited by the state between 1949 and 1978 during the Mao era. Lilong houses in this period were not general commodities for commercial transaction, but reward or state subsidies to people allocated by administration, to meet national economic and planning strategy². The Maoist housing policy reform largely reduced the value and vitality of housing market and weakened the relationship between residents and their living places as well³.

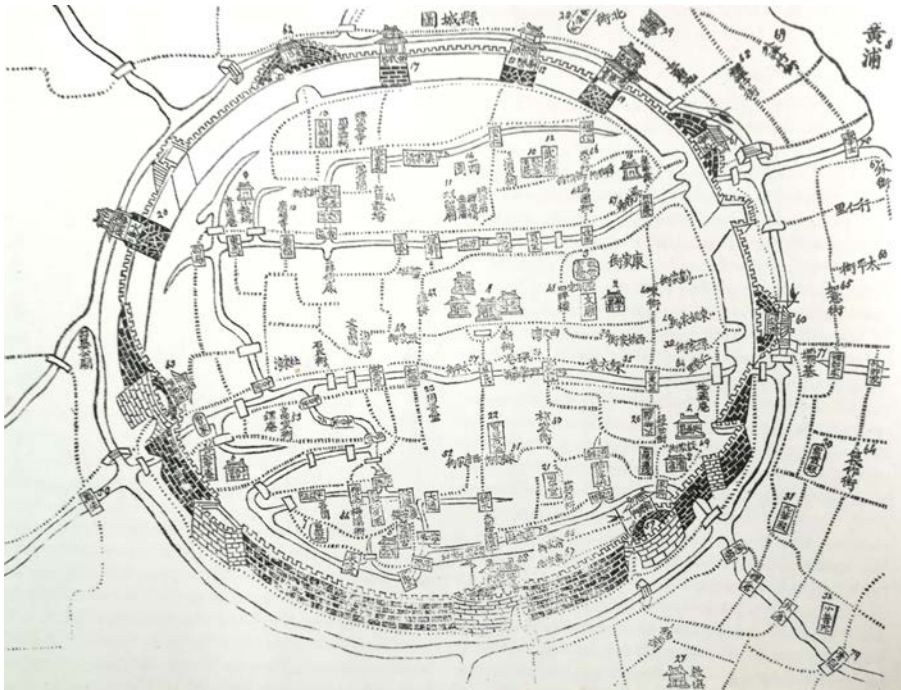


Figure 1. Unknown. General Description of Shanghai. *The walled old town of Shanghai, showing swamp, cultivated land and initial roads.* [Mission Press, 1850]

Since the state has continuously owned most historical buildings, native residents' role in historic urban communities within urban transformation is constrained within a certain range. Influenced by international tendency of housing privatization, the central government of China launched several economic measures in the late 1970s, to realize the reform and opening-up policy starting in 1978⁴. With the promulgation of the land leasing policy of Shanghai in 1988, attribute of land usage in Lilong districts has changed and faced different transforming modes⁵. For example, a considerable number of abandoned and dilapidated Lilong houses encountered with massive demolition and renovation of the city builders in the 1990s⁶. Shenjing He and Fulong Wu demonstrate that in the project of Xintiandi, urban redevelopment of historic site was led by property, to attract private sectors⁷. Furthermore, in major existing historic communities, such as Bugali and Hehefang, district-level government took the responsibility to renovate and restore architectural facilities, improving living qualities⁸. Nevertheless, including demolition, commercial redevelopment and housing renovation, this paper argues that local authorities have maintained to own and manage the construction or transaction of most Lilong houses. Considering the adding character of Lilong housing as heritage in contemporary era and their location advantages, housing policy reform after 1978 yet cannot bring these remaining urban community heritage to an open, free and fair market, in which all residents (if being householders) should take their own responsibilities and obligations for the conservation of historic architecture and urban landscape. Under the circumstances, in order to engage native residents in urban transformation of historic communities that they are living in, the intangible significance of residents' existence should be emphasized by themselves and the public simultaneously. This paper also argues that historic communities, under the long-lasting government-dominated housing market, residents could not clarify their role by living in urban heritage. These residents can neither obtain house-ownership to define their position nor be treated as one important intangible component of urban heritage.

Urban transformation has become one of the most distinct characteristics in contemporary Chinese metropolises. About 7.3 million square meters of Lilong houses in downtown area of Shanghai need to be protected and renovated⁹. In the following content, firstly, through literature review, this paper elaborates that within a short term of socio-economic development, a status of Lilong housing as state-owned property will not change; regardless of a small portion houses for commercial redevelopment, Lilong housing will continuously be a non-productive sector in most senses; therefore, local government cannot provide sustainable and sufficient funding supply for architectural renovation project with low rental income from residents¹⁰. Varied stakeholders had interpreted, implemented, appropriated and justified the concept of modern heritage and their values in the movement of urban transformation of historic Lilong communities. Under the contemporary heritage discipline within which intangible significance of heritage is repeatedly emphasized, spirit of place and native residents' memories as an important component of history have become a more attractive feature of a historic site to



investigate. Secondly, by analysing three different cases located in Taipingqiao (Xintiandi), Taikang Road (Tianzifang) and Chunyangli, this paper thus further explores that in the scope of government capabilities that cannot be reached, from what perspectives for native residents to enhance, expressing their role as one intangible component of urban heritage.

Housing Policy and Lilong Houses

Throughout the last two decades of the twentieth century, privatization of public property have obtained political inclination and increasing emphasis in many advanced societies of the world¹¹. In the United Kingdom and eastern Europe, government promoted the strategy of house ownership, to strengthen the influence of private sector in housing market; under such circumstances, a hint of the ideology of socialism in housing system faced collapse in these societies as well¹². As a socialist country, practices and political reform of housing property should launch with its speciality. Normal compounds built in the late twentieth century for working class and newly-built commercial residence in flexible housing market have completed their ownership-attribute shift from state-owned dwellings to private estate. However, despite the cancellation of the welfare housing allocation system, most Lilong houses have been owned by the state and rented at a low price. According to historical events and a regime change, Zhang Song indicates that the ownership of historic buildings is extremely complex, bringing difficulties to protection and management of Lilong houses¹³. This situation manifests that under the existing housing policy for historic urban communities in China, residents cannot be property owners, but they can take occupancy as long-term tenure and users, largely benefiting from government subsidies and preferential policy for urban heritage. This paper thus argues that these residents should seek a way out by taking maximum advantage of their identity as intangible legacy and spiritual-cultural holders. Housing policy reform of historic urban communities forward a further stage seems to be a continuous and circuitous mechanism to follow, largely creating limitation of residents' involvement and dynamic roles in urban transformation of urban heritage. In the following three Lilong transforming cases for analysis, despite strong intervention made by capitalists and local authorities, this paper explores residents' mobility and behaviour within each urban transformation; regarding the chronological order of every single project, it further discusses the interaction between multiple groups of residents' behaviours, to elaborate.

Residents and the Significance of Urban Heritage

Lilong architecture was primitively built in the foreign settlements in the nineteenth century. Two rebellions, booming population and advanced industrial techniques of that time catalysed the germination of a real estate market in Shanghai. The word "Lilong" is the representation of two Chinese characters: Li (里) stands for the concept as a neighbourhood, a block of compounds; while Long (弄), which is also named as Longtang (弄堂), means alleyways or lanes, connecting and structuring each subdivided residential compounds. Lilong house is therefore also under the name of alleyway house in translation, referring likewise the urban community lifestyle in the historical Shanghai. Lilong were built between the 1870s and the 1940s; during the seventy years, these residential quarter progressively transformed into different forms to keep with the changing population.

One thing for certain is that after the reform and opening-up policy and land leasing policy, the society or more precisely the market in Shanghai has paid more attention to commercial values of Lilong; although, their heritage values have received more concentrate in the increasing strong voice of some experts and scholars¹⁴. Based on the criteria included in *Venice Charter* (1964), published literature reveals that Wang Shaozhou and Chen Zhimin indicate the combination characteristics of Lilong houses from both western and oriental architecture¹⁵; Lu Wenda and Zhu Jiancheng claims its social significance as the beginning of modern real estate in China¹⁶; Fan Wenbin indicates the importance of Lilong neighbourhoods as one distinctive character of urban landscape in Shanghai, while Li Yanbo points its social and cultural values¹⁷. Nevertheless, as a result of the lack of research on the spirit of Lilong communities, where residents gather and create a typical lifestyle of Shanghai, dynamic residents omitted the initiative consciousness of being part of the of the heritage itself, actively integrating into urban heritage.

Shifting Ownership-attribute of Lilong Housing

Ownership-attribute shifts of Lilong can be divided into three major historical stages, from foreign commercial housing development before the foundation of the PRC, to the rising welfare system under the planned economy between 1949 and the 1980s, and to the later state-controlled market economy of commercialization and monetization.



Lilong houses were as mentioned widely built as commodities in the foreign settlement era, to form a hitherto real estate market in China. Before 1949, most commercial housing for sale and rent were constructed and owned by foreign investors, such as Shanghai Land Investment Company, Sassoon Group and Haroon Company. The early Shikumen Lilong built in the late nineteenth century maintained the Chinese traditional characteristics of *Shenzhai Dayuan* (深宅大院), a compound of connecting courtyards and surrounded by dwelling quarters¹⁸. Such expensive and upscale housing property were mostly owned by the transmigrating gentry and wealthy families in Shanghai; however, in the early twentieth century, with the decline of these powerful families, a Lilong house was usually divided into several households and becoming into a more civilian product under the circumstances. This division has raised a tremendous number of second and even third landlord of a single Shikumen Lilong property. In the continuous typological evolution, Lilong had transformed towards styles more of economization and popularization. This improvement made Lilong houses more affordable and accounting for more than three quarters of the whole residential buildings in the 1940s of Shanghai, reaching a number of two hundred thousand houses¹⁹. Lilong as commodity had been unequivocal with no doubt, establishing and accelerating Shanghai's urban transformation and capitalist accumulation.

After a recovery from Sino-Japan War in 1949, the national liberation raised an urgency for mass accommodative dwellings to shelter a burgeoning and broad working class. Meanwhile, there was no company able to manage the construction of Lilong housing. In addition, during the disorder time, a large number of local residents moved out of Shanghai and left their houses vacant or co-rent by more people; therefore, during the period of planned economy after 1949, a considerable number of Lilong houses were nationalized and offered to senior intellectuals, senior officials and returned overseas Chinese celebrities as reward. From that point on, historic residences have been state-owned property under control. Accompanied by continual housing shortage, situation had been even worse since the 1960s when the *Cultural Revolution* broke out. Encouraged by Mao's call for rebellion, temporal radical 'rebels', who contributed to abolish cultural traditions, pillaged houses from legal but persecuted residents who were defined as reactionaries in the turbulent time. Disorganized haphazard construction, deteriorating urban landscape and retrogressive lifestyle reconfigured Lilong architecture, which nature as a home was deprived and even lost, becoming conquest with no feelings of belongingness. It had been government property but without normative control. This historical production confused both the owners and users, laying complicated difficulties for the later urban transformation, especially in residents allocation and equity ownership. There was one thing for sure that Lilong's attribute as a commodity had no longer existed but been regarded as spoils or awards by the public instead.

As mentioned above, after 1988, when the central government admitted land leasing policy, foreign investment started to attach importance to the real estate market in Mainland China. This measure brought a dynamic environment in China. In the meantime, several Lilong neighbourhoods with distinctive features were initiatively listed as *officially protected monuments and sites* (文物保护单位) and *excellent historical buildings* (优秀历史建筑) of Shanghai, and besides, with an increasing number of Lilong in the list of cultural relics, the importance of such historic sites has been ever emphasized. Nevertheless, the situation that a minority of Lilong houses are private and a majority are state-owned have not changed.

Historic houses can become commodities easily due to the land leasing policy and it literally happened in 1997 within the Xintiandi Project; however, with the process of democratization and socialism and continue rising of land prices, Lilong's role as family home and government property are increasingly highlighted. In Lilong's attributive changing history of more than one hundred years, bargaining among capital, authorities and communal inhabitants are full of directivity, speculation and uncertainty. Stakeholder, who occupied more resources, usually dominated the values, functions, social roles, and even preservation status of these Lilong houses; however, and furthermore, whether it was the real estate market that was introduced during the Qing dynasty, or the Cultural Revolution that was experienced during the early days of the foundation of the People's Republic of China, or the concept of commodity economy and cultural relics conservation that have been re-emphasized since the 1980s, the contemporary Chinese society is unfamiliar with dealing with Lilong's complicated property-ownership and value scope as urban heritage. As its nature has changed from simple to multiple, from simple to complex, Lilong have been highly likely becoming an aggregate property with social and political status and value.

Whether it is a remediation of past errors or a cater to international trends, Lilong have obtained a new and additional identity as architectural heritage ever after. Among all the Chinese cities, Shanghai as a land formed by the accumulation of capital has observed an evolving process of stakeholders' heritage approaches towards Lilong architecture and neighbourhoods since 1988. The resulting production has been diverse as well; among them, the most representative cases are the commercial development Xintiandi and Jianyeli, renovated and preserved living neighbourhoods Bugaoli and Chunyangli and, the very specific bottom-up urban renewal of Tianzifang. In these urban transformation in urban historic areas of Shanghai, driven by interests or legislative



factors, residents' role has been continuously shifting, illuminating effects on dynamics of heritage approaches in varied districts.

Xintiandi: Residents' Inaction

Xintiandi project is a commercial redevelopment conducted by Hong Kong developer Shui On Group in 1997. Designed by American architects Wood and Zapata, two city blocks in the former Taipingqiao area has become the most popular and luxury shopping and entertainment hubs in Shanghai (Figure 2). Standing for "new world" in Chinese, stakeholders introduced a new lifestyle into this renamed Xintiandi project²⁰. Before Xintiandi redevelopment, there were 23 vernacular old neighbourhoods in Taipingqiao area, accompanied with seventy thousand people. Located within the conservation area of the First Communist Congress historic site, this redevelopment project should comply with certain laws and regulations of cultural relics protection. Since the limitation of targeted regulations, guidelines, orders and recommendations from local authority, seizing maximization of interests has become the major subject throughout this specific "developmental-conservation" project²¹.



Figure 2. WOOD & ZAPATA. Sketch manuscript of Wood's urban design in Taipingqiao area, and in this redeveloping process, residents could not be involved. [Shanghai, 2017]

Residents passively participated in this redevelopment. It was extremely efficient that in less than six months the relocation of 1950 households was settled, with the efforts paid by collaborating developer and Luwan District government; moreover, remove of about 3,800 households and 156 working units were achieved in merely 43 days, making room for the adjacent Taipingqiao Park²². Throughout this redeveloping process, local residents as the largest population could not voice for their own demands and rights and interests. The rapid pace of relocation allows people to associate native residents with bundled packages that can be disposed of in the form of orders and notices, without prepared negotiation. Although, inhabitants benefited larger living area and healthier living environment after the redevelopment, residents' role and function was completely ignored and overlooked. This precedent of residents' inaction has consequently brought considerable inconvenience and failure of mutual trust to later Lilong conservation and renewal. People who used to experience the traditional way of life have no longer regarded Lilong as a homeland but a bargaining chip. Marginalizing residents in this first-practical project named Xintiandi has largely declined native residents' positivity to participate in public management of Lilong, and besides, residents have few senses to take obligations as part of heritage and contribute to the sustainability of historic urban communities.

Tianzifang: Residents' Gradually Withdrawal

Learning experience and seizing a smoothly expanded commercial opportunity from their neighbour Xintiandi, a group of residents in the case of Tianzifang played their subjective initiative in regional transformation for the first time. However, as a bottom-up project of urban renewal, as a result of financial restraint and China's inherent land policy, Tianzifang has actually altered to be the production of the game among varied stakeholders.



The transforming progress of this project has gone through four stages: the original stage (before 1998), the initial stage (between 1998 and 2004), the conflict stage (between 2005 and 2007), the free transformation stage (after 2008)²³. Within this urban transformation, with arrivals of artists, retailers, developers, the local government, professionals and other stakeholders, native residents' influence on decision making within this area has become gradually less important. Since Tianzifang gained social attention in the early Twenty-first century, the evolving orientation of urban neighborhood has been no longer controlled or led by the residents. In China, it remains to be seen whether government or capitalists can dominate the urban dynamics, since most of the residents do not own Lilong property, their contribution and group aspiration can easily be replaced by authorities for national strategic significance.

Chunyangli: Residents' Repulsion and Irresponsibility

Compared with Huangpu District, geographical factors did not bring Hongkou District advantages in economic competition, but serendipitously contributed to the retention of a large number of Lilong housing. Considering cost-effective conditions, Lilong neighbourhood in Hongkou District was selected for the first practice, under the guidance of reform policy of "preservation before renovation and demolition" (named as "留改拆" in mandarin)²⁴. Among all the residential relics, Chunyang Li which was built in 1930 by the Shanghai Land Investment Company, was distinguished by holding typical Shikumen architectural features. Due to the proximity of Hongkou Port, residents in this community were mostly urban migrants, working for port trade in north bund. In this political renovation project, observing propaganda slogans and banners (Figure 3), district government applied varied method to obtain native residents' coordination for short-term moving out. However, according to pilot interviews during site investigation in Chunyangli, residents were not willing to face inconvenience brought by urban transformation, which aimed to improve basic living facilities, such as sewer lines and window frames; moreover, some inhabitants even drew emotions of contradictory. However, four months later after author's oral interviews, according to media reports, 46 households included in the first renovation practice were approaching a better living environment and public health²⁵. Another 1,135 households are waiting for similar engineering. This paper is questioning who is responsible for such large amount cost. So far, government is still the biggest stakeholder in charge of the most financial expenses.



Figure 3: Author. One of the billboard on the photo on the left is about the warning on rejection of temporary relocation, while content of the other is about renovation details to avoid moisture inside houses; photo on the right is the encouragement and for a brighter future of better living conditions. [Shanghai, 2017]

In American sociologist Harvey Molotch's urban theory, a city, or any place, is the representation of interests of elites, which is also very much in line with Henri Lefebvre's discussion on space production²⁶. In such competition between varied elites, by utilizing local government and authorities, both sides strive to induce investment growth in their own fields, sacrificing profit of the other stakeholders. Nevertheless, in Chunyangli housing renovation project, with increasing investment from local government, relationship between elites and other stakeholders seems to be becoming simple and pure. However, considering the core principle of social justice, this paper questions where should funding supply from if local government dominates and takes the most responsibility within urban heritage transformation? If most of these funds are borne by the government and



come from national taxpayers, regarding such rented Lilong houses as a type of social housing, what action and efforts for native residents with low income can make for sustainable development of urban heritage.

Conclusion

To conclude, urban transformation in historic urban communities from within is therefore rare in China. Two aspects mainly predominate residents' habitual passive attitude within urban transformation or transition of historic communities, the absolute power of administrative authorities in China and an extent sense of disengagement from urban heritage as integration. Normal residents can neither be classified as ordinary owners and daily users, nor can be considered part of the intangible cultural heritage.

Under the contemporary housing policy of urban historic dwellings, district-level government and the state in China has been indeed the character who mediates between all stakeholders and bears the most burden in urban transformation of historic communities. Residents' participation in urban transformation of their living community has constantly been low. Native residents seem to have undergone a process of transition from not having the right to participate to being unwilling to express themselves. The reasons could be that residents' subjective initiative has been negatively depressing, although the present legislative framework and regulations can bring in limitation within residents' practices; furthermore, as a result of the residents' mistrust and resistance to the local authorities, cooperation between them has been increasingly complicated and challenging. As a principle group of integration in every specific historic neighbourhood, it is essential for residents to explore and promote their positive participation during urban transformation.

Urban heritage and intangible significance of cultural relics has been overlooked in the Chinese society and heritage practice environment. Internationally, the concept of intangible cultural heritage was proposed in 1970s, when the Chinese central government started to re-emphasize the importance of protection of relics and ancient buildings. Comparatively, such concept and mainstream has evolved in Europe for more two hundred years. This paper hence argues that the Chinese society has a consistent lag and prejudice on the values of urban heritage, whether people are the general public or residents, part of historic communities. With the enhancing of Lilong's cultural and intangible significance, public-private-partnerships may contribute to solve this multidisciplinary issue in a longer further by an accumulation of urban heritage practices, discussion and reflection, but to be demonstrated though²⁷.

Notes on contributor(s)

ZHU Kaiyi (1991), is a PhD candidate at TU Delft. Kaiyi obtained her Msc in Conservation of Historic Buildings at the department of Architecture and Civil Engineering of the Faculty of Engineering and Design in the University of Bath. Since October of 2016 when she started her first year of PhD studies at Chair History of Architecture and Urban Planning, Kaiyi's research and practice is related to the development of international conservation theories and urban heritage practice "in the name of conservation" located in historic residential areas of China's big cities.

Carola Hein is Professor and Head, Chair History of Architecture and Urban Planning at Delft University of Technology. She has published and lectured widely on topics in contemporary and historical architectural and urban planning—notably in Europe and Japan on capital city issues. With an Alexander von Humboldt fellowship she investigated large scale urban transformation in Hamburg in international context between 1842 and 2008. Her current interest is the study of international networks and the transmission of architectural and urban ideas along these networks, focusing specifically on port cities and the global architecture of oil.

Endnotes

¹ The word "Lilong" is directly derived from the Chinese Phonetic, in different literature, authors have their own preference to express; "alleyway" contains the meaning of Lilong as well.

² Zhang, Xing Quan. "Chinese Housing Policy 1949-1978: The Development of a Welfare System." *Planning Perspectives* 12, no. 4 (1997): 433-455.

³ Ibid., 452.

⁴ Wang, Ya Ping, and Alan Murie. "Social and Spatial Implications of Housing Reform in China." *International Journal of Urban and Regional Research* 24, no. 2 (2000): 397-417.

⁵ Zhu, Xiaoming, and Xiaoying Gu. "Evaluation and Analysis on Four Kinds of Cases Concerning Protection and Renovation of Shikumen Lane in Shanghai (上海石库门里弄保护与更新的4类案例评析)." *Housing Science (住宅科技)* 30, no. 6 (2010): 25-29.



- ⁶ Zhong, Xiaohua, and Xiangming Chen. "Demolition, Rehabilitation, and Conservation: Heritage in Shanghai's Urban Regeneration, 1990–2015." *Journal of Architecture and Urbanism* 41, no. 2 (2017): 82-91.
- ⁷ He, Shenjing, and Fulong Wu. "Property-Led Redevelopment in Post-Reform China: A Case Study of Xintiandi Redevelopment Project in Shanghai." *Journal of Urban Affairs* 27, no. 1 (2005): 1-23.
- ⁸ Zhu, Xiaoming, and Xiaoying Gu. "Evaluation and Analysis on Four Kinds of Cases Concerning Protection and Renovation of Shikumen Lane in Shanghai (上海石库门里弄保护与更新的4类案例评析)." *Housing Science (住宅科技)* 30, no. 6 (2010): 25-29.
- ⁹ Chen, Yi. "Shanghai: Ninety percent of the old Lilong Houses for more than 50 years will be maintained (上海: 50年以上旧里9成将保留保护)" last modified July 12, 2017. <http://service.shanghai.gov.cn/SHVideo/newvideoshow.aspx?id=363A2C3CB6E9B53D>
- ¹⁰ Zhang, Xing Quan. "Chinese Housing Policy 1949-1978: The Development of a Welfare System." *Planning Perspectives* 12, no. 4 (1997): 433-455.
- ¹¹ Wang, Ya Ping, and Alan Murie. "Social and Spatial Implications of Housing Reform in China." *International Journal of Urban and Regional Research* 24, no. 2 (2000): 397-417.
- ¹² Ibid.
- ¹³ Zhang, Song. "Conservation Strategy of Urban Heritage in Shanghai (上海城市遗产的保护策略)." *City Planning Review (城市规划)* 30, no. 2 (2006): 49-54.
- ¹⁴ Scholars such as Song Zhang, Yisan Ruan, Qing Chang, Shiling Zheng, Jiang Wu who are based in Shanghai have made a number of research regarding values of Lilong and existing heritage redevelopment modes.
- ¹⁵ Wang, Shaozhou, and Zhimin Chen. *Lilong Architecture (里弄建筑)*. Shanghai Science and Technology Literature Press (上海科学技术文献出版社), 1987, pp 1, 34, 38.
- ¹⁶ Lu, Wenda. *Shanghai Real Estate Annals (上海房地产志)*. Shanghai Academy of Social Sciences Press(上海社会科学院出版社), 1999; Zhu, Jiancheng. *The Real Estate Business of Old Shanghai (旧上海的房地产经营)*. Shanghai People Press (上海人民出版社), 1990, p 10.
- ¹⁷ Fan, Wenbin. Protection and Renewal of Lilong in Shanghai (上海里弄的保护与更新). Shanghai Scientific and Technical Publishers (上海科学技术出版社), 2004, pp 42-45; Li, Yanbo. Values of Shanghai Lilong Districts (上海里弄街区的价值). Tongji University Press (同济大学出版社), 2014.
- ¹⁸ Li, Yanbo. *Values of Shanghai Lilong Districts (上海里弄街区的价值)*. Tongji University Press (同济大学出版社), 2014.
- ¹⁹ Ji, Guoliang. "The Characteristics of Shikumen Residential Buildings in Shanghai under the Background of Urbanization (城市化背景下上海石库门里弄住宅的特质)." *China Folklore Network (民俗研究)*, no. 2 (2015): 155-60.
- ²⁰ In the word "Xintiandi", "Xin" means "new" in Chinese and "Tiandi" means "heaven and earth", standing for "world" in the traditional Chinese context and discourse. Thus, the name Xintiandi has the meaning of "new world".
- ²¹ Mo, Tianwei, and Di Lu. "Regeneration of Urban Form of Shanghai Lilong: Conservation Development of Xintiandi (再生上海里弄形□开口性保□新天地)." *Time Architecture (□代建筑)*, no. 3 (2000): 40-42.
- ²² He, Shenjing, and Fulong Wu. "Property-Led Redevelopment in Post-Reform China: A Case Study of Xintiandi Redevelopment Project in Shanghai." *Journal of Urban Affairs* 27, no. 1 (2005): 1-23.
- ²³ Wang, Yaoshun, Huwen and Liuwen. "Game and Reconstruction in the Transformation of Old City: Taking Tianzifang of Shanghai as an Example (旧城改造中的博弈与重构——以上海田子坊□例)." *Architecture & Culture (建筑与文化)*, no. 11 (2016): 122-23.
- ²⁴ In this "preservation before renovation and demolition" ("留改拆") reform policy, administrative department requires that regarding 90 percent of existing Lilong houses, all stakeholders should preserve them first, and if they are not maintained in a good state, renovation is the next step of heritage approach that stakeholders can apply. Demolition should not be taken into consideration unless very specific damage may occur.
- ²⁵ Zhou Nan, "How can people live comfortably in unbreakable Lilong Houses? Hongkou ushered in the first batch of home residents in Hongkou, the first overall renovation project in Shanghai." *Shanghai Observer*, December 27, 2017, <http://www.jfdaily.com/news/detail?id=75190/>.
- ²⁶ Molotch, Harvey. "The City as a Growth Machine: Toward a Political Economy of Place." *American journal of sociology* 82, no. 2 (1976): 309-32.
- ²⁷ Hodge, Graeme A, and Carsten Greve. "Public-Private Partnerships: An International Performance Review." *Public administration review* 67, no. 3 (2007): 545-58.

Bibliography

- Chang, Qing. "Shanghai Architecture and Its Urban Historical Context in the Urban Reformation (旧改中的上海建筑及其都市□□境)." *Architectural Journal 建筑学□*, no. 10 (2009): 23-28.
- Chen, Zheqi, Jie Liu and Feng Lin. "Analyzing the Place of Shanghai Li-Long Housing (作□□所的海里弄解□)." *New Architecture (新建筑)* 6, (2007): 60-64.
- Denison, Edward, and Guang Yu Ren. *Building Shanghai: The Story of China's Gateway*. John Wiley & Sons, 2013.
- Fan, Wenbin. *Protection and Renewal of Lilong in Shanghai (上海里弄的保护与更新)*. Shanghai Scientific and Technical Publishers (上海科学技术出版社), 2004.
- Fei, Xiaotong, Gary G Hamilton, and Wang Zheng. *From the Soil: The Foundations of Chinese Society*. University of California Press, 1992.



- He, Shenjing, and Fulong Wu. "Property-Led Redevelopment in Post-Reform China: A Case Study of Xintiandi Redevelopment Project in Shanghai." *Journal of Urban Affairs* 27, no. 1 (2005): 1-23.
- Hodge, Graeme A, and Carsten Greve. "Public-Private Partnerships: An International Performance Review." *Public administration review* 67, no. 3 (2007): 545-58.
- Ji, Guoliang. "The Characteristics of Shikumen Residential Buildings in Shanghai under the Background of Urbanization (城市化背景下上海石库门里弄住宅的特质)." *China Folklore Network (民俗研究)*, no. 2 (2015): 155-60.
- Keele, Luke. "Social Capital and the Dynamics of Trust in Government." *American Journal of Political Science* 51, no. 2 (2007): 241-54.
- Kuan, Seng, and Peter G Rowe. *Shanghai: Architecture & Urbanism for Modern China*. Prestel Munich, 2004.
- Li, Yanbo. *Values of Shanghai Lilong Districts (上海里弄街区的价值)*. Tongji University Press (同济大学出版社), 2014.
- Liang, Samuel Y. *Mapping Modernity in Shanghai: Space, Gender, and Visual Culture in the Sojourners' City, 1853-98*. Routledge, 2010.
- Lu, Hanchao. *Beyond the Neon Lights: Everyday Shanghai in the Early Twentieth Century*. University of California Press, 1999.
- Lu, Wenda. *Shanghai Real Estate Annals (上海房地产志)*. Shanghai Academy of Social Sciences Press(上海社会科学院出版社), 1999.
- Luo, Xiaowei, and Yongjie Sha. *Shanghai Xintiandi: Research of the Architectural History, Cultural History and Development Model in Old District Reconstruction (上海新天地——旧区改造的建筑历史, 人文历史与开发模式的研究)*. Southeast University Press (东南大学出版社), 2002.
- Molotch, Harvey. "The City as a Growth Machine: Toward a Political Economy of Place." *American journal of sociology* 82, no. 2 (1976): 309-32.
- Mo, Tianwei, and Di Lu. "Regeneration of Urban Form of Shanghai Lilong: Conservation Development of Xintiandi (再生上海里弄形态开发性保护 新天地)." *Time Architecture (时代建筑)*, no. 3 (2000): 40-42.
- Ruan, Yisan, and Chenjie Zhang. "Research on Shanghai Lilong's Value as World Cultural Heritage (上海里弄的世界文化遗产价值研究)." *Shanghai Urban Planning Review (上海城市规划)*, no. 2015 年 05 (2015): 13-17.
- Wang, Stephen Wei-Hsin. "Commercial Gentrification and Entrepreneurial Governance in Shanghai: A Case Study of Taikang Road Creative Cluster." *Urban policy and research* 29, no. 4 (2011): 363-80.
- Wang, Shaozhou, and Zhimin Chen. *Lilong Architecture (里弄建筑)*. Shanghai Science and Technology Literature Press (上海科学技术文献出版社), 1987
- Wang, Ya Ping, and Alan Murie. "Social and Spatial Implications of Housing Reform in China." *International Journal of Urban and Regional Research* 24, no. 2 (2000): 397-417.
- Wang, Yaoshun, Huwen and Liuwen. "Game and Reconstruction in the Transformation of Old City: Taking Tianzifang of Shanghai as an Example (旧城改造中的博弈与重构——以上海田子坊为例)." *Architecture & Culture (建筑与文化)*, no. 11 (2016): 122-23.
- Xu, Mingqian. "Study on the Renewal and Development Patterns of the Old Settlements in the Inner City of Shanghai." *Unpublished doctoral thesis, Tongji University, Shanghai. (In Chinese)* (2004).
- Vecco, Marilena. "A Definition of Cultural Heritage: From the Tangible to the Intangible." *Journal of Cultural Heritage* 11, no. 3 (2010): 321-24.
- Zhang, Xing Quan. "Chinese Housing Policy 1949-1978: The Development of a Welfare System." *Planning Perspectives* 12, no. 4 (1997): 433-455.
- Zhao, Chunlan. "From Shikumen to New-Style: A Rereading of Lilong Housing in Modern Shanghai." *The Journal of Architecture* 9, no. 1 (2004): 49-76.
- Zhong, Xiaohua, and Xiangming Chen. "Demolition, Rehabilitation, and Conservation: Heritage in Shanghai's Urban Regeneration, 1990-2015." *Journal of Architecture and Urbanism* 41, no. 2 (2017): 82-91.



Zhu, Jiancheng. *The Real Estate Business of Old Shanghai (旧上海的房地产经营)*. Shanghai People Press (上海人民出版社), 1990.

Zhu, Xiaoming, and Xiaoying Gu. "Evaluation and Analysis on Four Kinds of Cases Concerning Protection and Renovation of Shikumen Lane in Shanghai (上海石库门里弄保护与更新的4类案例评析)." *Housing Science (住宅科技)* 30, no. 6 (2010): 25-29.

Image sources

Figure 1: *Chinese Miscellany: General Description of Shanghai and Its Environs, Extracted from Native Authorities*. Mission Press, 1850.

Figure 2: Xintiandi (上海新天地), http://studioshanghai.co/assets/xintiandi-site-sketch2_web-978x462.jpg. (Accessed June 8, 2018.)

Figure 3: Author. (August 29, 2017.)



Temporary dwellings as successful informal suburban development: the case of Sydney 1945 to 1960

Nicola Pullan*

* *PhD student, Faculty of Built Environment, UNSW Sydney, n.pullan@unsw.edu.au*

Occupation of temporary dwellings during a shortage of affordable housing is a global phenomenon. Until recently, the majority of urban planning literature has tended to convey that this type of informal urbanism existed only in the global south. However, a number of scholarly publications have revealed that informal urbanism was present in the global north throughout the early twentieth century, surrounding newly-industrialising cities in France and Canada and as seasonal accommodation in the UK. Recent studies reveal that similar dwellings emerged with illegal suburbanisation in Greek and Portuguese cities during the mid-century, and persist today as US-Mexico borderland *colonia* settlements. References to temporary dwellings in Australian housing literature suggested that informal urban development existed at an appreciable scale on the fringes of most towns and cities in Australia following world war two. This paper surveys the phenomenon as it played out in the outer suburbs of metropolitan Sydney, highlights a distinctive Australian story, and compares this with the international instances. The paper then suggests that a combination of four unprecedented circumstances prevailing in post-war Sydney enabled temporary dwellings to be a successful form of informal suburban development that enabled economically-marginal households to achieve ownership of a conventional home.

Keywords: informal urbanism, temporary dwellings, Sydney housing, makeshift housing, post-war housing shortage.

Introduction

Urban informality has been described as instances when the actions of economic agents do not conform to established institutional rules or when the rules fail to protect their interests.¹ In this paper the term is applied to housing that does not reach institutionalised standards for urban habitations. Urban informality is a global phenomenon, however, much of the planning literature has assumed that this form of development is seemingly restricted to the global South. This assumption was highlighted by urban geographer, Richard Harris, who identified a large number of studies promoting the notion that it was the informality of urban settlement which distinguished the South from the strongly regulated urban locations of Europe and North America. He observed that, in the few instances which acknowledged the existence of informal urbanism in the global North, it was primarily understood to be a fairly recent phenomenon, comprising issues of regulatory infractions or limited to a small number of rapidly-growing, poorly-regulated locations.² However, a number of scholarly publications on suburban development have mentioned the occupation of sub-standard housing on undeveloped land in a number of the more-established countries in this region. Among these publications were a handful of accessible in-depth studies focussed on unregulated residential development surrounding rapidly-industrialising cities in Canada and France and holiday townships throughout the UK or enquired into 'unauthorized' housing in Greece and 'clandestine' residential building in Portugal.³ Brief references in the Australian housing literature, and other anecdotal evidence, indicates that similar urban informality existed on the fringes of most Australian towns and cities during the late-1940s and the 1950s. This paper presents aspects of this distinctive Australian story. The proposition explored is that the social, political and economic context which prevailed in Sydney during this era enabled temporary dwellings constructed on purchased land to be a successful phase in the suburban development of the metropolis.

This paper comprises two sections, commencing with a discussion of examples of informal development in the global North. The second section describes informal urbanism on the fringes of Sydney between 1945 and 1960, then identifies and explores four elements fundamental to its success as a housing route: emergency wartime legislation; an expanding national economy; the prior existence of prematurely-subdivided allotments; and government regulation of utility providers. This paper draws on primary sources such as state and local government records, oral accounts, contemporaneous photographs and maps, and histories of land subdivision and urban expansion. It has been developed from ongoing research into the role of temporary dwellings in facilitating access to home-ownership and builds on previous papers considering dwelling typologies, living conditions, financing, and institutional barriers to their existence.⁴



International examples of informal urban development

Widespread but by no means universal, informal urbanism has played an important role in the suburban development of expansive areas of the global North during the twentieth century, however this phenomenon is limited to a minority of texts on the suburbanisation of established cities and the subject of only a handful of in-depth studies. The texts mention the occupation of owner-built makeshift housing on purchased land on the developing fringe of a number of rapidly-industrialising North American towns and cities during the first half of the twentieth century, such as Los Angeles and Illinois, and settlements of 'clandestine' or unapproved housing on illegally subdivided rural land throughout the Mediterranean region following world war two, including Rome and Belgrade in Southern Europe, Barcelona and Castellon in Spain, and Istanbul in Turkey, however the topic is not pursued in any detail by the authors.⁵

The few accessible in-depth investigations into urban informality in Northern cities focussed on locations in Canada, England, France, Greece and Portugal. The first of these explored the makeshift shanties or partial houses which were constructed by low-income workers on newly-subdivided and un-serviced residential allotments scattered across vast tracts of vacant land surrounding Toronto between 1900 and 1939, where the existing provincial housing regulations did not apply to un-incorporated areas outside city boundaries, allowing rural land to be subdivided and sold for occupation without provision of amenities and public infrastructure.⁶ Designated 'shacktowns' by contemporary observers, these enclaves consisted of small shacks and shanties. Some comprised the rear ground-floor portion of a house, while others were made from the basement level of a future house roofed with tin sheets or tar-paper and surmounted by a small box-like structure serving as a porch.⁷ Comparable development occurred between 1918 and 1939 in the *lotissements*, a ring of un-serviced and sub-standard subdivisions surrounding Paris on which low-income purchasers constructed shanties and other 'mediocre' dwellings, later described as 'one of the most perfect examples of unorganised urban space'.⁸ As with the instances mentioned previously, local authorities did not have the power to halt subdivision nor to compel land entrepreneurs to install the amenities and infrastructure needed to ensure these rapidly growing areas reached acceptable standards for the urban density which eventuated.⁹



Figure 1. Tar-papered shacks in Earlscourt, York County, Toronto, 1916. Image: National Archives of Canada, a069935-v8.

Similarly examined were uncontrolled settlements which spread throughout the coastal and rural areas of England. Designated 'plot-lands' by local authorities and decried as rural slums by town and country planners of the day, they consisted of small allotments of undeveloped marginal land subdivided and sold principally between the wars and marketed as seasonal accommodation, although subsequent changes in housing circumstances meant many were later occupied on a permanent basis.¹⁰ Countless subdivisions were only partially settled, with dwellings contrived from old buses, trams and train carriages as well as more conventional shacks and huts, the majority without amenities or public infrastructure.¹¹



In each of these locations, authorities were confronted by sub-standard urbanisation on a vast scale, the bulk of which was situated in locations that would prove expensive to service.¹² In the UK, local town councils could not regulate housing beyond their immediate jurisdiction until national Town and Country planning legislation was enacted in 1947.¹³ However, before this date, a number of local councils and utility providers borrowed funds to provide the public works needed in 'plotland' sites and the increasingly-permanent owners were charged compulsory levies to refund the high cost of installation.¹⁴ At the same time, residents were obliged to upgrade their shacks to satisfy newly-amended housing ordinances.¹⁵ Although these expectations could be met by some owners, the legislation placed 'an impossible burden' on old people and very low-income owners, who either mobilised, with some success, against attempts to resume and demolish their dwellings or were forced into selling for land redevelopment.¹⁶

The dwellings in Toronto and Paris were occupied on a permanent basis from the beginning so remediation could not be postponed. In the districts surrounding Toronto, new municipal authorities were established during the 1920s which proceeded to impose minimum housing standards and borrow from the state to provide essential services, to be repaid through service and usage charges and a municipal tax levied on the affected households according to property valuations.¹⁷ Municipal taxes more than doubled within four years, yet revenue received from the low-value allotments could never cover the excessive cost of servicing such widely-scattered settlements.¹⁸ Harris revealed that many 'blue-collar' owner-builders had reached the limit of their resources after purchasing land and building materials, and the newly-imposed housing standards and municipal taxes, combined with a non-existent labour market after 1929, made it impossible for many marginal residents to cover their housing costs, resulting in more than 27% of taxes remaining unpaid in the following year and several municipal authorities facing bankruptcy.¹⁹ A significant number of owner-builders were forced into selling, leading Harris to conclude that the most-marginal households ended up worse off financially than if they had continued to rent accommodation within the city boundaries.²⁰ In Paris, a number of legislative measures were passed during the 1920s to ensure new subdivisions were provided with modern utilities, however these laws were ignored by land speculators.²¹ Conditions improved only after ratification of an urgent parliamentary bill in 1931, through which the French government granted short-term loans to resident syndicates for installation of essential infrastructure, repaid through a quarterly tax.²² The extra expense was unaffordable for a large number of low-income owners and the deepening economic crisis meant that many now-unemployed purchasers, up to 30% of the wage-earning population in some districts, found themselves in serious financial difficulties and either refused to pay the tax, or sold or abandoned their property.²³ With funding increasingly limited, public works slowed and living conditions stagnated until the late 1950s when entire districts were cleared and replaced with government-owned low-rent apartment blocks.²⁴

Informal housing was also constructed on illegally subdivided rural land on the outskirts of Athens and in townships on the periphery of Lisbon following World War 2.²⁵ The dwellings which surrounded Athens commenced as single multi-use rooms gradually extended in three directions as the owners could afford materials, until a two-storey courtyard house was achieved.²⁶ Hampered by ineffective and outmoded regulations, the city later annexed these unauthorized and un-serviced outlying settlements on payment of a 'special contribution' from owners, which was not necessarily expended on the needed infrastructure, and many years elapsed before reticulated water, electricity, roads and schools were available, with drainage and refuse collection following much later.²⁷ The construction and occupation of makeshift housing was also common between 1958 and 1974 in villages surrounding Lisbon, where un-serviced land was subdivided through successive lot-splits without prior approval, granted separate title and sold to low-income workers. Purchasers then built minimal houses, again without approval.²⁸ These subdivisions were initially designated 'clandestine' and tolerated as a necessary model of urban transition but a change of government in 1974 and retrospective imposition of minimum building standards meant they were re-interpreted as 'illegal'.²⁹



Figure 2. First-stage dwellings in a prematurely-developed fringe area of Athens, 1969. Image: Romanos, 1969.

The instances of informal development outlined above achieved only qualified success. Although the affordability of un-serviced allotments made ownership of a residential property available to ‘the small man’, the difficulties encountered in achieving the standard of living required for habitable structures meant constant financial problems for owners and local authorities.³⁰ The high cost of retrospective installation of utilities compromised ownership for many marginal households who were also expected to comply with newly-introduced compulsory housing standards, while the advent of the 1930s economic crisis with its concomitant widespread unemployment limited many to a basic lodging or forced them to forfeit the property and lose the money they had invested. In some cases, indebted local authorities and residents’ syndicates found themselves unable to meet loan obligations so declared bankruptcy or requested outstanding loans be written off by the state.³¹ In contrast, Lisbon’s informal urban development can be perceived to have been completely unsuccessful as official policy changed from tolerance under one authoritarian regime to criminalisation under the next, with ‘clandestine’ homes ‘illegalised’ and their owners labelled ‘unequal citizens’ or criminals, forcibly relocated to geographically-distant public housing settlements, and their houses demolished to make way for financially-motivated private development.³²

However, the use of makeshift housing as a form of urban development was more successful in certain sites in the UK and in settlements surrounding Athens. In the UK, a number of local authorities responsible for enforcing enacted housing legislation accepted informal development as an interim housing step or realised the exorbitant cost of land rehabilitation, so either relaxed their policies and allowed replacement of substandard dwellings in unsuitable locations with approved housing, or accepted staged installation of amenities combined with extension and improvement of the original dwelling. In the districts surrounding Athens, incremental expansion of the dwelling as the owner could afford it meant most houses were completed as planned, with essential services and infrastructure of an appropriate standard installed as public funds gradually became available, and the residential security gained by subsequent metropolitan annexation outweighing the burden of living in difficult conditions for many years. Nevertheless, retrospective installation of utilities and drainage or their approved alternatives still proved very expensive for the home-owner and the decision to occupy or to build without authorisation frequently meant the house was at risk of demolition.³³

Informal urban development in Sydney

Between 1945 and 1960, Australia also experienced informal urban development. In 1946, it was estimated Australia needed almost 400,000 homes, 90,000 of which were needed in Sydney, where the cumulative effects of rent control, economic instability, and wartime building restrictions had left almost a quarter of the population without adequate and affordable housing.³⁴ Public housing initiatives were unable to satisfy demand, and many households were forced to turn to an alternative solution.³⁵ However, household funds were limited, materials were strictly rationed and skilled labour was unobtainable, so the solution for thousands of families often entailed purchasing an inexpensive allotment of outer-suburban residential land and building a temporary dwelling while they worked to achieve a permanent home.³⁶ By 1952, the architect, Robin Boyd could observe that, ‘many thousands... lived in unsatisfactory accommodation: in temporary, converted army camps, in tents, in caravans, and with in-laws’ while they waited for their permanent house to be habitable.³⁷ A small number of tents and caravans were used as homes, as well as converted trams and railway cars, but a considerably larger number of



garages, shacks, huts and sheds provided accommodation, sometimes for many years. All these makeshift homes contravened recommended and legislated standards for habitable structures but continued to spread rapidly throughout the developing fringes of all towns and cities in the country and, in the vast majority of cases, were successfully replaced by, or gradually adapted and extended to become, a house that conformed to institutionalised expectations.

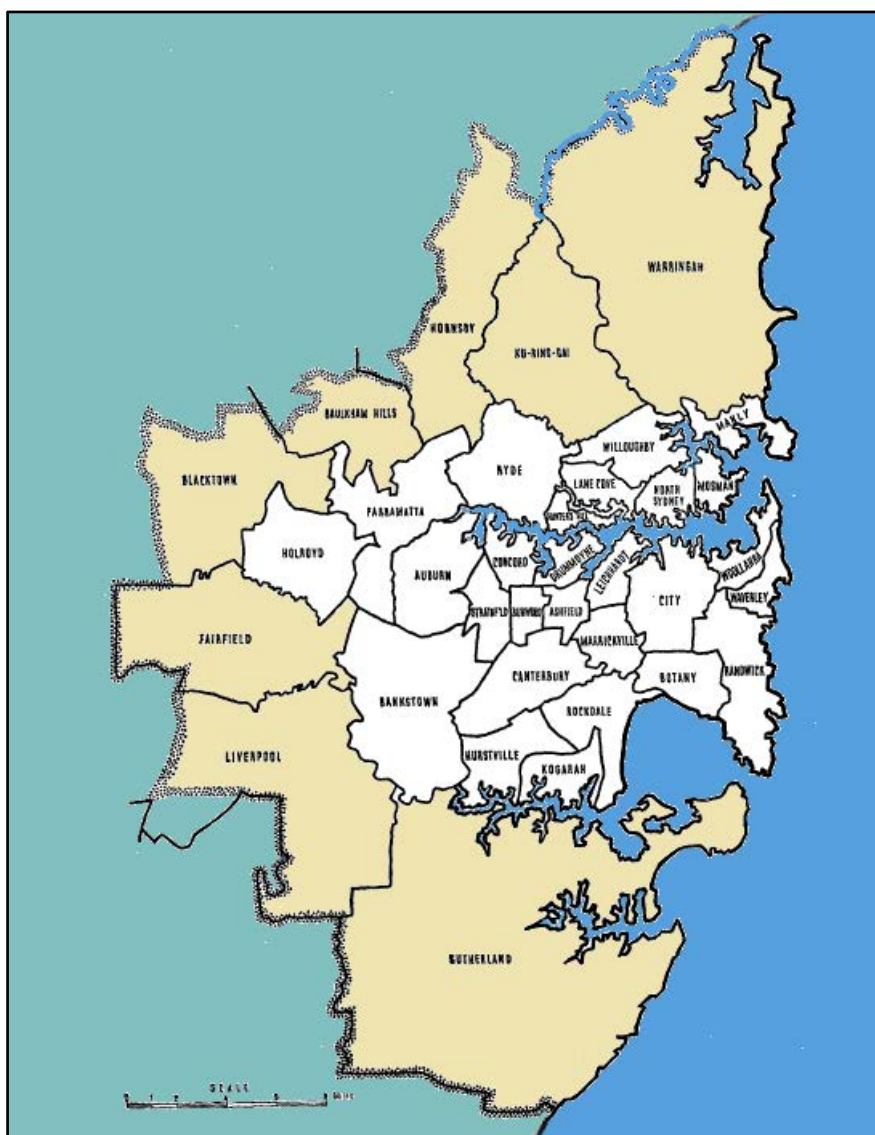


Figure 3. Local Government Areas of metropolitan Sydney, 1958, including urban areas only of the 8 fringe LGAs. Ref. Jeans and Logan, 1961, 34.

Recent research into makeshift homes in Fairfield, Hornsby and Warringah, three of the eight Local Government Areas (LGAs) on the outer fringe of Sydney, has identified more than 6,600 temporary dwellings occupied during the post-war period, the success of which as a form of urban development appears to be attributable to a number of coinciding events.³⁸ Firstly, Commonwealth legislation removed the ability of local authorities to enforce legislated minimum housing standards.³⁹ Secondly, post-war economic expansion and wartime savings provided a favourable financial climate for land purchase.⁴⁰ Thirdly, legislative changes meant many prematurely-subdivided building allotments were made available for purchase.⁴¹ Finally, the established system of public infrastructure provision reduced the financial burden of utility installation for individual households.

Commonwealth legislative actions

For the government of NSW, informal urbanism commenced with early acceptance of the Commonwealth Powers Bill 1942, a draft law proposed in December 1942 and enacted into federal law as the Commonwealth Powers Act



The 18th International Planning History Society Conference - Yokohama, July 2018

on 30 June 1943.⁴² This Bill transferred many State government concerns to the Commonwealth government until five years after the Act was passed by Parliament, including control of the production, sale, distribution and prices of all building materials and internal fixtures, now allocated entirely to military purposes, and also granted control of the sale-price of vacant land which was immediately limited to 10% above the 1942 valuation.⁴³

In NSW, elected local Councils operated with powers delegated by the State Government and so were responsible for enforcing enacted state housing legislation, including compliance with Ordinances 70 and 71 of the Local Government Act 1919 (the Act), that required housing to satisfy minimum accommodation standards before occupation was permitted.⁴⁴ The NSW Government's immediate acceptance of the Commonwealth Powers Bill meant that any houses under construction and in need of further materials or fittings were unable to be completed, and planned new housing was unable to commence. Within two weeks of NSW accepting the Bill, local councillors realised that the requirement for full compliance with the ordinance could no longer be achieved and so Councils could no longer reject owners' requests to occupy incomplete or non-complying housing.⁴⁵ By July 1943, Councils were appealing to the Department of Local Government for an amendment to the Act which would allow them to approve occupation of temporary dwellings on condition they were demolished after the war, however the Department simply agreed that 'the position which confronts Councils today with regard to the erection of small war-time dwellings is difficult', noted that demolition could leave families without shelter, and stated that any decision on the ultimate fate of temporary dwellings should therefore be left for the future.⁴⁶ With this reply, the Department effectively conceded their inability to enforce institutionalised housing standards and the opportunity opened for temporary or makeshift dwellings to become widespread. Local Councils were forced to approve construction and occupation of these dwellings, albeit with rarely-met conditions, while the living standards of the residents were brought under the supervision of increasingly-tolerant Council Health and Building Inspectors.⁴⁷



Figure 4. Two-roomed garage dwelling occupied 1950-1965, Hornsby LGA, Sydney. Image: N.Pullan 2014.

The Commonwealth Powers Bill expired in 1948 but was immediately replaced with the NSW Building Operations and Building Materials Act 1948 which retained control of building materials, but relinquished control over land prices.⁴⁸ Full delegated powers were finally re-instated in September 1952 on expiration of the 1948 NSW Act, and Ordinance 71 was simultaneously amended with Clause 86, Temporary Buildings – “Special Provision”, prohibiting the habitation of temporary structures.⁴⁹ However, for at least another decade, local authorities' attempts to re-impose control over sub-standard dwellings could only extend to pushing for rapid completion of the permanent house while continuing to ensure temporary dwellings provided adequate, if basic, accommodation.⁵⁰

The expanding post-war economy

From 1945 until 1949, the Commonwealth government also retained full control of the country's domestic and international finances, facilitating a successful transition of the Australian economy from wartime production to consumer-oriented manufacturing.⁵¹ As a result, despite inflation briefly reaching 20% in 1951-52 due to high consumer demand and increased labour costs, the period from 1945 to 1961 was generally characterised by strong economic growth and full employment.⁵² From 1947, wages reverted to an earlier industrial award scheme, leading to a 150% increase in wages over the period, while at the same time unemployment ranged between 2 and 3.5%



with thousands of unfilled job vacancies.⁵³ Between February 1946 and June 1956, the value of primary production rose 77% and manufacturing increased by 167%, led by increased manufacture of industrial metals, machines, and conveyances, comprising 42% of the total production value and employing 28% of the workforce by 1949.⁵⁴ Meanwhile, payment of deferred military pay amounted to £30 mill. by 1948, with an additional £6 mill. in war gratuities paid in 1951, each contributing to a 70% increase in deposits to the government-owned Commonwealth Savings Bank between 1946 and 1955.⁵⁵ These economic changes resulted in an unprecedented number of low-income households finding themselves in a more secure financial position than they had ever experienced, with stable employment prospects, consistently high wages, and small sums on deposit.⁵⁶ Although more families were in a position of relative financial security, the majority were from occupations where their income was so low or variable they were unable to satisfy the exacting borrowing conditions for a loan to purchase a completed home, even if houses were available, and their limited savings were only enough to purchase inexpensive vacant land and materials for a shed or garage.⁵⁷ However, by taking advantage of this opportunity, aspiring but marginal homeowners could retain the money which would otherwise have been paid in rent and put it towards buying materials to construct their permanent house as they could afford to do so.

Availability of prematurely-developed land

Premature development of land has been defined as “the subdivision of land for residential purposes without relation to actual housing needs”.⁵⁸ In 1948, it was estimated that approximately 250,000 prematurely-developed and still un-serviced vacant residential allotments existed in the immediate environs of Sydney, having been subdivided for their investment potential during seventy years of unregulated and haphazard suburban expansion.⁵⁹ Of these, just over half were situated in or close to areas which already had amenities installed and so were regarded as viable building sites.⁶⁰ The remainder, comprising almost 120,000 lots, were so remote that newly-installed county planners considered it impossible to provide utilities within a reasonable period, if at all.⁶¹ Consequently, a few allotments were usually taken up on subdivision but vast tracts remained vacant, still without basic amenities and held mainly as consolidated holdings until demand for building land caught up with this long-standing over-supply during the early post-war years.

A limited amount of vacant land was put on the market from 1945, however, the majority was withheld from sale until Commonwealth control of land prices was allowed to lapse in September 1948, after which the number of lots available for purchase more than doubled within six months.⁶² Much of the land was in outer suburbs and remained without amenities or public infrastructure with little prospect of provision in the foreseeable future, however it was both readily available and affordable to the marginal purchaser, being already subdivided into residential allotments with individual title and offered at prices considerably lower than developed land closer to local amenities and places of employment.

Government control of utilities and public infrastructure

In post-war Australia, the provision of utilities and related public infrastructure was the responsibility of government-owned or government-regulated entities, therefore, in NSW all utilities except gas supply were under the direct control of the State. The Metropolitan Water, Sewerage & Drainage Board installed, maintained and operated water and waste water infrastructure; Sydney County Council generated electricity which was distributed through its own network or, until 1958, sold in bulk to local Councils who then distributed it using council-owned infrastructure; while local Councils managed garbage and night-soil services, street lighting, and construction of local roads. Gas was provided by AGL, a public company that owned and operated all gas infrastructure, and had accepted government control of prices and dividends in return for a market monopoly.⁶³ During this period, with much of the still un-serviced land being settled, and materials and labour in very short supply, connection of all utilities and amenities was only considered once a subdivision had reached 25% occupancy.⁶⁴ However, installation costs were not borne entirely by the new homeowners as each utility provider charged a uniform rate across the metropolitan area, relying on high demand in more-developed areas to subsidise installation of essential services for localities which could not otherwise be served due to high costs per property or insufficient population to cover expenditure.⁶⁵ Local Councils also utilised provisions in the LG Act 1919 permitting them either to guarantee providers against income deficiencies arising from utility extensions, or to pay the full cost out of the General Fund which would then be recouped incrementally via a general rate levied for a number of years on all improved land throughout the municipality.⁶⁶

Where the local Council was responsible for electricity infrastructure i.e. poles and wires, electricity installation commenced once “loan money and materials [were] available”, and was also postponed if the particular area had



too few customers for revenue to cover expenditure.⁶⁷ Roads and footpaths were constructed and maintained by Councils from their General Fund supplemented by grants from the Lands Department and Department of Main Roads, with narrow central strips of bitumen and pre-formed concrete slab footpaths laid when resources were available, while locally-quarried sandstone was provided for residents to construct their own kerbing and guttering along frontages.⁶⁸ Thus, the financial load of installing utilities and public infrastructure was reduced for the individual home-owner as prices and levies were tightly-regulated and underwritten by the state government, while communal repayment strategies and community effort shared the cost of servicing undeveloped suburbs across the entire customer base.

Conclusion

Contrary to experiences of informal urbanism in the majority of international contexts, post-war temporary dwellings in the outer suburbs of Sydney can be seen as a primarily successful model of suburban development. This success was underpinned by four exceptional events. Firstly, removal of State support for enforcement of enacted housing ordinances meant Councils had accept the existence of sub-standard dwellings and the responsibility for ensuring the dwellings provided a tolerable standard of living. Secondly, the stable and expanding national economy brought guaranteed employment and high wages to all workers, supplemented in many cases by extraordinary lump sum payments, and so providing historically-marginal households sufficient financial resources to own land and construct basic accommodation while saving to achieve a complying house.⁶⁹ Thirdly, a large number of residential allotments became available at prices affordable even to these low-income wage earners. Finally, public ownership or regulation of essential utilities and infrastructure ensured timely and affordable installation of basic amenities, while communal funding for their provision reduced the financial burden on households in newly-developing areas.

Thus, the unprecedented social, political and economic environment outlined above enabled low-income wage-earners in Sydney to purchase an allotment of inexpensive residential land, acquire the building materials necessary for construction of a temporary dwelling, and have affordable access to basic amenities while they saved to complete a conventional home. During this time, local authorities also modified their expectations and acted to support the occupation of non-complying dwellings until a complying house was achieved. In this way, the vast majority of families who experienced informal suburban development on the outer fringes of Sydney successfully transitioned to a formal and complying urban mode.

Acknowledgements

I would like to thank Professor Rob Freestone and the reviewers for their useful comments on this paper.

Disclosure Statement

No potential conflicts of interest were reported by the author.

Notes on Contributor

Nicola Pullan is an historian, doctoral candidate and research assistant in the Faculty of Built Environment at the University of New South Wales. She is currently researching the construction and occupation of temporary dwellings between 1945 and 1960 on the suburban fringe of Sydney and the social, political and economic contexts in which they existed.

Notes

¹ Harris, "Modes of Informal Urban Development", 1.

² *Ibid.*, 6.

³ Harris, *Unplanned Suburbs*; Bastie, *La Croissance De La Banlieue Parisienne*; Hardy and Ward, *Arcadia for All*; Romanos, "Illegal Settlements in Athens"; Castela, "A Liberal Space".

⁴ Pullan, "A Roof over Their Heads"; Pullan, "A Lot of Hardship"; Pullan, "Tram Cars, Tents, 'Igloos' and Garages"; Pullan, "An Alternative Solution", forthcoming.

⁵ Leontidou, *The Mediterranean City in Transition*; Benevolo, *O Ultimo Capitolo*; Busquets, *La Urbanizacion Margina*; Castells, *The City and the Grassroots*; Vineta, *La Urbanizacion Marginal*; Nicolaides, "'Where the Working Man Is Welcomed'"; Jackson, *Crabgrass Frontier*; Gowans, *The Comfortable House*; Harris, "The Imprint of the Owner-Builder".

⁶ Harris, *Unplanned Suburbs*, 270.

⁷ *Ibid.*, 2, 3, 158.



- ⁸ Bastié quoted in Etienne, "Jean Bastie", 942-943.
- ⁹ Bastie, *La Croissance De La Banlieue Parisienne*, 264.
- ¹⁰ Hardy and Ward, *Arcadia for All*, vii, 7; Knapton, "Basildon's Special Problems", 509
- ¹¹ Hardy and Ward, "Makeshift Landscapes", 13.
- ¹² Hardy and Ward, *Arcadia for All*, 47.
- ¹³ Hardy and Ward, "Makeshift Landscapes", 12.
- ¹⁴ Hardy and Ward, *Arcadia for All*, 47.
- ¹⁵ *Ibid.*, 47.
- ¹⁶ *Ibid.*, 128-129.
- ¹⁷ Harris, *Unplanned Suburbs*, 236.
- ¹⁸ *Ibid.*, 237.
- ¹⁹ Harris, "The Impact of Building Controls", 19; Harris, *Unplanned Suburbs*, 288.
- ²⁰ Harris, *Unplanned Suburbs*, 19.
- ²¹ Bastie, *La Croissance De La Banlieue Parisienne.*, 264.
- ²² *Ibid.*, 308; Faure, "Annie Fourcaut", 237.
- ²³ Bastie, *La Croissance De La Banlieue Parisienne*, 311.
- ²⁴ *Ibid.*, 340.
- ²⁵ Romanos, "Illegal Settlements in Athens", 137.
- ²⁶ *Ibid.*, 138-39.
- ²⁷ *Ibid.*, 145.
- ²⁸ Castela, "A Liberal Space", 1.
- ²⁹ *Ibid.*, 164.
- ³⁰ Hardy and Ward, *Arcadia for All*, 11, 33; Harris, *Unplanned Suburbs*, 268.
- ³¹ Harris, *Unplanned Suburbs*, 254; Hardy and Ward, *Arcadia for All*, 277- 280; Bastie, *La Croissance De La Banlieue Parisienne*, 322.
- ³² Castela, "A Liberal Space", 152.
- ³³ Romanos, "Illegal Settlements in Athens", 138
- ³⁴ "Official Yearbook of the Commonwealth of Australia for 1962-63", 22; Australian Labor Party, *Five Critical Years*, 100; Hogan, *Almost Like Home*, 3; *Commonwealth Housing Commission Final Report, 25th August, 1944*, 185; Boyd, *Australia's Home*, 117-119.
- ³⁵ Allport, "The Unrealised Promise", 57.
- ³⁶ Patryn, "Recording 16".
- ³⁷ Boyd, *Australia's Home*, 115.
- ³⁸ Abercrombie, "Metropolitan Planning for Sydney 1948-1988: Looking to the Past to Learn for the Future", 33.
- ³⁹ Warringah Shire Council, "Minutes of Ordinary Meeting, File No. 2531", 4.
- ⁴⁰ Wagstaff, "Interview 1"; Kociuba, "Recording 1".
- ⁴¹ Twomey, *The Constitution of New South Wales*, 229.
- ⁴² Commonwealth Powers Act. Act No. 18, 1943.
- ⁴³ Macintyre, *Australia's Boldest Experiment*, 125-126.
- ⁴⁴ Local Government Act 1919 (NSW), "Ordinances under the Local Government Act, 1919 Embodying Amendments and Alterations to 31st August, 1945". Part XL, r. Building, ss.310, 316, 318.
- ⁴⁵ Hornsby Shire Council, "Minutes of Ordinary Meeting, No. 1/43, File No. 144", 3.
- ⁴⁶ Warringah Shire Council, "Minutes of Ordinary Meeting, File No. 2531", 4.
- ⁴⁷ Kirby, "Interview 1".
- ⁴⁸ Twomey, *The Constitution of New South Wales*, 807.
- ⁴⁹ "Ordinances under the Local Government Act, 1919, Embodying Amendments and Alterations to 3rd August, 1951", 63.
- ⁵⁰ Warringah Shire Council, "Minutes of Ordinary Meeting", 2; Champion and Champion, *Forest History*, 72; Hornsby Shire Council, "Minutes of Ordinary Meeting, No. 9/51, File No. 1406", 6.
- ⁵¹ Brett, "The Menzies Era", 122.
- ⁵² *Ibid.*, 124; CAU, *Report of the Committee on Australian Universities*, 13.
- ⁵³ "Official Yearbook for New South Wales for 1957, No. 55", 227, 231.
- ⁵⁴ *Ibid.*, 241, 247; Macintyre, *Australia's Boldest Experiment*, 340.
- ⁵⁵ "The Official Yearbook of New South Wales, No. 53, 1950-51", 594; "Official Yearbook for New South Wales for 1957, No. 55", 485.
- ⁵⁶ Macintyre, *Australia's Boldest Experiment*, 340.
- ⁵⁷ McDonnell, "Interview 1"; Pullan, "An Alternative Solution", forthcoming.
- ⁵⁸ Cumberland County Council, "Planning Scheme", 72.
- ⁵⁹ *Ibid.*
- ⁶⁰ *Ibid.*
- ⁶¹ *Ibid.*
- ⁶² Houses, Land, Businesses for sale, SMH, Sat 14 Aug 1948 p10; SMH, Sat 18 Mar 1950, 11; SMH, "Big 1950 Turnover in Real Estate.", 4.
- ⁶³ Broomham, *First Light*, 72.
- ⁶⁴ Cumberland County Council, "Planning Scheme", 187; Hornsby Shire Council, "Minutes of Ordinary Meeting No. 46/53, File Number. 2044".
- ⁶⁵ Aird, *The Water Supply, Sewerage and Drainage of Sydney*, 238.
- ⁶⁶ *Ibid.*, 247; Wilkenfeld and Spearritt, *Electrifying Sydney*, 36.
- ⁶⁷ Hornsby Shire Council, "Minutes of Ordinary Meeting No. 46/53, File Number. 2044".
- ⁶⁸ Hornsby Shire Council, "Minutes of Ordinary Meeting, No. 22/53, File No. 2005"; Hornsby Shire Council, "Minutes of Ordinary Meeting, No. 23/53,"; Hornsby Shire Council, "Minutes of Ordinary Meeting, No. 22/50".
- ⁶⁹ Wagstaff, "Interview 1"; Kociuba, "Recording 1".

Bibliography

- Abercrombie, Lachlan. "Metropolitan Planning for Sydney 1948-1988: Looking to the Past to Learn for the Future." M.Planning Diss., Kensington: University of New South Wales, 2008.
- Aird, W. V. *The Water Supply, Sewerage and Drainage of Sydney*. Sydney: MWS&DB, 1961.
- Allport, Carolyn. "The Unrealised Promise: Plans for Sydney Housing in the Forties." In *Twentieth Century Sydney: Studies in Urban and Social History*, edited by Jill Roe. Sydney: Hale and Iremonger, 1980.



- Australian Labor Party. *Five Critical Years. Story of the Mckell Labour Government in New South Wales, May 1941-May 1946*. Sydney: ALP, 1946.
- Bastie, Jean. *La Croissance de la Banlieue Parisienne*. Paris: Presses Universitaires de Paris, 1964.
- Benevolo, Leonardo. *O Ultimo Capitulo de Arquitectura Moderna [The Last Chapter of Modern Architecture]*. Translated by Jose Eduardo Rodil. Lisbon: Edicoes 70, 1985.
- "Big 1950 Turnover in Real Estate: Record for Many Firms." *Sydney Morning Herald*, 30 December 1950, 4.
- Boyd, Robin. *Australia's Home: It's Origins, Builders and Occupiers*. Carlton, Vic: Melbourne University Press, 1952.
- Brett, Judith. "The Menzies Era, 1950-66." In *The Cambridge History of Australia. Volume 2: The Commonwealth of Australia*, edited by Alison Bashford and Stuart Macintyre, 112-34. Melbourne: Cambridge University Press, 2013.
- Broomham, Rosemary. *First Light: 150 Years of Gas*. Sydney: Hale and Iremonger, 1987.
- Bureau of Census and Statistics. *Official Yearbook for New South Wales for 1957, No. 55*. Sydney: Government of New South Wales, 1957.
- Bureau of Statistics and Economics. *The Official Yearbook of New South Wales, No. 53, 1950-51*. Sydney: Government of New South Wales, 1955.
- Busquets, Juan. *La Urbanizacion Marginal [Marginal Urbanization]*. Barcelona: Edicions UPC, 1999.
- Castela, Tiago Luis Lavandeira. "A Liberal Space: A History of the Illegalized Working-Class Extensions of Lisbon." Ph.D. thesis, University of California, Berkeley, 2011.
- Castells, Manuel. *The City and the Grassroots: A Cross-Cultural Theory of Urban Social Movements*. Berkeley, CA: University of California Press, 1983.
- Champion, Shelagh, and George Champion. *Forest History*. Killarney Heights: Shelagh and George Champion, 1988.
- Committee on Australian Universities. *Report of the Committee on Australian Universities*. Canberra: Commonwealth of Australia, 1957.
- Commonwealth Powers Act 1943. Act No. 18, 1943*. Commonwealth of Australia.
- Commonwealth Bureau of Census and Statistics. *Official Yearbook of the Commonwealth of Australia for 1962-63*. Canberra: Government of the Commonwealth of Australia, 1963.
- Cumberland County Council. "Planning Scheme for the County of Cumberland New South Wales." Sydney, 1948.
- Department of Local Government (NSW). *Ordinances under the Local Government Act, 1919 Embodying Amendments and Alterations to 31st August, 1945*. Sydney: Department of Local Government (NSW), 1945.
- Department of Local Government (NSW). *Ordinances under the Local Government Act, 1919, Embodying Amendments and Alterations to 3rd August, 1951*. Sydney: Department of Local Government (NSW), 1951.
- Etienne, Juillard. "Jean Bastie, La Croissance de la Banlieue Parisienne." *Annales. Economies, Societes, Civilisations* 21, no. 4 (1966): 942-44.
- Faure, Alain. "Annie Fourcaut, La Banlieue en Morceaux. La Crise des Lotissements Defectueux en France dans L'entre-Deux-Guerres." *Revue d'histoire moderne et contemporaine* 51, no. 1 (2004): 234-39.
- Gowans, Alan. *The Comfortable House. North American Suburban Architecture 1890- 1930*. Cambridge, Mass.: MIT Press, 1986.
- Hardy, Dennis, and Colin Ward. "Makeshift Landscapes." *Planning History Bulletin* 2, no. 1 (1980): 12-15.
- Hardy, Dennis, and Colin Ward. *Arcadia for All: The Legacy of a Makeshift Landscape*. London: Mansell, 1984.
- Harris, Richard. "The Impact of Building Controls on Residential Development in Toronto, 1900-40." *Planning Perspectives* 6, no. 3 (1991): 269-96.
- Harris, Richard. *Unplanned Suburbs: Toronto's American Tragedy 1900 to 1950*. Baltimore: Johns Hopkins University Press, 1996.
- Harris, Richard. "The Imprint of the Owner-Builder on American Suburbs." In *Shapers of Urban Form: Explorations in Morphological Agency*, edited by Peter J. Larkham and Michael P. Conzen, 193-216. New York: Routledge, 2014.
- Harris, Richard. "Modes of Informal Urban Development: A Global Phenomenon." *Journal of Planning Literature* 20, no. 10 (2017): 1-20.
- Hogan, Michael. *Almost Like Home: Living in Bradfield Park*. Gordon, N.S.W.: Ku-ring-gai Historical Society, 2012.
- Hornsby Shire Council. "Minutes of Ordinary Meeting, No. 1/43, File No. 144." 7 January 1943.
- Hornsby Shire Council. "Minutes of Ordinary Meeting, No. 22/53, File No. 2005." 8 October 1953.
- Hornsby Shire Council. "Minutes of Ordinary Meeting No. 46/53, File Number. 2044." 17 December 1953.
- Hornsby Shire Council. "Minutes of Ordinary Meeting, No. 23/53, File Number. 2015." 22 October 1953.



The 18th International Planning History Society Conference - Yokohama, July 2018

- Hornsby Shire Council. "Minutes of Ordinary Meeting, No. 9/51, File No. 1406." 26 April 1951.
- Hornsby Shire Council. "Minutes of Ordinary Meeting, No. 22/50, File No. 1263." 26 October 1950.
- Jackson, Kenneth T. *Crabgrass Frontier: The Suburbanisation of the United States*. New York: Oxford University Press, 1985.
- Kirby, Mary. "Recording 1." at her home in Mt Colah, interview with Nicola Pullan, digital recording and unpublished manuscript in author's possession, 31 January 2015.
- Knapton, W. G. D. "Basildon's Special Problems." *Town and Country Planning* 53, no. 1 (1953): 509-12.
- Kociuba, T and A. "Recording 1." early Hornsby residents, at their home in Clarinda Street Hornsby, interview by Nicola Pullan, digital recording, in author's possession, 14 February 2011.
- Leontidou, Lila. *The Mediterranean City in Transition: Social Change and Urban Development*. Cambridge: Cambridge University Press, 1990.
- Macintyre, Stuart. *Australia's Boldest Experiment: War and Reconstruction in the 1940s*. Sydney: NewSouth, 2015.
- McDonnell, Mrs. "Interview 1." early Asquith resident, at her home in Asquith, interview with Nicola Pullan, notes, in author's possession, 9 June 2016.
- Nicolaides, Becky M. "'Where the Working Man is Welcomed': Working-Class Suburbs in Los Angeles, 1900-1940." *Pacific Historical Review* 68, no. 4 (1999): 517-59.
- Patryn, Katiusha. "Recording 16." early Hornsby resident, at her home in Hornsby, interview with Nicola Pullan, digital recording, in author's possession, 3 March 2011.
- Pullan, Nicola. "A Roof over Their Heads: Temporary Dwellings in Post-War Suburban Sydney." In *Architecture, Institutions and Change. Proceedings of the 32nd Annual Conference of the Society of Architectural Historians, Australia and New Zealand*, edited by Paul Hogben and Judith O'Callaghan, 500-11. Sydney: SAHANZ, 2015.
- Pullan, Nicola. "A Lot of Hardship, There's Nothing There at All: Experiencing Premature Housing Development in Post-War Sydney." In *Icons: The Making, Meaning and Undoing of Urban Icons and Iconic Cities. Proceedings of the 13th Australasian Urban History/Planning History Conference*, edited by C. Bosman and Dedekorkut-Howes, 365-76. Gold Coast, Qld: Australasian Urban History/Planning History Group and Griffith University, 2016.
- Pullan, Nicola. "Tram Cars, Tents, 'Igloos' and Garages: An Institutional Theoretical Lens on Temporary Dwellings in Sydney." In *History, Urbanism, Resilience. Proceedings of the 17th International Planning History Society Conference*, edited by Carola Hein, 175- 86. Delft: TU Delft, 2016.
- Pullan, Nicola. "An Alternative Solution: Self-Provisioned Dwellings on Sydney's Suburban Fringe 1945-1960." In *Remaking Cities. Proceedings of the 14th Australasian Urban History/Planning History Conference*, edited by Ian McShane, Forthcoming. Melbourne: RMIT University's Centre for Urban Research, 2018.
- Ministry of Post-war Reconstruction. *Commonwealth Housing Commission Final Report, 25th August, 1944*. Canberra: Ministry of Post-war Reconstruction, 1944.
- Romanos, Aristidis G. "Illegal Settlements in Athens." In *Shelter and Society*, edited by Paul Oliver, 137-47. London: Barrie and Jenkins, 1969.
- Twomey, Anne. *The Constitution of New South Wales*. Sydney: Federation Press, 2004.
- Vineta, Vicente. *La Urbanizacion Marginal en el Area Urbana de Castellon [Marginal Urbanization in the Castellon Urban Area]*. Valencia: Edicions Alfons el Magnanim, 1987.
- Wagstaff, Brian. "Interview 1." early Hornsby resident, at his home in Hornsby, interview with Nicola Pullan, digital recording, in author's possession, 7 February 2011.
- Warringah Shire Council. "Minutes of Ordinary Meeting."
- Warringah Shire Council. "Minutes of Ordinary Meeting, File No. 2531." 28 September 1943.
- Wilkenfeld, George, and Peter Spearritt. *Electrifying Sydney*. Sydney: Energy Australia, 2004.



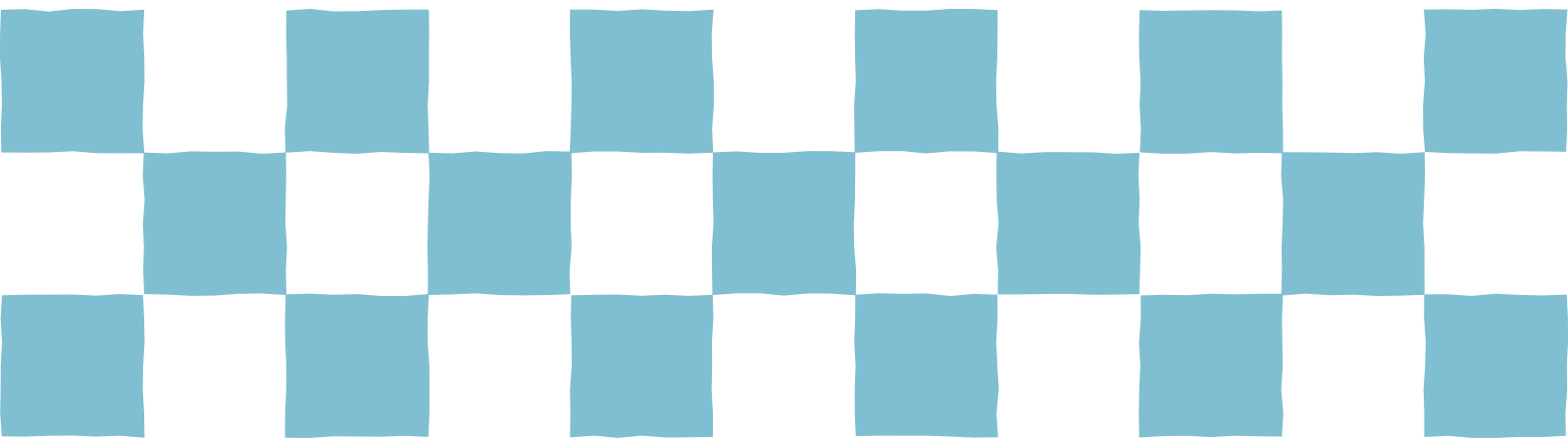
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

35 Policy, Politics and Planning



Plan of Seoul Olympic games facilities and the execution of the plans of green area and road network of Seoul city planning

Kwanghyun Park (Kagoshima University)

This study aims to outline the changes of the plan of Seoul Olympic Games facilities and the related roads, to identify their locations in Seoul city planning, especially the green area in the zoning of Seoul city planning and the road network of Seoul master plan, to reveal the urban transformation of Seoul triggered by the Seoul Olympic Games.

In the original plans of Seoul Olympic Games of 1980, sport facilities were located in the north of Han River(Old city district), the south of Han River(Jamsil district), the northeast of Seoul City(Taenung district) and the northwest of Seoul City(Sungsari district). In the actual plans of 1988, some new facilities were located along the Jungnang-cheon the branch of Han River in the east of Seoul and some venues were constructed in the south of Seoul, particularly along the Nambusunhwan-ro (arterial road) which connects Gimpo International Airport to Jamsil district. Most of the sport facilities for the Olympic games were built in and around the green areas in the zoning of Seoul city planning. Especially Olympic park and Jamsil sports complex were located adjacent to the green area of Sungnae-cheon and Tan-cheon the branch of Han River in the east of Seoul. Since then, large sports parks constructed in Seoul like the World Cup Stadium were located in the green area of branch of Han River.

In 1980s, the roads around old city area were extended as an urban redevelopment which promoted by Olympic Games, and new roads for the housing development based on the Housing Site Development and Promotion Act, which was legislated in 1980, were constructed in the development districts like the Gaepo district(1981) and the Mokdong district(1983) along the branch of Han River. Especially, the roads like the Olympic-daero(olympic expressway), Noryang bridge, Dongjak bridge, Dongho bridge, Dongho-ro(arterial road), Olympic bridge, Nambusunhwan-ro (arterial road,), were expanded and constructed for preparing Olympic Games.

It is concluded that almost facilities for the Olympic games were built in and around the green areas in the zoning of Seoul city planning. The 1988' s plan of Seoul Olympic Games facilities was laid out in the east of Seoul City more compactly than the 1980' s plan. The broad highways and road-rail bridges planned in Seoul city planning were executed for the Olympic Games.

Critical junctures and city development: a brief retrospect of Chongqing's planning history, 1949-2010

Min Jiang (The University of Tokyo)

Southwest China' s Chongqing is a city with unique development history which experienced critical junctures. This study collected and organized political, economic and cultural events in Chongqing during 1949 to 2010, and then analysed how its city planning responded to those critical junctures, and evaluate whether it was successful or not; furthermore, it traced the evolution of motive forces in Chongqing. The analysis has led us to the conclusion that critical junctures constituted pivotal motive forces in Chongqing' s urbanization; generally, each version of Master Plans responded them effectively and timely, especially by giving the priority to natural geography and continually developing the polycentric structure at different scale. The result of this study shows that Chongqing has built a comprehensive development framework for settlement hierarchy structure, transportation, economy and ecology. For the future, it should pay more attention to improve its infrastructure, conserve its historic heritage, strengthen its identity as a city of mountain and river, and achieve more sustainable development both ecologically and socially. Moreover, besides making sure that politic and economic forces fulfil their role, decision makers should also value social forces, make multiple objectives, exercise public participation and achieve social justice in the policy making and implementing process.

Designing the Chinese modern capitals in correspondence of political chances. A comparative analysis of planning proposals for the post-Imperial capitals of Nanjing and Beijing

Domenica Bona (Università degli Studi Roma Tre)

With a historical and morphological approach, this paper marks the correlation between the critical junctures occurred in China from 1911 to 1958 and the new planning proposals for the modern capital cities rebuilt at that time, Nanjing and Beijing. This paper assumes that the modern breaking points of Chinese history have the key role in reshaping the urban landscape as in the past. From this perspective, the research assumes an 'interpretative morphological approach' based on the comparison of the case studies. Stressing the attention on the planning features of each proposal, it is possible to highlight, firstly, the way new plans reproduce the classic patterns and override them in accordance with the political ideals and propaganda meanings that architecture and urbanism are supposed to embody; secondly, a constant application of traditional forms and urban patterns, by citation and reinterpretation. These two orders of results could eventually prove that reactionary and revolutionary political forces are influenced by the same atavistic rhetorical frameworks when they come to draw the spatial palimpsest of their power. Thus, each critical juncture is a new testing ground for the resistance of those recurring planning features in the present days as in the past.

Rethinking Southern Africa's Purpose-Built Cities: Instruments for National Identity Formation

James De Mott (Grinnell College)

This is an undergraduate thesis which adopts a historical process tracing approach to analyze the connection between elite-driven national identity movements and the built environment of purpose-built capital cities. The paper investigates three national contexts: Botswana, Malawi, and Tanzania. The research question seeks to access what, if any, connections can be drawn between the incentive structures created by particular elite-driven national identity movements and the placement, design, and success of these capitals in becoming functional administrative centers. The paper argues that purpose-built capital cities were not simply exercises in statism, but rather were intended to satisfy the demands implicit in specific nationalist identity movements.

James De Mott is an undergraduate student at Grinnell College, Iowa where he majors in Political Science with a concentration in Global Development Studies. His interest in the history of urban planning was the impetus for a year abroad which focused on the questions of comparative urban planning and colonial legacies, first at his college's campus in London and then at the University of Botswana.



Plan of Seoul Olympic games facilities and the execution of the plans of green area and road network of Seoul City Planning

Kwanghyun Park

** PhD, Department of Architecture & Architectural Engineering, Kagoshima University,
park@aae.kagoshima-u.ac.jp*

By analyzing the changes in planning for facilities for the 1988 Seoul Olympic Games, focusing especially on green areas and road networks, this study aims to reveal the transformation of Seoul City, sparked by the Seoul Olympic Games. Most of the new competition venues for the Olympic games were built in the green areas in the Jamsil District and the Taenung District. In particular, the Jamsil District was able to support the development of two main Olympic venues by reclaiming land through the reclamation of the Han River. The river was the defining feature for Seoul City Planning's Olympic development plans, dictating the paths of the broad highways and bridges which follow and span its waters.

Keywords: Seoul, Olympic, Competition Venues, City Planning, Green Area, Road Network.

Introduction

This research clarifies the arrangement plan of the Seoul Olympic sports facilities and the development and expansion of infrastructure related to the Olympic Games. It also considers the relation between the facilities, infrastructure construction and Seoul City Planning.

The 24th Seoul Olympic Games (1988) was an international sports event showcased for the high economic growth of the Republic of Korea since it had been established in 1948¹. It can also be said that through the Olympic Games, the urban transformation of Seoul was done mainly in 1970s-1980s. For a large-scale international event like the Olympic Games, the related facilities such as various competition venues, athletic villages, parks and the transportation infrastructure are planned and completed according to Seoul City Planning. In some cases, the city plans are changed due to the needs of the actual construction.

There are many discussions from social and economic standpoints on the economic effects and changes in citizen consciousness brought about by the Seoul Olympic Games, however, there are few studies which analyze the transportation infrastructure and large-scale athletic parks developed for the Olympics². In addition, the correlation between these and Seoul City Planning in the same period have not been sufficiently examined.

This paper, therefore, will clarify the transition of the arrangement plan for the Olympic Games facilities from the time of the hosting application to the time the Games were held, and describes the relation between the location of the competition venues and the green area of Seoul City Planning. Subsequently, I will review the transition of the road networks of Seoul City Planning before and after the Olympic Games, focusing in particular on the construction and expansion of roads and bridges directly related to the competition venues, and examine the relation between these and the road networks of the Seoul Master Plan.

Background of the application for the hosting of the Olympic Games

The hosting of the 24th Olympic Games in Seoul was in part of a political bid to abate the public's criticism against the dictatorship of President Park Chung-Hee in the 1970s³. Seoul City announced that it would apply to host the Games as a government initiative on Oct 8, 1979, but immediately after that, the hosting campaign met trouble due to the assassination of President Park, who had made to final decision to bid to host the Olympic Games. In the political turmoil caused by the President's death, the KOC (Korean Olympic Committee), which actively promoted the bidding, and Seoul City, which was reluctant to bid due to the poor financial situation and lack of facilities, came into conflict, and the hosting campaign was ceased temporarily. This impasse was broken by President Chun Doo-Hwan who took office in September 1980. On his initiative⁴, The KOC conveyed the intention to host the Olympic Games to the IOC, and then on Dec. 4, 1980, the IOC announced that Seoul, the capital city of the Republic of Korea, would be the fourth city to apply for the right to host the Olympic Games after Melbourne, Australia; Nagoya, Japan; and Athens, Greece. There were many hurdles at high-level government meetings for



the Olympic bid, even after the KOC and Seoul City submitted their response to the IOC questionnaire about the hosting capacity on Feb. 26, 1981. This was due to the objection of Seoul City and the Economic Planning Board on the grounds that the financial situation for the Olympic Games was insufficient. At the 3rd meeting, however, it was resolved to proactively promote the hosting campaign⁵. Then finally on Sep. 30, 1981, Seoul was chosen to host the 24th Olympic Games from Sept. 17th to Oct. 2nd 1988, at the IOC General Assembly held in Baden-Baden, Germany.

Change of the Olympic Games venues plan (Table 1)

The arrangement plan of the Seoul Olympic Games venues evolved from the time of application to host the Games to the time when they were held. Here we compare the arrangement plans of the competition venues in 1981 and 1988 (Figure 1).

The competition venues at the time of the hosting application (Feb. 1981) were mainly located in the Jamsil District on the south bank of the Han River, in the surroundings of the old town at the center of Seoul, and in the Taenung District in the northeast part of the city. There were two main competition venues; the National Sports Complex (newly constructed) and the Seoul Sports Complex (under construction) in the Jamsil District. The main stadium (athletics, football), the archery field, the velodrome, the fencing hall, the gymnasium, the hockey pitches, and the indoor swimming pool were planned for the National Sports Complex, and the student gymnasium (boxing), the indoor gymnasium (handball, volleyball), the indoor swimming pool were planned for the Seoul Sports Complex.

Table 1 The change of Olympic Games competition venues (*outside of the boundry of Seoul City)

Competition	Venues at the time of application	Venues at the time of Olympic Games
Archery	1. Archery Field (in National Sports Complex)	15. Hwarang Archery Field (in Korea Military Academy)
Athletics	1. Main Stadium (in National Sports Complex)	2. Olympic Stadium (in Seoul Sports Complex)
Basketball	5. Changchung Gymnasium	2. Jamsil Gymnasium (in Seoul Sports Complex)
Boxing	2. Student Gymnasium (in Seoul Sports Complex)	2. Jamsil Student Gymnasium (in Seoul Sports Complex)
Canoeing	unsettled	21. Han River Regatta Course*
Cycling	1. Velodrome (in National Sports Complex)	1. Olympic Velodrome (in Olympic Park)
	-	Tongil-ro Olympic Road Course
Equestrian Sports	13. Sungsa-ri Equestrian Arena*	2. Olympic Stadium (in Seoul Sports Complex)
	-	19. Seoul Equestrian Park* 19. Wondang Ranch
Fencing	1. Fencing Hall (in National Sports Complex)	1. Olympic Fencing Gymnasium (in Olympic Park)
Football	1. Main Stadium (in National Sports Complex)	2. Main Stadium (in Seoul Sports Complex)
	6. Seoul Municipal Stadium	6. Dongdaemun Stadium Kwangju Stadium*
	3. Hyochang Stadium	Taejon Stadium* Taegu Stadium* Pusan Stadium*
Gymnastics	1. Gymnasium (in National Sports Complex)	1. Olympic Gymnastics Hall (in Olympic Park)
Handball	2. Indoor Gymnasium (in Seoul Sports Complex)	Suwon Gymnasium*
	Sunin Gymnasium* Incheon Gymnasium*	1. Olympic Gymnastics Hall (in Olympic Park)
Hockey	1. Hockey Pitches (in National Sports Complex)	Songnam Stadium*
Judo	4. Sogang University Gymnasium	5. Changchung Gymnasium
Modern Pentathlon	13. Sungsa-ri Equestrian Arena*	21. Seoul Equestrian Park*
Equestrian Sports	1. Fencing Hall (in National Sports Complex)	1. Olympic Fencing Gymnasium (in Olympic Park)
Fencing	9. Taenung International Shooting Range	10. Taenung International Shooting Range
Shooting	1. Indoor Swimming Pool (in National Sports Complex)	1. Olympic Indoor Swimming Pool (in Olympic Park)
Swimming	10. Taenung Country Club Running Course	1. Mongchontoseong Cross-country Course (in Olympic Park)
Cross-country	7. Han-Gang Regatta Course	15. Han River Regatta Course*
Rowing	1. Indoor Swimming Pool (in National Sports Complex)	1. Olympic Indoor Swimming Pool (in Olympic Park)
Swimming	2. Indoor Swimming Pool (in Seoul Sports Complex)	2. Jamsil Indoor Swimming Pool (in Seoul Sports Complex)
	8. Taenung Indoor Swimming Pool	-
Shooting	9. Taenung International Shooting Range	10. Taenung International Shooting Range
Table Tennis	-	20. Seoul National University Gymnasium
Tennis	-	1. Olympic Tennis Courts (in Olympic Park)
Volleyball	2. Indoor Gymnasium (in Seoul Sports Complex)	16. Hanyang University Gymnasium 14. Saemaul Sports Hall
		2. Jamsil Gymnasium (in Seoul Sports Complex)
Weightlifting	1. Weightlifting Hall (in National Sports Complex)	1. Olympic Weightlifting Gymnasium (in Olympic Park)
Wrestling	11. Seo-Ae-Kwan (in Korea Military Academy)	22. Sangmu Gymnasium*
Yachting	Pusan Marina*	Pusan Yachting Center*
Baseball	-	2. Jamsil Baseball Stadium (in Seoul Sports Complex)
Taekwondo	-	5. Changchung Gymnasium
Badminton	-	18. Seoul National University Gymnasium
Bowling	-	17. Royal Bowling Center
Olympic Village	adjacent to National Sports Complex	adjacent to Olympic Park

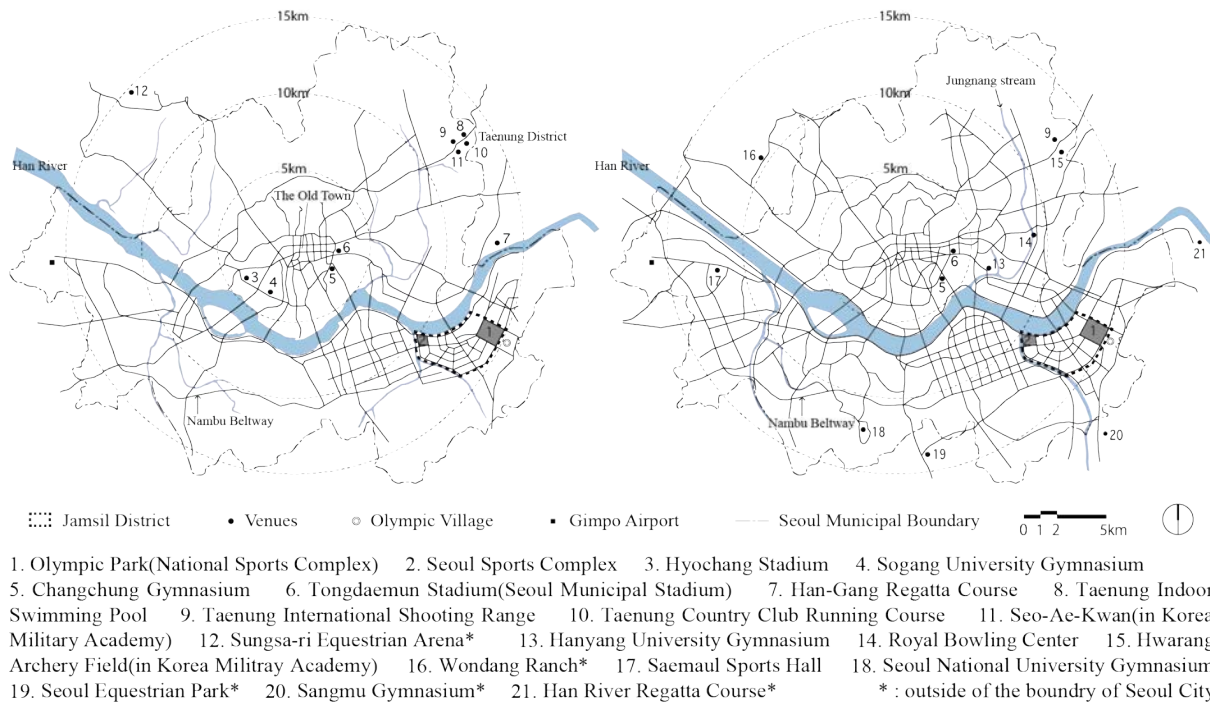


Figure 1 Comparison of the arrangement plan of the competition venues : plan at the time of application in 1981(left) and holding in 1988(right)

Four existing sports facilities in the vicinity of the old town were selected as competition venues: Hyochang Stadium (football) and Sogang University Gymnasium (judo) were located in the southwest of the old town; Changchung Gymnasium (basketball) and Seoul Municipal Stadium (football) were located in the east of the old town. In northeast area of the city (Taenung District), Taenung Indoor Swimming Pool, Taenung International Shooting Range, Taenung Country Club Running Course (cross-country) located in the Taenung Village; and Seo-Ae-Kwan (wrestling) which was located in the Korea Military Academy, were selected as competition venues.

Comparing the venue placement plans at the time of application (Sep. 1988) with those at the time of the Games, the two main competition venues located in the Jamsil District on the south bank of the Han River were used as planned. In the National Sports Complex which was now known as “Olympic Park”, the construction of the main stadium was discontinued, and the Olympic Velodrome, Olympic Fencing Gymnasium, Olympic Gymnastics Hall (gymnastics, handball), Mongchontoseong Cross-country Course, Olympic Indoor Swimming Pool, Olympic Tennis Courts and Olympic Weightlifting Gymnasium were newly planned and constructed. In the Seoul Sports Complex, the main stadium (athletics, equestrian sports, football), Jamsil Student Gymnasium (former student gymnasium : boxing), Jamsil Gymnasium (former indoor gymnasium: basketball, volleyball), and Jamsil Baseball Stadium were built. Among the competition venues in the surroundings of the old town, only Changchung Gymnasium (judo, taekwondo) and Dongdaemun Stadium (former Seoul Municipal Stadium : football) in the east, were used as planned at the time of the application, and Hanyang University Gymnasium (volleyball) and Royal Bowling Center along the Jungnang Stream were newly selected as venues. In the Taenung District, Taenung International Shooting Range was used as planned, and Hwarang Archery Field in the Korea Military Academy was newly selected as a venue. In addition, Seoul National University Gymnasium (table tennis, badminton) and Saemaul Sports Hall (volleyball) were newly selected as competition venues and could be accessed directly from the Nambu Beltway which connect the Jamsil District to Gimpo Airport.

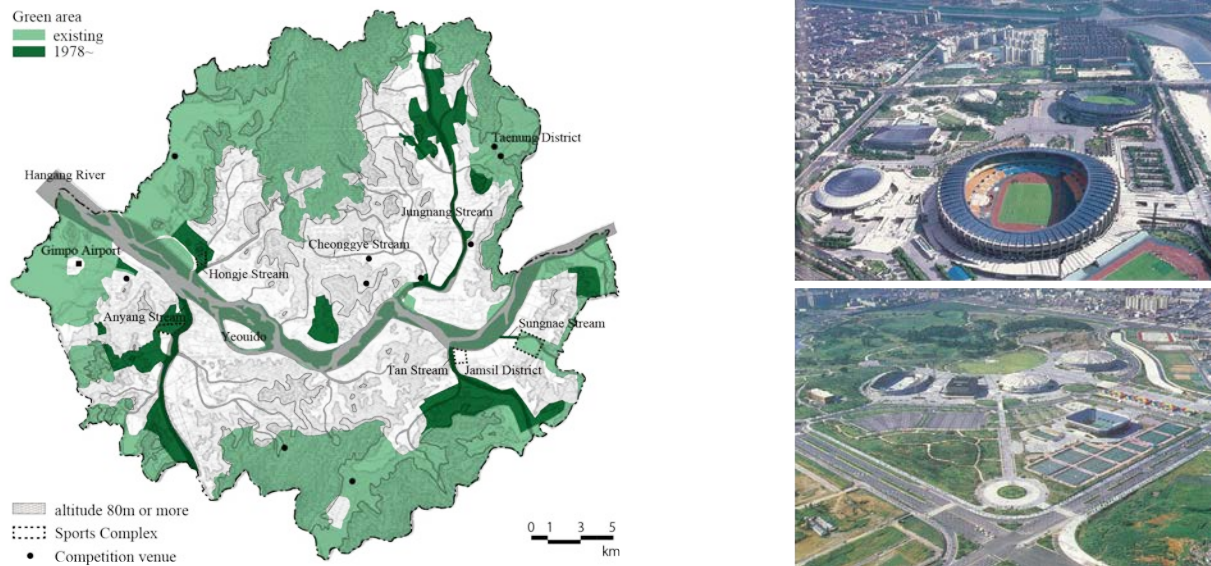


Figure 2 Positioning of the competition venues on the Green area : Seoul Sports Complex (top right), Olympic Park (bottom right)

Positioning of the competition venues in the green area of the zoning of Seoul City Planning

There is a significant relationship between the zoned green areas in the plans for Seoul, and the location of the Olympic Park and the Seoul Sports Complex.

The green areas of the 1972 Seoul City Planning consisted of a ring shaped green area along the periphery of the city, located in the surrounding mountains, and a linear green area along the Han River which traverses Seoul⁶, but since 1978, green areas both in the mountains and along the river have been connected as a result of newly designated green areas along the tributaries of the Han River⁷ (Figure 2).

Of the two main competition venues for the Olympic Games, the Olympic Park was constructed in a green area along the Sungnae Stream, and the Seoul Sports Complex was constructed adjacent to the green area along the Tan Stream. In this way, the green area along the tributaries of the Han River began to be developed as a park and a sports complex. After the Olympic Games, the Mokdong Sports Complex (1989) and the Seoul World Cup Park (2002) were constructed along two tributaries of the Han River; the Anyang Stream and the Hongje Stream. Also, the banks of the Han River were developed as a public park in accordance with the *'Comprehensive Development Plan of the Han River (1982-1986)'* during the Olympic preparation period. The green area newly created by the revetment of the Han River and its tributaries was utilized as a city park. It can be said that the waterfront of Seoul began to develop in earnest with the Olympic Games.

Transition of the Road Network of Seoul City Planning and Related Roads of Olympic Games

Comparing the road networks of Seoul City Planning at the closest time before the application to host the Olympic Games (Dec. 1976) and after the Olympic Games (Feb. 1989), we can see that the roads were mainly constructed around the old town, the Han River and its tributaries (Figure 3). Of these, I will look in detail at the Olympic Dae-ro ('Dae-ro' means a highway in Korean), Noryang Bridge, Dongjak Bridge, Dongho Bridge, Dongho-ro ('ro' means a road in Korean), the Olympic Bridge, the Nambu Beltway, which were directly involved with transport for the Olympic Games.

The Olympic Dae-ro was opened to traffic as a motor road in May 1986 (Figure 4). There was originally a road (Gangnam-ro) along the southern bank of the Han River which had been constructed in accordance with Notification No. 268 of Seoul Metropolitan Government (Nov. 26, 1972). This had several sections: Gangnam 1-ro (from the east boundary of Seoul to Jamsil Bridge), Gangnam 2-ro (from the Jamsil Bridge to Hannam Bridge),

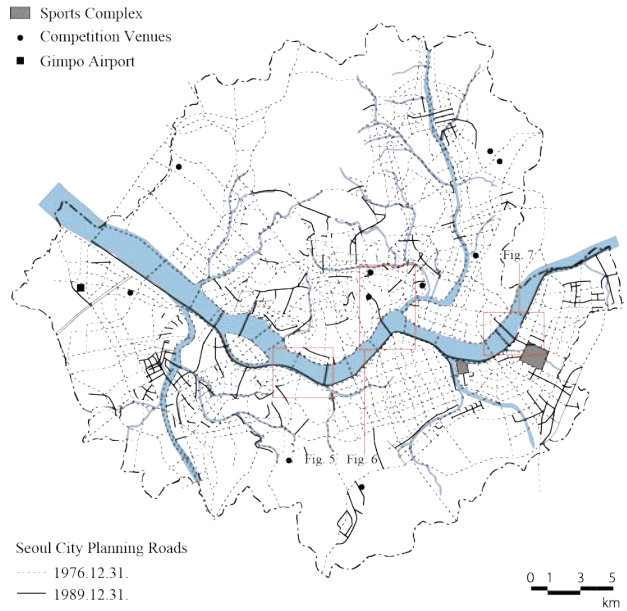


Figure 3 Comparing the road networks of Seoul City Planning in 1976 and 1989

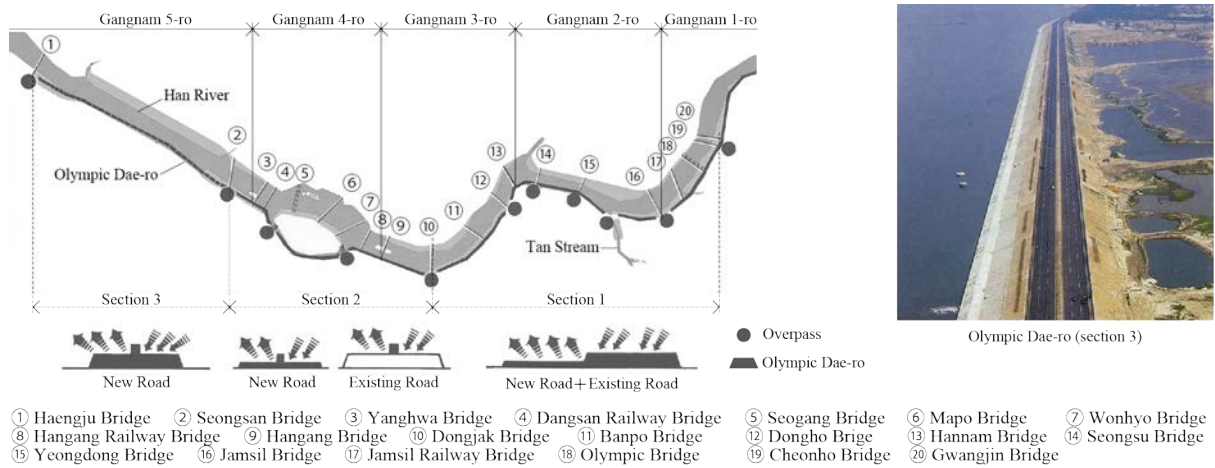


Figure 4 Bridges of the Han River and Olympic Dae-ro

Gangnam 3-ro (from the Hannam Bridge to Hangang Bridge), Gangnam 4-ro (from the Hangang Bridge to Yanghwa Bridge), Gangnam 5-ro (from the Yanghwa Bridge to the west boundary of Seoul). In preparation for the Olympic Games, these roads were repaired and expanded in three sections. In section 1 (from Cheonho Bridge to Dongjak Bridge), there were the existing roads with 4 lanes: Gangnam 1-ro, Gangnam 2-ro and Gangnam 3-ro (partly). These roads were widened into one two-way road with 8 lanes; 4 lanes being added to the river side. In section 2 (from the Dongjak Bridge to Seongsan Bridge), because the expansion of the existing Gangnam-ro was difficult due to topographical problems, a new two-way road with 4 lanes was constructed next to the riverside parallel to the existing Gangnam 4-ro which was then excluded from the Olympic Dae-ro. In section 3 (from the Seongsan Bridge to Haengju Bridge), a new embankment was extended along Gangnam 5-ro which had not been yet fully constructed (only the section from the Yanghwa Bridge to the Seongsan Bridge was completed), then a new two-way road with 6 lanes was opened along the entire route of the Gangnam 5-ro. This Olympic Dae-ro which extends 36 kilometers between Haengju Bridge and Cheonho Bridge, connected to existing trunk roads in Seoul with 5 bridges and 11 overpasses, and Gimpo Airport and the Olympic Stadium were also directly connected.

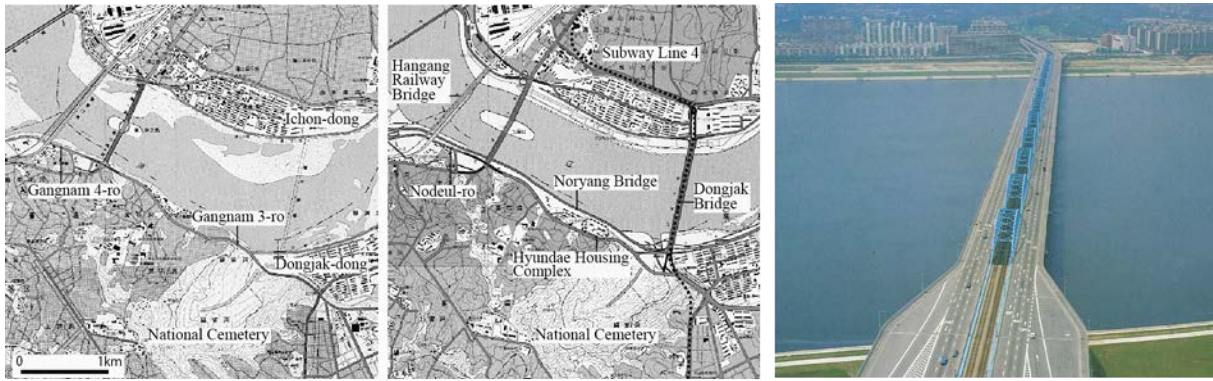


Figure 5 Comparison the topographic map of 1981 and 1987 around the Dongjak Bridge (right)

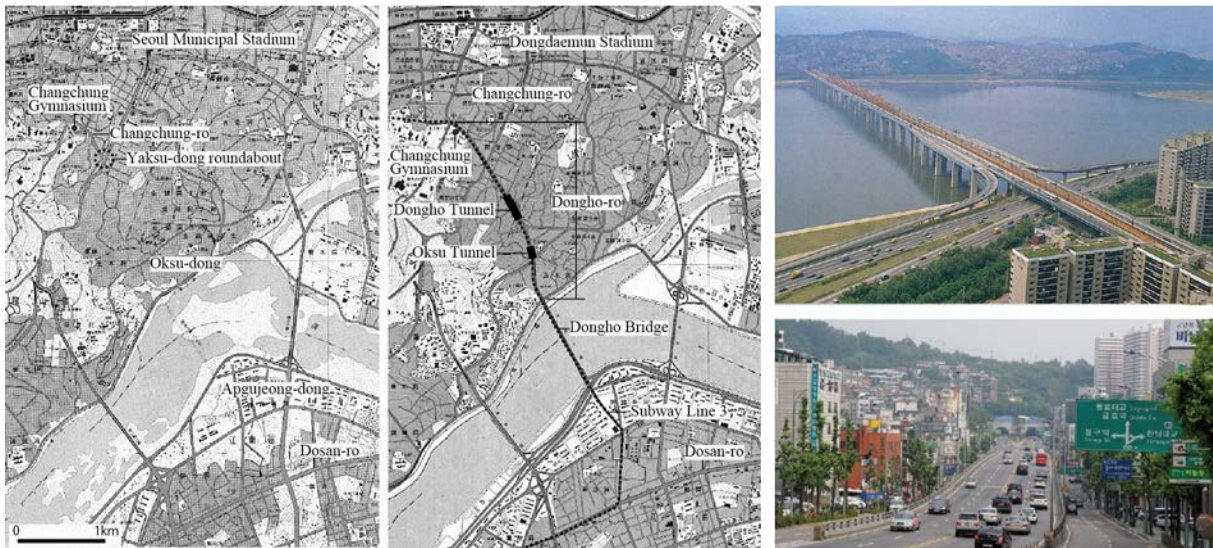


Figure 6 Comparison the topographic map of 1981 and 1987 around the Dongho Bridge (top right), the Dongho-ro (bottom right)

The Noryang Bridge (road width 21.4 m, total length 2,070 m, completed in Dec. 1987) is parallel to the Han River and also part of the Olympic Dea-ro (from Hangang Railway Bridge to the Dongjak Bridge), and was constructed separately from the revetment of the Han River (Figure 5).

The Dongjak Bridge (road width 28.6m, railway width 11.4m, total length 1,330m, completed in Dec. 1984) is the first bridge on the Han River to combine roadway with railway, and connects Ichon-dong (north bank of the Han River,) to Dongjak-dong (south bank of the Han River) ('dong' means an administrative district in Korean.) This made it possible to have quick access from Seoul Station to the Nambu Beltway (connecting at Sadang Station) via Seoul Subway Line 4 (Figure 5).

The Dongho Bridge (road width 20.4m, subway width 11m, total length 1,220m, completed in Feb. 1985) also combines road with railway (Seoul Subway Line 3), and connects Oksu-dong (north bank of the Han River) to Apgujeong-dong (south bank of the Han River). Dongho-ro (road width 28.6m, 8 lanes, constructed in Dec. 1984) runs from the north end of the Dongho Bridge to the Changchung Gymnasium. The section from the north end of the Dongho Bridge to Yaksu-dong Roundabout at the south end of Changchung-ro was repaired, and two tunnels - the Oksu Tunnel and the Dongho Tunnel- were constructed in this section. Another section from Yaksu-dong Roundabout to the north of the Changchung Gymnasium was originally part of Changchung-ro, but it was transferred to Dongho-ro. The Dongho Bridge and Dongho-ro connected Dosan-ro (south bank of the Han River) to the Changchung Gymnasium and the Dongdaemun Stadium about 1 km to the north. This gave quick access from the Jamsil District to competition venues around the old town (Figure 6).



Figure 7 Comparison of the topographic map of 1981 and 1987 around the Olympic Bridge (right)

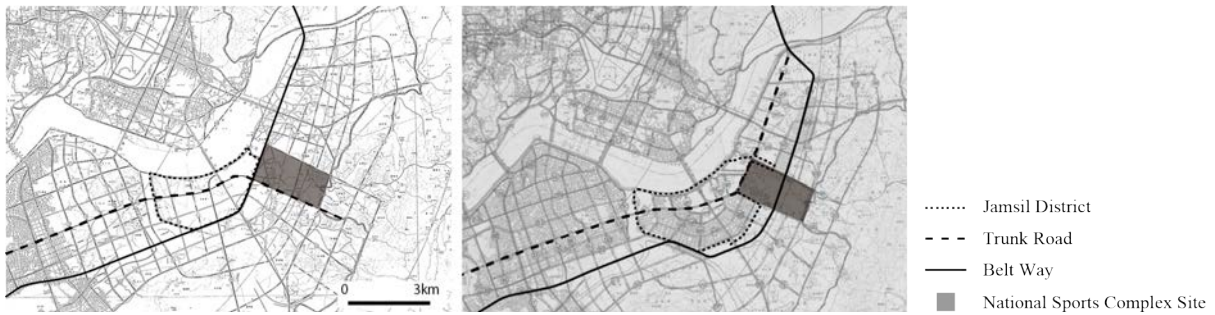


Figure 8 Change of the Seoul City Planning Road around the Jamsil District

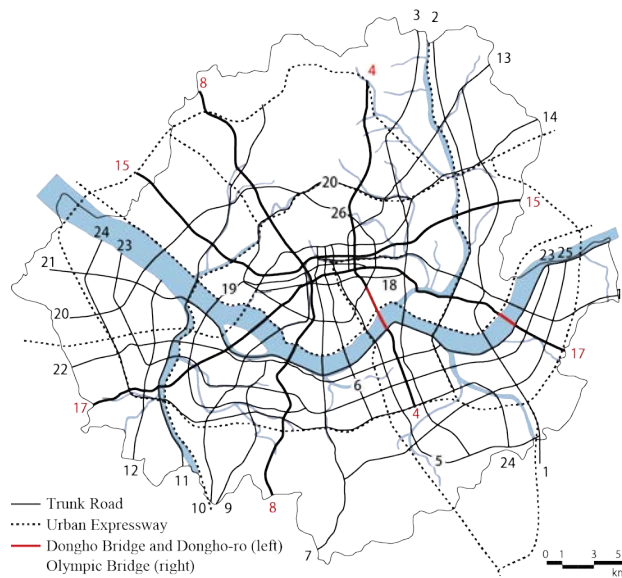


Figure 9 The road network of Seoul Master Plan in 1980

The Olympic Bridge (road width 32m, total length 1,225m, completed in Jun. 1990, between the Jamsil Railway Bridge and the Cheonho Bridge) was constructed in preparation for an increase in traffic volume in the southeast part of Seoul, including the Jamsil District, and was named in commemoration of the Olympics. It connected Guui-dong (north bank of the Han River) and Pungnap-dong (south bank of the Han River) and was linked to Gwangnaru-ro at the north end and Gangdong Dae-ro (adjacent to the northeast side of the Olympic Park) at the south end. It connects the old town at the city center to Seoul's southeast part which was developed for the Olympics Games (Figure 7). Especially the Jamsil District, bracketed by the Olympic Park and the Seoul Sports Complex, was reclaimed in the 1970s, and developed as a subcenter after the Seoul Olympics⁸.



The Nambu Beltway was a part of the 4th ring road of Seoul, and connects the east and west part of Seoul in the south. In 1970, it formed the south boundary of the Jamsil District and passed the north side of the National Sports Complex site (later Olympic Park). Its route was altered in 1974. It curved at the southwest of the Jamsil District and was laid along the south of the Jamsil District, and then divided the National Sports Complex site. Gimpo Airport and the Olympic Park (including the Athletes Village) were directly connected by this road (Figure 8).

Positioning of Roads Related to the Olympic Games in the road network of Seoul Master Plan

The road network of the 1980 Seoul Master Plan was a basis for the Seoul City Planning Road in 1980s. It was conceived as an integration of the previous two patterns - the ring-radial pattern of the 1966 Seoul Master Plan and the grid pattern of the 1978 Seoul Master Plan - and characterized by a cross of hyperbola-shaped roads consisting of 4th, 8th, 15th and 17th trunk roads⁹ (Figure 9). Of these, part of the 4th trunk road (from the south bank of the Han River to the old town) was completed by the construction of the the Dongho Bridge and the Donghvo-ro, and part of the 17th trunk road (the crossing of Han River) was completed by the construction of the Olympic Bridge respectively. In other words, the roads which formed the frame of the road network of the 1980 Seoul Master Plan were completed with the construction of roads and bridges related to the Olympic Games around the Han River crossing sections.

Conclusion

When the Olympic Games was held in 1988, the competition venues were compactly placed in the eastern part of Seoul, as the existing sports facilities located in the west of the old town ceased to be used as competition venues. Two sports complexes in the Jamsil District were used as planned at first, but the layout of the facilities in the Olympic Park (former National Sports Complex) was changed : the main stadium and facilities for archery and hockey were excluded, and a cross-country course for the modern pentathlon was included. Except for the competition venues near the old town, almost all venues were located in the green area of the Seoul City Planning. In particular, the two sports complexes were located in the newly designated green areas along the tributaries of the Han River. After that, the green areas along the tributaries which flowed through the west part of Seoul, were utilized for the new sports complexes. Furthermore, the highway was constructed along the Han River during its revetment, and the bridges crossed the Han River connecting the trunk roads of the 1980 Seoul Master Plan. It can be said that the Seoul City Planning Roads which were planned around the Han River, were constructed while preparing the Olympic Games.

Acknowledgements

I would like to thank Bo Causer who is an assistant professor of Kagoshima University, for English Language editing.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

PARK Kwanghyun is an assistant professor in the department of architecture and architectural engineering at Kagoshima University. He earned a doctorate at Nagoya University, doctoral topic was about the transformation of Seoul in 1960-80s, titled 'A Study on the Urban Transformation of Seoul triggered by Seoul Olympics'. He is exploring the Seoul's reconstruction focusing on the Han River Development after the Korean War.

Endnotes

1 Kyunghun Kim, *The History of Seoul Olympic Game XXIVth* (Seoul:Hasanmunhwasa, 2000), 5.

2 B. Bridges, 'The Seoul Olympics: Economic Miracle Meets the World', in J. A. Mangan and M. Dyreson (eds.), *Olympic Legacies: Intended and Unintended—Political, Cultural, Economic and Educational* (Routledge, 2010). 56-69 ; Hyunkook Shin and Dosik Kim, 'A Study of the Characteristics of the Architectural Spaces in Olympic Weight Lifting Stadium by Kimm Jongsoung', *Journal of the Architectural Institute of Korea* 28 (9) (2012) :147-154.

3 Jungmok Son, *서울도시계획이야기-5 [The story of Seoul City Planning-5]* (Seoul:Hanulbooks, 2003), 13.



4 President Chun Doo Hwan expressed the view that the country should go ahead with the plan to obtain Olympic hostship, reasoning that what was officially announced with approval from the former President should not be changed without strong reason. He said, "We cannot back down from a historic project in the sentiment of defeatism without even making a try." (Seoul Olympic Organizing Committee, *Seoul Olympic Games Official Report* (Seoul:Goryo,1990), 34.)

5 Ibid. 36.

6 Kwang-hyun Park, 'On the Change of Green Area in the Zoning of Seoul City Planning', *Journal of Architecture and Planning (Transactions of AIJ)* 80 (713) (2015), 1691.

7 Ibid. 1692.

8 Jungmok Son, *서울도시계획이야기-3 [The story of Seoul City Planning-3]* (Seoul:Hanulbooks, 2003), 175-255.

9 Kwang-hyun Park, 'On the Road Networks of Seoul Master Plans in The 1960-80s', *Journal of Architecture and Planning (Transactions of AIJ)* 78 (693) (2013):2430-31.

Bibliography

Gold, John R. and Gold, Margaret M. *The Making of Olympics Cities*. Routledge, 2010.

Katagi, Atsushi. *Olympic City Tokyo 1940 • 1964*. Tokyo:Kawade Shobo Shinsha, 2010.

Kim, Kyunghun. *The History of Seoul Olympic Game XXIVth*. Seoul:Hasanmunhwasa, 2000.

Mangan, J. A. and Dyreson, Mark (eds.). *Olympic Legacies: Intended and Unintended—Political, Cultural, Economic and Educational*. Routledge, 2010.

Park, Kwanghyun. 'On the Change of Green Area in the Zoning of Seoul City Planning'. *Journal of Architecture and Planning (Transactions of AIJ)*. 80 (713) (2015):1689-96.

Park, Kwanghyun Park. 'On the Road Networks of Seoul Master Plans in The 1960-80s'. *Journal of Architecture and Planning (Transactions of AIJ)*. 78 (693) (2013):2425-32.

Seoul Olympic Organizing Committee. *Seoul Olympic Games Official Report*. Seoul:Goryo, 1990.

Seoul Metropolitan Government. *Bridges in Seoul*. Seoul:Samsungbunka, 1988.

Seoul Metropolitan Government. *The Han River*. Seoul:Samyoung Press, 1986.

Shin, Hyunkook and Kim, Dosik. 'A Study of the Characteristic of the Architectural Spaces in Olympic Weight Lifting Stadium by Kimm Jongsoung', *Journal of the Architectural Institute of Korea* 28 (9) (2012) :147-154.

Son, Jungmok. *서울도시계획이야기-3 [The story of Seoul City Planning-3]*. Seoul:Hanulbooks, 2003.

Son, Jungmok. *서울도시계획이야기-5 [The story of Seoul City Planning-5]*. Seoul:Hanulbooks, 2003.

Image sources

Table1: Kwanghyun Park, based on sources from Mairie Metropolitaine De Seoul, *Reponses Aux Questionnaires Pour Les Jeux De La XXIV Olympiade* (1981), 올림픽企画團 [Olympic Planning Department], *올림픽資料 [Olympic Sourcebook]* (1984), Seoul Olympic Organizing Committee, *Official Report – Organization and Planning Volume1* (1988).

Figure 1: Kwanghyun Park, based on sources from Mairie Metropolitaine De Seoul, *Reponses Aux Questionnaires Pour Les Jeux De La XXIV Olympiade* (1981), Seoul Olympic Organizing Committee, *Official Guide and Souvenir Program to the XXIVth Olympiad* (1988).



Figure 2: Kwanghyun Park, based on sources from On the Change of Green Area in the Zoning of Seoul City Planning, *Journal of Architecture and Planning (Transactions of AIJ)*, 80 (713) (2015), 1692.

Figure 3: Kwanghyun Park, based on digital files by National Geographic Information Institute, <https://sd.ngii.go.kr> (Accessed April 10, 2015.)

Figure 4: Kwanghyun Park, based on sources from Seoul Metropolitan Government, *The Han River*, (Seoul:Samyoung Press, 1986), 70, 181.

Figure 5,6,7,8 MAP : Kwanghyun Park, based on digital files from National Geographic Information Institute, <https://sd.ngii.go.kr> (Accessed April 10, 2015.)

Figure 5,6 PHOTO : Seoul Metropolitan Government, *Bridges in Seoul* (Seoul:Samsungbunka, 1988), 107,108.

Figure 7 PHOTO : Seoul Metropolitan Government, *사진으로 보는 서울 6 : 세계로 뻗어가는 서울 1981-1990 [Seoul with the Photographs]* (Seoul:Banghyoengsik design, 2010), 410.

Figure 9: Kwanghyun Park, On the Road Networks of Seoul Master Plans in The 1960-80s, *Journal of Architecture and Planning (Transactions of AIJ)*, (78) (693) (2013), 2430.



Critical junctures and city development: a brief retrospect of Chongqing's planning history, 1949-2010

Min Jiang*

* Ph.D. Student, Department of Urban Engineering, Graduate School of Engineering, the University of Tokyo, m.jiang@ud.t.u-tokyo.ac.jp

Southwest China's Chongqing is a city with unique development history which experienced critical junctures. This study collected and organized political, economic and cultural events in Chongqing from 1949 to 2010, and then analysed how its city planning responded to those critical junctures, and evaluate whether it was successful or not; furthermore, it traced the evolution of motive forces in Chongqing. The analysis has led us to the conclusion that critical junctures constituted pivotal motive forces in Chongqing's urbanization; generally, each version of Master Plans responded them effectively and timely, especially by giving the priority to natural geography and continually developing the polycentric structure at different scale. The result of this study shows that Chongqing has built a comprehensive development framework for settlement hierarchy structure, transportation, economy and ecology. For the future, it should pay more attention to improve its infrastructure, conserve its historic heritage, strengthen its identity as a city of mountain and river, and achieve more sustainable development both ecologically and socially. Moreover, besides making sure that politic and economic forces fulfil their role, decision makers should also value social forces, make multiple objectives, exercise public participation and achieve social justice in the policy making and implementing process.

Keywords: planning history, critical juncture, motive force, China

Introduction

Chongqing, located in southwest China, is not only a beautiful city shaped by rivers and mountains, but also a famous historic city nourished by the long history of 3000 years. Presently, it is one of the 4 Municipalities directly under the Central Government (MCG)¹, and also one of the first generation of National Central Cities², playing an increasingly important role in China's development. In 2017, its GDP grew by 9.3 percent, hitting 1.95 trillion yuan, and constantly led the GDP growth nationwide since 2014.

Critical junctures have been considered to be one of the most important motive forces for modern Chongqing's development especially after 1890s. In this paper, critical junctures refer to major events happened in politic, economic, social and cultural areas, which shift cities' development and bring both negative and positive influence as one kind of motive forces. This study collected diverse critical junctures in Chongqing's development history mainly after 1949, then analysed how city planning responded to them. Finally, it went further to see the characteristics of motive forces for city development in Chongqing.

Historical development before 1949

Chongqing's history can date back to 1000 BC when it was dominated by Ba Kingdom; the Ba people established Jiangzhou as their capital. Jiangzhou Castel, in present Jiangbei District, was built in 316 BC, while Liyan Castel, in present top of Yuzhong Peninsula, was built in Shuhan Dynasty 226 AD. Thereafter, Chongqing experienced a 2-castel period for more than 500 years till Tang Dynasty. Jiangzhou was renamed for many times; the current name Chongqing, literally meaning double celebrations, was given in 1189, during the Southern Song Dynasty³. In Ming Dynasty, city walls and 17 city gates based on Daoism culture were built in Yuzhong Peninsula. As the population grew, the Jiangzhou castle gradually collected more and more residents and became active again. In Qing Dynasty, the government center moved to Jiangzhou castle; therefore, the once lost 2-castle pattern officially turned back again.

Till now, Chongqing had been continuing to experience stable development, especially relying on its convenient location for water transportation. In 1890, Chongqing was forced to open up to foreign countries by *Sino-British Yantai Treaty* and became the gateway to enter inland China. This accelerated its urbanization and the development of manufacturing. Between 1900 and 1905, Chongqing's textile production contributed one third of the total produced in China. In 1928, Chongqing city was formally established (Figure 1).

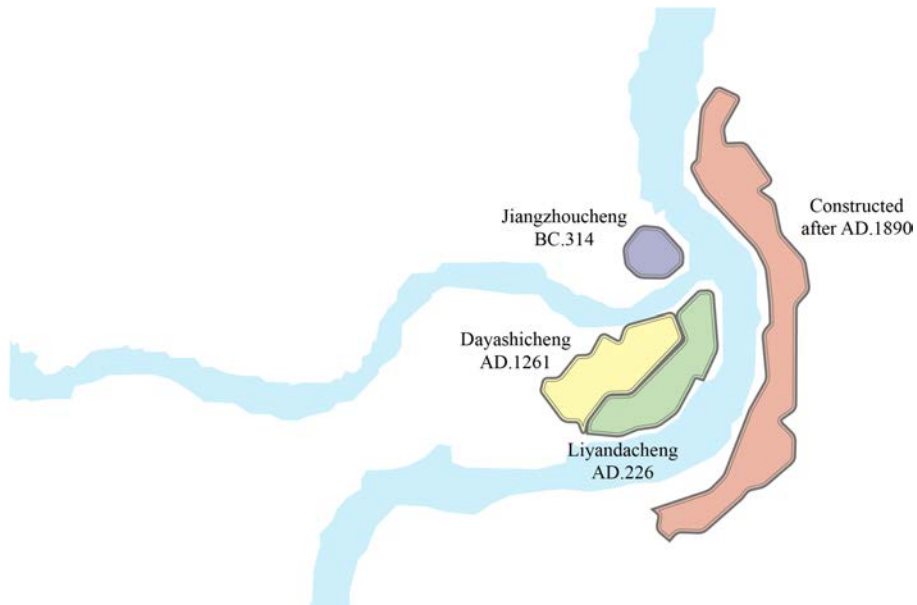


Figure 1: The development of Chongqing city from the ancient time

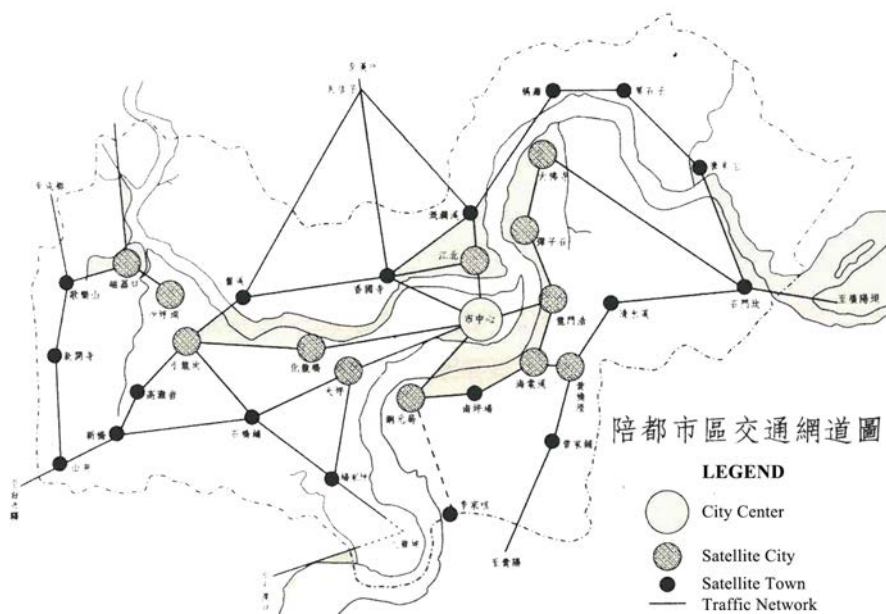


Figure 2: The development of Chongqing city from the ancient time

In 1937, after Nanjing was occupied by the Japanese, the Kuomintang (KMT) government moved to Chongqing and designated it as its wartime capital. Many factories were moved there from Shanghai, Wuhan and Tianjin; therefore, Chongqing jumped into a modern industrial city and played a pivotal role nationwide in policy, economy and manufacturing during the 1940s. In 1946, the KMT government released *Draft of Ten-Year Planning on the Construction of the Alternate Capital*. This was the first comprehensive city master plan of Chongqing, and also one of the most important representatives of the post-war city planning document. It was strongly influenced by western city theories and showed the characteristics of Modern Rationalism. Although it was not implemented due to historic reasons, many of its idea, especially Satellite Town, profoundly influenced following master plans in Chongqing (Figure 2).

1949-1977: frustration and stagnation

After the foundation of the People's Republic of China in 1949, the nation experienced an initial phase of city planning for the first 8 years until 1957, during which China experienced the significant Socialist transformation.



One of the urgent missions then was to recover the economy. Later from 1958 to 1960, it experienced the Great Leap and People's Commune; the whole nation tried to achieve a rapid economy improvement however the result proved to be unsatisfactory. The the nation announced *no city planning for 3 years* in 1960 due to complicated international and national situations, thereafter city planning fell into stagnation.

However, Chongqing's development accelerated in the 1960s because of *Third Front Construction* policy carried out by the central government, although its city level was degraded from a municipality to a city under the jurisdiction of Sichuan provincial government in 1954. The policy invited a large number of defence-related state-owned enterprises to establish factories in and around Chongqing. With 46,000 workers migrating to the city and 200 key projects being established, the policy helped Chongqing build up its infrastructure and economic structure, and jump into the biggest industrial base in southwest China. Today, many of these military enterprises have converted to civil use, continuing to enhance Chongqing's industrial strength.

In terms of city planning, the government proposed *Chongqing Primary Plan* in 1960, concentrating on industrial distribution and improvement of transportation system, however, since the center government decided to stop the city plan as well as the following events, it was not implemented. In 1964, the *Third Front Construction Plan in Chongqing*, in response to *Third Front Construction*, helped Chongqing build up the hierarchic system of cities and towns (Figure 3). Nevertheless, as a large number of factories and workers moved in within a very short time, the construction was quite rapid; consequently, the urban distribution was found disorganized in the late 1970s. While the core urban area was too crowded as industrial and residential areas were mixed and restricted each other's development, new urban areas were dispersed and lacked of infrastructure for a long time. Moreover, the improper location made some factories yield poor economic output and resulted in severe pollution.

During these 30 years, stimulated by political, military and social forces, Chongqing dramatically shifted from a commercial center along Yangtze River to an important heavy industry base. It indeed brought prosperity, whereas it also relatively weakened other aspects of the city being a commercial center. Accordingly, those once formed superior functions such as transportation system, financial system, cultural accumulation did not have chance to perform better.

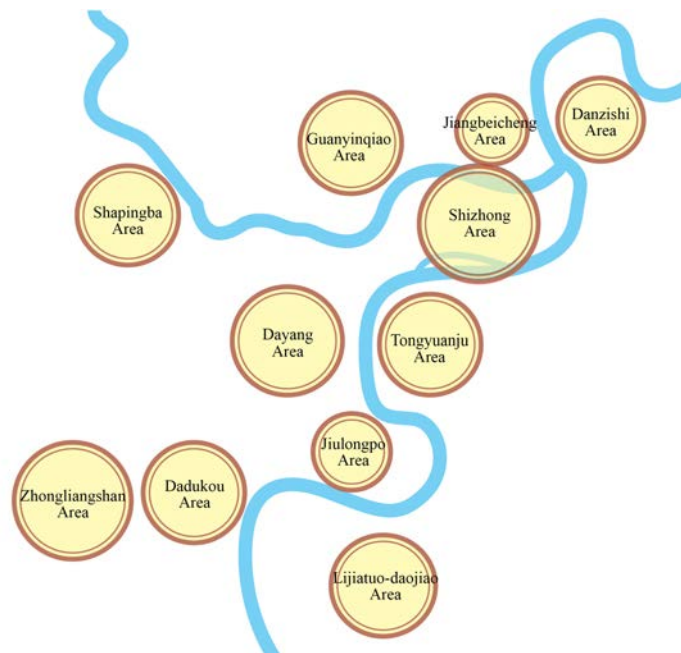


Figure 3: Dispersed Compact Groups, 1960

1978-1999: recovery and development

In 1978, Chinese government implemented the policy of Reform and Opening up, which later brought China rapid development. Significant system reforms concerning land system, household registration system, state-owned enterprise, etc., profoundly influenced the city development. As the city's pivotal role for economy development was gradually recognized and widely accepted, city construction received greater attention; after a 20-year stagnation, city planning work was finally picked up. In 1991, the urban housing system reform again greatly



promoted the city development by stimulating the real estate market and consumption; the housing sector became a significant part of economic activity and provided a sizable tax base.

In these 20 years, Chongqing also experienced an eventful history. In 1980, it was designated as one of the port cities opened for international trade along Yangtze River. In 1983, it became one of the comprehensive economy system reform pilot city. In 1984, it was listed as a separate unit under the state economic development plan so that Chongqing was able to enjoy the provincial-level right of economy management. In 1992, according to Comrade Deng Xiaoping's South Talk, Chongqing officially became a city of open economy. Hereafter, Chongqing gradually regained its importance and influence as being one of the commercial centers as well as a transportation hub along Yangtze River and southwest areas. Later in 1997, Chongqing was designated as the forth MCG with its area growing fourfold. The new municipality faced with 2 very tough problems, Three Gorges Dam project and the task to make center metropolitan areas drive the development of larger countryside areas. Therefore, although Chongqing did achieve significant achievement in metropolitan areas, with large undeveloped areas the general situation was soon found left behind coastal cities like Shanghai, Guangzhou, Shenzhen.

After the National City Planning Conference in 1980, the Chongqing government finished *The Master Plan* in 1983 and made some adjustment later in 1990. After an overall analysis, *The Master Plan (1983)* deemed that Chongqing is a commercial center in upper reaches of the Yangtze River, a water and land transportation hub and trade port, and an industrial city with both light and heavy industry (The adjustment in 1990 added that Chongqing is one of the National Famous Historical and Cultural Cities and an International Trade Port.); it has convenient transportation location, abundant natural resources and promising market for economy development.

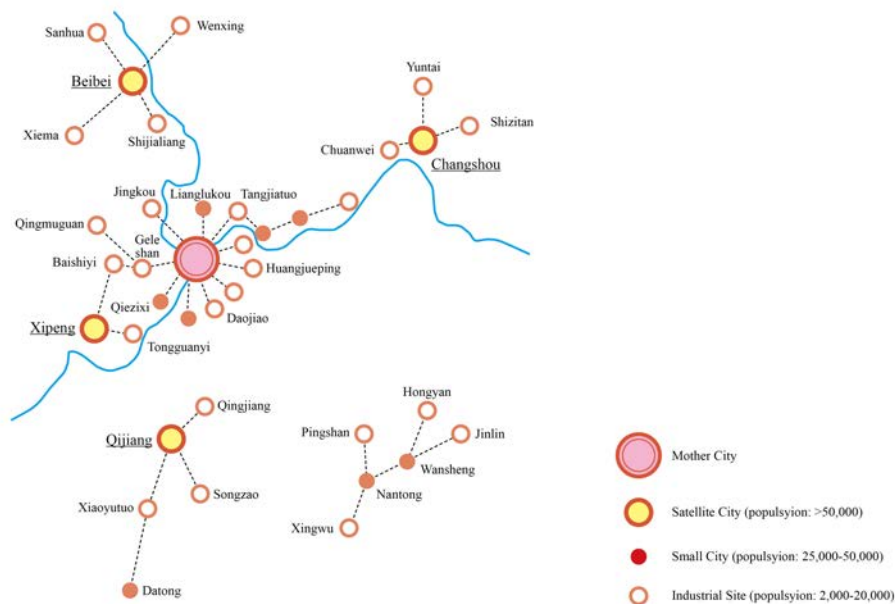


Figure 4: The Constellation-like Urban System Structure Plan, 1983

Moreover, in response to the natural geography, the plan valued the current urban morphology which was generally dispersed with compact groups, and further decided to develop a polycentric structure with 14 groups. Each group should be as possible as compact, offer both working and residential places, and be divided with river, green belt, slopes and cliffs, and farmland. The Shizhong District (presently Yuzhong District) was the center for policy, business and finance, meanwhile it was planned to build 4 other sub-centers, focusing on business, technology, culture and relocation site for enterprises and institutions, respectively, to relieve the stress of the center area. Around 100 km away from the old city was planned to construct 4 satellite cities, 8 small towns, and more than 20 smaller industrial areas, forming a constellation-like urban system structure (Figure 4). This structure was very unique since it was different from common layout of satellite town in metropolitan areas, or the layout of high-density cities on big-medium size; it stemmed from Chongqing's unique natural geographical environment, long-term history and current social-economic conditions.

As Chongqing became a municipality in 1997 and the old version master plan failed to adapt new situation, a new master plan was released soon in 1998. Firstly, the new plan modified Chongqing's status to the biggest center for



economy, technology, culture and education in upper reaches of the Yangtze River and southwest areas, a national transportation and communication hub, and an important industrial city, showing that Chongqing had developed into a more comprehensive city with greater competitiveness.

Moreover, the municipality greatly changed Chongqing’s administrative regions from 23,114 km² to 82,403 km², as well as the structure of its system of cities. Before municipality in the 1990s, in Bayu region, there was a big gap in the city scale in terms of population; the first-level city had the population over 1.6 million, while the second-level city’s population just dropped to only 0.25 million approximately. To deal with this situation, the *Master Plan 1996-2020 (1998)* proposed a new structure for system of cities according to the industrial distribution; this structure took metropolitan area as the center and the main transportation corridors as the development axis. It was planned to develop 3 regional central cities and create a networking system. In detail, there were 5 scales of cities, consisting of 1 megacity, 2 big cities, 9 medium cities, 33 small cities, 192 center towns and 517 general towns (Table 1). The plan divided Chongqing MCG into 4 big regions, consisting of center city and its surrounding dense areas, Wanzhou city group, Fuling city group and Qianjiang city group; the 5 city levels included center city of Chongqing MCG, center city of region and of county, center town and general town.

	Scale (10,000 people)	Amount	Population (10,000 people)
1	Megacity >100	1	500
2	Big City 50-100	2	52.5
3	Medium City 20-50	9	28.57
4	Small City 10-20	12	14.29
	5-10	21	5.75
5	Towns 1-5	192	1.30
	<1	517	0.38

Table 1: Structure for System of Cities in *Master Plan (1996-2020)*, 1983

From 1978 to 1990, Chongqing’s development was relatively steady because during this period, it did not get as much attention from the central government as before. *The Master Plan (1983)* proved to be successful especially by abiding and creatively developing the polycentric structure for Chongqing. After 1990, Chongqing gradually recovered its influence especially in economy as being designated as a city of open economy along Yangtze River, and later peaked as being designated as municipality, performing dramatic growth in GDP.

2000-2010: rebuilding and transition

Major progress has been registered in reform and opening up. After entering the 21th century, the industrialization and urbanization significantly accelerated. However, along with the fast urbanization emerged many issues. For instance, the growing gap between urban and rural areas, the deterioration of the ecological environment, uncoordinated development between urban and regional areas, etc. Moreover, as the reform and opening-up mainly focused on eastern coastal regions, the west has remarkably fallen behind the east. Accordingly, the *Great Western Development Strategy (GWDS)* was implemented in 2000 to enhance the economic and social development in the western region and consolidate the national defence by using superfluous capacity of economic development in the east coast areas. Later *the 11th Five-year Plan (2006-2010)* proposed the target to improve the environment, adjust industry structure and increase the tertiary industry, resulting a large scale of factories relocation from inner city to suburban areas.

Being as one of the most important cities in this policy, Chongqing got greater attention and enjoyed more preferential policies to develop into a growth pole in the Three Gorges area and southwest China. In 2005, Chongqing was designated as one of the national central cities along with other 4 cities⁴. Besides the positive influence of *GWDS*, Chongqing established Liangjiang New Area as the pilot area for urban-rural comprehensive reform in 2010. The different issue with Shanghai’s Pudong New Area and Tianjin’s Binhai New Area was that Liangjiang New Area need to build a better relationship between urban and rural areas. Moreover, as an industrial city, there were 31 state-owned industrial enterprises moved out of main urban areas, leaving lots of urban land with great potential to redevelopment.

Under this circumstance, the city planning objectives were to achieve urban-rural and regional integration, social justice, and maintain public benefit. It should practice urbanization in Chinese contexts, and develop a balanced settlement hierarchy from large cities to small villages. As some goals in 1998’s *Master Plan* had been achieved ahead of time, Chongqing released a new *Master Plan 2007-2020* in 2007. To improve the integration of urban and rural areas, the plan firstly specified the system of cities to 1 megacity, 6 big cities, 25 medium and small cities, 95 center towns and around 400 general towns. Secondly, an important concept for regional space structure, *One*

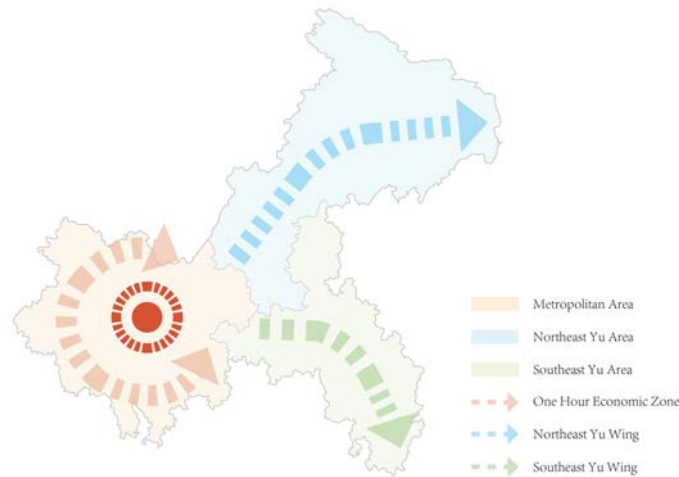


Figure 5: The One Center and Two Wings Structure, 2007

Center and Two Wings, was proposed; one center meant the one-hour economic center, consisting of 23 networking districts and counties, covering 2.87 km² and connected by diverse ways of transportation, including water transportation, railway, highway and air transportation; two wings consisted of 2 linear regions, Northeast Yu Wing centering on Wanzhou district and Southeast Yu Wing centering on Qianjiang District (Figure 5). These 3 regions have different development directions based on their own advantages; the center region should fulfil its leading role and make efforts to narrow the gap among cities and towns, while the other two regions should fulfil the duty of ecological migration and accelerate to transfer superfluous labour.

During these 10 years, Chongqing was able to build a relatively rational system of cities, explore the approach to build metropolitan areas and drive the development in rural areas.

Year	Planning	Strategic Positioning	Key Points	Major Influence
1946	<i>Draft of Ten-Year Planning on the Construction of the Alternate Capital</i>	the permanent alternate capital after the war; future center for policy, economy, military and culture in southwestern areas	satellite town; economy; transportation system; health facilities	not implemented
1960	<i>Chongqing Primary Plan</i>	a comprehensive and modern industrial city specializing in steel, machine, transport tool, heavy chemical industry	satellite town; industrial distribution; transportation system	not implemented
1964	<i>Third Front Construction Plan</i>	/	industry development	rapid growth in population and industry; poor economic output; severe pollution
1983	<i>The Master Plan</i>	a commercial center in upper Yangtze River, a water and land transportation hub and trade port,	polycentric structure; compact groups with mixed uses;	constellation-like urban structure formed;
1990	<i>The Master Plan (Adjustment)</i>	an industrial city with light and heavy industry, a national famous historical and cultural city, an international trade port	historic cultural heritage; International trade port	comprehensive development;
1998	<i>The Master Plan 1996-2020</i>	the biggest center for economy, technology, culture and education in upper reaches of the Yangtze River and southwest areas, a national transportation and communication hub, and an important industrial city	city-town system	great area growth; balanced city-town system
2007	<i>The Master Plan 2007-2020</i>	the important Center City, a national famous historical and cultural city, the national modern manufacturing industry base, a commercial center in upper Yangtze River, a transportation hub in middle and western areas	urban-rural integration; function structure;	one center two wings structure;

Table 2: Summary of Important City Plans



Summary

That the city development history of Chongqing is unique is not only resulted from its special landscape with rivers and mountains, but also because of those critical junctures, especially after it was forced to open up to Western countries in 1890s when its dramatic leapfrog development started. Since 1890s, Chongqing gradually started its urbanization and become the commercial center because it was the only opened port city in inland China. After the KMT government moved to Chongqing and designated it as the wartime capital, Chongqing reached its peak of political status, jumping to the national political, military and commercial center and experiencing the wartime prosperity with a 10-time increase of population from 1936 to 1946; this is also the period when Chongqing first got its heavy industry development.

After the foundation of Republic of China in 1949, Chongqing achieved significant success during the difficult time because of the *Third Front Construction Policy*, which greatly enhanced its heavy industry foundation and grow into one of the most important industrial bases nationwide. Then in 1978, along with *Reform and Opening Up*, the whole nation experienced significant change and so did Chongqing. However, since the *Reform and Opening Up* mainly focused on eastern coastal cities, Chongqing's development was soon found left behind after 1978. Therefore, in order to minimize the gap and strike a balance, the central government designated Chongqing as the fourth MCG in 1997 and released *Great Western Development Strategy* in 2000, helping Chongqing develop into a growth pole in the Three Gorges area and southwest China.

Driven by political power, social organization and economy development, Chongqing's area, population and Per Capita GDP greatly increased from 1949 to 2010. Among these forces, political ones contributed most especially by changing the administration area of Chongqing, continuously practicing and developing the idea of dispersed and compact groups (Table 3).

Period	Critical Junctures	City Index			Main Motive Forces
		Area (km ²)	Population (10,000 persons)	Per Capita GDP (yuan)	
1949-1957	The Great Leap	7692 (1959)	2005.18	132.45	political power; social organization
1957-1977	Third Front Construction	9848 (1978)	2724.89	221.00	political power; social organization; economy development
1978-1990	Reform and Opening-up	23114 (1983)	2920.90	1122.09	social organization; economy development
1991-1996	Designation of City of Open Economy along Yangtze River;		3042.92	4350.71	political power; social organization; economy development
1997-2010	MCG ; Three Gorges Dam Project; The Great Western Development	82403 (1997)	3303.45	26127.28	political power; social organization; economy development

Table 3: Summary of Critical junctures, City Index and Main Motive Forces

Concluding comments

This study reviewed the city development and planning history of Chongqing from 1949 to 2010, finding that critical junctures, usually followed by significant policies and strategies, constituted a crucial motive forces for its development. Generally, Chinese cities are motivated by comprehensive forces in regard of policy, economy and society, however in Chongqing, especially in modern period, political power, instead of social and economic accumulation, played a crucial role and stimulated its development rapidly.

Meanwhile, in response to these continuing policy shifting, the city planning proved to be reasonable and successful, particularly concerning the city structure. Based on its own geography and profoundly influenced by the organic decentralization theory which was widely spread in the Modern China, the idea to develop Chongqing into a polycentric city with dispersed compact groups remained and its implication kept being specified and grew. Developing from the late 19th century as a city with one single center, Chongqing's urban morphology gradually grew bigger and more comprehensive. During the wartime, its urban areas began to disperse and primarily formed the quincunx structure. The *Third Front Construction* in 1960s brought about a rapid development of small cities and towns; as the city planning came back on track in the 1980s, city development became more rational and the constellation-like structure began to emerge. Later after its municipality, the administrative area greatly grew and the polycentric structure at a bigger scale formed.

After around the 30-year development after the first city planning document was released, Chongqing has already built a comprehensive development framework in system of cities, transportation and economy. Along with the history, the political environment and national strategies kept changing, and so did the direction of Chongqing's development. Therefore, city planning in Chongqing generally stayed on macro level and did not go further. As



the nation is developing into a new stage, Chongqing is also embracing its new chance and challenge now; this study provided suggestions that it is time for Chongqing to adjust the development objectives from macro structure building to micro quality improving. First, it is pivotal to continue the environment-friendly polycentric structure development according to the natural geography. This will also strengthen Chongqing's identity as mountain and river city and help build residents' identity which can transfer to the competitiveness of the city. Moreover, Chongqing still needs to improve its livability and sustainability both ecologically and socially, which particularly require attention on human scale and everyday life. To address this, it should try to improve the quality of urban environment, create more livable communities, provide more public spaces with diverse uses, as well as conserve its historic heritage. Finally, there are already increasing urban redevelopment projects where traditional planning theory finds difficult to deal with. Urban redevelopment requires new knowledge including economy, property law, management, and so on. Public participation will be critical to guarantee the justice during the process, that is to say, besides making sure that politic and economic forces can fulfil their role, decision makers should also pay attention to social forces, making multiple objectives, exercising public participation and achieving social justice in policy making and implementing process.

Acknowledgements

I would like to express my gratitude to all those who have helped me during the writing of this thesis. I gratefully acknowledge the help of my supervisor Professor Nakajima Naoto. I do appreciate his patience, encouragement, and professional instructions during my paper writing. Also, I would like to thank Professor Lu Feng, Doctor Chen Liran and Doctor Zhou Xiang, who kindly offered lots of help and suggestion for this paper. Last but not the least, my gratitude also extends to The China Scholarship Council who supported my Ph.D. study.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Min Jiang is a first-year Ph.D. student from the University of Tokyo, Japan. Her Ph.D. research is dealing with publicness, development of riverfront areas, production of space, especially in Chongqing, China. Before that, she studied the history and theory of American humanistic urban design, focusing on streets, for her Master degree.

Endnotes

¹ The 4 municipalities in China include Beijing, Shanghai, Tianjin and Chongqing.

² The first generation of National Central Cities were designated in 2010, including Beijing, Tianjin, Shanghai, Guangzhou, Chongqing.

³ Prince Zhao Chun described his being titled as Prince Gong and then Emperor Guangzong in the following month as a double celebrations.

⁴ Other 4 national center cities are Beijing, Tianjin, Shanghai and Guangzhou.

Bibliography

Alternate Capital Planning Advisory. *Draft of Ten-Year Planning on the Construction of the Alternate Capital*. Chongqing: Chongqing Planning Exhibition Hall & Chongqing Library. Reprinted in 2005

Chongqing Urban Planning Bureau. *The Historical Atlas of Chongqing*. Shanxi: Xi'an Cartographic Publishing House. 2017.

Chongqing Statistics Bureau. *Chongqing Statistical Yearbook 2017*. Chongqing Statistical Publishing House. 2018

Cheng, Yusi. *A Study on Chongqing Urban Morphology Evolution (BC. 316-AD 2012)*. Chongqing University. 2014

Han, Sunsheng., Wang, Yong. *City Profile: Chongqing*. Cities 18, no. 2 (2010): 115-125.

Wei, Jiayong. *Study on the Development about CQ Urban Zone Spatial Construction*. Chongqing University. 2005.

Jiang, Ziying., Zhang, Xiang., Xu, Jiangang. *A Research and Discussion on the Evolutionary Sequence of Old City Transformation since Reform and Opening up: A Study based on the Dynamic Perspective of Urban Regime*. Modern Urban Research 2014, no. 4: 80-86.



Li, Cai. *A Study on the History of Chongqing Early-modern City Planning and Construction (1876-1949)*. Chongqing University. 2012

Qi, Xiaomeng. *The Research of Urban Morphology Development in Yuzhong Peninsula--Based on the Urban Planning Text (1949-2014)*. Chongqing University. 2015

Xie, Xuan. *Study on the Urban Construction and Planning of Chongqing (1937-1949)*. Chongqing University. 2011

Xu, Yuhui. *History, Present, Future: research on the Evolution and Planning of Chongqing's Center Urban Areas*. Chongqing University. 1999.

Xu, Suning. *Mega-event and Development of City*. Urbanism and Architecture ?, Vol. Iss 2 pp.

Yi, Zheng., Chen, Zhigang., He, Yang. *Chongqing's Master Plan: Retrospection and Thought*. Beijing City Planning and Construction Review 2015, no. 1: 76-81.

Zhang, Xinyu. *The Preliminary Study of the Evolution of Spatial Structure of Early Modern Chongqing: based on Maps and Images*. Chongqing University. 2014

Zhou, Yajie., Gao, Shiming. *Change and Prospect of Guiding Ideology and Policy Regime of China's Urban Planning in 60 Years*. Urban Planning International 31, no. 1 (2016): 53-57.

Image sources

Figure 1: Redrew by the author according to The City Planning Department of Chongqing. *The Historical Atlas of Chongqing*. Shanxi: Xi'an Cartographic Publishing House. 2017.

Figure 2: Alternate Capital Planning Advisory. *Draft of Ten-Year Planning on the Construction of the Alternate Capital*. Chongqing: Chongqing Planning Exhibition Hall & Chongqing Library. Reprinted in 2005: p132.

Figure 3: Redrew by the author according to Xu, Yuhui. *History, Present, Future: research on the Evolution and Planning of Chongqing's Center Urban Areas*. Chongqing University. 1999: 175.

Figure 4: Redrew by the author according to Xu, Yuhui. *History, Present, Future: research on the Evolution and Planning of Chongqing's Center Urban Areas*. Chongqing University. 1999: 255.

Figure 5: Redrew by the author according to Master Plan 1996-2020, 1998.

Designing the Chinese post-Imperial capitals in correspondence of political chances. A comparative analysis of planning proposals for Nanjing in the Thirties and Beijing in the Fifties

Domenica Bona*

* *Università degli Studi Roma Tre, domenica.bona@gmail.com*

With a historical and morphological approach, this paper marks the correlation between the critical junctures occurred in China from 1911 to 1958 and the new planning proposals for the modern capital cities rebuilt at that time, Nanjing and Beijing. This paper assumes that the modern breaking points of Chinese history have the key role in reshaping the urban landscape as in the past. From this perspective, the research assumes an 'interpretative morphological approach' based on the comparison of the case studies. Stressing the attention on the planning features of each proposal, it is possible to highlight, firstly, the way new plans reproduce the classic patterns and override them in accordance with the political ideals and propaganda meanings that architecture and urbanism are supposed to embody; secondly, a constant application of traditional forms and urban patterns, by citation and reinterpretation. These two orders of results could eventually prove that reactionary and revolutionary political forces are influenced by the same atavistic rhetorical frameworks when they come to draw the spatial palimpsest of their power. Thus, each critical juncture is a new testing ground for the resistance of those recurring planning features in the present days as in the past.

Keywords: Beijing, China, colonial history, East-Asia, morphology, Nanjing, planning, planning history, planning legacy, urban history, westernization

Introduction

As claimed by Andrew Boyd and Arnold Pacey concerning the Chinese pre-industrial era, historical breaking points used to represent the conjuncture of the rise of new dynasties, foundation of new cities, construction of great infrastructures and boost to arts and technologies. At the same time, they represent the fall of old dynasties, famines, civil wars, and the destruction of former symbols of power.¹

This paper assumes Pacey and Boyd's theory and claims the possibility that the modern breaking points of Chinese history have had the same role in reshaping the urban landscape, specifically the one of new capitals, as in the Imperial era. In the framework of the author's PhD thesis in which this research was developed, the morphological analysis of the proposals of development of the Chinese post-imperial capital cities of Nanjing and Beijing was fundamental in understanding the elements of analogy and continuity between them and the Chinese history of planning.

Nanjing had been the capital during the first Chinese Republic led by Sun Yat-sen's nationalist Kuomintang Party (1912-49). Later, Beijing returned to be the capital during the People's Republic of China led by Chinese Communist Party of Mao Zedong (1949-76). If we consider the continuity that organs of state have had and still have in China and if we assume the existence of socio-cultural factors that have allowed historical-political factors to determine in the urban planning of these two capitals as in the past also in the present, then it is possible to look to the governments of the post-imperial period as to 'modern dynasties' which in turn have marked moments of break, ascending phases of development and descending phases of decay.

Methodology

From a planning perspective that brings together the complex multiplicity of instances from architecture, history and human geography, this paper demonstrates the existence of invariants in the Chinese city and in its urban facts across the centuries and up recent days.² The method applied for this purpose is based on the morphological interpretation of the cities in a historical perspective. This approach was introduced in the framework of the Italian school of urban studies of the second half of the twentieth century when the typo-morphological method was developed in studying the Italian and European cities.³

In the framework of this research, the method required to collect the original documentation (e.g. maps, master plans, descriptions, etc.) of several case studies from their foundation up today. In a second phase, a selected series of case studies were redrawn, at the same scale and by using the same criteria in terms of contents and graphic.

The 18th International Planning History Society Conference - Yokohama, July 2018

These redrawn maps synthesize the elements of the urban structure and allow to compare in their diachronic evolution the different stage of development of each city also with the unbuilt planning proposals. Indeed, the confrontation of these morphological comparative maps picks out similarities and correspondences under various aspects (e.g. structural, dimensional, formal and visual) that do not end in the physical description of urban data but refer to a vocabulary that is more than ever symbolic and rooted in the Chinese urban culture.

First case study. The nationalist capital of Nanjing

With the fall of the Chinese Empire after the Xinhai Rebellion in 1911, Sun Yat-sen⁴ led the founding of the first Chinese Republic and the relocation of the capital to Nanjing.⁵ During the Thirties, a decade remembered as the 'Nanjing decade', the city became a symbol of modern Republican China. Indeed, in a pro-western climate the KMT involved many experts in the re-construction of Nanjing, among which Chinese and foreign technicians and politicians affiliated to the party, many of the young educated abroad, and entrepreneurs active in the Treaty Ports interested in participating in the construction of the Post-Imperial Modern China.⁶

Already capital in the medieval period, the original urban structure is that of a double city. Dated back to the tenth century, the first settlement has a rectangular shape and is located near the Yangtze River. Subsequently, new walls were built to include a larger area to the north-west of the city, between the river and Xuan Lake, and the imperial palace built *extra moenia* in 1368 under the Ming dynasty (1368-1644).⁷

Nanjing was an important commercial city but the proximity to Shanghai contributed to its decay. This did not favour urban growth so much that the structure, the footprint and the built fabrics remained mostly unchanged from the Middle Ages until the stipulation of the Treaty of Nanjing (1842) when the establishment of the foreign commercial companies contributed to build the railway, strengthen the port, and found numerous activities related to overseas trade.

The state of decadence and the possibility of building freely on the still predominantly agricultural land made Nanjing the ideal place to settle the capital of the Republic of China as Sun Yat-sen already proposed in the first decade of the twentieth century. In 1925, important works were started to improve the road network and build new buildings;⁸ in the same year, the competition for the construction of the Sun Yat-sen Mausoleum was launched and won by Lu Yanzhi.⁹ It was the first Nanjing building designed to consecrate the new Republican political power,¹⁰ on the southern side of Mount Zijin east of the Ming Tombs, Lu proposes an elegant and majestic adaptive architecture that reflects the aims of the tender and the principles of the 'Chinese form movement' (trad. 中國固有形式, Zhōngguó gùyǒu xíngshì), combining classic architectural forms with modern construction technologies.¹¹ The construction of the mausoleum was crucial to enable Nanjing to become the capital of the Republic, with the consent of the entire KMT; the southern position made Nanjing well placed, safe enough and far from the north occupied by Japanese and Communists.

For the leader of KMT Chiang Kai-shek, the development of the city was a priority so that in 1928 the 'National Capital Reconstruction Planning Committee, guesting Chinese and American designers including Ernest Goodrich and Henry Murphy.¹² The committee soon launched the competition for the 'Capital Plan' (trad. 首都计划, Shǒudū jìhuà) proposing an unprecedented program whose objective was the creation of a new *capitolium*. This was to turn into a project that would glorify China rebirth, in continuity with the past, and KTM rise to world power. As in the case of the mausoleum, the competition brief gave precise indications on the aesthetics of the project, that is a classical Chinese style with explicit sober monumental elements reworked in a modern key and contaminated by new types and construction technologies. Wide boulevards, long-laced straight-lines, tree-lined avenues, public gardens, grand buildings, and triumphal monuments are the elements that can be found in all the proposals.

In fact, all the projects took inspiration from the *beaux-arts* plans of Washington, New Delhi, Canberra and Paris, adapting the classical features of Chinese urbanism, such as the symmetry along the longitudinal axis, the partition into sectors and the horizontality of the built skyline. Among the many projects presented, two are those that best represent the positions and variations suggested by the design teams, that by Henry Murphy and the winner by Wong Yook Yee and S. Howard Jee.¹³

Murphy planned a 'Capitol Hill' outside the walls south of the Sun Yat-sen Mausoleum. With a second doubling of the city, Murphy proposes a continuation of the longitudinal axis of the memorial on which to graft monumental urban settlement that would have collected the governmental, administrative, cultural, and residential functions of the new capital.¹⁴ The winning project by Wong Yook Yee and S. Howard Jee proposed another *beaux-arts* urban layout and overlapped the eastern part of the city, thus foreseeing the demolition of the imperial palace and the eastern city walls. With large orthogonal straights and diagonal vaults, the urban grid is permeated with marked citations of the cosmological city, eventually, making architectural choices and setting itself in the wake of the *adaptive* style in vogue.

The 18th International Planning History Society Conference - Yokohama, July 2018

However, the winning project of Wong and Zhu was criticized because it was too expensive and complex to carry out. The Planning Committee then opted for a less onerous proposal, eventually not wither realised, that plans to raze the eastern *intra-moenia* area of the Ming Palace. The layout is based on an orthogonal grid with an irregular perimeter that follows the pre-existing form of the city. The central north-south axis is conceived as a large tree-lined boulevard interrupted in the middle by two monumental buildings surrounded by squares and gardens, which ends in the north at the railway station on which converges a new section of the railway that winds the city up at the banks of the river. The core area along the main axes is intended for large public functions, the peripheral blocks are intended for high to low-income residential areas, and the whole settlement would have featured a broad and coherent range of *adaptive* architectural designs.¹⁵

Second case study. The communist capital of Beijing

Beijing has had the fortune of never having been dismissed from its role of capital until the fall of the Empire.¹⁶ Founded by the Mongol Kublai Khan in 1271 adjacent to a pre-existing Chinese city dating back to 221 BC, Beijing may be considered the most sacred city in Chinese history for its precise adherence to the cosmological model of the 'magic square'.¹⁷ With the abdication of Emperor Puyi in 1911, however, the decline of Beijing begins. The city changed its name to Beiping, was dismissed from the role of capital and fell under Japanese control between 1937 and 1945.¹⁸

In 1949, right after the founding of the People's Republic of China, the Communist intelligentsia brought back the capital to Beijing and started an apologetic-glorifying program that led to the definition of political symbols, cults and, the image of the new Chinese proletarian era. These interventions can be grouped into two macro-phases.¹⁹ The first phase (1950-53) contributed defining the image of the state with the projects for the National Emblem (1950), the Monument to the People's Heroes (1952) and the urban expansion plan of Beijing (1949-53). They respond, in fact, to the immediate needs to make the identity of the Party recognizable and concretely demonstrate the political purposes that led to Mao's seizure of power. The second phase (1954-59) instead represents a theoretical and practical climax during which the dominant cultural positions were defined. During that time, the expansion plan for the capital was done (1954-58) and a new capitolium was created with the so-called 'Ten Great Buildings' and Tiananmen Square (1959).

When in 1949 the Beijing Municipal Government announced the design competition for urban expansion in Beijing, that was the first Chinese experience of urban planning since the Nanjing days. The debate was fervent and the ideas were inspired by what had already been done in Russia. The attitude was basically explorative and the main proposals were three, very different from each other: (1) the conservative one by Liang Sicheng and Chen Zhangxian and known as the 'Liang-Chen Plan' which proposes an urban doubling and the conservation of the historical fabric,²⁰ (2) that of the Soviet technicians coordinated by M.G. Barannikov redefining the historical core and urban growth on the Muscovite model, and (3) that of the Planning Committee headed by Hua Nankui, Zhu Zhaoxue, and Zhao Dongri which mediates the positions of the other two proposals.²¹

The 'Liang-Chen Plan' applied the principle of organic decentralization proposed by Eliel Saarinen in the plan for Helsinki (1917) and applied by Abercrombie to London (1944).²² It proposed the preservation of the built fabric of Beijing and the construction of a new core of expansion to the west outside the historical city.²³ Preserving the walls, the monuments, and the *hutong*, the plan thus concentrated the new functions outside the walls. The administrative centre was placed along a longitudinal axis parallel and dimensionally analogue to the one of the Forbidden City which was taken as a reference for proportions and typological layout. The result was meant to create a double city with the historical low-dense built fabric and a new modern settlement built by a set of monumental pavilions for public functions and skyscrapers for apartments and offices.²⁴ However, Liang's foresight found a weak endorsement by the Party and the 'Liang-Chen Plan' was considered excessively conservative.

On the contrary, the 'Proposal on the improvement of the Beijing Municipal Administration' draft by the Soviet group was based on the idea that Beijing should become the industrial centre capable of leading the modernization of the new China by abandoning its traditional political and cultural vocation. In general, the plan contained elements already tested in the construction of Soviet industrial cities and in the redesign of Moscow and Stalingrad. The historic centre was meant to host the central administrative and civic district, on the site of the future Tiananmen Square and Chang'an Road. The program also proposed the construction of social-housing neighbourhoods and greenbelts separating them from the historic city centre where the main public, military and administrative functions should have converged. In fact, the plan denied the monocentric structure of Beijing, transforming the city in a polycentric system with a core and several new towns, every one characterized by a functional vocation and high levels of independence.

Assuming to the Soviet proposal, in 1953 the Planning Committee elaborated a Party-internal project, the so-called 'Chang-guan-lou Plan', and in 1954 the final version was published as the 'Master Plan for the Construction of

The 18th International Planning History Society Conference - Yokohama, July 2018

Beijing',²⁵ the first definitive urban project for Beijing further revised in 1958. The plan thus clarifies the dual role of Beijing as an industrial metropolis and political, institutional and cultural reference core of the country. It outlined a twenty-year development based on the principle of 'control urban area and develop the far suburb'.²⁶ From a planning perspective, the plan proposed the reversal of the traditional north-south axis and the strengthening of Chang'an Road, an east-west boulevard appointed to be the 'axis of modernization'.²⁷ Indeed, by changing the logic of the original layout, this new plan deeply upset the classical structure of the consolidated city, creating an unseen **double axiality**, like a *cardo* and *decuman* system.

On the basis of the 'Chang-guan-lou Plan', Beijing Municipal Government in parallel carried on the architectural for Tiananmen Square and the 'Ten Great Buildings'.²⁸ The design of the square and these buildings was entrusted to various groups of architects and engineers in order to favour the typological-stylistic variety that the Party intended to pursue. Despite the modern technologies applied in the construction, in fact, the whole composition of the facades or just details evoke the Chinese identity that has its roots in history. Indeed, all the buildings were endowed with decorative elements of the classical tradition (e.g. architraves, shelves, and stairways), the essence of the 'National Style' that would be developed from then on.²⁹

Comparing the two case studies

The analysis of the planning proposals and the urban development of the case studies briefly presented was conducted by applying a comparative morphological method. Specifically, Nanjing was analysed in seven drawings, mapping the urban development in 1912, 1927, 1941, and 1974, and the three planning proposals of the 'Capital Plan' (1929) by Henry Murphy and the winner by Wong Yook Yee and S. Howard Jee and Nanking Planning Committee. Beijing was analysed in seven drawings too, mapping the urban development in 1911, 1940, 1959, and 1974 and the unbuilt planning proposals by the Japanese (1937), Liang Si Cheng and the M.G. Barannikov (1953). By reading the evolution of each city and then comparing the two, it came to evidence the presence to analogous patterns in terms of design tools, planning features, political context and cultural background, despite the apparent diverse historical frameworks.

Grafts and doublings

Planning history of China has shown two different attitudes towards expansion tools that were detected also in the proposals for Nanjing and Beijing. On one hand, the 'urban graft' overwhelms the order of things by destroying the existent built fabrics and super-impress a new settlement. It is a practice that would imply a clear intention of creating a new palimpsest in contrast with the past. On the other, the 'urban doubling' allow building a new settlement by juxtaposition rather than. It is a consolidated practice that can be observed in the most ancient Chinese cities, as in the nineteenth-century Nanjing and in the early twentieth-century. The will to not cancel the traces of established settlements tells us about a dual purpose: to build on symbolically uncontaminated foundations and construct in a regime of rapidity and economy of efforts.³⁰

In pre-modern times when Kublai Khan establishes the Tartar capital in Beijing, instead of occupying the pre-existing Chinese city, he founded his own one *ex-novo* based on the cosmological model, whose walls were graft on the northern side of those of the ancient settlement. The same happens in many other cities where the rise of new rulers creates the conditions for expanding, reorganizing and re-imagining the structure of existing cities. Nanjing makes no exceptions since the Ming doubled the urban structure when they built the new imperial palace *extra-moenia*, side by side of the original walled city.

This *modus operandi* was later reinterpreted functionally by the foreigners who 'colonized' China in the Nineteenth century, in the transition period between the pre-modern and modern age, and by the Chinese *intelligentsia* in the post-imperial time. This is demonstrated by the planning proposals draft at the competitions for Nanjing (1929) and later for Beijing, with the doubling project by the Japanese (1941) and the Liang-Chen Plan (1949). In all these projects, the doubling theme becomes functional to the definition of an urban plan of great impact and to the safeguard of the historical settlements from the devastation that an urban graft would have produced. However, although the theme of the double city has been revised frequently and has found a broad consensus, none of the doubling projects has been brought to realization. Eventually, in Nanjing the fall of the KMT blocked the process of urban re-foundation and, even more striking, in Beijing the urban structure remained still strongly monocentric, despite the attempts to shift the centre of gravity to areas other than the Forbidden City.

The axis of urban symmetry

Modern plans for the capitals show that the monumental axis is one of the most frequent figures of reinterpretation of the cosmological urban model. As in the pre-modern age, the axis is a planning tool capable to set the urban

The 18th International Planning History Society Conference - Yokohama, July 2018

structure of settlements and put into relation the practical issues of design with the spiritual symbology of religion (e.g. North-South as god-man) and the celebratory issues politics.

In Nanjing, all the projects developed during the Nanjing Decade were based on a symmetrical development supported by a longitudinal axis that connects the city with the surrounding environment (e.g. the mountains to the north, the water to the south). Associated with the use of classical architectural typologies (e.g. pavilion buildings with pagoda roof), those projects all introduced modern western themes such as that of public space, extroversion, verticality, and therefore a panoptic vision of the axis which dominates the entire array of buildings surrounding the great open space along the axis. The axiality, in fact, is reiterated by the design of built fabrics that generates a series of typified blocks aligned from north to south, which surround the public space and the special blocks leaning against the axis. In Beijing, instead, Tiananmen Square is located south of the Forbidden City along the existing axis of symmetry to the south up to Qianmen. By symbolically extending the pavilions of the Forbidden City outside its walls along the edges and in the middle of the square, the axis intercepts a series of buildings that double the system of the imperial compound, made up of interrupted central perspectives and paths that, never straight, oblige to cross or turn around these large buildings. At the same time, the consistency of the architectural artefacts accentuates the long perspective and dominance of a horizontal landscape, devoid of spatial references outside the square itself.

Indeed, the figure of the axis returns to the most relevant urban projects through the past to the twentieth century. On the one hand, it preserves the formal characteristics of the physical urban layout based on rigour, symmetry, and a ratiocination. On the other, it embodies the values and uses proper of the institutions in place.

In the ancient time already, the triumphal road used to connect the southern gate of the imperial palace to corresponding one of the city walls, with a straight line along which stand a series of temples and altars marking the obligatory stages of solemn processions conducted by the emperor. In the twentieth century the transfer of the power of the hands of the emperor first, the KMT then, and the CCP later has meant the shift of institutions from one capital to another. In this process, in both Nanjing and Beijing the characters of the axis change and the functions evolved and the instances of the modern city were added to the traditional celebratory values. In fact, the monumental axis is transformed into in an **equipped linear urban space**, reminiscent of the market street, characterised by a dense agglomeration of civic venues, government headquarters, and business centres attractive at the urban at mostly national scale.

Conclusions

As emperors of 'modern dynasties', Chang Kai-shek and Mao Zedong have sealed the beginning of their power through the construction of modern capitals inspired more or less explicitly to the Chinese classical model. In fact, in both moments the change in the geography of power has pushed the *intelligentsia* to redesign the capital city, so to embody new values and objectives in a city as much as in the nation. This fact eventually proves that reactionary and revolutionary political forces were influenced by the same atavistic rhetorical frameworks when they came to draw the spatial palimpsest of their power. Thus, urban planning continues to have in itself a strong political connotation and, we could say, the anti-democratic characteristics that belong to the feudal culture of the past period. As commonly known, the Chinese political model has historically been heavily subjected to hierarchical mechanisms of control that left little room for the debate and participatory policies. In this sense, the exceptional nature of the two cases is confirmed by the way in which the urban planning process was carried out. The **competition of ideas**, in fact, is an uncommon tool for the Chinese context, both in terms of architectural and urban design, as it implies a level of democracy and cultural openness that *de facto* do not belong to the Chinese cultural mind set. Nevertheless, in both cases, the winners of the tenders had been disregarded and the project re-entrusted to a design institute, a direct expression of the government.

To conclude, similarities emerged between the urban and architectural proposals for Nanjing and Beijing. From the urban perspective, all the projects envisaged significant interventions on the urban structure, monumental and necessary for the construction of the new centralities and the expansion of the existing urban fabric. From the architectural point of view, in Nanjing the *adaptive* architecture combines classical forms with modern construction techniques, while in Beijing the scientific principles of socialist functionalism imported from Russia were applied for the first time and gave birth to the *National Style*. Therefore, both proposals do not end within the urban scale but develop the composition of the architectural objects and their typological, constructive, and decorative characters so that each competition is an occasion of a choral work on multiple design scales.

As a result, Nanjing and Beijing represent the modern *continuum* of that tradition of urban renewal contextual to the advent of new political powers; at the same time, they show how urban planning and architecture are conditioned by the political power. Despite the differences in the political climate that characterizes the two historical moments of the Chinese modern history, in both, we see analogous celebratory intentions for which the urban project becomes an opportunity to transfer the symbols of power in the physical space of the city.

Tables and Figures

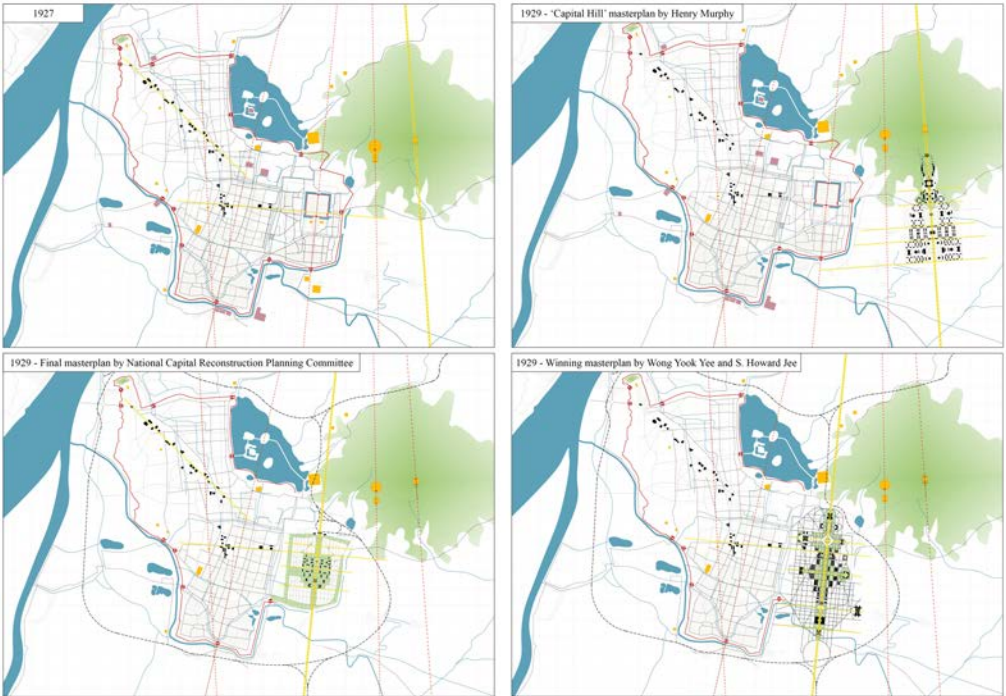


Figure 1: Nanjing and the three main planning proposals of the competition for the Capitol Plan (1929). Drawings by the author. From left, clockwise: Nanjing in 1927, the 'Capitol Hill' masterplan by Henry Murphy, winning masterplan by Yook Yee Wong and S. Howard Jee, and the final Capital Plan by the National Capital Reconstruction Planning Committee.



Figure 2: Beijing and its urban development. Drawings by the author. From left, clockwise: Beijing in 1911, the 'Liang-Chen Plan' masterplan by Liang Sicheng and Chen Zhangxian (1953), the 'Master Plan for the Construction of Beijing' and the Ten Great Buildings by the Beijing Municipal Planning Committee (1959), and the urban development of the post-Mao period.

The 18th International Planning History Society Conference - Yokohama, July 2018

Acknowledgements

This paper presents partial results of the author's PhD thesis '*La città cinese e i caratteri perduranti tra tradizione e modernità*' (transl. '*The Chinese city and its persistent planning features between tradition and modernity*').

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Domenica Bona (1986) is an Italian architect, and researcher currently based in Rome. She studied architecture at the Shenzhen University (PRC) and graduated from School of Architecture of Polytechnic of Milan in 2012. Largely involved in academic research related to contemporary Chinese urbanism and architecture, she holds a Ph.D. from the Third Rome University and her doctoral thesis investigates the concept of *chineseness* in the image of Chinese contemporary cities. Since 2013, Domenica has been teaching assistant in Urban Planning, Human Geography and Urban Studies in Milan and Rome. Since 2015, she has been the curator of Divisare and was recently appointed editor-in-chief of Divisare Books.

Bibliography

- BICP. "Preliminary Master Plan for Construction of Beijing City in the Years of 1957 -1958." Beijing Municipal Institute of City Planning & Design, <http://www.bjghy.com.cn/ghyEng/ghyEng3develop.aspx>.
- Boyd, Andrew. "Chinese Architecture and Town Planning, 1500 B.C.-A.D. 1911." *Technology and Culture* 5, no. 1 (1964): 92-96.
- Caniggia, Gianfranco. *Lettura Dell'edilizia Di Base*. [in Ita] Venezia: Marsilio, 1981.
- Cody, Jeffrey W. *Building in China: Henry K. Murphy's "Adaptive Architecture" 1914-1935*. Beijing: Chinese University Press, 2001.
- Lao-Tzu. *Tao Te Ching*. Edited by D. C. Lau. Penguin Classics, 1964.
- Li, Dongquan. "Policy, Space and Governance: Lessons from Beijing." *Business and Public Administration Studies* 8, no. 1 (2014): 77-90.
- Liang, Si Cheng. *Complete Works*. [in Chinese] [梁思成全集]. Vol. 5, Beijing: China Construction Industry Press, 2004.
- Ming, Yuezhe. *The Manchukuo Capital Planning*. [in Chinese] [伪满洲国首都规划: Wěi mǎnzhōu guó shǒudū guīhuà]. Beijing: Social Science Literature Publishing House, 2011.
- Muratori, Saverio. *Per Una Operante Storia Urbana Di Roma*. [in Italian] Roma: CNR, 1963.
- . *Studi Per Una Operante Storia Urbana Di Venezia*. [in Italian] Roma: Istituto Poligrafico dello Stato, 1960.
- Pacey, Arnold. "Five Chinese Cities before 1840." In *Pre-Industrial Cities and Technology*, 263. Abingdon-on-Thames: Routledge, 1999.
- Rossi, Aldo. *L'architettura Della Città*. [in Italian] Padova: Marsilio, 1966.
- Rowe, Peter G., and Seng Kuan. *Architectural Encounters with Essence and Form in Modern China*. Cambridge: MIT Press, 2004.
- Saarinén, Eliel. *The City: Its Growth, Its Decay, Its Future*. Cambridge: MIT Press, 1943.
- Schinz, Alfred. *The Magic Square: Cities in Ancient China*. Fellbach: Edition Axel Menges, 1996.
- Sun, Yat-sen. *The International Development of China*. New York: The Nickerbocker Press, 1922.
- Tyau, Min-Chien T.Z. *Two Years of Nationalist China*. Shanghai: Kelly & Walsh, 1930.
- Yao, Qian, and Bing Gu. *Sun Yat-Sen Mausoleum*. [in Cn/En] Beijing: Cultural Relics Pub., 1981.
- Yu, Shuishan. *Chang'an Avenue and the Modernization of Chinese Architecture*. Washington: University of Washington Press, 2013.
- Zhu, Jianfei. *Architecture of Modern China: A Historical Critique*. Abingdon-on-Thames: Routledge, 2009.

The 18th International Planning History Society Conference - Yokohama, July 2018

Image sources

Figure 1: by the author.

Figure 2: by the author.

¹ Andrew Boyd, "Chinese Architecture and Town Planning, 1500 B.C.-A.D. 1911," *Technology and Culture* 5, no. 1 (1964); Arnold Pacey, "Five Chinese Cities before 1840," in *Pre-Industrial Cities and Technology* (Abingdon-on-Thames: Routledge, 1999).

² 'Urban facts' is a locution introduced by Aldo Rossi to define the architectural elements determining the geography of the city and its internal tensions in opposition to the residential built fabrics. See: Aldo Rossi, *L'architettura Della Città* (Padova: Marsilio, 1966).

³ Gianfranco Caniggia applied the typo-morphological method to several cases by comparison, demonstrating the general rules behind the evolution of urban fabrics in the medieval European cities. For example, in the case Como, he could determine the historical evolution of the city from the roman time and date the current urban fabrics. The same work was conducted by Saverio Muratori who applied the method to Venice and Rome, discovering the logic behind their urban development and the typological evolution of their architecture. See: Gianfranco Caniggia, *Lettura Dell'edilizia Di Base* (Venezia: Marsilio, 1981); Saverio Muratori, *Studi Per Una Operante Storia Urbana Di Venezia* (Roma: Istituto Poligrafico dello Stato, 1960); *Per Una Operante Storia Urbana Di Roma* (Roma: CNR, 1963).

⁴ Considered as the father of modern China, Sun Yat-sen (1866-1925) first proposed a modernization program for the country. See: Yat-sen Sun, *The International Development of China* (New York: The Nickerbocker Press, 1922).

⁵ The new capital was made official only in 1927 under the control of Chang Kai-shek (1887-1975), the general of the Kuomintang.

⁶ The transfer of the government from Beijing to Nanjing gave the KMT the opportunity to symbolically and physically break with the past and the feudal setting of the imperial society and institutions. The new Nanjing capital, in fact, changed the barycentric roles within the Chinese territory. As the North became part of the area under Japanese control, central-southern China became the forge of the country's first political, cultural, and technical modernization. Along the Blue River and the coasts of the Yellow Sea, the Treaty Ports were still open and these foreign outposts played an important role in creating international contacts and circulating ideas from outside.

⁷ Peter G. Rowe and Seng Kuan, *Architectural Encounters with Essence and Form in Modern China* (Cambridge: MIT Press, 2004).

⁸ Between 1925 and 1948, Nanshan Road became the showcase of the most modern architecture in the city. Banks, insurance companies, hotels, theaters, department stores, government, and commercial offices concentrated on two sides of the street. In fact, concurrent with the drafting of the 'Capital Plan', the Planning Committee commissioned the projects for many public buildings and required to ascribe them all within the main currents in which the *adaptive* architecture was declining: revivalism, neoclassicism and *déco*. Among the architects in charge of these designs, there are Allied Architects, Henry Murphy, Li Huibo, Xi Fuquan, Yang Tingbao, and Xu Jingzhi.

⁹ Lu won another competition in 1925, the one for the Sun Yat-sen Memorial Hall in Guangzhou, the hometown of the leader. Graduated from Tsinghua University in Beijing and Cornell University in the United States, Lu Yanzhi (1894-1929) worked as an architect with Henry Murphy in New York. Lu was one of the most important architects of the first generation educated abroad. In 1921, he founded one of the first private architectural offices in Shanghai, the Southeastern Architectural & Engineering Company (Dongnan jianzhu gongsi).

¹⁰ Qian Yao and Bing Gu, *Sun Yat-Sen Mausoleum* (Beijing: Cultural Relics Pub., 1981).

¹¹ Among the compositional references adopted by Lu, there are certainly the Tomb of Napoleon at the Invalides in Paris and the Pan American Union in Washington. See: Rowe and Kuan, *Architectural Encounters with Essence and Form in Modern China*.

¹² Foreign participation is a double meaning. On the one hand, it was useful to legitimize the Republican process in the eyes of the other foreign powers and, on the other, it allowed to challenge the professional and political relations between Nationalist China and the western countries within a capitalist, bourgeois, and anti-communist framework.

¹³ Architect, Wong Yook Yee (1902-1942) graduated from MIT in 1925 and was an assistant architect in the Nanjing Planning Bureau. Zhu Shenkang (as known as Shinn-hong Howard Jee) graduated from the University of Michigan in 1923.

¹⁴ Jeffrey W. Cody, *Building in China: Henry K. Murphy's "Adaptive Architecture" 1914-1935* (Beijing: Chinese University Press, 2001).

¹⁵ Min-Chien T.Z. Tyau, *Two Years of Nationalist China* (Shanghai: Kelly & Walsh, 1930).

¹⁶ Originally named Dadu, Beijing is the only capital not founded by the Han Chinese but by the Mongolian Yuan dynasty (1279-1368).

¹⁷ Alfred Schinz, *The Magic Square: Cities in Ancient China* (Fellbach: Edition Axel Menges, 1996).

¹⁸ Beiping (trad. 北平, Běipíng) is the ancient name of the city and means 'peace of the North'. It was restored by the KMT in 1929, when the capital was moved to Nanjing and remained in use until 1949.

¹⁹ Jianfei Zhu, *Architecture of Modern China: A Historical Critique* (Abingdon-on-Thames: Routledge, 2009).

²⁰ Considered the father of modern Chinese architecture, Liang Sicheng (1901-72) was an architect and scholar who first studied the classic typologies and constructive technologies of the Chinese architecture. Urbanist, Chen Zhangxian was a member of the team group with whom Patrick Abercrombie elaborated the plan for the Greater London in 1944.

²¹ Dongquan Li, "Policy, Space and Governance: Lessons from Beijing," *Business and Public Administration Studies* 8, no. 1 (2014).

²² Liang Sicheng met Saarinen during a trip to the United States in 1947. In the following years, Liang had a large collection of foreign texts, including the writings of Saarinen. See: Eliel Saarinen, *The City: Its Growth, Its Decay, Its Future* (Cambridge: MIT Press, 1943).

The 18th International Planning History Society Conference - Yokohama, July 2018

²³ A similar idea had already been proposed by the Japanese in 1941 when they drew the 'Beiping Urban Plan'. See: Yuezhe Ming, *The Manchukuo Capital Planning* [伪满洲国首都规划: Wěi mǎnzhōu guó shǒudū guīhuà] (Beijing: Social Science Literature Publishing House, 2011).

²⁴ Si Cheng Liang, *Complete Works* [梁思成全集], vol. 5 (Beijing: China Construction Industry Press, 2004).

²⁵ The plan was widely implemented and remained valid until 1973.

²⁶ BICP, "Preliminary Master Plan for Construction of Beijing City in the Years of 1957 -1958," Beijing Municipal Institute of City Planning & Design, <http://www.bjghy.com.cn/ghyEng/ghyEng3develop.aspx>.

²⁷ Shuishan Yu, *Chang'an Avenue and the Modernization of Chinese Architecture* (Washington: University of Washington Press, 2013).

²⁸ The so-called 'Ten Great Buildings' were majestic and heterogeneous for layout and decoration. Some were placed around Tiananmen Square and others along Chang'an Avenue or in strategic points identified by the urban expansion plan. Around the Tiananmen Square, there are the Great Hall of the People and the National Museum of China, the Monument to the People's Heroes designed by Liang in 1952, and the Mausoleum of Mao built in 1976.

Along the western section of Chang'an Avenue, there are the Cultural Palace of Nationalities, the Minzu Hotel, the Chinese People's Revolutionary Military Museum, and the Diaoyutai State Guesthouse. In the eastern sector of the historical city, the Beijing Railway Station was built close to the south-eastern walls of the Tartar city and the Overseas Chinese Hotel in the Wangfujing district. The Workers Stadium and the National Agriculture Exhibition Hall were located outside the walls in the Dongzhimen area. Among them, four buildings reproduced the traditional pagoda roofs, two others used the element of the colonnade of western neo-classical matrix, another referred to Soviet monumentalism and three others, finally, were attributable to modern rationalism.

²⁹ Zhu, *Architecture of Modern China*; Rowe and Kuan, *Architectural Encounters with Essence and Form in Modern China*.

³⁰ In pragmatic terms, it is cheaper to build on mackerel soils than 'demolish and build' where there is already a liveable and at most modifiable city. Nevertheless, the concept of 'demolish and build' [trad. 拆迁, *chāiqiān*] is at the base of great part of the contemporary urbanization which has been conducted through this kind of operations. The whole Taoist philosophy is based on the balance of a binary system of things defining every dimension of the tangible and intangible world (e.g. *yin* and *yang*, humans and gods, nature and artefacts, square and circle). See: Lao-Tzu, *Tao Te Ching*, ed. D. C. Lau (Penguin Classics, 1964).



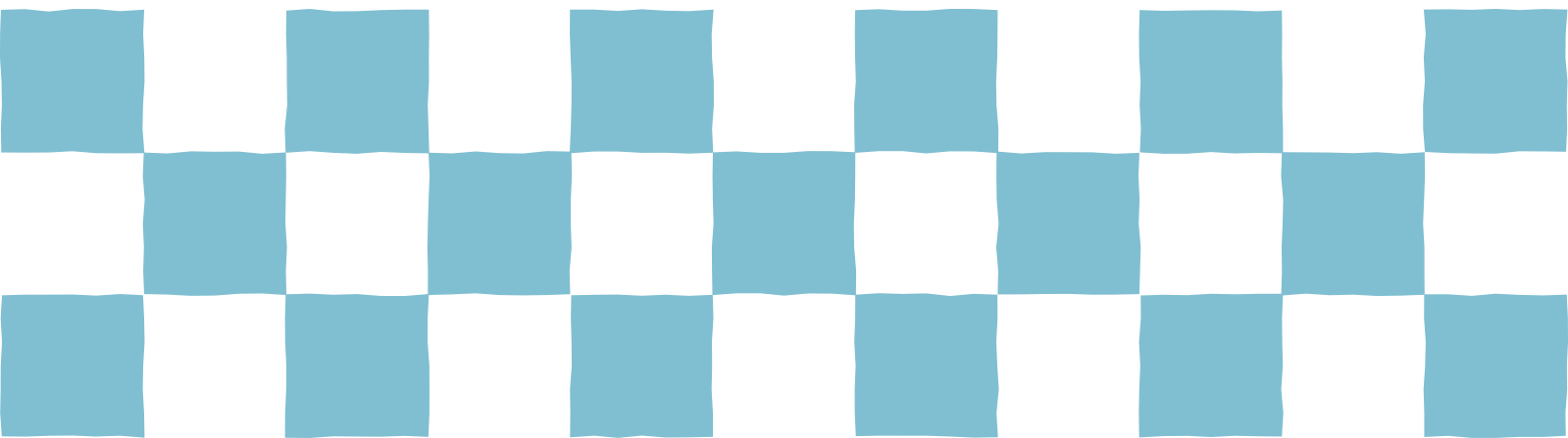
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

36 Planning Heritage and Community



Possibility of Planning History as Local Heritage in Mature Small Local City: Case of Ishikari City, Japan

Takashi Tsutsumi (Tokyo Institute of Technology)

After over 150 years of modernization, Japan has begun to change its form of society. The number of residents in many cities has begun to decline and paradigm of urban planning has been changed and diversified as to correspond to the situation. In many cities, they had been encouraged to build urban infrastructures, residences, transportations, urban facilities, and so on especially after the WWII, and the issues concerning to urban planning was "How to develop a city?". However, for many Japanese cities, their proposition more important now is "How to use a city?", and the citizens are trying to evaluate the value of urban environment established by urban planning and to preserve and promote them.

This study discusses if "Planning History" and "Planning Heritage", i.e. the real urban space as its result, can be "Local Heritage" in a small city through a case study in Ishikari city, Hokkaido, Japan. As for "Planning Heritage", Freestone (2010) published a comprehensive research book on Australia's planning heritage and proposed "a preliminary list of Australia's major sites of planning heritage". This work was done by specialists of planning history and the project had related to Australia's national heritage system. On the other hand, the aim of this study is to discuss the value of urban planning for locals who are living there. Thus, the detailed research subjects are: 1) clarifying the history of urban planning in Ishikari city and its characteristics and 2) revealing the position of "Planning Heritage" among the inscribed properties of "Local Heritage".

Ishikari's development had begun from Meiji era. Early settler in Ishikari broke ground to use the land as farm, and they established windbreak forest network by remaining some of natural forests. This network still works up to the present. The next opportunity of development was the planning of large port to load materials produced in Hokkaido in 1940's, but the plan was failed in incompleteness due to WWII. In 1960's, according to the growth of Sapporo city, next to Ishikari, its newtown development had started to provide residences for increasing population. 40 years later, the number of population got started to decline in spite of its proximity to Sapporo with a population of 1.9 million.

In 2013, a group of locals was established and it started to study and evaluate about local history, culture, natural resources, and their lifestyle. Its recent objective is to disseminate the value of "Ishikari Heritage" to all the citizens to preserve and promote the local assets. The heritage is not an official or administrative cultural asset management system, but it is conducted by the locals. In the list of property candidates for nomination of heritage, some planning history and heritage are included as an asset that explains how the place of local's life had been built. This study indicates the difference between "Planning Heritage" and the other properties of "Ishikari Heritage", mentions the local's perception for "Planning History" and "Planning Heritage", and considers the possibility of "Planning History" as a local heritage.

An Investigation on China's NGOs in Urban Heritage Preservation: Taking the Grassroots NGO of Tianjin Memory as a Case

Qiuyin Xu (School of Architecture, Tianjin University, China), Tianjie Zhang (School of Architecture, Tianjin University, China) and Yuwei Zhang (School of Architecture, Tianjin University, China)

As for China's urban heritage preservation, the official cultural relics bureaus and urban construction departments have played crucial roles. Besides these top-down actors, some non-governmental organizations (NGOs) have emerged, and started to play increasingly noticeable parts. Their participation makes the actors in this field more diversified. At the same time, however, these NGOs have encountered considerable problems, due to the lack of administration experience, policy guarantee and supervision mechanisms. Accordingly, how indeed do these NGOs work? Facing China's increasingly pluralistic situation in urban heritage preservation, what kinds of roles do they play? How do the multiple stakeholders interact?

In this vein, the paper selects Tianjin Memory (former Tianjin Architectural Heritage Preservation Volunteer Team) as a specific case, and carries out empirically based and theoretically informed studies. Via literature research, in-depth interviews and internet big data analyses, the research elucidates Tianjin Memory's developments and transformations from 2006 to the present. Informed by internal ecological relationship and influence evaluation for NGOs in sociology, the paper divides its development process into four main stages: start, rapid development, parasitic disruption, differentiation and reorganization. Each stage is examined from six domains, including human resources, structure and management, finance, social resources, products and achievements. The advantages, problems and difficulties will be identified, and reasons behind will be uncovered.

Based on above analyses, this paper will further make comparisons among Tianjin Memory, the other two influential urban heritage preservation NGOs in China, and the similar NGOs in the West. The main limitations and challenges for Tianjin Memory will be identified and construed, including the lack of professional knowledge, unclear management structure, poor funding management, relatively backward-looking activities, antitheses to the local government, etc. Informed by the thinking about Pluralistic Urbanism, this paper intends to bring forwards some suggestions for a healthy and sustainable future of Tianjin memory and other similar NGOs in China.

Conservation of Memory Heritage through the artwork “Sea Present” painted by Shigeru AOKI

Ilji Cheong (Prefectural University of Kumamoto)

The scope of cultural heritage is beginning to extend to the modern era and holistically covers buildings and lifestyle. Using memory has become to be applied as one of the methods for conservation while it is usually used in short duration or just for one heritage. It is hardly ever extended to urban planning. In this paper, I proposed the memory project in Mera village and considered the collaboration among five sectors through three memories. The memory project became virtuous circle to produce community initiatives and new memories at the same time. And, I determined memory heritages through the changes of the relationship between the memories and the spaces. There was a possibility for memory urbanism too. Finally, I revealed the interaction and mediation among five sectors for the conservation of the museum of “Sea Present” . It said that the importance of realistic and balanced viewpoints with authenticity.

Mapping and placemaking from the perspective of cultural field the three historic sites of the western Han Dynasty in Hanzhong

Chao Chen (Xi’an University of Architecture and Technology) and Yunying Ren (Xi’an University of Architecture and Technology)

Recently, in the context of China's policy of vigorously developing the assertive culture confidence, the value of traditional culture has been re-recognized by the whole society. However, due to the unbalanced development of China's eastern and western regions, the value of cultural heritage is not valued in the western region. Hanzhong district in Shaanxi province, belonging to the intersection of the south and north, has its own unique natural and cultural environment. The three historic sites of the western Han Dynasty are located in the city centre of Hanzhong, and as the historical heritage of Han culture, it has been hesitant between protection and development for many years. On the one hand, this paper tries to introduce the concept of "field" into the protection of cultural heritage, by constructing the cultural field model and using the cultural field to explore the question of historical heritage activation. This article, on the other hand, by expanding the mapping function, using the method of mapping defined the three historic sites of the western Han dynasty culture field research scope and the elements, combing extracted place identity, controlling the space boundary of place and for placemaking, and proposing an operable strategy and approach. The conclusion is that: firstly, the cultural field model can be directly and succinctly plotted historical block boundaries from the point of cultural; Second, creating cultural field for historical heritage contributes to the value recognition of heritage itself; Third, Mapping as a research heritage of technology strategy research tools, not only can create the cultural field, can also be determined by extracting cultural information more objective place identity, and through placemaking rebuild new cultural links. This article expounds the theory and practice of historic helps overcome cultural heritage value cognitive impairment, effectively strengthen cultural inheritance and innovation, for placemaking of historic blocks to build a positive practical significance.



An Investigation on China's NGOs in Urban Heritage Preservation: Taking the Grassroots NGO of *Tianjin Memory* as a Case

Qiuyin XU*, Tianjie ZHANG**, Yuwei ZHANG***

* Postgraduate Student, School of Architecture, Tianjin University, China, qiuyin_xu@126.com

** Associate Professor, School of Architecture, Tianjin University, China, arch_tj@126.com

*** Postgraduate Student, School of Architecture, Tianjin University, China, 549057232@qq.com

As for China's urban heritage preservation, besides the top-down actors, some non-governmental organizations have emerged and started to play increasingly noticeable parts. The paper accordingly explores China's increasingly pluralistic situation in urban heritage preservation, and reveals the roles of these non-governmental players. The paper selects *Tianjin Memory* as a specific case, and elucidates its developments and transformations from 2006 to the present via documental research, in-depth interviews and internet big data analyses. Informed by internal ecological relationship analyses, the paper divides its development process into four main stages: start, rapid development, differentiation and reorganization. Each stage is examined from six factors, i.e. human resources, structure and management, finance, social resources, products and achievements, based on NGOs' influence evaluation in sociology. The research further identifies the main limitations and challenges for *Tianjin Memory*. As a part of the discussions about China's current pluralistic urbanism, this paper brings forwards some suggestions for a healthy and sustainable future of *Tianjin Memory* and other similar NGOs in China.

Keywords: NGOs in China's urban heritage preservation, *Tianjin Memory*, Multiple Stakeholders, Pluralistic Urbanism

Introduction

In the field of urban heritage preservation in China, the government and related management departments had an overwhelming advantage in the decision-making of heritage protection due to the public ownership of land¹. At the same time, with the introduction of public participation policy and the growing public awareness of heritage preservation, many NGOs² that gathered civil power emerged and have made a lot of effort³. Actually, their participation makes the actors in China's urban heritage preservation more diversified. However, the development of China's NGOs in urban heritage preservation is not mature at present. Lacking administration experience, policy guarantee and supervision mechanisms, these NGOs have encountered many difficulties in their development. How indeed do these NGOs work? Facing China's increasingly pluralistic situation in urban heritage preservation, what kinds of roles do they play? How do the multiple stakeholders interact?

Tianjin Memory is taken as a case in this paper to discuss the above issues. This NGO is one of the most representative and influential organizations



Figure 1: logo of *Tianjin Memory*

¹ Haichao She, "近十年我国城市遗产保护中公众参与研究综述 Jin Shi Nian Wo Guo Chneg Shi Yi Chan Bao Hu Zhong Gong Zhong Can Yu Yan Jiu Zong Shu (A Review of Public Rarticipation in Rrban Heritage Conservation in China in the Last Decade)," *Chongqing Architecture*, no.8 (2014): 12.

² Non-Governmental Organizations. The United Nations defines NGOs as non-profit voluntary civic organizations organized at the local, national or international level. In China, the definition of NGO is relatively more general. Professor Wang Ming of Tsinghua University defines NGO in China as a social organization that is not for profit, has a formal organizational form, and belongs to a non-governmental organization system. They have certain autonomy, voluntariness, commonweal or reciprocity. But this is not comprehensive and need objective and dynamic observation and understanding.

³ Yaxi Gong, Yingyu Gao, "苏州城市遗产保护中的公众参与机制研究 Su Shou Cheng Shi Yi Chan Bao Hu Zhong de Gong Zhong Can Yu Ji Zhi Yan jiu (Study on Public Participation Mechanism in Suzhou's Heritage Preservation)," *Chinese & Overseas Architecture*, no.10 (2016): 46-48.



in Tianjin⁴. It has protected many valuable historical buildings by recording, supervising and textual researching, and won many national heritage protection awards. Since its inception in 2006, it has undergone three changes of name and differentiation, and the backbone has developed into today's *Tianjin Memory*. It has not yet registered as a formal NGO and belongs to the grassroots organization category. Investigation on this NGO can provide rich experience on the operation of similar NGOs and their own limitations in multi subject participation.

1.A brief review of existed stuiess on NGOs

Researches on China's NGOs in urban heritage preservation is in the ascendant. Many NGOs in developed countries, such as *Society for the Protection of Ancient Building* in the UK⁵, and *Historic Savannah Foundation* in the USA⁶, play their roles in different ways to protect urban heritage. Their institutes pattern, sources of found, operation of projects and relationship with the government can be used for reference⁷. It is also concluded that the NGOs in China are facing problems such as the low level of social charity, the imperfect law, the restriction of taxation policies, the blankness of supervision system and poor management⁸. Related studies mainly focus on introducing the experience in developed countries, analysing the plight of China's NGOs in urban heritage preservation and giving some macroscopic suggestions, which provide the basis for the follow-up study of specific case in China.

Compared with the studies in the field of architecture, more in-depth analyses of the internal factors of NGOs have been made in the field of sociological. Moral self-discipline⁹, value orientation¹⁰ and so on provide us new perspectives and basis to study the emergence of internal problems in China's NGOs in urban heritage preservation. An evaluation system, including products, structure and management, governance, human resources, finance and marketing, has been set up to map the level of development of grassroots NPOs in China¹¹. Considering the short history of Chinese grassroots NPOs and the

Table 1: Evaluation system of the development of Tianjin Memory

Factors	Connotation
Human resources	Main members
	Volunteers
Management and decision-making	Organization rules and regulations
	Decision-making system
Finance	Financial status
	Financial system
Social resources	Relationship with government
	Relationship with experts
Products	Online activities
	Offline activities
	Publications
Achievements	Protection of historical buildings
	Honours
	Media coverage

⁴ Min Liu, "Study on Public Participation Mechanism and Practice during Architectural Heritage Conservation in Tianjin", Tianjin University, 2012.

⁵ Yixue Jiao, "英国历史文化遗产保护中的民间团体 Ying Guo Li Shi Wen Hua Yi Chan Bao Hu Zhong De Ming Jian Tuan Ti (Non-governmental Organizations in British Historical and Cultural Heritage Preservation)," *Planners*, no.05(2002): 79-83.

⁶ Yixue Jiao, "美国历史环境保护中的非政府组织 Mei Guo Li Shi Huan Jing Bao Hu Zhong De Fei Zheng Fu Zu Zhi (Non-governmental Organizations in Historical Environmental Protection in the United States)," *Foreign Urban Planning*, no.01(2003): 59-63.

⁷ Ye Yang, Shijun Wang, "美、英建筑遗产保护非营利组织研究及对中国的启示 Mei Ying Jian Zhu Yi Chan Bao Hu Fei Ying Li Zu Zhi Yan Jiu Ji Dui Zhong Guo De Qi Shi (Research on Non-profit Organizations of Architectural Heritage Preservation in the United States and Britain and Their Enlightenment to China)," *China Ancient City*, no.05(2011): 53-57.

⁸ Yisan Ruan, Feng Ding, "我国城市遗产保护民间力量的成长 Wo Guo Cheng Shi Yi Chan Bao Hu Ming Jian Li Liang De Cheng Zhang (Growth of Private Forces in China's Urban Heritage Preservation)," *Urbanism and Architecture*, no.12 (2006):7.

⁹ Chuanlin Shi, "NGO 的伦理困境与改善策略 NGO De Lun Li Kun Jing Yu Gai Shan Ce Lue (Ethical Dilemma and Improvement Strategy of NGO)," *Academic Exchange*, no.08(2009): 24-27.

¹⁰ Xiaoping Zhao, Leshi Wang, "NGO 的生态关系研究——以自我提升型价值观为视角 NGO De Sheng Tai Guan Xi Yan Jiu—Yi Zi Wo Ti Sheng Xing Jia Zhi Guan Wei Shi Jiao (Research on the Ecological Relationship of NGOs—from the Perspective of Self-improvement of Line Values)," *Sociological Study*, no.01 (2013): 7.

Xiaoping Zhao, "NGO 的生态关系研究——两种价值观下的不同结果比较 NGO De Sheng Tai Guan Xi Yan Jiu—Liang Zhong Jia Zhi Guan Xia De Bu Tong Jie Guo Bi Jiao (Research on the Ecological Relationship of NGOs—Comparison of Different Results Under Two Values)," Beijing Normal University, 2012.

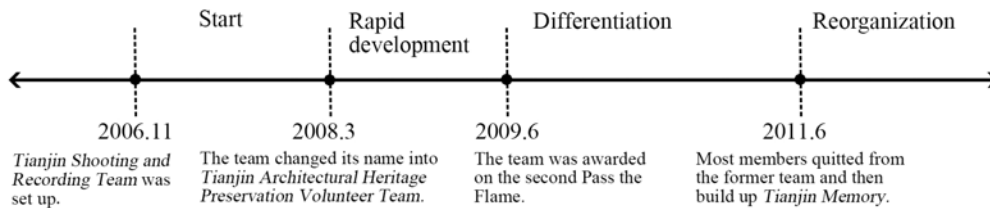
¹¹ Huiquan Zhou, "Mapping the Level of Development of Grassroots NPOs in China," *Voluntas International Journal of Voluntary & Non-profit Organizations*, 2015:1-30.



hazardous environment, this evaluation system is relatively suitable. Based on the characteristics of the NGOs in China's urban heritage preservation, this paper proposes an evaluation system based on six factors (table 1).

2.The development of *Tianjin Memory*

Tianjin Memory is a grassroots NGO growing up from network BBS. Since its establishment in 2006, it has undergone three renaming and reorganization, and the backbone has developed into today's *Tianjin Memory*.



Finger 2: the development of *Tianjin Memory*

2.1. the Stage of Start: from Individuals to an Organization (2006.8-2008.3)

Table 2: Memorabilia of *Tianjin Memory* (2006.8-2008.3)

Time	Main events
2006.6.9	China Memory Network and China Memory Forum were created.
2006.8.23	Tianjin section of China Memory Forum opened.
2006.11.11	<i>Tianjin Shooting and Recording Team</i> was set up.
2007.6.9	The organization held a collective shot event and a forum to commemorate.
2007.8.-2008.4.	The organization conducted a carpet survey of the former Italian Concession and Austrian concession and reconfirmed the identity of more than 30 historic buildings.
2007.9.-11	The organization conducted four thorough investigations of the Xigu area of Tianjin and found a number of important historical buildings.
2007	The organization protected the old residence of Zheng Shiqi.
2008.2.22	The organization held the annual meeting and exchange meeting for Tianjin residents.

Individuals were brought together by the establishment of *Tianjin Shooting and Recording Team*, and began carrying out larger and more systematic protection. The members of the organization were the core members of the Tianjin section of China Memory Forum. They are non-governmental individuals¹² and their division of work is basically clear. It can be seen that all the major members have a relatively high educational background and belong to the intellectuals. Of the core members, Qiang Zhang has retired, Zhenliang Wang and Chunjing Han have stable jobs and incomes, Sen Mu and Qipeng Zhu are still young and at the start of their careers.



Finger 3: photo of the members of Tianjin section of China Memory Forum (December 9, 2006)

The organization was relatively loose in management. At the beginning of its establishment, meetings were hoped to hold regularly, but actually they were not. Members need to spend their own money to hold activities. Much communication have been done with the experts in Beijing and other places. Organization activities are mainly based on filming and meetings. In terms of heritage preservation, the organization has also made some achievements.

¹² Zhenliang Wang, Chunjing Han, Lei Fu, "The situation of Tianjin Memory," interview by Tianjie Zhang, Yuwei Zhang, Jiaqi Wu, Qiuyin Xu, Haoran Zhang, May 23, 2017.



Table 3: Situation of the Core Members

Name	Gender	Age	Profession	Education	Division
Qiang Zhang	Male	About 70	Retired, used to be a senior researcher of coating institute	unknown	Related work on cultural relics and law
Zhengliang Wang	Male	About 35	Editor of the Newspaper	Master of Chinese Department	Text composition and oral group leader
Sen Mu	Male	About 25	Drama film creation and research	Drama Major	Organization convener, daily management of the organization
Chunjin Han	Female	About 35	Accountant	Department of Finance	Accounts, outdoor photography, and outreach work
Qipeng Zhu	Male	About 25	Student	Postgraduate student in Architecture	Professional writing

2.2 the Stage of Rapid Development: Cooperation and Reciprocity (2008.3.-2009.6.)

Table 4: Memorabilia of Tianjin Memory (2008.3-2009.6)

Time	Main events
2008.3.19	The organization changed its name to <i>Tianjin Architectural Heritage Preservation Volunteer Team</i> in preparation for the first Pass the Flame ¹³ .
2008.4	The organization conducted five surveys about the excellent historical building in Tianjin Financial City area and proposed a list of over 40 buildings that need preservation.
2008.5.27	The City Express newspaper in Tianjin published a newsletter about the organization.
2008.6.12	The organization was awarded in Pass the Flame. They also initiated and signed Beijing Proposal ¹⁴ with Ms. Zeng Yizhi.
2008.6.18	Beijing Proposal was published on China Cultural Relics News.
2008.8.3	Internal communication material Tianjin Memory came out.
2008.8.5	The director of the State Administration of Cultural Heritage, Jixiang Shan, gave an instruction on the appeal proposed by the organization and affirmed the organization.
2008.8.25	Tianjin TV broadcasted a film about the organization.
2008.10.19-23	An exhibition about the achievements made by the Tianjin residents in heritage preservation was held.
2008.11.1	The first China Cultural Heritage Protection Tianjin Forum was initiated and hosted.
2008.12.9	The weekly edited Tianjin Memory column was published in the Jinwan Economic Weekly.

At this stage, the organization formed ‘five-person core’ composed of Sen Mu, Qiang Zhang, Zhenliang Wang, Chunjing Han and Qipeng Zhu, and they were responsible for different works. Members recalled that the

¹³ A selection activity initiated and hosted by the China Heritage Conservation Foundation. The whole name is Pass the Flame — Outstanding Person of the Year for the Protection of Chinese Cultural Heritage (薪火相传——寻找文化遗产守护者年度杰出人物).

¹⁴ The Proposal to Strengthen the Preservation of Cultural Heritage.



organizational structure of this period was the clearest during the development¹⁵. The organization renamed for the award under the guidance of the new moderator Sen Mu, and it can be seen that the organization members have a tendency to change from the initial “self-transcendence” to “self-improvement”. In one event, Mu refused to let un-core members pick the experts and called the experts’ addresses ‘resources’, raising questions from members. The distrust among the organization's backbone accumulated slowly, and the ecological relationship of mutual cooperation began to break gradually. However, under the atmosphere of the organization's spurt, these were difficult to notice. And because of ‘unregistered, informal’ status, members thought it seems inappropriate for strict formal management. In a word, the formal management framework was not established at that time, foreshadowing the later contradictions.

The first written statement¹⁶ was issued, which stipulates the organization’s purpose, qualifications, restrictions and duties. According to it, all members were not required to pay any fees, and the organization didn't accept any gifts, funding, and sponsorship. It can be speculated that the organization does not have a stable source of collective funds. Actually, organization members still have to spend their own money and the organization's funding situation was not transparent. Due to firm intransigence, their relationship with the relevant government departments once entered a rigid phase. In terms of products, the internal publication, Tianjin Memory, came out and the organization brand ‘Tianjin Memory’ was initially established. The location of filming was more diversified, and the organization try to hold the exchange conference about Tianjin heritage preservation, which promoted the communication between scholars in the historical and cultural heritage preservation of Tianjin.



Finger 4: cover of the internal publication Tianjin Memory

This stage is the ascending period of the organization, which coincides with the rapid urban construction of Tianjin. It is likely for government to overlook the value of urban heritages at that time and the glory of Tianjin's memory organization is also created by the times.

2.3. the Stage of Differentiation: Parasitic and broken (2009.6.-2011.6.)

Table 5: Memorabilia of Tianjin Memory (2009.6-2011.6)

Time	Main events
2009.6.14	Sen Mu was awarded on the second Pass the Flam,.
2009.11.7	The organization held the second Tianjin Forum.
2011.1.22	Together with Tianjin Old City Website and Tianjin Old City Museum, the organization organized Association between Neighbors in Tianjin Old City successfully.
2011.6.-12.	Three issues of Tianjin Warm Neighborhood Association were organized by the organization, Tianjin Radio Traffic Channel and Hummingbird Tianjin Station successfully.
2011.6.11	Sen Mu, Qipeng Zhu and Qiang Zhang recorded program at Tianjin Traffic Station without permission from ‘five-person core’. Most of the members could not stand it and quitted from the volunteer organization.

When Sen Mu was promoted as the nominee, the conflicts within the organization began to be exposed. Text infringement and decision-making dictatorship further intensified the problem, and most of the members chose to withdraw from the organization. Sen Mu and Qipeng Zhu, two younger people of the ‘five-person core’, belong to the self-elevating type, while the other older cores belong to the self-transcendence type. Different values will inevitably lead to differences in the development concept. Sen Mu, who called himself the liaison, and Qipeng Zhu, who has architectural background, could hardly convince others with the professional knowledge. Instead, they used the resources accumulated by the organization as a self-developing capital and made profits for themselves, leading to the breakdown of the organization.

In the early stage, regular meeting, financial disclosure and prohibition of single line contact was concluded. However, these were not kept during this period, and many members thought that their trust was consumed and

¹⁵ Wang, interview.

¹⁶ Tianjin Architectural Heritage Preservation Volunteer Team Statement



had been feuding for a long time. Although there was no clear system, it is a psychological contract to support the operation of the NGO between intellectuals. This kind of psychological contract is subtle and implicit, which may not be recorded in words, and may not even be expressed verbally. Once a member or an outsider breaks the psychological contract intentionally or unintentionally, the consequences can be devastating.

With the expansion of influence, its activities were also richer. Cooperation with other organizations, more times of filming, conference and heritage protection incidents were organized. The organization got national award and was reported by powerful media.



Finger 5: organization photo in 2010



Finger 6: photo of the second China Cultural Heritage Protection Tianjin Forum

3.Current situation of Tianjin Memory: Reorganization (2011.6 to the present)

In recent years, there is a decline in organization activities, and its combination with the market has also been frustrated. For various reasons, the organization has not yet registered as an official NGO.

Table 6: Memorabilia of Tianjin Memory (2011.6-present)

Time	Main events
2011.6	The members who left the volunteer organization sum up their previous experiences and announced the formation of the <i>Tianjin Memory Cultural Heritage Preservation Team</i> (<i>Tianjin Memory</i> for short).
2014.3.23	The first filming event in 2014, followed by once a month.
2014.12.20	<i>Tianjin Memory</i> organized a lecture about the buildings in Japanese concession with other organizations.
2015.1.17	On the 7th Pass the Flame, <i>Tianjin Memory</i> won the title of Distinguished Team.
2015.6.15	Photo Exhibition of Huang Garden was held.
2016.3.16	Archives Culture Lecture Hall in Tianjin archives began in March.
2016.9.1	Crowdfunding plan of Gleaning Study lunched.
2016.10.16	The first hiking event: Tianjin memory, historical traversing
2016.11.4	Communication Between Cyborg and <i>Tianjin Memory</i> .
2016.11.5	<i>Tianjin Memory</i> attend the first Social Power Participation in Heritage Conservation Forum.
2017.4.29	Sharon about the protection of buildings in Japanese concession was held in Gleaning Study.

The re-established organization has made obvious changes in two aspects¹⁷. First, the attitude toward heritage preservation tended to be more moderate, and more attention will be paid to the intangible cultural heritage. They found that confronting with government was not effective. Therefore, *Tianjin Memory* wanted uncover the value of the distinctive culture in Tianjin, improve the general cultural awareness and stimulate civil concept of urban

¹⁷ Wang, interview.



The 18th International Planning History Society Conference - Yokohama, July 2018

heritage preservation. The second is that as a volunteer organization, they were often considered as cheap labor in the past. So the organization did not use the word ‘volunteer’ this time.

After the reorganization, Chunjing Han and Zhenliang Wang are still important organization members. Other members are also more diversified. However, it has to say that the management system has not been improved significantly.

The organization has realized the importance of stable funds and adopted a more open-minded attitude. Crowdfunding plans and business cooperation with enterprises were measures taken by the organization. In Gleaning Study project, through donations, salon activities, book transfers, and the customization and sale of handicrafts, profit is earned as finance. And the name of donators and the use of funds was publicized.

Tianjin Archives proposed cooperation with *Tianjin Memory* about Archives Culture Lecture Hall. A total of nine Tianjin cultural history scholars gave the lecture and more than 1,000 audience attended. It is the first time that audio and video broadcast software was used, nearly 4,000 people watched the live broadcast. From then on, *Tianjin Memory* had a larger platform to introduce their research.



Finger 7: photo of Hike in the City



Finger 8: photo of Archives Culture Lecture Hall

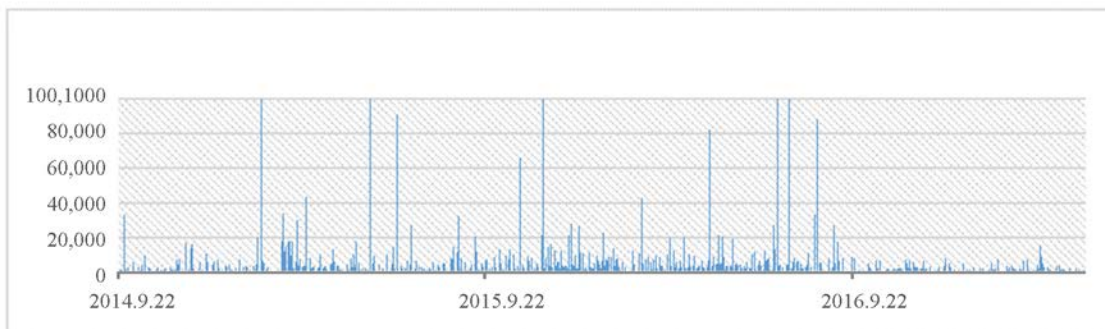


Figure 9: pageview of *Tianjin Memory* WeChat platform

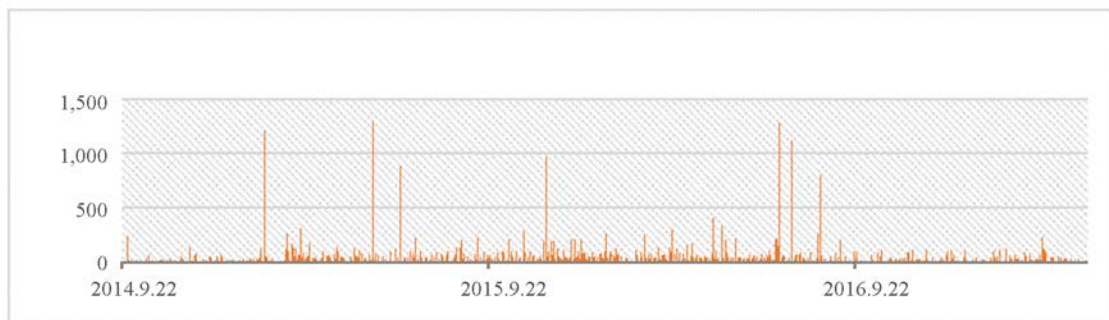


Figure 10: thumb up quantity of *Tianjin Memory* WeChat platform



With the popularity of Weibo¹⁸ and WeChat¹⁹, the organization's platforms have also been established in 2011 and 2014. Its network power has transferred from the forum to the two platforms. By data statistics about its WeChat platform, it is found that there has been a trend of declining in the platform profile recently, which may be related to the decline of the platform's topicality and the solidification of the model. As the off line activities, the organization intended to establish a neighborhood group, a book and an exhibition for every historical block. However, only neighborhood group for Huang Garden was set up successfully. With different backgrounds of other historical blocks, *Tianjin Memory* encountered different problems in actual promotion.



Finger 11、 12: photo of Huang Garden exhibition and the message left by visitor(The message says:The Huang garden in memory.My wonderful childhood.)

Tianjin Memory strives to find a link unit and hopes to become an officially registered organization, but it has not yet registered as a formal organization. Its combination with the market is facing many problems, such as blindly giving and a serious violation of intellectual property rights.

4.Evaluation of Organization Capability

Table 7:Summary of the six factors in four stages

Stage \ Domain	Start	Rapid development	Differentiation	Rreorganization
Human resources	↑↑	↑	↓↓	↑
Structure and management	↑	↑	↓↓	↑
Finance	--	↑	↓	↑↑
Social resources	↑↑	↑	↓	↑
Products	↑	↑↑	↓	↑
Achievements	↑	↑↑	↑	↓
↑↑ rapidly rise ↑ rise -- essentially unchange ↓ fall ↓↓ rapidly fall				

It can be seen that in the different stages of development, different factors are more prominent. In the start stage, great importance was attached to the acquisition of resources(both in huaman resources and social resources) and the construction of the organization. It gathers the volunteers quickly and preliminarily determines the leadership core and organizational framework of the organization. At the same time, the organization strengthened the communication with the social experts to improve professional communication. In the stage of rapid development, the gains in products and achievements are enormous. The organization held many activities and established its own cultural brand. At the same time, the protection results are obvious and the influence is much higher. In the differentiation phase, the most obvious is the disintegration of the management and supervision system. Due to the lack of an effective management oversight mechanism, the spiritual contract between the members was broken, and the distrust between them slowly accumulated. At the same time, the opacity of funds has also led to further intensification of conflicts.In the reorganization period, the organization improved its management system and

¹⁸ Official Weibo of *Tianjin Memory*: https://weibo.com/tianjinjiyi?refer_flag=1005055014_&is_hot=1

¹⁹ WeChat Official Account: tianjinjiyi



human resources allocation. However, the organization's achievements plummeted, indicating that the organization's brand was scattered and its influence was not as great as before. Without timely transformation or adjustment, there would be a crisis of extinction.

Some particular deficiencies affect the capacity of *Tianjin Memory*. In terms of human resources, the leader shifted to the young Sen Mu in the fast growing period. But, his qualifications and experience were not rich enough to convince others, which led to the intensification of organization conflicts. Then, it is regrettable to say that a mature organization will focus on improving stability, control and efficiency at rapid development. Competent organizations tend to have effective management systems and regular development plans. Although the organization has begun to formulate some management systems, it basically remained in writing. This may be an important reason for its subsequent development to decline. At the same time, the lack of money management has increased the tension among the members. Meagre funds have also limited their operations. In terms of products, because of the lack of new ideas, the product's appeal has declined somewhat. Due to infringement and other issues, volunteers have been paying and it seems that there is no return. The cultural brand of *Tianjin Memory* was also damaged.

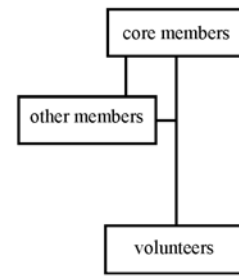


Figure 13: management system of *Tianjin Memory*

5. Conclusion

In view of the operation of *Tianjin Memory*, the author proposes the following strategies. Firstly, members should strengthen the knowledge about heritage preservation. Secondly, pay attention to the signing of regulations in the early stage of the establishment to protect the intellectual property rights and guarantee the brand identity. Advanced concepts of modern management should be used to restrain members. Thirdly, NGOs need to strive for a multi-channel source of funding and strengthen the management of funds. Fourthly, it is still necessary to strengthen exchanges with other urban heritage preservation NGOs. Fifthly, bring forth new ideas on activities to inspire people's enthusiasm in urban heritage preservation. Sixthly, try to cooperate with other organizations to carry out the research results and heritage protection ideas into the design and construction work.

Acknowledges

Supported by National Natural Science Foundation of China (No.51478299, 51778403).

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Qiuyin XU: Postgraduate Student, School of Architecture, Tianjin University, China

Tianjie ZHANG: Associate Professor, School of Architecture, Tianjin University, China

Yuwei ZHANG: Postgraduate Student, School of Architecture, Tianjin University, China

Interview

Wang Zhenliang, Chunjing Han, Lei Fu, "The situation of *Tianjin Memory*," interview by Tianjie Zhang, Yuwei Zhang, Jiaqi Wu, Qiuyin Xu, Haoran Zhang, May 23, 2017.

Bibliography

Deng Guosheng, "中国 NGO 发展的现状与障碍 Zhong Guo NGO Fa Zhan De Xian Zhuang Yu Zhang Ai (The Present Situation and Obstacles of the Development of Chinese NGOs)," *Social Outlook*, no.05 (2010):14-15.

Gong Yaxi, Yingyu Gao, "苏州城市遗产保护中的公众参与机制研究 Su Shou Cheng Shi Yi Chan Bao Hu Zhong de Gong Zhong Can Yu Ji Zhi Yan jiu (Study on Public Participation Mechanism in Suzhou's Heritage Preservation)," *Chinese & Overseas Architecture*, no.10 (2016): 46-48.



Jiao Yixue, “英国历史文化遗产保护中的民间团体 Ying Guo Li Shi Wen Hua Yi Chan Bao Hu Zhong De Ming Jian Tuan Ti (Non-governmental Organizations in British Historical and Cultural Heritage Preservation),” *Planners*, no.05(2002): 79-83.

Jiao Yixue, “美国历史环境保护中的非政府组织 Mei Guo Li Shi Huan Jing Bao Hu Zhong De Fei Zheng Fu Zu Zhi (Non-governmental Organizations in Historical Environmental Protection in the United States),” *Foreign Urban Planning*, no.01(2003): 59-63.

Liu Min, “Study on Public Participation Mechanism and Practice during Architectural Heritage Conservation in Tianjin,” Tianjin University, 2012.

Ruan Yisan, Feng Ding, “我国城市遗产保护民间力量的成长 Wo Guo Cheng Shi Yi Chan Bao Hu Ming Jian Li Liang De Cheng Zhang (Growth of Private Forces in China’s Urban Heritage Preservation),” *Urbanism and Architecture*, no.12 (2006): 6-7.

She Haichao, “近十年我国城市遗产保护中公众参与研究综述 Jin Shi Nian Wo Guo Cheng Shi Yi Chan Bao Hu Zhong Gong Gong Can Yu Yan Jiu Zong Shu (A Review of Public Participation in Urban Heritage Conservation in China in the Last Decade),” *Chongqing Architecture*, no.8 (2014):12-16.

Shi Chuanlin, “NGO 的伦理困境与改善策略 NGO De Lun Li Kun Jing Yu Gai Shan Ce Lue (Ethical Dilemma and Improvement Strategy of NGO),” *Academic Exchange*, no.08(2009): 24-27.

Sobeck Joanne, Elizabeth Agius, “Organizational capacity building: Addressing a research and practice gap,” *Evaluation and Program Planning*, no.03 (2007), 237–246.

Wang Zhenliang, Chunjing Han, Lei Fu, “The situation of Tianjin Memory,” interview by Tianjie Zhang, Yuwei Zhang, Jiaqi Wu, Qiuyin Xu, Haoran Zhang, May 23, 2017

Yang Ye, Shijun Wang, “美、英建筑遗产保护非营利组织研究及对中国的启示 Mei Ying Jian Zhu Yi Chan Bao Hu Fei Ying Li Zu Zhi Yan Jiu Ji Dui Zhong Guo De Qi Shi (Research on Non-profit Organizations of Architectural Heritage Preservation in the United States and Britain and Their Enlightenment to China),” *China Ancient City*, no.05(2011): 53-57.

Zhao Xiaoping, Leshi Wang, “NGO 的生态关系研究——以自我提升型价值观为视角 NGO De Sheng Tai Guan Xi Yan Jiu—Yi Zi Wo Ti Sheng Xing Jia Zhi Guan Wei Shi Jiao (Research on the Ecological Relationship of NGOs—from the Perspective of Self-improvement of Line Values),” *Sociological Study*, no.01 (2013): 7.

Zhao Xiaoping, “NGO 的生态关系研究——两种价值观下的不同结果比较 NGO De Sheng Tai Guan Xi Yan Jiu—Liang Zhong Jia Zhi Guan Xia De Bu Tong Jie Guo Bi Jiao (Research on the Ecological Relationship of NGOs—Comparison of Different Results Under Two Values),” Beijing Normal University, 2012.

Zhou Huiquan, “Mapping the Level of Development of Grassroots NPOs in China”, *Voluntas International Journal of Voluntary & Non-profit Organizations*, 2015:1-30.

Zhu Jiangang, “NGO 与中国公民社会的成长 NGO Yu Zhong Guo Gong Ming She Hui De Cheng Zhang (the Growth of Grassroots NGOs and Chinese Civil Society),” *Open Times*, no.6(2004):36-47.

Image sources

Figure 1: http://blog.sina.com.cn/s/blog_791656d30102veg4.html (Accessed May, 2017).

Figure 2: Drawn by the author.

Figure 3: Du Li Han Qiu. Pay tribute to the new and old friends who took part in today's filming (2006.12.9), <http://www.memoryofchina.org> (Accessed October, 2017).

Figure 4: Filmed by the author. The publication was edited and gifted by Mr. Zhenliang Wang.

Figure 5: <http://blog.cntv.cn/9180147-404507.html>(Accessed May, 2017).

Figure 6: http://blog.sina.com.cn/s/blog_4bcf27130100g7x3.html (Accessed October, 2017).

Figure 7: http://mp.weixin.qq.com/s/dibZX_hqY6rRVbIVOOK4Dw(Accessed May, 2017).

Figure 8: http://mp.weixin.qq.com/s/ac_Sbwv_voWGSDbY5dMBLw(Accessed May, 2017).

Figure 9: Drawn by the author and the data is collected from WeChat public account of *Tianjin Memory*.

Figure 10: Drawn by the author and the data is collected from WeChat public account of *Tianjin Memory*.



The 18th International Planning History Society Conference - Yokohama, July 2018

Figure 11: WeChat public account of *Tianjin Memory*, http://mp.weixin.qq.com/s/_VvBBC82VyNWAoo71faG-Cg (Accessed October, 2017).

Figure 12: WeChat public account of *Tianjin Memory*, <http://weibo.com/67819712> (Accessed October, 2017).

Figure 13: Drawn by the author.



Conservation of Memory Heritage through the artwork “Sea Present” painted by Shigeru AOKI

Ilji CHEONG*

* PhD, Prefectural University of Kumamoto, ilji00.asian@gmail.com

The scope of cultural heritage is beginning to extend to the modern era and holistically covers buildings and lifestyle. Using memory has become to be applied as one of the methods for conservation while it is usually used in short duration or just for one heritage. It is hardly ever extended to urban planning. In this paper, I proposed the memory project in Mera village and considered the collaboration among five sectors through three memories. The memory project became virtuous circle to produce community initiatives and new memories at the same time. And, I determined memory heritages through the changes of the relationship between the memories and the spaces. There was a possibility for memory urbanism too. Finally, I revealed the interaction and mediation among five sectors for the conservation of the museum of “Sea Present”. It said that the importance of realistic and balanced viewpoints with authenticity.

Keywords: Conservation, Memory Heritage, “Sea Present”, Shigeru AOKI, Community Initiatives

1. Background and purpose of the Paper

The scope of cultural heritage is beginning to extend to the modern era and holistically covers buildings and lifestyle. At same time, the evaluation and the conservation methods are becoming increasingly difficult. Usually, as conservation method, community initiative was used well. Cultural building and community have been a kind of package for it. On the other hand, using memory has become to be applied for conservation nowadays. Especially, to designate separated buildings as cultural heritage, memory is important to interpret plural histories and regard them as one layered area. For example, remnants of evacuation capital Busan have added to the tentative list for UNESCO World Heritage Sites in 2018 even some heritages are separated and intangible.

In the field of urban design, Dolores Hayden is a pioneer of memory project¹. She conducted creation of urban landscape through minority memory. Haruhiko GOTO conducted memory project through community initiatives². Aya KUBOTA determined the mechanism of memory concerned with heritage³. I will call memory heritage which a space is conserved with a memory (fig. 1).

On the other hand, the memory projects were usually used in short duration or just for one heritage. It was hardly ever extended to urban planning almost. In this paper, I focus on mechanism of memory project for the conservation of memory heritage. And, I also determine the potential of this method as memory urbanism.

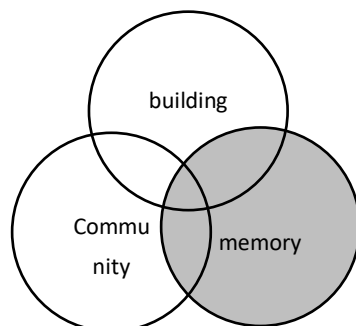


Figure 1: A scope of memory history which started from coloured zone

This paper focuses on the conservation project of the historic building through artist Shigeru AOKI and his artwork “Sea Present” in Mera village in Japan, which has been in progress since 2005 (fig. 2). It explores the process of the memory project for conservation of heritage and revitalization. The thesis is based on interview and reports of three organizations: NPO Museum, NPO Sea Present and NPO Awa.

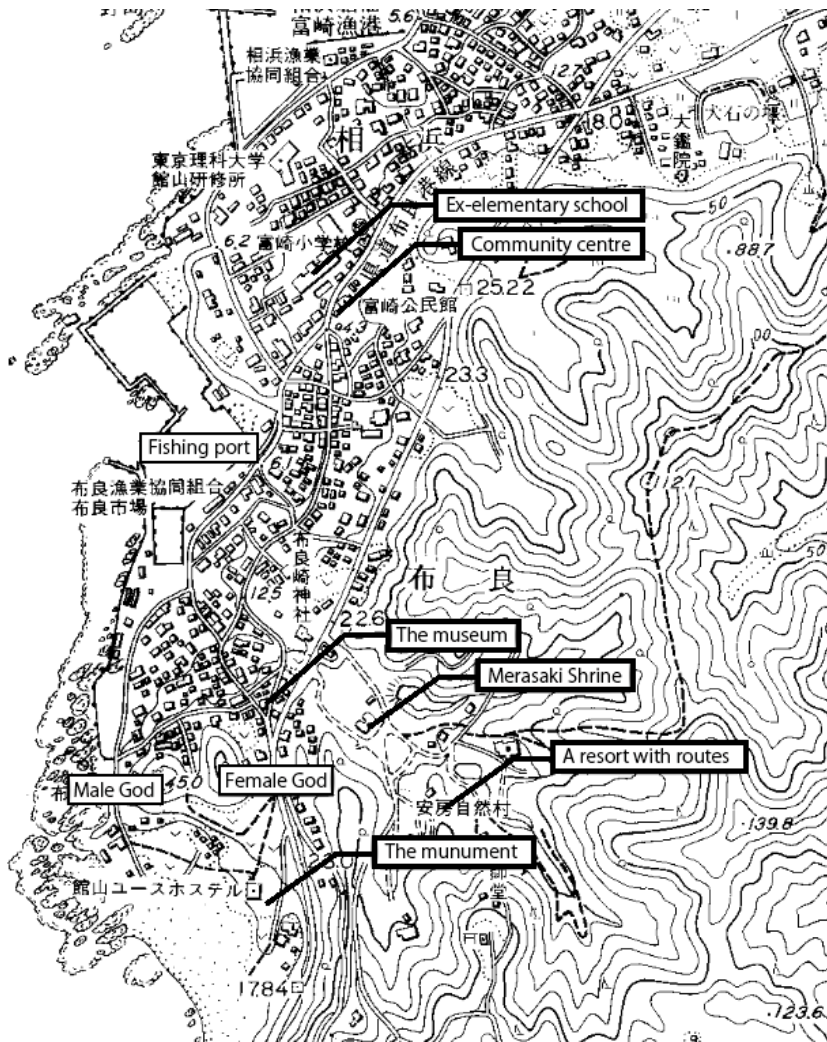


Figure 2: A map of Mera village

2. Introduction of Tomisaki village and organizations background

2-1. Introduction of Tomisaki village

The artwork “Sea Present” painted by Shigeru AOKI, has become the first tangible cultural property of western style. Shigeru AOKI visited Mera, a fishing village, in 1904 at the time of the Russo-Japanese War. AOKI was inspired by Japanese myths. Mera has been holy land of myths in local region. During his stay in a fishing house in the village, he drew “Sea Present”, which contains the mythical and scenic elements of the village. In 2016, the house became the Museum of “Sea Present”.

In 1962, 50 years after Shigeru AOKI’s death, the monument was built by artists, the mayor and the officers of Tateyama City with local residents. The Ishibashi financial group, which came to possess almost all of AOKI’s artworks, also donated 2500 dollars for the construction of the monument which was costed 6000 dollars⁴.

In 1998, the monument was almost torn down because it was situated on a national site. The residents of Mera initiated a campaign to conserve it. The owner of the house, where “Sea Present” was created, also joined the campaign. As a result of the campaign, Tateyama City started to pay a rental fee to the government and, thus, the conflict was resolved. The monument stayed on with the help of the residents.

2-2. Background of the conservation and initiative



Even Mera was big fish village, they could not fish anymore, because the temperature of the sea water became too warm. The population of the village has decreased to 1000 people, which is one-third the number during the Meiji era. The aging percentage is 47% in 2010s. When a kindergarten was closed down owing to a fewer number of children, two residents went to the NPO Awa Cultural Heritage Forum (NPO Awa) to seek counsel. One of the residents was a member of NPO Awa. At the time, NPO Awa had been involved in the campaigns for the conservation of War Heritage and Castle Heritage since the 1980s. With the support NPO Awa, the community revitalization of Mera began.

The exhibition of AOKI commenced in 2014 in the Bridgestone Museum of the Ishibashi financial group. The organizers of the project felt the potential of the “Sea Present” and the moment of it. In 2015, exactly 100 years after the birth of the “Sea Present”, a forum was held to celebrate and discuss the method of using monuments for revitalization of the village. At the forum, the owner of the house proposed the use of his house for the village. As a result, the scope of the project expanded to the house, too.


	Completion	1961 (Meiji36)
	Background	The monument was built by the mayor of Tateyama City along with artists and residents, 50 years after Shigeru AOKI died. This was done to boost tourism and revitalize the village.

Figure 3: NPO Museum, and NPO Awa. *The Monument of "Sea Present": The report for the conservation and the use of the museum of "Sea Present"*. [Tateyama: 2016]


	Completion	1860(Edo) and 1889 (Meiji22) after Kanto Earthquake
	Roof style	Hip roof, pantile roofing
	Floor area	92.7m ²
	Background	The house owners have been fishermen since Edo era. They were important leaders of the village. After the Kanto Earthquake, the house was rebuilt in 1889. In 1904, AOKI created the “Sea Present” during his one-month stay in the house. The plan of the early building included a dirt floor, which was the usual style in the village.
Open as museum	The museum was opened in 2016 and it opens on weekends.	

Figure 4: NPO Museum, and NPO Awa. *The Museum of "Sea Present": The report for the conservation and the use of the museum of "Sea Present"*. [Tateyama: 2016]

2-3. Background and activity of 2 organizations and Tateyama City

The organizers held many studies and events in order to persuade the residents of the village. In 2008, the NPO Conservation organization for the museum of "Sea Present" and the monument (NPO Museum) was established. This was constituted with the help of residents, artists, art critics, curators, and the Ishibashi financial group. The organization covers (1) the conservation of the museum and the monument, (2) PR activities, (3) community initiatives, and (4) the setting up of a conservation fund. NPO Awa, which assumes office, assigned a name to the house, giving it the title Tateyama Heritage in 2009.



Since the 2000s, two artists, who valued the “Sea Present” and Mera village so much that they often visited the house, proposed to sell it to them. The organizers of NPO museum were concerned about this as community initiatives would suffer if the house was sold to the artists. Therefore, they persuaded the artists to wait and divide roles among themselves, as a result of which, the artists established the organization: NPO Organization for “Sea Present” of Shigeru AOKI (NPO Sea Present) in 2010, the next year of the establishment of the community group, NPO Museum. They mainly collected funds for repairing the house and raised these funds through donations from another artist organization.

After 3.11 earthquake in 2011, it was difficult to collect funds. In order to raise funds, a homage exhibit of AOKI was held 13 times since 2012. NPO Museum and NPO awa also helped with the exhibit when it was opened in Tateyama.

Furthermore, the city exempted the museum from tax under the “Furusato local tax payment” system. The four organizations and Tateyama City made arrangements with the owner to discuss the conflicts among them. The five sectors include the local organization, the artist organization, the intermediary organization, the government and the owner.

Eventually, in 2012, the museum was repaired and opened.

	NPO Conservation organization for the museum of “Sea Present” and the monument (NPO Museum)	NPO Awa Cultural Heritage Forum (NPO Awa)	NPO Organization for "Sea Present" of Shigeru AOKI (NPO Sea Present)
Establishment	September, 2008	January, 2004	January, 2010
Members	It comprises representatives of the community, NPO Awa, and artists.	It comprises researchers and citizen activists.	It comprises artists and critics.
Action	Management of the museum and monument; Community initiatives; Generating funds; and Researching local culture	Conservation campaign; Community initiatives; and Tourist guilds	Collecting funds for museum repairs
			

Figure 5: NPO Museum. *A brief of the organization.* [2018]

Figure 6: NPO Awa. *A brief of the organization.* [2018]

Figure 7: NPO Sea present. *A brief of the organization.* [2018]

3. Community initiatives with the memory

3-1. In the community

The residents did not believe in NPO Awa, who were from the next town, the owner of the house was not interested in the village revitalization at the time. Furthermore, the artists who valued "Sea Present" attempted to buy the house. Therefore, it was very important to consider the community and persuade them above all things.

In the 2005 forum, the organizers filled the panel with more residents than professionals (Chart 1). The pamphlet displayed the words “Sea Present, the pride of the village” and “local heritage to be passed to the children”. It is said that the organizers tried to cultivate the pride of the village and interest in the local heritage. Just after the forum, the owner of the house had a change of heart and decided to use his house for the village even without discussing it with his family.



The 18th International Planning History Society Conference - Yokohama, July 2018

In 2013, a forum on AOKI was held with professionals and residents. They discussed the origin and the characters' activity in the artwork. The residents claimed differently from the professionals. For example, the residents claimed that AOKI drew inspiration from the local festival, Merasaki Shrine, because of the artwork angle, whereas the researchers pointed that he was inspired by Awa shrine festival. The residents could suggest it because they knew full well about their village.

Chart 1: NPO Awa, *The member list of the 2015 forum panel: the pamphlet of the forum.* [Tateyama: 2005]

The representative of NPO Awa
The owner of the museum
The representative of Mera village and ex-captain of one ship
The local carpenter of ship
The local relieveo artist
The local essayist of Mera village

At the same time, many studies and events were conducted to enhance the understanding of the problems and potential in the village. The studies not only covered Medical problem, but also covered the local heritage such as AOKI, local food, and local song. For example, the participants made proposals for community revitalization by using local culture and AOKI. They learned their local food and local songs.

On the other hand, the son of the museum became the curator of the museum. He started to study his family history to interpret "Sea Present" (Fig. 8). He delved into his ancestral history. He revealed that his ancestors played a big role for modern fish industry, and he claimed that the fish illustration, presented by the principal of fishing university gave idea to AOKI. With NPO Awa, he also determined village history, that the village head made commune fund for the village and made an elementary school. He claimed the stable situation of the village for AOKI's stay and the birth of his artwork.

Furthermore, NPO Museum started a tour guide on AOKI and local culture in the village. Even the older bashful women of the village started to perform their traditional dance. They created a garden with a fence and the planted trees to reproduce the scenery seen in the artworks. Based on residents' suggestion of reusing the ex-elementary school, the lifelong education centre and the theatre were opened there.

Chart 2: Activities of NPO Museum

Research	- local food - local song - Shigeru AOKI and "Sea Present"
Community initiatives and revitalization	- local healthcare situation and the answer - use of ex-elementary school for community events
Guide	- guide for tourists
Management of the museum	- display and guide of the museum - cleaning and gardening the site



Figure 8: The curator of the museum



Figure 9: The interpretation of the artwork and local festival



3-2. Outside of the community

There was a model of the AOKI museum. The house in which AOKI was born in Kurume was the first museum before the one in Mera opened. Kurume City bought the house and commissioned it to the community. In 2011, the members of the NPO Museum interacted with Kurume group and procured information. They attended events of Kurume and also asked for the funds.

NPO Museum and NPO Sea Present also interacted each other with the supports. They also tried to interact with the Ishibashi fund group consistently.

3-3. Three memories for memory project

There were three memories which have been used for the memory project. I will consider the methods and the effect of community initiatives with the memories.

First memory was AOKI's one. Organizers focused on AOKI memory with his artwork during his visit in Mera village. They tried to determine AOKI's interest and his characters to deepen the memory of his artwork, "Sea Present". They tried to interpret why AOKI came to the village, what he thought about the village, what point of the village gave him ideas for the artwork. Furthermore, the AOKI memory helped residents to have interests in the village memory and gain confidence with the village. It also helped artists to participate and collect funds. That is why putting the memory on a local textbook was proposed.

Second memory became village's one. They tried to pick up local scenery and culture of fish, food and festival to reveal what AOKI saw during his visit. At the same time, they revealed village history at that time. For community initiatives, the organizers paid attention that the representatives of the village became the main members of the project rather than the artists too. They also divided the roles between the residents and the artists. Through the participation of the residents, the interpretation of the memories became various and detailed. The residents picked out local points from the artwork and produced new points. These were possible as they became to have interest in their village memories.

Third memory was family history of the museum. The curator of the museum revealed how his ancestor could support AOKI for one month stay. The curator of the museum drew the family tree, which shows the three generations between the curator and the ancestor when AOKI visited the museum. Through these process, the owner of the museum got pride to study and to display family history such as certification, family tree and traditional doll.

4. Memory heritage

4-1. Relationship between memory and space

According to KUBOTA, there are four types of relationship between memory and space as (1) destroyed type, (2) survived type, (3) succeed type and (4) united type⁵. Survived one means the case which only the space remains. Succeed one means the case which only the memory remains. And united one means the case which both memory and space remains.

Only (2) survived type and (4) united type usually become designated heritage. However, (3) succeed type can provide the factor for conservation of the space. On the other hand, if there is not any memory, the space can be easily destroyed. Memory is an important factor for conservation and community initiatives.

Before the memory project in Mera village, the fish industry with the fish culture declined. These were (1) destroyed type (Chart 2). The closed kindergarten and elementary school were (2) survived type. The monument of "Sea Present" was also thrown away with weeds as (2) type. Even the food culture of fishing village was succeeded as (3) type, it was only succeeded by each family. There was not any cooking school at that time. Only the shrine has been used and conserved with village myths and local festival as (4) united one. On the other hand, the AOKI museum was a usual house at that time. The family has lived there for generations, so it was (4) union type. However, it was not memory heritage because no body tried to revive the house memory.

4-2. After community initiatives through memory

The organizers tried to think village memory and reuse empty buildings during memory project. As a result, not only the house was used for open museum, but also the elementary school was reused for lifelong education centre



and theatre (Chart 3). The community centre became to be used for cooking school of local food. Furthermore, one resort in Mera made memory route around hotel based on AOKI and one famous diver. I would call these cases as plurally united types. In the chart 3, (4) and (5) are memory heritages because they have both memory and space.

I verified that promoting village memory with community initiatives helped to reuse or use heritage with different program. These “memory heritage” were born, when the interpreted memories combined with existing spaces. Furthermore, these memory heritages show the potential as memory urbanism.

Chart 3: Relationship between memory and space

(1) destroyed type	(2) survived type	(3) succeed type	(4) united one
- the fish industry - the fish culture	- kindergarten closed and elementary school	- the food culture of each family.	- the Shrine - the house - the community centre

Chart 4: Relationship After community initiatives through memory

(1) destroyed type	(2) survived type	(3) succeed type	(4) united type	(5) plurally united type
-	- closed kindergarten	-	- the Shrine - the elementary school	- the museum - the community centre

5. Conservation of the museum

5-1. Designation of Tateyama Heritage

After the owner dedicated his house, its conservation campaign began with the monument. Keeping community initiatives in mind, the NPO Museum and the NPO Awa applied for the designation as Tateyama Heritage in order to cooperate with the city. The residents also asked for the designation and the conservation of the house. In 2009, the museum was designated as city heritage. In the city comment concerned with designation, the value of the house is not written about; only the academic aspect and the story of AOKI and the artwork “Sea Present” are mentioned.

5-2. Furusato local tax payment

NPO Museum and NPO Awa asked the city to support the conservation of the museum and treat it as city heritage. As a result, the City exempted the museum under the “Furusato local tax payment” system. Almost all the funds were donated in “Furusato local tax payment”.

However, there were some problems. The repair fee for a new house was not included in the corner of tax exemption. It was also necessary to collect funds for a new house, because the museum was too small for living and exhibit space. As a result, living space was excluded from the museum. In addition, there were no funds to repair the two buildings, the museum and the house. NPO Museum and NPO Sea Present determined to collect funds for the new house too.

5-3. Collecting the funds

NPO Museum and NPO Sea Present have tried to collect funds through a variety of ways. First, they tried to obtain funds through donations from the members of NPOs and citizens. Second, they tried to collect funds from the Kurume organization and the Ishibashi fund group through steady interactions with them. Third, they held events to collect funds. NPO Museum sold roof tiles and all the profits was donated to the conservation. In addition, with the help of a Korean Japanese collector, they made five copper relievos and put them in front of the museum of



"Sea Present", Kurume museum and three Korean museums. This also helps to collect funds. NPO Awa coordinated between the collector and relief artist.

NPO Sea Present has held a homage exhibit for 13 times. The artists created homages of the AOKI's artworks. The events were hold in galleries in big city. Only the exhibit in Tateyama was hold in small city and the residents also participated in it. One third of the profits was donated as funds. A sketch tour was also launched in Mera with the artists.

Finally, they were able to collect 280,000 dollars for the museum and 150,000 dollars for the house. The NPO Museum collected 76,000 dollars and the NPO Sea Present collected 154,000 dollars. Other artists donated 146,000 dollars. Tateyama City also supported the design fee. Alternatively, the NPO Museum used 200,000 dollars for community initiatives.

However, after the opening the museum, NPO Sea Present was dismantled and some of the members became the members of NPO Museum, which took over the management of the museum. In 2017, the Awa fund was established.

5-4. Repair and management of the museum

There were many discussions among five sectors: NPO Museum, NPO Sea Present, the owner of the museum, Tateyama city and NPO Awa. Formal discussion was hold by nine times⁶. One of the discussions titled "discussion of four sectors" except NPO Awa. However, NPO Awa also participated in these discussions as it intermediated the four sectors along with the office of NPO Museum. Therefore, they have been retained as one of the sectors. In this session, the discussions mainly focused on the repair and the management of the museum.

The main issue was about retaining an authenticity within limited cost. Because the museum was repaired extensively in 1889, just after Kanto Earthquake, the period of repair and restoration was big issue for them. The professionals and the city, wanted to restore the museum to what it was in 1860, when the museum was built with a characteristic dirt floor⁷. The middle plan of figure 11 shows the trace of the old style. However, there was not enough evidence and money for restoration. Furthermore, the spare was required for exhibits. As a result, it was repaired to the second period which the museum was rebuilt in 1889. It was referred in the middle and bottom plan of figure 11. Even the facade of the museum was considered important, only the facing wall was covered with square tiles and raised plaster because of the budget problem. At the same time, the possibility to restore to the first period later on was considered. For example, the base of the dirt floor was remained.

There were many discussions on the subject of display and management too. The biggest issue was maintaining a balance between museum's use of space for an exhibit and preserving it as it were at the time AOKI visited. Artists of NPO Sea Present wanted to retain the look and feel at the time of AOKI's visit. Hoewever, NPO museum wanted it to function more for exhibits. Eventually, only for the wall for exhibits were cleaned and if it is not necessary to repair or to rebuild, the wall and the post were remained.

The museum had exhibits of AOKI and "Sea Present" memory, family memory such as traditional dolls, and village memory such as sea map for fishing which were found out in the house (Fig. 10). It shows that the museum was not only for "Sea Present" but also for the owners and the residents.



Figure 10: The exhibit of traditional dolls at the museum. [Newspaper of Bonichi: Feb. 23, 2018.]

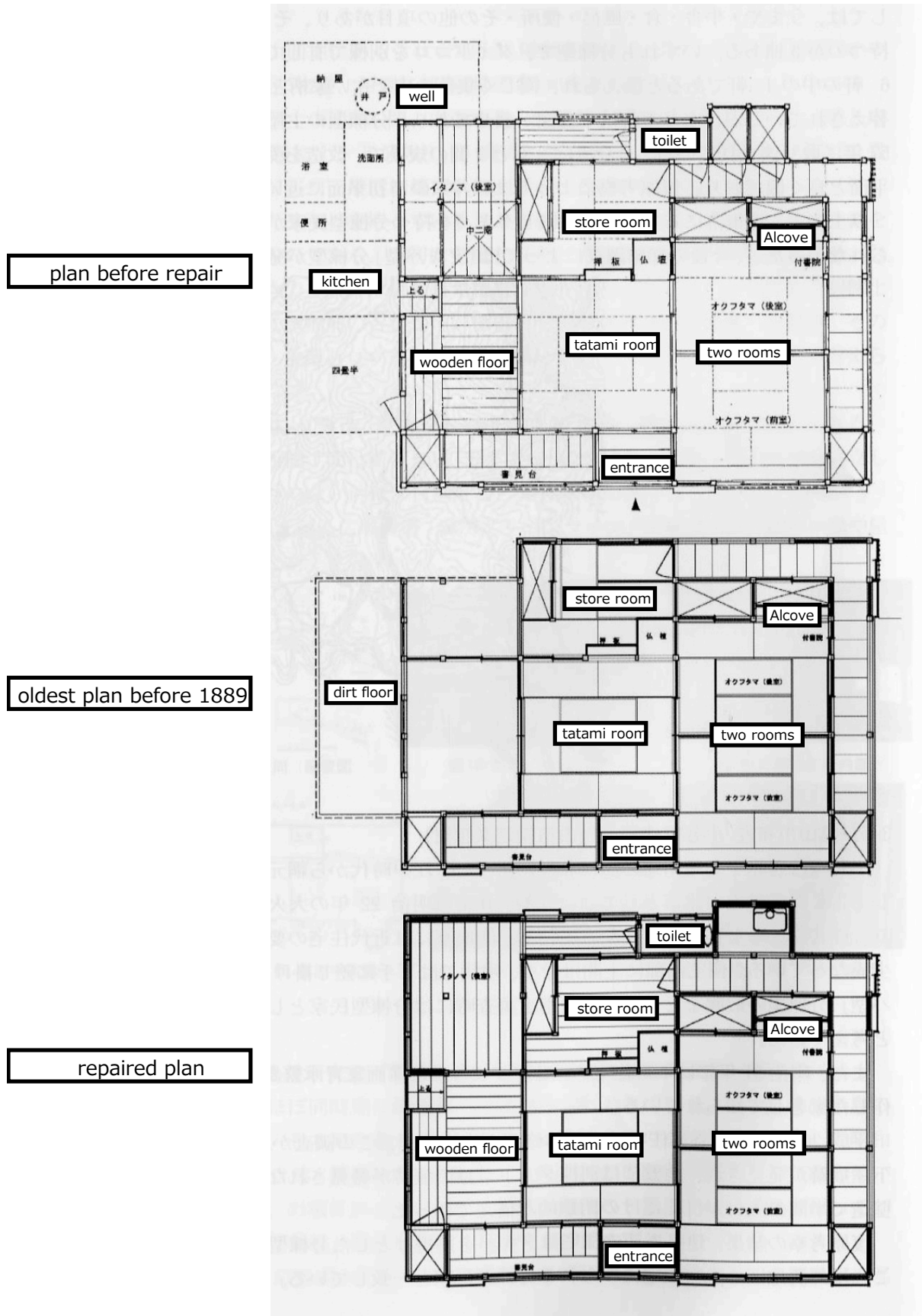


Figure 11: NPO museum and NPO Awa. *The plans of the museum: The report for the conservation and the use of the museum of "Sea Present".* [Tateyama: 2016]



6. Conclusion

I proposed the memory project in Mera village and considered the collaboration among five sectors through three memories. And, I determined memory heritages through the changes of the relationship between the memories and the spaces especially about the museum of "Sea Present".

6-1. Community initiatives with the memory

I considered the methods and the effects of community initiatives with the three memories: AOKI memory, village memory and the family memory of the museum. Memory helped residents to get confidence and interest in another memory. Finally, the memories became various and deep. The memory project became virtuous circle to produce community initiatives and new memories at the same time.

6-2. Memory Heritage

Through the memory project, various memory heritages were produced. Before the project, there were four types of the relationship between memory and space. There were only three cases which the memory and the space were united as memory heritages. After the project, three others were produced as another memory heritages. Sometimes, through the union between new memory, the existing facilities changed to plurally united one. Furthermore, memory routes were conducted with memory heritage. This shows the potential as memory urbanism. To conduct memory urbanism, it is better to consider an area plan during memory project.

6-3. Conservation of the museum

There was hot controversy over the conservation of the museum between five sectors. I considered how five sectors cooperated and mediated each other. Each sector claimed their own opinions. NPO Awa interacted and mediated them through impartial and realistic viewpoints on the problems: collecting the funds, repair and the management of the museum. This role of arbitration gives hint for the conservation of cultural heritage. It says that the importance of realistic and balanced viewpoints with authenticity.

Bibliography

1. Aya KUBOTA, "Study on the Memory Evoking Framework of Sawara, Mercantile Historic City at Watery Environment", Architectural Institute of Japan 79, no.705 (2014): 2443-2452.
2. NPO Awa, the pamphlet of the forum, Tateyama: NPO Awa, 2005.
3. NPO Museum and NPO Awa, The report for the conservation and the use of the museum of "Sea Present", Tateyama: NPO Museum and NPO Awa, 2016.
4. NPO Sea Present, "Sea Present" and Mera with Shigeru AOKI, Kawasaki: NPO Sea Present, 2018.
5. Tateyama City, The report of 4 sectors discussions, vol. 1-9, Tateyama City, 2004.

Image sources

Figure 1: writer

Figure 2: writer

Figure 3: (contents) NPO Museum and NPO Awa, *The report for the conservation and the use of the museum of "Sea Present"* (2016)

: (picture) Writer

Figure 4: (contents) NPO Museum and NPO Awa, *The report for the conservation and the use of the museum of "Sea Present"* (2016)

: (picture) Writer



The 18th International Planning History Society Conference - Yokohama, July 2018

Figure 5: (contents) “*A brief of the organization*”, NPO Museum, accessed April 14, 2018, <http://aoki-shigeru.awa.jp/>.

: (picture) Writer

Figure 6: (contents) “*A brief of the organization*”, NPO Awa, accessed April 14, 2018, <http://bunka-isan.awa.jp/>.

: (picture) Writer

Figure 7: (contents) “*A brief of the organization*”, NPO Sea present, accessed April 14, 2018, <http://uminosac.web.fc2.com/>.

: (picture) “*The poster of homage exhibit in Tokyo*”, NPO Sea present, accessed April 14, 2018, <http://uminosac.web.fc2.com/>.

Figure 8: Writer

Figure 9: Writer

Figure 10: *The exhibit of traditional dolls at the museum*, Newspaper of Bonichi (Feb. 23, 2018)

Figure 11: NPO museum and NPO Awa. *The plans of the museum: The report for the conservation and the use of the museum of “Sea Present”* (2016)

Chart 1: NPO Awa, *The member list of the 2015 forum panel: the pamphlet of the forum*. (2005)

Chart 2: Writer

Chart 3: Writer

Chart 4: Writer

¹ Dolores Hayden, *The power of place*, MIT Press, 1997.

² Haruhiko GOTO, *Machizukuri of Landscape*, Gakuge Press, 2007.

³ Aya KUBOTA, “Study on the Memory Evoking Framework of Sawara, Mercantile Historic City at Watery Environment”, *Architectural Institute of Japan* 79, no.705 (2014): 2443-2452.

⁴ NPO Museum and NPO Awa, ed., “The report of funds for the conservation of the museum”, (2016), 37.

⁵ Aya KUBOTA, op. Cit., pp. 2446-2448.

⁶ Tateyama City, ed., “The reports of 4 sectors discussions”, vol. 1-9, Tateyama City (2004).

⁷ NPO Museum and NPO Awa, loc. cit.



Mapping and placemaking from the perspective of cultural field: the three historic sites of the western Han Dynasty in Hanzhong

Chao Chen*, Yunying Ren**

* *Lecturer of urban and rural planning department, Xi'an University of Architecture and Technology, 513114738@qq.com*

** *PhD, Professor and director of urban and rural planning department, Xi'an University of Architecture and Technology, renyunying@hotmail.com*

Recently, in the context of China's policy of vigorously developing the assertive culture confidence, the value of traditional culture has been re-recognized by the whole society. However, due to the unbalanced development of China's eastern and western regions, the value of cultural heritage is not valued in the western region. Hanzhong district in Shaanxi province, belonging to the intersection of the south and north, has its own unique natural and cultural environment. The three historic sites of the western Han Dynasty are located in the city centre of Hanzhong, and as the historical heritage of Han culture, it has been hesitant between protection and development for many years. On the one hand, this paper tries to introduce the concept of "field" into the protection of cultural heritage, by constructing the cultural field model and using the cultural field to explore the question of historical heritage activation. This article, on the other hand, by expanding the mapping function, using the method of mapping defined the three historic sites of the western Han dynasty culture field research scope and the elements, combing extracted place identity, controlling the space boundary of place and for placemaking, and proposing an operable strategy and approach.

Key words: Cultural field; place identity; mapping; placemaking; the three historic sites of the western Han dynasty

1. Background

Lewis Mumford commented that "a city is a concrete and authentic record of human culture." A city is the symbol of histories and culture of a place, so it has distinct feature of regional culture. Redevelopment an old city by respecting history is supposed to be basic rules to be observed in the course of urban planning and construction¹. Today, as China government make a firm cultural confidence, the values of traditional culture are gradually recognized by the whole society. However, as a result of development imbalance existing between the east and the west of China, west areas generally neglect historic and cultural values of cities. Even worse, some people consider traditional historic blocks or even cultural relics and historic sites as a barrier in economic and urban development. In the course of urban renewal, those ancient urban areas with cultural characteristics and hundreds of years' history vanish after a thorough transformation, or difficult to sustain. This leads to imbalance between cultural development and urban development of local places, mismatch and imbalance between urban cultural supply and demand and similar problems. Such problems are mainly reflected in participants' inadequate recognition of the values of historical and cultural heritages, fragmented memory of local cultures and complicated definition of boundary. The reason lies in the participants' unclear cultural identity toward historical and cultural heritage, which leads to lack of place identity, loss of local features and senses.

2. Construct Model of Cultural Field

According to the theory of field, every behavior of participants is affected by the field where the behavior occurs. A cultural field is a collection of movements of cultural factors. In a cultural field where cultural heritages occur, participants' physical behaviors become a factor that cannot be ignored and their psychological behaviors are also affected by many factors. In this paper, the author tried to introduce the concept of "field" in the protection of cultural heritage, construct a model of cultural field (Table 1) and discuss about how to achieve flexible use of historical and cultural heritage of urban from the perspective of the cultural field.



2.1. The Concept and Theory of Field

Based on the objective structure of society, French sociologist Pierre Bourdieu put forward the concept of “field”, which means “a social space that works as per unique rules”ⁱⁱ and studied social cultural activities through three interconnected concepts, i.e. field, capital and habitus. A field is relatively independent and defines its boundary through its unique rules. “Capitals” mentioned by Bourdieu is classified into three categories, namely economic capitals, cultural capitals and social capitals. While habitus is pertaining to individuals in the social structures, i.e. behaviors of participants. The participants perceive and grasp social conventions and internalize them into their minds and behaviors, and the mind and behavior settings in turn affect the field where the participants are.

Meanwhile, a field exists objectively. Stan Allen¹ pointed out in his paper *Field Conditions* that “field gives a form to things but it lays particular stress on the form between things instead of the form of things themselves” and that “a field condition could be a matrix of any form or space and the matrix can contain various different elements and respect their respective characteristics”. And, a field is “defined by complicated and concrete connections”ⁱⁱⁱ. Which shows that a “field” is a structure without a clear boundary freely organized internally but orderly connected, and a “field condition” manifests characteristics of the field. Historical and cultural heritage is mainly a urban context of “field condition”.

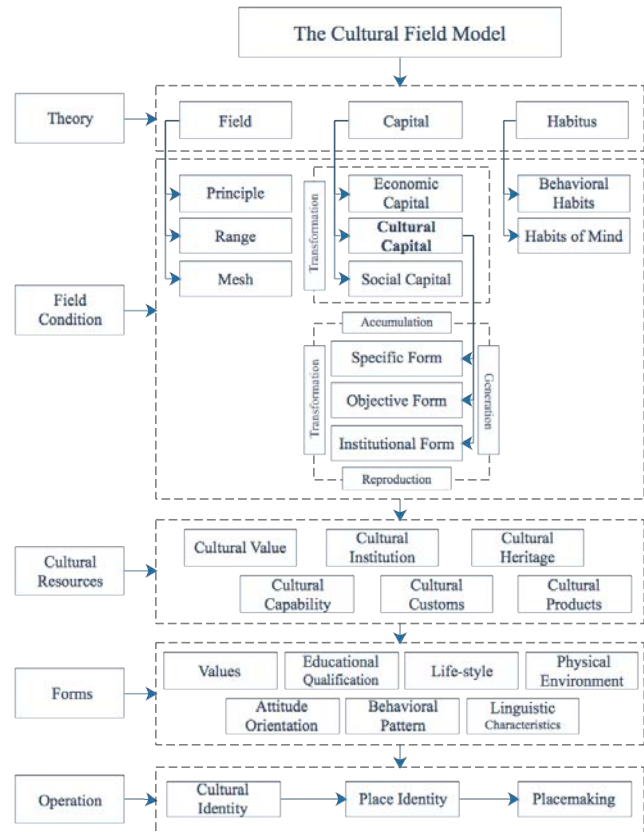


Table 1: The cultural field model

2.2. Cultural Field Condition

Every kind of culture has its own cultural field, which is composed of a series of values, ideas, attitude orientations, behavioral patterns and life-styles. A cultural field is open without definitive boundaries and forms in the course of interaction with other fields. It absorbs nutrients beneficial to its development from other cultural fields and makes them a part of it. In a cultural field, economic capitals refer to economic power of the cultural field; social capitals relate to population, the form of social organization and the like; cultural capitals refer to the attraction of perceptions, beliefs, values and cultural patterns. Cultural capitals are accumulated with time and labors and are manifested in physical, concrete and institutional forms; besides, they have a potential to earn productive profits and can realize reproduction of it^{iv}.

2.3. Cultural Resources and Forms

Bourdieu believes that, “cultural capitals is a sum of all cultural resources, including cultural customs, cultural capabilities, cultural institutions and cultural products and is reflected in forms of people’s educational qualification, behavioral pattern, linguistic characteristics and life-style.” Each city is an organic regional society and a specific cultural cluster. Culture of a city is characterized in both diversity and coherence. In the cultural field model, cultural resources include cultural values, cultural institutions, cultural heritage, cultural capabilities, cultural customs, cultural products, etc. Cultural forms include values, educational qualification, life-style physical environment,

¹Stan Allen, Dean of School of Architecture of Princeton University



attitude orientation, behavioral pattern and linguistic characteristics. As a symbolic system, urban physical environment has complicated and diversified senses. Cultural heritages, as historic physical environment, constantly convey rich historical and cultural connotations to people.

3. Operation Method

Field has inherent characteristics of a global concept formed by individual collections. The simplest field state is numerous existence of juxtaposition. In urban and architectural design, the numerous “existence” gives a spiritual shock, and symbols formed by field imply a certain context. We need to pay attention to large amounts of information about field, and the most essential physical information includes soil, bed rock, hydrology, historical value, animal and plant. This information not only provides cultural symbols which stimulate inspiration but also is used for architectural and urban development, from which we obtain inspiration and benefits. Based on the cultural field model, this paper researches the cultural elements through mapping with regard to historical and cultural heritage, and summarizes field characteristics from cultural identity to place identity, and placemaking.

3.1. Cultural Identity

Under globalization, culture transformation presents two distinct trends: non-territorial culture expansion and local cultural reconstruction^v. Culture is not only a local symbol but also the historical origin and base for identity formation of the individuals and ethnic groups. Identity is the premise of existence. Cultural identity refers to ethnic group identity. Historical and cultural heritage is one of important resources which the cultural field relies on, and is embodied by habitus in participants’ bodies, thoughts and life. It is evitable that one cultural field which affects or threatens cultural existence will affect and threat cultural identity of group members in the fields. Culture is a capital which can be converted into more economic capitals in practice so as to guarantee self-growth and continuity. Hence, it is very necessary to determine the concept of capital within the context of historical cultural heritage resources so that we can further recognize surface meanings of local traditional culture and form self-awareness for development and utilization. Cultural identity actually refers to local context summarization.

3.2. Place Identity

In 1983, Roshansky et al. introduced the concept of identity into environmental psychology and thought that it corresponded to social identity. Place identity^{vi} (Table 2) may be extended to object, thing, space and place, and refer to interaction of the individuals or groups in the places. This type of special socialization includes feelings, perception, cognition and other complex processes. Based on this process, the individuals and groups are defined as a

	Characteristic	Representation
Place identity	Cultural identity	Historical context, historical event, figure, protection and inheritance of local culture and cultural landscape, folk custom and local culture of festival
	Environment identity	Geographic location, natural environment, climate, life convenience, perfection of amenities, folk custom, social order and residential satisfaction
	Distinguishing	Resident’s sense of honor and superiority, local characteristics, identification and place memory
	Place dependence	Sense of belonging, psychological meaning, location and emotional attachment
	Self-efficacy	Individual life, daily demand, sense of security, stability and relaxation
	Commitment	Contact and relevance between people and place

Table 2: Characteristic of place identity



part of a certain place^{vii}, so as to establish the position and role in the society depending on place^{viii}. Under this context, place is no longer just a physical background for human activities, but a part of self-identity^{ix}. In other word, place identity is a part of self-identity and is developed from the nature of unique element and interaction between people and place^x. However, place is interpreted as site in a narrow sense and as land or context in a broad sense. So, place identity is sometimes called urban character, neighborhood character or local character. Place identity refers to a general item of elements of a certain place, and is the origin and vitality of place formation, continuation and development. These elements are formed through long-term evolution and combination, including region, path, building, space, fabric and other physical elements and possibly including human elements such as certain type of population or certain behavior or activity. The fundamental of planning and design is to explore the stable and orderly structure among these elements^{xi}.

3.3. Mapping

“Mapping” is originated from surveying and mapping, and expresses the concepts of drawing, mapping and plotting. James Conner created the operation system of “mapping” in landscape design^{xii}, and more emphasized that “mapping” is a design method appropriate for regeneration. Within the range of cultural field, the original intention of planning and design is to discover and guide actual usage requirements for the fields. Usually, field characteristics cannot be rapidly and effectively captured through traditional field survey in general. In any physical environment, discrepancies may exist between the intent of its design and how it is actually used. Behavioral mapping can be useful to help identify underlying patterns of participant movement and behavior within a given environment. It helps the planners and designers to discover current inherent laws and form place identity which achieves common cognition, effectively improve the current space during planning and design, promote overall design from bottom to top. It can be extended that mapping is an effective way of information visualization. For a field of a larger scale, we may carry out visualized research with big data to conduct objective data verification.

3.4. Placemaking

Based on cultural context and regional characteristics, the planners and designers establish the relationship between people and field, between behavior and space and between nature and artificial environment through analysis on building, site and environment elements. In general, it is impossible for us to fully understand the status quo in a short time by using traditional work methods, and we only superficially analyze current problems and internal relations, which leads to that design is disconnected from the reality. In addition, the place-making method is a set of logical methodologies of “observation-discovery-analysis-resolution”.

Specific analysis methods include people-oriented analysis, multi-scale and multi-level analysis and comprehensive sensitivity analysis. Specific steps for place-making include: construction and analysis of basic network, expectation and perception description, mapping analysis, questionnaire analysis, composite mapping overlay analysis, identity image, comprehensive layout and design interference measure.

Placemaking is a multi-faceted approach to the planning, design and management of public spaces, such as cultural heritage sites. Placemaking capitalizes on a local community's assets, inspiration, and potential, with the intention of creating public spaces that promote people's health, happiness, and wellbeing. It is political due to the nature of place identity. Placemaking is both a process

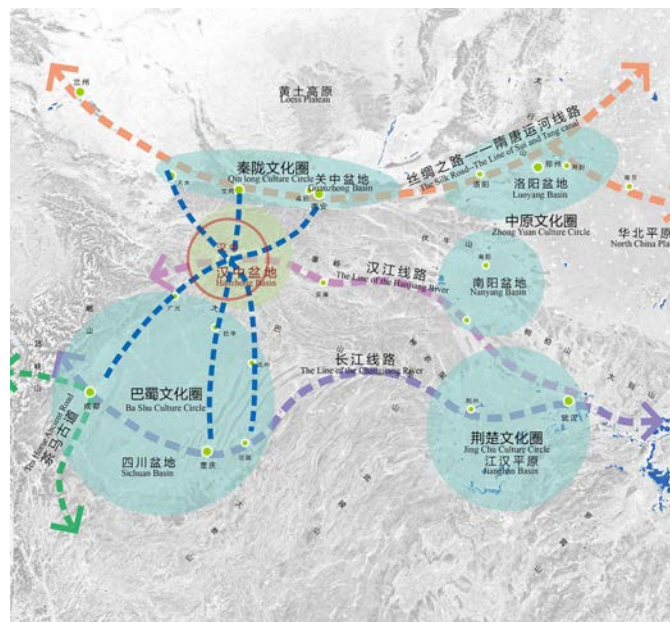


Figure 1: Cultural location map of Hanzhong



and a philosophy.^{xiii}The target of placemaking is to establish or rebuild place spirits^{xiv}.

4. A plan of the three historic sites of the western Han Dynasty in Hanzhong

Between the Qinling mountains and the Bashan mountains, Hanzhong district in shaanxi province is located in the west of China, belonging to the intersection of the south and north, has its own unique natural scenery and cultural history environment (Figure 1) . The three historic sites of the western Han Dynasty are located in the center of Hanzhong, and as the historical heritage of Han culture, it has been hesitant between protection and development for many years.

According to the model of cultural field, the author assimilated local culture of Hanzhong to an organic cultural field with the method of analogy. Specifically, psychological behaviors of participants are habitus; influencing factors of habitus are capitals of the field; such physical environments as historical blocks and architectures of the three historic sites are the core capitals of the cultural field; habitus and capitals interact with each other and jointly make the field work. The author introduced basic concept and working mode of cultural field and investigated current situation of the three historic sites, expecting to find out influencing factors for flexible use of the historic sites, make coherence of environmental image, ecological greening, physical and psychological behaviors, and make the classical theory of people-orientation and spirits of place the basis of placemaking.

4.1. Situation

The three historic sites mainly include Guhan Altar, Baijiang Altar, Yinma Pool and their surrounding areas, It covers an area of about 80 hectares.Using big data and mapping methods,such as average population density in Hanzhong city (Figure 2),it is clear that although the three historic sites are located in the city center, the vitality is very low.Furthermore, Guhan Altar is a provincial cultural relic protection site, which covers an area of approximately 1.37 hectares. It is now a local comprehensive history museum which starts to take shape with diversified styles of architectures after several repairs. Baijiang Altar is also a provincial culture relic protection site, which covers an area of approximately 0.73 hectare.It occupies a large area and is separated from surrounding areas by fences, so it is

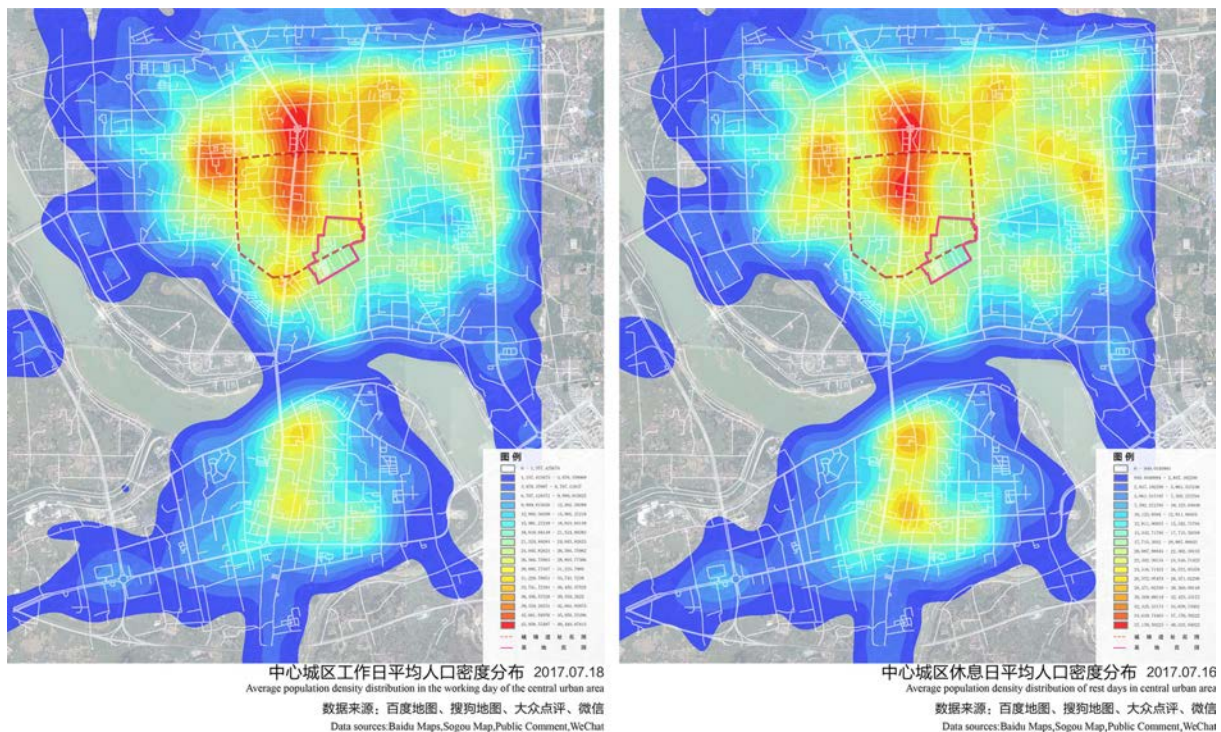


Figure 2: Mapping of average population density in Hanzhong city



generally enclosed. Yinma Pool is a municipal culture relic protection site, which covers an area of approximately 1.21 hectares. It is generally well-conditioned, but ancient city walls, Santai Pavilion and Longshen Temple disappeared, surrounding architectures and environment need to be improved. There isn't an open landscape vision. As historic and cultural blocks, their surrounding area cover a area of about 6.78 hectares, a protection area of about 31.64 hectares and a supporting area of about 40.44 hectares. It can be seen that the boundary relationship between the three sites is complex, and it is difficult to determine a reasonable research scope (Figure 3).



Figure 3: The boundary of the three historic sites of the Han Dynasty

With the city wall site of the Ming Dynasty was discovered, cultural resources and information cross with each other in the whole area, it's hard to distinguish the primary and secondary cultural resources and information. Through behavior mapping of current participants, it found that the three historic sites work independently at present without any connection in terms of functions and transportation. As a museum, Guhan Altars relatively enclosed with independent functions; as an enclosed park, Baijiang Altar is not adequately lively; Yinma Pool remains in resting status; the T-shaped historic streets lacks adequate protection generally and traditional folk business activities declines day after day; position of city walls of the Ming Dynasty in Hanzhong is clear and distinguishable, as some multi-floor buildings were built orderly on the demolition position in 1980s, which is different from

surrounding area with low buildings. After mapping existing condition of the three historic sites, we made the following conclusions: ① slow-moving traffic system is missing, transportation system is not perfect; ② There are not adequate public service facilities, public places and open spaces; ③ Continuity of local culture is still weak; ④ Quality of physical environment is inferior. It is necessary to repair the spatial texture.

surrounding area with low buildings. After mapping existing condition of the three historic sites, we made the following conclusions: ① slow-moving traffic system is missing, transportation system is not perfect; ② There are not adequate public service facilities, public places and open spaces; ③ Continuity of local culture is still weak; ④ Quality of physical environment is inferior. It is necessary to repair the spatial texture.

4.2. Identity

Hanzhong area has its unique local culture in long-time social and historical practices, which is an important distinguishing characteristic. Historic city that remains in Hanzhong is a special mark of it, and is also what local culture survives on. This kind of local culture can be classed as cultural capital according to classification of field capitals proposed by Bourdieu. A collection of local historical and cultural heritages are special cultural capitals of Hanzhong area. In certain conditions, they could be converted into economic capitals and social capitals. To tap the potential, they must be connected with a certain field and form a special cultural field. In other words, it is necessary to construct a structure of historic city area of Hanzhong centered in the three historic sites and connected with the city wall



Figure 4: The structure of the historic district of Hanzhong city



ruins of the Ming Dynasty (Figure 4). In this process, we sorted local cultural elements of Hanzhong with mapping method. As an important resource in the cultural field and a physical environment of the city, traditional historical culture commercialize cultural resources in the cultural field through spatial production behaviors; connected with consumption, they initiate consumption behaviors and bring economic benefits, in which way, conversion between different kinds of capitals are finished.

As the core of ritual thought, the LI-YUE system originates from the Zhou Dynasty, and flourished in the Han Dynasty, together with the political and legal system forms the whole social system of ancient China and has a great impact to the politics, culture and arts afterward. And that is why China is called the Country of LIYUE. After studying local culture and cultural inheritance, it's not difficult to find that in the local cultural field of Hanzhong, the three historic sites of the Han Dynasty and surrounding areas are the most representative local cultural resources and physical environment. Guhan Altar and Baijiang Altar are both spaces constructed under the influence of traditional ritual system. As time passes, special folk liveness forms in surrounding T-shaped streets; however, it declined day after day in recent years as a result of lack of protection measures. Hence, we believe cultural identity of the place should be defined as ritual and liveness. Ritual represents the classical elite culture with sense of order and sense of ceremony, while liveness represents harmonious, natural grass-roots culture. The place identity may be defined as LI-YUE symbiosis. The three historic sites of the Han Dynasty, as a cultural center of the city, take both tourism and city life into consideration. It a center where people may experience diversified local cultures.

4.3. The strategy of placemaking

Based on the place identity of LI-YUE symbiosis, we put forward the strategy of placemaking: all parts are connected with each other and greenways are designed based on natural conditions; establish the axis LI and axis YUE, it is well protected and modern life is well guaranteed.

All parts are connected with each other and greenways are designed based on natural conditions. First of all, a large ring of local cultures – a recreation system around the main urban area – could be built. Hantai District is positioned as an experience center of Hanzhong culture. Various cultural resources of the city radiate from the center of Hantai District, in which way, cultural development of surrounding districts and counties is driven efficiently and comprehensively. The city highway ring serves rapid traffic, and national highway ring serve slow traffic and tour. Secondly, a middle ring of traditional culture is built. Specifically, it is suggested that a heritage park should be built on the position of city walls of the Ming and Qing Dynasties, the city and rivers should be well connected and a demonstration urban reaction and slow traffic system should be constructed. By building up a city wall heritage park, connecting cultural relics inside and outside of the ancient city and creating a slow traffic system for the purpose of ancient city experience, it is able to recover and highlight pattr of ancient city, expand public spaces of the city and improve people's identity and experience. Last of all, a small ring for local culture experience is built. The three historic sites are connected to maintain liveness of the city; a slow traffic system is



Figure 5: The small ring of the three historic sites

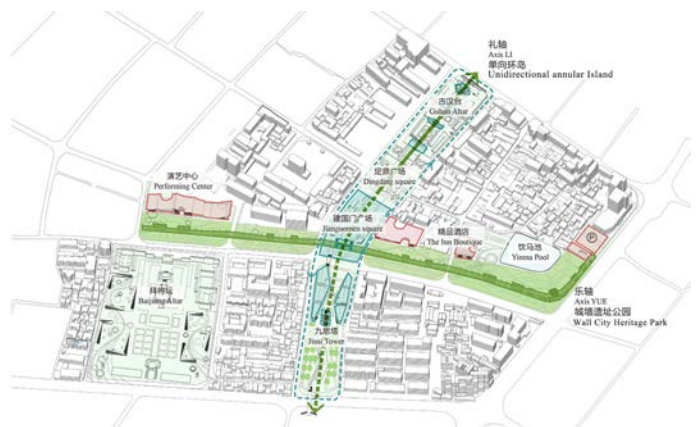


Figure 6: The LI-YUE axis of the three historic sites



built to connect main spatial nodes and public buildings; activities with local features are devised to create liveness experience(Figure 5).

Establish the axis LI and axis YUE, it is well protected and modern life is well guaranteed(Figure 6). Firstly, we should uphold traditional Chinese rituals and facilitate tourism. It is suggested that ritual architectures of Guhan Altar should be repaired and the traditional axis should be maintained; fences should be demolished to reshape background and foreground spaces of Baijiang Altar; the landscape of Yinma Pool is expected to be repaired and Santai Tower is to be recovered roughly to create an open space for the portal of the area. Secondly, the ancient city and city walls should be recovered. We should express pattern of the city walls and recover spatial pattern of the city walls of the Ming Dynasty in structure. It is suggested to devise display spaces, experience spaces and recreation spaces by taking the demonstration section of middle ring – the heritage park of city walls of the Ming and Qing Dynasties – as a carrier. Thirdly, roads need to be upgraded and cycle tracks should be offered. Roads are criss-crossed, graded and made denser; cycle tracks and footpaths are offered to create a slow-traffic system. Finally, heritages and liveness of daily life should be well protected. We should protect intangible cultural heritage successors and create a space where people live harmoniously; we should also make up daily life circles and activate occasional life circles.

5. Conclusions

“Field” originates from the idea of “social space” proposed by Pierre Bourdieu. It is a network in which there are objective relationships between all positions. Its nature depends on social position of each person and living functions of the space^{xv}. Without the sense of history and the attribute of culture of “cultural context”, it represents natural daily life. Being different from “environment” we usually care about, it stresses on the relationship between individuals in built environment or even milieu which is broader and more active. Basing on the naturalness of life represented by the “field”, planners and designers well explain sociality that they care about, space-time makes sense, people are valuable and splendid stories are told in the cultural field. The author drew the following conclusions: firstly, cultural field model can mark boundaries of historic blocks intuitively and concretely from a cultural perspective; secondly, to create a culture field for historical heritages makes for value identity and field identity of heritages; thirdly, as a technical and strategic research tool for research of historical heritages, mapping can not only help to find out internal connections between elements within the cultural field, but determine place identity in a more objective way by extracting cultural information and rebuild cultural connections through placemaking. Theories and practices discussed in this paper can help us to well know values of cultural heritages in historic areas, effectively enhance cultural inheritance and innovation and have positive significance in placemaking of historic blocks. There are still some troubles to be discussed. As a “public product”, historical cultural heritage needs involvement of stakeholders, but it’s hard to find a way out of the dilemma between protection of private equity and protection of public interest; protection of historical cultural heritages is a responsibility of both local residents and citywide citizens; to protect historical cultural heritages is to protect public interests, so high-level culture identity should act as main impetus for involvement of citizens, in addition to property right protection; as a deep-level variable, local culture has an impact on behavioral selection of the relation “government – market - society” and has the functions of building up social values, reconcile social conflicts and guide social development.

Acknowledgements

The writer wishes to express his most sincere appreciation to Prof. Zhang Pei, who read the manuscript carefully and gave valuable advice. Tremendous thanks are owed to Ms. Fang Minjie and Wu Hanru for helping me with the figure sort out. The writer is also indebted to BA studio for offering the case.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

The first author is, PHD student of Urban design and history, visiting scholar at the international art city in Paris, lecturer of Xi'an University of Architecture and Technology, core teacher, deputy director urban planning section,urban and rural planning department. He is mainly engaged in urban and rural planning history and cultural



heritage protection, urban design and regional architecture research. His research fields included development and planning history, urban regeneration, space justice. Since work, He has published over 10 academic papers, presided and participated in more than 10 research projects and 40 project of the planning and design, and won more than about 15 award in scientific research, teaching and working.

Second author, PHD of history, national registered planner in China, professor and director of Xi'an University of Architecture and Technology, academic leader, chairman of urban and rural planning department. She is mainly engaged in urban and rural planning history and cultural heritage protection, urban planning and design, ancient Chinese city studies, historical urban geography, urban morphology and other research. She is the managing director of Chinese ancient capital society and member of the China branch of international morphological society. Since work, she has edited and participated 11 books, more than 70 academic papers, presided and participated in more than 20 research projects and 70 project of the planning and design, and won more than about 10 award in scientific research, teaching and working.

Bibliography

- ⁱ Zhang Song. *Introduction to Protection of Historic Cities – A Method of Integral Protection of Cultural Heritage and Historic Environment* [M]. Shanghai: Shanghai Scientific & Technical Publishers. 2001
- ⁱⁱ Bourdieu P. *The Field of Cultural Production: Essays on Art and Literature* [M]. Cambridge: Polity Pres, 1993:162-164
- ⁱⁱⁱ Stan Allen. *Field Condition*. Points + Lines, p92
- ^{iv} Xue Xiaoyuan, Cao Rongxiang. *Globalization and Cultural Capitals* [M]. Beijing: Social Sciences – Academic Press (China). 2005
- ^v Yu Dazhong. *Non-territorial Expansion and Local Reconstruction of Culture under Globalization* [J]. Journal of Chongqing University of Posts and Telecommunications, 2010, 22(6): 117 – 121
- ^{vi} Zhao Hongjie, Wu Bihu. *A Study on Place Identity Model Based on the Leisure Temporal-spatial Involvement*. Tourism Tribune. 2017
- ^{vii} STEDMAN R. *Toward a social psychology of place: Predicting behavior from place-based cognitions, attitude, and identity*[J]. Environment and Behavior, 2002, 34: 561-581.
- ^{viii} ROSHANSKYHM, FABIANAK, Kaminoff R. *Place identity: Physical world socialization of the self*[J]. Journal of Environmental Psychology, 1983, 3: 57-83.
- ^{ix} KRUPAT E. *A place for place identity*[J]. Journal of Environmental Psychology, 1983, 3: 343-344.
- ^x BERNARDO F, PALMA J M. *Place change and identity processes*[J]. Medio Ambiente y Comportamiento Humano, 2005, 6: 71-87.
- ^{xi} Chen Chao, Qi Wei, Zhu Ling. *Field • Behavior • Architecture – Placemaking Method Based Urban Planning and Design Basis III Teaching Reform and Innovation*. 2017 Collected Papers of Urban Planning Education of Chinese Institution of Higher Education. 2017
- ^{xii} Corner, J. (1999). *The Agency of Mapping: Speculation, Critique and Invention*. In D. Cosgrove, *Mappings* (pp. 213-252). London: Reaktion Books.
- ^{xiii} <https://www.wikipedia.org>
- ^{xiv} H. L. Gamham. *Maintaining the Genius Loci: A Process for the Preservation of Town Character*
- ^{xv} Huang Yinggui, Wang Yuanling. *Space and Cultural Field* [M], Taipei: Chinese Studies Center Press, 2009

Image sources



Table 1: The cultural field model, by author

Table 2: Characteristic of place identity, by author

Figure 1: Cultural location map of Hanzhong, by author,

Figure 2: Mapping of average population density in Hanzhong city, by author, data sources came from Baidu maps, Sogou map, Public comment and WeChat

Figure 3: The boundary of the three historic sites of the Han Dynasty, by author, the information shown here comes from *the preservation plan of the famous historical and cultural city of Hanzhong*, photos by author

Figure 4: The structure of the historic district of Hanzhong city by author, the information shown here comes from *the preservation plan of the famous historical and cultural city of Hanzhong*

Figure 5: The small ring of the three historic sites, by author

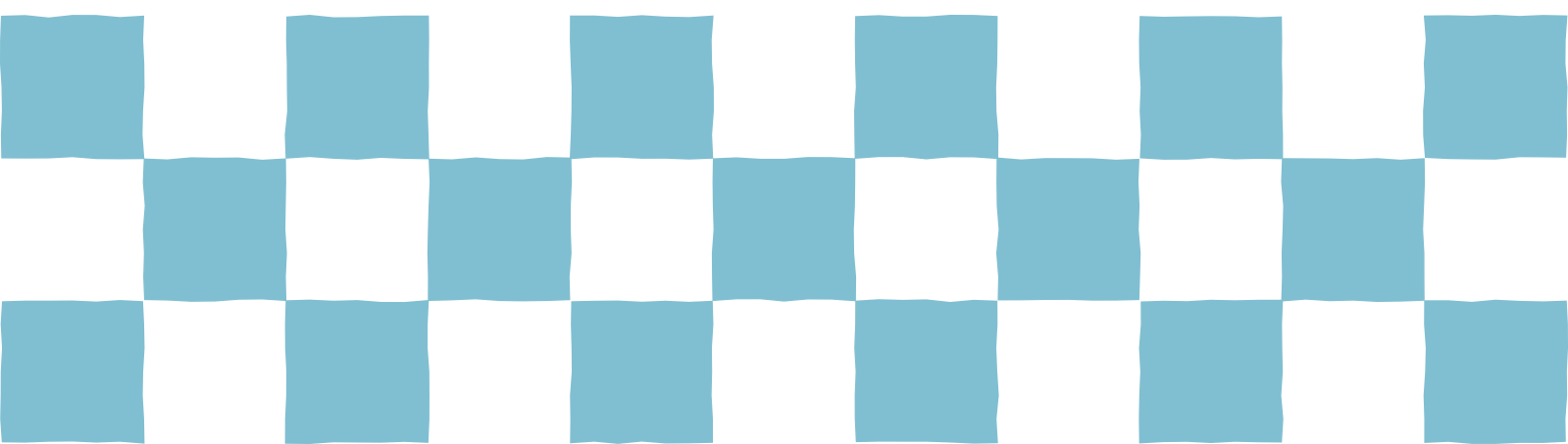
Figure 6: The LI-YUE axis of the three historic sites, by author



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

37 The Global History of Urban Renewal / GUHP*



Thousand-Hectare Metropolitan Playground: Visions for Johannesburg's Gold Mining Belt

Dorothy Tang (MIT)

Throughout the history of Johannesburg, the gold mining belt that spans the heart of the city has been depicted as an empty swath of land. However, the ownership structure of the mining lands obscured underlying forms of urbanization related to mining activity, including industrial complexes, employee villages, and miners' compounds. Johannesburg's economic reliance on gold extraction has left a legacy of racial conflict and environmental crisis, and apartheid-era planning practices used the mining belt as a buffer for racial segregation and reinforced spatial disparity of the city. With the decline in gold reserves since the 1960s, mining operations have ceased, leaving behind a vast industrial brownfield site ripe for redevelopment. A socially progressive design collective at Rand Mine Properties led by Ivor Prinsloo from 1968-1971 conceived of a vision to convert this landscape into a large site for recreation—a playground for Johannesburg. As a former assistant to the Smithsons and later Candilis-Josic-Woods, Prinsloo believed that the mining belt should be a site of reconciliation and social integration rather than separation. He assembled an inter-disciplinary and multinational team of architects, engineers, landscape architects, and planners to address the complex challenges of the mining landscape. His hope was that it would emerge from the stigma of dereliction to one of health and wellbeing, and entertainment and recreation. While never fully realized and despite the appropriation of certain projects for commercial interests, this vision for the mining belt persists in the planning imaginary of Johannesburg today.

This paper traces the genesis and legacy of Prinsloo's utopian vision in the conversion of the mining industrial complexes into a heterogeneous urban mosaic of leisure, housing, infrastructure, and industry. In particular, Gold Reef City and Shareworld, both amusement park complexes, demonstrate how the vision of a playground is used selectively to legitimize conflicting political claims and planning endeavors. This landscape embodies the paradoxical interests of neoliberal urban governance and the mandate for racial justice in post-apartheid Johannesburg.

Imagining a Meshwork of Urban Nature – Lawrence Halprin and Panhandle Parkway in the San Francisco

Meng-Tsun Su (National Chiao Tung University)

The concept of mobility conveys two important aspects of the cultural landscape – the ability to move and the condition of displacement. Through the lens of mobility I will investigate Lawrence Halprin's involvement with the San Francisco urban freeways between 1962 and 1964. I will argue that these urban freeway projects demonstrate Halprin's first attempts to mediate between the discrepancy in rootedness and drift, preservation and development, and the ordinary and the extraordinary. Halprin believed in the civic value of large-scale urban design. Freeways could act as catalysts in the transportation system not only to channel traffic flows but also to cultivate a lively, occupiable urban environment.

Halprin saw urban freeways as socially significant and integral to the urban fabric and thus pushed for an urban redevelopment that was integrated with the structure of highway. Despite the San Franciscans' revolt against highways, he proposed various solutions—elevated, suppressed, and tunneled roadways together with layered multi-use developments of parks and apartments—to “mesh the highway with the city.” The urban spaces created by existing highways could be transformed from marginal sites to performative venues. These were strategies and tactics to invest urban freeways with social and political purposes beyond engineering and transportation.

Halprin believed in facilitating and accommodating social mobility of the postwar San Francisco through transportation infrastructure. Many redevelopment sites where he and his colleagues involved with, however, were blamed for the large-scale clearance and dislocation of minority residents. Highway construction that were consciously linked to these sites was highly contested and subject to vehement opposition. The social drama have furthered his theoretical emphasis on participation, community, and collective creativity in the late 1960s. While the caveats of the redevelopment efforts add dimension to the lessons of mobility, these open strategies suggest alternative ways of building, occupying, and moving through cities.

Contesting Urban Authenticity on a Global Scale: Heritage, Regeneration and Redevelopment in Singapore and Tokyo

Jiewon Song (National University of Singapore)

In our urban century, cities are more and more connected. Correspondingly, urban ideas and strategies have traveled as well as shared across borders not limited to nations but cities. Cities in Asia are no exception as they are connected to the circuits of global capital and cultural circulation. At the same time, there are super-national heritage policies developed by international institutions, i.e., ICOMOS and UNESCO that tend to turn the local heritage conservation praxis into their playing field. Urban redevelopment is increasingly inviting the conservation and management of heritage as a vector of place identity to distinguish one place from another place that is now a global phenomenon, known as heritage-led regeneration. It brings the combined effect of global urban and cultural strategies into the ground of urban redevelopment. Here, economic globalization is a key driver, which has changed the roles of heritage conservation and expanded it in an unprecedented way into urban political economic spheres.

This study, therefore, focuses heritage-led regeneration, which is an urban renewal effort designed to revitalize urban places by adopting the conservation of heritage properties, especially in two cities in Asia: Singapore and Tokyo. While the former is a centralized, unitary city-state so that urban policies are made at a national level without having a separate layer of local government, the latter has put effort into the decentralization of planning power, but the national government still plays a larger role in urban redevelopment projects. In line with this, the study looks into an urban district from each city that is Tanjong Pagar (Singapore) and Marunouchi (Tokyo)

The urban history of Tanjong Pagar began as a fishing village, whilst that of Marunouchi started as a trading port town. These districts have played a critical role not only as cradles for national development but also as financial centers for global city status. In this process, the government of Singapore and of Tokyo attempt to create their own formula of urban policy and practice for heritage conservation and urban redevelopment to win the premier league of the global city. However, their recipes for making authentic urban places to stand out from competitors absurdly turn out to be same. They invite private sector participation under the scheme of the public-private partnership and put the priority on the economic return of urban redevelopment. More importantly, there are national narratives weaved into those heritage-led regeneration efforts. As a consequence, the study argues that these components turn authenticity into a singular entity leading to the homogenization of urban places.

Given these backgrounds, this study critically untangles the construction of authenticity of urban places within the context of heritage-led regeneration driven by global city making. It attempts to examine socio-economic and political factors; mechanisms to connect local and national into the circuits of global capital and cultural circulation; and their socio-spatial consequences in contemporary urban places. In this fashion, this study can nurture the global history of urban renewal by providing an insight into Asian global cities.

Remaking Hong Kong Heritage and Identity: Post-Colonial Urban Renewal Planning and Heritage Policy Agenda

Yeung Yeung Fok (University of Leicester)

Heritage is not simply inherited from the past, but socially and culturally constructed for both present and future purposes. Through an examination of recent changes in the Hong Kong heritage landscape, I argue that the city is undergoing a process of heritage creation and (re) construction, embedded in discourses of post-colonialism, identity and globalization.

In the first two decades of the 21st century, major Asian cities, including Hong Kong and Singapore, have experienced a radical and fast process of urban redevelopment. The mega-competition for attaining global city status among Asian cities is no longer based only on economic achievement, but also on urban cultural landmarks and creativity.

Among the cities participating in this global mega-competition, Hong Kong stands out as one of the key players. In the last two decades, the Special Administrative Region (SAR) government has introduced new mega-projects of cultural infrastructure such as the West Kowloon Cultural District and urban redevelopment projects including the 'revitalization' of the former Central Police Station and Blue House Cluster, to reconstruct and regulate urban heritage space and to help re-branding Hong Kong as an Asian cultural hub.

This paper addresses three questions with reference to two case studies of Hong Kong, namely, the former Central Police Station and Blue House Cluster: (a) how major Asian mega-cities (such as Hong Kong) are regulating their urban heritage to establish new cultural notions of the city; (b) what power relations exist behind these urban renewal and heritage projects, and their implications for people's everyday participation; (c) what the role of the urban renewal and heritage policy agenda is, in terms of the complex process of creating Hong Kong's post-colonial identity. Additionally, this paper analyses the role of the SAR government's urban renewal planning. While the government attempts to re-brand the colonial past of the city as part of Hong Kong's cultural capital, this also generates feelings of nostalgia for the colonial period. Its history of colonialism has given Hong Kong a so-called 'Westernized' and 'internationalized' image which set it apart from the rest of mainland China, and gave it an advantage in the competition for global city status. However, it also places Hong Kong in a challenging position within the larger Chinese national project.

As the cultural competition between Asian cities is turning fiercer, it is important to explore these issues in the specific context of Hong Kong.



Imagining a Meshwork of Urban Nature – Lawrence Halprin and Panhandle Parkway in the San Francisco

Meng-Tsun Su*

* *PhD Candidate, Graduate Institute of Architecture mtsu72@gmail.com*

The unbuilt project of Panhandle Freeway in San Francisco from the early 1960s is a unique case in the politics of design during the heyday of urban renewal in the United States in the early 1960s. The close collaboration between highway engineers and landscape architect Lawrence Halprin on this project also exemplifies cross-disciplinary thinking in redefining natural processes in the city. While Halprin emphasized the visual and visceral experience of moving through the highways integrated with parks and residential apartments, the civic function of urban freeway clashed with the local communities that would be displaced by the construction. The aesthetics of mobility eulogized a regional vision shared by Halprin and his friends informed their active involvement with the infrastructural design of the Bay Area. It presents an alternative to the criticism of the urban renewal of the 1960s. Nevertheless, the residents worked with the city council on the successful revolt against Panhandle Freeway, and none of the alternative routes was constructed, leaving the gap between southern San Francisco and Golden Gate Bridge to local traffic. While some critics see Halprin's freeway design as an ameliorative disguise, his schemes open up a dialogue between social and aesthetic aspects of the mobility. In doing so, his interweaving of urban ecology and infrastructure marked the evolution of scenic parkways to urban freeway in landscape architectural practices. The lesson of Panhandle Freeway is not only a matter of coexistence, it also foreshadowed the open-ended methodology in planning and design.

Keywords: urban freeway, landscape urbanism, urban renewal, Lawrence Halprin

Introduction

Geographer Tim Cresswell pondered two different ideas of mobility in the cities – the aesthetic experience of movement and the condition of social change. Both senses are favorable to their adherents. Aesthetic mobility invigorated modern arts and architecture, and larger capital and social mobility is key to viable economics. The unobstructed flow of people and businesses often displaced of the local community.ⁱ Landscape Architect Lawrence Halprin's design for the Panhandle Freeway addresses both senses of mobility. At its best, he proposed a series of sensitive interventions that address the imposing large-scale construction. Furthermore, he experimented with representation techniques to analyze the visual and visceral experiences of movements on the freeway.

The downtown businesses of San Francisco were eager to revive the declining central business district of San Francisco in the postwar years. In a way, they continued the desire to integrate the city into the larger bay area after the construction of the Golden Gate Bridge and the Bay Bridge during the 1930s. Like other major cities in America, San Francisco faced serious traffic congestion during the peak hours of driving. The Chamber of Commerce worked with planners and city officials, hoping an unobstructed freeway system would attract more consumers and residents to the city.ⁱⁱ Various plans had been proposed, and the planning of the Bay Area Rapid Transit District (BARTD) was begun in the 1950s as well to facilitate the journey across the bay.

With the passing of a series of federal housing and highway acts and the booming populations after the World War II, the financing provided by the federal government spurred the construction of subsidized housings and statewide highway networks that often led to large-scale clearance of the "slum" areas. In addition to housing developments in Fillmore, South Market, and Embarcadero, the highway and the BART system constructions in the Bay Area included some of the most disastrous episodes, including the mostly black and lower income communities of West Oakland.ⁱⁱⁱ Planners and theorists proposed policy with different ramifications. Planners and theorists proposed policy with different ramifications. Many observers fault the protests and riots on the



suburbanization of jobs and the lack of minority mobility. Furthermore, the demonstrators further valued stability and homeownership and pointed to the cult of mobility as the problem.^{iv} Catherine Bauer Wurster, the prominent advocate for public housing, urged for more choices in housing and higher mobility among residents to remedy the increasing distance between housing and employment locales due to demographic and industrial shifts.^v

The freeway revolt in San Francisco is one of the early successful counter actions to urban redevelopments that owes its success to the mostly middle-class based constituency. A strong network of Neighborhood associations organized a series of successful protests that pressured the San Francisco Board of Supervisors to vote in 1959 in opposition to state plans for freeway projects around the city. The extension of the elevated, double-deck Embarcadero Freeway, which had marred the vista of the landmark Ferry Building, was halted due to this



opposition (Figure 1).^{vi}

Figure 1. Embarcadero Freeway, San Francisco, early 1960s.

To connect the Bay Bridge and the existing Southern and Central Freeways to the Golden Gate Bridge, the State Highway Division sought alternative routes: one through the Panhandle area east to the Golden Gate Park, and another through the area north of the City Hall.^{vii} These three legislative routes all together are named Panhandle Parkway and Cross-town Tunnel Corridors, often dubbed as the Panhandle Freeway. At the request of the City, the State hired Halprin to “ensure incorporation of the highest aesthetic qualities of landscaping and special design.”^{viii} Halprin was concerned with the civic value of infrastructure based on the regional vision of his colleagues, mainly the loosely organized planners, architects, and landscape architects in the Bay Area called *Telesis*.^{ix} More recently, architect DeMars and landscape architect Theodore Osmundson had served on the Design Committee of the Ferry Building Park in the mid-1950s and had proposed several alternatives to address the impact of the Embarcadero Freeway.^x Upon accepting the commission of the Panhandle Freeway, Halprin wrote to Kevin Lynch, the renowned urban planner and theorist at the Massachusetts Institute of Technology, requesting a draft of his forthcoming book, *The View from the Road*.^{xi} Lynch responded with enthusiasm, saying that “You have been given a marvelous task! I envy you, and will be very much interested to see the results that come of it.”^{xii}

Mediating Two Kinds of Mobilities

The urban freeways of the early 1960s facilitated the dynamic spatial organization and movement among the emerging regional complexes. Like the comprehensive highway systems developed among American cities during the interwar era, they also served the desired political and economic continuum.^{xiii} Halprin’s collaboration with engineers of the California Department of Transportation on Panhandle Freeway reacted to the previous highway revolts. The aesthetics of an urban freeway he promised fulfilled the need of drivers, pedestrians, and



the community on both regional and bodily scales. As a daily automobile commuter between Marin County and downtown San Francisco office via the Golden Gate Bridge, he described the dual identity of city dweller cum car driver as a “Dr. Jekyll and Mr. Hyde contrast.”^{xiv} Valuing experience for its function in unifying the varied scales of the freeway and the city, he also contended that “the pedestrians and automobile should be friends.”^{xv}

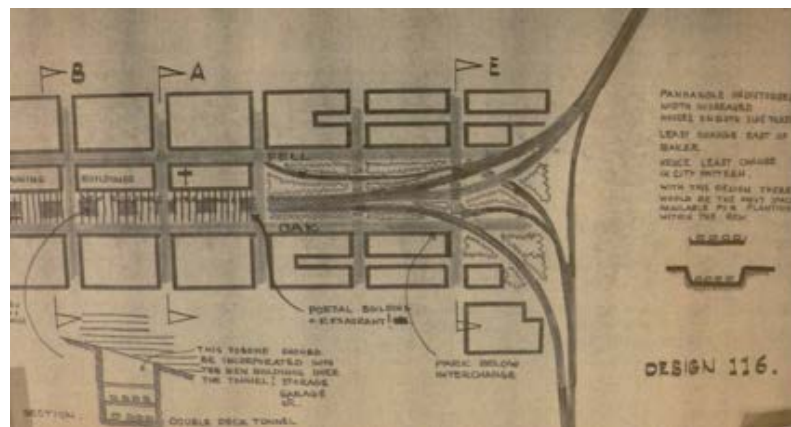
The beginning of the 1960s witnessed a sea change in the discourse of urban design, when influential writings by Jane Jacobs and Herbert Gans eroded the faith in total design of the city as a system and fomented an ensuing disillusionment of the grand manner.^{xvi} Despite their different positions on suburban culture but common to the sociological wisdom of Jacobs and Gans, is the limited role of the physical environment in the formation of collective and individual experiences, and, therefore, a call to relinquish total control over design in order to enable social processes to take place. In the American Institute of Planners conference in December 1961, Halprin scribbled down his thought on “How do we achieve visual heterogeneity” in six points: leave holes for building to be done some years later; get various hands at work – architects; encourage naïve design – builders [and] people; allow for chance occurrences. . . the unpredictable; multiple use zoning; and do away with architectural commissions which tend to standardize things.^{xvii} These immediate concerns were echoed in his freeway projects.

Seeing the city as both a system as well as experiences also defines Halprin’s approaches to urban freeway. For Halprin, who commuted from Marin County to his downtown San Francisco office for work, via the Golden Gate Bridge, the dual identity of city dweller cum car driver is a “Dr. Jekyll and Mr. Hyde contrast.” Valuing experience for its function in unifying the varied scales of the freeway and the city, he also contended that “the pedestrians and automobile should be friends.”^{xviii} As automobile circulation shapes the armature of the city, Halprin’s open strategies for urban design depends on the mapping of planar relations of the urban elements. On the pedestrian side, he appropriated the ground condition at a smaller scale and engaged the boundaries of urban infrastructure.

After a more general *Report on the Aesthetics of Urban Freeways*,^{xix} Halprin went on to explore the site-specific issues of topography, local streets, and the neighborhoods (Figure 4). The first comments on the set of road geometries passed from the State office were based on three aspects: community, pedestrians, and drivers. Many of his favorite alternative devices appear as depressed, tunneled, and double-deck roadways interspersed with lush plantings. For example, the eight-lane, two-level road geometry of no. 116 caused less impact because “after construction there would be more space for buffer planting and other coordinated redevelopment which would speed the integration of the freeway.” Its pedestrian experience was preferred, for the freeway was blended “into its surroundings, so helping the pedestrian and the community in the immediate vicinity.” The driving experience was pleasant because of the “varied interesting route.”^{xx} The route was developed into



Alternative L3 where one sees a separated circulation of highway lanes, local streets, and pedestrian walkways



(Figure 2, 3).

Figure 2. Working drawing of road geometry no. 116, Panhandle Freeways, c. 1963.

Figure 3. Proposal for a redevelopment area integrated with the freeway based on the concept of staging in road geometry no. 116, c.1964

Concentration is another strategy found in Halprin's proposal that would reduce the footprints of an urban freeway. Contrary to the prevailing wisdom of parkway designers who seek to achieve picturesque effects, Halprin criticized a wide right-of-way as unfit in urban areas. As a result, he preferred devices of multiple-decking and tunneling as mentioned above. The interchanges that served as connections between the freeway and urban systems are also significant. Halprin suggested a lower speed design to reduce the radii of the ramp. He also studied the movement of traffic in order to eliminate unnecessary interchange roadways.^{xxi} The no. 118 road geometry shows a compressed interchange at the Civic Center, contained by a tunnel entrance with a "park below structure (Figure 4)." At the interchange at Park Presidio, Halprin considered "the situation of the



remaining houses could be improved by detail design of the spaces between narrow roads and ramps,” such as “earth mounds, retaining walls, planting.”^{xxii}



Figure 4. Proposed Interchange at the Civic Center, Lawrence Halprin and Associates, 1964.

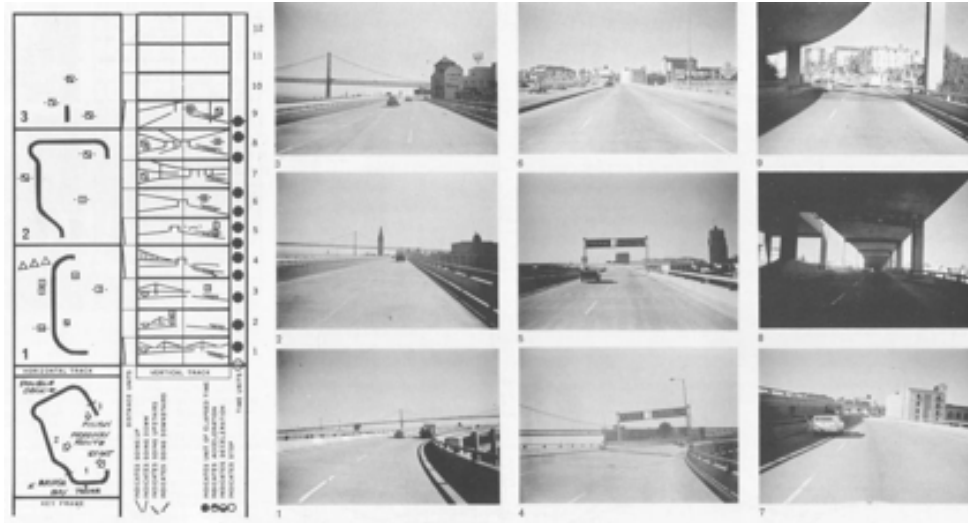
On the pedestrians’ human scale, Panhandle Freeway benefit from the spontaneous cultivation of body and its engagement with the urban environment as found. Halprin’s latter book *Freeway* shows Anna holding a kerchief, sometimes standing and posing, sometimes dancing, shuttling around and between the buttresses underneath an elevated highway.^{xxiii} The matrix of photos resembles Edward Muybridge’s motion study photographs. Both break down continuous actions into still frames which imply a sense of time. Just as Anna’s spontaneous approach invites a give-and-take between the body and the environment, Halprin sees urban design as an “inclusive” rather than “compulsive” practice.^{xxiv}

Representing Urban Freeways

Halprin’s work on the San Francisco freeway project coincides with the formulation of his scoring system in landscape design.^{xxv} The *Program of Phase I Study* of the Panhandle Freeway indicates an attempt to develop a “continuous ‘strip’ technique” for graphics presentation,^{xxvi} by which Halprin referred to the notational system as he used in representing the experience of walking at the Capitol Tower Apartments.^{xxvii} Here the objects in the space are projected in relation to the moving body rather than a three-dimensional Cartesian coordination. His course assignment for students at the University of California at Berkeley, “Recording of Actual and Perceptual Events,” attempted to negotiate the conflict between “what is seen” and “what is felt.”^{xxviii} The students’ collective work appeared as a score depicting the travel from north San Francisco to Sausalito via the Golden Gate Bridge.^{xxix} This notational system evolved into a combination of image matrices and strip symbols,



together with a plan indicating the trail of the movement. When Halprin published his article “Motation” in



1965, he included a graphic of a driving experience on the Embarcadero Freeway as an example (Figure 5).^{xxx}

Figure 5. Embarcadero Freeway “Motation” score, Lawrence Halprin and Associates, 1965.

Halprin’s representation of moving through the urban streets and freeways was paradoxical. The bodily experience of urban infrastructure and its non-perspective representations in his investigations are at once ameliorative veneer and progressive proposal. On the one hand, these drawings worked as the aestheticized mask of the ruthless urban clearance. The combination of section and perspective drawings of the San Francisco freeway, as well as the many conceptual renderings made by Denis Wilkinson, the firm’s draftsman, have their political intention to persuade the public in the face of their opposition. After all, the vocabulary of “plant buffer” and “landscaping” was prevalent in the newspaper and design documents. On the other hand, the national system also worked as the mediator, or even the embodiment, of the automobile movement through the city. The various physical and intangible connections in Halprin’s freeway design testify to his ideas to extend the civic function of infrastructures. He saw aesthetic elegance in the freeway structures’ expression of movement, like an “action painting,”^{xxxix} within which one can literally participate and experience “the sensation of motion through space.”^{xxxii}

In a way, the delineation of overpasses and bridges in the drawings manifests Halprin’s aim in connecting the body to the act of seeing. A photograph in Halprin’s *Freeway* shows the unfinished end of the elevated Embarcadero Freeway, which became a spot overlooking the city’s port. The idea climaxed into a whimsical ventilation tower above the tunnel that also serves as a belvedere. The reclining figures and the passing cars depicted in some of the freeway drawings imply an interpenetration of sight-seers, some static, some moving, on different elevations of highway, local streets, and walkways (Figure 6). These site-specific appropriations of the



city negotiate the visual (what is seen) and visceral (what is felt), aspects that Halprin intended to mediate across



different scales in experiencing the city.

Figure 6. The Franklin D. Roosevelt East River Drive, Manhattan, 1937-1942.

Through the Panhandle Freeway, Halprin argued for a different type of road from that which was prevalent in parkway discourse. Frederick Law Olmsted had defined the civic function of urban roads in his writing on the concept of “park ways.”^{xxxiii} In fact, the Panhandle area, called “the Avenue” in the nineteenth century, reflects Olmsted’s unrealized Promenade that would connect different parts of the city to his proposed Rural Ground for San Francisco (Figure 13).^{xxxiv} This dialogue between Halprin and Olmsted reinforces Jacqueline Tatom’s summary of the formal and functional evolution of urban roads from boulevard to parkway to urban freeway which is also echoed in Halprin’s favorite contrast between the Henry Hudson Parkway and East River Drive on two sides of the Manhattan waterfront.^{xxxv} Since the nineteenth century, the theory of parkway design had been inculcated by apologists of technological modernism. For Sigfried Giedion, the parkway represents a new design genre expressive of the new space-time conception. Using the Henry Hudson Parkway in Manhattan as an example, Giedion declared an ultimatum for the city which was to be bulldozed for parks along the way:

The use of a new and larger scale in town planning which would coincide with the scale already being used in the parkway system is an imperative necessity for the salvation of the city. This scale must permeate all urban projects.^{xxxvi}

Similarly, according to socio-economic perspective, an urban freeway design manual published by American Association of State Highway Officials (AASHO). One of its telling paragraphs maintains:

Expressways developed to desirable standards, with emphasis on ample right-of-way and landscape features, provide a park-like atmosphere and thereby enhance the value of adjoining property and the general area served by the arterial improvement.^{xxxvii}

The dilemma in assessing this technological aesthetics has been best summarized in urban historian Matthew Gandy’s assessment of the parkway system as established by Robert Moses and Gilmer Clarke in New York State. Gandy maintains that it is difficult to separate Moses’ “aesthetic dimensions to his infrastructural projects”



from “the wider social and economic dynamics of urban change underpinned by their construction.”^{xxxviii} This separation is most salient in the catastrophic destructions caused by the urban freeways Moses had built in his later years, such as the Cross Bronx Expressway. His proposal for the Mid-Manhattan Expressway was even illustrated in AASHO’s design manual.^{xxxix}

The freeway is a two-way lane that holds up and drains the urban economy and culture at the same time. In retrospect, whether San Francisco needs a limited-access highway from downtown to the Golden Gate Bridge is still debatable. Here Halprin’s contribution lies in his ability to reify the transitional quality of the urban freeway while diminishing its footprints within the city. As Halprin imagined it, a good urban road embodies his view of cities as process and change.^{xl} Therefore, his design for the Panhandle Freeway is not only a lesson of coexistence between the outsider drivers and insider dwellers, but one that encourages the crossing over of permanent as well as intangible boundaries. Like many modernist architects and planners of his time, Halprin viewed physical design as an instrument of social change. Moreover, his social sensitivity was augmented by his keen observation and willingness to tackle the realities of urban problems. For cultural historian Marshall Berman, the separation of political and aesthetic messages after World War II, the so-called depoliticization of art, ceases to produce a dialogue between the modernization of the environment and modernist art and thoughts. In the Panhandle Freeway project, Halprin has embodied Berman’s call for the necessity to imagine and engage the present in the life of the postwar cities and societies.^{xli}

Notes on contributor(s)

A Ph.D. candidate at the Graduate Institute of Architecture at National Chiao-Tung University in Taiwan, Meng-Tsun Su also teach courses on the histories of landscape architecture in Tunghai University and Chung Yuan Christian University. His dissertation focuses on the inclusive and open-ended works of landscape architect Lawrence Halprin in the ways city and nature infiltrates each other in the environment of the San Francisco Bay Area.

Endnotes

ⁱ Tim Cresswell, *On the Move: Mobility in the Modern Western World* (New York, NY.: Routledge, 2006).

ⁱⁱ Joseph A. Rodriguez, *City Against Suburb: The Culture Wars in an American Metropolis* (Westport, Conn: Praeger, 1999), 24.

ⁱⁱⁱ For the history of highway revolts and BART controversies, see Joseph Rodriguez, *City Against Suburb: The Culture Wars in an American Metropolis*, 21-74 and Katherine M. Johnson, "Captain Blake Versus the Highwaymen: Or, how San Francisco Won the Freeway Revolt," *Journal of Planning History* 8, no. 1 (2009), 56-83; For institutional segregation in relation to the planning of highway and BART in West Oakland, see Robert Self, "'to Plan our Liberation': Black Power and the Politics of Place in Oakland, California, 1965-1977," *Journal of Urban History* 26, no. 6 (September, 2000), 759-792; For controversies of the BART construction in downtown Berkeley, see Henry Malcolm Steiner, *Conflict in Urban Transportation : The People Against the Planners* (Lexington, Mass: Lexington Books, 1978), 33-48.

^{iv} Rodriguez, *City Against Suburb : The Culture Wars in an American Metropolis*, 1999, 64-65.

^v Catherine Bauer Wurster, *Housing and the Future of Cities in the San Francisco Bay Area* (Berkeley, Calif: Institute of Governmental Studies, University of California, 1963), 26-29; For a urban history of the San Francisco Bay Area according to the ideal of a balanced regional development, See Mel Scott, *The San Francisco Bay Area; a Metropolis in Perspective* (Berkeley, Calif: University of California Press, 1959).

^{vi} Rodriguez, *City Against Suburb : The Culture Wars in an American Metropolis*, 32-36.

^{vii} California Department of Public Works, *Freeway Studies: Panhandle Parkway and Crosstown Tunnel Corridors, Legislative Routes 2, 56 and 223, a Digest of Studies* (Sacramento: California Department of Public Works, California Division of Highways, 1964). Documents related to the Panhandle Freeway can be found in the Halprin Archive housed in the Architectural Archives of the University of Pennsylvania (office files 014.I.A.763-768, box 19; flat files 014.II.A.054).



- viii Draft of letter from J. P. Sinclair to Board of Supervisors, City and County of San Francisco, [November 1962?], Halprin Archives, box 19, 014.I.A.763.
- ix For brief discussions on *Telesis*, see Gwendolyn Wright, "A Partnership: Catherine Bauer and William Wurster" In *A Everyday Modernism: The Houses of William Wurster*, ed. Marc Treib (Berkeley, Calif: University of California Press, 1995); Marc Treib and Dorothée Imbert, *Garrett Eckbo : Modern Landscapes for Living* (Berkeley, Calif: University of California Press, 1997).
- x For details of DeMars and Osmundson's participation in the design of the Embarcadero Freeway, See Vernon DeMars, "The Embarcadero Freeway Vs. the Ferry Building Park: Selected Correspondence and News Clippings from August 1955 to December 1957" Frank Violich Collection, Environmental Design Archives, University of California, Berkeley. 1985.
- xi See Donald Appleyard, Kevin Lynch and John R. Myer, *The View from the Road* (Cambridge, Mass: M.I.T. Press, 1964).
- xii Letter from Lynch to Halprin, dated 7 March 1962, Halprin Archives, box 19, 014.I.A.763.
- xiii The thesis is proposed by Matthew Gandy in his analysis of Robert Moses' parkway systems in New York State. See Matthew Gandy, *Concrete and Clay: Reworking Nature in New York City* (Cambridge, Mass: MIT Press, 2002), 133-135.
- xiv From 'Outline of May 1963 Presentation' document, Halprin Archives, box 19, 014.I.A.768.
- xv Lawrence Halprin, *Freeways* (New York: Reinhold Publishing Corporation, 1966), 27.
- xvi When consulted on the redevelopment of Chinatown in Honolulu, Hawaii, Halprin advised the inquirer to "read Jane Jacobs about the qualities of life in a city." Letter from Halprin to Lindley, dated 25 February 1966, Halprin Archives, box 194, 014.I.A.6050. Halprin was referring to the influential book by Jane Jacobs, *The Death and Life of Great American Cities* (New York, Random House, 1961). In his typescript comment as a panelist in the meeting of the American Institute of Planners in December 1961, Halprin expressed great admiration for Herbert Gans' essay on community life. See untitled typescript, Halprin Archives, box 195, 014.I.A.6147; Herbert J. Gans, "The Balanced Community: Homogeneity Or Heterogeneity in Residential Areas?" *Journal of the American Planning Association* 27, no. 3 (1961), 176-184. Gans was to developed this thesis on the positive side of homogeneity in his important book on suburban culture. See Herbert J. Gans, *The Levittowners: Ways of Life and Politics in a New Suburban Community* (New York: Pantheon Books, 1967).
- xvii 'How do we achieve visual heterogeneity' manuscript, Halprin Archives, 014.I.A.6147.
- xviii Lawrence Halprin, *Freeways* (New York: Reinhold Publishing Corporation, 1966), 27.
- xix See 'Report on the Aesthetics of Urban Freeways, Second Draft' document, dated 23 May 1963, Halprin Archives, box 19, 014.I.A.768.
- xx See enclosures of letter from Halprin to Sinclair, dated 21 October 1963, Halprin Archives, box 19, 014.I.A.763, for comments on these road geometries.
- xxi This is evidenced in the studies for a new interchange in Akron, Ohio. See Lawrence Halprin, *Freeways*, 104-105.
- xxii Letter from Halprin to Sinclair, dated 21 October 1963.
- xxiii Halprin, *Freeways*, 20-21.
- xxiv 'AIA Northern California Chapter, San Francisco' typescript, dated 9 March 1964, Halprin Archives, box 195, 014.I.A.6164.
- xxv See 'Notes on a Notation System' in Lawrence Halprin, *Notebooks, 1959-1971* (Cambridge, Mass: MIT Press, 1972), 95-104; Lawrence Halprin, "Motation," *Progressive Architecture* 46 (July, 1965), 126-133.
- xxvi 'Program of Phase I Study' document, dated 26 February 1962, Halprin Archives, box 19, 014.I.A.768.
- xxvii Lawrence Halprin, *Cities* (New York: Reinhold Publishing Corporation, 1963), 212-213.
- xxviii 'Recording of Actual and Perceptual Events' document, dated 10 October 1962, and the student works can be found in Halprin Archives, box 194, 014.I.A.6042.
- xxix Lawrence Halprin, *Cities*, 208-209.
- xxx Halprin, *Motation*, 126-133; A more detailed presentation of this example is included in Halprin, *Freeways*, 88-89.
- xxxi 'Hawaii Governor's Conference on Natural Beauty and Community Appearance, Honolulu' typescript, dated 4 February 1966, Halprin Archives, box 195, 014.I.A.6164.
- xxxii Halprin, *Freeways*, 17..
- xxxiii Frederick Law Olmsted, "Report of the Landscape Architects and Superintendents" In *The Papers of Frederick Law Olmsted. Supplementary Series. Vol. I, Writings on Public Parks, Parkways, and Park Systems.*, eds. Charles E. Beveridge and Carolyn F. Hoffman (Baltimore: Johns Hopkins University Press), 112-146.
- xxxiv Terence Young, *Building San Francisco's Parks, 1850-1930* (Baltimore: Johns Hopkins University Press, 2004), 76-77.



^{xxxv} Jacqueline Tatom, "Urban Highways and the Reluctant Public Realm" In *The Landscape Urbanism Reader*, ed. Charles Waldheim (New York: Princeton Architectural Press, 2005), 182-183.

^{xxxvi} Sigfried Giedion, *Space, Time, and Architecture: The Growth of a New Tradition* (Cambridge, Ma.: The Harvard University Press, 1947), 569.

^{xxxvii} American Association of State Highway Officials, *A Policy on Arterial Highways in Urban Areas* (Washington D. C.: American Association of State Highway Officials General Offices, 1957), 138.

^{xxxviii} Gandy, *Concrete and Clay: Reworking Nature in New York City*, 135.

^{xxxix} American Association of State Highway Officials, *A Policy on Arterial Highways in Urban Areas*, 444.

^{xl} Halprin, *Freeways*, 85-86.

^{xli} Marshall Berman, *All that is Solid Melts into Air: The Experience of Modernity* (New York: Simon and Schuster, 1982), 309.



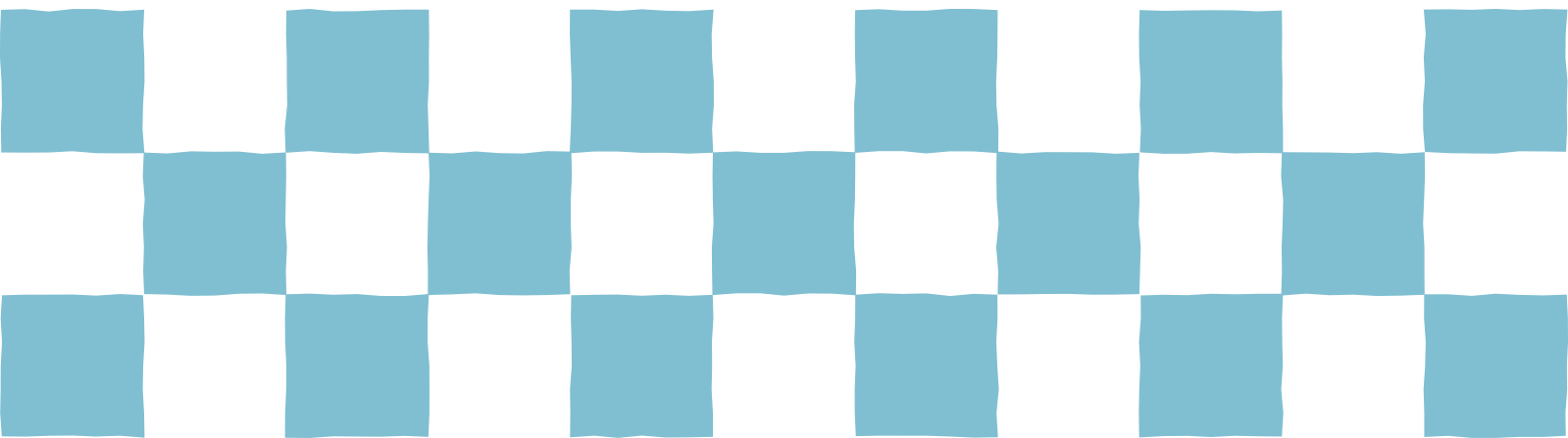
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

38 **Historicizing the Global City / GUHP***



How to create a global city? Tokyo's modern development (1860-1930) as a possible case of reference.

Beate Loeffler (University of Duisburg-Essen)

During the latter half of the nineteenth century, Japan was forced by the western hegemonies to end its isolationist policy and to take part in the trial of strength in East Asia. The government tried to avoid colonisation by initiating a complex process of modernization. It introduced the western administrative machinery, as well as technological and cultural knowledge from the West, dispatched students to renowned educational institutions abroad and hired experts from Europe and North America as advisers and teachers.

In a matter of years, Tokyo, the new capital, underwent a radical change. Both social and physical space became reformed and redefined along the western ideas of modernity and progress. While the centrally located castle retained its symbolic function as centre of power, the real estate surrounding the castle was re-allocated and rebuilt with public institutions such as ministries, diplomatic missions and the National Diet Building, thus completely renegotiating road infrastructure and size ratio of the downtown areas. Some decades later, central Tokyo resembled the image of a modern 'western' city. But what did/does this mean in terms of perception and narrative strategies of identity building? Did Tokyo become a global city?

The paper sketches arguments for/against the notion of Tokyo as a global city and deconstructs some of the intricate workings of conceptually competing narrative strategies in the creation of its urban imaginaries. It shows the juxtaposition of a 'modern' public built environment with 'traditional' neighbourhoods on the physical level of space, overlaid with a meshing of narrative ideas of 'global' urban innovation on one hand and of 'real Japanese' cultural tradition on the other hand. This parallel examination allows to sharpen the concept of a 'global city' as a means of ranking and comparison on a worldwide scale and to gain insight into historical processes of 'city branding'.

In result, the modern development of Tokyo becomes perceivable as an interlinked construction of two narratively conflicting elements: The historical process of Japanese modern self-empowerment towards a capital city as a beacon of technology and civilisation on one hand and the subtext of a Japanese urban 'otherness' that grew from Western myth-making interacting with the Japanese creation of a modern national cultural identity.

The paper questions either/or categorisations of observed phenomena and calls for a complex and multi-layered analysis of developments across all levels of physical, social and symbolical urban space.

An Early Modern Caribbean: Havana

Guadalupe Garcia (Tulane University)

Once one of the most important port cities in the New World, colonial Havana became a model of Spanish imperial rule and an example for the planning and construction of Spanish American colonial cities. Through a close examination of the planning and early growth of the seventeenth-century city, this paper focuses on the multifaceted role that the urban, early modern Caribbean played in transatlantic commerce, the growth of capitalism, and the establishment of colonial rule and governance in the early Americas.

The literature on Latin American urban history has largely focused on mainland and contemporary cities. This is despite the economic importance of colonial cities (and port cities especially), and the roles that they played in establishing transatlantic and imperial processes. A close look at Havana reveals that its foundations were similar to that of port cities around the globe. Its planning and early growth challenges the theoretical margins of Latin American urban history, with its tendencies to view the early modern Caribbean as a tabula rasa for European colonization. Specifically, this paper explores the ways in which administrators were forced to reimagine the "blank" or "uncivilized" areas outside of European maps. It traces the ways in which the city was imagined through maps and urban plans and argues that space, race, and blackness were foundational elements of empire. It further suggests the ways in which these were intimately connected to centuries-long processes of urban change. The paper explores the enduring nature of these foundational elements by also discussing the ways in which these processes have been inscribed in the modern-day topography of the city. By doing so, the author seeks to move beyond an analysis of the early planning history of Havana to interrogate the epistemologies within which the field is bound and which have set the Caribbean outside of the trajectory of urban history as a field.

A Perspective of “Diversity Creation” and “Expandability”: Another Interpretation on Spanish Colonial Town Planning

Akihiro Kashima (Setsunan University)

There has been a great accumulation of research on the uniform town planning philosophy since the 16th century in the Spanish colonies and now its impact on modern urban planning is an important contemporary aspect on this theme. The planning techniques of grid pattern for rational administrative management and missionary work were carefully literalized by the Laws of the Indies to create a large number of urban spaces with highly physical homogeneity. Symbolizing this planning philosophy is the Ordinances of Philip II promulgated in 1573. However, almost no towns were built in perfect accordance with this code, and rather the process of real town construction and its transformation have been the subject of many researches. On the other hand, in view with the specific planning techniques described in the Ordinances of Philip II, there is some intentional operation that is difficult to explain clearly from the viewpoint of the planning philosophy of homogeneity. This paper is to review the Ordinances of Philip II as an accumulation of the concrete town planning techniques for the Spanish colonial town construction and to verify the perspective of "diversity creation" and "response to city extensibility".

As a result, the following interpretation was derived from the discussions in this consideration. First, the concept of creating town cores is obviously recognized. In other words, this is the idea of establishing both the urban core with the highest centrality and the other urban cores with somewhat weak centrality. This suggests an idea of creating a multi-centred urban structure. Secondly, there are planning ideas considering "urban growth". This is the idea that urban space expands with time toward the periphery as its population grows. Therefore, the viewpoint of expanding the town space is admitted while keeping the spatial order already established in the layout of streets and blocks. Thirdly, there is a concept of "giving hierarchy to streets and plazas". Streets are categorized into main street and ordinary street, and the plazas into main plaza and small plaza as well. Urban facilities are categorized in this way, and as a result, the idea of effectively giving rich functionality to urban space is recognized. Fourthly, we can point out the idea of "dispersion of urban facilities". This can be interpreted as a planning method to create different districts with different characteristics in the town by collecting religious facilities and small plazas and planning them in a distributed manner in the town. In other words, this can be understood as the intention to create "distinctive neighbourhoods" in the town. As a result, the planning methodology of the Spanish colonial town planning is not necessarily interpreted by a viewpoint of homogeneous creation of town space, but an attitude to create various town cores with different characteristics by dispersing small plazas and public facilities throughout the town. This research shows that the perspective on "diversity creation" and "growth in urban space" is considered very important in the planning historiography of the Spanish colonies.



A Perspective of "Diversity Creation" and "Expandability": Another Interpretation on Spanish Colonial Town Planning

Akihiro Kashima*

* Professor, Department of Architecture, Setsunan University, kashima@arc.setsunan.ac.jp

There has been a great accumulation of research on the uniform town planning philosophy since the 16th century in the Spanish colonies and now its impact on modern urban planning is an important contemporary aspect on this theme. The planning techniques of grid pattern for rational administrative management and missionary work were carefully literalized by the Laws of the Indies to create a large number of urban spaces with highly physical homogeneity. Symbolizing this planning philosophy is the Ordinances of the Philip II promulgated in 1573. However, almost no towns were built in perfect accordance with this code, and rather the process of real town construction and its transformation have been the subject of many researches. On the other hand, in view with the specific planning techniques described in the Ordinances of Philip II, there is some intentional operation that is difficult to explain clearly from the viewpoint of the planning philosophy of homogeneity. This paper is to review the Ordinances of Philip II as an accumulation of the concrete town planning techniques for the Spanish colonial town construction and to verify the perspective of "diversity creation" and "response to city extensibility".

Keywords: Spanish colonial town planning, Spanish early modern, Ordinances of Philip II, Laws of the Indies, Diversity creation, Expandability, Plaza Mayor

1. Introduction

Spain has a long history of grid town planning including the well-known Barcelona's city expansion plan of 1859 by Ildefonso Cerdá as well as the pre-modern grid town planning extensively practiced at home and abroad. Spain is, as it were, a grid city planning power. A perspective on the grid of modern urban planning has accumulated a lot of research, and there are sufficient and diverse interpretations. On the other hand, in relation with the viewpoint of the pre-modern grid, there are some studies focusing its the continuity with the modern urban planning, but the viewpoint of order for the pre-modern grid town planning is dominant. Therefore this research aims to introduce a new viewpoint to the grid town planning history of the Spanish Early Modern. Historically the greatest significance of the grid was fair conditions on military, administrative, space utilization, or health. The grid is an urban structure observed not only in the planning history in the Spanish colonial period but also in many urban planning histories in Western Europe, such as the Roman city planning, the planning philosophy of Eiximenis in the Spanish Middle Ages, the Bastide in French Middle Ages, and the Ideal City planning and the architectural treatises of Italian Renaissance, etc. The grid city or the idea of orderly planning is an old tradition and it can be understood that the Spanish colonial city is also on that extension. In the Spanish early modern town planning, as the planning techniques to create order in town space has developed vigorously, the systematization of planning regulations and methods were improved. In particular, after discovering the new route to the Americas, Spain developed a town planning code under a national strategy and built a number of colonial towns while expanding colonial territory. There is a large accumulation of research on the urban structure of the Spanish colonial towns where a homogeneous grid pattern develops around the main plaza. Its representative planning system of the Spanish colonies is *the Ordinances of Philip II* or called *the Laws of the Indies*, which were issued in 1573 by the King, Philip II, and was actually the basis for creating many Spanish colonial towns of grid patterns. However, judging from the fact that these planning norms incorporated norms from various viewpoints for the construction of urban society, not only military intentions but also premises on building relations with indigenous peoples, it is recognized that the Ordinances of Philip II was a code of an essential ideal planning philosophy that aimed a town making with "religious significance and the lives of residents".

In addition, there were few towns which were completely satisfying the conditions stated in the planning regulations of a grid pattern planning as literally. For example, in some colonial towns, there were various plazas other than the central plaza since the town's foundation. From that point, once again looking at the planning regulations of the "Ordinances of Philip II", it is understandable that the planning regulations of the Spanish colonial towns have some important aspects that cannot be easily explained by a concept of rationality and homogeneity which has been a well-studied key concept of town planning. Therefore, specifically, in this research, we verify a viewpoint of creating "diversity", a different aspect from homogeneous planning, also an attitude toward a future change of the town, that is, an intention to correspond to the growth of the town.

Regarding the town planning approach of the Spanish colonies, the architectural historian, Spiro Kostof mentions



that uniform and functional planning with administrative control superiority did not consider distinctions between individual towns. But at the same time, he points out that the grid is not planned as originally boring, and the matrix is intended to make richness and diversity for human beings over time¹. This paper verifies the viewpoint of such diversity and town's expandability in the Spanish colonial urban planning law.

2. Method of research

The Spanish colonial town planning law is an indication of the planning philosophy of the Spanish colonies. The most notable is the Law of the Indies issued in 1680 by the King, Charles II². In addition to the detailed provision of urban planning, this code consisting of 6447 articles was a compilation of laws of all fields concerning colonial management. However, we can tell from the information described in the Laws of the Indies that most of the planning regulations derive from the regulations described in the prior code in the 16th century, *the Ordinances of Philip II* ("Ordinances of discoveries, settlements and pacifications") which were issued in 1573 by the King, Philip II³ (Figure 1). The Ordinances of Philip II consist of a preface, 148 articles divided into three parts and they provide general regulations on town making as well as a model of town planning. No explanations with appendices, index, or charts are added. These urban planning norms had strong influence, and it is said that about 330 Spanish cities were already formed by 1630 in Spanish America. There is no doubt that the compilation of urban planning law contributed to the commonality in the construction of many colonial cities.

In this research, from the *Ordinances of Philip II*, I extract some important provisions suggesting ideas on diversity creation and expandability of a town and examine their planning philosophy (Table 1).

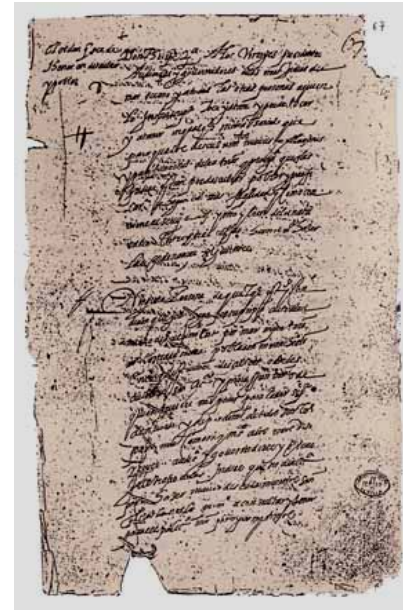


Figure 1: The first page of the *Ordinances of Philip II* issued in 1573.

3. A perspective on the expandability of a town

3-1. Creating a grid: parallel arrangement of blocks and streets

Here we examine to what extent "the Ordinances of Philip II" were concrete as planning regulation. "*The Ordinances of Philip II*" do not clearly state the morphology of grid. However, rough layout patterns can be led from provisions concerning the construction of roads and blocks. Since the whole arrangement of the layout is also mentioned, it is possible to guide the image of city planning in a certain direction from the articles such as the Articles 111, 112, and 114.

Firstly, the plan of the rectangular Main Square [*Plaza Mayor*] which is the most important space of the city is regarded as the starting point of urban planning as stated in the code [Articles 111, 112]. Four principal streets extend from the middle point of each side of the *Plaza Mayor*. Eight regular streets (narrow streets) are extended, at right angles, two by two from four each corner of the *Plaza Mayor* as well [Article 114]. The street layout method is clearly based on the idea that the rectangle of the Main Square is the standard of whole planning. The direction of

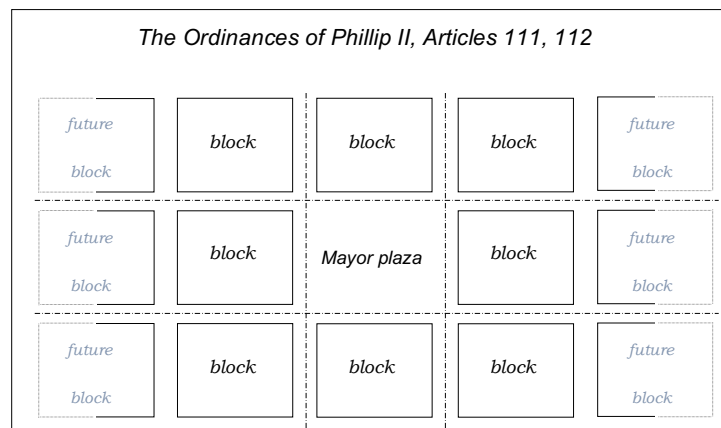


Figure 2: Arrangement of streets and blocks according to *the Ordinances of Philip II*



each side, that is, the orthogonal X-Y axis direction is first fixed. Here, the direction of the X-Y axis is determined so as to sandwich the strong wind blowing direction in the middle, that is, a 45-degree difference. Streets extending from the rectangular Mayor Square will be laid parallel or at right angles to the X-Y axis direction. It does not mention about the distance between streets parallel to each four side of the Main Square, that is, the street pitch nor street width. What "The Ordinances of Philip II" require is simply a linear arrangement of streets, squares, and blocks in the city, in short, a "sequential" and "orderly" arrangement these elements [Articles.111, 117].

Table 1: Articles (extract) of the *Ordinances of Philip II* on Diversity Creation and Expandability of a town

Articles and its points	Extracts from the provisions
Article 111 Regular layout in order of central square, streets, residential lots / securing open spaces around the town	<i>The plan of the place, with its squares [plaza], streets [calle], and building lots[solar] is to be outlined by means of measuring by cord and ruler, beginning with the main square from which streets are to run to the gates [puerta] and principal roads and leaving sufficient open space so that even if the town grows it can always spread in a symmetrical manner. (Omission)</i>
Article 112 Placement and morphology (ratio) of the Main square in coastal cities and inland towns / rectangular main square as the starting point of planning	<i>In the case of a sea-coast town the Main square [Plaza mayor] which is to be the starting point for the building of the town, is to be situated near the landing place of the port. In inland towns the main plaza should be in the centre of the town and of an oblong shape, its length being equal to at least one and half times its width, as this proportion is the best for festivals in which horses are used and any other celebrations which have to be held.</i>
Article 113 Basic concept for calculating the size and size of the plaza	<i>The size of the plaza shall be in proportion to the number of residents, heed being given to the fact that towns of the natives, being new are bound to grow and it is intended that they shall do so. Therefore the plaza is to be planned with reference to the possible growth of the town. It shall not be smaller than two hundred "pie" wide and three hundred "pie" long nor larger than eight hundred "pie" long and five hundred thirty-two "pie" wide. A well proportionated medium size plaza is one six hundred "pie" long and four hundred "pie" wide.</i>
Article 114 Detailed plan of town nucleus	<i>From the plaza the four principal streets [calle principal] are to diverge, one from the middle of each of its sides and two streets [calle] are to meet at each of its corners...</i>
Article 115 Function and structure of the Plaza Mayor	<i>The whole plaza and the four main streets diverging from it shall have arcades, for these are a great convenience for those who resort thither for trade. The eight streets which run into the plaza at its four corners are to do so freely without being obstructed by the arcades of the plaza. The arcades are to end at the corners in such a way that the sidewalks of the streets can evenly join those of the plaza.</i>
Article 117 Planning idea for streets and plazas in town's expansion	<i>The other streets laid out consecutively around the plaza are to be so planned that even if the town should increase considerably in size it would meet with no obstruction which might disfigure what had already been built or be a detriment to the defense of convenience of the town.</i>
Article 118 Creation and function of small plazas	<i>At certain distances in the town, small plazas [plazas menores] are to be laid out on which the temples [templo] such as the main church [iglesia mayor], the parish church [parroquia] or monastery [monasterio] shall be built so that the teaching of religious doctrine may be evenly distributed.</i>
Article 121 Perspective on hygienic arrangement of hospital facilities	<i>(Omission)</i> <i>The hospital for the poor and sick of non contagious diseases shall be built next to the church forming its cloister.</i>
Article 122 Placement of production facilities where garbage emerges / hygienic and commercial point of view	<i>The lots and sites for slaughter houses, fisheries, tanneries, and such like productive of garbage shall be so situated that the latter can be easily disposed of.</i>
Article 123 Prohibition on windward placement of unsanitary garbage facilities / hygienic point of view	<i>It would be of great advantage if inland towns, at a distance from ports were built on the banks of a navigable river, in which case an endeavor should be made to build on the northern river bank, all occupations producing garbage being relegated to the river bank or sea situated below the town.</i>
Article 126 Land utilization around the plaza / creation of distinctive zones	<i>No building lots surrounding the main plaza are to be given to private individuals for these are to be reserved for the church, Royal and Town house, also shops and dwelling for the merchants, which are to be the first erected. (Omission)</i>



The article 117 states that the streets should be extended from the Main Square and they are further extended. This prevents inconveniences such as inducing ugly rebuilding, or impairing the defense and comfort of the city, even if the town grows expanded. In other words, the urban layout indicated by the "Ordinances of Philip II" is structured based on the rectangular central block serving as an urban core, and principal streets and ordinary streets orthogonal to it. This central block is regarded as a public space or a public square, that is, a plaza, and the general residential blocks are set in parallel repeatedly (Art. 111, 112). This way the basis of the grid pattern is formed (Figure 2). This implies a town planning methodology that leads to firstly establish the central urban core surrounding the Main square [Plaza mayor], then to layout streets [calle], and building lots [solar] which extend from the center towards the periphery of a town. From this interpretation, although there is no direct expression pointing to the grid pattern, the street layout is intended to be a grid across the entire city.

3-2. The centre and periphery: A spatial composition of a town

The Ordinances of Philip II pay special attention to the spatial composition of the urban core (Plaza Mayor). In common with Vitruvius and Alberti, the Ordinances establish detailed criteria to construct the urban core by establishing the building standards of the facades facing the square and related facilities in the surrounding area. However, there is also clear singular point in the Ordinances of Philip II. The Ordinances holds a concept that a city consists of a special fixed central core and various different surroundings. In other words, the indicated urban core is a special central city district and at the same time the startpoint of the town layout. This central urban area is given the function of a central square, it is designed as a rectangular Plaza Mayor with a proportion of length:width = 1.5:1. The Plaza Mayor is positioned as the urban core, so to speak, the starting point for the planning of the whole town [Art. 112] (Figure 3) and the porticoes are constructed around the Plaza Mayor [Art. 115] (Figure 4), thus the Plaza Mayor becomes a special urban core. Although the planning method of the plaza is very similar, the viewpoint in the Ordinances that size and form of the Main Plaza composing the urban core affects the whole city layout, can not be seen in either Vitruvius nor Alberti. Also, as in the case of Vitruvius ["Ten Books on Architecture" by Vitruvius, Book V, Chapter 1, Section 2], the Ordinances of Philip II require the scale calculation of the Plaza Mayor according to the number of inhabitants. Furthermore, the Ordinances of Philip II provide an ideal square model by instructing the specific size and form of the square [Arts. 112, 113]⁵).

The ideal square planned at the center of the city with a special architectural composition is a so-called urban core, and it is assumed the Ordinances of Philip II holds a strong intention to build a centrality in the town. This is the idea that a strong center of town functions sustainably even if the town is expanded and the town's area spreads toward the surrounding area.

3-3. Growth of a town

The Ordinances of Philip II were the planning standard that describe the urban core and surroundings of a new city as mentioned above. However, although referring to the composition of the urban core, the Ordinances do not

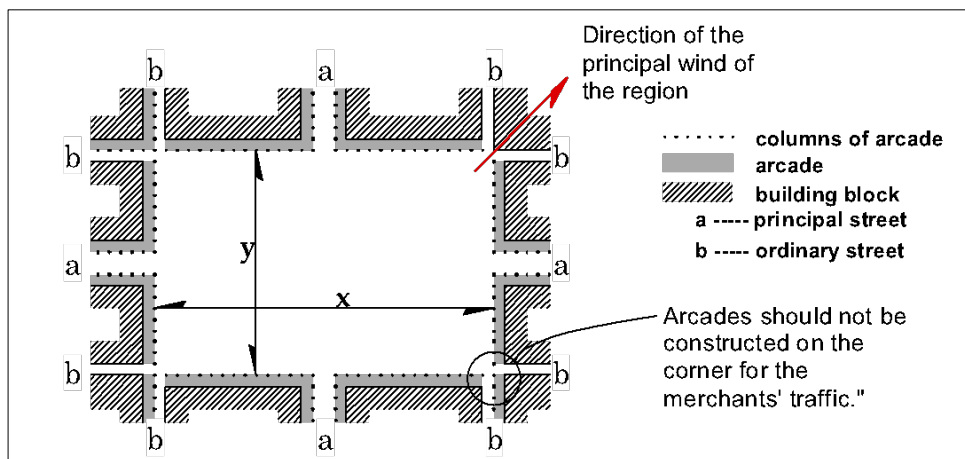


Figure 4: Urban core plan suggested by the Ordinances of Philip II

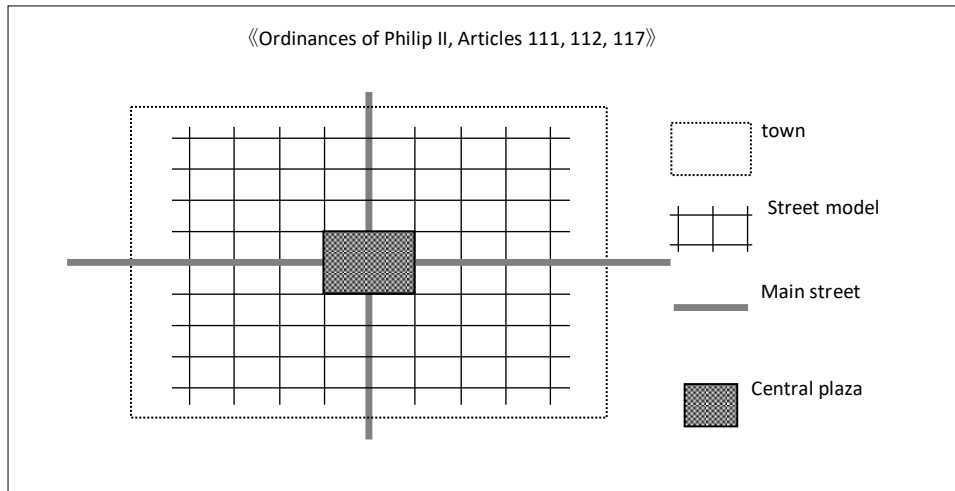


Figure 3: Street layout according to the *Ordinances of Philip II*

mention a town's spatial extent and its boundary such as concrete scale of the entire city or the construction of the city wall. It was possibly based on a trade city, but in reality, the cities with walls were not so uncommon. In practice in the colonial cities without walls, apart from the central urban area, there is an open space outwards the urban area, and it is clear that there is no fixed viewpoint of deciding the urban territory. Moreover, it is clear that the Ordinances have a viewpoint to secure vacant land as a reserve space outside urban areas. The explanation of the road in the Article 111 means a planning where the Main Square which becomes the town's core is connected to the outskirts of the town by the main road (Table 1). In addition, the Ordinances show the idea that a vacant land should be secured around the town from the beginning for future expansion of the town. Clearly, this is an idea of dealing with urban expansion maintaining the order of the block layout. This is a concept that anticipates the growth of the city.

4. Viewpoint of diversity creation in urban space

Here we analyze how the Ordinances of Philip II was intending to utilize the urban space and its planning method to give various characters and functions to urban space.

4-1. Hierarchy of streets

As referenced in the Article 114 of the Ordinances, the streets can be categorized into two types, *main street [calle principal]* and *ordinary street [calle]*. It is speculated that the difference is in the width of the road, but it is obvious that we are categorizing the roads. The main street [*calle principal*] in the Ordinances seems to correspond to the main street referred in the Article 111 which is to reach the city gate [*puerta*]. It is a way of thinking to raise town's function by street planning according to the function of a street (see also Figure 4). Furthermore, the Article 118 clearly establishes a category for plaza, called "plaza menor", which is different in scale from Plaza mayor. In actual Spanish colonial towns, a small plaza, *Plaza menor*, which obviously is different from the Plaza Mayor, is very common.

4-2. Placement of Public Facilities and Region Creation

- Urban facility planning -

The Ordinances have a strong interest in planning facilities and their layout planning. Here we analyze them from the viewpoint of zoning and area's feature creation. The Ordinances of Philip II list churches, royalty facilities, other public facilities, shops and merchant houses as facilities around the Main Plaza. [Article 118, 126] As an urban facilities planning around the Plaza Mayor, the Ordinances of Philip II demand building standards with construction of the porticoes, considering flow planning for merchants [Article 115] as an appropriate planning for the town's core. In addition to the urban facilities around the plazas, placement restrictions from a sanitary viewpoint are suggested for public facilities planning such as religious facilities, customs, arsenals, and hospitals [Article 121], and commercial facilities (butchers, fish stores, leather places) where garbage problems are feared [Articles 122, 123]. Also, there is no detailed building standard, but like Alberti's opinions, the ordinances divide the hospital for infectious disease patients and the others, and states norms on their placement [Article 121]. These regulations on arrangement of urban facilities from such sanitary viewpoints and rational viewpoints suggest a standpoint of multi-



functionality of a town which is linked to the zoning visions in the modern urban planning.

- Plaza menor (Small plaza) -

As mentioned above, the Ordinances of Philip II provide two categories of the plazas as well as the streets. The Articles 118 and 126 of the Ordinances of Philip II also show an idea to disperse small plazas and increase various plazas in conjunction with religious facilities in the vicinity. It establishes “a small plaza [*plaza menor*]” different from the central Main Plaza and it insists that these arrangements are necessary elements of a town [Articles 118, 126]. Apart from the central Main Plaza which are mentioned above with the details of planning regulations, this small plaza [*plaza menor*] is indicated as another urban facility. In the Ordinances, the idea of categorizing the plaza develops into the idea of urban facilities distribution. Here we can recognize a way of thinking to disperse small plazas on the regularly arranged blocks of grid patterns. At the same time, this also suggests an idea of dispersing layout of temples [*templo*] such as the principal church [*iglesia mayor*], parish church [*parroquia*], monastery [*monasterio*] in conjunction with the small plaza (Article 118). We confirmed that the Ordinances do not explain concretely the relationship between the small square and the urban core, such as the central square and its surrounding streets, and the temples and small plazas. But the Ordinances at least provide a way of thinking to combine the plazas and temples. This is an attitude of incorporating a religious role into the town planning. Here we can see the image of homogeneously arranges of the urban facilities in the grid city layout as shown in the Figure 5. It is physically homogeneous, but in reality, it is understood that this is a structure that actually produces various areas in the town.

Let's see a similar perspective about small plaza by Alberti. In his treatise, “*De re aedificatoria*”, he shows a viewpoint to grasp an intersection almost equally with a plaza because it is also a place where the streets combine and intersect [“*De re aedificatoria*” by Alberti, *Book VIII, Chapter vi*].

“*The crossroad and the forum differ only in size. In fact the crossroad is but a small forum.*” (6) Alberti seeks for elegant decoration in this plaza space and recommends to construct porticoes as a means for that (7).

Furthermore, Alberti describes that it is better to incorporate a store in the urban houses and those should be in front of a crossroad and a plaza [V.18]. This is regarded as a viewpoint in which shops of different genres exist depending on each plaza, creating vicinities with different characteristics in different places. Therefore it is estimated that plazas of different characteristics are dispersed in the town.

It has been pointed out that the Ordinances were influenced by Alberti, but the Ordinances show the idea of applying Alberti's thought to distribute diverse religious facilities and small plazas as a group. Since the Main Square was an urban core in the planning vision of the Ordinances, small plazas can be understood as small cores. In other words, here we can point out that a characteristic “town's small cores” with various religious facilities are distributed in a dispersed manner on the grid urban space.

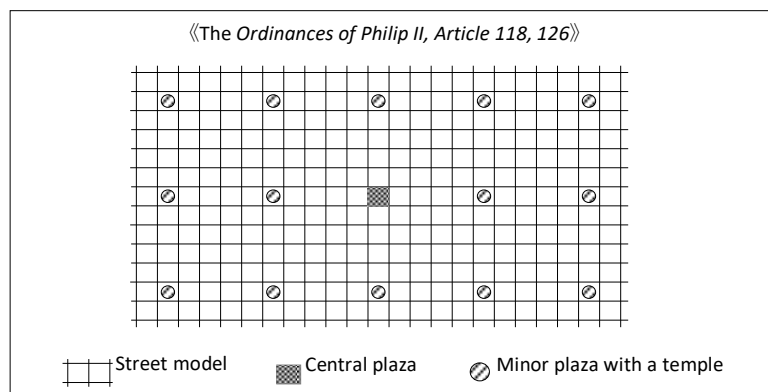


Figure 5: Concept of dispersive distribution of small plazas and temples

5. Conclusion: Planning concept assuming change of town

Based on the above verification, it can be seen that the Ordinances of Philip II did not merely intend a homogeneous space by a grid urban pattern. First, the concept of creating town cores is obviously recognized. In other words, this is the idea of establishing both the urban core with the highest centrality and the urban cores with a somewhat weak centrality. This can be regarded as a way of thinking similar to a multi-centred urban structure. Secondly, the concept



of "urban growth" can be considered. This is the idea that urban space grows toward the periphery with population growth while setting urban nucleus as the center. For that reason, the viewpoint of considering ways to expand cities is recognized. Thirdly, there is a concept of "giving hierarchy to streets and plazas". Streets are categorized into main street and ordinary street, and the plazas into main plaza and small plaza as well. Thus, equivalent urban facilities are categorized in this way, and as a result, the idea of effectively giving rich functionality to urban space is recognized. Fourthly, we can point out the idea of "dispersion of urban facilities".

This can be interpreted as a planning method to encourage different districts with different characteristics to be born in town by dispersing different urban facilities. In particular, it can be interpreted as a planning method to encourage different districts with different characteristics to be created in town by dispersing small plazas always arranged with religious facilities there. In other words, this can be understood as the intention to create "distinctive neighborhoods" in urban space. As many previous studies show, the Ordinances of Philip II provided a planning guideline that physically leads the urban space composition by a strong grid pattern. However, what lies there is not necessarily a viewpoint of homogeneous creation of town space, but an attitude to create a functional town core with high centrality, and make small town cores with various features around the town as the town grows. This research shows that the perspective on "diversity creation" and "growth in urban space" is considered very important in the planning historiography of the Spanish colonies.

Acknowledgements

This research was supported by Grant-in-Aid Scientific Research (C) 16K06675 and Grant-in-Aid Scientific Research (A) 15H01760 from the Ministry of Education, Culture, Sports, Science and Technology, Japan.

Notes on contributor

The author, Akihiro Kashima, is a professor at the Department of Architecture, Setsunan University, Osaka, Japan. His research interest lies in the continuity of the planning philosophy and technique between the early modern and the modern periods. His publications include: 'An Essay on the scale of town planning in the initial colonization found in Spanish colonial laws', *Journal of the City Planning Institute of Japan No. 48-3*, pp. 219-224, 2013 (Annual Conference 2013, Tokyo) / 'Reviewing the Urban Planning History of the Spanish Colonies: Establishment of the Latin American city image', *Toshishi Kenkyu* (Japanese Journal of Urban and Territorial History) No. 2, Society of Urban and Territorial History, Tokyo, 2015 / "Determining factors for the urban form and its orientation in Spanish colonial town planning: Planning the town of Guatemala in the eighteenth century", in Carola Hein (ed.): *History Urbanism Resilience Volume 01: Ideas on the Move and Modernization*, pp.235-243, Tu Delft, 2016.

Endnotes

1 Spiro Kostof, *The City Shaped: Urban Patterns and Meanings Through History*, New York ; Boston ; London : Bulfinch Press, 1991. pp.103-116.

2 This code was originally named "Recopilación de las Leyes de los Reynos de Indias". "Indias" originally means the whole territories of Spanish colonies. Therefore "Laws of the Indies" refer to the laws promulgated not only to the Latin American territories but also to the other parts of the world like the Philippines. Although the *Laws of Charles II* had some imperfection and defectiveness, they were no more re-compiled until the independence of the hispanoamerican countries from the beginning of the 19th century on. This Code is also being reprinted today. PAREDES, J.(ed.). *Recopilación de leyes de los reynos de las Indias*, Tomo I, II, III, IV. Madrid:Ediciones Cultura Hispánica, 1973.

3 Originally named "*Ordenanzas de descubrimiento, nueva población y pacificación*" in Spanish. This code was issued by the King, Philip II in Segovia on the thirteenth of July, 1573. This document is preserved in the Archivo General de Indias (A.G.I.) in Seville, Spain, the Document code: Indiferente General, legajo 427, libro 29, folios 67-93; the Document title: Ordenanzas de descubrimiento, nueva población y pacificación. This is a manuscript document written in the sixteenth century Castilian language, which extends for 27 pages of almost A4 size on both sides. It was issued on July 13th, 1573 by the King, Philip II. This code consists of 149 articles in all widely about three themes on the colonization of the Indies; discovery (search for the territories for colonization), the population, and the pacification (the Christian missionary work), each of which respectively comprises a chapter. The documents about the code referred to in this study are the followings: Centro de Estudios Políticos y Constitucionales y el Boletín Oficial del Estado, 1998, and ICAZA DUFOR, 1987.

4 A pie is an old Castilian unit of length utilized in sixteenth-century Spain, and was equal to 278.33 mm. Converting pie into meters, the size of the Plaza Mayor described in the Ordinances of Philip II is about (83.5 m, 55.7 m) < (X, Y) < (222.7 m, 148.1 m), and the ideal size: (X, Y) = (167.0 m, 111.3 m). The unit conversion of pie and meter is according to the following study by Doursther (1965 Reprinting of the 1840 ed.)

5 Article 113 of the *Ordenanzas* suggests an ideal size for a plaza; "The main plaza should be larger than 200 'pies' in width and 300 'pies' in length and smaller than 800 'pies' in length and 530 'pies' in width and the medium size is 600 'pies' in length and 400 'pies' in width." A pie is a unit of length utilized in 16th century Spain, and was equal to 278.33 mm. Converting pie into meters, it is about (83.5 m, 55.7 m) < (X, Y) < (222.7 m, 148.1 m), and the ideal size: (X, Y) = (167.0 m, 111.3 m). X: long side, Y: short side. The unit conversion of pie and meter is according to the following study: DOURSTHER, H.: *Dictionnaire Universel des Poids et Mesures anciens et modernes*, (Amsterdam, 1965 [repr. of the 1840 ed.]

6 Leon Batista alberti, *On the Art of Building in Ten Books*, translated by Joseph Rykwert, Neil Leach, and Robert Tavernor, The MIT Press, Cambridge, Massachusetts, 1988, p.263.

7 Leon Batista alberti, *On the Art of Building in Ten Books*, translated by Joseph Rykwert, Neil Leach, and Robert Tavernor, The MIT Press,



Cambridge, Massachusetts, 1988, p.263.

Bibliography

Centro de Estudios Políticos y Constitucionales y el Boletín Oficial del Estado. *Recopilación de leyes de los reynos de las Indias. 3 tomos.* Madrid, 1998 [reprint of 1681ed.]

CROUCH, Dora P., GARR, Daniel J., and MUNDIGO, Axel I. *Spanish City Planning In North America*, Cambridge, Mass., MIT Press., 1982

DOURSTHER, H.: *Dictionnaire Universel des Poids et Mesures anciens et modernes*, (Amsterdam, 1965 [repr. of the 1840 ed.]

HARDOY, Jorge E. and ARANOVICH, Carmen, “Escalas y funciones urbanas de la América Española hacia 1600. Un ensayo metodológico”, *‘Estudios sobre la ciudad iberoamericana’*, Madrid:C.S.I.C., 1983, pp.346-347.

ICAZA DUFOUR, F. de (coord.): *Recopilación de leyes de los reynos de las Indias / estudios histórico-jurídicos*, Escuela Libre de Derecho, México:Miguel Angel Porrua, 1987

KOSTOF Spiro, *The City Shaped: Urban Patterns and Meanings Through History*, New York ; Boston ; London : Bulfinch Press, 1991.pp.103-116.

MARTÍN LOU, M. A. and MÚSCAR BENASAYAG, E.(eds.)(1992): *PROCESO DE URBANIZACIÓN EN AMÉRICA DEL SUR*, Madrid, MAPFRE.

NUTTALL, Zelia, (1964. Reprint of the 1922ed.) : “Royal Ordinances Concerning The Laying Out of New Towns”, *Hispanic American Historical Review*, New York.

SILVA, Marta Beatriz (1997): “Las dimensiones urbanas. Los patrones coloniales y decimonónicos”, ‘*49 Congreso Internacional de Americanistas’ (ICA), Simposio : Historia Urbana de las Américas (HIST16)*, Quito. is published in the following. URL: <http://www.naya.org.ar/congresos/contenido/49CAI/Silva.htm>, March, 2013.

SOLANO, Francisco de(ed), *ESTUDIOS SOBRE LA CIUDAD IBEROAMERICANA*, Madrid, C.S.I.C., 1983

SOLANO, Francisco de(ed.), *HISTORIA URBANA DE IBEROAMÉRICA*, Madrid, Consejo Superior de los Colegios de Arquitectos de España, 1987

STANISLAWSKI, Dan, ‘Early Spanish Town Planning in the New World’, *THE GEOGRAPHICAL REVIEW, Vol.37*, The American Geographical Society, pp.94-105, 1947

Image sources

Figure 1: Archivo General de Indias [AGI:Indiferente General; legajo 427, libro 29, folios 67-93.]

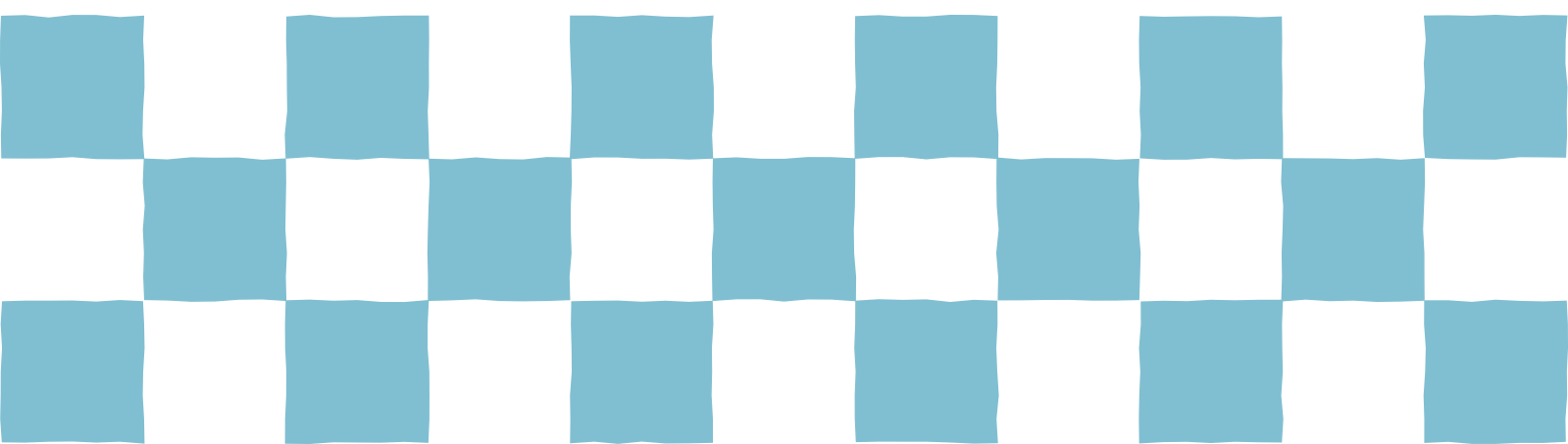
Figure 2, 3, 4, and 5: Drawn by the autor.



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

39 **Global Cities, Urban
Space, Ethnic Mobility and
Intercultural Integration /
GUHP***



Social Housing and the Emerging of Greater London: the case of Becontree Estate

Weifang Lu (Shanghai Normal University)

London was the pioneer of social housing in UK that started from inner city slum clearance in the latter half of the 19th century, to suburban estate building at the turn of the century, finally to out-county estate development in the first half of the 20th century, which provided some valuable experience for other cities and towns, even for the later urbanized countries today. The plan and construction of Becontree Estate formed a part of the shaping process of the Greater London. London County Council(LCC) began to develop its own social housing from the end of 19th century onwards which included the clearing the sites of overcrowded areas and buildings and built the housing estate within the London County boundary and purchased new land outside of county boundary. The Becontree Estate is one of the great examples of large housing estates in Greater London today which has approximately 4 square miles (10 km²) in the contemporary London borough of Barking and Dagenham which located 11 miles (17.7 km) east-northeast of Charing Cross and was constructed in the interwar period as the largest public housing estate in the world at the time and ‘the crown jewel of the London County Council’ s vast housing empire and the world’ s largest public housing development’ outside of London County boundary which unintentionally marked the circum of the later administrative Greater London County Unit. The Housing Act 1919 permitted the LCC to build housing outside the County of London and Becontree was constructed between 1921 and 1935 to cottage estate principles in Essex and added an additional 1,000 houses later. The estate initially was a pure bedroom town and had no industrial and very little commercial development. Later on other community function added. The Becontree Estate was only one of the large social housing estates built by LCC and pushed unintentionally the county boundary further away into the Home Counties. The fact that Becontree areas transferred from Essex to Greater London in 1965 itself showed how much essential the out-county estates were for the being of Greater London. The estate became part of Greater London in 1965 when the Barking section was combined with Dagenham, and has been within a single London borough since the Ilford section was transferred to Barking and Dagenham in 1994. The paper deals with the situation of London housing problems and slum in London from the start. Then it goes on to discuss the decision making of out-county housing develop in the early 20th century. Finally it considers the process of Becontree Estate formation and the consequence of the Becontree Estate and the emerging of Greater London. It reaches the conclusion that out-county housing estates in part helped the being of Greater London in a way.

The Chinese people were imagined in the eighteenth century London: on the study of Oliver Goldsmith’s “Citizen of the World or letters from a Chinese philosopher, residing in London, to his friends in the east”

Weiliang Zhang (Hangzhou Normal University)

In the early era of globalization, intercontinental exchanges brought a new foreign cultural horizon and imagination, but the barrier of time and space created the strange sense and the exotic imagination. The Citizen of the World published in the middle of the eighteenth century has not aroused the sensation as Montesquieu’s The Persian Letters, but its text narration also attracted the public concerns, and became another example of the exotic imagination of that time. All is always with the imprint of the times in The Citizen of the World, which were constructed by the missionaries and East India Company. The porcelain, tea, Chinese traditional thoughts and Chinese philosophers are very popular in that time, Goldsmith’ s desire to going to India has not been realized, and the East is always his dream. This article will focus on the study of the text of The Citizen of the World, and expound the following viewpoints: First, London is becoming the center of intercontinental exchanges with the growth of ocean trades and exchanges in the early globalization, and London means ‘the world’ which has nurtured a large number of new literary works. Second, the letter from a Chinese philosopher is Goldsmith’ s Chinese imagination by the expression of literature, and his The Citizen of the World involves the broad geographical space of the known world, reflecting a global vision. Last, the narrative aroused the exotic enthusiasm of the public, and its popularity has promoted the process of globalization in a certain degree.

Milan-Madrid-Mexico: Global Urban network and cities in Spanish Empire

Ming Zhu (East China Normal University)

In recent years, the global history has been pushing forward the connected history studies, urban history focus on the production of urban space and its political significance. Further, much attention has been paid to the network and interaction inside global empire. The colonial city is an important analytical category to rethink center and periphery, East and West in world history.

Under the reign of Spanish Empire, Milan, Madrid, Mexico City underwent similar morphological change in terms of urban space, such as spatial form, structural layout and monumental landscape. On the one hand, the spectacular rectangular square became the center of the city, making the whole city develop around it; on the other hand, the checkerboard layout with the right angle intersecting dominated, making the urban space more regular and symmetrical. Behind such transformation, the motive is the urban planning idea, which was regarded as a tool to justify the legitimacy of Empire. It is usually considered that this urban change originated in the idea of Italian urban planner such as Alberti, Firalette, however, these ideas were not only and initially achieved in Europe but also in early 16th century's America. The square-centered checkerboard pattern could be even date back to late medieval America, viz. Azteca Empire and Inca Empire. They impacted upon European cities, this phenomenon appeared just because the Spanish Empire afforded a network, in which the people, techniques, ideas could circulated freely, which brought the reciprocal impacts and promoted similar urban changes. Besides, both Renaissance urban planning ideas and American medieval urban mode mattered in the Empire, the European factor is not always dominating, the non-western factor sometimes played an even more important part, European urban development in the early global times subjected to a certain degree of external influence.

This study highlights the diversity and counter-flow in the frame of Empire through the transformation of urban space, which will represent a connected and shared history.



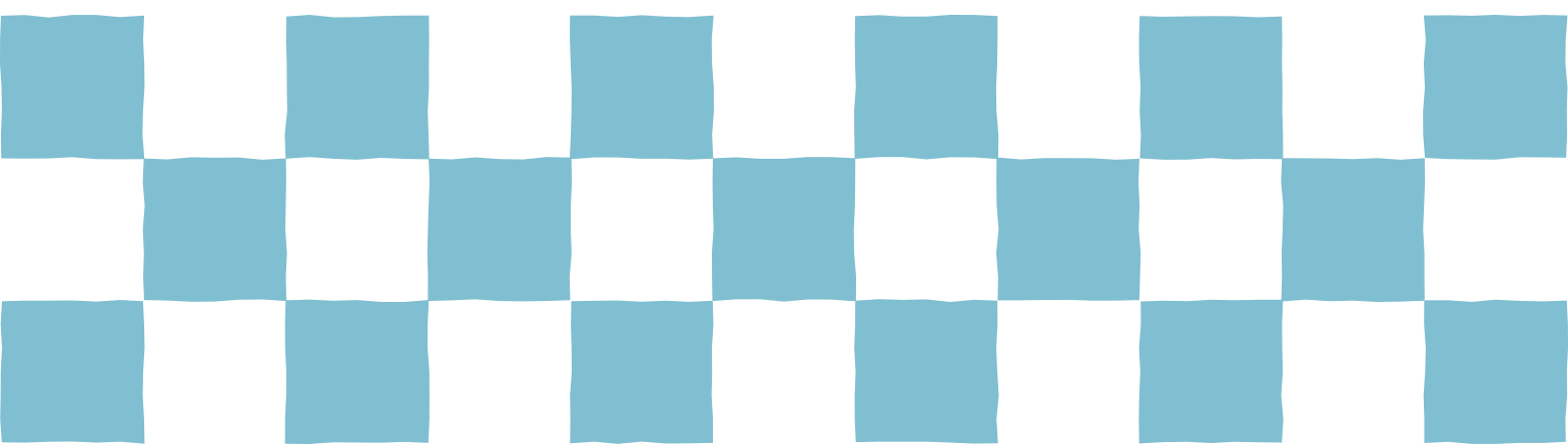
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

40 **Discussing the Teaching and Design of Planning History Courses / Round Table**



Tue. July 17, 2018

Session 4 (9:15AM-11:00AM)

Room 7, Yokohama Port Opening Hall

Moderators:

Ian Morley, Associate Professor, Chinese University of Hong Kong, Hong Kong SAR
Carola Hein, Professor, Delft University of Technology, The Netherlands

Participants:

Chris Silver, Professor, University of Florida, USA
Richard Hu, Associate Professor, University of Canberra, Australia
Renato Leão Rego Professor, Universidade Estadual de Maringa, Brazil
Mo Sedighi, Delft University of Technology, The Netherlands

A well-designed curriculum bestows learners a coherent series of intellectual experiences. But to successfully design a syllabus the teacher must not only rationally compose a variety of learning situations he/she must also be acquainted with internal and external influences. As such instructors as a matter of course when designing learning activities need to not only pay attention to departmental and institutional teaching assessment strategies but moreover professional accreditation requirements and broad debates within academic communities about what thematically is/is not relevant to learners today.

In this roundtable, designed principally for graduate students, dialogue is to be tendered on current issues associated with Planning History curriculum design. Scholars from a range of academic fields will not only introduce their approaches to designing curricula but moreover will identify what they see as key contemporary and future issues in the design and teaching of Planning History courses. Topics such as eLearning, interdisciplinary schooling and Planning History' s role and relevance, planning design paradigms, urban environmental transformations plus pedagogical shifts within higher education and the impact of the evolving planning marketplace will be discussed.



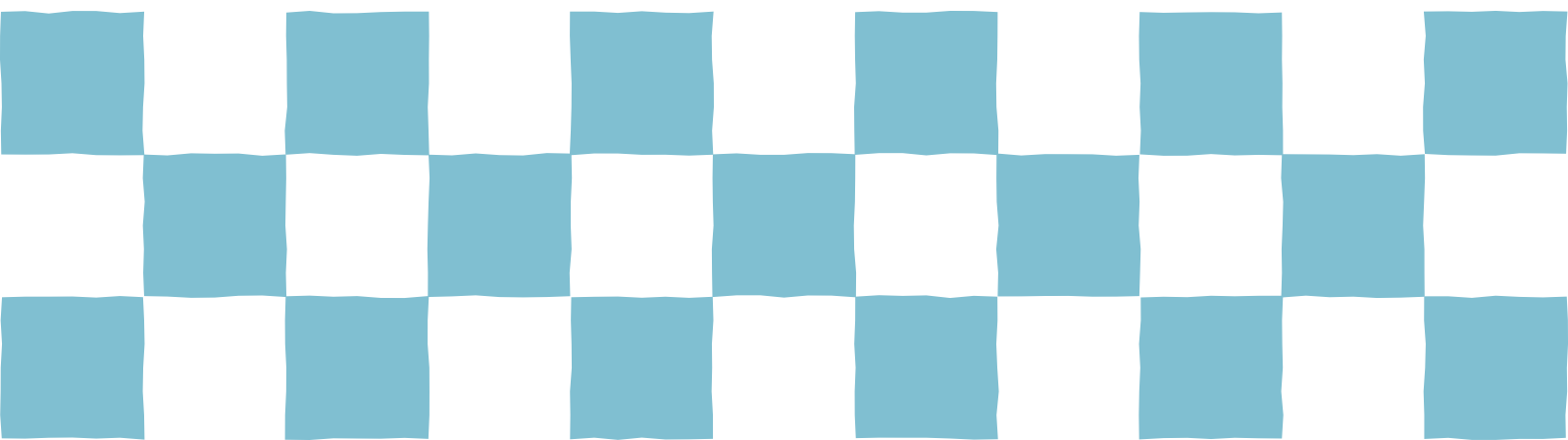
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

41 History of Regional Planning



A History of Regional Planning in Queensland, Australia: From Voluntary Collaboration to Statutory Planning.

Aysin Dedekorkut-Howes (Griffith University) and Michael Howes (Griffith University)

There are a series of problems and issues planners face that are best dealt with at a regional scale such as air quality, water quality, habitat protection, transportation planning, urban sprawl (land use and growth management), economic development and social equity. However, regional planning is easier said than done. Planning usually occurs within administrative boundaries but economic development and environmental systems transcend administrative boundaries. Most of the time political boundaries do not reflect an economically, ecologically and socially functional region. When the region is ill-defined planning may not achieve its goals. Planning powers and authority are usually fragmented among competing local governments and agencies with different missions. This paper focuses on answering the question “How do we make regional planning efforts effective?” through the case study of Australia’s state of Queensland.

Queensland has been one of the fastest growing states in Australia for several decades. This growth has brought with it many opportunities as well as challenges. The most urbanized part of Queensland, the Southeast corner has been feeling the consequences most intensively. Initial response to these pressures took the form of collaborative regional frameworks for growth management in the 1990s which subsequently transformed into the statutory regional plans in the following three decades. Eleven statutory regional plans now cover most of the state and more are in preparation.

This paper examines regional planning in the state of Queensland contextualizing it in regional planning in Australia to provide some answers to the research question. It first studies the emergence of the initiative, then traces its transformation from its voluntary, collaborative roots to its current statutory state. It also overviews the reviews of the various South East Queensland (SEQ) regional plans including the early voluntary regional frameworks for growth management and the two predecessors of the current statutory plan Shaping SEQ: South East Queensland Regional Plan 2017 and evaluates them against regional planning principles such as appropriate designation of planning region boundaries; involvement of all organizations with authority in the defined region in the planning process; horizontal and vertical consistency between lower and higher level plans; timing of the planning process; adherence to the planning hierarchy and public engagement. It also considers the consequences of the statutory vs. advisory nature of the plans and mandatory vs. collaborative and voluntary nature of the processes. The findings will help identify what needs to be done differently to make regional planning more effective.

Greater Istanbul Metropolitan Area Planning Experience (1965-1980): Approaches, Models and Strategies

S. Güven Bilsel (KTO Karatay University Department of Architecture) and F. Cana Bilsel (Middle East Technical University Department of Architecture)

Following the enforcement of the Urban Development Act in 1956 and the foundation of the Ministry of Reconstruction and Settlement in 1958, the first regional plan was developed for the Eastern Marmara Region in Turkey. The regional plan, which was prepared by the Ministry of Reconstruction and Settlement, in collaboration with the State Planning Office aimed at directing the industrial developments, the distribution of the industrial population and defining the hierarchy of urban settlements in the region respectively. The Regional Plan proposed an urban and regional infrastructure and a linear settlement development model for the Greater Istanbul area for the first time. The cities in Turkey were subject to a rapid urbanization due to a continuous flow of population from rural areas to the cities, which accelerated after 1950s. As a result, a multiplicity of new municipalities outside the existing limits of the major cities were formed, which necessitated a holistic planning in metropolitan scale. With this objective, three metropolitan planning offices were established for the major cities, Istanbul, Ankara and Izmir under the Ministry of Reconstruction and Settlement.

In continuity with the principal decisions of the East Marmara Regional Plan, the planning studies for the Greater Metropolitan Area of Istanbul started with the foundation of Greater Istanbul Metropolitan Planning Office in 1965. The distribution of population between European and Asian sides of Istanbul metropolitan area was studied, and a linear pattern of settlement units separated by green areas was adopted in line with the regional plan. A strategic planning model was adopted in the last stage of the metropolitan planning. Based on an extensive survey, the demands of different sectors were defined. Alternative development strategies and scenarios were proposed with regard to the demands of the sectors. Beginning with the regional planning scale, the distribution of the residential and working areas, different strategies were tested with respect to their performances in achieving the initial development objectives. Based on an extensive data, projections, and regional development strategies updated, a plan that could guide the urban development policies was achieved. The metropolitan plan was completed and approved by the Ministry in July 1980.

The Metropolitan Plan of Greater Istanbul constituted the first metropolitan plan, in Turkey, where the strategic planning approach was applied by comparing alternative development strategies. However, it could not be implemented properly as the planning authority was transferred to the Greater Municipality. Yet, with its holistic approach, this metropolitan plan that defined strategies of urban development and natural and urban conservation in metropolitan scale, could have prevented unplanned, piecemeal operations if it could be implemented. In the present paper, the metropolitan planning experience of Greater Istanbul is studied with a focus on the 1980 master plan. The role of the planning decisions in the urban development of the metropolitan city will be discussed at the end of the paper.

Warren Manning and the origins of environmental planning in the United States

Carlton Basmajian (Iowa State University)

Mel Scott (1969), Peter Hall (1988), and Jon Peterson (2003) situate the origins of city planning in the United States at the beginning of the 20th century, a reaction to the congested and polluted industrial cities of the day. As a result of their work, a handful of early practitioners have become enshrined in the annals of the field. Others, perhaps equally significant, remain outside the pantheon. Warren H. Manning is one such case. An early 20th century landscape architect/city planner, Manning shared much with his more famous contemporaries - Burnham, Olmsted Jr., Nolen, and Bartholomew - yet his vision for what planning could achieve was distinct, both in its conception of scale and in its privileging of environmental information. Pioneering the use of map overlay techniques to gauge the carrying capacity of different landscapes (Steinitz, Parker, Jordan, 1976), Manning combined extensive environmental data with social and economic information to develop what has been called "a foretaste of modern environmentally-based planning" (Neckar, 1989)

Though his innovative use of environmental data is today rarely discussed among planning historians, Manning's activities during the 1900s and 1910s saw the development of an innovative model of city planning. Using transparent map overlays as an analytic device, Manning had by the late 1910s developed a series of increasingly ambitious city, regional, and state plans. His magnum opus came in the form of a 900-page national plan for the United States, drafted in 1919. Manning's national plan used data analysis to re-imagine the continental US as a set of distinct environmental regions. The plan brought the broad conservation-style planning advocated by John Wesley Powell down to the level of landscape design. Yet Manning's work was compromised by his embrace of the racist undertones common to many early environmentalists (Purdy, 2015) By the mid-1930s, Manning's work had been mostly forgotten, as the social scientists who dominated Franklin Roosevelt's New Deal agencies and later assumed prominent positions in post-war US planning education popularized a style of planning more concerned with economic and social policy than land conservation (Alanen and Bjorkman, 2008)

Not until the late 1950s did the practice of using environmental data re-appear, and not until Ian McHarg's 'Design With Nature' did it become widely known amongst US planners (Collins, Steiner, Rushman, 2001)

In this paper I excavate Manning's 1919 national plan, arguing that his conception of planning forms a missing link between the conservation movement of the late 19th century and the city planning movement of the early 20th century, and represents an overlooked piece of the history of planning in the United States. With increasing interest in the structuring role of the environment in the history of city planning (Steinberg, 2002; Daniels, 2008), Manning's environmental plans captured a fleeting moment when perceptions of a natural world of "unspoiled moral order" were giving way to a mechanical world of mass production and consumption (Worster, 1973)

Manning's plans suggested a data driven environmental approach to regional design, a practice that modern digital infrastructure has finally made possible.

Chiang Ching-kuo and the Regional Planning of Kanhsien, Kiangsi Under the Influence of Soviet Model (1941-1948) ——The Planning Practice of Socialist Ideological Trend in Modern China

Zhao Li (School of Architecture, Southeast University) and Baihao Li (School of Architecture, Southeast University)

After World War I and the Great Depression, regional planning theory was spread into China in the early 1940s. Practice of regional planning began to rise in many regions. Affected by the socialist ideological trend, there had been many regional planning under planned economy system in China such as Guangxi and Jiangxi. Gannan Reform dominated by Chiang Ching-kuo was an important experiment and clearly marked by socialist ideology from the Soviet-Russia. Chiang Ching-kuo studying in Moscow was deeply influenced by socialist ideology and command economic system during the period of the first "Five-Years Plan" (1928-1933) in 1930s. Served as governor of Jiangxi Province after his returning to China, Chiang Ching-kuo formulated the regional development path of "first social construction and post physical planning" according to the social conditions of Gannan in 1940. As a proponent of Confucianism, he combined the Soviet experience with the traditional Confucian urban-rural governance rules of ancient China. Promoted by Chiang, the government formulated two regional plans in 1941 and 1943, The First Three-year Plan of New Gannan (1941-1943) and The Second Five-year plan of New Gannan (1944-1948)

From 1941 to 1945, under planned economy system, government developed public and cooperative undertakings to construct agriculture, industry, commerce, transportation and other ten systems which can allocate population, industry and resources reasonable, to eliminate urban-rural gap. Taking Kanhsien City as the center, Chiang built Gannan into a model state as an example for new China, attracted the attention of world. The plan was similar to the Five-Years Plan of Soviet and P.R. China, and had an obvious socialist character. Its annual plan and ten systems were also similar to Chiang's Four-year Plan and Top Ten Construction in Taiwan in late twentieth century. Based on historical archives, research has focused on Chiang Ching-uo and Gannan Reform, explained that how the reform can combine the Soviet-experience, planned economy, Confucian experience with regional planning under the leadership of such a heroic figure as Chiang, as the earliest regional planning in modern China in 1940s. It's an extremely important issue that has not been excavated.



Greater Istanbul Metropolitan Area Planning Experience (1965-1980): Implementation of a Strategic Planning Approach

S. Güven Bilsel*, F. Candaş Bilsel**

* Prof. Dr., KTO Karatay University, Turkey, guvenbilsel@gmail.com

** Prof. Dr. Middle East Technical University, Department of Architecture, bilsel@metu.edu.tr

Following the enforcement of the Urban Development Act in 1956 and the foundation of the Ministry of Reconstruction and Settlement in 1958, the first regional plan was developed for the Eastern Marmara Region in Turkey. The regional plan, which was prepared by the Ministry of Reconstruction and Settlement, in collaboration with the State Planning Office aimed at directing the industrial developments, the distribution of the industrial population and defining the hierarchy of urban settlements in the region respectively. The Regional Plan proposed an urban and regional infrastructure and a linear settlement development model for the Greater Istanbul area for the first time. The cities in Turkey were subject to a rapid urbanization due to a continuous flow of population from rural areas to the cities, which accelerated after 1950s. As a result, a multiplicity of new municipalities outside the existing limits of the major cities were formed, which necessitated a holistic planning in metropolitan scale. With this objective, three metropolitan planning offices were established for the major cities, Istanbul, Ankara and Izmir under the Ministry of Reconstruction and Settlement.

In continuity with the principal decisions of the East Marmara Regional Plan, the planning studies for the Greater Metropolitan Area of Istanbul started with the foundation of Greater Istanbul Metropolitan Planning Office in 1965. The distribution of population between European and Asian sides of Istanbul metropolitan area was studied, and a linear pattern of settlement units separated by green areas was adopted in line with the regional plan. A strategic planning model was adopted in the last stage of the metropolitan planning. Based on an extensive survey, the demands of different sectors were defined. Alternative development strategies and scenarios were proposed with regard to the demands of the sectors. Beginning with the regional planning scale, the distribution of the residential and working areas, different strategies were tested with respect to their performances in achieving the initial development objectives. Based on an extensive data, projections, and regional development strategies updated, a plan that could guide the urban development policies was achieved. The metropolitan plan was completed and approved by the Ministry in July 1980.

The Metropolitan Plan of Greater Istanbul constituted the first metropolitan plan, in Turkey, where the strategic planning approach was applied by comparing alternative development strategies. However, it could not be implemented properly as the planning authority was transferred to the Greater Municipality. Yet, with its holistic approach, this metropolitan plan that defined strategies of urban development and natural and urban conservation in metropolitan scale, could have prevented unplanned, piecemeal operations if it could be implemented. In the present paper, the metropolitan planning experience of Greater Istanbul is studied with a focus on the 1980 master plan. The role of the planning decisions in the urban development of the metropolitan city will be discussed at the end of the paper.

Keywords: Concept and methodology of Global/World Planning History, Metropolitan Planning, Strategic Planning



Introduction

The city of Istanbul, which was the capital of two empires due to its location on the maritime route that connects the Black Sea to the Mediterranean, and forming a bridge between two continents, continues to have a strategic importance in the Eurasian geography. It is a unique city with its outstanding topography, distinct microclimate and vegetation as well as its historical identity and World heritage monuments. In spite of the fact that it has grown and extended rapidly, and exceeded its natural thresholds since the second half of the twentieth century, the city could conserve its historical silhouette and townscape values as a result of its original location, geographic and topographical properties.

The planning experience of Istanbul in modern terms started with the planning competition organised by the Municipality of Istanbul in 1933. Three planners from Germany and France were invited to submit their planning proposals for the future development of the old capital city, which had lost its status of being the capital, yet remained the most important city of Turkey, with its population and its economic activity. Following this first attempt, the French architect-planner Henri Prost was invited as planning consultant to the Municipality of Istanbul. He prepared the Master Plan of Istanbul European Side in 1937, the Plan of the Asian Side in 1939, a regional plan in 1943 and a number of development plans for different sectors of the city including the shores of Bosphorus.¹ After Henri Prost left Istanbul in 1951, a commission formed of Turkish architects and planners took over the planning of the city. This transition period was interrupted by large-scale urban operations undertaken by the Prime Minister of the period.²

While the planning works of the early Republican period perceived the city within the limits of the historical settlement, the irregular process of urbanization resulted from the massive immigration flow from rural areas to the principal cities of the country that began in 1950s, necessitated approaching the city from an upper scale. In this period, the population of Istanbul reached almost 2 million inhabitants (1.4 million in 1960 and 2.1 million in 1970), the capital Ankara and the port city of Izmir were also subject to a rapid urban development and change.³ In order to cope with this process, the Metropolitan Master Plan Offices were founded under the Ministry of Reconstruction and Settlement, with the decision of the Board of Ministers and National Security Council in 1965.⁴

The present paper focuses on the works of the Greater Istanbul Metropolitan Planning Office, created in this context. Following an overview of its initial activities, the strategic planning method applied to the planning of Istanbul in late 1970s, is presented and discussed within the limits of this paper. Despite the Greater Istanbul Metropolitan Area Master Plan was approved in July 1980, it could not be implemented as it was planned, due to the changing governmental policies and decentralization of the planning authority in the early 1980s. However, this paper argues that the 1980 Master Plan of Greater Istanbul, which was the first metropolitan planning process conducted with a strategic planning approach in Turkey, was influential on the later planning works and deserves to be examined more in detail.⁵

The First Regional Plan and the Beginning of Metropolitan Planning

Following the period from 1950 to 1960 when liberal political discourse prevailed, the policy of planned development was adopted in the 1960s. The “Development Plans for Five Years” started to be prepared after the State Planning Organization (DPT) was founded. This organization initiated the studies to define the “hierarchy of urban settlements” and “regions of investment priority” in response to the problem of unbalanced development in the scale of the country.

The Directory of Regional Planning created under the Ministry of Reconstruction and Settlement founded in 1958, completed the studies of inventorying and collaborated with the State Planning Office to prevent the unbalanced development in between regions. This directory conducted the “Growth Pole Policy” studies and regional development strategies on which metropolitan planning works depended in the metropolitan areas later.

The first regional plan developed by the Ministry was the “Eastern Marmara Regional Plan,” which was the outcome of the studies held between 1960 and 1964. The Regional Plan that comprised the metropolitan area of Istanbul, adopted the premise that the growth of Istanbul was inevitable and its development had to be supported; it also predicted “Istanbul would influence the urban settlements in its surroundings and thus would contribute to their development.”⁶



Greater Istanbul Planning Office, founded in 1966 started its studies for Istanbul Metropolitan Area that was defined as an area that comprised the whole province of Istanbul, including Gebze from the neighbouring province of Izmit. The metropolitan area was composed of the integrity of urban settlements that extended from Silivri to Ereğli on Marmara in the West. In addition to the series of urban settlements that extended linearly along the coast of Marmara Sea, the metropolitan area of Istanbul contained valuable agricultural lands, water sources protection areas, the Northern Forests, “the lungs of Istanbul” that extended to the coasts of the Black Sea and the coastal strip to be conserved with its “outstanding natural beauties,” covering also a number of semi-rural settlement areas.

The Metropolitan Planning Office pursued its studies with an outstanding leading staff and an interdisciplinary group of experts who conducted the surveys, analyses, synthesis and evaluation studies based on a comprehensive study of inventorying. From its creation to 1970s, the Office developed metropolitan planning proposals in 1/25.000 scale and opened different development strategies to discussion.⁷

In 1970s, new models of planning were searched besides the necessity of updating the data with the ever changing conditions in the Greater Metropolitan City that was rapidly crowded with a new migratory flow, grew in an irregular manner and its building density increased drastically resulting in the loss of the vernacular architecture and the green character of the city, being increasingly polluted due to uncontrolled industrial developments and wrong heating methods, and faced with the problems of transportation and accessibility because of the increasing commuting between working and living areas at the two sides of Bosphorus.

However, an incremental attitude started to prevail in the implementation instead of a holistic approach that comprehended the integrity of the metropolitan area in late 1970s. Given the urging necessity to develop principal decisions of a holistic macro plan, a higher council was created by the Ministry for the monitoring of the planning works in Istanbul. Following the reorganization of the Office, a “decision making board” in which the planners responsible from each sector actively participated was constituted.⁸

Strategic Spatial Planning Approach in the Metropolitan Planning of Istanbul (1978-1980)

In this stage of the studies, the “Strategic Spatial Planning Approach” was adopted both by the higher council and the Greater Istanbul Metropolitan Planning Office. The Strategic Spatial Planning, which began to be discussed and implemented in the metropolitan planning of cities worldwide in this period, was adapted and further developed for the greater city of Istanbul by the higher council and the decision making board of the Istanbul Metropolitan Planning Office.

In this context, based on the trends of development, the planning team defined the thresholds and limits of urban development and the problems and potentials, and developed “the urban and metropolitan development scenario” for the target year of 1995. The decision making committee formed from the team of planners of the Metropolitan Planning Office developed a set of “strategic development objectives” in line with the main goal of planning and the scenario of development defined. The aim of the planning was defined with one single sentence, in accordance with a strategic spatial planning approach and stated as: “increasing the international significance of metropolitan Istanbul for the benefit of the country, without losing the city’s particular values nationally and internationally renown.”⁹

Amongst the strategic development objectives defined in the Greater Istanbul Metropolitan Area Master Plan, the following planning principles amongst the principles listed on the master plan document are to be emphasized in particular;

- *“Integration of Istanbul metropolitan area with Marmara Region and the development plan of the country,*
- *Meticulous protection of the water sources of Istanbul by the conservation belts determined,*
- *Conservation of natural, historical and cultural values and resources,*
- *Benefitting from the energy resources at an optimum level together with the consideration of the principle of not to create environmental problems,*
- *Programming the provision of housing in consideration with real needs and demands determined,*



- *Being selective among different sectors in the working sectors in the metropolitan area in accordance with the employment program of the country,*
- *Planning of industrial areas in consideration with the balanced distribution of working areas, the location and functional pollution,*
- *Provision of the balanced distribution of the main central business district (CBD) and sub-centres in the whole metropolitan area,*
- *Balanced distribution of the recreation potential, proportionately to the population; excluding Northern Forests as the lungs of the metropolis, from settlement tendencies and meticulous protection of the ecological balance in these areas,*
- *Decreasing the cost of working oriented trips to the society, maximizing the means of railway and maritime transportation in the whole metropolitan area and increasing the means of public transportation.”¹⁰*

It is interesting to observe that in this plan, no alternative development strategy that included the Second Bridge on the Bosphorus was proposed despite the increasing daily trips between Asian and European sides. The first Bosphorus Bridge was constructed between 1970-1973, while the metropolitan planning studies continued and functioned with its connections, as the main transportation channel between the two sides. The metropolitan plan adopted this connection as the main transportation structure that served the whole metropolitan city

Increasing the number of crossings between the two sides of Bosphorus, either by a bridge or a tunnel, was not among the principal decisions of 1980 Metropolitan Plan. In addition to the assumption that the connections to be provided by the construction of such big structures would further increase the amount of the transportation demands, damaging the calm of the settlements on the Bosphorus, negative effects on the maritime transportation, and more important than these, stimulating the urban development towards North, harming the invaluable water sources and the extinction of the ecological corridors were enumerated as important inconveniences.¹¹

In order to test the level of success of each alternative development strategy, the team of planners did the evaluation by using the goals achievement matrix. A set of measurable criteria were defined and used in the evaluation of the alternative development strategies, produced in the previous phase of the planning process.

In this process, the principal decisions of the regional planning at the upper level were taken as determining in the metropolitan planning studies. Therefore, the decisions of the Eastern Marmara Regional Plan were revised in consideration with the developments that occurred in the past fifteen years.¹² The decision of the Regional Plan to support the urban development of Istanbul metropolitan area in line with the existing tendencies, and to sustain the urban growth with the assumption that it would have a positive impact on the development of the surrounding settlements was reconsidered, and the decision to redistribute the population working in the industries was maintained.

In the stage of defining alternative development strategies, the planning team applied a method in stages. The method, which was further developed by the members of the decision making committee, was based on the diversification of the alternative development strategies in regional scale that were found successful, by further developing them in the scale of the whole metropolitan area. The study groups were asked to develop the sectorial master plan schemas that highlighted the development goals of the sectors that they studied in addition to the urban and regional land uses and preferences of location, based on the inventories in which the socio-economic, cultural, natural and environmental data and information on the conservation and utilization equilibrium were updated.

Among the alternative regional development strategies, the strategies, which limited the metropolitan development and predicted population transfer outside the metropolitan area, and those that foresaw the development in satellite settlements were discussed. In metropolitan scale, searching different means of benefiting from the existing potential enabled developing different alternatives; the cost dimension became determining the level of surpassing the thresholds that were defined.

Among the alternative strategies that were defined according to the sectorial weight, the industrial development oriented strategy, and the alternative that aimed at benefiting from the services at the utmost level and the conservation-recreation oriented alternatives prevailed. In the transportation-accessibility oriented strategy, the



alternatives that aimed at benefiting from the urban and metropolitan public transportation and the railway came to the fore.

In the last stage of evaluation in achieving the development strategy to be selected in urban scale, alternative urban development models in which different weights were given to the western or eastern sides of the city were discussed. The rights acquired and tendencies of development were considered in the evaluation of different alternatives. The metropolitan development strategy that was achieved at the end, is a mixed strategy which was obtained from the synthesis of the outstanding features of the development alternatives that were selected at the last stage.

Evaluation of the Greater Istanbul Metropolitan Area Master Plan (1980)

It can be argued that Greater Istanbul Metropolitan Area Master Plan is the first plan prepared for directing sustainable development and growth of Greater Istanbul in metropolitan scale. In this upper scale plan, the approach for a “sustainable urban development” that looks out for the conservation and utilization equilibrium was particularly emphasized. The conservation of northern forests, fresh-water basins and surrounding agricultural lands was adopted as one of the fundamental principles of the plan. Besides forests and water sources, the protection of the ecological system and ecological corridors from the possible impacts of urban growth and expansion was particularly emphasized. This principle was set as one of the criteria that had the highest weight in the evaluation of the alternative development strategies. As a result, a linear urban growth model in east-west direction was adopted in the strategy selected¹³ in order to prevent urban sprawl and expansion towards the northern forests and other protection areas including agricultural lands and pastures. This was also the main reason of the absence of the second bridge that crosses Bosphorus on this plan. (Figure 1)

Balanced distribution of the population was one of the most significant concerns of the Greater Istanbul Metropolitan Planning. The distribution of the working areas including the sub-centres and industrial areas were decided according to the evaluation of the different development strategies and scenarios set. The distribution of

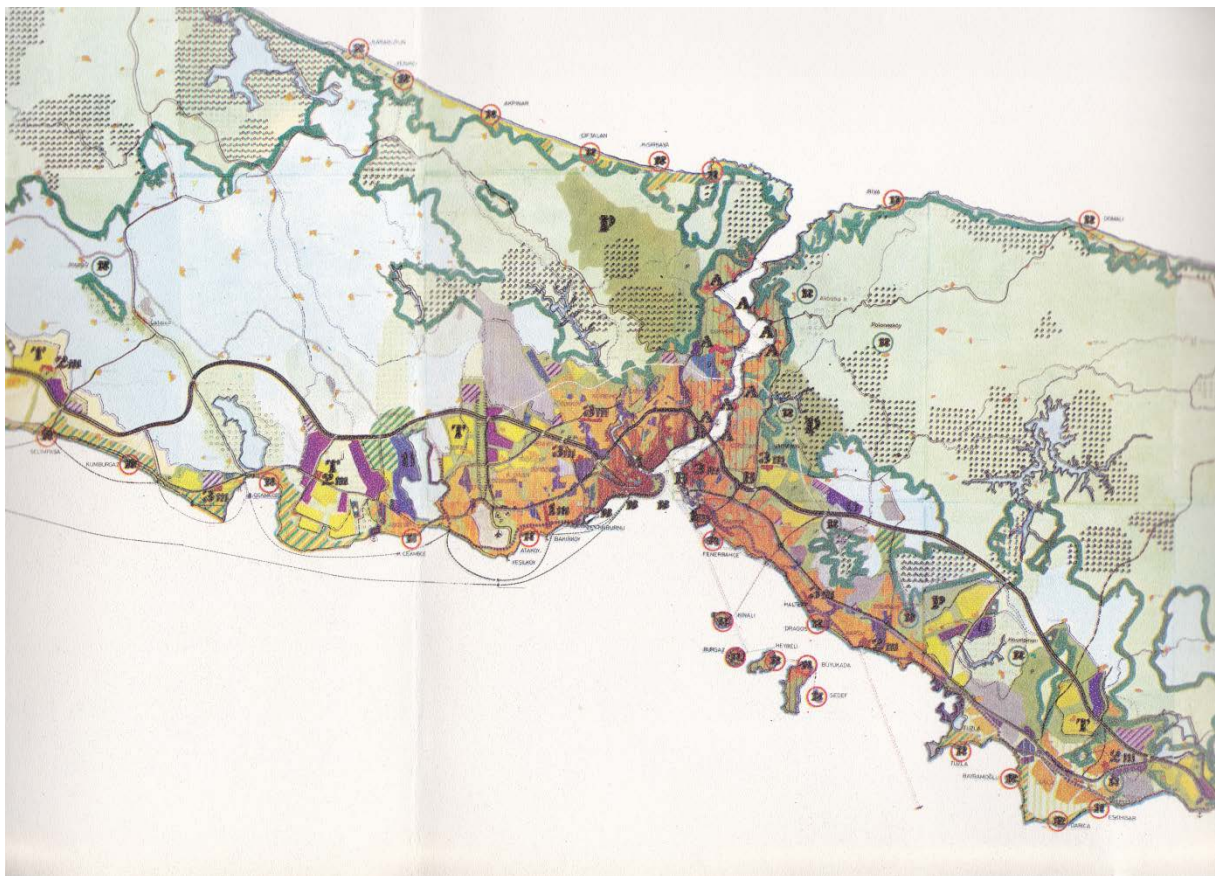


Figure 1. Istanbul Metropolitan Area Master Plan, Istanbul Metropolitan Area Planning Office (Istanbul, 1980)



residential areas were defined in consideration with the distribution of the working areas. The distribution of the population on both sides of Bosphorus was decided in consideration with the environmental assets to be preserved, besides the consideration of existing tendencies and priorities of the development strategy selected.

In this plan, the population living in the whole metropolitan area, which was 3.7 million in 1975, was projected to reach 7.1 million in 1995. This population was distributed between the two sides of the city according to the development strategy adopted. In the western side, the population that was 2,7 millions in 1975 was projected to increase to 4.7 millions, and in the eastern side, the population that was 1.0 million was projected to reach 2.4 million inhabitants. It is important to note that, in the distribution of the new urban population foreseen for the end of the planning term, different alternative strategies were developed depending on the prediction of the quantity of trips between home and work. The weight of the population predicted in the western side can be explained by the existence of a relatively higher population in this side, and by the consideration of the existing tendencies. The evaluation of the environmental assets to be conserved and the thresholds that can be surpassed were also factors that played in the distribution of the population in both sides. It is to note here that additional restrictions need to be brought for the definition of settlement areas according to the micro-zone geological studies conducted after the 1999 earthquake.

The Implementation of the Istanbul Metropolitan Master Plan

In the program proposed for the implementation of the planning decisions of the master plan approved in July 1980, it was aimed to start the action area planning and action programming in the Strategic Priority Areas. In this context, in line with the objective to prevent irregular settlements, settlement areas for mass housing were selected in ten priority areas of the first and second degree defined by the metropolitan area master plan. In the first stage, Halkalı and Beylikdüzü in the west, and Kurtköy, Maltepe and Gebze in the east were selected; detailed spatial arrangements and the actions of expropriation and infrastructure development were initiated starting from 1981.

The transition to the new local government model of “Metropolitan Municipality” in Turkey dates back to 1984.¹⁴ Yet, substantial changes in the administrative system could only be made with a series of legislative regulations in the years 2000. During the studies of Istanbul Metropolitan Area Master Plan, there were 34 settlements of different sizes having the status of municipality within the metropolitan area, including the Municipality of Istanbul. A number of these local governments founded outside the municipal borders of the city of Istanbul, were the municipalities of the old settlements formed around the stations of the railway lines extending on both sides. These settlements extended in time and subject to structural change. Many other new settlements, which emerged as a result of the massive immigration to the city that gained impetus after 1950, were settlements formed spontaneously without plan.

During the preparation of the master plan, according to the current legislation, the authority of preparing, making prepare, approving and revising plans was given to the related Ministry in the name of the central government, however, it was considered necessary for a democratic process to have the decision of the municipal council regarding the preparation of a plan, appropriateness of the plan to the local needs, before the approval of the Ministry. This centralist governmental polity that defined the mandate of control in planning and the implementation of the plan, has changed with the liberalization policies after 1985; the Ministry of Settlement and Reconstruction was closed down, mechanisms of central control were abolished and the municipalities were accorded the liberty to prepare, make prepare and approve plans and to direct the implementation of the plans.

Before these changes were put into effect, the Office of Neighbouring Municipalities was founded in Istanbul by the Bank of Provinces, with the objective to coordinate the preparation of urban development plans of the settlements surrounding Istanbul, with the studies of the Metropolitan Area Master Planning Office.

After the Metropolitan Area Master Plan was approved, this Office of the Bank of Provinces, continued to prepare and make prepare implementation plans for the neighbouring municipalities, in accordance with the principal decisions of the master plan.

Epilogue

When the growth of the urban population in Istanbul is examined, it is observed that Istanbul was the “primary city” of Turkey, with its population that exceeded 1 million in 1950s. In this period, one twentieth of the



country's population lived in Istanbul. It is to note that the urban population was only 24 % of the country's population, whereas today this ratio increased to 92 %, and the metropolitan city of Istanbul, with 15 million inhabitants, shelters one fifth of the country's population. Today, it is predicted that the urbanization of the metropolitan city, which has exceeded all the natural thresholds and reached the saturation level, will finally slow down, and the population size foreseen for 2050 will remain around 17 million.

Among the predictions of Istanbul Metropolitan Area Master Plan, it is stated, "The metropolis of Istanbul will continue to maintain its property of being the biggest city of the country and of Marmara Region."¹⁵ In addition to that, in the studies on Marmara Regional Plan, it was foreseen that in the Eastern Marmara Region in which Istanbul was included, the dynamics of development of the metropolitan Istanbul, would affect the other growth poles of the region such as Bursa and Izmit, and in line with the policy of redistribution of the industrial population, new urban development poles would be created such as Bozüyük-İnönü development axis.

Based on the selected regional development strategy, and in consideration with the population projections made by the Metropolitan Planning Office in 1970s, in which the lowest limit was defined as 6.7 million and the upper limit as 9.2 millions, the population of Istanbul metropolitan area was accepted to reach 7.1 million in 1995, in conformity with the renewed goal and strategic objectives of the metropolitan development. When the population growth of Greater Istanbul at the end of the term of the 1980 Metropolitan Area Master Plan is studied, it is seen that it reached 6.6 million people in 1990 and approximately 10 million in 2000. It can be argued that this Master Plan aimed primarily at the conservation of the environment and to provide a healthy environment for a healthy urban life by the "belts of protection" that it brought to restrict the urban expansion, was based on a relatively accurate prediction of population growth.

However, today the main problem in Istanbul metropolitan area is the urban expansion and sprawl in every direction rather than the population growth. This process is accelerated with the incremental decisions such as the third bridge constructed on the very north of Bosphorus in the heart of Northern Forest, and the new international airport being built on a wetland near important water resources on the Black Sea coast. The continuing urban expansion threatens the Northern Forests, which were qualified as "the lungs of Istanbul," ecological corridors, agricultural fields, pastures and water resources, in contrary to the planning principles set in the Greater Istanbul Metropolitan Area Plan almost four decades ago.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributors

Prof. Dr. S. Güven Bilsel was born in Istanbul and graduated from Istanbul Technical University Faculty of Architecture in 1960. He participated in the program held by the Senator of Re- construction and Settlement in Berlin in 1967. He continued his graduate studies in the Master Program of Town and Regional Planning at the University of Sheffield between 1972-74 and received his Master degree (MA.TRP.) from this university with his thesis study on "Piecemeal Urban Re-development." He worked in the Ministry of Reconstruction and Settlement in different positions, actively participated in the Metropolitan Planning of Istanbul, Izmir and Bursa and awarded with high honour certificates. He presented papers in international meetings and symposia, and headed the Turkish National Committee in the Urban Renaissance Campaign of the European Council in Strasbourg in 1980.

Prof. Dr. Güven Bilsel received his PhD degree from Gazi University in 1987 with his thesis entitled "Planning for Strategic Priority Areas." He taught graduate and undergraduate courses at the Department of City and Regional Planning at Gazi University in Ankara. He was invited to found the City and Regional Planning Department at Erciyes University in Kayseri, where he was appointed as a full professor in 1999. He continues his teaching activity at the Department of Architecture of KTO Karatay University in Konya. He is a member of RITP Urban Design Network and the Urbanization Architecture and Town Planning Committee of the Chamber of Architects of Turkey.

Prof. Dr. F. Candaş Bilsel received B.Arch (1987) and M.Arch (1989) degrees in Architecture from the Middle



East Technical University in Ankara. She continued her post-graduate studies in Sociology and Urban Geography at the Université de Paris X – Nanterre, and in Architecture and Urban Design at the École d'Architecture de Paris-Belleville. She obtained her Ph.D. degree in Space Planning and Urbanism at the Université de Paris X – Nanterre in 1996. Her Ph.D. dissertation is entitled “Cultures and Functionalities: Urban Morphological Evolution of the City of Izmir from the beginning of the 19th to the beginning of 20th century.” She published several articles and chapters in books, on the history of cities, urbanism and urban design. She was one of the curators of the exhibition From the Imperial Capital to the Republican Modern City: Henri Prost's Planning of Istanbul, held by Istanbul Research Institute Foundation in 2009.

Cânâ Bilsel is a professor of architecture at METU where she has been teaching architectural design studio and urban design courses in the undergraduate and graduate programs of the Department of Architecture since 1996. She is currently teaching at METU where she is the Chair of the Department.

Endnotes

¹ Cânâ Bilsel, “*Les Transformations d'Istanbul: Transformation of Istanbul by Henri Prost*”, *AIZ Journal of Faculty of Architecture*, vol. 8, issue n. 1, Spring 2011, 100-116; F. CÂNÂ BİLSEL., “Henri Prost's Planning Works in Istanbul (1936-1951): Transforming the Structure of a City through Master Plans and Urban Operations”, Bilsel, F. C., Pinon P. (eds.), *From the Imperial Capital to the Republican Modern City: Henri Prost's Planning of Istanbul*, (Istanbul: Suna and Inan Kiraç Foundation, Istanbul Research Institute, 2010), 101-165

² Mete Tapan, “Istanbul'un Kentsel Planlamasının Tarihsel Gelişimi ve Planlama Eylemleri”, Yıldız Sey (ed.), *Yilda Değişen Kent ve Mimarlık*, (Istanbul: Tarih Vakfı, 1998), 84.

³ İlhan Tekeli, “Modernleşme sürecinde İstanbul nüfus dinamikleri nasıl değerlendirilmeli?”, *Modernizm, Modernite ve Türkiye'nin Kent Planlama Tarihi*, (Istanbul: Tarih Vakfı Yurt Yayınları, 2009), 172-206

⁴ İlhan Tekeli, İstanbul'un Planlamasının ve Gelişmesinin Oyküsü, (Istanbul: Tarih Vakfı, 2013), 255-257.

⁵ The present paper is based on both written archival documents and unwritten information founded on the personal notes of Prof. Dr. Güven Bilsel who was the head of the higher council for the monitoring of the Greater Istanbul Metropolitan Plan from 1978 to 1980.

⁶ Anonymous, “Doğu Marmara Bölgesi Ön Planı”, Cumhuriyet Dönemi İstanbul Planlama Raporları, Şener Özler (ed.), (Istanbul: Chamber of Architects of Turkey, 2007), 191-208; Tuğrul Akçura, “Doğu Marmara Bölgesi Ön Planı”, *Yedinci İskân ve Şehircilik Haftası Konferansları*, (Ankara: 1964).

⁷ Anonymous, “Büyük İstanbul Nazım Plan Bürosu 1971-1972”, Mimarlık, 1972, n. 7, 25-36; Niyazi Duranay, Ersen Gürsel, Selçuk Ural, “Cumhuriyet'ten Bu Yana İstanbul Planlaması”, Şener Özler (ed.), Cumhuriyet Dönemi İstanbul Planlama Raporları, (Istanbul: of Architects of Turkey, 2007), 423-426

⁹ Istanbul Metropolitan Area Planning Office, *Greater Istanbul Metropolitan Area Master Plan Report*, (Istanbul: 1980)

¹⁰ *Ibid.*

¹¹ Istanbul Metropolitan Alan Planlama Ofisi, “1/50.000 Ölçekli İstanbul Metropolitan Alan Nazım Planı, 29.07.1980 tarihli Bakanlık Onanlı Rapor”, Şener Özler (ed.), Cumhuriyet Dönemi İstanbul Planlama Raporları, (Istanbul: of Architects of Turkey, 2007), 221-247.

¹² Tuğrul Akçura, *op.cit.*

¹³ Istanbul Metropolitan Area Planning Office, *op.cit.*

¹⁴ *Büyükşehir Belediyelerinin Yönetimi Hakkında Kanun Hükmünde Kararname*, (Decree having force of law on Metropolitan Municipalities, 1984)

¹⁵ Istanbul Metropolitan Area Planning Office, *op.cit.*



Chiang Ching-kuo and the Regional Planning of Gannan under the Influence of Soviet Experience (1941-1945)

--The Planning Practice of Socialist Ideological Trend in Modern China

Li Zhao*, Li Baihao**

* *PhD, School of Architecture in Southeast University, archilz0706@gmail.com*

** *Professor, School of Architecture in Southeast University, libaihaowh@sina.com*

In the early 1940s, regional planning theory and practice spread into China. Gannan Reform dominated by Chiang Ching-kuo was an important experiment and marked by socialist ideology from the Soviet-Russia. In Jiangxi Province, Chiang Ching-kuo formulated the regional development path of first social construction and post physical planning. As a proponent of Confucianism, he combined the Soviet-experience with traditional Confucian urban-rural governance rules of ancient China. Promoted by Chiang, the government formulated two five-year plans (1941-1949) in 1941 and 1943. Under planned economy system, government developed public and cooperative undertakings to construct various industries and built a model state as an example for China which attracted the attention of world. The plan was similar to the Five-Years Plan of Soviet and P.R. China, and had an obvious socialist character. Its annual plan and ten-systems were also similar to Chiang's Four-year Plan and Top Ten Construction in Taiwan in 1970s. Based on historical archives, research has focused on Chiang Ching-uo and Gannan Reform and explained that how the reform can combined the Soviet-experience, planned economy, Confucian experience with regional planning as the earliest regional planning in modern China in 1940s. It's an extremely important issue that has not been excavated.

Keywords: Chiang Ching-kuo, Gannan Reform, Soviet-experience, regional planning.

Introduction

Origin of Research

China began to be integrated into world in the middle of 19th century in Qing Dynasty. The material civilization and values created by Industrial Revolution exerted enormous impact on Chinese traditional ethics and way of life.

The entry of West did not only weaken Qing government's fiscal capacity of engineering construction, but also shattered its control over city management. Areas that were not under direct control of China sprang up and were expanded, such as concessions, treaty ports and settlements¹. In new urban districts that were far away from old one, westerners set up urban authorities, introduced municipal management measures, built structures of consulates, custom office and infrastructure including streets and parks, reshaping the urban space different from that in Chinese traditional society.

In the end of 19th century, Chinese people began to make urban planning, which started from the imitation of concession and focused on urban facilities construction such as building streets. Planning during this period mainly consisted of detailed plans such as road planning, residential planning and reconstruction planning. In 1920s, the urban planning theory of modern cities in West was introduced to China, since when China changed the old city reconstruction focusing on streets and municipal construction into comprehensive urban planning. Starting from the *THE CITY PLAN OF NANKING* drawn up by Henry K. Murphy, cities in China began to make general plan.

After World War I and Great Depression in 1930s, it was urgent to carry out post-war reconstruction and boost regional economy nationwide, which triggered off the rudiment of regional development planning system. China was influenced by the regional planning and combined it with experience accumulated in local area². From 1930s to 1940s, regional planning sprang up in many areas, with the trend of combined urban and rural planning becoming the mainstream. Meanwhile, influenced by socialist thought and the First Five-Year Plan of USSR, regional planning of planned economy mode came into being, such as Guangxi Planned Economy Experiment conducted by Qiu Zhizhong and Movement of Establishing New Hubei advocated by Chen Cheng. Led by Chiang Ching-kuo, Gannan Reform greatly impacted by USSR experience was an important practice.

Research Significance and Status



Studies on the development of planning will contribute to our understanding on the evolution of planning in modern China, so that we can explore the pattern of planning localization. In addition, to summarize the origin and development of regional planning will also be of great significance to the trend of provincial planning and coordinated regional development in China currently.

At present, studies on planning in modern China mainly concentrates on special cities including concessions, trading ports and metropolis such as Shanghai, Peking, Canton, Hankow, Nanking and Tientsin, while studies on small and medium-sized cities are also gradually increasing such Amoy, Lanchow, Ningpo and Suchow. Due to separation administration of city and country in China, 90% of planning history research focused on city-centred planning, while there were relatively few studies on provincial and regional planning such as Guangxi. Therefore, practice in Gannan, Jiangxi Province conducted by Chiang Ching-kuo in 1940s is regarded as the object of this study, supplement of which will be conducive to our understanding of evolutionary planning development in modern Chinese cities from “point” to “surface”.

Object of Research: Chiang Ching-kuo and Gannan Reform

As the son of Chiang Kai-shek, chairman of the Committee of Government of the Republic of China (GRC), Chiang Ching-kuo³ (Figure 1-1) studied in the Soviet Union in his youth, returned at the age of 27, and participated in political activities from Jiangxi, one of the three model provinces of GRC⁴.

Gannan, abbreviation of southern Jiangxi Province, is adjacent to Hunan, Guangdong and Fujian Provinces, accounting for one-fourth of the total area of Jiangxi. (Figure 1-2)

During his work, Chiang Ching-kuo reformed local construction and planning in Gannan. Within 6 years, great changes have taken place, which was praised as a political miracle during wartime. It was known as Gannan Reform.

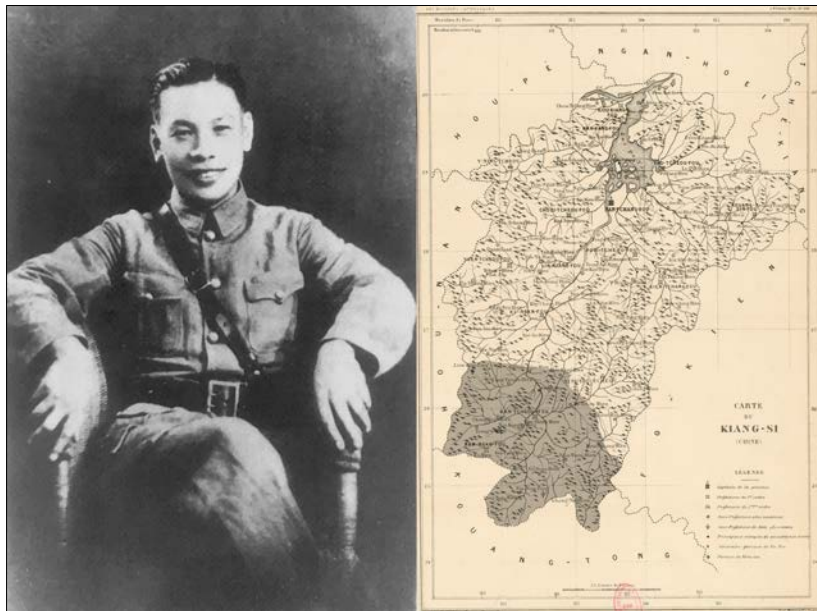


Figure 1-1: Chiang Ching-kuo in Gannan period; Figure 1-2: Location of Gannan in Jiangxi Province.

Ideological Source: Soviet Planned Economic Experiment

Reviewing the Gannan Reform, we can find that government intervention in urban and rural construction and governance robustly featured planned economy. Featuring more or less USSR socialism, these measures combine collectivism, Confucianism and Fascism. Chiang Ching-kuo declared that he would turn Gannan into the model area of Three Principles of the People raised by Sun Yat-sen, which actually resembled a small socialist Soviet Union. His thought originated from his study in the Soviet Union in the early years as well as the conception of socialism.

Studying in the Soviet Union

In 1925, Chiang Ching-kuo went to Soviet Union at 15, studying in Moscow Sun Yat-sen University and learning from K. Radek, president of the university and Trotsky's loyal supporters⁵. Aspiring to disseminate the idea of socialist revolution around the world, Radek viewed the son of Chiang Kai-shek as the leader of Chinese



revolution and even the leader of the world revolution, so he taught everything he knew to Chiang. After graduation, Chiang Ching-kuo pursued advanced studies in Central Tolmatchev Military and Political Institute in Leningrad.

Soviet Planned Economy Experiment

In the administration era of Stalin, the Soviet Union abandoned new economic policies in the era of Lenin. The period from 1928 to 1932 marked the First Five-Year Plan in the Soviet Union. Under the highly centralized planned economy system, political intervention boosted national industrialization, turning a large agricultural country into a planned economy aiming at large-scale industry. The theory on socialist urban construction and planning were also conceived in the process of implementation of the plan, and later developed and improved in the period of the second and third Five-Year Plan. During this time, Chiang Ching-kuo was studying in Moscow, greatly influenced by those thoughts. After graduation, Chiang once worked as an intern in Dynamo Power Plant and held a post as chief editor of *Worker's Daily* as well as factory director of heavy machinery shop, witnessing the urban construction under socialist system⁶.

Returning and Serving

In 1937, 27-year-old Chiang Ching-kuo finally returned after spending 12 hard years in Soviet Union. In the first meet with his father Chiang Kai-shek, Chiang Ching-kuo put forward his aspiration to advance progress in spite of hardships⁷. However, Chiang Kai-shek declined his proposal due to his lack of experience. Upon returning to his hometown Xikou in Zhejiang Province, Chiang Ching-kuo studied classics of Confucianism and works written by Sun Yat-sen including *General Plan for National Reconstruction*, learning the theory of New Confucianism and Three Principles of the People.

In 1938, suggested by Xiong Shihui, president of Jiangxi Province, Chiang Kai-shek appointed Chiang Ching-kuo to take office in Nanchang. In March 1939 when Japanese forces were about to invade Nanchang, Xiong Shihui moved the government to Kanhshien, a city in south of Jiangxi (Gannan Area). Chiang Ching-kuo was appointed as the supervisor of Gannan.

In August 1939, Stalin signed non-aggression treaty with Hitler. Abandoning its invasion in Russia, Japan coveted Southeast Asian colonies that were plunged into European battlefield, attempting to establish new order in East Asia. With the ending of war in China, Japanese troops no longer occupied new area and stopped its military action of occupying Jiangxi. In China at that time, major cities including Shanghai, Guangzhou, Wuhan, and Nanchang had fell into enemy's hands. Changes of situation enabled Gannan to become a crucial place in terms of geography, which linked south and north. Chiang Ching-kuo once asserted that Gannan was a suitable place for resistance against aggression and the founding of the nation⁸. As a temporary safe place, Gannan offered sound conditions for the reform.

Chiang Ching-kuo and Gannan Reform (1939-1945)

Gannan Overview

Located in the upper reaches of Ganjiang River, Gannan bordered Baiyue to the south and Henan Province to the north. It was at the centre of five ridges and crucial to the development of Jiangxi, Fujian, Guangdong and Hunan⁹. Surrounded by hills and mountains, Gannan was a relatively independent area, crossed by Zhang River and Gong River, which flowed westwards into Yangtze River.

Administrating 11 cities and counties including Gan County, Dayu, Nankang, Xinfeng, Longnan, Dingnan, Qiannan, Shangyou, Chongyi, Anyuan and Xunwu, the district covered an area of 23,000 km² and had the total population of over 2 million, with its administrative office in Kanhsien. (Figure 2) Founded in 201 BC, Kanhsien city relocated many times due to chaos caused by war and flood. Consequently, it was located between Zhang River and Gong River in 552 AD, the history of which lasted for 1400 years. Kanhsien was high in the middle and low in surrounding areas, known as the city of tortoise because of its shape.(Figure 3) With the opening of Dayuling thoroughfare, an important regional trade thoroughfare, continuous progress was made in commerce and transportation in Kanhsien. Developing into the transportation crux of south eastern China, Kanhsien was known as a pass to four provinces. However, after the Opium War, coastal trade achieved development, hinterland shrunk, leading to the decline of Yulin thoroughfare and Kanhsien¹⁰.

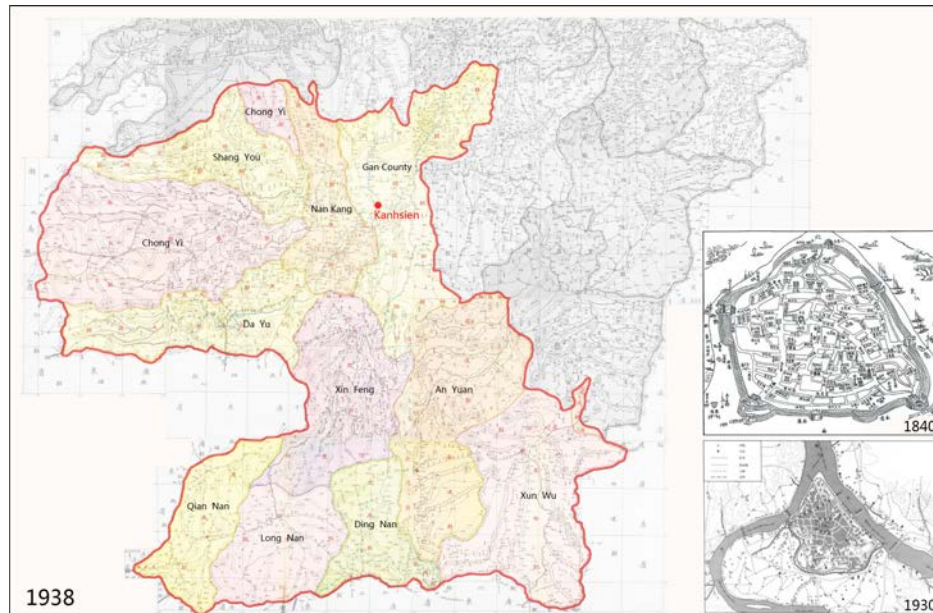


Figure 2: The 11 regions of Gannan and the ancient Kanhsien city in history.

Despite the fact that China experienced 10 golden-years for construction (1927-1937), there were powerful enemies outside and bandits and warlords at home, which left refugees destitute and homeless. In 1939 when Gannan was controlled by warlord and local bandits in Guangxi and Guangdong provinces, destitution, poverty, cultural backwardness and misery prevailed everywhere.

Social Governance Centered on Economy and Culture

Upon taking the office, Chiang Ching-kuo was so ambitious and positive that he put forward the slogan that building Gannan means building Jiangxi Province and even building new China. He also aspired to establish a Communism paradise without Communist Party. In view of status of Gannan, Chiang drafted the regional development path featuring socialist construction first and material planning second, attaching great importance to the socialist construction in economy, propaganda, organization and spirit.

(1)Economy

In view of the devaluation of paper currency and inflation, people live in great misery. Chiang Ching-kuo first stabilized national economy, adopted controlling economic policies and set up Gannan cooperative and transaction stores, controlling the sale of commodities, oil and rice, so that he could crack down on profiteers and eliminate the threat of soaring prices.

(2)Propaganda

Chiang Ching-kuo prioritized the importance of psychological warfare due to his studying in Soviet Union, so he spared no effort to apply media tools. At that time, under the call of “going to Yan’an”, a great number of young people rushed to Yan’an in northern Shanxi Province, where Communist Party and MAO Zedong were stationed, meanwhile some of them also went to Gannan under the call of Chiang Ching-kuo. Chiang started Integrity Daily, news agency, New Gannan press and New Gannan Bookstore, drawing the attention of talents and supporting him.

(3)Organization

Chiang Ching-kuo applied the Komsomolsk mode into Jiangxi Province, and told his father that youngsters in today's China were so passionate but lack of working methods and correct political line. He set up young cadre training class, advocating that youth organization should mainly consist of farmers, workers, students, teachers, freelancers, merchants and capitalists. Talents cultivated in this organization later became the pillar of the implementation of various policies in Gannan Reform.

(4)Spirit

Born in the same place with Wang Yangming (1472-1529), the representative of Confucianism in Ming Dynasty, Chiang Kai-shek and Chiang Ching-kuo were all advocators of new Confucianism. In 1520s, when Wang Yangming took charge of Gannan, he drawn up *Local Rules and Regulation of Gannan* so as to improve social



morality. Combined with Bao and Jia household registration system of old China, the county regulation system became the ruling mode ensuring the stability of Gannan for 400 years. Chiang Ching-kuo imitated Local Rules and Regulation of Gannan and issued *New Gannan Rules*, promoting ideological and cultural construction in local area. To regulate people's daily life through Chinese traditional virtues and standard of conduct as well as spiritual education, bad custom in people's daily life was changed and openness in culture was also advanced. Through one year effort, fresh progress has been made in Gannan.

After conquering all these hardships, Gannan area gradually achieved social stability, and Chiang Ching-kuo also promoted his conception step by step. Since then to 1945, he began to developed economy, education and carried out reform and planning.

Two Regional Planning

Through what Chiang Ching-kuo had written in letters, it could be found that he always hoped to have the opportunity to transplant a soviet social mode in China. However, under the ideology and administration system of GRC, he had no chance to carry out his ideas, still less could he implement the soviet planned economy. He tried his best to utilize the slogan of building Three Principles of the People demonstration zone, protecting his dream of building a socialist Soviet¹¹. Two regional planning from 1940 are examples to show that.

The First Three-year Plan of New Gannan

In the Executive Meeting of Ganan held in November 1940, Chiang Ching-kuo put forward that he wanted to establish economic system of Three Principles of the People. He believed that “the reason why our economic system was different from the capitalist economic system was that we had plans.” Chiang launched Gannan Reform in Kanhsien, aspiring to turn Gannan into a demonstration area of Three Principles of the People. Under his effort, Establishing the First Three-Year Plan of New Gannan formulated at the meeting advocated that a long-term goals should be achieved¹², namely, turning poor and old Gannan into an advanced and prosperous new Gannan with high happy index¹³.

Maybe influenced by The General plan for National Reconstruction by Sun Yat-sen, many planning in the Republic of China era featured industrial and regional planning, among which Gannan Reform was no exception. The Three-year Plan consisted of ten industries including agriculture, forestry, industry, commerce, mining, transportation, education, culture, health and relief. (Table 1)

Projets	Measures				
Agriculture	Land reclamation	The building of farms	Promote cooperative organizations	Repairing and renovating irrigation and water conservation	Opening orchards
	Establishing new villages in rural areas				
Forestry	Forest resources protection	Building new Gannan	Expanding nursery	Tree planting competition	Control on timber sale
Industry	Setting up guiding institution of handicraft industry	Promote cooperative industries	Set up various factories	Rewarding industrial investment	Promote small family factories
Commerce	Building state stores	Setting up consumer cooperatives	practising small loan		
Mining industry	Exploiting mineral resources	Improving exploitation methods	Rewarding privately operated mine sites		
Transportation	Building roads and bridges	Regulating traffic order	Building telephone communication network	Building post communication network	Opening up county main road
	Improving road network	Building freight transport network	Dredging and realignment of rivers		
Education	Building middle schools	Building vocational schools	Building county and village schools	Building national schools	Setting up educational fund
	Building schoolhouses	Building libraries	Building stadiums	Building kindergartens	Rewarding donation to build schools
Culture	Circulating newspaper	Building bookstores	Building printshops	Publishing popular books	Building parks



	Advocating academic research	Building theatres			
Health	Building health centers	Setting up tuberculosis sanatorium	Building leprosarium	Improving environmental sanitation	Building public restrooms
Relief	Setting up almshouses	Setting up relief factories	Setting up orphanage	Setting up residence for people	Setting up woman factories
	Setting up relief fund				
Urban construction	Building food markets				

Table 1: Specific measures in *the Three-year Plan*

In the plan, it was required that 331 factories, 314 rural villages, 2,900 demonstration zones, 3,000 cooperatives, 6,043 water conservancy projects, 321 orchards and 3,000 new schoolhouses would be built and 1.33 km² barren land cultivated¹⁴. The core goal was not material construction, but to inspire people through material construction. Chiang Ching-kuo attracted coastal investment to Gannan to open factories through his personal influence. After the outbreak of Anti-Japanese War, a great number of coastal universities and colleges as well as enterprises moved to Kanhsien offering abundant human and industrial resources to the implementation of Three-Year Plan.

Before Chiang's coming, Guangdong warlord established government office in Kanhsien, carried out improvement in municipal administration, and drafted General plan of Municipal Administration Planning of Kanhsien, which was the first reform planning in its history. Imitating the municipal construction of Canton, the planning involved the building of arcades, parks, roads, markets and fire-fighting devices, so Kanhsien was also known as small Canton. Large-scale construction was once made in urban roads. From 1933 to 1935, 15 roads were open to the public, and the city wall no longer limited the development of cities. Connected with Ganyu highway and Gansui highway and distributed in the shape of net, these roads enjoyed 6.53 km and covered a construction area of 10,000 m². Because of turmoil and chaos during war from 1935 to 1941, the government failed to build new city roads.

After issuing the Three-Year Plan, city roads construction in Kanhsien reached the climax from 1941 to 1947. (Figure 3) From 1941 to 1945, 6 roads were built with total length of 2.18 km and total road area of 25,500m², and 6 bridges including Zhongzheng bridge, new Gannan bridge and Zhongxiao bridge. After Chiang Ching-kuo resigned, Yang Ming took the office and continued administrative policy advocated by Chiang. From 1946 to 1947, 8 roads have been opened, with the total length of 5.1 km and total area of 44,200 m². These roads made up structural framework of roads in Kanhsien up till now. (Table 2) In the process of expanding roads, the way of dismantling city walls to build roads was not adopted. Instead, followed the *THE CITY PLAN OF NANKING*, all city walls and city gates were preserved.

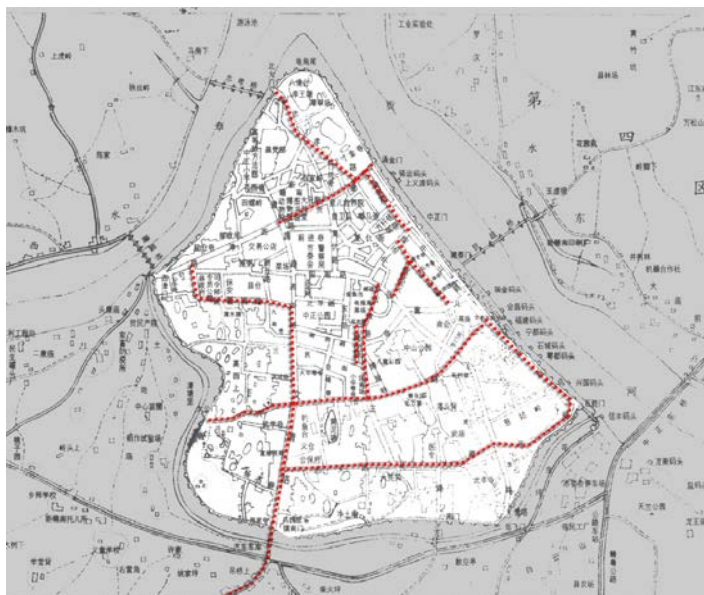


Figure 3: Road construction in the reign of Chiang Ching-kuo.

Name	Completion Time
New Gannan Road	1941
Sports Road	1941
Wenqing Road	1941-1947
Lianxi Road	1941
Zhanggong Road	1943
Dagong Road	1946
Healthy Road	1946
Bajing Road	1946
Houde Road	1947
Peace Road	1947
Big Huaxing Road	1947
Small Huaxing Road	1947

Table 2: Road built in 1941-1947



Gannan Reform and Three-Year Plan aimed at improving the city landscape and people's livelihood, so a number of buildings catering to people's living and war were set up, such as children village, Jiangxi Nursery, Zhengqi Middle School and Xinren factory. (Figure 4)



Figure 4: New buildings and street view in new Kanhsien, Gannan.

When the Three-Year Plan was about to finish in 1944, 2,800 schools, 657 farms, 1,996 water conservancy projects, 17,000 km of roads, over 5,000 bridges were built. The number of the unemployed decreased by 3 times compared with that of 1938, boosting economic development in Gannan, and Kanhsien became one of the 14 largest cities in the country at the time ¹⁵.

The Second Five-year Plan of New Gannan

In January 1943 when the First Three-Year Plan was about to finish, Chiang Ching-kuo issued The Outline of New Gannan Construction, preparing for the Second Five-Year Plan. In the same year, Gannan of Jiangxi Province enacted the Second Five-Year Plan of New Gannan, attaching the implementation schedule. In the Five-Year Plan, national defence was regarded as the key due to the need in wartime, and economic plan should be drafted on the basis of military demand.

Since Gannan had relatively weak industrial basis, Chiang Ching-kuo had clear understanding on what had been achieved in the First Three-Year Plan and high expectation of the Second Five-Year Plan. He believed that the Three-Year Plan can only finish the basis of construction. Other important tasks was about to be done in the Second Five-Year Plan.

In terms of the industry, the Five-Year Plan put forward learn soviet model, established heavy industrial base, developed agricultural industrialization and carried out agrarian reform so as to achieve industrial mechanization. To solve the problem of concentration of landholding in Gannan, Chiang Ching-kuo put forward the Executive plan of land Administration in new Gannan, established demonstration area, cooperative farms, rural new villages and enabled land-to-the-tiller through adopting yeomenry equalization of landownership policies of Three Principles of the People. In Anti-Japanese war, only 4 counties set up 6 yeomenry demonstration areas, levying 7.2 km² land and 1,116 yeomenries ¹⁶. The relatively mild land reform policies were first tested in Gannan, and were popularized in Taiwan after initial progress was achieved.

At the same time, the Five-Year Plan also attached great importance to education and spared no efforts to set up public educational buildings to train professionals and talents for region, such as library, science building, art building, kindergartens and schools.

Different from the Three-Year Plan, the Five-Year Plan set clear construction goals of population size, urban and rural area under administration and construction sequence, featuring initial modern city planning.

Modern city construction was put forward in the plan, namely, achieving city modernization and village urbanization and creating new living environment. Main roads including Dagong road, Ganjiang road and Wenqing road were built in Kanhsien at their centre. Various counties in Gannan were turned into modern standard cities and small commercial centres such as Yulu, Jiangkou and Shadi were rebuilt into modern cities. Satellite town of Kanhsien was thus formed and the population plan of Kanhsien was also enlarged to 500,000. (Figure 5)

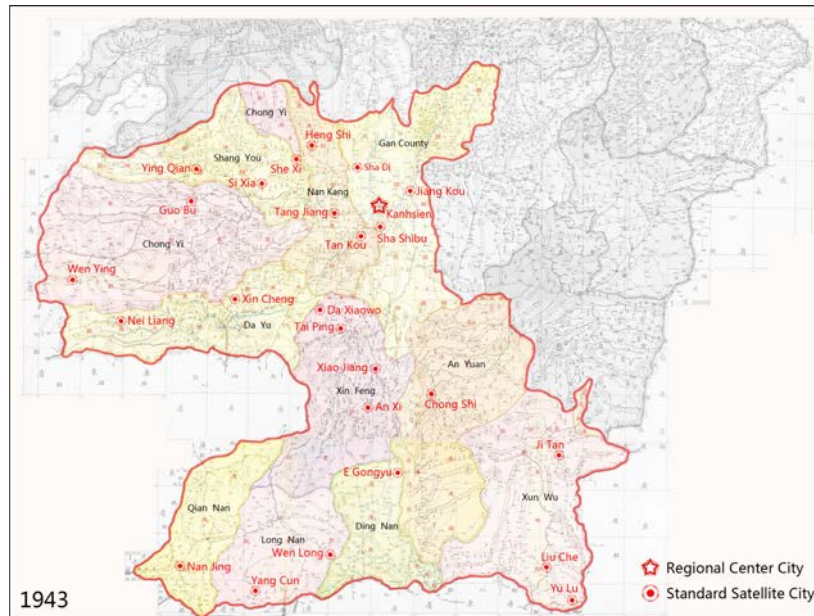


Figure 5: Concept of satellite towns.

11 counties administrated by Gannan regarded Dayu, Chongyi and Shangyou as NO.1 heavy industrial centre, Gan county, Nankang and Xinfeng as NO.2 heavy industrial centre, Longnan, Dingnan and Qiannan as light industrial centre and Xunwu, Anyuan as handicraft industrial centre. Counties set up astronomical observatory, broadcasting stations, and Niedu was renovated into a scenic spot. Recuperation village was built, and travel agencies were built in Longnan and Xinfeng. (Figure 6) It is proposed that Gannan would be turned into a paradise for people who worked within 5 years.

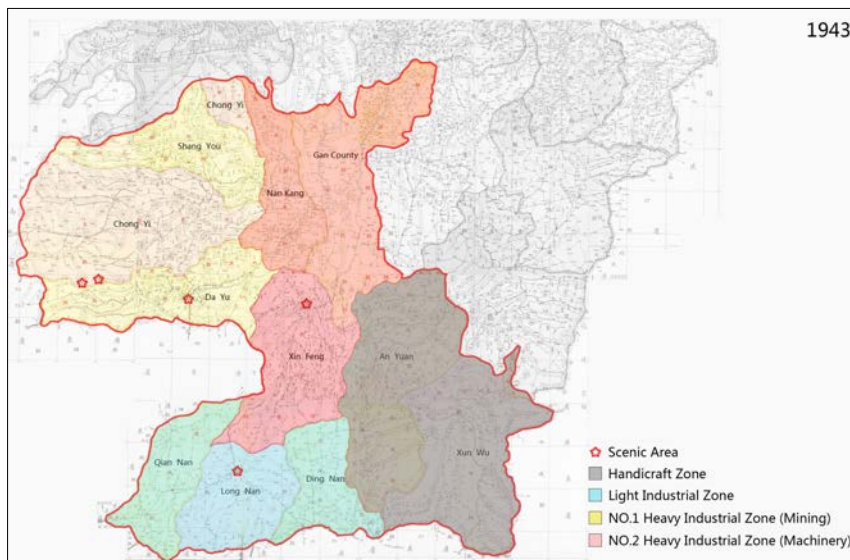


Figure 6: Layout of industrial space.

Evaluation of Gannan Reform

Remarkable achievement has been made since Chiang Ching-kuo took charge of Gannan, which was called as Gannan Model and won praise by others. There was even a saying that Gannan had great influence in post-war politics. Chiang Kai-shek was satisfied with the achievement made by his son, and he praised in the telegraph, "It has been 3 years since my son served as the administration commissioner, and I felt so pleased that he won people's love and respect for his achievement in social construction."



Compared with the governance of government in other areas, reform conducted by Chiang Ching-kuo was quite unique and drawn the attention of China and even the world. In particular, it was quite obvious when foreign visitors compared the backward Gannan with other areas in China. In July 1943, *Collier* took the lead to publish the article *Gissimo is Building a Model State as an Example for New China* so that Chiang Ching-kuo and New Gannan were known overseas¹⁷. Atkinson, journalist of New York Times, interviewed people in Gannan and published the article *Kanhsien Sets Aim for People's Rule*, in which he said that insightful personages in China preferred to talk about Chinese modernization, however, only Gannan was advancing it¹⁸. From the perspective of Atkinson, Kanhsien was the most modern and cleanest city in China.

Ta Kung Pao in Chongqing also reported it, showcasing that the progress of top-down reform in new Gannan was obvious. Certainly, achievement should also be attributed to the effort made by the authority. These changes were only a small fraction of changes in new Gannan¹⁹.

Since 1945, Chiang Ching-kuo resigned and worked in the central government, but he still frequently commuted Chongqing and Gannan. In spite of this, he cared about the Gannan reform and promoted the implementation of the Second Five-Year Plan.

Unfortunately, Japan launched war in January, 1944 and occupied Kanhsien on February 5. Jiangxi Province was occupied by Japan, so the unfinished plan of Gannan Reform was postponed.

Conclusion: Characteristics and Influences

The Combination of Pluralistic Thought and ideology

As a legendary politician who integrates Chinese Confucianism, Soviet Communism, American democratic value, and Taiwan experience, Chiang Ching-kuo was a complicated governor. His attitude towards life originated from Chinese culture and his life experience in the underclass of Soviet Union. Like his father Chiang Kai-shek, Chiang Ching-kuo was also a vindicator of Chinese traditional culture and the disciple of Three Principles of the People of Sun Yat-sen. However, China's political situation has made it necessary for him to become a warlord-style local consul, and it is precisely because of the nature of the warlords that it can effectively implement similar reforms. Urban planning of western modern cities, capitalism, soviet planned economy model, cosmopolitanism of Chinese tradition and socialism were all mixed and utilized in Chiang's practice, cantering on the goal of developing industry, building cities and forming unique administrative model, which was different from Chongqing of Kuomintang and Yan'an of Communist party. It was the most distinctive feature of Gannan Reform.

The Critical Continuation of Traditional China in Modern Times

Critical inheritance of Chinese traditional thought was also a feature of this reform. Before Chiang's practice, whether the country governance made by Wang Yangming through Local Rules and Regulation of Gannan or the new village movement advocated by Yan Xishan, Yan Yangchu and Liang Shumin in Zouping, Dingxian and Jiangning were focused on education, economy and culture but substantive rural and urban planning. On the basis of their experience, Chiang Ching-kuo issued and implemented the regional development path of 'featuring socialist construction first and material planning second'. Through this path, he accurately grasped the social status quo in the Gannan region and stabilized economic and industrial in a short period, which inspired a greatly improvement in rural and urban landscape and people's living standards.

Continuation of the Reform in Taiwan

When concluding the experience of Gannan Reform, Chiang once said that this experience should be respected and thought about how to be used in the future.²⁰ During the Taiwan period, the administration style of Chiang was still well-received by people like in Gannan time. When Chiang Kai-shek resigned, Chiang Ching-kuo governed Taiwan and drafted a series of Four-year plan and Six-year Economic plan, and advanced ten constructions. The influence of his administration in Gannan to his politics career could be dimly reflected by what he had done in this period.

Ten industries of Gannan Reform and ten constructions carried out when Chiang Ching-kuo took charge of Taiwan had much in common. Ten constructions, featuring obvious planned economy, was more Taiwan version of Stalin planned economy than new deal of Roosevelt. Therefore, Chiang's administration in Gannan was an important period for individual political development. It could be said that the achievements in Gannan period to some extent led to the development of Taiwan's economy, which also laid a solid foundation for Chiang's administration and rapid economic soar.

Epilogue



Gannan Reform resembled the local autonomy, which was a top-bottom reform based on government. Under the leadership of such a heroic figure as Chiang Ching-kuo, through strong government administrative intervention and self-development in a planned economy model is the establishment of self-government outside the national power structure. Though progress had been made in a short period, for instance, economic modernization was first advanced in provincial area and contribution was made to the modernization of Gannan, dissimilation of system was an obstacle impeding the development of Gannan local autonomy. This problem was solved after Chiang Ching-kuo took charge of Taiwan, and then local autonomy became indispensable part of power structure of the country, which could create benign interaction. Despite of various challenges, the Gannan Reform, as an exploratory regional planning practice, was influenced by western philosophy and kept distinctive Chinese tradition at the same time. This process is also the evolution of local planning in modern China.

Acknowledgements

I wish to acknowledge the considerable contribution that Xu Hao, a Ph.D. candidate student in Southeast University, gave a lot of inspiration in the initial stages of the article. And thanks also to my ex-girlfriend, who has supported me for the last 5 years. I wish you happiness.

Disclosure Statement

We hereby declare that the reference to others' research productions in the paper, are reflected in the endnotes.

Notes on contributor(s)

Li Zhao, male, born in 1988. Doctor Candidate of the School of Architecture in Southeast University, Nanjing, China.

Li Baihao, male, born in 1963. Professor of the School of Architecture in Southeast University, Nanjing, China. Vice-chairman and Secretary-general of Academic Committee of Urban Planning History & Theory and Urban Planning Society of China. His research interests are mainly in urban planning history and theory.

Endnotes

1. Lai Delin, Wu Jiang, Xu Subin, *The History of Modern Architecture in China*, 3-4.
2. Wu Tinghai. *Regional Planning in Modern China*, 10.
3. Chiang Ching-kuo was born on April 27, 1910 in Fenghua, Zhejiang Province, the son of Chiang Kai-shek. In 1925 he went to study in the Soviet Union and returned to China in 1937. After the death of Chiang Kai-shek in 1975, he took over the Kuomintang government and assumed the chairman of the Kuomintang. In January 1988, he died in Taipei at the age of 78. It has made important contributions to Taiwan's economic development and democratization.
4. The three exemplary provinces of the Kuomintang government: Guangxi, Jiangxi and Shanxi Provinces.
5. Leon Trotsky: Leader of the October Revolution, Lenin's comrade, the left-wing opposition. He was the actual creator of the new economic policy of the Soviet Union and the socialist planned economic experiment (the First Five-year Plan), whose policy is called The Permanent Revolution.
6. Taylor, *The Generalissimo's Son: Chiang Ching-kuo and the Revolutions in China and Taiwan*, 50-51.
7. Forman, *Gissimo Junior: Deals with Chiang Kai-shek's son*, 31.
8. Chiang Ching-kuo, *Building New Gannan with Hardy // The complete works of Mr Chiang Ching-kuo (Book 1)*, 91-92.
9. Chu Jingxin, *History of Gan County*, 3.
10. Liu Xinguang, *The Choice of the Imperial Route: The Change of Traffic Pattern of Five Mountains in Past Dynasties*, 80-90.
11. Chiang Ching-kuo, *Commissioner Chiang Talking on Improvement*, 181.
12. There are five objectives: everyone has clothes to wear, everyone has food to eat, everyone has a place to live, everyone has to work, everyone has the chance to read.
13. Chiang Ching-kuo, *Cultivate the Seedlings of Revolution with Hard Work // The Complete Works of Mr Chiang Ching-kuo (Book 3)*, 407.
14. Chiang Ching-kuo, *The First Three-year Plan for the Construction of New Gannan*, 2.
15. Huang Zonghua, Wang Yuping, *A Tentative Analysis of Chiang Ching-kuo's Gannan Policy Ideas*, 63.



16. Wu Zongci, *History of Jiangxi Province in Republic China*, 6.
17. Forman, *Gissimo is Building a Model State as an Example for New China*, 31.
18. Atkinson, *Kanhsien Sets Aim for People's Rule*, 10.
19. Xu Ying, *A trip to Gannan*.
20. Chiang Ching-kuo, *Eastward to See the Confluence of Zhang River and Gong River* // Liu Jingxing. *Mr. Chiang Ching-kuo's Important Literature on the Construction of New Gannan (Part I)*, 248.
21. Top Ten Constructions: Ten Public Constructions in Taiwan Promoted by Chiang Ching-kuo in the 1970s, Including Nuclear Power Plants, Chiang Kai-shek International Airport, Electrification of Railways, Taichung Harbor, Zhongshan Expressway, China Steel Works, Suao Port, North-return Railway, China Shipyard, Petrochemical Industry.

Bibliography

- Brooks Atkinson. *Kanhsien Sets Aim for People's Rule*. New York Times, 1945-11-5:10, Col.6.
- Chiang Ching-kuo. *Building New Gannan with Hardy*// The complete works of Mr Chiang Ching-kuo: Book 1. Taipei: Taipei Information Bureau, 1991:91-92.
- Chu Jingxin. *History of Gan County*. Taipei: Cheng Wen Publishing, 1975.
- Chiang Ching-kuo. *Commissioner Chiang Talking on Improvement*. New Gannan Monthly, 1942.10.1,4(4):181.
- Chiang Ching-kuo. *Cultivate the Seedlings of Revolution with Hard Work*//The Complete Works of Mr Chiang Ching-kuo: Book 3. Taipei: Taipei Information Bureau, 1991:407.
- Chiang Ching-kuo. *The First Three-year Plan for the Construction of New Gannan*. Kanhsien: New Gannan Press, 1941.
- Chiang Ching-kuo. *Eastward to See the Confluence of Zhang River and Gong River*//Liu Jingxing. *Mr. Chiang Ching-kuo's Important Literature on the Construction of New Gannan (Part I)*. Taipei: Zhanggong Academic Societies, 1997:248.
- Harrison Forman. *Gissimo Junior: Deals with Chiang Kai-shek's son*. Collier's, July 31, 1943.
- Harrison Forman. *Gissimo is Building a Model State as an Example for New China*. Collier's, July 31, 1943.
- Huang Zonghua, Wang Yuping. *A Tentative Analysis of Chiang Ching-kuo's Gannan Policy Ideas*. Journal of Huaibei Normal University, 2008(4):59-63.
- Liu Xinguang. *The Choice of the Imperial Route: The Change of Traffic Pattern of Five Mountains in Past Dynasties*. Journal of Sinology, 2014(1):80-90.
- Lai Delin, Wu Jiang, Xu Subin. *The History of Modern Architecture in China*. Beijing: China Architecture & Building Press, 2015.
- Wu Zongci. *History of Jiangxi Province in Republic China*. Nanchang: Jiangxi Museum, 1986.
- Wu Tinghai. *Regional Planning in Modern China*. Beijing: Tsinghua University Press, 2006.
- Xu Ying. *A trip to Gannan*. Chongqing Ta Kung Pao Newspaper, 1943-9-12.

Image sources

Figure 1-1: Jay Taylor. *The Generalissimo's Son: Chiang Ching-kuo and the Revolutions in China and Taiwan*. Cambridge: Harvard University Press, 2000:1.

Figure 1-2: Erhard Schièble, Georges. *Carte du Kiangsi (Chine)*. Bibliothèque nationale de France, département Cartes et plans, GE D-21692.

Figure 2: *Database of the late Qing Dynasty*:
<http://iras.lib.whu.edu.cn:8080/rwt/GDT/http/M7THILUMNFSC675IPVYGK3DWF3SXP/mapInfo.aspx?mapId=4005>.

Figure 3: Song Ming. *History of Kanhsien*. Beijing: Chinese Literature and History Press, 1999:52.

Figure 4:

http://www.360doc.com/content/15/0207/19/709425_447072373.shtml



http://www.360doc.com/content/12/0723/16/1630322_226001986.shtml

http://www.360doc.com/content/15/0207/19/709425_447072373.shtml

http://www.360doc.com/content/12/0723/16/1630322_226001986.shtml

Figure 5:

<http://iras.lib.whu.edu.cn:8080/rwt/GDT/http/M7THILUMNFSC675IPVYGK3DWF3SXP/mapInfo.aspx?mapId=4005>

Figure 6:

<http://iras.lib.whu.edu.cn:8080/rwt/GDT/http/M7THILUMNFSC675IPVYGK3DWF3SXP/mapInfo.aspx?mapId=4005>



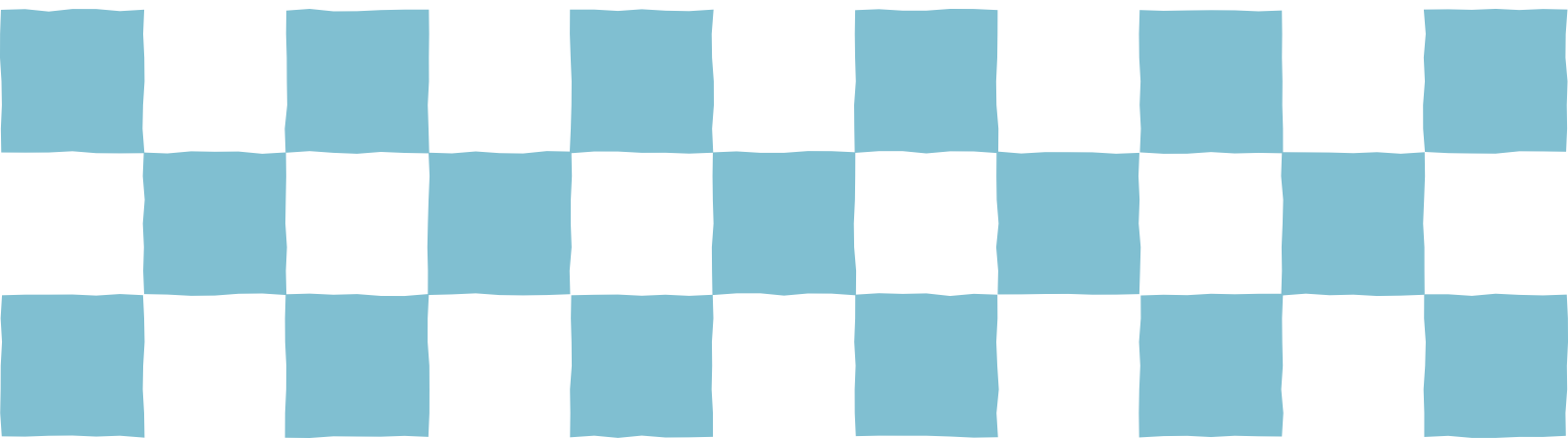
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

43 Garden City and Modern City Planning Movement



A Republic of Garden City-states on Which the Sun Never Sets: Auguste Comte and Richard Congreve's Urban-regional Vision for the British Empire

Matthew Wilson (Ball State University)

By the early twentieth century, Britain had forged a congeries of colonial outposts comprised of some 57 million people within a territory of 95 million square kilometres. Britons hailed it as the 'empire on which the sun never sets'. Historians of political thought have suggested that there were few if any critics of the British Empire until the end of the nineteenth century. Yet it has been recently shown that a little-known group of citizen-sociologists represented a cogent, polemical force against British aggression abroad. Along these lines this essay seeks to show that these citizen-sociologists in fact sought to systematically break up the British Empire and, in turn, create a network of idyllic real places – deliberative eutopias – which were to take the form of Garden City-states. These citizen-sociologists were the followers of the French philosopher Auguste Comte. The former secretary of the 'utopian socialist' Henri de Saint-Simon, Comte was once considered the most well-known thinker of the nineteenth century. He introduced the modern science of sociology and the republican Religion of Humanity in association with a vision he called the 'Republic of the West'. After setting out the socio-spatial character and qualities of the sovereign republics nested within the 'Republic of the West', this essay will show that from the 1850s Comte's British followers, led by the Oxford don and ex-Anglican minister Richard Congreve, implemented a controversial practice of applied sociology and the Religion of Humanity with the aim to create his global network of utopian city-states or republics. Using an intellectual history method, this essay will show that through to the interwar period Congreve's affiliates – Frederic Harrison, Charles Booth, Patrick Geddes and Victor Branford – attempted to realise Comte's vision. With scarcely used source material it will present the Positivists as an organised resistance to imperialism, industrial exploitation, poverty and despondency. Much to the consternation of the church, state and landed aristocracy they organised urban interventions, led ad hoc sociological surveys and published programmes for realising idyllic city-communities. Effectively this essay contributes to our understanding of how Positivism can be understood as a utopian spatial design praxis.

Gailiang Dushi: The Garden City, Urban Improvement, and Visions of Modernization in Early 20th Century China

Cecilia Chu (The University of Hong Kong)

Recent research in planning history has significantly expanded the understanding of the international dissemination of the garden city idea in the 20th century. These works have helped to direct attention away from the more researched cities in Europe and North America to 'non-Western' contexts, including colonial and semi-colonial territories that served as experimental grounds for ambitious modern planning projects. This paper builds on this scholarship by examining how the garden city idea was first introduced to China via Japan in the early 20th century and subsequently utilized by various urban reformers and development agents as a means to promote urban improvement, economic development and nation-building. It will begin by tracing Chinese writings on the subject that first appeared in academic journals and mass-market texts in the mid 1910s. While the basic descriptions of the forms and organization of the garden city differed little from those in foreign language texts, they tended to highlight the urgency to adopt a 'Western' planning model by criticizing the backwardness of China's development which lagged behind those of more advanced nations. These critiques were also grounded on a growing faith that modern planning based on scientific principles could provide solutions to all urban problems and help revive the declining rural economy in the countryside. By the mid 1920s, the idea of creating entirely new garden cities away from existing metropolises became seen to be increasingly feasible with the rapid construction of motor roads and other infrastructures. The optimism associated with the arrival of new transportation technologies further increased the anticipation for decentralization, industrial development and agricultural reform across the nation. These ideas were elaborated in a growing number of articles in specialist journals and 'general knowledge' books series focusing on urban planning and administration. Although Howard's original radical vision, which was predicated on voluntary cooperation and associative democracy, was not the central tenet in these texts, the underlying polemics of creating a more perfect city and harmonious society retained a lasting appeal to promoters of the garden city concept. The idea also attracted the attention of many ordinary urbanites who looked to the garden city not so much as an ideological instrument for nation building, but more as an idealistic image that fostered their aspirations to live a better life by becoming owners of a suburban property in a safe and healthy environment.

By examining the multiple, and sometimes conflicting interpretations of the garden city in this period, this paper will provide a better understanding not only of the dissemination of a key foreign planning concept in the Chinese context, but also some of the specific ways in which it interacted with existing discourses about the city, the countryside and the roles of the state and citizens in constructing competing visions of the urban future. The study also hopes to prompt critical reflections on contemporary reappraisals of the theory and how particular assumptions about the urban-rural relationship are being reformulated to support nationalist development in the present.

A Comparative Study of Two Hotels from the Perspective of “Altruism”-Development Plans of the Koshien Area in the 1920’s

Tomoko Kuroda (Mukogawa Women’s University)

Koshien” was the name given to an area between the Eda and Saru Rivers in 1928 (Fig. 1)

This area had been purchased by Hanshin Electric Railway Co., Ltd. (HER) in 1922 from the Hyogo Prefectural Government for 4.1 million yen. The 6.8 hectares of land was to be the largest development area for HER.

In 1924, HER opened the Koshien Baseball Stadium where two rivers branched as the core of the leisure area to the south of the HER railroad (Fig. 1)

In 1930, the company opened Koshien Hotel designed by Arata Endo (1889-1951) at the spot where the Eda River branched from the Muko River, as the core of the residential area to the north of the railway.

This paper compares Koshien Hotel of Endo with the proposed hotel in the Koshien Kaen City Plan of Reijo Oya (1890-1934) from the perspective of “altruism.” Endo was a free architect who had served as the chief assistant under Frank Lloyd Wright (1867-1959) for the construction of the Imperial Hotel, well known as Wright’ s masterpiece and a representative of modern Japan. The hotel was completed by Endo in 1923. After Endo became independent, the first hotel he designed was Koshien Hotel. It has both Japanese and Western suites not only for guests and dignitaries from Japan and abroad but also for Japanese families to enjoy.

Oya served the Osaka Prefectural Government as a landscape architect designing gardens and parks. From 1921 to 1922, he inspected Garden Cities and suburbs in England, Germany and America including Letchworth and Welwyn planned by Ebenezer Howard (1850-1928), whom he revered for attempting to solve the problem of overcrowded cities. After returning to Japan, Oya theorized his own Kaen City (Garden City) and proposed the Koshien Kaen City where citizens could enjoy gardening. At what would become the site of Endo’ s Koshien Hotel, Oya proposed a horticulture area, where the residents could learn how to grow vegetables and fruits in their own gardens (Fig. 2)

I will compare the two hotels from the viewpoint of the customer target and the possible activities related to the features of the architecture.

Next, I examine them from the viewpoint of the relationship between the hotel and the surrounding environment. The two sites are in such contrast to each other with Oya’ s site at the south, facing the bright spacious ocean, while Endo’ s hotel stands in a dense pine forest facing a clear pond (Fig. 3)

In Oya’ s plans, this would have been the water resource for the area (Fig. 2)

In conclusion, while Oya considered the pine forest area as a residential one with those living there to be engaged in gardening, Endo planned his hotel based on the character of the site and the surrounding area. Endo rarely expressed his views in writing but seems to have considered the pond when planning the shape and design of Koshien Hotel.

Chilean pioneers and the crystallization of “urbanismo”. Records in journals and professional bulletins (1872-1929)

Macarena Ibarra Alonso (Pontificia Universidad Católica de Chile)

When crystallization of “urbanismo” took place as a professional activity, after the creation of the Sección de Urbanismo (depending on the Ministry of Foment), the promulgation of a national urban regulation in 1929, and the beginning of the teaching of the discipline a year before, already existed -in the national context- a corpus of knowledge led by professional pioneers. This paper looks at their contribution, by examining journals and professional bulletins of the physicians, engineers and architects. Their publications exhibit the discussion of key themes of the new discipline while permit to grasp into the main traditions that conformed an early disciplinary language. Apart from focusing on the urban fabric and the circulation problems, the issues of urban health and social housing were crucial on these debates. For instance, while Revista Médica declared that looking after scientific knowledge and diffusing the sanitary state of the country was its essential mission, the Anales del Instituto de Ingenieros confirmed the public role of its engineers and Revista de la Habitación, led by the circle of architects, focused on private constructions, particularly on social housing. Thus, while associations and professional circles consolidated their own disciplines, their scope of action was shaped by urgent issues of urban environments.

Even though they put emphasis on different dimensions, these publications show the debates that individuals, professional circles and associations were leading, and their role in the formation of a new discipline as a professional and public activity. To sum up, journals and professional bulletins show the discussion that shaped the “urbanismo’ s” eve; a discussion that showed how the mission of the discipline moved from a diagnosis about urban conditions towards the proposals of the first public policies. This latter, gradually, materialized in a new legislation and institutionality that marked the formative period of the discipline.



A republic of garden city-states on which the sun never sets: Auguste Comte and Richard Congreve's urban-regional vision

Matthew Wilson*

* Ball State University, MRWilson@BSU.edu

From the mid 1850s and into the interwar period a little-known group of citizen-sociologists attempted to break up the British Empire and establish a proto- garden-city-state network. These actors were the followers of the French Positivist philosopher Auguste Comte and his British acolyte Richard Congreve. Comte introduced the modern science of sociology, the Religion of Humanity, and the utopia called the Occidental Republic. After setting out the socio-spatial character of this utopia, this study will argue that from the 1850s the former Oxford don and ex-Anglican minister Richard Congreve advocated Comte's principles as British international and national policy. I will contend that Congreve's affiliates formed an organised resistance to imperialism, exploitation, poverty, and despondency. They created urban interventions or Positivist institutes, led ad hoc sociological surveys, and published programmes for realising regional republics. This essay contributes to our understanding of how Positivist sociology was a eutopian spatial design practice rooted in creating a comprehensive and participatory moral, cultural and intellectual network for the life virtuous. If we require some alternative to religious fanaticism, political lethargy, provincialism, fake news and right-wing reaction, the praxis explored herein might serve as a precedent for ethical, political and collectivist spatial agency.

Keywords: urban visions, comprehensive planning, sociology, positivism, garden cities, humanism

Introduction

By the early twentieth century, Britain had forged a congeries of colonial outposts comprising 57 million people within a territory of 95 million square kilometres. It was hailed as the "empire on which the sun never sets." Historians of political thought have suggested that there were few if any critics of the British Empire until the end of the nineteenth century.¹ Yet from the mid 1850s a little-known group of citizen-sociologists emerged as a cogent polemical force against aggression abroad. These actors, I argue, sought to break up the British Empire and, in turn, establish idyllic real regions or utopias. They were the followers of the French philosopher Auguste Comte, the Positivist thinker who introduced the modern science of sociology and the republican² Religion of Humanity. Together this science and religion served as the basis for a utopia called the Occidental Republic, which, I contend, was akin to the establishment of a global network of garden city-states. After setting out the socio-spatial character and qualities of the sovereign republics nested within this utopia, it will be shown that from the 1850s Comte's British followers, who were led by the Oxford don and ex-Anglican minister Richard Congreve, implemented a sociological practice for reconstructing international, national and regional affairs.

Using an intellectual history method, this essay will argue that through to the interwar period Congreve's followers — Frederic Harrison, Charles Booth, Patrick Geddes, and Victor Branford — made a cogent attempt to realise Comte's vision. Much to the consternation of the church, state, and landed aristocracy they polemicised against imperialism, industrial exploitation, poverty, and despondency. They built on Comte and Congreve's historical-geographical surveys by leading industrial, social, civic, and rustic types of surveys to evaluate the nature of social life. They organised urban interventions (Positivist schools, lecture halls, churches, and civic societies) as educational nodes and community-action centres, where they fleshed out programmes and manifestos offering systematic counsel for transforming chaotic conurbations into independent, eutopian communities. For these Positivists, planning was not a bureaucratic, materialist practice of setting out plots, roads, trees, and pavements. It was a human-centred and process-focused practice seeking to create a comprehensive political, cultural, and intellectual network for the life virtuous.

Recent studies by Scott and Bromley, Young and Clavel, Bowie, Egbert, and others have covered the radical and socialist tradition of British sociology and planning but, barring accounts of Geddes and Branford, organised Positivism has remained neglected.³ Notwithstanding the system of thought captured the imagination of well-regarded social reformers, physicians, scientists, philosophers, literary savants, and trade unionists.⁴ The emergence of the modern metropolis was the result of the coordinated contributions of such actors. The urbanist Edward Soja has argued that Comte's long-forgotten utopian "manifesto" spurred this activity. It forecast how the cooperation of various practitioners led to the realisation of a vast number of metropolises, which were "elaborated, diffused and reinvented all over the world" during the nineteenth and twentieth centuries.⁵ The basic template



here, arguably, was the garden city as a self-sufficient unit.⁶ The Positivists were central to preparing and furthering this discourse for the small planned state through their political polemics, sociological surveys and programmes for eutopian social reorganisation.

International policy for republics or city-states

In their age of revolution, empire and capital the Positivists believed that modern civilisation was on the cusp of radical change. Modern humanism opens with the founding father of social democracy and Positivism, Henri de Saint-Simon (1760–1825). He envisioned several transnational urban infrastructural projects and the emergence of a “meritocratic, managerial, free-market society.”⁷ While he was the secretary to Saint-Simon, Comte developed historical sociological surveys of western society which pointed to the rise of this “positive era.” They traced the withering-away of monotheistic and monarchic powers since the medieval period; science and industry, they proclaimed, were the new “spiritual and temporal” power structures of modernity. A “Newtonian elite” of scientists could assume the role of the “papal and theological” power. What was needed, however, was a “positive doctrine” based on a hierarchical classification of the human and natural “sciences of observation.”⁸ With such a doctrine, this scientific elite could coordinate the activities of moral, social and political affairs. What was missing was the positive science of society, which Saint-Simon outlined under the rubric “social physiology.” Along this vein, in the wake of the July Revolution, Comte introduced in his famous *Cours de Philosophie Positive* (1830–6) the “master-science” of sociology.⁹ Sociology, alongside morality, would constitute the two premier disciplines within his classification of the sciences.¹⁰ By the 1848 Revolution, Comte had established the Positivist Society and the Religion of Humanity. Positivist sociologists, Comte declared, could spur a “moral revolution” to answer the “question of modern times,” the “incorporation of Woman and the Proletariate [sic] into Modern Culture.”¹¹

Comte’s magnum opus, the *System of Positive Polity* (1851–1854), detailed a utopia-planning manifesto called the Occidental Republic. It included a new calendar, cultural festivals, regional currencies, banking system, ethical codes, and a flag system, which the British Positivists would emulate. This utopia would come to fruition beginning with an international peace pact in which all nations agree to return their colonial exploits. Each nation would install a dictatorship of the proletariat, which would be counselled by the Positivist Society; the society would serve as the critical-regional spatial agency for the Positive Era by creating a network of Positivist halls in town and country. Such urban interventions would coordinate the organisation of public life in the modern city-region. As the hub of the local community and catalyst for structured social change, each intervention was to act as a centre for regional sociology, institute of humanist scholarship, and republican hall of social activism. Part of the activities here would include social investigations for regional place-making, in which the people determine the look, feel and function of the built environment.¹² These community-centres would thus offer a gamut of educational and cultural activities to establish in each region the Positivist mentality. The national dictatorship, meanwhile, would dissolve after the emergence of a new generation of “moral capitalists”; from this generation, newly-formed regional city-states would form and elect their commerce, manufacturing, and agriculture chiefs. Only the “spiritual” Positivist societies would link together the separate republics as an Occidental Republic.

Comte wildly believed that the Occidental Republic would comprise, within a century’s time, five-hundred modern, peaceful, greenbelt city-communities. Each republic would have the character of a small salubrious region with a clear distinction but tight interrelationships between the urban and the rural. With a land area comparable to Belgium, each republic would contain around two million people.¹³ For the Positivists, the utopian “spirit of devotion to the public welfare” could only be kindled in republics of such a limited spatial scale. It would facilitate a particular type of private and public life with places that, in the Aristotelian sense, enable all to live the good life.¹⁴ To encourage participatory forms of spatial production, Comte suggested that different architectural types signalled social power for ruling in turn. Here, two “spiritual types” called “Intellectuals” (i.e. sociologists, physicians, philosophers) and “Emotionals” (artists, teachers, mothers) would hold social power within universities, schools, hospitals, salons, and homes.¹⁵ Two “temporal types” called “Chiefs” (bankers, barristers, industrialists) and “People” (unionised masons, crafters, factoryworkers) would maintain obligations to business and politics in spaces such as banks, factories, fields, workshops, and union halls. All citizens as such would hold functionally differentiated roles in the cooperative process of producing the urban social fabric of the republic, as a form of “positivist republicanism.”¹⁶ (Comte also maintained that together the community would decide the unique look and feel of the city, where Positivist institutions would stand at the centre of civic life.)

The key protagonist who presented Positivism in this light was the Aristotelian scholar, Richard Congreve (1818–99). He established organised Positivism in Britain and was the first to promote Comte’s utopia as a critique of British foreign policy. Without his efforts, organised British Positivism would not exist and would not have treated Comte’s ideas as “spatial formulae” for a “realisable utopia.”¹⁷ It was on seeing Comte’s *Catechism of Positive Religion* (1852) that Congreve, then an Oxford don and Anglican minister, decided to abandon “everything, for the sake of the truth.”¹⁸ He produced sociological surveys rooted in historical-geographical analyses that tested Comte’s sociological laws about the rise and fall of empires and the “spiritual powers” of



Europe. (He promoted the use of a “map without names” to diagnose and treat international relations, and he balked at the study of “English History from a purely national point of view.”¹⁹) Like Saint-Simon and Comte, Congreve’s early works praised the “admirable utopias” of the sixteenth and seventeenth centuries, namely Henry IV’s plan for a Christian republic and the Abbé de Saint-Pierre’s Project for Perpetual Peace.²⁰ Henry IV’s plan, he noted, captured the sympathy of Elizabeth, the queen of England. It aimed at “ordering the states of Europe in one great federal system, the Republic of the West [Occidental Republic], a modification of the policy of Charlemagne.”²¹ Congreve proceeded to suggest that France and England, then allied in the Crimean War, should act as the “spiritual” leaders of Europe. Like Comte, he demanded they return their colonial exploits, refrain from conflict and uricide, and devolve their nation-states into sets of regional city-states.²² Congreve clarified that sociology was to serve as the “guide or type for the *re-organisation of society*”; it was an applied ethical science for urban-social planning.²³ Sociology, as such, was of “direct political interest” to Victorian life, for the re-organisation of empires into “complete” regions.²⁴

Congreve established the British Positivist Society in London in 1859, just two years after he gained instant infamy by publishing a succession of polemics against British affairs in Gibraltar and India. By establishing Chapel Street hall, he was following Comte’s vision for creating idyllic communities via urban intervention. From here he went on to defend the Paris commune, the Boers, the Afghans, the Jamaicans, and the Ugandans against foreign aggression. As Britain continued to annex various territories, he published a programme called “Systematic Policy.”²⁵ Based on his historical-geographical surveys, the programme proposed a guardianship of nations to facilitate pan-European devolution.²⁶ Positivist societies, which sprouted up across Britain, would also lead surveys for town and country improvements towards home rule. They would offer free secular education, civic rites of passage following the Religion of Humanity, art lessons, concerts, and festivals. Congreve’s Policy sought to moderate the powerful individualistic forces driving imperialism while establishing a collective sense of regional identity.²⁷ One of his primary agendas here was to unite trade unions, to approximate the “temporal” power of Comte’s utopia. Comte considered trade unionism as *the* “systematic connection with the socialist movement towards internal regeneration.”²⁸

Surveying national and social life

From the 1860s to the 1900s the barrister and Positivist sociologist, Frederic Harrison (1831–1923), sought to unite, vindicate, and coordinate workers under the banner of Positivism.²⁹ Harrison was introduced to the Positivist view of trade unions and the reconstruction of the city-region while assisting Congreve, his former Oxford tutor, with his recent sociological surveys. Whereas sociologists were the urban-regional planners and “spiritual power” of modernity, it was trade unionists that were to serve as the political core of “temporal power” of Comte’s utopia. For Comte and Harrison, trade unions were the modern equivalent of medieval guilds.³⁰ Guided by the medieval clergy, guilds provided the “constant sense of each citizen having his place in a complex whole.” Harrison praised Comte’s aim to establish a similar Positivist sociability with city-spaces replete with “centres of moral and spiritual education.”³¹

Yet, during Victorian times trade unions were considered a menace to society. During the 1860s “social war” between capital and labour Harrison, at Congreve’s urging for “social action,” set out on national industrial surveys. He documented working conditions, hours and wages, education, pastimes, beliefs, and living circumstances of trade unionists.³² Publishing his findings in political newspapers and scientific and literary journals, Harrison aimed to legitimise, systematise and strengthen the institution of trade unionism.³³ In 1867, he was appointed to the Royal Commission on Trades Unionism, which questioned the legality of unions, their misuse of funds and affiliation to acts of violence.³⁴ Harrison contributed to the Minority Report which redeemed trade unions from criminal activities and made them independent and legally binding entities.³⁵ His recommendations, though not without modification, were the basis for trade union law from 1868 to 1906. For the next forty years in the very least, trade union leaders, notably George Potter, George Howell, and George Shipton, were known to seek out the Positivists’ counsel.³⁶ Like the relationship between the medieval clergy and guilds, the Positivists’ positioned themselves as independent intellectuals, and their advice was not always implemented.³⁷

Owing to their support, the London Trades’ Council invited Harrison, Congreve and Beesly to deliver lectures at their meetings. Here, Harrison prompted trade unionists to re-orient the focus of the aristocracy away from offshore exploits to a civilising mission at home.³⁸ In response to the conservative “New Social Movement” of the 1870s, Harrison thereafter published a planning vision entitled “Our Social Programme.”³⁹ He recommended devolving England into a network of planned, regional industrial republics. Based on Congreve’s suggestions, Harrison’s remedy for national social problems was regional sociological investigations, followed by the national municipalisation of industry, the creation of a secular-humanist public education system, and regional cultural programmes.⁴⁰ The municipalisation of factories, post office and rail, road, bridge, harbour, pier, dock, and lighthouse were of paramount importance. A unionised workforce would furnish the capital to expedite urban



renovations; strike funds would finance mid-rise, mixed-use housing blocks, transport links, neighbourhood educational facilities, playgrounds, and civic spaces.⁴¹ Harrison's social programme promoted regional reconstruction and "Home Rule All Around." He celebrated the Local Government Act of 1888 by producing writings that envisioned "Ideal London."⁴² The London County Council soon thereafter appointed Harrison to design the Kingsway Boulevard, which permitted trade unionists to begin rebuilding the city. This was the first major urban intervention in London since Regent Street in 1820.⁴³ The scheme and its budget were an impetus to Ebenezer Howard's garden city vision.⁴⁴

Meanwhile, the urban cartography of the Positivist sociologist Charles Booth (1840–1916) proved indispensable to various London improvement schemes, including Kingsway Boulevard. Booth's survey of London – covering poverty, industry, and religion – was a momentous extension of the Positivists' studies of spiritual and temporal powers. Under the influence of Congreve, Harrison, Vernon Lushington, and his cousins, Booth converted to Positivism.⁴⁵ As early as the 1870s, Booth was infatuated with Comte's scientific system of "benevolent intervention," and he and his cousins, Albert and Henry Crompton, were continually talking with Congreve about the Positivist utopia.⁴⁶ Booth wrote a little-known confession of adherence to the Religion of Humanity as well as a "Positivist Prayer," but more broadly he also published articles in defence of Comte's ideas in *The Colony*, his family's home journal.⁴⁷

During the calamities of the 1880s, Harrison urged Booth to contribute to the social investigations of the Mansion House Committee. Witnessing severe distress, he sought to repay his "debt to humanity."⁴⁸ The successful steamship company chief became a "scientific sociologist" or Positivist Intellectual. Booth determined to use his resources to diagnose and treat the conditions of the "bitter outcast," the sick, elderly and the idle. His urban-regional social survey of London drew on the ideas of Comte as well as the empirical methods of the Saint-Simonian social scientist, Frédéric Le Play, and the industrial surveys of Harrison. From the 1880s to the 1900s, Booth and his team compiled regional studies on "urbanisms in embryo" and figures on housing conditions, redundancy, and old age, in attempts to form a complete picture of the urban-regional condition.⁴⁹ Although it is little-acknowledged, Booth's survey findings showed that overcrowding was the "evil," "the great cause of degeneracy," in London. And there were few means of escape. Overcrowding was the "source for demoralization" within the body politic. This "moral weakness" in the urban fabric, wrote Booth, "is the prolific, if not the main source of unemployment."⁵⁰

From the 1890s through to the 1900s Booth sought to shape public consensus on a comprehensive programme of proposals called "Limited Socialism," which was a phrase he introduced in the first volumes of his London survey. First, Booth proposed the government set out a system of home colonies or new towns to decongest urban areas, to provide education and to encourage family life.⁵¹ Next, and building on Harrison's efforts, he promoted "new unionism" for unifying skilled and unskilled labour; his Positivist colleagues celebrated this "socialist unionism" as a step in the direction of the true industrial "temporal power" of Positivism.⁵² Similar to the ideas of Comte and Le Play, Booth thereafter proposed a system of old age pensions as a social safety net.⁵³ Lastly, his programme for Limited Socialism advocated for a new policy of infrastructural urbanism which, he imagined, would be managed by a new land development authority and would to attenuate speculative slum-building.⁵⁴ Effectively, Limited Socialism aimed to address the ethics of poor industrial, financial and urban land management.

Regional and civic visions

The Scottish polymath Patrick Geddes (1854–1932) developed a regional survey method that addressed the severed links between town and country life. While a student of the evolutionary biologist Thomas Huxley, Geddes sought out Congreve at the Positivist Society in London.⁵⁵ He recalled Congreve's impact on him as a "revelation"; under Congreve's direction Geddes' early essays discussed the links between biology, community and economics.⁵⁶ Here Geddes suggested that the laws of biology provided the basis for establishing ethical regional communities. Collecting biological and social facts about the environment would enable one to index "natural wealth" and set out planning forecasts.⁵⁷

Along these lines during the 1880s, Geddes led an "almost Positivist" Summer School in Edinburgh. It offered the "sociologic teaching" of outdoor education by way of regional surveys.⁵⁸ Students documented the lives of civic and rustic types of people, as outlined in Comte's and Le Play's works.⁵⁹ Following Comte and Congreve, Geddes held that Spiritual types, Emotionals and Intellectuals, would hold providence over educational and cultural spaces, as mentioned above; meanwhile, temporal types, or Chiefs and People, would maintain obligations to business and politics. The Positivists depicted Comte's civic types of the city as complementary to Le Play's rustic types of the countryside: miners, woodsmen, hunters, shepherds, peasants, farmers, and fishermen. These spiritual and temporal types would rule in turn in relation to their respective spaces within the city-region.

By the 1890s Geddes opened his Outlook Tower in Edinburgh. Here, Geddes exhibited the "sociological facts" collected during regional surveys. He called this exhibit an "Encyclopedia Civica," and it explained the past and



present of the people and their region. Its purpose was to inform planning schemes for harmonising individuals, institutions and the environment.⁶⁰ He held that a network of institutes like the Outlook Tower could plan regional wholes, foster inclusive public government and initiate imperial devolution. Along these lines Geddes employed this sociology before planning approach in response to the dilapidated dens of the Edinburgh Old Town as well as the refugee crisis in Cyprus.⁶¹ Geddes also used the method and Positivist ideas about a “Church of the People”⁶² for a scheme to transform the Scottish town of Dunfermline into a garden city-state.⁶³ Such projects rallied support for the Town Planning Act of 1909.⁶⁴

Central to this discussion was Geddes’ idea of a sociological centre for “concrete politics” concerned with creating the city-region anew.⁶⁵ The primary purpose and significance of the Outlook Tower, Geddes reiterated at the Royal Institute of British Architects first Town Planning conference, was to operate as an *urban intervention*, a “civic observatory.”⁶⁶ A global network of such Civic Societies, or “Civicentre(s) for sociologist and citizen,” would energise and engage the public. It would exhibit the efforts of Howard as well as international planning innovators such as Josef Stübben, Camillo Sitte and Daniel Burnham; organise transnational tours of urban redevelopment projects; and praise foreign planning advances in the local press. These centres would lead regional surveys, publish investigations on human-ecological alienation and exploitation and, also, implement planning programmes—just as Congreve, Harrison, Booth and other Positivist society affiliates had.⁶⁷

From the late 1890s Geddes’ partner Victor Branford (1863–1930) disseminated applied sociology for planning regional city-states throughout the British empire. He was the initiator of the first intellectual institution in Britain with the word “sociology” in its name, the Sociological Society.⁶⁸ Founded in 1904 the organisation furthered sociology as a modern academic discipline in association with the University of London, which was offering the first-ever sociology seminars in Britain. The society served as the meeting ground for economists, geographers, politicians, philosophers, and writers.⁶⁹ Here parties of eugenicists, town planners and ethical evolutionaries debated the meanings and methods of sociology. Scholars have attributed the immediate origins of the first party to the sociological works of Charles Darwin and Francis Galton (eugenicists), the second to Booth and Geddes (town planners) and the third to Herbert Spencer and Hobhouse (ethical evolutionaries).⁷⁰

Branford and Positivist supporters were the leading advocates of the eutopian “town planning school” of sociology.⁷¹ From the early 1900s to the 1920s Branford expounded a discipline called “City Design,” which he described as an “art of polity-making” that put ultimate emphasis on the unselfish-self as the sociological agent for social transformation. It called for something of a religious conversion, where idealists would employ civic sociology towards consensus-based place making.⁷² Such ideas took shape with Branford’s explorations of the works of Comte, Ernest Mach and James Ward, which spurred him to consider ways in which to link science, faith and citizenship.⁷³ He later presented Geddes’ regional survey method as *the link — the “sacred way” — the process for self-actualisation and living the “good life” in an ideal city.*⁷⁴ As an ethical entrepreneur, Branford employed the regional survey for planning agricultural and industrial schemes in various South American outposts. Fixated on creating small states with the character of the Positive Era, his business ventures connected telephone, rail, road, waterway hubs, housing, and industries to cultural centres. Synthesising the ideas of Comte, Geddes, Thorstein Veblen and William MacDonald,⁷⁵ Branford suggested that City Design addressed the two competing psychologies of formalism and idealism. He controversially claimed that the Sociological Society was the omphalos of idealism and applied sociology.

During the great unrest of the 1910s, Branford encouraged idealists to form a “Religion of Idealism” and to promote the consolidation of cooperative-economics schemes to realise garden city projects. He and Geddes incorporated these ideas into their post-war reconstruction programme called the “Third Alternative.” Here the Bank of England and cooperative societies would finance the total reconstruction of the nation as the “moral equivalent of war” in which case moralised “banker-statesmen” could facilitate the “central concept of realisable ideals as regional Utopias.”⁷⁶ Like other Positivists he claimed that the post-war neotechnic era would comprise the government of women, where science and industry operate on the basis of the spirit of decentralised self-reliance and civic responsibility.⁷⁷

Inspired by the American activist Charles Ferguson, Branford and Geddes proposed that “university militants,” could lead citizen-groups in regional surveys and propose, like Positivists before them, a “Policy of Culture” to resolve such problems as housing deficiencies, industrial gridlock, rural decline, and despondency to create a regional eutopia.⁷⁸ Like Comte’s Occidental Republic, they held that each region would also establish its own architectural language, currency, festivals, and thus provide an enhanced individual and social life suited to each locale.⁷⁹ The Third Alternative, in fact, offered a schema for the devolution of the British empire into an Occidental network of garden city-states. Here a worldwide regional university system, would provide practical education to craft guilds, thus making “City Design” initiatives possible. Thus, instead of a “Positivist Society” taking the lead, it was now the modern university. Its academics, they imagined, would arbitrate international and domestic affairs relating to industry and public life.⁸⁰ This vision of post-war reconstruction, Branford and Geddes



acknowledged, drew on Comte's "practical treatise," the *System of Positive Polity* and its utopia, the Occidental Republic.⁸¹

Conclusion

In promoting the notion of creating self-sufficient, small republics the Positivists offered support for the concept of the town and country as a planned regional unit. Through their intellectual and cultural interventions, they upheld the notion that the school is the nucleus of community sociability and the means for broader social transformation. As such they held that the city-community is defined by its public spaces and civic institutes; and by promoting social action and civic duty via different types of sociological surveys for place-making, they introduced the notion of design-research as a form of activism in the creation of caring and socially-responsible citizens. Thus, seeking an alternative form of regional life, Comte and Congreve's followers used applied sociology to examine nested social problems, from the international level to the locality. Their work, as such, stands as an example of planning politics, where citizen-groups acted as an intellectual and practical alternative to imperialism and urbicide.

Tables and Figures

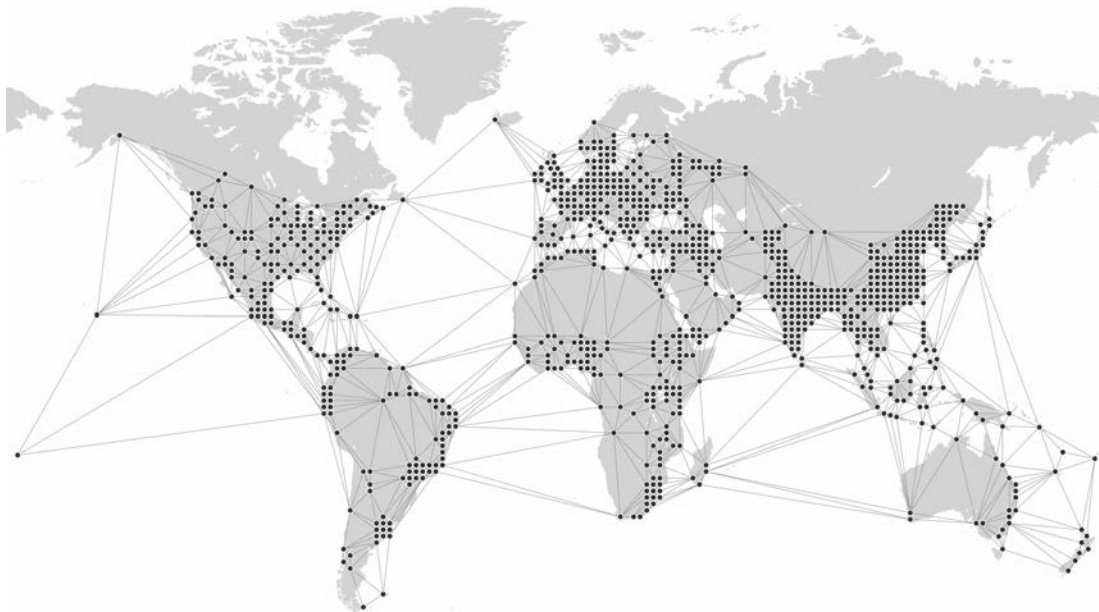


Figure 1: Speculative sketch of Comte's Occidental Republic, a garden city-state network. Here each circle contains the land area he prescribed. Rather than 500 circles as he envisioned, we see here 1000 circles arranged in relation to contemporary population densities of more than seventy people per square kilometre.

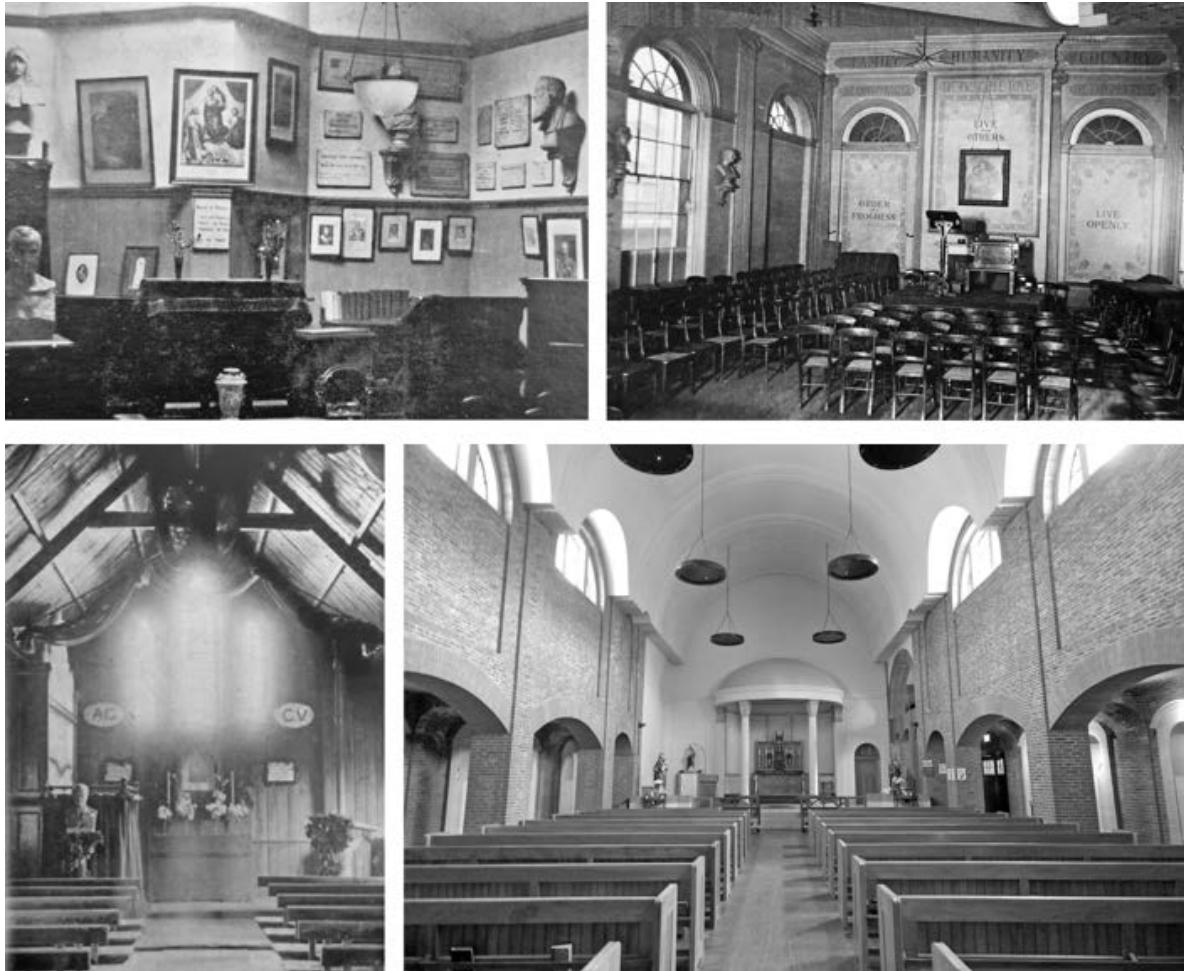


Figure 2: Positivist interventions. Chapel Street Hall, London (upper left); Newton Hall, London (upper right); and Church of Humanity, Newcastle (lower left) BLPES-LPS, 5/4; St. Pius X Church, formerly the Liverpool Church of Humanity (lower right).

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Matthew Wilson is an intellectual historian and Assistant Professor at Ball State University, College of Architecture and Planning.

Endnotes

¹ See, for instance, L.T. Hobhouse, *Liberalism* (Oxford: Oxford University Press, 1964); Porter, Bernard. *Critics of Empire* (London: Macmillan, 1968); Claeys, Gregory. *Imperial Sceptics* (Cambridge: Cambridge University Press, 2010).

² Auguste Comte, *System of Positive Polity*, 4 vols. Vol. I (London: Longmans, Green) 123–4; Henri Gouhier, *La Jeunesse d'Auguste Comte*, 3 vols. Vol. II (Paris: Vrin) 58–61; *ibid.*, III, 407. Within the *System*, Comte called the “true principle of republicanism,” a state where “all forces ... work together for the common good.” The proclamation of a republic, he maintained, meant that each citizen devotes “all his faculties” to “the public welfare.” The primary means through which he aimed to achieve this mode of republicanism was through the cultural celebrations of the Religion of Humanity. Henri Gouhier argues the Religion of Humanity was based on the secular religions of the French Revolution, which aimed to establish a new republican culture.

³ John Scott and Ray Bromley, *Envisioning Sociology* (Albany: State University of New York Press, 2013); Duncan Bowie, *The Radical and Socialist Tradition in British Planning* (London: Routledge, 2017); Robert Young and Pierre Clavel, eds. “Planning living cities: Patrick Geddes’ legacy in the new millennium.” Special issue, *Landscape and Urban Planning*; Peter Eisenman, “Post-Functionalism,” in *Theorizing a New Agenda for Architecture*, ed. Kate Nesbitt (New York: Princeton Architectural Press, 1996). All of these studies largely neglect the Comtean impact on planning, but Eisenman presents Positivism as a movement of “ethical functionalism.” This paper draws on important connexions in the Eric Paul Mumford’s *The CIAM Discourse on Urbanism, 1928–1960*, Donald Drew Egbert’s *Social Radicalism*



and the Arts, and Konstanze Sylva Domhardt's "The Garden City Idea in the CIAM discourse on Urbanism." These works show how Saint-Simon's and Ebenezer Howard's ideas influenced the global planning and design movement, Congrès internationaux d'Architecture Moderne (CIAM). The chief British intermediaries, I argue here, were Congreve's Positivists, who were attempting to approximate Comte's Occidental Republic. Egbert situates Congreve as central to the Positivist network theory of planning and the medieval revival in Victorian architecture. Aspects of Positivism, as a eutopian theory and sociological practice, served as the impetus to and the activities of Sybella Gurney, H.V. Lanchester, Patrick Abercrombie, Lewis Mumford and Le Corbusier. It percolated into the efforts of the Sociological Society Cities Committee, the Le Play House, the Regional Planning Association of America and, as mentioned, CIAM.

⁴ Iñaki Ábalos, *The Good Life* (Barcelona: Gili: 2001), 69–70; Mary Pickering, *Auguste Comte*, 3 vols. Vol. III (Cambridge: Cambridge University Press, 2009) 10; Thomas Dixon, *The Invention of Altruism* (Oxford: Oxford University Press, 2008); T.R. Wright, *The Religion of Humanity* (Cambridge: Cambridge University Press, 1986), 66, 110, 219, 55; Edward R. Pease, *The History of the Fabian Society* (New York: Dutton, 1916), 18. Victorians found Positivism alluring because it upheld a "belief in universal regeneration to be brought about by the new "master-science" of sociology." This belief was expressed in terms of "an international level opposition to imperialism, and on a national scale raising the dignity of labour" via trade unionism. Comte's ardent follower, the polymath Frederic Harrison, claimed that Positivism was "at once a scheme of Education, a form of Religion, a school of Philosophy, a method of Government, and a phase of Socialism" founded on sociology. This essay uses this definition of Positivism.

⁵ Edward W. Soja, *Postmetropolis* (Oxford: Blackwell, 2000), xii–94.

⁶ F.J. Osborn, *Green-Belt Cities* (London: Faber and Faber Limited, 1946), 39.

⁷ Joseph Rykwert, *The Seduction of Place* (New York: Oxford University Press, 2000), 62.

⁸ Claude Henri de Saint-Simon, *Oeuvres de Saint-Simon*, 6 vols. Vol. I (Paris: Dentu, 1868), 53, 210–4; Auguste Comte, *System*, IV, 500–2; Claude Henri de Saint-Simon, *Catéchisme des industriels*, 59; *Du système industriel*, iii–x, 22–62; *ibid*, 2e partie, 8–10.

⁹ Auguste Comte, *Cours de philosophie positive*, 6 vols. Vol. IV, 294.

¹⁰ Emile Durkheim, *Socialism* (New York: Collier, 1962), 134; Claude Henri de Saint-Simon, *Oeuvres*, IV, 11–96.

¹¹ Auguste Comte, *System*, III, 523; Victor Branford, *Outlines of the Sociology of London* (London: University of London), 14; C.G. Higginson, "The Incorporation of the Proletariate into Modern Society," *Positivist Review* (1897): 68–72.

¹² Auguste Comte, *Correspondance inédite d'Auguste Comte*, 4 vols. Vol. III (Paris: Société Positiviste, 1904), 326–8; Henry Edger and M. John Metcalf, *Lettres d'Auguste Comte à Henry Edger et à M. John Metcalf* (Paris: Apostolat Positiviste, 1889), 13–4; Roger Wunderlich, *Low Living and High Thinking at Modern Times, New York* (Syracuse: Syracuse University Press, 1992), 164–71; Gillis J. Harp, *Positivist Republic* (University Park: Pennsylvania State University Press), 23–30.

¹³ Comte, *System*, IV, 267.

¹⁴ *Ibid.*; *System*, I, 123–4. Their spatial scale and social contract promised that the individual could participate in determining "precisely what it is that the common good requires" via historical, geographical and social investigation. The body politic would play a pivotal role in the republic, providing "facts" to establish a "recognized Code of principles, an adequate Education, and a healthy direction of Public Opinion."

¹⁵ Victor Branford and Patrick Geddes, *Our Social Inheritance* (London: Williams & Norgate), 35–7.

¹⁶ On the republican tradition see J.G.A. Pocock, *Virtue, Commerce, and History* (New York: Cambridge University Press, 200); *Machiavellian Moment; Three British Revolutions* (Princeton: Princeton University Press, 1975). On the republican tradition and Positivism see Mark Bevir, *The Making of British Socialism* (Princeton: Princeton University Press, 2011), 3–9; Royden Harrison, *Before the Socialists* (Routledge & Kegan Paul, 1965), 3–4, 210–339; Porter; Jose Harris, "French Revolution to Fin De Siècle Political Thought in Retrospect and Prospect, 1800–1914," in *The Cambridge History of Nineteenth-Century Political Thought*, ed. Gareth Stedman Jones and Gregory Claeys (Cambridge: Cambridge University Press, 2010), 896.

¹⁷ Claeys, *Imperial Sceptics*, 3, 102–17, 273–84.

¹⁸ OUBL-CP, MS.Eng. misc.c.349, ff. 52–3. Also see John Stuart Mill, *Autobiography* (London: Longmans, Green, Reader, and Dyer, 1873), 60–1, 163–6; *The Positive Philosophy of Auguste Comte* (New York: Holt, 1887), 3–5; *A System of Logic*, 2 vols. Vol. I (London: Parker, 1843), 611; G.H. Lewes, *The Biographical History of Philosophy*, 4 vols. Vol. III (London: W. Clowes and Sons, 1851), 256. Congreve first encountered Positivism during the 1840s while under the influence of such Oxford cohorts as the poet Arthur Clough and the future MP John Blackett. Together they explored Mill's *System of Logic*, which cited Comte's Cours and the establishment of a "sociological system" to "accelerate ... natural progress." Lewes' *Biographical History of Philosophy*, also in their purview, discussed how an "élite of humanity" would soon emerge to develop and apply Comte's sociology teachings.

¹⁹ Richard Congreve, *Essays*, 3 vols. Vol. III (London: Longmans, 1874), 529–769.

²⁰ Saint-Simon, *Oeuvres*, I, 176–7; Francis Harry Hinsley, *Power and the Pursuit of Peace* (Cambridge: Cambridge University Press, 1980), 102–4.

²¹ Congreve, *Essays*, III, 651.

²² Auguste Comte, *Catechism of Positive Religion* (London: Chapman, 1858), 337, 57; Congreve, *Essays*, III, 529–769.

²³ Congreve, *The Politics of Aristotle with English Notes* (London: Parker, 1855) x–xviii; *Essays*, III, 701–4.

²⁴ Congreve, *Essays*, II, 356; *Essays*, III, 488–9; *The Politics*, x–xviii; Harriet Martineau, "The Religion of Positivism," *Westminster Review* 69, no. 136 (1858): 305–50.

²⁵ Richard Congreve, *Essays*, I, 107, 201–8; *Essays*, III, 107–18.

²⁶ The suggestion to establish a "guardianship of nations" to break up empires peacefully became a Positivist trope. "The War between Prussia and France," *Bee-Hive*, 7 Jan. 1871; "Telegraphic Intelligence," *Daily News*, 7 Jan. 1871; OUBL-CP, MS.Eng. Misc.a.10, f. 32; *Essays*, I, 74–80; "Anti-Aggression League," *Daily News*, 23 Feb. 1882; N.A., "An Anti-Aggression League," *Saturday Review*, 25 Feb 1882; Congreve, *Essays*, II, 453; "Annexation of Burmah," *Daily News*, 12 Jan. 1886.

²⁷ Congreve, *Two Addresses* (London: Trübner, 1870); BL-PP, Add.MSS, 45,243 ff. 3–9.

²⁸ Auguste Comte, *Passages from the Letters of Auguste Comte* (London: Adam & Charles Black, 1901) 163.

²⁹ Frederic Harrison, *National Social Problems* (London: Macmillan, 1908) 262.

³⁰ Comte, *System*, I, 134.

³¹ Frederic Harrison, *The Meaning of History* (London: Macmillan, 1894), ii–iii, 54–8, 236.

³² "Builders' Combination in London and Paris," *National Review*, Oct. 1860; NAPSS, *Transactions, 1860* (London: Parker, 1860), 54.

³³ "The Builders' Strike," *Times*, 15 July 1861; "Response," *Times*, 22 July 1861; BLPES-HP 1/8, ff. 17–20; NAPSS, *Transactions, 1861*, 717–21, 95–6; Frederic Harrison, "Lancashire," *Westminster Review* 24, no. 1 (1863): 191–219; *Autobiographic Memoirs*, I, 323.

³⁴ E.S. Beesly, *The Sheffield Outrages* (London: Truelove, 1867); "The Trades' Union Commission," *Fortnightly Review* 2, no. 7 (1867): 1–18; Richard Congreve, *Mr. Broadhead and the Anonymous Press* (London: Truelove, 1867).

³⁵ Harrison, *Autobiographic Memoirs*, I, 323.

³⁶ George Howell, *Labour Legislation, Labour Movements and Labour Leaders* (T. Fisher Unwin, 1902), 128.



- ³⁷ Frederic Harrison, "The Trades-Union Bill," *Fortnightly Review* 6, no. 31 (1869): 30–45; LMU-LTC, 2/2, f. 174; "Commission," *Times*, 14 March 1874; "Labour Laws Commission," *Bradford Observer*, 20 Mar. 1874; BIL-GHP 1/11, f. 20.
- ³⁸ BLPES-HP 2/2, ff. 16–7; Frederic Harrison, *Order & Progress* (London: Longmans, Green, 1875), 152–237.
- ³⁹ George Potter, "The First Point of the New Charter," *Contemporary Review* (1871). George Potter, who outlined the first component of the new movement, urged workers to seek out "improved dwellings for the people" to "rescue" working-class families.
- ⁴⁰ Harrison, *Autobiographic Memoirs*, I, 251; "Our Social Programme," *Positivist Review* (1894).
- ⁴¹ *Ibid.*
- ⁴² Frederic Harrison, "Ideal London," *Contemporary Review* 18, no. 1 (1898): 547–58; Comte, *System*, IV, 380; Frederic Harrison, *Memories and Thoughts* (London: Macmillan, 1906), 284; *The Meaning of History*, 247–51, 414–31.
- ⁴³ London County Council, *Opening of Kingsway and Aldwych* (London: Southwood, Smith, 1905), 3–5. This project recast the "black and blue" areas of the St Giles district by creating the Haussmann-esque boulevard offering improved communications, attractions and housing between Holborn and The Strand. Harrison resigned from the council, claiming the corruption of architects and developers who demanded to maximise profit potentials instead of creating a civic plaza front St. Mary le Strand.
- ⁴⁴ Ebenezer Howard, *Garden Cities of To-morrow* (London: Faber and Faber, 1970), 78–9. Matthew Wilson, "Labour, Utopia and Modern Design Theory: the Positivist Sociology of Frederic Harrison," *Intellectual History Review* (2017), 1–23.
- ⁴⁵ Booth, *Charles Booth*, 8–9, 95–8.
- ⁴⁶ Mary Booth, *Charles Booth, a Memoir* (London: Macmillan, 1918), 8–9.
- ⁴⁷ SHL-BP, MS.797/II/26/15, ff. vii, ix; SHL-BP, MS.797/II/24/6, ff. 7, 15–19.
- ⁴⁸ SHL-BP, MS.797/II/26/15 ff. xi–xiv.
- ⁴⁹ Charles Booth, "Occupations of the People of the United Kingdom, 1801–81," *Journal of the Statistical Society of London* 49 (1886), 314–444; *Labour and Life of the People*, 2 vols. Vol. II (London: Williams and Norgate, 1891), 262–96; *Pauperism* (London: Macmillan, 1892), 166–7, 200.
- ⁵⁰ Booth, *Life and Labour of the People in London*, 17 vols. Vol. IX (London: Macmillan, 1904), 234–80, 309.
- ⁵¹ *Labour and Life of the People*, I, 163–70.
- ⁵² "The Strike in the East End," *Northern Echo*, 26 Aug. 1889, 169; Booth, *Labour*, I, 169; Frederic Harrison, "The New Trades-Unionism," *Nineteenth Century* 26, Nov. (1889): 721–32; Congreve, *Essays*, II, 594.
- ⁵³ Booth, *Pauperism*, 166–7, 200; Comte, *System*, I, 130; Charles Booth, *Old Age Pensions and the Aged Poor* (London: Macmillan, 1899), 36–42, 67–8.
- ⁵⁴ Booth, *Improved Means of Locomotion as a First Step Towards the Cure of the Housing Difficulties of London* (London: Macmillan, 1901) 1–23; "Mr. Balfour and The Housing Problem," *Times*, 15 Feb. 1901.
- ⁵⁵ Congreve, *Essays*, II, 225; Thomas Henry Huxley, *Lay Sermons* (London: Macmillan, 1870), 88, 153–91; Susan Liveing and Patrick Geddes, *A Nineteenth-Century Teacher* (London: Paul, 1926), 11; BLPES-LPS 1/1, ff. 1–4; Pickering, *Auguste Comte*, III, 571; S.H. Swinny, "Two Faithful Lives," *Positivist Review* (1919); Patrick Geddes, "A Current Criticism of the Positivist School," *Positivist Review* (1921).
- ⁵⁶ Patrick Geddes, *The Classification of Statistics* (Edinburgh: Black, 1881), 12, 23–9; US.T-GED 9/18, f. 176.
- ⁵⁷ Patrick Geddes, *John Ruskin* (Edinburgh: William Brown, 1884), 14, 26–7.
- ⁵⁸ Victor Branford, "The Edinburgh Summer Meeting," *Positivist Review* (1893).
- ⁵⁹ Branford and Geddes, *Our Social Inheritance*, 35.
- ⁶⁰ Patrick Geddes, "The Influence of Geographical Conditions on Social Development," *Geographical Journal* 12, no. 6 (1898): 580–6; *Education for Economics*.
- ⁶¹ Patrick Geddes, "Cyprus, Actual and Possible," *Contemporary Review* 71 (1897): 892–908.
- ⁶² Patrick Geddes, *City Development* (Edinburgh: Geddes, 1904), 1–3, 21–35, 166, 221; NLS, MS.10612 ff. 2, 18, 22, 25; Comte, *System*, IV, 274–5.
- ⁶³ Geddes, *City Development*, 1–3, 21–35, 166, 221.
- ⁶⁴ RIBA, *Transactions* (London: RIBA), 66–71.
- ⁶⁵ Patrick Geddes, *Cities in Evolution* (Williams & Norgate, 1915), 96, 207–10, 52.
- ⁶⁶ Geddes, *The Civic Survey of Edinburgh* (Edinburgh: Outlook Tower, 1911), 537–57.
- ⁶⁷ Sociological Society, *Sociological Papers*, 3 vols. Vol. II (London: Macmillan, 1906), 92–3; Patrick Geddes, "Two Steps in Civics," *Town Planning Review* 4, no. 2 (1913): 78–94.
- ⁶⁸ Victor Branford, *Interpretations & Forecasts* (New York: Kennerley, 1914), 373.
- ⁶⁹ The three-volume *Sociological Papers* is graced by the commentary of celebrity intellectuals such as Ebenezer Howard, Émile Durkheim, L.T. Hobhouse, Bertrand Russell, William Beveridge and H.G. Wells.
- ⁷⁰ A.H. Halsey, *A History of Sociology in Britain* (Oxford: Oxford University Press, 2004), 9–11, 248.
- ⁷¹ Sociological Society, *Sociological Papers*, I, 142; Lewis Mumford, *Values for Survival* (New York: Harcourt, Brace, 1946), 153.
- ⁷² Victor V. Branford, "A Craft University," *Athenaeum* 1, no. 4626 (1918): 79–82.
- ⁷³ NLS, MS.10556 f. 17.
- ⁷⁴ Victor Branford, "Survivals and Tendencies in the University," *Sociological Review* a7, no. 1 (1914): 1–8; Victor V. Branford, *An Undeveloped Estate of the Empire*, 3–14.
- ⁷⁵ "A Sociological Approach Towards Unity," in *Ideals of Science and Faith*, ed. James Edward Hand. (London: Allen 1904), 104–56; Thorstein Veblen, *The Theory of the Leisure Class* (New York: Modern Library, 1934); Victor Branford, "The Founders of Sociology," *American Journal of Sociology* 10, no. 1 (1904): 94–126.
- ⁷⁶ "The Mobilisation of National Credit," *Sociological Review* 7, no. 4 (1914), 307–14; Sociological Society Cities Committee, *Papers for the Present*, 2 (London: Headley Bros., 1917–9), 1–33. The Bank of England would consolidate disparate cooperative initiatives, notably the Co-partnership Tenants Limited, Agricultural Organisation Society and Urban Banks Association. Shopkeepers, artisans and craftspeople could receive loan disbursements, which were previously available only to industrial chiefs. Here Branford claimed that the unification of the nation's financial system mirrored Comte's vision: "The concentration of selective control, which we are to-day witnessing in the Governor's Court of the Bank of England," he wrote, "is suggestive of the 'triumvirate of bankers,' which Comte foresaw at the apex of the temporal power in the modern state." Idealist financiers, he imagined, could act as civic functionaries – a "hieratic craft" of "social selection" – "directing and controlling communitary life and welfare."
- ⁷⁷ Frederick J. Gould, *Auguste Comte and Positivism* (London: Watts & Co., 1916), 9; Victor Branford, *Whitherward? Hell or Eutopia* (London: Williams and Norgate, 1921), 1–59; Sociological Society Cities Committee, *Papers for the Present*, 9 (London: Headley Bros., 1917–9), 42.
- ⁷⁸ Branford, *Interpretations & Forecasts*, 301–56.
- ⁷⁹ Sociological Society Cities Committee, *Papers*, 2, 1–17.



⁸⁰ Sybella Branford, "An Industrial Symposium," *New Age*, 7 Dec. 1916; W. Anderson, "Regionalism and an Educational Guild," *New Age*, 12 Oct; Victor V. Branford, "Ora Labora," *Times* (1920).

⁸¹ Victor Branford and Patrick Geddes, *The Coming Polity* (Williams and Norgate, 1917), 52.

Bibliography

Manuscripts

BIL-GHP, Bishopsgate Institute Library, George Howell Papers.
BL-PP, British Library, Positivist Papers.
BLPES-HP, British Library of Political & Economic Science, Frederic Harrison Papers.
BLPES-LPS, British Library of Political & Economic Science, London Positivist Society Papers.
HALS-EH, Hertfordshire Archives and Local Studies, Ebenezer Howard Papers.
KU-LP, Keele University, Le Play House Papers.
LMU-LTC, London Metropolitan University, London Trades Council.
MAC, Maison d'Auguste Comte.
OUBL-CP, Oxford University Bodleian Library, Richard Congreve Papers.
SHL-BP, Senate House Library, Charles Booth Papers.
US.T-GED, University of Strathclyde, Patrick Geddes Papers.

Primary and secondary sources

Ábalos, Iñaki. *The Good Life*. Barcelona: Gili, 2001.
Anderson, W. "Regionalism and an Educational Guild." *New Age*, 12 Oct. 1916.
"Annexation of Burmah." *Daily News*, 12 Jan. 1886.
"Anti-Aggression League." *Daily News*, 23 Feb. 1882.
"An Anti-Aggression League." *Saturday Review* 53 (25 February 1882): 224–5.
Beesly, E.S. *The Sheffield Outrages*. London: Truelove, 1867.
———. "The Trades' Union Commission." *Fortnightly Review* 2, no. 7 (July 1867): 1–18.
Bevir, Mark. *The Making of British Socialism*. Princeton: Princeton University Press, 2011.
Booth, Charles. *Improved Means of Locomotion as a First Step Towards the Cure of the Housing Difficulties of London*. London: Macmillan, 1901.
———. *Life and Labour of the People in London*. Industry. 17 vols. Vol. IX, London: Macmillan, 1904.
———. *Labour and Life of the People*. 2 vols. Vol. I, London: Williams and Norgate, 1889.
———. *Labour and Life of the People*. 2 vols. Vol. II, London: Williams and Norgate, 1891.
———. "Occupations of the People of the United Kingdom, 1801–81." *Journal of the Statistical Society of London* 49 (1886): 314–444.
———. *Old Age Pensions and the Aged Poor*. London: Macmillan, 1899.
———. *Pauperism*. London: Macmillan, 1892.
Booth, Mary. *Charles Booth, a Memoir*. London: Macmillan, 1918.
Bowie, Duncan. *The Radical and Socialist Tradition in British Planning*. London: Routledge, 2016.
Branford, Sybella. "An Industrial Symposium." *New Age*, 7 Dec. 1916.
Branford, Victor. "The Edinburgh Summer Meeting." *Positivist Review* (Dec. 1893): 215–20.
———. "The Founders of Sociology." *American Journal of Sociology* 10, no. 1 (1904): 94–126.
———. *Interpretations & Forecasts*. New York: Kennerley, 1914.
———. "The Mobilisation of National Credit." *Sociological Review* 7, no. 4 (1914): 307–14.
———. *Outlines of the Sociology of London*. London: University of London, 1908.
———. "Survivals and Tendencies in the University." *Sociological Review* 7, no. 1 (1914): 1–8.
———. *Whitherward? Hell or Eutopia*. London: Williams and Norgate, 1921.
Branford, Victor, and Patrick Geddes. *Our Social Inheritance*. London: Williams & Norgate, 1919.
———. *The Coming Polity*. London: Williams and Norgate, 1917.
Branford, Victor V. "A Craft University." *Athenaeum* 1, no. 4626 (1918): 79–82.
———. "Ora Labora." *Times* (11 Aug. 1920).
———. "A Sociological Approach Towards Unity." In *Ideals of Science and Faith*, edited by James Edward Hand, 104–56. London: Allen, 1904.
———. *An Undeveloped Estate of the Empire*. London: West Indian Co-operative Union, c. 1899.
"Builders' Combination in London and Paris." *National Review*, Oct. 1860, 314–29.
"The Builders' Strike." *Times*, 15 July 1861.
Claeys, Gregory. *Imperial Sceptics*. Cambridge: Cambridge University Press, 2010.
"Commission." *Times*, 14 March 1874.
Comte, Auguste. *Cac*. 4 vols. Vol. III, Paris: Société Positiviste, 1904.
———. *Cours De Philosophie Positive*. 6 vols. Vol. IV, Paris: Bachelier, 1839.



- . *Cathecism of the Positive Religion*. London: Chapman, 1858.
- . *General View of Positivism*. London: Routledge, 1908.
- . *Passages from the Letters of Auguste Comte*. London: Black, 1901.
- . *Positive Philosophy of Auguste Comte*. 3 vols. Vol. III, London: Bell & Sons, 1896.
- . *System of Positive Polity*. 4 vols. Vol. IV, London: Longmans, Green, 1877.
- . *System of Positive Polity*. 4 vols. Vol. III, London: Franklin, 1876.
- . *System of Positive Polity*. 4 vols. Vol. I, London: Longmans, Green, 1875.
- Congreve, Richard. *Essays, Political, Social, and Religious*. 3 vols. Vol. III, London: Longmans, 1900.
- . *Essays, Political, Social, and Religious*. 3 vols. Vol. I, London: Longmans, 1874.
- . *Essays, Political, Social, and Religious*. 3 vols. Vol. II, London: Longmans, 1892.
- . *Mr. Broadhead and the Anonymous Press*. London: Truelove, 1867.
- . *The Politics of Aristotle with English Notes*. London: Parker, 1855.
- . *Two Addresses*. London: Trübner, 1870.
- Dixon, Thomas. *The Invention of Altruism*. Oxford: Oxford University Press, 2008.
- Durkheim, Emile. *Socialism*. New York: Collier, 1962.
- Edger, Henry, and M. John Metcalf. *Lettres D'auguste Comte À Henry Edger Et À M. John Metcalf*. Paris: Apostolat Positiviste, 1889.
- Eisenman, Peter. "Post-Functionalism." In *Theorizing a New Agenda for Architecture*, edited by Kate Nesbitt, 78–83, Princeton: Princeton Architectural Press, 1996.
- Geddes, Patrick. *City Development*. Edinburgh: Geddes, 1904.
- . *Cities in Evolution*. London: Williams & Norgate, 1915.
- . *The Civic Survey of Edinburgh*. Edinburgh: Outlook Tower, 1911.
- . *The Classification of Statistics*. Edinburgh: Black, 1881.
- . "A Current Criticism of the Positivist School." *Positivist Review* (July 1921): 145–9.
- . "Cyprus, Actual and Possible." *Contemporary Review* (June 1897).
- . *Education for Economics*. Manchester: Co-operative Printing Society, 1895.
- . "The Influence of Geographical Conditions on Social Development." *Geographical Journal* 12, no. 6 (1898): 580–6.
- . *John Ruskin*. Edinburgh: William Brown, 1884.
- . "Two Steps in Civics." *Town Planning Review* 4, no. 2 (1913): 78–94.
- Gouhier, Henri. *La Jeunesse D'auguste Comte Et La Formation Dur Positivisme*. 3 vols. Vol. II, Paris: Vrin, 1970.
- . *La Jeunesse D'auguste Comte Et La Formation Dur Positivisme*. 3 vols. Vol. III, Paris: Vrin, 1970.
- Gould, Frederick J. *Auguste Comte and Positivism*. London: Watts & Co., 1916.
- Halsey, A.H. *A History of Sociology in Britain*. Oxford: Oxford University Press, 2004.
- Harp, Gillis J. *Positivist Republic*. University Park: Pennsylvania State University Press, 1995.
- Harris, Jose. "French Revolution to Fin De Siècle Political Thought in Retrospect and Prospect, 1800–1914." In *The Cambridge History of Nineteenth-Century Political Thought*, edited by Gareth Stedman Jones and Gregory Claeys, 893–933. Cambridge: Cambridge University Press, 2010.
- Harrison, Frederic. *Autobiographic Memiors*. 2 vols. Vol. I, London: Macmillan, 1911.
- . "Ideal London." *Contemporary Review* 74 (July 1898): 139–52.
- . *John Ruskin*. London: Macmillan, 1902.
- . "Lancashire." *Westminster Review* 24, no. 1 (July 1863): 191–219.
- . *Memories and Thoughts*. London: Macmillan, 1906.
- . "The New Trades-Unionism." *Nineteenth Century* 26 (Nov. 1889): 721–32.
- . *National Social Problems*. London: Macmillan, 1908.
- . *Order & Progress*. London: Longmans, Green, 1875.
- . "Our Social Programme." *Positivist Review* (Jan. 1894): 1–5.
- . *The Meaning of History*. London: Macmillan, 1894.
- . "The Trades-Union Bill." *Fortnightly Review* 6, no. 31 (July 1869): 30–45.
- Harrison, Royden. *Before the Socialists*. London: Routledge & Kegan Paul, 1965.
- Higginson, C.G. "The Incorporation of the Proletariat into Modern Society." *Positivist Review* (1 March 1897): 68–72.
- Hinsley, Francis Harry. *Power and the Pursuit of Peace*. Cambridge: Cambridge University Press, 1980.
- Hobhouse, L.T. *Liberalism*. Oxford: Oxford University Press, 1964.
- Howard, Ebenezer. *Garden Cities of To-morrow*. London: Faber and Faber, 1970.
- Howell, George. *Labour Legislation, Labour Movements and Labour Leaders*. London: T. Fisher Unwin, 1902.
- Huxley, Thomas Henry. *Lay Sermons*. London: Macmillan, 1870.
- "Labour Laws Commission." *British Observer*, 20 Mar. 1874.
- Lewes, G.H. *The Biographical History of Philosophy*. IV vols. Vol. III, London: W. Clowes and Sons, 1851.



- Living, Susan, and Patrick Geddes. *A Nineteenth-Century Teacher: John Henry Bridges*. London: Paul, 1926.
- London County Council. *Opening of Kingsway and Aldwych*. London: Southwood, Smith, 1905.
- Martineau, Harriet. "The Religion of Positivism." *Westminster Review* 69, no. 136 (1858): 305–50.
- Mill, John Stuart. *Autobiography*. London: Longmans, Green Reader and Dyer, 1873.
- . *The Positive Philosophy of Auguste Comte*. New York: Holt, 1887.
- . *A System of Logic*. 2 vols. Vol. I, London: Parker, 1843.
- "Mr. Balfour and the Housing Problem." *Times*, 15 Feb. 1901.
- Mumford, Lewis. *Values for Survival*. New York: Harcourt, Brace, 1946.
- NAPSS [Social Science Association]. *Transactions, 1860*. London: Parker, 1860.
- . *Transactions, 1861*. London: Parker, 1862.
- Osborn, F.J. *Green-Belt Cities*. London: Faber and Faber Limited, 1946.
- Pease, Edward R. *The History of the Fabian Society*. New York: Dutton, 1916.
- Pickering, Mary. *Auguste Comte*. 3 vols. Vol. III, Cambridge: Cambridge University Press, 2009.
- Pocock, J.G.A. *Machiavellian Moment*. Princeton: Princeton University Press, 1975.
- , ed. *Three British Revolutions*. Princeton: Princeton University Press, 1980.
- . *Virtue, Commerce, and History*. New York: Cambridge University Press, 2002.
- Porter, Bernard. *Critics of Empire*. London: Macmillan, 1968.
- Potter, George. "The First Point of the New Charter." *Contemporary Review* 18, no. 1 (1871): 547–58.
- "Response." *Times*, 22 July 1861.
- RIBA. *Transactions: Town Planning Conference London, 10-15 October 1910*. London: RIBA, 1911.
- Rykwert, Joseph. *The Seduction of Place*. New York: Oxford University Press, 2000.
- Saint-Simon, Claude Henri de. *Catéchisme Des Industriels*. Paris: Sétier, 1823.
- . *Du Système Industriel*. Paris: Renouard, 1821.
- . *Du Système Industriel, 2e Partie*. Paris: l'auteur, 1821.
- . *New Christianity*. London: Wilson, 1834.
- . *Oeuvres de Saint-Simon*. 6 vols. Vol. I, Paris: Dentu, 1868.
- . *Oeuvres de Saint-Simon*. 6 vols. Vol. IV, Paris: Dentu, 1868.
- Scott, John, and Ray Bromley. *Envisioning Sociology*. Albany: State University of New York Press, 2017.
- Sociological Society. *Sociological Papers*. 3 vols. Vol. I, London: Macmillan, 1905.
- . *Sociological Papers*. 3 vols. Vol. II, London: Macmillan, 1906.
- Sociological Society Cities Committee. *Papers for the Present*, 2. London: Headley Bros., 1917–9.
- . *Papers for the Present*, 9. London: Headley Bros., 1917–9.
- Soja, Edward W. *Postmetropolis*. Oxford: Blackwell, 2000.
- "The Strike in the East End." *Northern Echo*, 26 Aug. 1889.
- Swinny, S.H. "Two Faithful Lives." *Positivist Review*, no. 315 (March 1919): 286–7.
- "Telegraphic Intelligence." *Daily News*, 7 Jan. 1971.
- Veblen, Thorstein. *The Theory of the Leisure Class*. New York: Modern Library, 1934.
- "The War between Prussia and France." *Bee-Hive*, 7 Jan. 1871.
- Wilson, Matthew, "Labour, Utopia and Modern Design Theory: the Positivist Sociology of Frederic Harrison," *Intellectual History Review* (2017): 1–23.
- . *Moralising Space: the Utopian Urbanism of the British Positivists, 1855–1920*. London: Routledge, 2018.
- . "The Utopian Moment: the Language of Positivism in Modern Architecture." in Maria do Rosário Monteiro and Mário S. Ming Kong (eds.), *Utopia(s) Worlds And Frontiers Of The Imaginary* (CRC Press), 2016.
- Wright, T.R. *The Religion of Humanity*. Cambridge: Cambridge University Press, 1986.
- Wunderlich, Roger. *Low Living and High Thinking at Modern Times, New York*. Syracuse: Syracuse University Press, 1992.
- Young, Robert and Pierre Clavel, eds. "Planning living cities: Patrick Geddes' legacy in the new millennium." Special issue, *Landscape and Urban Planning*, 166, no. 1 (2017).



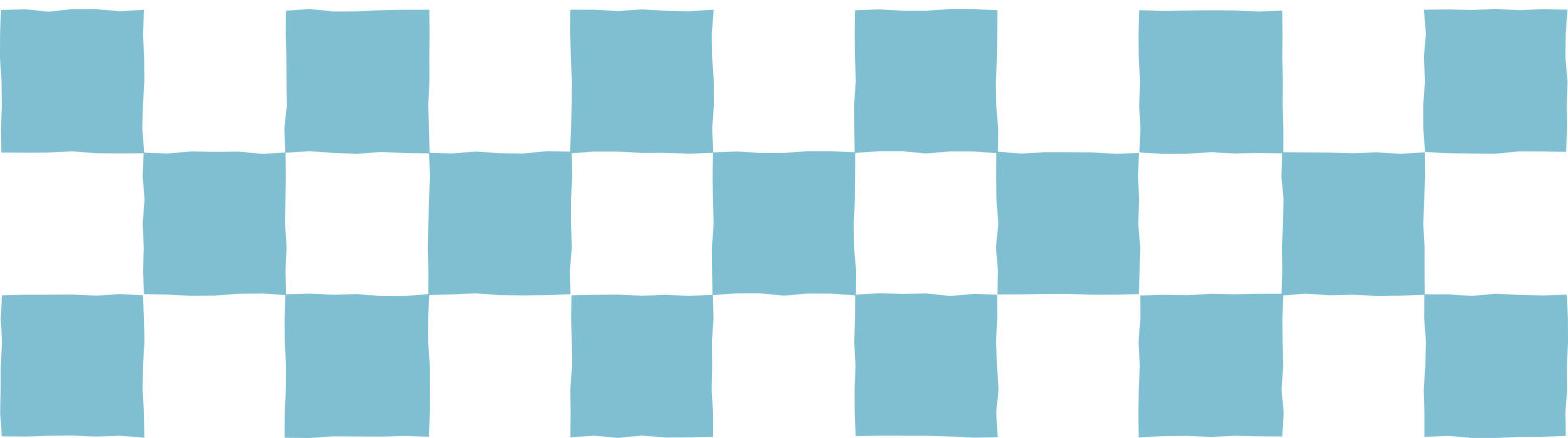
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

44 Superblock and Neighbourhood Unit



Superblocks, neighbourhood units and residential islands as fragments of the collage city. Housing estates in Italy and Spain in the 1960s.

Carmen Díez Medina (Department of Architecture, School of Ingeneering and Architecture, University of Zaragoza), Javier Monclús (Department of Architecture, School of Ingeneering and Architecture, University of Zaragoza), Isabel Ezquerro (Department of Architecture, School of Ingeneering and Architecture, University of Zaragoza) and Sergio García-Pérez (Department of Architecture, School of Ingeneering and Architecture, University of Zaragoza)

In the intense debate that surrounds modernist housing estates in Europe there is a common argument: the contrast between the high quality of urban spaces in the compact traditional city and the low quality of new mass housing developments. In our opinion, the comparison should be made not with the traditional city but with the remaining peripheral landscape. The question is: do those 'fragments' of the modern 'collage city' that float between infrastructures and urban voids have greater or worse urban quality than the so-called 'ordinary peripheries'? In this regard, determining the level of isolation from or integration into the immediate urban tissue is a key issue.

In this paper we consider what Anthony Sutcliffe called a 'specifically Latin culture of urbanisme', in particular we focus on eight case studies located in four Southern European cities (Madrid, Barcelona, Rome and Milan). The selected housing estates – that could be extended to many other cases – are paradigmatic examples of 'modernist housing estates' and represent a good sample of this relevant episode for the history of functionalist urbanism. The purpose of this analysis is to determine how these 'fragments' developed in regard to their immediate urban context: whether today, fifty years after their construction, they are still isolated 'fragments' and whether the quality of their urban spaces is better or worse than the quality of the 'ordinary peripheries' that developed in parallel. The eight analysed case studies provide a sufficiently representative sample of locations in the urban structure of each city which allows to comment different ways of integration or isolation regarding the surrounding urban tissue. How were they designed and with what specific features, compared to their European counterparts? What role and impact did urban planning and projects have in their fragmentary development? What conclusions can we draw comparing these *quartieri* and *polígonos* fifty years later? What are the values and weaknesses of those 'fragments' in comparison with the urban tissues of the surrounding 'ordinary peripheries'?

Occasionally, these housing estates served to qualify the anodyne peripheries by endowing them with recognisable elements. In other cases, the often obsessive attempt to create 'self-sufficient' and 'clearly separated' complexes affected their excessive isolation from the urban environment, hindering their subsequent integration. The objective of this analysis is to overcome 'generic stories' and go more in depth in urban planning and design cultures.

Neighbourhood unit in Brazilian new towns: foreign idea and local urban life

Renato Rego (Universidade Estadual de Maringá)

New towns were created in twentieth-century Brazil in line with governmental nation-building discourse and planning agenda, be it a democratic or a dictatorial regime. Urbanization was thought to be a path to modernization and new towns were an instrument of development in the hinterland agricultural frontiers. As a sign of progress, contemporary European and North-American planning ideas were implemented and the North-American neighbourhood unit became a recurrent feature of innovative urban settings, which were to establish new urban practices and change social behaviour as part of the country's modernization process. This paper examines how the new urban settings were appropriated. Did new towns and innovative urban forms really result in new living patterns? Was the neighbourhood unit straightforwardly accepted as a new urban condition? Did it meet passive compliance or strong opposition? Worldwide, the transnational diffusion of planning theory has shown that foreign ideas have been selectively adopted and conveniently adapted in various contexts and different historical times, thus revealing assimilation, resistance, and recreation; local planners have contributed to the transformation and contextualization of alien ideas. Drawing upon the Americanization of Brazilian society and bearing in mind that cultural products are not faithfully copied, but rather reproduced through a complex cultural process, this paper explores the transfer, interpretation and, particularly, the appropriation of the neighbourhood unit in Brazil. As a case study, the paper includes a range of towns, comprising new capital cities and agricultural-settlement towns, planned during different periods of the country's history, in accordance with early twentieth-century academicist urbanism or post-war functionalist planning. The original layouts and present situations of neighbourhood units in the cities of Goiânia (1933-36), Angélica (1954), Brasília (1957), Rurópolis (1972) and Palmas (1988) are analysed. As a result, the paper exposes contradictions and conflicts between the universally valid idea, the planners' visions, and the cultural and social appropriation and use of the urban forms - in short, mismatches between how they were imagined and how they were lived. Due to physical inadequacy and cultural incompatibility, neighbourhood units were either considerably transformed or rejected and replaced by more traditional, conventional urban configurations, for a foreign planning idea is truly incorporated only when it makes sense in the cultural realm that has adopted it.

The Global Migration of Modernist Affordable Housing: Repeated Architectural Mistakes or Resilient Urban Transformation?

Lawrence Vale (Massachusetts Institute of Technology) and Laura Wainer (Massachusetts Institute of Technology)

Over the last century, the troubled Euro-American experiment with high modernist social housing has traveled widely across the global South, most obviously in terms of stark architectural forms and superblock urbanism. Across the planet, planners have duly embarked on repeated efforts to clear places labeled as “slums” and to replace them with modern alternatives. Yet, it has rarely been easy to pair high standards of housing with low incomes of people. Given these circumstances, what are the identifiable patterns of housing knowledge that crossed geographies, political-economic scenarios and time? And, how did international housing knowledge and expertise impact local practices and populations in both the South and North?

This paper begins by examining the forms and agendas behind American public housing, with its modernist superblocks and initial social selectivity. We then consider how these same architectural and social questions have been engaged in cities of the global South. The effort here is less to document direct formal or policy transfer. Rather, we seek to analyze the assumptions and priorities that come packaged with ideas about housing policy and ideals of architectural modernism: the ways that social housing has been as much about the “social” as it has been about the “housing.” The ultimate goal of this paper is to raise questions about the nature of the affordable housing challenge by demonstrating its connection to more holistic efforts that engage livelihoods, environmental quality, security, and communal governance.

The paper concludes with two case studies illustrating different processes of adaptation of Euro-American modernism that also reveal the adoption of local, holistic processes that engage the “social” with the “housing.” First is the Joe Slovo informal settlement in Cape Town, South Africa. Its phased housing redevelopment since 2004 exemplifies the evolution of modernist post-apartheid housing policy. The project, which started as any other top-down housing intervention, has been transformed into an inclusive experience of community empowerment through the realization of housing rights. The second case, Ciudad del Bicentenario in Cartagena, Colombia, is a typical modern, large-scale, low-density housing project implemented by Fundación Mario Santo Domingo, a non-profit organization that has made significant efforts to introduce their Integrated Development for Sustainable Communities model—driven by the objective of “building communities, not just housing.”

Findings indicate that in the field of affordable housing, forms and norms travel together. The most important part of the North-South transfer of ‘social housing’ has been the social engineering part rather than the housing. As the examples from Cape Town and Cartagena suggest, however, sometimes there can be complex learning, especially from multi-phase projects. Once it is agreed that affordable housing in itself means little unless accompanied by a more holistic approach economic well-being, environmental protection, personal security, and inclusive governance, it becomes possible to see that exemplary projects in the global South may have much to teach their northern progenitors. This paper reveals that at very least, it should be clear that any learning is multi-directional and at two scales: between the North and South, and between governments and communities.

Can physical neighbourhoods be sustainable? The influence of the designed physical environment and personality traits on the ability of residents in Geelong Australia to sustainably meet their basic human needs

Ross Wissing (Deakin University), David Jones (Deakin University) and Anna Klas (Deakin University)

Australia is often called the first suburban nation. This low-density form of living was enshrined to enable early settlers to meet their basic needs themselves around their homes as most European colonisers did not believe that there was an existing infrastructure to meet these needs. Australia was Terra Nullius- ‘nobody’ s land’ .

Suburbs are comprised of neighbourhoods. A neighbourhood is ‘...a collection of people who share services and some level of cohesion in a geographically bound place’ . Four levels of neighbourhood are now recognised - face-block, residential, institutional and community. Western society sees neighbourhoods as being a modern phenomenon, mostly through Howard’ s ‘Garden City’ and then Perry’ s ‘Neighbourhood Unit’ . However, recent scholarship demonstrates that neighbourhoods have been a central part of non-Western urban societies over time. Consequently neighbourhood organisation is of fundamental importance in human societies and are probably universal.

Perry offered the Neighbourhood Unit as an instrument for addressing social problems including alienation, youth delinquency, and lack of civic participation through enhancing the physical design of the community. Since the 1960s there have been ongoing debates about the ‘negative’ societal impacts of the ‘Neighbourhood Unit’ and the subsequent detrimental effects of physical determinism on social processes and capital formation in urban areas. Such criticisms of ‘social engineering’ have increasingly been refuted with the rationale behind the physical design of the neighbourhood unit being only to create opportunities for interaction between individuals and groups rather than determining the nature of those interactions.

What is not recognised in these critiques and discussions is that design of any place, and the broader cultural landscape in which it sits, has both a physical and social deterministic impact. Thus, a key question is not whether there are impacts, but whether these impacts can be sustainably absorbed within the capacity of the urban ecosystem, and their functions and processes, that sustain the ecosystem. These are key elements being investigated in a major assessment of the human impact on the environment, entitled the Millennium Ecosystem Assessment (MEA), launched by the United Nations Secretary-General Kofi Annan in 2000.

Within this social and policy context, this paper investigates the influence of personalisation and physical design since European colonisation of Australia on the ability of residents to sustainably meet their basic needs from their private backyards at the face-block neighbourhood scale within the underlying ecological processes. The study venue, Geelong, is the second least sustainable of Australia’ s 20 largest cities. The research considers four distinct urban design periods in Geelong enabling a temporal assessment.



Superblocks, neighbourhood units and residential islands as fragments of the collage city. Housing estates in Italy and Spain in the 1960s.

Carmen Diez*, Javier Monclús**, Isabel Ezquerro***, Sergio García***

* Associate Professor of Architectural History and Theory, University of Zaragoza, cdiezme@unizar.es

** Full Professor of Urbanism, University of Zaragoza, jmonclus@unizar.es

*** PhD research assistant, University of Zaragoza, iezquerro@unizar.es / sgarciap@unizar.es

In the intense debate that surrounds modernist housing estates in Europe there is a common argument: the contrast between the high quality of urban spaces in the compact traditional city and the low quality of new mass housing developments. In our opinion, the comparison should be made not with the traditional city but with the remaining peripheral landscape. The question is: do those ‘fragments’ of the modern ‘collage city’ that float between infrastructures and urban voids have greater or worse urban quality than the so-called ‘ordinary peripheries’? In this regard, determining the level of isolation from or integration into the immediate urban tissue is a key issue. The aim of this paper is to study eight housing estates in four cities (Rome, Milan, Madrid, Barcelona) and analyse how these ‘fragments’ developed in regard to their immediate urban context. How were they designed and with what specific features, compared to their European counterparts? What role and impact did urban planning and projects have in their fragmentary development? What conclusions can we draw comparing these *quartieri* and *polígonos* fifty years later? What are the values and weaknesses of those ‘fragments’ in comparison with the urban tissues of the surrounding ‘ordinary peripheries’?

Keywords: modernist housing estates, *polígonos*, *quartieri*, neighbourhood units, superblocks, ordinary peripheries, Italy, Spain, urban forms, mapping urbanism, modernist legacy, urban design

“Together, these two conceptions of the city may be seen as the alternative readings of a figure-ground or solid-void relationship; the one, a city of isolated solids in a continuous void, the other, a condition of defined voids (streets, squares, etc.) contained within a virtually continuous built solid”¹.

Fred Koetter and Colin Rowe

Introduction

Koetter and Rowe’s Collage City approach has sometimes been used to demonstrate the loss in urban quality of modern developments which shaped the peripheries of European cities in the 1960s and 1970s. The acceptance of a piecemeal development led Rowe to coin the concept of the ‘city as a collage’, as an ‘aggregate of discontinuous fragments’ that rejects the utopian dream of modernist urban planning. From this perspective, housing estates can be seen as fragments that played an important role in the shaping of modern peripheries.

In the intense debate that surrounds modernist housing estates in Europe, and despite the variety of their urban locations, there is a common argument: the contrast between the high quality of urban spaces in the compact traditional city and the low quality of new mass housing developments. In our opinion, the comparison should be made not with the traditional city but with the remaining peripheral landscape. The question is: do those ‘fragments’ of the modern ‘collage city’ that float between infrastructures and urban voids have greater or worse urban quality than the so-called ‘ordinary peripheries’?

In this regard, determining the level of isolation from or integration into the immediate urban tissue is a key issue. The aim of this paper is to study eight case studies and analyse how these ‘fragments’ — superblocks, neighborhood units, or residential islands — have developed in regard to their immediate urban context fifty years after their construction.

1. Housing in post-war urban planning: neighbourhood units and superblocks

During the first two decades after the Second World War — with a time lag of 20-30 years — European cities began to implement the modernist principles of the Athens Charter (1933) on a large scale. Traditional extension plans changed to ‘open urbanism’, and modernist housing estates appeared, using Koetter and Rowe’s concept, as ‘isolated solids’ (superblocks) floating in a ‘continuous void’.



There were several factors explaining why housing estates became the new ‘urban pieces’ that, to a large extent, contributed to shaping the peripheries of the modern city. The four most relevant are outlined below.

First, the new scale of developments and their growing size. Residential units grew bigger, from plots and blocks to superblocks and large housing estates². Colquhoun refers to “large pieces of real estate, each of which is financed and organised as a single entity”³. Second, the triumph of the concept of the neighbourhood unit, which consolidated during the 1930s and 1940s and became “the most important planning paradigm after 1945”⁴. Several authors see this triumph as the result of the convergence of two parallel traditions: the Garden City and Modernist urban planning⁵. Third, the adoption of the typology of ‘towers and slabs’ or serial blocks as an urban form representative of modernist mass housing⁶. Fourth, the increase of road transport and highways and the growing importance of road systems. The main idea of 20th century highway design was that roads, like railways, should have their own permanent space for uninterrupted driving.

Housing estates thus became a kind of urban laboratory that facilitated the growth of the city through modular ‘fragments’ of housing units and superblocks, often floating in the ‘continuous void’ that characterised the peripheries of European cities. In such a laboratory, the role of renovated discourses, such as the ‘modernist organicist interpretation of urban planning’ — which dominated after the Second World War — together with a growing concern for the community, the human scale, etc, was essential⁷. These views were not so new; the modernist city was initially thought of as an organic system of aggregated ‘urban cells’ shaped like superblocks, residential units, neighbourhood units or urban districts⁸. The paradigm of an ‘organic modernity’, with the idea of planned communities that would structure urban growth, was shared throughout the international urban planning culture. Several variables led to a growing autonomy of the new residential units or superblocks — whether planned that way or not — especially in the planning of neighbourhood units⁹.

We will now explore the specific case of Latin European housing estates, which grew as piecemeal developments of a modern ‘collage city’.

2. Italian and Spanish post-war urban planning and mass housing experiences: *quartieri* and *polígonos*

This article focuses on Italy and Spain, two countries with a similar and deep urban tradition¹⁰. During the 1950s, both experienced a first cycle of urban modernisation, whereas a more explosive and less controlled second cycle took place in the 1960s. In this context, housing an increasing population became a critical issue, especially in large cities such as Rome, Milan, Madrid or Barcelona. Even though both countries faced similar implementation difficulties¹¹, it was an opportunity for planning and designing modernist housing estates following the principles of CIAM. *Polígonos de viviendas*, *quartieri* and other forms of mass housing were the urban units that characterised the fragmentary growth of Italian and Spanish cities in those years.

In Italy, the ambitious, successful Piano INA Casa (National Insurance Institute) programme was defined by Samonà as “a magnificent machine for producing houses”¹². The results were, somehow, contradictory, but the experimentation was unquestionable. The drive of the INU (National Institute of Town Planning) and the new stage of the journal *Urbanistica* are evidence of the emergence of a strong social and cultural urban vision. Some architects of the cultural elite were protagonists of the new modernist ‘organicist urbanism’ developed during the 1950s and 1960s. In Italian urban planning culture, the most elaborate discourse was associated to the *Movimento Comunità* founded by the industrialist A. Olivetti, whose ideals were “an original re-interpretation of the regionalism of Lewis Mumford”¹³. The concept of ‘quartiere organico autosufficiente’ — understood as social, urban planning and an architectonic unit — was a domestic version of the urban quarter and neighbourhood unit ideology¹⁴.

In Spain, meanwhile, state institutions were created to address the housing shortage; among them, the INV (National Housing Institute), which launched plans to build hundreds of thousands housing units¹⁵. As in Italy, there were substantial continuities, but also, some important reinterpretations of the CIAM urban planning principles, with the adoption of the modernist organicist paradigm. The role played by the architect G. Alomar is a reflection of how organicist ideas were introduced in Spain, directly from L. Mumford first and then Gaston Bardet¹⁶. Special emphasis was placed on hierarchical “*estructuras nucleares*” (nuclear structures), with the ‘barrio’ as a sort of ‘town inside a town’ that should be as autonomous as possible¹⁷. Those organicist visions were included in the INV official regulations and general plans approved during the 1950, with the progressive adoption of the neighbourhood unit concept¹⁸.



The analysis of Italian and Spanish examples highlights the difficulty of their integration into peripheries characterised by piecemeal developments and a poor urbanity. This made it difficult to achieve the 'urban organism' that modern urban planning dreamed of in the post war years. On this basis, we will move on to analyse some examples.



Figure 1: Superblocks, neighbourhood units and residential islands as fragments of the collage city. Location of the eight case studies in Rome, Milan, Madrid, Barcelona (2015). Source: Maps and graphs made by the authors

3. Four cities, eight examples: Rome, Milan, Madrid, Barcelona

We will now explore some Italian and Spanish urban planning and design episodes in greater detail by contrasting eight case studies located in four Southern European cities (Madrid, Barcelona, Rome and Milan). The purpose of this analysis is to determine whether today, fifty years after their construction, they are still isolated 'fragments' and whether the quality of their urban spaces is better or worse than the quality of the immediate urban context. The selected case studies offer a significant sample that could be extended to many other cases¹⁹.

Rome: Decima²⁰. Located on the southern peripheries of Rome, it emerges as linked to the process that transforms the EUR into a directional centre. According to Tafuri, in those years the EUR represented the "only real directional pole of the capital"²¹ and its consolidation was accompanied by a policy that encouraged the construction of houses close to new jobs. Although it was a depressed area and not well communicated with the urban centre, its location was strategic, 1 km away from the new ministerial centre.

The new residential complex emerges as an island in the agricultural landscape that surrounds it. Two main roads divide it into four quadrants and ensure a connection with the city. Inside each quadrant, traffic circulation is more domestic²². The complex is created around a central void, from which blocks of four-or-five-storey curvilinear linear buildings 'grow', resulting in clean and dynamic visual perspectives. It is a 'self-sufficient' neighbourhood, a vast and 'organic' example of urban and architectural planning²³.

Over the years, the project, which radically altered the agricultural periphery landscape by 'drawing' a hierarchical system of streets and blocks, has proved its urban quality²⁴. Communication with the centre of Rome has improved considerably. However, this 'fragment' of a modern city that once 'floated' in agricultural fields is still seen today as a residential island, since the fabric used to consolidate the peripheries that surround it has not sought continuity through a connection with Decima²⁵.

Rome: Casilino²⁶. It is located on the eastern peripheries of Rome, on land that was occupied by car scrapyards, sheds and old buildings²⁷. Casilino corresponds to one of the 16 area plans from the first PEEP (Plan for Economic and Popular Construction) biennial programme. The context into which it is inscribed was no different from that of other peripheries in Rome, comprising scattered buildings that did not manage to create a recognisable area. The idea that a neighbourhood should convey the idea of belonging to the city emerged within that climate of criticism towards the contemporary city.

This new urban 'fragment' sought to radically distance itself from a periphery that has no identity, inserting itself with a 'modern' gesture recognisable from above. The planimetric scheme comprises 29 buildings of variable heights arranged in a 'fan' shape, according to directrices that converge onto four centres²⁸. The use of this dynamic geometry created perspective effects in the spaces between blocks and served as an open solution towards the adjoining areas that admitted future extensions²⁹.



Just as its architects intended, Casilino 23 stands out today as an easily identifiable city fragment, especially when compared to the chequered fabric of the neighbouring Centocelle or to the other adjacent areas of spontaneous peripheries. Its status as an enclave is made more manifest by the roads that surround it³⁰. The strength of the urban project has absorbed the variations of the architectural project³¹. Its appearance is that of a modern and functional urban complex, with wide avenues and well-maintained intermediate spaces. In the words of Quaroni himself: “In the middle of the chaos of the Casilino neighbourhood, this great island shines like a jewel”³².

Milan: Feltre³³. It is located in the northeastern periphery of Milan, next to Lambro Park, on the northern edge of the urbanised area of Lambrate. This favoured location helps it avoid taking on the same enclave character of other complexes. Although Pollini contravened the INA Casa prescriptions to build low-density neighbourhoods³⁴, Feltre is one of the most successful examples of the ‘coordinated initiatives’ policy, which in the 1950s and 1960s led to the construction of numerous ‘self-sufficient neighbourhoods’³⁵ in the Milanese periphery³⁶.

High ten-storey piecemeal blocks act as organic ‘curtains’, as a filter between the city and the park, allowing it to penetrate the housing estate thus creating three large green cores. A fourth smaller nucleus is interwoven to the West with the existing urban fabric by means of four-and-five-storey blocks that enclose semi-open spaces. The neighbourhood services, such as stores and collective facilities, are located in those spaces. Pollini sought to articulate large buildings of overtly urban character, similar to the neighbourhood of Harrar, but “with an attenuated rigidity”³⁷.

An organic integration with the park and the city (morphological, but also because the neighbourhood facilities function well) is largely responsible for the way the complex ages so well³⁸. The urban project achieves a convincing balance between the idea of the city as a compact phenomenon and the extension plans adopted by principles of modern urbanism (zoning, neighbourhood units, superblock, etc.). This is a case that serves to reinforce the thesis of the neighbourhood as a filter between the ‘community’ and the city, while subdivided into ‘neighbourhood units’³⁹.

Milan: Monte Amiata⁴⁰. Located on the northwest outskirts of Milan, it is part of the Gallarate 2 neighbourhood. In the 1940s, the mining company Monte Amiata acquired an agricultural field which the 1953 Piano Regolatore (PR) zoned as residential. For the 1956 PR, Bottoni put forward an interesting proposal for the Gallarate 2 that included those plots, but it was never developed⁴¹. The 1963 Piano di Zona of the Milan City Council zoned the area for the construction of popular affordable housing⁴².

The complex can be described as an ‘architectural artefact’ that is distinctly separated from the anonymous panorama of the surrounding periphery⁴³. It represents the expression of the discourse of the ‘autonomy of architecture’ and the strategy of designing fragments as urban pieces which could qualify the disorder peripheries of Milan and prefigure new more complex ways of life⁴⁴. Monte Amiata shows how the Italian architectural culture of the explored the link between building typology and urban morphology as an instrument of knowledge of the city and as a methodological foundation of the project⁴⁵.

This is a clear and deliberate example of a ‘residential island’. Today, perimeter fencing contrary to the project’s initial spirit of openness contributes to its isolation and the abandonment of community and commercial facilities, which were designed at a neighbourhood scale, but have lost meaning due to the complex being privately managed⁴⁶. The project, based on the hypothesis that the city is made up of ‘finite parts’, is, in Tafuri’s words, “too open to the environment (...) to really be a self-sufficient fragment while, at the same time, too ‘designed’ to become a methodological reference”⁴⁷.

Madrid: Gran San Blas (Unit F)⁴⁸. Located on the eastern outskirts of Madrid, it is one of the seven superblocks — or residential units — comprising the original Gran San Blas project; the most representative social housing complex of those years⁴⁹. Driven by the 1958 Madrid Social Emergency Plan, Gran San Blas could be considered an instance similar to Comasina in Milan⁵⁰, an example of the intense activity by official bodies created in Italy and Spain to construct social housing.

With the modest means that characterised the Spanish interventions of those years, Unit F proposes a solution that is faithful to rationalist orthodoxy. Compared with the other three Gran San Blas units, where the teams worked together to obtain a homogeneous design, the architects of Unit F shared out the design of the houses.



The result was that unit F had the most varied image, with 10 different typologies. Barbero leaves his mark with the three porticoed squares created by grouping the blocks into a helix.

Although the scale of both the buildings and the intermediate spaces is controlled, the construction and urbanisation are of very low quality. The status as an enclave has been maintained, mainly because the city grew around it with urban and architectural typologies that are different from those of the modest rationalist experiment, which was crystallised inside the perimeter road system. The life of the residential unit is concentrated in the three aforementioned squares with the presence of shops and bars that heroically resist the dominance of shopping centres⁵¹.

Madrid: Saconia⁵². In 1963, Antonio Perpiñá developed the Saconia Partial Plan for 8,000 homes in the Dehesa de la Villa in Madrid. The plots were barren and significantly sloped, with almost 50 metres difference in altitude from one end to the other.

As in the Decima *quartiere*, the streets were assigned to road traffic, defining the urban fabric of the neighbourhood. However, in this case it was hexagon-shaped, in line with the structuralist explorations of the time, which formed irregular polygons that are assimilated into neighbourhood units⁵³. These units are pedestrianised, interconnected and leave the central space free to place facilities with the aim of creating socially recognisable communities. A canonical urban centre is also proposed to serve as a community and commercial centre. The result is an architectural continuum that “evades becoming a linear block through the way the houses are grouped”⁵⁴.

As in most of the cases studied, the status as an enclave is perceived both by the limit established by the road on two of the three sides of the perimeter and by the peculiar morphological solution, which makes it an anomaly in the disordered landscape that surrounds it. Although the initiative was valued at the time for its organic quality⁵⁵, the neighbourhood presents obvious problems⁵⁶. For locals and the local government alike, the initiative of open private spaces for public use resulted in a continuous source of problems that, even today, are reflected in the lack of maintenance in some of those spaces.

Barcelona: Besós Southwest⁵⁷. It is located in the northeastern periphery of Barcelona, with a delimitation defined by the 1958 Social Emergency Plan. The partial plan was drafted by the same architects who designed the project in 1959. It was proposed as a development of provisions of the 1953 General Plan for the entire “Levante area”, a plan that responded strictly to the organicist conceptions of the period, and that included partial plans comprised in the 1956 Land Law, essential to Spanish urban legislation.

Unlike other Barcelona *polígonos*, this one is inscribed in the orthogonal grid of the *Ensanche*, projected by Cerdá in a sector that had not yet been developed or urbanised, but with an innovative planning that associated the general scale with the sector layout scale⁵⁸. The Partial Plan has a low-height construction central hub, which is surrounded and protected by taller constructions (14 storeys). The superblocks are defined by six-storey blocks and two-storey rows, combining a variety of housing typologies and configuring the intermediate spaces through educational or commercial facilities.

The subsequent urban growth processes explain the substantial changes in the relative integration of the complex with regard to the adjoining neighbourhoods, diluting those marked edges that, separately, endow the complex with an original identity. In particular, since the 1990s, the barriers that for decades represented ‘vacant’ plots or poorly developed urbanisations⁵⁹ gave way to the requalification of public spaces (with the configuration of the new road systems and pedestrian promenades (Rambla de Prim).

Barcelona: Bellvitge⁶⁰. Located in the southern peripheries of Barcelona, in the adjoining municipality of L’Hospitalet, its construction was promoted by the private company Ciudad Condal⁶¹, in delta area lands dedicated to irrigated agriculture. Its borders were road and railway infrastructure: the prolongation of the Gran Vía to the south; train tracks from the coast to the east; Bellvitge Medical Complex to the west; and an industrial estate separating Bellvitge from the centre of L’Hospitalet to the north⁶².

The order is radical rationalist, with all blocks southern-facing, very narrow and of great height⁶³. The road layout is also aggressive: a powerful central axis — the Rambla de Bellvitge — that divides it into two, and a ring road. Small sections of cul-de-sac streets that give access to the buildings emerge from this road system⁶⁴. Each unit in turn contains a commercial building on the ground floor with a tree-lined perimeter that structures the complex into a totally autonomous and recognisable urban piece⁶⁵.



The transformation processes of Bellvitge have contributed to its improvement, both due to the centrality acquired during the urban transformation experienced by the entire sector located in the vicinity of the airport and the Barcelona fair tertiary spaces, and to the improvement in public spaces⁶⁶. The incorporation of small buildings for commerce has worked very well. Although nowadays the *polígono* continues to be an enclave in first metropolitan periphery, it establishes new relationships and integrates relatively well in the city, without continuously ‘anchoring’ itself to traditional urban spaces.

These eight cases are just a sample of the hundreds that were built during the 1960s and 1970s all over Europe⁶⁷. They were all projected as ‘unitary fragments’ of a modernist city conceived as an ‘organic system’ of aggregated ‘urban cells’ and are still perceived today as ‘anomalies’, ‘islands’ and ‘enclaves’, units with their own identity, which is intrinsic to the concept of ‘neighbourhood’, ‘*barrío*’ or ‘*quartiere*’.

4. Conclusions / Epilogue. Enclaves vs. islands in an urban archipelago

How were the Italian and Spanish modernist housing estates designed and with what specific features, compared to their European counterparts? What role and impact did urban planning and projects have in the fragmentary development of those housing estates? In both countries the consolidation of urban planning occurred with some delay compared to its steady development in countries such as the United Kingdom, Holland and Germany after the Second World War. This gap meant that the attractive theories of functionalist organicism and organic urban plans — with their urban cells, superblocks and neighbourhood units — could not be implemented because of a lack of the mechanisms needed to control the processes in progress⁶⁸. The result is that these ‘urban fragments’, instead of being part of an organic plan, remained ‘floating’ in the surrounding ‘ordinary peripheries’. That does not mean that city shaping through housing estates projected and managed as units proved unsuccessful. Occasionally, they served to qualify the anodyne peripheries by endowing them with recognisable elements. In other cases, the often obsessive attempt to create ‘self-sufficient’ and ‘clearly separated’ complexes affected their excessive isolation from the urban environment, hindering their subsequent integration.

What conclusions can we draw comparing these *quartieri* and *polígonos* fifty years later? What are the values and weaknesses of those ‘fragments’ in comparison with the urban tissues of the ‘ordinary peripheries’ that gradually grew in parallel? A comparative morphological perspective can help to better understand the achievements and limits of modern urban strategies; in other words, the advantages and problems of planning a city based on fragments⁶⁹. However, this analysis must be carried out in the context of the parallel construction processes of nearby urban peripheries that make up the traditional and ‘ordinary’ fabric of the peripheries of that period. Thus, this analysis allows us to verify, on the one hand, the widespread use of open block superblocks — more or less ‘organic’ — as an urban management strategy (the Italian cases studied presented more formal, spatially dynamic and riskier geometric solutions than Spanish ones); and, on the other hand, the contrast between street and block networks that made up the traditional and ‘ordinary’ fabric of the urban peripheries of that time in different cities, even when these were consolidated after the complexes themselves did. When analysing morphological integration, we have considered both street patterns and social and functional land uses. Regarding the road systems, the situations vary considerably. In some estates, the road systems are connected to the surrounding street pattern; in others, they have remained isolated due to the boundaries of arterial roadways. ‘Ordinary peripheries’ are normally well integrated with earlier urban developments, since their growth has been gradual. With respect to social characteristics, there are not significant differences between the housing estates and the surrounding peripheries. However, there are relevant differences in the activities. In most occasions, housing estates are just residential — with few commercial facilities; in the surrounding ‘ordinary peripheries’, commerce concentrates in commercial streets.

The problems of fragmentary development evidenced by the construction of these *quartieri* or *polígonos* have been widely considered in the multiple critical views of functionalist urbanism. However, it is also possible to think, as Colin Rowe did, that there is a certain balance between the city of those constructed fragments, or ‘solids isolated in a continuous vacuum’, and the continuous city, in other words, the city of the voids contained in a continuous solid. From this perspective, certain virtues can be recognised in the method of making a city with the superblock in centre stage and the somewhat naive aspiration of setting up neighbourhoods composed of neighbourhood units. That is when the ‘modern islands’ shine like jewels in an urban archipelago. In any case, the processes undergone over the last fifty years have modified the initial situations, sometimes improving the integration with the environment and other times accentuating their condition of enclaves, which hinders reaching the virtues that are attributed to a traditional compact city where streets and blocks act as supports for intense urban life and recognised urbanity.



ITALY

early 1970's

2015

current aerial view

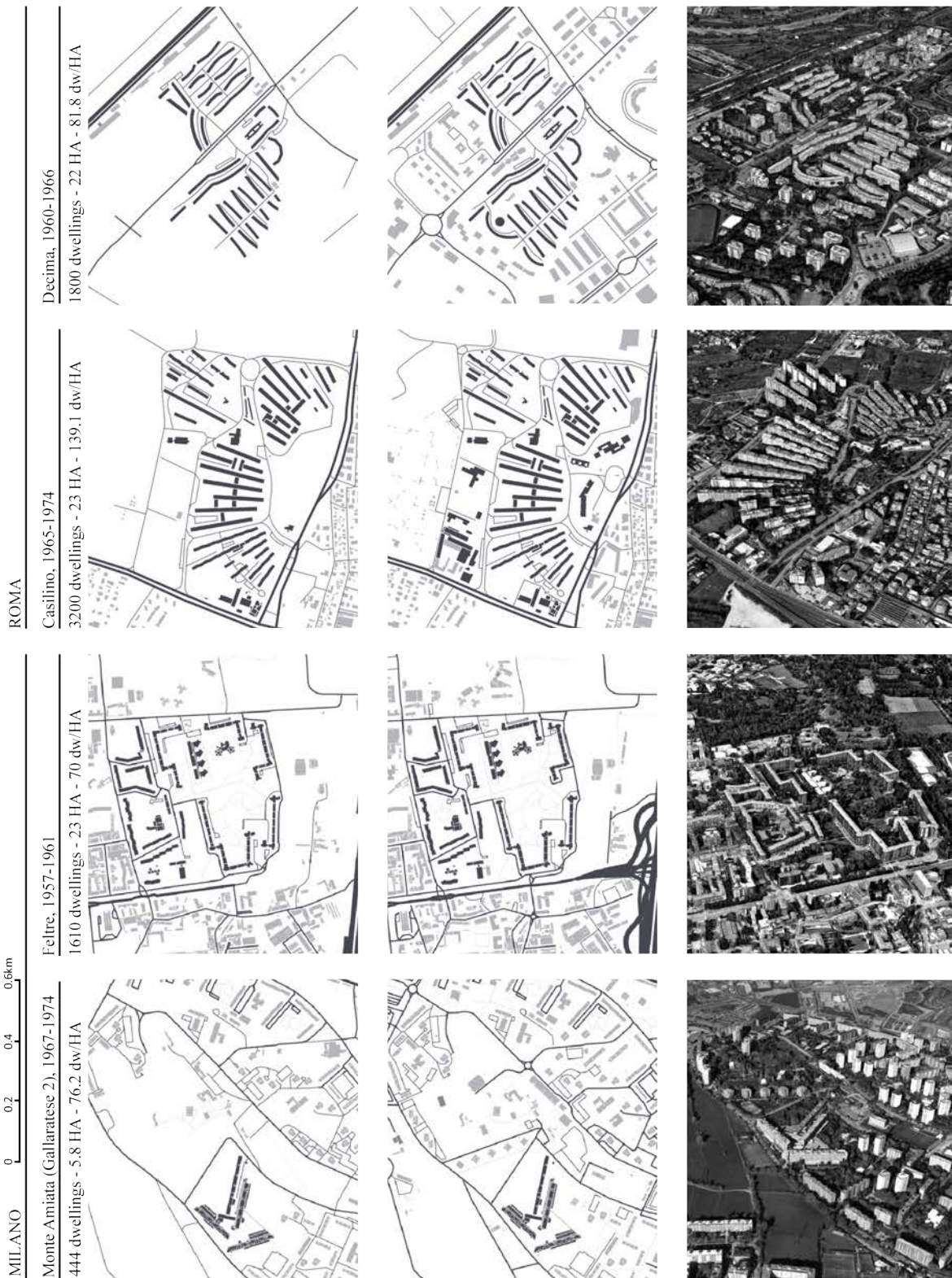


Figure 2: Morphological urban processes: Italian housing states and surroundings peripheries. Source: Maps and graphs made by the authors. Urban morphological approaches such as figure-ground maps can give some clues to better understand similar processes and specificities of housing estates and ordinary peripheries in different cities during the last 40 or 50 years. They help to identify different levels of integration into the surrounding urban tissue.

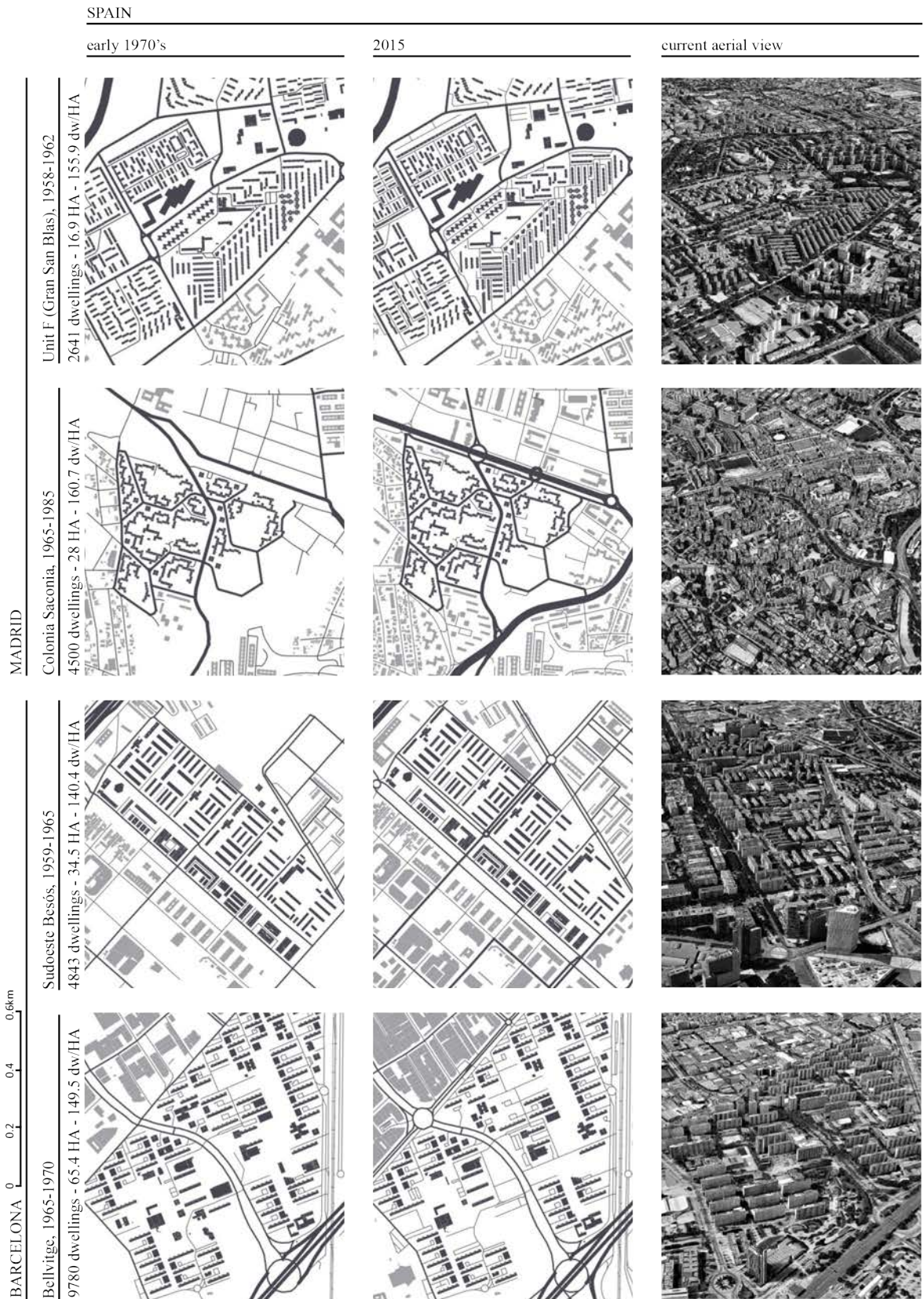


Figure 3: Morphological urban processes: Spanish housing states and surroundings peripheries. Source: Maps and graphs made by the authors All these maps and images shown in figures 1 and 2, however, are not enough to explain deeper transformations, such as changes in land use (from industry to housing), size, densities, etc. We have addressed them in other works, see: Monclús, Diez, 2017.



Acknowledgements

This research has been carried out within the framework of the research project UR_HESP (Urban Regeneration of Housing Estates in Spain, project number I+D+i BIA2014–60059-R) directed by the authors of this text and granted by the Ministry of Economy, Competitiveness of Spain. The authors belong to the group T44_17R Paisajes Urbanos y Proyecto Contemporáneo (PUPC, <http://pupc.unizar.es/urhesp/>) of the University of Zaragoza, funded by the Government of Aragón and directed by J. Monclús. This work was also supported by the Spanish Ministry of Education, Culture and Sports (I. Ezquerro's predoctoral grant FPU 2016/06737) and the Spanish Ministry of Economy and Competitiveness (S. García-Pérez's predoctoral grant BES 2015/072536).

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributors

<http://arquitectura.unizar.es/en/about-us/staff/>

¹ Koetter, F., Rowe, C. 1980, 1978.

² “This building type, together with its different variants and modalities, is usually arranged in a basic aggregation unit, which is not the typical quadrangular block with a surface area of between half and one hectare, but rather a much larger block, which is why it is called a “superblock”. López de Lucio, 2013.

³ And not only concerning housing but also infrastructure, institutions and facilities. Colquhoun, 1985, 82-127.

⁴ Schubert 2014. See also J. Gold, 2007.

⁵ Abercrombie, P., *Planeamiento de la ciudad y del campo* [Planning of Town and Country, 1930]. Madrid: Espasa - Calpe, 1936.

⁶ ‘Towers in the park’ was more than a slogan, Urban, 2011. A wide historiography shows how this complex process was developed in different countries, both in Western and Eastern Europe. See Monclús, Díez, “Modernist Housing Estates...”, 2016.

⁷ The diverse and broad definitions of the concept of organicism hindered a standard understanding of its role in modernity, both in architectural and urbanistic historiography. Monclús, 2017.

⁸ For a global and cross-sectional approach to the culture of urban planning and ‘other urbanisms’, see Díez, Monclús, 2018, chapter 9.

⁹ Indeed, this was one of the critical issues identified by Lewis Mumford in an important article published in *Town Planning Review* in 1954: “Perhaps the first question of importance is what degree of isolation should be accorded the neighbourhood, apart from the inevitable separation made by major traffic arteries”.

¹⁰ In both Italy and Spain, modern urban planning emerged and was institutionalised later than it was in the UK or Germany, due to a slower process of industrialisation.

¹¹ With obvious differences, such as diverse historical political contexts and the existence of a more advanced urban planning culture in Italy. Monclús, Díez, 2017. Piccinato, 2010.

¹² Samonà, G., “Il piano Fanfani in rapporto all’attività edilizia dei 360 liberi professionisti”, *Metron* 33–34, 1949, 14. (in Díez, 2018).

¹³ Even if it underwent “much simplification and misrepresentation”, Mazzoleni, 2003; see also Saibene, A., *L’Italia di Adriano Olivetti*. Roma: Edizioni Di Comunità, 2017. Adriano Olivetti was the sponsor of the review *Urbanistica*.

¹⁴ Associated with the experience of residential units being promoted by the INA Casa programme, “The *quartiere organico*” appeared to be the most suitable way of expressing ideological assumptions, according to which, as stated by Astengo, organic form and cellular structure were the mirror of a democratic society”, Mazzoleni, 2003.

¹⁵ The first Plan Nacional de la Vivienda (National Housing Plan) built almost 100,000 houses per year during the first period (1955-1960). During the 25 years (1939-1964) the Organización Sindical del Hogar (Home Union Organisation) was active, 200,662 were built, in addition to other public housing built by municipal authorities. Sambrić, 2008.

¹⁶ Especially through the Institut international et supérieur d’urbanisme appliqué in Brussels (International Institute of Applied Urban Planning).

¹⁷ The concept of ‘nucleación orgánica’ and the role of the ‘cells’ and neighbourhood units were explained in his exceptional book *Teoría de la ciudad. Ideas fundamentales para un urbanismo humanista (Theory of the City. Key Ideas for a Humanist Urbanism)*, Madrid, in 1948.

¹⁸ An important Italian handbook on urban planning was also translated into Spanish: see Rigotti, 1947, 1952 (translation by A. Perpiñá).

¹⁹ The criteria for choosing this eight case studies are as follows: first, all of them are paradigmatic examples of ‘modernist housing estates’ and represent a good sample of this relevant episode for the history of functionalist urbanism; second, they also offer a sample of locations in the urban structure of each city which allows to comment different ways of integration or isolation regarding the surrounding urban tissue.

²⁰ INCIS *Quartiere* in Decima, 1960-62. L. Moretti (urban project); V. Cafier, I. Guidi, A. Libera, L. Moretti (architectural project). Part of the 1962 Urban Plan. Constructed between 1960 and 1966. INCIS: Istituto Nazionale per la Case degl’Impiegati Statali (National Institute for State Employee Housing).



- ²¹ Tafuri, 1986. The EUR expanded towards the South as a business district and a residential area for the upper-middle class between the 1950s and the 1960s.
- ²² The typical road scheme consists of tree-lined streets, with large parking spaces, some of them in a *cul-de-sac* form, which alternate with green spaces between two blocks.
- ²³ The project provided sufficient services and facilities to respond to the usual demands of a community (comprising mostly civil workers). Although it was not completed in its entirety, as was the case for most of these complexes, the facilities were completed over the years.
- ²⁴ In addition to the urban planning system, the quality of the architectural project, modern construction systems and building typologies are worth noting.
- ²⁵ Eight-storey *palazzine* and five-storey blocks. Neither have the projects which are requalifying the green areas of the neighbourhood.
- ²⁶ Casilino *quartiere*, 1964-65. L. Quaroni (team leader).
- ²⁷ Like the neighbouring neighbourhoods of Mandrione and Pigneto, whose physical degradation and social marginalisation were dramatically depicted by Pasolini in his films.
- ²⁸ The radial arrangement and, therefore, the increasing distance between the buildings, also determines their height: those closest to the centre vary between two and seven floors, while the furthest ones reach a maximum height of 14 floors.
- ²⁹ Together with Casal del Pazzi-Nomentano, Tor de'Cenci and Prima Porta, the Casilino was part of that first generation of projects that directly (perhaps also due to a certain formalism) included research done into town design, which, in those years, were in the focus of interest of a significant part of the Italian architectural culture. Rossi, *Roma: guida all'architettura moderna 1909-1984*. Roma, Laterza, 1991, 266.
- ³⁰ One of those roads acts as a barrier to the urban park Villa de Sanctis, in a clear contrast to the integration with green spaces achieved by the Feltrine *quartiere* in Milan.
- ³¹ The intermediate spaces are rarely frequented. The presence of a shopping centre located in the core of the northernmost fan is, as in other neighbourhoods, a reality against which small businesses in the interior of the neighbourhood cannot compete. The complex is equipped with green spaces and facilities and with a large square that aspires to become the heart of the neighbourhood. Muso, Labanca, "Spazio sociale, identità e funzione urbana. Il caso di Casilino 23", in Giuseppe Strappa (ed.), *Studi sulla periferia Est* (Milan: Franco Angeli, 2012): 75-92.
- ³² Solà Morales, M. "Entrevista a L. Quaroni", *UR* 7, 1989. In fact, Casilino has come to be called 'the Parioli of municipality VI', referring to one of the best known Roman residential areas. Strappa, 2012, 82.
- ³³ Quartiere INA Casa - INCIS Feltrine, 1957-60. Gino Pollini (main team leader), Mario Bacciocchi, Luciano Baldessari, Giancarlo De Carlo, Ignazio Gardella, Gianluigi Giordani, Angelo Mangiarotti, Mario Terzaghi, Pier Italo Trolli, Tito Varisco (team leaders).
- ³⁴ Together with the contemporary Vialba I *quartier*, it answers to the management of Milan INA Casa, an entity that in 1957 published a *Guida per l'esame dei progetti*, which included the requirement of low density in new projects. Pollini responds with a high-density solution.
- ³⁵ In Milan, the definition of a self-sufficient neighbourhood was produced through an evolution that started at the heart of the rationalist culture: from its pragmatic and reductive application in the Istituto Autonomo Case Popolari, IACP (Autonomous Institute of Popular Housing) and City Council's recent achievements, more than from the immediate anti-war projects' theoretical positions. Grandi, Pracchi, 2008, 259.
- ³⁶ Boriani, M., Morandi, C., Rossari, A., *Milano contemporanea. Itinerari di architettura e di urbanistica*. Milan: Libreria Clup, 2006, 331.
- ³⁷ Grandi/ Pracchi, 2008, 262.
- ³⁸ In addition, the nature of unitary intervention, from the perspective of the architectural project, prevails over the individual contributions of the buildings' authors (not in vain, most of them are top-leading authors).
- ³⁹ Fabbri, 1975, 38.
- ⁴⁰ Monte Amiata residential complex, in Gallaratese 2, 1967-74. C. and M. Aymonino, A. De Rossi and S. Messaré. Promoted by the Società Mineraria per Azioni Monte Amiata (Monte Amiata Mining Company).
- ⁴¹ Following a canonical urban planning solution, which was not built, consisting of four neighbourhood units divided into neighbourhoods linked by a '*strada vitale*' as the core of the complex, around which the facilities were located. The complex hangs from via Gallaratese as a fast connection to the city centre.
- ⁴² The masterplan was commissioned by Carlo Aymonino, who directly commissioned one of the residential blocks to Aldo Rossi.
- ⁴³ A private periphery, as the authors themselves state, of natural or artificial suggestions: "(...) it has been sought, therefore, to accentuate 'the separation', resorting to a general form that is as compact and constructed as possible, which, at its limit, could almost be a single building or, better yet, a single construction". Aymonino, 1970, p. 27. However, its vocation is open, as it tries to "break the traditional conception of a 'private' building, whose only relationship with 'public' areas in the city is the entrance (...)". Aymonino, C., "Progetto architettonico e formazione della città", *Lotus* 7, 1970, 32. (Quoted in Grandi, Pracchi, 2008, 349).
- ⁴⁴ Molinari, 2014.
- ⁴⁵ Grandi, Pracchi, 2008, 348.
- ⁴⁶ The decision to fence the complex highlights the contradiction implicit in its double condition of open fragment and object/monument imposed on the periphery, exiled from the metropolis but loaded with metropolitan values, as pointed out by Tafuri (1982, 151-153). However, paradoxically, it is possible that closing off the complex probably prevented community spaces from being degraded, as is the case in other examples.
- ⁴⁷ Tafuri, 1982, 151-153.
- ⁴⁸ Plot F in the Gran San Blas neighbourhood, 1958-62. M. Barbero (team leader), V. Benlloch, F. Riestra and R. de la Joya.



⁴⁹ The Gran San Blas project is a paradigmatic example of the application of the principles of urbanism of the Modern Movement: seven large superblocks of different shapes and sizes — those of a residential nature range between eight and 23 hectares — delimited by the arterial road system, and include in its barycentre, as prescribed, a smaller piece (3.26 hectares): the community and commercial centre, which will paradoxically be the area that takes the longest to occupy and construct. Each of the superblocks was designed by a different team of architects. López de Lucio, R. “El Gran San Blas”, in Sambricio, C. (ed.). *Un siglo de vivienda social en Madrid 1903-2003*, vol. II. Madrid: Nerea, 2003, 214-215. See also Bataller, López de Lucio, Rivera, 2004/2017.

⁵⁰ The *quartiere* Comasina, located in the northwest of Milan, represents the paradigm of a ‘self-sufficient *quartiere*’, the largest intervention carried out in the 1950s in Italy by an official entity, the Istituto Autonomo Case Popolari, IACP (Autonomous Institute of Popular Housing).

⁵¹ From a design perspective, one of the most interesting singularities of the complex and also the area of highest urban quality. Díez, 2017.

⁵² Known as City of Poets or SACONIA, as a reference to the name of the property development company (Sociedad Anónima de Construcción e Industrias Auxiliares), 1965-1985. Antonio Perpiñá, Carlos de Miguel y Luis Iglesias.

⁵³ The perimeter streets are defined on a hexagonal grid. The building is projected on a 4.2-metre lattice on the side, a multiple of 30 centimetres, which corresponded to the structure’s centre line and which is signalled throughout the entire plot with a striped concrete pavement. It reinforces a dynamic image that distances it from the rigidity of the orthodox groups of blocks and towers, such as Gran San Blas’ F Unit, which clearly identifies with the principles of urbanism in the Modern Movement and largely with the open block typology.

⁵⁴ Three dwellings in a T-shape, two joined dwellings and two juxtaposed dwellings, as well as the composition of four- or five-storey buildings and eight- or twelve-storey towers. Hernández Aja, A., “SACONIA”, in Sambricio, C. (ed.), *Un siglo de vivienda social en Madrid 1903-2003*, vol. II. Madrid: Nerea, 2003, 120-121.

⁵⁵ When compared to the usual urban poverty of Spanish cities’ peripheries.

⁵⁶ The most significant of which include, accessibility difficulties in the interior to the neighbourhood units, the emergence of residual spaces between the proliferation of ramps, platforms and stairs, and the difficulty in keeping a sense of direction in the dense labyrinthine spaces.

⁵⁷ Besòs southwest *polígono*, 1959-65. Authors: Guillermo Giráldez, Pedro López Íñigo and Xavier Subías (LIGS). The LIGS team (together with E. Giralt Ortet and J. Puig Torné) presented the Besòs Southwest Partial Plan in 1958.

⁵⁸ Thus, the introduction of a new urban structure that furthered the experimentation begun in the 1930s with Le Corbusier and the GATCPAC group’s proposals for the Macià Plan and its organisation through 400 x 400 m superblocks that also correspond to the idea of a neighbourhood unit was essential to the planning of the Besòs complex. See Torres i Capell, M., *La formació de la urbanística metropolitana de Barcelona. L’urbanisme de la diversitat*. Barcelona: AMB, 1999.

⁵⁹ With infrastructure such as towers and high voltage cables... Although “at present we can see how none of the three zones that surround the settlement have followed the original Plan”. Tena, P., *Universalidad y adecuación en la obra de LIGS. 1956-1966* (Barcelona: Universidad Politècnica de Catalunya, 2010, 144.

⁶⁰ Bellvitge *polígono*, 1965-70. Author: Joan Salichs

⁶¹ The Bellvitge *polígono* was promoted as part of 1958 Barcelona *Social Emergency Plan* (which delimited the land to be occupied), although it underwent a complicated administration process. It was finally developed during the second half of the 1960s. Ferrer, 1996, 124.

⁶² An area that has undergone substantial changes in recent years. Hormias, E., Bestraten, S., “Bellvitge, 50 años después: la vivienda como proyecto de ciudad que hace barrio”, in *I Congreso Internacional de Vivienda Colectiva Sostenible*. Barcelona: Máster Laboratorio de la Vivienda Sostenible del Siglo XXI, 2014, 226-231.

⁶³ The first project for Bellvitge (1957) was created by the architect Antonio Perpiñá (1957), with the interesting initiative of a fan, although the final version was carried out by Joan Salichs. The rigidity of the outlines should not be attributed solely to the authors’ interpretation of the principles of modern orthodox urbanism, but also to the willingness of the property developers (in this case private) to simplify the construction process and the production of houses through an extreme standardisation of buildings by using industrialised systems; this case and La Mina are probably the best examples of this in the city.

⁶⁴ The introversion of the complex is reinforced by the clusters that these streets help to shape, with land reserved for parking space and pavements.

⁶⁵ The building is arranged according to a repeatable module that is supported by a central space. Ferrer, 1996, 190. The neighbourhood has 1,140 productive units with a minimum size of 50m² that allows aggregation. Hormias, Bestraten, 2014.

⁶⁶ Rubert, M., “Polígonos sin alrededores”, in AA.VV. *Alrededores* (Barcelona: Fundación Tapies, 2005).

⁶⁷ Monclús, Díez, “CIAM Urbanism revisited”, 2016.

⁶⁸ Terán, 1978; Picinatto, 2010.

⁶⁹ Urban morphological approaches such as the one adopted in this paper can give some clues to better understand similar processes and specificities of housing estates and ordinary peripheries in different cities, as well as the changes taking place during the last 40 or 50 years. They focus on the different levels of integration into the surrounding urban tissue, but, of course, other aspects are also important, such as size, densities, road systems, land uses, etc. We have dealt with them in other works. See: Monclús, Díez, García-Pérez, 2017

Bibliography

Bataller, J.J, Lopez Lucio, R., Rivera, D., Tejera, J., *Guía del urbanismo de Madrid*. Madrid: Gerencia, 2017.

Colquhoun, A. “Architecture and the City.” (1970), in *Essays in Architectural Criticism. Modern Architecture and Historical Change*. Cambridge MA: MIT Press, 1985, 82–127.

Di Biagi, P., “Il piano INA-Casa”, in *Il contributo Italiano alla storia del pensiero*. Roma: Treccani, 2013.



- Díez Medina, C., Madrid, “Absorbiendo la modernidad. Declinaciones latinas de una modernidad europea”, in Lampreave, R. (ed.), *Los años CIAM en España. La otra modernidad*. Madrid: Lampreave, 2017, 74-89.
- Díez Medina, C., Monclús, J., “Dealing with mass housing estates legacy: the need of specific diagnoses from an urban design perspective”, *XXIV Congreso Internacional Seminar on Urban Forms (ISUF) City and Territory in the Globalization Age*, Universidad Politécnica de Valencia, 25-27 septiembre de 2017.
- Díez Medina, C., “Urban planning and ideology: Spain and Italy (1945-1960)”, in *Urban Visions. From Planning Culture to Landscape Urbanism*. Cham, Switzerland: Springer International Publishing AG, 2018.
- Díez Medina, C., Monclús, J. (eds.), *Urban visions: From Urban Planning Culture to Landscape Urbanism*. Cham, Switzerland: Springer International Publishing AG, 2018.
- Fabbri, M., *Le ideologie degli urbanisti del dopoguerra*. Roma: De Donato, 1975.
- Ferrer, A., *Els poligons de Barcelona*. Barcelona: Universidad Politécnica de Cataluña, 1996.
- Grandi, M., Pracchi, A., *Guida all'architettura moderna*. Milan: Libbraccio, 2008.
- Hebbert, M., “Re-enclosure of the urban picturesque Green-space transformations in postmodern urbanism”, *TPR* n. 79 (1) 2008.
- Koetter, F., Rowe, C. *Collage City*. Cambridge MA: MIT Press, 1978. See also: “The Crisis of the Object: The Predicament of Texture”, *Perspecta*, Vol. 16 (1980): 108-141.
- López de Lucio, R., *Vivienda colectiva, espacio público y ciudad. Evolución y crisis en el diseño de tejidos residenciales 1860-2010*. Buenos Aires: Nobuko, 2013.
- Mazzoleni, C. “The concept of community in Italian town planning in the 1950s”, *Planning Perspectives*, Vol. 18, n. 32003, 325–342.
- Molinari, L., “Matteoti Village and Gallarate 2: Design Criticism of the Italian Welfare State, in Avermate, in Swenarton et al., *Architecture and the Welfare State*. London: Routledge, 2014), 259-275.
- Monclús, J., “Entre los CIAM y el urbanismo organicista: tres planes urbanísticos de posguerra”, in Lampreave, R. (ed.), *Los años CIAM en España. La otra modernidad*. Madrid: Lampreave, 2017, 340-357.
- Monclús, J., Díez Medina, C., “CIAM Urbanism revisited. Modernist Mass Housing Estates in Spain: Best, Good, Standard, Poor (BGSP)”, in Tostoes, A., Ferreira, Z. (eds.), *Adaptive reuse. The Modern Movement towards the future*. Lisbon: Docomomo internacional, Casa da Arquitectura, 2016, 779-787.
- Monclús, J., Díez Medina, C., “Modernist Housing Estates in European Cities of the Western and Eastern Blocs: How different?”, *Planning Perspectives* vol. 31/4, 2016.
- _____. “Urbanisme, Urbanismo, Urbanistica. Latin European Urbanism”, in Hein, C., *Routledge Planning History Handbook*. London: Routledge, 2017.
- Mumford, L., “The Neighborhood and the Neighborhood Unit”, *Town Planning Review*, 24:4, 1954.
- Piccinato, G. “A brief history of Italian town planning after 1945”, in *Town Planning Review* 81 (3), 2010.
- Rigotti, G., *Urbanistica. La Técnica*. *ibid.*, *Urbanistica. La Composizione* Torino: UTET, 1947-1952.
- Sambrić, C. (ed.), *100 años de historia de la intervención pública*. Madrid: Lampreave, 2008.
- Schubert, D., “Transatlantic Crossings of Planning Ideas: The Neighbourhood Unit in the USA, UK, and Germany”, in Diefendorf, J., M., Ward, J. (eds.), *Transnationalism and the German City*. New York: Palgrave Macmillan, 2014
- Tafuri, M., *Storia dell'architettura italiana del dopoguerra 1945-85*. Turin: Einaudi, 1982.
- Terán, F., *Planeamiento urbano en la España contemporánea: historia de un proceso imposible*. Barcelona: Gustavo Gili, 1978.
- Urban, F., *Tower and Slab. Histories of Global Mass Housing*. London, Routledge, 2011, 60-62.
- Ward, S., *Planning the Twentieth Century City: The Advanced Capitalist World*. London: John Wiley, 2002.



Neighbourhood Units in Brazilian New Towns: foreign idea and local urban life

Renato Leão Rego*

* *Professor, Universidade Estadual de Maringá, Brazil, rlrego@uem.br*

Neighbourhood units and Brazilian new towns were an instrument of national development in line with the governmental nation-building discourse and planning agenda. Urbanisation was thought to be a path to modernisation and innovative urban settings were to establish new urban practices and change social behaviour. But could neighbourhood units really mean new living patterns? Was the neighbourhood unit straightforwardly accepted as a new urban condition? Did it meet passive compliance or strong opposition? Drawing upon the Americanisation of Brazilian society, this paper explores the transfer, interpretation and appropriation of the neighbourhood unit in Brazil through the analysis of the original layouts and present realities of neighbourhood units in the cities of Goiânia (1933-36), Angélica (1954), Brasília (1957), Rurópolis (1972) and Palmas (1988). Contradictions and conflicts are exposed between the planners' visions and the appropriation and use of the urban forms - in short, mismatches between how they were imagined and how they were lived. Due to physical inadequacy and cultural incompatibility, neighbourhood units were either considerably transformed, or rejected and replaced by more traditional, conventional urban configurations, for a foreign-planning idea is only truly incorporated when it makes sense in the cultural realm that has adopted it.

Keywords: planning ideas, international diffusion, appropriation, rejection.

Introduction

The neighbourhood unit, an idea originally formulated in 1920's America within the context of the garden-city movement, has been rebuilt throughout the world and adapted to many distinct planning proposals¹. In Brazil it has been adopted both by academicist urbanism and rationalist/functionalist planning. Be it a city-beautiful type layout or a functional-city plan, a new capital city or a colonisation-project new town, the neighbourhood unit has been constructed in modern layouts created by both federal institutions and private entrepreneurs, fostered by both democratic and authoritarian governments. The exemplary cases of Goiânia (1933-1936), Angélica (1954), Brasília (1957), Rurópolis (1972) and Palmas (1989) depict its recurrence in particular situations through the 20th century, for various purposes and with specific meanings.

As a social product – historically and culturally determined – the planning idea is transformed when transferred in space and time. Grounding in a new destination normally involves a selective process of recreation, which makes it somewhat different from its 'original version'². As noticed elsewhere, interpretations and revisions of the neighbourhood-unit schema were often conjunctural, as it has been constantly tamed into different programmes of modernisation in different times and places³. For a travelling planning idea has to be validated as sufficiently polysemic and capable of sustaining new values in order to effectively function in different contexts to its original one⁴.

Despite the planners' efforts to deal locally with transnational planning ideas, did Brazilian new towns and innovative urban forms really mean new living patterns? How was the foreign neighbourhood unit appropriated? Was it straightforwardly accepted as a new urban condition? Did it meet passive compliance or strong opposition?

The originality of this paper stems from the understanding of the reconstruction of planning ideas in diverse circumstances by different social actors, moved by various interests, with distinct purposes, conveying new values and meanings, and by also considering the reaction of the inhabitants to the new neighbourhood forms. In hindsight, and in the global and more complex panorama of the international diffusion of planning ideas⁵, this paper broadens the history of twentieth-century Brazilian new towns and brings about an assessment of the design process from a cultural viewpoint.

Drawing upon cultural studies and the Americanisation of Brazilian society, this paper's premise is that a foreign idea is only really assimilated when it makes sense in the cultural realm that adopts it⁶. New symbolic values and (invented) traditions root wherever there is fertile social and cultural soil⁷.



New towns, progressive country, modern urban life

Throughout the twentieth century, Brazilian democratic governments and dictatorships created, and fostered the creation of, new towns with the objective of occupying territory and developing the country. Brasília is certainly the epitome of this. Urbanisation was thought to be a path to modernisation and new towns were an instrument of progress⁸. Though planned in the pioneering hinterlands, under the governmental discourse of development and nation-building, Goiânia (1933-1936), Angélica (1954), Brasília (1957), Rurópolis (1972) and Palmas (1989) each belong to a particular conjuncture of the national history.

Goiânia, the new capital of Goiás state, was built in the era of Getúlio Vargas (1930-1954) and cannot be dissociated from the “march to the west”: a policy of the authoritarian, centralising, nationalistic government, which exalted past territorial occupation and imbued it with the future progress of the country to foster the development of its hinterlands⁹. The ‘*Estado Novo*’ (New State), as the period of Vargas’ dictatorship (1937-1945) was named, aimed at creating a new society as part of an urban, industrialised, modern country. Indeed, this period was an important phase for Brazilian industrial capitalism, with a shift from the agro-export economy to an urban-industrial one¹⁰. Devoted to a nationalist, modernisation process, the State then promoted contemporary architecture and urbanism as an identitarian image of the modern Brazil, for they associated modernity with tradition; international avant-garde artistic expressions with Brazilian features¹¹. It was believed that the ideology of rationalist architecture and urbanism would change society¹², and so the New State also pursued it. Grounded in a milestone, emblematic, modernist building, Vargas’ Ministry of Education and Health was concerned with the formation of a new type of man¹³. The Americanisation of Brazilian society was starting to be felt as President Franklin D. Roosevelt implemented the Good-Neighbour Policy in Latin America¹⁴. In such an atmosphere, President Vargas referred to Goiânia as having a state-of-the-art layout¹⁵, while its designer presented it as the result of capitalist expansion in a new era for the national economy¹⁶. Goiânia and its neighbourhood units portrayed the new country under construction in the 1930s.

When Angélica was planted in under-explored, agricultural Mato Grosso state in 1954, the private enterprise colonising the city advanced the march to the west of the country, and the layout for the new town depicted a radical change in urban form, replacing academicist urbanism, the picturesque ambience and the figurative town, for the functional city. The neighbourhood-unit idea had already been echoed in the European discourse on rationalist urbanism, particularly in the third CIAM (1930); Albert Mayer, and later on Le Corbusier, had already adjusted it to the layout of Chandigarh¹⁷. Angélica’s layout embodied, in the rural world, a contrasting scheme: a rationally ordered town, a uniform spatial organisation for a standardised, modern, communitarian life.

Brasília (1957) was the project of a democratic government committed to the country’s development and an internationalist nationalism, that is, an idea of cosmopolitan modernisation stripped off references to local tradition and regionalisms¹⁸, not dissimilar to the case of Angélica. With the slogan of ‘fifty years of progress in five years of government’, president Juscelino Kubitschek (1956-1961) proposed an economic model that favoured associations of Brazilian private companies with multinational and state corporations, which were successful in the short term as national rates for economic growth peaked at 10%¹⁹. Pursuing the growth of basic industry, Kubitschek’s administration undertook a vast programme of infrastructure construction, including roads, hydroelectric power plants, aeronautic projects and car manufacturing. The construction of the new federal capital embodied the democratic progress, the ‘developmentist nationalism’ and a break with the past. Representative of its moment, Brasília was to be an entirely new city: ‘international’, deprived of any pre-existent urban context²⁰.

Brasília epitomised the endeavour to transform physical environment as a manifestation of development²¹. Urban modernity in Latin America was a path to modernising development – not its natural consequence, and with this inversion, the idea of a town became a modernising agent, particularly the new capital of Brazil. Brasília depicted a new urban form that would create a new social order and foster regional progress²². By radically re-conceptualising town life, Brasília was to create a new civilisation²³.

The military regime (1964-1985) retrieved the late 1950’s economic model and the euphoria of the times of Brasília’s construction²⁴. Envisioning a ‘Great Brazil’, it promoted colossal building enterprises to stimulate economic growth and encourage regional development. The resulting economic growth rates were higher than those experienced before, and the period 1968-1973 is known as the economic-miracle years, although the 1973 oil crisis, the high inflation in the following year, massive unemployment and the following economic recession labelled the 1980s as the ‘lost decade’²⁵.



General Garrastazu Médici's tenure (1969-1974) created a series of new towns, including Rurópolis (1972), as part of a mammoth colonisation scheme along the newly open Transamazonian highway, implemented by the National Institute of Colonisation and Agrarian Reform – INCRA. Stemming fundamentally from geopolitical and economic considerations, the Amazonian colonization scheme aimed to develop the region. The craving for progress and the objectives of national integration and economic growth had directed the capitalist expansion to that region. Crossing North Brazil from the Atlantic coast to the inner forest, the road was to change the 'demographically-empty' Amazonian basin and the densely populated Northeast region, thus connecting and balancing the potentialities of the Amazonian territory with the disadvantages of the *sertão* (the arid and remote interior), while simultaneously providing an alternative to the landownership inequities in Brazil. The official discourse referred to 'the distribution of land to men without land' and the 'formation of a community, a society', a new civilisation that was being born²⁶. The layout of Rurópolis depicted an ideal urban life designed upon common standards and strict social behaviour.

The creation of Palmas (1988) coincided with the country's period of re-democratisation, when the strengthening of social movements, the general criticism of modernist architecture and town planning, and a flourish of ecological consciousness could be noticed. The 1988 Federal Constitution led to the creation of a new state, Tocantins, and its capital, Palmas. The new state was then described as rural, living in economic and social chaos, with unexploited mineral and hydro-electrical potential and partially used agricultural fertility dependent on a monoculture: cattle raising²⁷. In this post-dictatorship period of economic recession, amid local setbacks, the creation of a capital city was again seen as a potential opportunity to give rise to progress and regional development²⁸.

Goiânia, Angélica, Brasília, Rurópolis and Palmas' new urban configurations were imagined as a means to a new social order. Their layouts comprised contemporary European and North-American planning ideas as a sign of progress. The North-American neighbourhood unit, in particular, became a recurrent feature of the radically innovative urban settings, which were to establish new urban practices and change social behaviour as part of the country's modernisation process. But did this, in fact, happen?

The neighbourhood unit rejected

The idea of new towns fitted well with Brazil's agenda for development throughout the 20th century and with the planners' attempts to create a better urban environment, which supposed a forward-looking and outward-oriented vision, particularly that nurtured by the North American way of life. Like for Clarence Perry, the neighbourhood unit would improve social life and enhance the spirit of citizenship.



Figure 1: Godoy, A. A. de. *Goiânia, revised plan, 1947*. [Manso: 2001]



The neighbourhood units formulated in Goiânia, Angélica, Brasília, Rurópolis and Palmas were either part academicist-urbanism or part functionalist planning, and served the progressive objectives of democratic and dictatorial regimes. At such distinct conjunctures, the recurrent idea conveyed uncommon urban images related to modernisation and development, always endorsing the motivation for having a community life, proximity to nature, detachment from heavy city traffic, and functional zoning and rationalist separation between pedestrians and motor vehicles. However these cultural values were not fully assimilated.

Civil engineer and town planner Armando Augusto de Godoy transferred the neighbourhood-unit scheme directly from the USA to the design for the South residential area of Goiânia in 1936 when he revised the original 1933 academicist city-layout and endorsed its garden-city-like features²⁹ (Figure 1). Godoy had already established a link between Brazilian town-planners and international planning ideas and practices as an author of several papers in specialised journals about his overseas field trips; namely, 'The Garden City' in 1931 and 'Town Planning in the United States' in 1935, in which text he considered the city of Radburn³⁰.

His layout for the South Goiânia residential area reflects the Radburn model and its informal and picturesque configuration. Cul-de-sacs, enclaves, superblocks, internal parks with community facilities and hierarchical winding roads created an unfamiliar, thus modern, urban form. Local press soon reported that in that neighbourhood 'the most modern urban solution of the present moment will appear: it will be built there, for the second time in the world; the most technical solution for modern cities, which was recently built for the very first time in Redburn [sic], a XX century town, as it is known in the USA'³¹. The new residential sector occupied an area of 325 hectares with a population density of approximately 118 inhabitants per hectare. Like Radburn, the modern (and healthier, greener and bucolic) neighbourhood unconventionally located the main house-façades to the park, with their back door to the cul-de-sacs. However, this foreign layout was ultimately rejected as dwellers insisted on building the house façade to the street, and the internal parks with direct connection to the residential buildings ended up being abandoned and some other park areas were later parcelled off. (A similar rejection and layout transformation was seen in Barry Parker's Jardim América, the first Brazilian garden suburb, built in São Paulo in 1917)³².

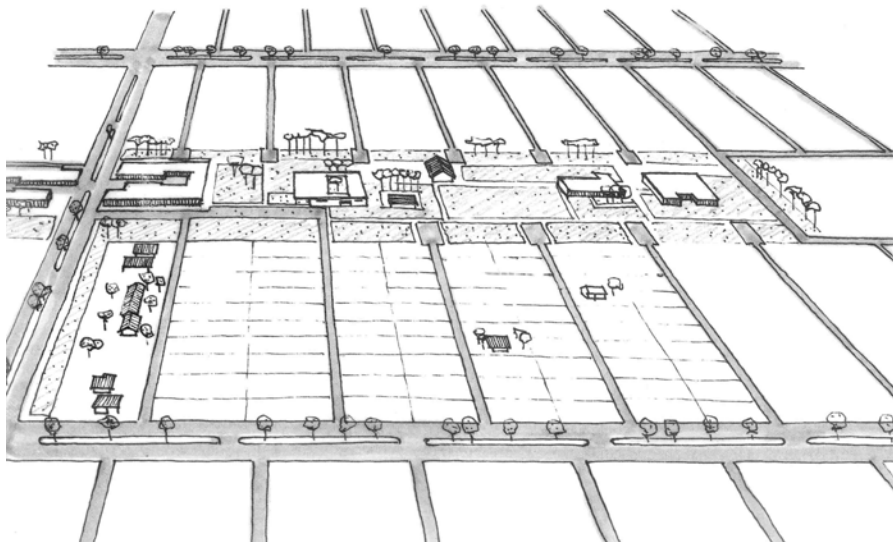


Figure 2: Wilhelm, Jorge. *Perspective of Angélica's neighbourhood unit, 1954*. [Wilhelm: 2003]

Distinct from Goiânia's and Radburn's picturesqueness, Angélica's neighbourhood unit (Figure 2) depicts a Cartesian, regular, symmetrical, uniform, standardised layout. Its designer, young architect Jorge Wilhelm, was interested in Le Corbusier's ideas and in the CIAMs' planning discourse, while not disregarding the 'English town planning and their garden cities'³³. A small new town in a pioneering rural area, Angélica was thus organised into functional sectors and its residential neighbourhood was organised into rectangular units whose central area was longitudinally defined by a green area with various community facilities. The estimated town population was 15,000 inhabitants and each neighbourhood unit, measuring 370 x 670 meters, should house around 1,600 people (with a density of roughly 65 inhabitants per hectare). Local commerce was located on one edge of these green areas and a series of plots for single-family detached houses were arranged into orthogonal cul-de-sacs. The location of common buildings on the green area follows the modernist inversion in the town-



layout, from continuous solid to continuous void³⁴; consequently, the vitality of the multi-use street was lost, along with the interaction of pedestrians and vehicles. However, the cul-de-sacs were eventually opened-up, the continuous green area was crossed by connecting streets and commercial buildings popped-up among the houses.

Unlike Angélica, Brasília's 'neighbourhood areas' (as Lucio Costa translated and referred to his neighbourhood units) suppressed the private ownership of urban land, elevated six-story, multifamily, uniform residential buildings, and increased urban density, thus combining the Anglo-Saxon concept of neighbourhood unit with the Corbusieran pilotis and endorsing the idea of a park-city. Costa designed four squared superblocks (280 meters the length of each side) to form each neighbourhood unit, whose population should range from 10,000 to 12,000 inhabitants. The estimated density of the superblock was little more than 300 inhabitants per hectare. Thus the original idea of a walkable distance between residences and common facilities and the segregation of commerce and motor vehicles were kept. The uncommon, egalitarian, functional city was to be the image of modern Brazil. By dis-familiarising and re-conceptualising city life, the radically new urban form was to connect architectural innovation, change in individual perception and social transformation³⁵. The layout of Brasília's neighbourhood units has been preserved through mandatory heritage protection³⁶, though not without suffering a significant change: commercial buildings settled on the edge of each superblock originally faced the interior of the neighbourhood unit, with their backs to service streets, but soon this position was inverted in order to recuperate the more traditional display of corridor-streets, and some *pilotis* were closed by walls and glass panels, blocking the spatial continuity³⁷. Brasília was at the same time a city of hope and a modernist dystopia³⁸.



Figure 3: Camargo, José Geraldo da Cunha. *Plan of Rurópolis (detail of neighbourhood unit)*, 1972. [Camargo: 1973]

Rurópolis' neighbourhood unit (Figure 3) returns to a less regular layout (due to adaption to site conditions) and the private ownership of residential plots for single-family detached houses, which were arranged along parallel cul-de-sacs, perpendicularly linked to vast green areas. The estimated town population was roughly 5,000 inhabitants and its neighbourhood units considered 1,000 inhabitants to each elementary school (population density around 42 inhabitants per hectare). Commerce, services and the main public buildings were to be located on a long, continuous green area in the city centre. Architect and town planner José Geraldo da Cunha Camargo, closely related to then president Médici, believed that the town's rationalist layout would bring together its carefully selected citizens, who were to be prepared for its community life and consequential benefits. The cautious selection of citizens was intended to prevent the social segregation caused by religion, customs,



previous relationships or origin. It was hoped that all inequalities would be eliminated in the Transamazonian scheme and so new towns with uniform, indistinct, standardised houses (in the neighbourhood units) were therefore expected to create a new, unbiased urban environment³⁹. Located in the middle of the Amazonian forest, the new-town layout endorsed the bucolic image and a low urban density – a slightly different image of what progress was expected to be compared to what generally appealed in that milieu. However, like in Angélica, Rurópolis' cul-de-sacs soon disappeared with the dead-end streets being extended and their portions of the original green areas being parcelled off. The neighbourhood units simply vanished from Rurópolis layout⁴⁰ (Figure 4).

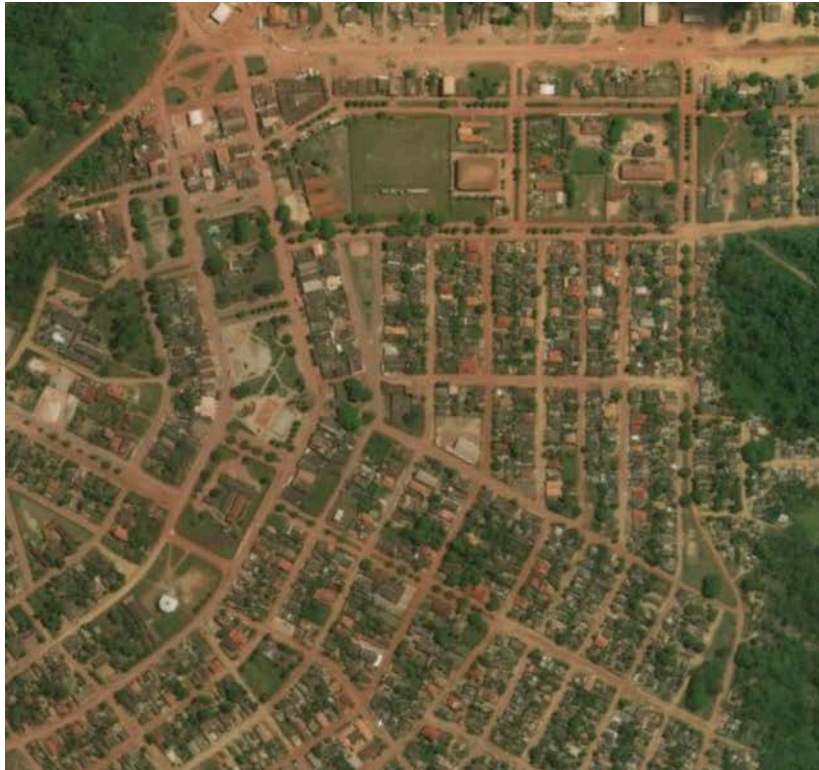


Figure 4: *Aerial view of Rurópolis*. [Google Earth: 2017]

Brasília was created in a democratic period but really thrived during the military regime, being easily related to the contemporary authoritarianism. Thus the layout of Palmas has a dual relationship with Brasília's urbanism: continuity and break. Palmas' macro-block (not superblock like in Brasília) varies its typology (by being less authoritarian and more flexible in its internal arrangement) as it follows, to a certain extent, the international criticism of functionalist planning and contextualises the recent democratisation of the country. Even so it does not totally abandon modernist ideas and certain precepts of the Charter of Athens⁴¹. Varied experiences contributed to the 'late modernism' of Palmas, including Milton Keynes New Town, then visited by the architects and town planners Luiz Fernando Cruvinel Teixeira and Walfredo Antunes de Oliveira Filho, who had lived in Goiânia, gone to college in Brasília and attended postgraduate courses in London.

In Palmas, large roads articulated by roundabouts define an orthogonal grid from which stems secondary roads that lead to residential macro-blocks, equivalent to the neighbourhood unit scheme. Macro-blocks' dimensions are 600 by 700 meters for a population raging from 8,000 to 12,000 inhabitants (roughly 285 inhabitants per hectare). Within the macro-blocks, informal, secondary streets give access to individual plots, common areas and public facilities⁴². Traditional morphological elements, e.g. streets, street corners, blocks, plots and detached houses were to be applied. Each macro-block was to be laid out differently to the others, with unique internal configurations to be designed by different architects⁴³, thereby avoiding Brasília's monotony and uniformity, though creating a resulting heterogeneous and confusing collection of neighbourhoods. Various residential-building types were to be included in it, from detached single-family residences to grouped houses to multi-story apartment buildings. Urban density was universally fixed and the existence of local commerce, schools, community centres, churches, health centres, and nurseries was envisaged⁴⁴. Due to minor urban flux, however, the internal public areas became less safe and little used. Supposedly, pedestrians would not need walk outside



the macro-blocks and cross the large main roads, as daily, ordinary necessities were to be supplied within them. Small daily commerce was to be found in the entrance of the macro-block while vicinal commercial buildings were to be located on the edge of each macro-block, facing the roads, endorsing the neighbourhood's autonomy and insulation. But it has not, in fact, functioned that way: commercial and residential buildings have been mixed in the core of the most popular macro-blocks, thus departing from the original plan.

Conclusion

The Brazilian new towns' neighbourhood units were a technical response to the quest for a modern, and supposedly better, urban way of living. They replaced a traditional spatial form of organisation for another, radically innovative one, and were supposed to shape the constitution of a new social order. They were adopted in different historical contexts to represent the modernisation of the country and its international alignment, and to reflect it physically on the urban environment at the domestic level.

The Brazilian neighbourhood unit also aimed at fostering community life. Neighbourhood units built in Goiânia (1936), Angélica (1954), Brasília (1957) and Rurópolis (1972) were scaled around the needs of children for an elementary school, echoing Perry's idea developed in the United States, while in Palmas (1989) they responded to CIAMs-influenced forms of neighbourhood organization. Brasília's neighbourhood units depicted Corbusieran residential slabs, and Palmas foresaw vertical residential buildings. Angélica, Rurópolis and Goiânia's neighbourhood units were structured upon detached single-family houses in private plots. Only Brasília's neighbourhood units remain (virtually) in their original aspects, certainly due to their mandatory heritage protection.

Brazilian neighbourhood units have depicted ever-contrasting layouts, distinct from established patterns of city living and oblivious to local preferences, and ended up being considerably transformed, many of them rejected and erased from town layouts. People's lives were ultimately not influenced by their physical environments, which, in turn, ended up being substantially transformed. Without passive compliance, residents, developers and public municipal administrations all participated in the transformations that mainly occurred in the neighbourhoods' structures (like in Angélica, Rurópolis and Palmas) but can also be noticed at the housing-level (like in Goiânia). These transformations – including a complete erasure of the neighbourhood unit – adapted the planned urban environment to the citizens' practical needs and cultural preferences.

The foreign neighbourhood unit embodied not only an unfamiliar urban arrangement but also new social and cultural values. Historians have shown that such a relationship between urban layout and resident may stem from acts of will, but its acceptance depends on its capacity of adherence, of establishing connections either with the pre-existing imagery or the collective aspirations for a new imagery.

These innovative urban forms, which endorsed the simplification of urban complexity, segregation of urban functions and social transformation through the reforming ambitions of modernist planning, were not accepted as a new urban condition. The populations who came to inhabit these new towns were not compliant and did not subject themselves to their neighbourhood-units' configurations and, therefore, transformed them into more traditional urban forms because of their physical inadequacies and cultural incompatibilities. This paper has thus exposed contradictions and conflicts between the planners' visions and the cities' appropriation by their inhabitants, whose knowledge might help us to grow more contextual planning histories.

Acknowledgements

The author wishes to thank CNPq, the Brazilian National Council for Technological and Scientific Development, for the grant that supported this research.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Prof. Rego is a full professor at the *Universidade Estadual de Maringá* (UEM), Brazil. His teaching has focused on modern architecture and town planning history, and his research interests concern the influence of foreign



ideas on twentieth-century Brazil. His current research project is related to the construction of new towns along the Transamazonian Highway in the early 1970s. He has been an Associate Research Fellow at the Centre for Iberian and Latin American Visual Studies (CILAVS), Birkbeck College, London, and Visiting Professor at the Center for Latin American Studies, University of Florida, USA.

Endnotes

¹ See Clarence Perry, "The Neighbourhood Unit: A Scheme of Arrangement for the Family-life Community," in *The Regional Plan of New York and Its Environs*, vol. VII, 1929, 486-498 (New York: Russell Sage Foundation, 1974); Dirk Schubert, "The Neighbourhood Paradigm: From Garden Cities to Gated Communities," in *Urban Planning in a Changing World*, ed. R. Freestone, 118-138 (London: E & FN Spon, 2000); Nicholas Patricios, "Urban Design Principles of the Original Neighbourhood Concepts," *Urban Morphology* 6 (2002): 21-32; Nelliana Villoria-Siebert, "The Travel Path of the Neighborhood Unit: From the US and Europe to Latin America. The Transfer of the Model to Venezuela Planning," *Paper presented at the 11th IPHS Conference* (Barcelona, 2004); Duanfang Lu, "Travelling Urban Form: The Neighbourhood Unit in China," *Planning Perspectives* 21 (October 2006): 369-392; Lucio Costa, *Registro de Uma Vivência* (São Paulo: Empresa das Artes, 1995); Edgar Graeff, "Unidade de Vizinhança," in *Brasília - Antologia Crítica*, org. A. Xavier and J. Katinsky, 242-247 (São Paulo: Cosac Naify, 2012); Matheus Gorovitz, "Brasília - Sobre as Áreas de Vizinhança," in *Brasília - Antologia Crítica*, org. A. Xavier and J. Katinsky, 254-266 (São Paulo: Cosac Naify, 2012); Jason Brody, "The Neighborhood Unit Concept and the Shaping of American Land Planning 1912-1968," *Journal of Urban Design* 18 (2013): 340-362; Sanjeev Vidyarthi, *One Idea, Many Plans. An American City Design Concept in Independent India* (New York: Routledge, 2015); Rosemary Wakeman, *Practicing Utopia. An Intellectual History of the New Town Movement* (Chicago: Chicago University Press, 2016); Rego, "Unidade de Vizinhança: Um Estudo de Caso das Transformações de Uma Ideia Urbanística," *URBE* 9 (2017): 401-413.

² See Stephen Ward, "Re-Examining the International Diffusion of Planning," in *Urban Planning in a Changing World*, ed. R. Freestone, 40-60 (London: E & FN Spon, 2000); Edward Said, "Traveling Theory Reconsidered," in *The Cultural Studies Reader*, ed. S. Daring, 241-252 (London: Routledge, 2007): 252; Antonio P. Tota, *O Imperialismo Sedutor. A Americanização do Brasil na Época da Segunda Guerra* (São Paulo: Companhia das Letras, 2000): 193.

³ See Duanfang Lu, "Travelling Urban Form: The Neighbourhood Unit in China," *Planning Perspectives* 21 (December 2006): 369-392.

⁴ See Edward Said, "Traveling Theory," in *The World, the Text, and the Critic*, 157-181 (Cambridge: Harvard University Press, 1983); see also Laura Lieto, "Cross-border Mythologies: The Problem With Travelling Planning Ideas," *Planning Theory* 14 (2013): 115-129.

⁵ See Carola Hein, "Crossing Boundaries. The Global Exchange of Planning Ideas," in *Makin Cities Global. The Transnational Turn in Urban History*, ed. A. K. Sandoval-Strausz and N. H. Kwak, 115-129 (Philadelphia: University of Pennsylvania Press, 2017).

⁶ See Tota, *O Imperialismo Sedutor*.

⁷ José Murilo Carvalho, *A Formação das Almas. O Imaginário da República no Brasil* (São Paulo: Companhia das Letras, 2017): 14 and 95; Eric Hobsbawm and Terence Ranger, *A Invenção das Tradições* (Rio de Janeiro: Paz e Terra, 1997): 9-10.

⁸ See Antonio Carlos Robert Moraes, *Território e história no Brasil* (São Paulo: Annablume, 2008); see also Adrián Gorelik, *Das Vanguardas a Brasília. Cultura Urbana e Arquitetura na América Latina* (Belo Horizonte: UFMG, 2005).

⁹ See Cassiano Ricardo, *Marcha Para Oeste* (Rio de Janeiro: José Olympio, 1959); see also Getúlio Vargas, *Cruzada Rumo ao Oeste*, 1940 (<http://www.biblioteca.presidencia.gov.br/presidencia/ex-presidentes/getulio-vargas/discursos/1940/25.pdf/view>).

¹⁰ Vera Rezende (Org.), *Urbanismo na Era Vargas* (Niterói: UFF, 2012): 12; Arturo Almandoz, "Despegues Sin Madurez. Urbanización, Industrialización y Desarrollo en la Latinoamérica del Siglo XX," *EURE* 34 (2008): 66-67.

¹¹ See Carlos Alberto Ferreira Martins, "Identidade Nacional e Estado no Projeto Modernista," in *Textos Fundamentais da História da Arquitetura Moderna Brasileira*, v. 1, org. A. Guerra, 279-298 (São Paulo: Romano Guerra, 2010); Angela de Castro Gomes (Org.), *Olhando Para Dentro: 1930-1964* (Rio de Janeiro: Objetiva, 2013): 68 and 244; Arturo Almandoz, *Modernization, Urbanization and Development in Latin America, 1900s-2000s* (London: Routledge, 2015): 76; see also Lucio Costa, *Registro de Uma Vivência* (São Paulo: Empresa das Artes, 1995).

¹² James Holston, *A Cidade Modernista. Uma Crítica de Brasília e Sua Utopia* (São Paulo: Companhia das Letras, 1993): 24 and 63.

¹³ Lauro Cavalcanti, "Modernistas, Arquitetura e Patrimônio," in *Repensando o Estado Novo*, org. D. Pandolfi, 179-189 (Rio de Janeiro: FGV, 1999): 180.

¹⁴ See Tota, *O Imperialismo Sedutor*; Almandoz, *Modernization, Urbanization and Development*; and Fernando Atique, *Arquitetando a Boa Vizinhança: Arquitetura, Cidade e Cultura nas Relações Brasil-Estados Unidos, 1876-1945* (São Paulo: Pontes Editores, 2010).

¹⁵ Getúlio Vargas, *Cruzada Rumo ao Oeste*, 1940 (<http://www.biblioteca.presidencia.gov.br/presidencia/ex-presidentes/getulio-vargas/discursos/1940/25.pdf/view>) and *Atualidade e Futuro de Goiás*, 1940 (<http://www.biblioteca.presidencia.gov.br/presidencia/ex-presidentes/getulio-vargas/discursos/1940/24.pdf/view>); Angela de Castro Gomes (Org.), *Olhando Para Dentro*, 73.

¹⁶ Atílio Corrêa Lima, "Goiânia, A Nova Capital de Goiás," *Arquitetura e Urbanismo* (January/February 1937): 32.

¹⁷ Vicente Quinella Barcellos, "Unidade de Vizinhança: Notas Sobre Sua Origem, Desenvolvimento e Introdução no Brasil," *Paranoá* 3 (2001): 5.

¹⁸ Laurent Vidal, *De Nova Lisboa a Brasília: A Invenção de Uma Capital (Séculos XIX-XX)* (Brasília: UNB, 2009): 196 and 189; Almandoz, *Modernization, Urbanization and Development*, 105.

¹⁹ Almandoz, *Modernization, Urbanization and Development*, 92; Mary Del Priore and Renato Venancio, *Uma Breve História do Brasil* (São Paulo: Planeta, 2010): 268.



- ²⁰ Vidal, *De Nova Lisboa a Brasília*, 185-190, 197.
- ²¹ Almandoz, *Modernization, Urbanization and Development*, 93.
- ²² Gorelik, *Das Vanguardas a Brasília*, 49; Holston, *A Cidade Modernista*, 12.
- ²³ Holston, *A Cidade Modernista*, 24.
- ²⁴ Del Priore and Venancio, *Uma Breve História*, 278, 284.
- ²⁵ Almandoz, "Despegues Sin Madurez," 71.
- ²⁶ See Renato Leão Rego, "Shaping an Urban Amazonia: 'A Planner's Nightmare,'" *Planning Perspectives* 32 (April 2017).
- ²⁷ *O Estado de São Paulo*. "Tocantins Nasce em Clima de Discórdia," edition 34.874, November 1 (1988): 40.
- ²⁸ GrupoQuatro, "A Concepção da Nova Capital," *Revista Projeto* 146 (1991): 95; Ana Beatriz Araujo Velasques and Thiago Ramos Machado, "O Pensamento Urbanístico na Concepção de Novas Cidades no Brasil: Permanências e Rupturas no Projeto de Palmas, Tocantins," paper presented at the XVI ENANPUR (Belo Horizonte, 2015): 5; Dirceu Trindade, "Challenges for New Town Design in a Frontier Region: Palmas," in *Contemporary Urbanism in Brazil: Beyond Brasília*, ed. V. Del Rio and W. Siembieda, 65-81 (Gainesville: University Press of Florida, 2009): 65.
- ²⁹ Renato Leão Rego, "Brazilian Garden Cities and Suburbs: Accommodating Urban Modernity and Foreign Ideals," *Journal of Planning History* 13 (2014): 287; Lima, "Goiânia, A Nova Capital," 141.
- ³⁰ Rego, "Brazilian Garden Cities," 286; See Celina Manso, *Goiânia* (Goiânia: Author's edition, 2001); Maria Cristina da Silva Leme, *Urbanismo no Brasil 1895-1965* (Salvador: UFBA, 1995); Armando A. de Godoy, "A Cidade-Jardim (1931)," in *A Urbs e os Seus Problemas*, Armando A. de Godoy, 135-140 (Rio de Janeiro: Jornal do Comércio, 1943).
- ³¹ See Rego, "Brazilian Garden Cities," 288.
- ³² *Ibid.*, 286, see also Rego, "Unidade de Vizinhança."
- ³³ Jorge Wilhelm, *A Obra Pública de Jorge Wilhelm* (São Paulo: Dorea Books, 2003): 33.
- ³⁴ Colin Rowe and Fred Koetter, *Collage City* (Cambridge, Mass.: The MIT Press, 1995): 56; Milton Braga, *O Concurso de Brasília* (São Paulo: Cosac Naify, 2010): 202.
- ³⁵ Holston, *A Cidade Modernista*, 62-63.
- ³⁶ See José Pessoa, "O Tombamento de Centro Histórico Moderno," in *Brasília - Antologia Crítica*, org. A. Xavier and J. Katinsky, 298-305 (São Paulo: Cosac Naify, 2012).
- ³⁷ Rego, "Unidade de Vizinhança," 407.
- ³⁸ Florian Urban, *Tower and Slab. Histories of Global Mass Housing* (London: Routledge, 2012): 88-89.
- ³⁹ See José Geraldo da Cunha Camargo, *Urbanismo Rural* (Brasília: Ministério da Agricultura/INCRA, 1973).
- ⁴⁰ Rego, "Unidade de Vizinhança," 410.
- ⁴¹ See Velasques, "A Concepção de Palmas"; Trindade, "Challenges for New Town Design," 69.
- ⁴² GrupoQuatro, "A Concepção da Nova Capital," *Revista Projeto* 146 (1991): 97.
- ⁴³ "O Ideal e o Real." *Revista Projeto* 146 (1991): 106.
- ⁴⁴ GrupoQuatro, "A Concepção da Nova Capital," 98.

Bibliography

Almandoz, Arturo. "Despegues Sin Madurez. Urbanización, Industrialización y Desarrollo en la Latinoamérica del Siglo XX." *EURE* 34, no. 102 (2008): 61-76.

Almandoz, Arturo. *Modernization, Urbanization and Development in Latin America, 1900s-2000s*. London: Routledge, 2015.

Atique, Fernando. *Arquitetando a Boa Vizinhança: Arquitetura, Cidade e Cultura nas Relações Brasil-Estados Unidos, 1876-1945*. São Paulo: Pontes Editores, 2010.

Barcellos, Vicente Quintella. "Unidade de Vizinhança: Notas Sobre Sua Origem, Desenvolvimento e Introdução no Brasil." *Paranoá* 3 (2001): 1-12.

Braga, Milton. *O Concurso de Brasília*. São Paulo: Cosac Naify, 2010.

Brody, Jason. "The Neighborhood Unit Concept and the Shaping of American Land Planning 1912-1968." *Journal of Urban Design* 18, no. 3 (2013): 340-362.

Camargo, José Geraldo da Cunha. *Urbanismo Rural*. Brasília: Ministério da Agricultura/INCRA, 1973.



- Carvalho, José Murilo. *A Formação das Almas. O Imaginário da República no Brasil*. São Paulo: Companhia das Letras, 2017.
- Cavalcanti, Lauro. "Modernistas, Arquitetura e Patrimônio". In *Repensando o Estado Novo*, organised by Dulce Pandolfi, 179-189. Rio de Janeiro: FGV, 1999.
- Costa, Lucio. *Registro de Uma Vivência*. São Paulo: Empresa das Artes, 1995.
- Costa, Maria Elisa. "A Superquadra em Números e Contexto." In *Brasília - Antologia Crítica*, organised by Alberto Xavier and Júlio Katinsky, 247-254. São Paulo: Cosac Naify, 2012.
- Del Priore, Mary, and Renato Venancio. *Uma Breve História do Brasil*. São Paulo: Planeta, 2010.
- Del Rio, Vicente, and William Siembieda (Eds.). *Contemporary Urbanism in Brazil: Beyond Brasília*. Gainesville: University Press of Florida, 2009.
- Godoy, Armando A. de. "A Cidade-Jardim (1931)." In *A Urbs e os Seus Problemas*, Armando A. de Godoy, 135-140. Rio de Janeiro: Jornal do Comércio, 1943.
- Gomes, Angela de Castro (Org.). *Olhando Para Dentro: 1930-1964*. Rio de Janeiro: Objetiva, 2013.
- Gorelik, Adrián. *Das Vanguardas a Brasília. Cultura Urbana e Arquitetura na América Latina*. Belo Horizonte: UFMG, 2005.
- Gorovitz, Matheus. "Brasília – Sobre as Áreas de Vizinhança." In *Brasília - Antologia Crítica*, organised by Alberto Xavier and Júlio Katinsky, 254-266. São Paulo: Cosac Naify, 2012.
- Graeff, Edgar A. "Unidade de Vizinhança." In *Brasília - Antologia Crítica*, organised by Alberto Xavier and Júlio Katinsky, 242-247. São Paulo: Cosac Naify, 2012.
- GrupoQuatro. "A Concepção da Nova Capital." *Revista Projeto* 146 (1991): 95-102.
- Hein, Carola. "Crossing Boundaries. The Global Exchange of Planning Ideas." In *Making Cities Global. The Transnational Turn in Urban History*, edited by A. K. Sandoval-Strausz, and Nancy H. Kwak, 115-129. Philadelphia: University of Pennsylvania Press, 2017.
- Hobsbawm, Eric, and Terence Ranger. *A Invenção das Tradições*. Rio de Janeiro: Paz e Terra, 1997.
- Holston, James. *A Cidade Modernista. Uma Crítica de Brasília e Sua Utopia*. São Paulo: Companhia das Letras, 1993.
- Leme, Maria Cristina da Silva. *Urbanismo no Brasil 1895-1965*. Salvador: UFBA, 1995.
- Lieto, Laura. "Cross-border Mythologies: The Problem With Travelling Planning Ideas." *Planning Theory* 14, no. 2 (2013): 115-129.
- Lima, Atílio Corrêa. "Goiânia, A Nova Capital de Goiás." *Arquitetura e Urbanismo* (1937): January/February, 32-34; March/April, 60-63; July/August, 140-146.
- Lu, Duanfang. "Travelling Urban Form: The Neighbourhood Unit in China." *Planning Perspectives* 21, no. 4 (2006): 369-392.
- Manso, Celina F. A. *Goiânia*. Goiânia: Author's edition, 2001.
- Martins, Carlos Alberto Ferreira. "Identidade Nacional e Estado no Projeto Modernista." In *Textos Fundamentais da História da Arquitetura Moderna Brasileira*. V. 1, organised by Abílio Guerra, 279-298. São Paulo: Romano Guerra, 2010.
- Moraes, Antonio Carlos Robert. *Território e história no Brasil*. São Paulo: Annablume, 2008.
- O Estado de São Paulo*. "Tocantins Nasce em Clima de Discórdia," edition 34.874, November 1 (1988): 40.
- "O Ideal e o Real." *Revista Projeto* 146 (1991): 103-109.
- Patricios, Nicholas N. "Urban Design Principles of the Original Neighbourhood Concepts." *Urban Morphology* 6, no. 1 (2002): 21-32.



- Perry, Clarence. "The Neighbourhood Unit: A Scheme of Arrangement for the Family-life Community." In *The Regional Plan of New York and Its Environs* (vol. VII, 1929), 486-498. New York: Russell Sage Foundation, 1974.
- Pessôa, José. "O Tombamento de Centro Histórico Moderno." In *Brasília - Antologia Crítica*, organised Alberto Xavier and Júlio Katinsky, 298-305. São Paulo: Cosac Naify, 2012.
- Rego, Renato Leão. "Brazilian Garden Cities and Suburbs: Accommodating Urban Modernity and Foreign Ideals." *Journal of Planning History* 13, no. 4 (2014): 276-295.
- Rego, Renato Leão. "Unidade de Vizinhança: Um Estudo de Caso das Transformações de Uma Ideia Urbanística." *URBE* 9, no. 3 (2017): 401-413.
- Rego, Renato Leão. "Shaping an Urban Amazonia: 'A Planner's Nightmare.'" *Planning Perspectives* 32, no. 2 (2017): 249-270.
- Rezende, Vera. (Org.). *Urbanismo na Era Vargas*. Niterói: UFF, 2012.
- Ricardo, Cassiano. *Marcha Para Oeste*. Rio de Janeiro: José Olympio, 1959.
- Rowe, Colin, and Fred Koetter. *Collage City*. Cambridge, Mass.: The MIT Press, 1995.
- Said, Edward W. "Traveling Theory." In *The World, the Text, and the Critic*, Edward W. Said, 157-181. Cambridge: Harvard University Press, 1983.
- Said, Edward W. "Traveling Theory Reconsidered." In *The Cultural Studies Reader*, edited by Simon During, 241-252. London: Routledge, 2007.
- Schubert, Dirk. "The Neighbourhood Paradigm: From Garden Cities to Gated Communities." In *Urban Planning in a Changing World*, edited by Robert Freestone, 118-138. London: E & FN Spon, 2000.
- Tota, Antonio P. *O Imperialismo Sedutor. A Americanização do Brasil na Época da Segunda Guerra*. São Paulo: Companhia das Letras, 2000.
- Trindade, Dirceu. "Challenges for New Town Design in a Frontier Region: Palmas". In *Contemporary Urbanism in Brazil: Beyond Brasília*, edited by Vicente Del Rio and William Siembieda, 65-81. Gainesville: University Press of Florida, 2009.
- Urban, Florian. *Tower and Slab. Histories of Global Mass Housing*. London: Routledge, 2012.
- Vargas, Getúlio. *Cruzada Rumo ao Oeste*, 1940. Accessed February 5, 2018. <http://www.biblioteca.presidencia.gov.br/presidencia/ex-presidentes/getulio-vargas/discursos/1940/25.pdf/view>.
- Vargas, Getúlio. *Atualidade e Futuro de Goiás*, 1940. Accessed February 5, 2018. <http://www.biblioteca.presidencia.gov.br/presidencia/ex-presidentes/getulio-vargas/discursos/1940/24.pdf/view>.
- Velasques, Ana Beatriz Araujo. "A Concepção de Palmas (1989) e Sua Condição Moderna." PhD diss., Universidade Federal do Rio de Janeiro, 2010.
- Velasques, Ana Beatriz Araujo, and Thiago Ramos Machado. "O Pensamento Urbanístico na Concepção de Novas Cidades no Brasil: Permanências e Rupturas no Projeto de Palmas, Tocantins." Paper presented at the XVI ENANPUR, Belo Horizonte, 2015. Accessed February 5, 2018. http://xviananpur.com.br/anais/?wpfb_dl=607.
- Vidal, Laurent. *De Nova Lisboa a Brasília: A Invenção de Uma Capital (Séculos XIX-XX)*. Brasília: UNB, 2009.
- Vidarthi, Sanjeev. *One Idea, Many Plans. An American City Design Concept in Independent India*. New York: Routledge, 2015.
- Villoria-Siegert, Nelliana. "The Travel Path of the Neighborhood Unit: From the US and Europe to Latin America. The Transfer of the Model to Venezuela Planning." Paper presented at the 11th International Planning History Society Conference, Barcelona, 2004. Accessed February 5, 2018. <http://www.etsav.upc.es/personals/iphs2004/eng/en-pap.htm>.
- Wakeman, Rosemary. *Practicing Utopia. An Intellectual History of the New Town Movement*. Chicago: Chicago University Press, 2016.



Ward, Stephen V. "Re-Examining the International Diffusion of Planning." In *Urban Planning in a Changing World*, edited by Robert Freestone, 40-60. London: E & FN Spon, 2000.

Wilheim, Jorge. *A Obra Pública de Jorge Wilheim*. São Paulo: Dorea Books, 2003.

Image sources

Figure 1: Manso, Celina F. A. *Goiânia*. Goiânia: Author's edition, 2001.

Figure 2: Wilheim, Jorge. *A Obra Pública de Jorge Wilheim*. São Paulo: Dorea Books, 2003.

Figure 3: Camargo, José Geraldo da Cunha. *Urbanismo Rural*. Brasília: Ministério da Agricultura/INCRA, 1973.

Figure 4: Google Earth, 2017.



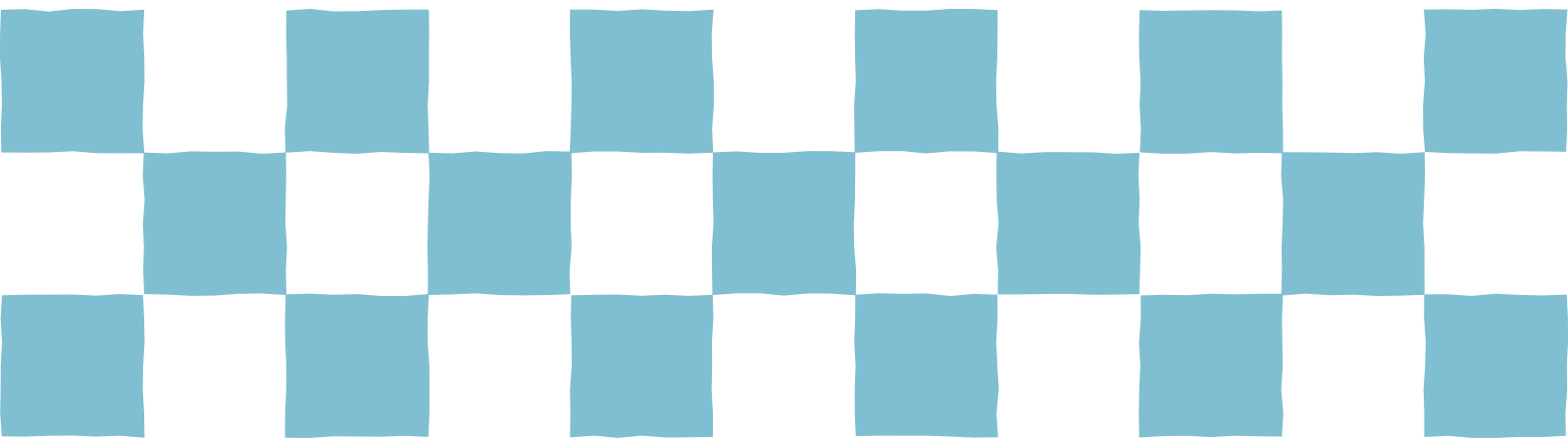
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

45 New Town



Transition of Planning Concept in Tsukuba Science City

Shin Nakajima (Tokyo City Univ.)

How is the concept of planned city realized and will it change afterwards? This research analyzes the planning concept and the subsequent transformation of Tsukuba Science City planned for suppressing growth in metropolitan areas in Tokyo.

In 1963, the Japanese government accepted the Cabinet meeting with the Tsukuba area as the construction site of the Science city. The law for Construction of Tsukuba Science City came into force in 1970. The planned cities planted by the huge national project called the science city had declared distributed arrangement for deterring overcrowding in the Tokyo metropolitan area. Tsukuba city was planned as self-sustaining rural city. This plan resulted in mass transfer of government research institutions from Tokyo. The characteristic of Tsukuba City is "the official residence city" - a collection of colonists with unique single attributes. Many researchers and students with high liquidity lived in the official residences prepared by the government.

Because there is only bus transportation connection with the metropolitan area, Tsukuba Science City became a solitary island by the concept of a self-sustaining city. The plan of Tsukuba Science City is designed mainly based on automobile. The pedestrian is located in the center of the city, and it is a thorough car isolation structure. Immigration of new residents is socially incorporated as a new layer in urban infrastructure improvement by the construction of new town - road and block system and the location of official residents. It was planned commercial functions necessary for daily life in the center area.

In the 21st century, the planning concept of Tsukuba city undergoes major transformation. By the location of a suburban shopping mall in the 2000s, the hollowing out of the center gradually advanced. Due to the opening of the new railway in 2005, it was dramatically improved the convenience of transport between Tokyo and Tsukuba by a high speed bus so far. At Tsukuba University, the number of students who came from Tokyo without living in Tsukuba city increased. The city office moved to the vicinity of the newly constructed station, and the center of gravity shift occurred due to the development of the new railway line. At the same time, the government promoted the obsolete plan to abolish the official residence in the central district. Furthermore, this plan was accelerated to secure reconstruction finance for the Great East Japan Earthquake. Residents who lived in government offices moved to residential areas in the new suburbs of the city. Due to progress of bed town formation and expansion of urban areas to the suburbs, the planning concept of independent city of Tsukuba City at the time of construction was dismantled. The concept of rural city residential is creating a new lifestyle in the suburbs in a manner different from the plan intention. Drastic space and social change and reorganization are forced by the disappearance and change of the idea of the city made with the conventional plan intention.

Re-inventing Copycat Cities: Shanghai's "One City and Nine Towns" Revisited

Zhongjie Lin (UNC Charlotte)

In 2001, the municipal government of Shanghai announced an ambitious plan of "One City and Nine Towns", calling for creating ten satellite towns to decentralize overcrowded Shanghai, each housing a half to a million. The controversial part of this program was the demand that each town should be built in a uniform architectural style, and townscapes should be introduced from the Western cultures. Within just several years, the plans of these new towns were carried out to construction, resulting in a series of copycat cities including a Thames Town, a German Town, an Italian Canal Town, and a Dutch Town among others themes. All of them were built to be photogenic, although many have remained underpopulated. Despite various issues these projects encountered, they have inspired town planners and builders across China as the country engaged in urbanization at an unprecedented scale, which has created numerous cities from scratch during the last two decades.

This paper revisits the One City and Nine Towns projects fifteen years after the inauguration of the program to examine their post-occupation effects and social impacts in a wider context. The idea of the One City and Nine Towns stemmed from the concern that new towns had tended to be built like generic places and without character, so signature Western townscapes was introduced as remedy in a superficial way. While the same issue had plagued the postwar British new towns and was part of the criticism of New Urbanism, the dilemmas that the Chinese themed towns have faced reflect the intensified interaction and contradiction between the global forces and the local conditions in the current age. The author's on-site investigations of these Chinese copycat towns in the recent years, however, have reveal additional challenges of these districts beyond the issue of cultural hybridity. They concern the lack of access to public transit, inadequacy of employment, and difficulty of attracting retail, as well as monotony of housing products that has to do with both the fixed design vocabulary and the market-driven approach. As a result, several of the towns have undergone substantial revision of their original plans and adopted new development strategies. The analysis of these towns' re-adaptation in the changing context of China's urbanization shed new lights on studies of new town planning in the world in terms of both physical forms and social challenges, and provide hint to possible solutions of their dilemma in development.

Narratives of Sustainability in Treasure Island's Planning History, 1993-2011

Tanu Sankalia (University of San Francisco)

When it was built in 1937, Treasure Island was considered to be one of the largest manmade islands in the world. Located in the middle of San Francisco Bay, the 400-acre island was constructed out of dredged bay mud in a remarkable feat of Depression-era civil engineering by the US Army Corps of Engineers. It was built concurrently with the San Francisco-Oakland Bay Bridge and the Golden Gate Bridge to serve as San Francisco's airport at a time of major transportation infrastructure expansion. Between 1939-1940, the island hosted the Golden Gate International Exposition (GGIE), which shifted the focus of world's fairs as venues of science and industry to representations of international unity exemplified in the idea of a Pacific Rim interconnected through commerce and trade. World War II scuttled this utopian imagination, and in early 1942 Treasure Island was converted into an active naval base. After World War II, Naval Station Treasure Island focused on training and distribution activities until it was officially closed in 1997.

In 2011, the City and County of San Francisco Board of Supervisors approved the Treasure Island Development Project (TIDP)—a redevelopment plan for a new sustainable city of 19,000 residents. The Treasure Island Development Project consists of 8000 units of housing, two hotels, about 500,000 SF of commercial space, a ferry terminal, and 300 acres of parkland with organic urban farming and manmade wetlands. Critics and commentators have described the plan as an antidote to urban sprawl, as utopian "eco-urbanism," and as a model for future cities.

In this paper, I trace the two-decade long planning history of the Treasure Island Development Project. Since 1993, following the federal mandate to begin the process of transfer of Treasure Island from the US Navy to the City of San Francisco, the island has been through five different scenarios for development ranging from modest urban design solutions to its most recent grand vision. As I document the project through its various transformations, I show how Treasure Island, as a disconnected island site, was considered exceptional to the norm and therefore subjected to special planning processes and state control. Further, I argue that it is within this structure of exceptionalism, and other political economic contingencies, that the project took a turn towards sustainability and the use of spectacular form. As sustainability and the promise of an ecotopia are used to promote the project, this paper examines what these concepts mean for urban planning and design. The paper shows how past planning legacies of the airport, world's fair site, and military base, further complicate urban visions of sustainable futures.

Interpreting the contemporary Chinese planning history from the "new towns" perspective. The case studies of Pujiang and Kilamba

Domenica Bona (Università degli Studi Roma Tre)

The new millennium has been a time for a great change in the Chinese planning history. Planning has become a professional practice able to manage the construction of thousands of new urban settlements and urbanization has driven deep transformations in the economic structure of China and in its society. This paper proposes a critical interpretation of the "new towns" by analysing two case studies, Pujiang and Kilamba. Pujiang is a new town near Shanghai designed by the Italian firm Gregotti Associati with the local Highpower-OCT Investment; Kilamba was designed by the Chinese CITIC in the outskirts of Luanda, Angola. From a planning perspective, this paper tries to analyse the phenomenal and formal aspects related to plans of two case studies. Applying a typo-morphological approach, the physical structure of both plans are analysed and compared so to highlight the structural elements of analogy between them. The aim is to reveal the current attempts by planners to transfer cultural issues into the built environment. Thus, this will allow to find out the possible commonalities and define the terms of correspondences of these contemporary layouts with the historical Chinese planning wisdom.



Interpreting the contemporary Chinese planning from the “new towns” perspective. The case studies of Pujiang and Kilamba

Domenica Bona*

* *Università degli Studi Roma Tre, domenica.bona@gmail.com*

The new millennium has been a time for a great change in the Chinese planning history. Planning has become a professional practice able to manage the construction of thousands of new urban settlements and urbanization has driven deep transformations in the economic structure of China and in its society. This paper proposes a critical interpretation of the “new towns” by analysing two case studies, Pujiang and Kilamba. Pujiang is a new town near Shanghai designed by the Italian firm Gregotti Associati with the local Highpower-OCT Investment; Kilamba was designed by the Chinese CITIC in the outskirt of Luanda, Angola. From a planning perspective, this paper tries to analyse the phenomenal and formal aspects related to plans of two case studies. Applying a typo-morphological approach, the physical structure of both plans are analysed and compared so to highlight the structural elements of analogy between them. The aim is to reveal the current attempts by planners to transfer cultural issues into the built environment. Thus, this will allow to find out the possible commonalities and define the terms of correspondences of these contemporary layouts with the historical Chinese planning wisdom.

Keywords: Africa, China, Chinese cities, contemporary cities, East-Asia, Kilamba, morphology, New town, Pujiang, planning, planning history, planning legacy, urban history

Introduction

The phenomenon of the new towns presents for China a series of causal and consequential issues intertwined with the economic, socio-demographic, geographic, and political history of the country and its relations with foreign countries. On the wave of urbanization that has involved China since 1978, hundreds of cities have been built *ex novo* to which must be added countless new districts in the suburbs of existing cities. Major metropolises and minor cities have carried out continuous urban additions, so that new neighbourhoods, industrial districts, business centres, residential complexes, and university campuses have grown around the consolidated cities and within. In this panorama, today planning practice is closely related to the oligarchical choices of a few political administrators and entrepreneurs who see the building industry as the main economic engine pulling the country despite the global downturns of finance and foreign interference. Moreover, as long as real estate and town planning have become almost a solely economical affair, most of the planning projects lack a theoretical conception capable to go beyond the pragmatism of technical issues, do better than applying dreary prototypes, and work as a bridge between past and present urban identities.

Acknowledging the phenomenon of the “new towns” as primarily characterizing contemporary Chinese planning, this paper reports the attempt to analyse the morphological characters of the Chinese new towns built in the 2000s. It proposes a critical interpretation of the contemporary Chinese planning history by analysing two apparently antithetical case studies, the new towns of Pujiang and Kilamba from a morphological perspective. Pujiang is a new town of Shanghai municipality, designed in 2001 by the Italian firm Gregotti Associati International and Kilamba is a new town in the outskirt of Luanda, Angola planned by the Chinese company CITIC in 2008.

The two cases represent two ends of the “new town phenomenon”; on the one hand, the importation of foreign planners to design new towns in mainland China and, on the other hand, the exportation of Chinese planners to develop urban plans abroad. By comparing them, this paper suggests similarities and diversities, in terms of general planning conditions, related to their foundation. Besides, the morphological analysis of their plans address the comparison highlighting a series of analogies in terms of structure, physical dimensions and urban facts that could eventually allow to claim the translation of historical planning features into contemporary Chinese planning practice.

Background and methodology

The research underlying this paper was developed in the framework of the author’s PhD thesis and is based on two levels of analysis: a phenomenal one, to understand the context in which an urban plan to be drawn and realized; a morphological one to define the structural elements of the planning projects guiding the construction of the new towns under study and identify points of correspondence between them. The analysis required to collect the historical documents about the planning process of each case study (e.g. maps, master plans, descriptions, etc.)



and redraw the data into a series of maps comparable in scale, criteria, contents, and graphics. As a result, the confrontation of the cartographic reconstructions picks out similarities and correspondences under various aspects (e.g. structural, dimensional, formal and visual) that, eventually, do not end in the physical description of urban data but refer to a typological vocabulary that could be identified as symbolic and rooted in the Chinese urban culture.

The historicising interpretation of contemporary town planning is a new perspective for the Chinese case that the literature tends to describe as western-oriented and regardless of its own past. As a matter of fact, the interest of academia was limited and the one of media focused on the socio-economic aspects related to the foundation of these new towns, mostly in critical terms. Indeed, the literature about Pujiang and Kilamba mainly reports the condition of “ghost cities” that both experienced right after the delivery of the urban projects for relatively long periods. Besides, as most of the new towns, their clear urban boundary contrasts with the unbuilt surrounds and increase the sense of “cathedrals in the desert” that the emptiness conveys alone, especially in the time when the towns are waiting to be inhabited.

If compared with the literature and research produced around the topic of this paper, the typo-morphological perspective has been applied in a limited number of cases to the Chinese context. On one side, the typological approach, developed in Italy to study the Italian and European historical cities during the second half of the twentieth century, was mostly abandoned because judged ineffective in the analysis of the contemporary cities.¹ On the other side, the morphological approach, developed in the same decades by Anglo-German school of urban morphology, found some application as an analytic tool for urban heritage regeneration.² In recent years, the attempts to define hybrid typo-morphological method found some application in the study of specific urban phenomena characterizing contemporary urban China (e.g. informal urban villages, hyper dense neighbours, etc.); nevertheless, the focus of these application refer to small-scale part of the built environment and lack of interest in understanding city plans at large scale and the structural logic underlying them.³

First case study. Pujiang, one of the Shanghai new towns

In the 1990s, the Shanghai municipality promoted the design of new satellite cities around the metropolitan area. With the slogan "One City Nine Towns" and financed in the five-year plan 2001-2005, nine new cities and few smaller suburbia made up the puzzle of settlements gravitating around Shanghai. This operation would have catalysed urban development away from the centre, along with the road network connecting downtown to the deltaic periphery; in fact, they were meant to absorb part of the new upper-middle-class population, tending to leave the centre to move into modern and less chaotic residential neighbourhoods. A curious new concept characterising the plan was to have given a thematic connotation to the new towns; dedicated each to a foreign nation, they were meant to reproduce its salient features in approximate terms of style and aesthetics.

Most of the master plans were designed by local design institutes and the outcome is mostly of the kind of a “pastiche”; for example, the English-themed Thames Town is a mix of rustic and regency style buildings, back dropping red telephone booths and guardians dressed as royal guards. Few other projects were instead entrusted to foreign well-known designers, who could better prefigure the image of these contemporary cities; Gregotti Associati International designed the Italian-themed town while the German firm GMP designed the German Anting and the Central European New Harbour City.

In 2001, Gregotti Associati won the international competition for the Italian-themed new town Breeza City of Pujiang.⁴ Differently from every other new town around Shanghai, the idea that the promoters, designers, and municipality have tried to convey through the project was the cultural proximity between the two-thousand-year-old cultures of China and Italy. In this framework, Pujiang was to be built on a *tabula rasa* fairly close to the centre of Shanghai, just 16 km southern and well connected by a metro line.

Gregotti project envisaged the construction of a 15 km² neighbourhood surrounded by 60 km² of a protected park (Figure 1). Here the municipality planned to relocate the 50,000 residents of the core area occupied for Expo 2010 and, since relocating the population was a priority for the municipality, his issue prevented the project to undergo to consistent changes and let the Gregotti plan be realized with few modification, though a reduction of area including the main waterfront public space.

Founded on a rigid orthogonal grid, the city has a longitudinal development organized in two sectors symmetrically divided by a north-south axis (Figure 2). A triple grid supports and differentiates the network system of pedestrian paths, roads, and water channels. The northern part of the town was developed as the “ecological quarter” by the company Highpower-OCT Investment and designed by Gregotti and other Italian architects who developed the single buildings defined by the general masterplan; it presents a slightly dense fabric, a sort of garden city with single and terraced villas, a central core with a square, a vernacular bell tower, and an “Italian style” town-hall *replica*. The central part of the town is the “Top Grade neighbourhood”, located around an equipped median axis



on which the main public functions, malls, and public space converge. The southern part reflects more Gregotti architecture and the urban scale of Pujiang; here the fabric is high-dense, the type of buildings recalls the ones he realized in the Bicocca area of Milan, and the public space is designed by sober elements and linear geometries. In the whole Pujiang, the blocks of 300 per 300 meters generate closed units conceived like *xiaoqu* for 1000 people. The buildings do not exceed four floors and maintain a rather low skyline that does not impact the context violently. Blocks are enclosed by straight streets and river channels that cross the city and connect to the rural water network. Well-kept gardens and lush vegetation complete the landscape of the modern and rationalist city that Gregotti has imagined as an emblem of Italian exportable architecture.⁵

Second case study. Kilamba and the Chinese new towns in Africa

A different case is that of "exporting urbanization" out of China. At the beginning of the new century, the Chinese government saw the opportunity to establish relations in Africa. Several North-African and sub-Saharan countries were interested in developing their infrastructural networks, increasing urbanization and life conditions of the population but in need of financial investments. As known, the Chinese interest on Africa is not a new phenomenon and, as early as in the Sixties, already Mao Zedong promoted an anti-colonial solidarity by investing in the construction of important infrastructures like the Tanzam railway. Foreseeing business opportunities in a new capitalistic perspective, since 2005 China has entered into agreements with nations like Kenya, Algeria, and Angola.⁶ The formula was usually based on non-monetary terms; in fact, in exchange for Chinese products, medical assistance, education programs in Chinese universities, know-how useful for the development infrastructures, and building works, China takes oil and raw materials necessary for running domestic industry. Within a few years, those African countries have been launching infrastructural modernization projects that otherwise would not have had the chance to be realized under such favourable conditions, in terms of allocated funds, work management, project quality, and political support. Doing so, in the last decade the most relevant construction sites of Africa have been run or supported by Chinese companies and government, which opened branches there and moved conspicuous groups of designers, engineers and workers on site from China thanks to whom it was inevitable to graft some Chinese urban prototypes in the African constructed landscape.

Among the urban projects of new towns, the Nova Cidade de Kilamba is the most emblematic of the cities built by Chinese companies in Africa. Aimed to give a house to 160,000 people, it stands on an area of 502 km² in the south of Luanda, the capital of Angola (Figure 3). After the end of the civil war in 2002, the Angolan government managed to finance the construction of public housing for low-income population and modern housing for the urban bourgeoisie of Luanda thanks to an agreement signed with the Chinese government. According to this deal, the China International Trust and Investment Corporation (CITIC) would have completed the Kilamba project by offering a USD 3.5 billion credit line to the Angolan government in exchange for supplies of oil and raw materials.

The design was drawn up by CITIC and overseen by Pierson Capital, an international company of engineering and finance. The realization was carried out in all 4 years, using Angolan materials and local and Chinese workers supervised directly by Chinese project managers.⁷ The urban layout based on a *tabula rasa* and framed as a rectangle developed longitudinally in a 1:2 proportion. It is structured on an orthogonal grid of wide roads and divided symmetrically into 4 sectors by a main north-south axis and a secondary east-west one (Figure 4). The main axis works as urban promenade lining up most of the public functions and the larger stripe of public green. In the four sectors, the blocks are occupied by about 750 residential buildings ranging from 5 to 11 storeys for total 20,000 apartments, a hundred commercial businesses, forty schools, and several sports facilities. Different colours make the built fabrics recognizable and mitigate the anonymous landscape of prototyped housing blocks.

Phenomenal level of comparison

The two case studies were designed and developed in different ways and under different conditions. On one side, Pujiang is the outcome an urban plan designed by an Italian firm for a small community of 50,000 people in the outskirts of Shanghai; on the other side, Kilamba is totally a product of the Chinese planning practice intended to create the most modern settlement for 160,000 medium-class citizens of Luanda.

Their functional programs are similar and differ just in terms of quality and quantities. Nevertheless, apart from the geographical contexts, the most evident difference is related to the roles of the actors in charge of the design because, in the case of Pujiang, a foreign designer was asked to imagine a foreign modern city that eventually could adapt to a Chinese program and, in the second case, the Chinese were themselves the foreigners bringing to Angola their own idea for a modern and healthy city. The two conditions of exporting and importing urban plans was translated into the two cases in different ways. On the one hand, Pujiang was the chance for the Italians to experiment the translation of their planning culture into that *tabula rasa* not practicable anymore in Italy because of its dense built environment; Gregotti created the chance to dialogue with the historical identity of the context and tried to intertwine the formal elements of the traditional urban landscape into the high-end project of the new



town. On the other hand, in Kilamba the cultural joint seems to be absent and the town comes to be a true reproduction of the quick and tiresome urbanization occurred in China, with the difference that Kilamba masterplan transfer the symbolism of its power into the structural elements of the built space establishing a sense of order in the physical environment, regardless to the people and the place, and demonstrating sort a post-colonial attitude.

Morphological level of comparison

On the physical level, the analytic study of the two master plans and the comparison of the two with other city plans of modern and ancient times demonstrate that both Pujiang and Kilamba share some planning principles that put potentially them in continuity with the traditional forms of the ancient urban China in terms of design, proportions, dimensional ratio and, with the due differences, of functions (Figure 5, 6). In terms of formal concept, both towns show the presence the dominant elements of the tradition: an orthogonal grid, the main axis of symmetry, and a cellular structure of plots.⁸

In there, the main axis fixes the symmetry of the entire urban organism and it assumes the connotations of the big boulevard characterized by a central linear park around which the primary viability flows and the main public functions are attested (e.g. schools, civic centres, sports facilities, etc.). However, in urban contexts predominantly residential and relatively small like Pujiang and Kilamba, the axis lacks any monumental connotation.

Moreover, the two cases share approximately the same area and a similar rhythm of the grid lines.⁹ This makes, eventually, the geometry of the two settlements almost superimposable; the ideal rectangles defining the urban area have similar proportion and dimension, despite the irregular shape generated by stretching one of them. The orientation of the settlements is the same with the short side aligned in direction north-south and the layout is determined by the orthogonal grid defining the infrastructural layers of the settlements.

The rhythm of the grids shows that modules and dimensions repeat in identical or overturned or reduced sequences, however demonstrating their recursion. The vertical scan tends to differ from the horizontal one, generating a square mesh of rectangular plots of land. Among the modules identified in the comparison, the pair "A · B" and the sequences "B · A | A · B" and "A · B | B · A" along the axis of longitudinal symmetry configure the principal urban space of the public functions, as like as in the classic city plans (e.g. Chang'an and Beijing). The study reveals also that the grid tends to split between a main grid and a secondary one generated by the submultiples of the basic modules (e.g. B/2 and B/3 instead of B). The first grid defines a higher hierarchical level of infrastructure and a macroscopic partition of neighbourhoods and quarters, which refer to a metropolitan and territorial rather than local scale. The second one marks the networks of roads and channels and the partition of plots. Indeed, the vertical main and secondary grid lines of Pujiang and Kilamba can be composed as:

$$\begin{aligned} (P_{v1}) & \qquad \qquad \qquad B \cdot A | A \cdot B \\ (P_{v2}) & \qquad (B/3 \cdot B/3 \cdot B/3) \cdot (B/2 \cdot E \cdot B/2) | (B/2 \cdot E \cdot B/2) \cdot (B/3 \cdot B/3 \cdot B/3) \\ (K_{v1}) & \qquad \qquad \qquad B \cdot A | C/2 | A \cdot B \\ (K_{v2}) & \qquad \qquad \qquad B \cdot (A/2 \cdot A/2) | C/2 | (A/2 \cdot A/2) \cdot B \end{aligned}$$

Eventually, the analysis of grid lines dimension shows a series of constant ratios recurring in the Chinese urban grids with no exception for Pujiang and Kilamba.

Conclusion

In general terms, the Pujiang town recalled the cosmopolitan and hybrid character of Shanghai despite the inversion of roles; in fact, as the past the grafting of Western architecture was a gesture of arrogance towards the local culture, today it was a collaboration that the city promotes with strong commitment. Kilamba shows instead the straightforwardness of Chinese actors in developing its one vision of the urbanization, mostly regardless the cultural implications related to importing urban types and plans, and the consequent living models.

Besides, from the morphological perspective Pujiang and Kilamba demonstrated to be two favourable contemporary testing grounds for applying a method commonly limited to the historical case studies. In fact, the analytical approach demonstrated that the current planning experiences are able to create a trans-geographic continuity between themselves and the past. Eventually, this means that Chinese contemporary planning principles, even when stereotyped, reinterpreted or prototyped, could still be coherent with the urban history and shared in a wider global urban culture.



Tables and Figures



Figure 1: Gregotti Associati International, bird view of Pujiang, 2008.



Figure 2: Gregotti Associati International, *Masterplan for Pujiang*, 2001.



Figure 3: CITIC, bird view of Kilamba, 2011.



Figure 4: CITIC, *Masterplan for Kilamba*, 2008.

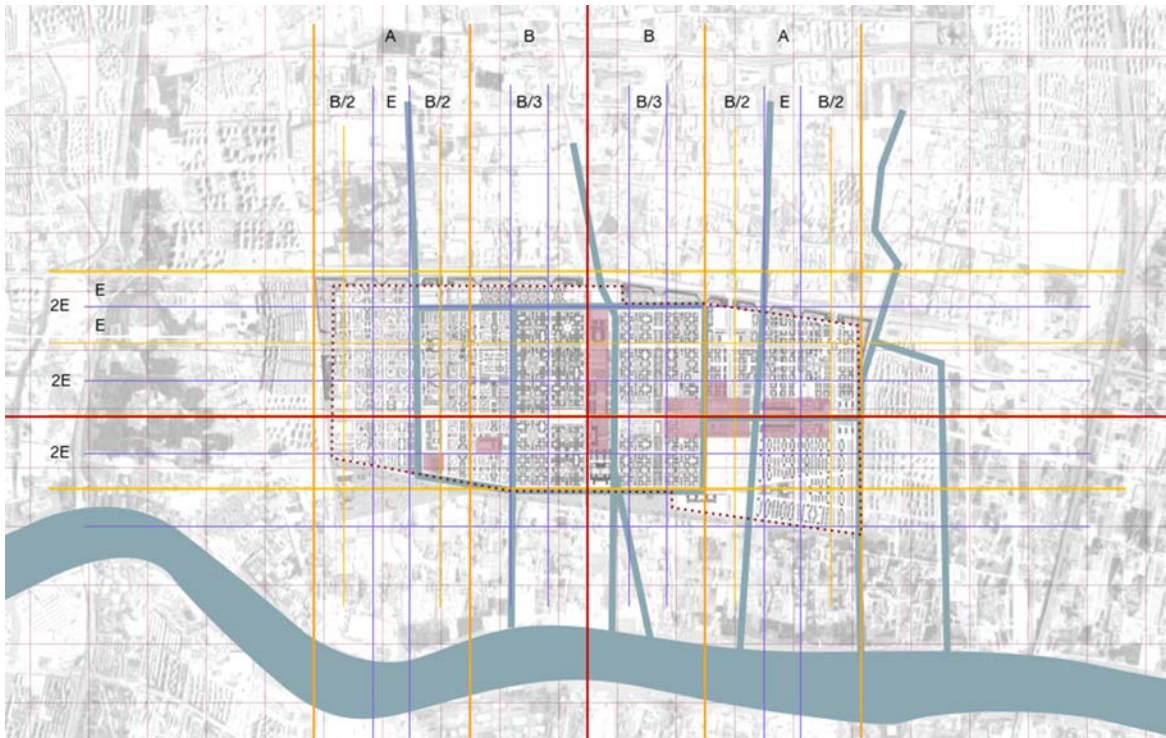


Figure 5: Analysis of the Pujiang urban structure. Drawing by the author on the masterplan designed by Gregotti Associati International.

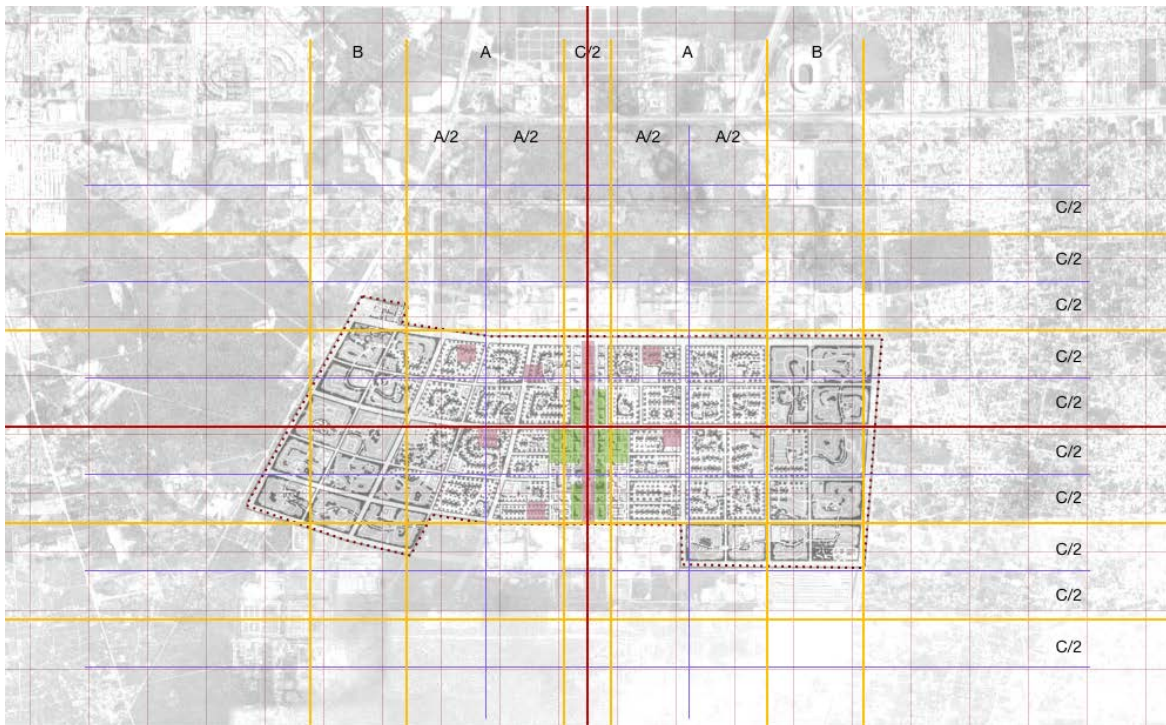


Figure 6: Analysis of the Kilamba urban structure. Drawing by the author on the masterplan designed by CITIC.

Acknowledgements

The results presented in this paper are part of the PhD research conducted by the author and titled “*La città cinese e i caratteri perduranti tra tradizione e modernità*” (transl. “*The Chinese city and its persistent planning features between tradition and modernity*”).



Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Domenica Bona (1986) is an Italian architect, and researcher currently based in Rome. She studied architecture at the Shenzhen University (PRC) and graduated from School of Architecture of Polytechnic of Milan in 2012. Largely involved in academic research related to contemporary Chinese urbanism and architecture, she holds a Ph.D. from the Third Rome University and her doctoral thesis investigates the concept of *chineseness* in the image of Chinese contemporary cities. Since 2013, Domenica has been teaching assistant in Urban Planning, Human Geography and Urban Studies in Milan and Rome. Since 2015, she has been the curator of Divisare and was recently appointed editor-in-chief of Divisare Books.

Bibliography

- Bauerfiend, Bettina, and Josefine Fokdal. *Bridging Urbanities: Reflections on Urban Design in Shanghai and Berlin*. Münster: LIT Verlag, 2011.
- Cain, Allan. "African Urban Fantasies: Past Lessons and Emerging Realities." *Environment and Urbanization* 26, no. 2 (2014): 561-67.
- Caniggia, Gianfranco. *Lettura Dell'edilizia Di Base*. Venezia: Marsilio, 1981.
- Chen, Fei, and Kevin Thwaites. *Chinese Urban Design: The Typomorphological Approach*. Abingdon-on-Thames: Routledge, 2013.
- CITIC. "Kilamba." <http://kilamba-info.com/>.
- Conzen, Micheal R.G. *Alnwick, Northumberland: A Study in Town-Plan Analysis*. London: Institute of British Geographers, 1969.
- Delsante, Ioanni. "Shanghainese Sub-Urbanism. Features, Rise and Trends Towards Unified Urban and Rural Development." Chap. 7 In *Study on Architecture and Urban Spatial Structure in China's Mega-Cities Suburbs*, edited by Tiziano Cattaneo, 113-24. Bologna: Universitas Studiorum, 2016.
- den Hartog, Harry. *Shanghai New Towns* [上海新城: 追寻蔓延都市里的社区和身份]. Rotterdam: 010 Publishers, 2010.
- Gu, Kai. "Urban Morphology of China in Post-Socialist Age: Towards a Framework of Analysis." *Urban Design International* 6, no. 3 (2010): 125-42.
- Gu, Kai, and J.W.R. Whitehand. "Research on Chinese Urban Form: Retrospect and Prospect." *Progress in Human Geography* 30, no. 3 (2006): 337-55.
- Li, Xiaodong, and Yeo Kang Shua. *Chinese Conception of Space* [in Eng/Cn]. Beijing: China Architecture & Building Press, 1991.
- Morpurgo, Guido. *Gregotti & Associates. The Architecture of Urban Landscape*. New York: Rizzoli, 2014.
- Muratori, Saverio. *Studi Per Una Operante Storia Urbana Di Venezia*. Roma: Istituto Poligrafico dello Stato, 1960.
- Robinson, Thomas W. , and David L. Shambaugh. *Chinese Foreign Policy: Theory and Practice*. Wotton-under-Edge: Clarendon Press, 1994.
- Rossi, Aldo. *L'architettura Della Città*. Padova: Marsilio, 1966.
- Rowe, Peter G., and Har Ye Kan. *Urban Intensities: Contemporary Housing Types and Territories*. Berlin: Birkhäuser, 2014.
- Schinz, Alfred. *The Magic Square: Cities in Ancient China*. Fellbach: Edition Axel Menges, 1996.
- Wang, Da Wei David. *Urban Villages in the New China: Case of Shenzhen*. New York: Springer, 2016.
- Whitehand, J.W.R., Kai Gu, Susan M. Whitehand, and Jian Zhang. "Urban Morphology and Conservation in China." 28, no. 2 (2011): 171-85.



Xue, Charlie Q. L., and Minghao Zhou. "Importation and Adaptation: Building 'One City and Ninetowns' in Shanghai: A Case Study of Vittorio Gregotti's Plan of Pujiang Town." *Urban Design International* 12 (2007): 21-40.

Image sources

Figure 1: Archello

Figure 2: Gregotti Associati International

Figure 3: CITIC

Figure 4: CITIC

Figure 5: Analysis by the author on the masterplan by Gregotti Associati International

Figure 6: Analysis by the author on the masterplan by CITIC

¹ First to develop the typological method, Gianfranco Caniggia applied it to several cases, by comparison, demonstrating the general rules behind the evolution of urban fabrics in the medieval time and determining the evolution process of historical architectural types. Focusing on the case Como, he could determine the historical evolution of the city from the Roman time and date the current urban fabrics. The same work was conducted by Saverio Muratori to study the evolution of Venice and Rome, discovering the logic behind the urban development and the typological evolution of their architecture. Later, Aldo Rossi's work of the "analogous city" was an attempt to move the typological research to the urban scale, considering some urban elements as typological in force of their form, function, and symbolism. See: Gianfranco Caniggia, *Lettura Dell'edilizia Di Base* (Venezia: Marsilio, 1981); Saverio Muratori, *Studi Per Una Operante Storia Urbana Di Venezia* (Roma: Istituto Poligrafico dello Stato, 1960); Aldo Rossi, *L'architettura Della Città* (Padova: Marsilio, 1966).

² The geographer Michael Robert Günter Conzen was main scholar who foresaw the possibility to research the geography of settlements by focusing on the ground plan of a town or a part of it and determining a scalar logic underlying the hierarchical structure of the built environment. See: Micheal R.G. Conzen, *Alnwick, Northumberland: A Study in Town-Plan Analysis* (London: Institute of British Geographers, 1969). In relation to the specific Chinese context, see: Kai Gu and J.W.R. Whitehand, "Research on Chinese Urban Form: Retrospect and Prospect," *Progress in Human Geography* 30, no. 3 (2006); Kai Gu, "Urban Morphology of China in Post-Socialist Age: Towards a Framework of Analysis," *Urban Design International* 6, no. 3 (2010); J.W.R. Whitehand et al., "Urban Morphology and Conservation in China," 28, no. 2 (2011).

³ Concerning the typo-morphological approach and its application on the Gu.Chinese context, the contribution by Fei Chen and Kevin Thwaites is the most relevant and exhaustive event though limited to a small-scale case study in Nanjing. See: Fei Chen and Kevin Thwaites, *Chinese Urban Design: The Typomorphological Approach* (Abingdon-on-Thames: Routledge, 2013).

⁴ About Shanghai New Towns and Pujiang, see: Bettina Bauerfiend and Josefine Fokdal, *Bridging Urbanities: Reflections on Urban Design in Shanghai and Berlin* (Münster: LIT Verlag, 2011); Charlie Q. L. Xue and Minghao Zhou, "Importation and Adaptation: Building 'One City and Ninetowns' in Shanghai: A Case Study of Vittorio Gregotti's Plan of Pujiang Town," *Urban Design International* 12 (2007); Peter G. Rowe and Har Ye Kan, *Urban Intensities: Contemporary Housing Types and Territories* (Berlin: Birkhäuser, 2014); Guido Morpurgo, *Gregotti & Associates. The Architecture of Urban Landscape* (New York: Rizzoli, 2014); Ioanni Delsante, "Shanghainese Sub-Urbanism. Features, Rise and Trends Towards Unified Urban and Rural Development," in *Study on Architecture and Urban Spatial Structure in China's Mega-Cities Suburbs*, ed. Tiziano Cattaneo (Bologna: Universitas Studiorum, 2016); Harry den Hartog, *Shanghai New Towns* [上海新城: 追寻蔓延都市里的社区和身份] (Rotterdam: 010 Publishers, 2010).

⁵ Right after, the firm won two other competitions, the one for the regeneration of the area of Wai Tan Tuan, a former British concession along the Shanghai Bund (2002) and the one for the residential district Pujiang Village, south of Pujiang.

⁶ In 2006 the Africa-China partnership was officialised at the Beijing Summit of the Forum on China-Africa Cooperation (FOCAC) attended by 48 African countries. About the Chinese foreign policies and affairs, see: Thomas W. Robinson and David L. Shambaugh, *Chinese Foreign Policy: Theory and Practice* (Wotton-under-Edge: Clarendon Press, 1994).

⁷ See the official website promoting the new town: CITIC, "Kilamba," <http://kilamba-info.com/>.

⁸ These "urban figures" are extensively described and analyzed by the literature and they are part of the work developed in the author's PhD thesis. Among the main studies, see: Xiaodong Li and Yeo Kang Shua, *Chinese Conception of Space* (Beijing: China Architecture & Building Press, 1991); Alfred Schinz, *The Magic Square: Cities in Ancient China* (Fellbach: Edition Axel Menges, 1996).

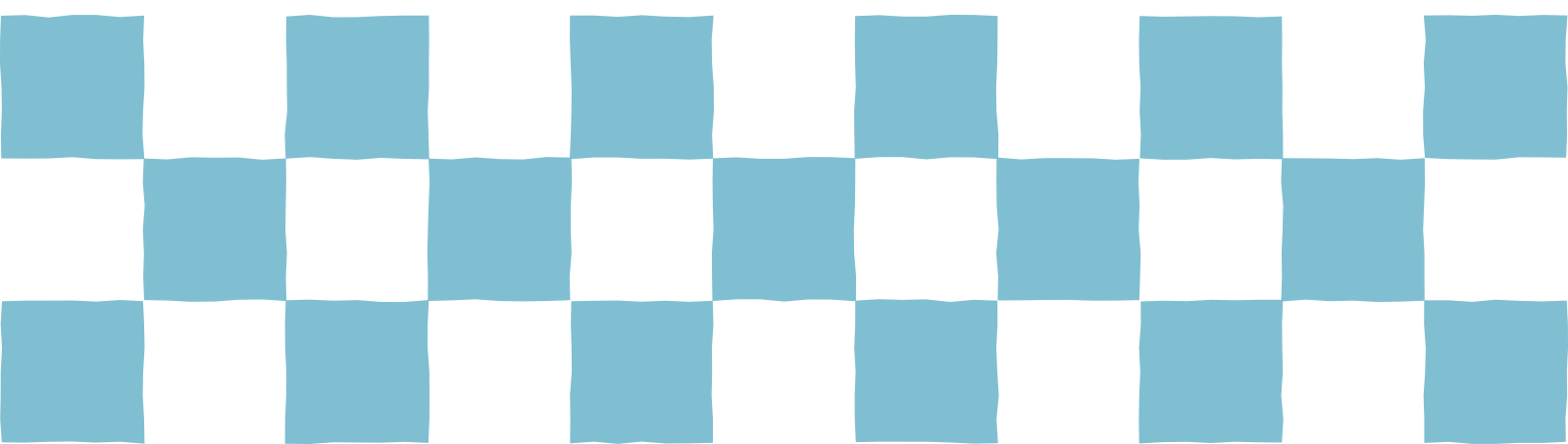
⁹ As shown in the PhD thesis by the author, at the same scale the modules composing the urban grids were identified in linear measurements, which make up the sequences of the vertical and horizontal grid lines. The recognized modules are mainly six, indexed with the letters A-F.



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

46 **Planning Practice Between the Late 19th Century and the Early 20th Century**



Learning from Berlin: How to create a dense urban area

Michael Locher (Berne University of Applied Sciences)

In the specialist literature, the Berlin tenement (Berliner Mietskasernen) is considered as the epitome of speculative overuse of the residential block on the eve of the Modern period. This view misses the fact that at the turn of the 19th century, several urban districts in Berlin were built for an emerging middle class that are of outstanding urban quality. The entrepreneur Georg Haberland (Berlinische Boden-Gesellschaft) developed entire neighborhoods that contributed greatly to the history of urban development at the beginning of the 20th century – a contribution seriously underestimated. In addition to the Anglo-Saxon way of suburbanization of the middle class and the French way of urbanization of the bourgeoisie within the existing town – which are commented on extensively – the urban interventions of Haberland are a little-documented third way in the history of city expansions. In this paper, first, I address the question of the urban qualities of the Bavarian District (Bayerisches Viertel), drawing on previously unpublished historical sources. And second, I propose a thesis how to place Haberland's undervalued contribution in the wider context of Berlin's planning history and beyond. Planning urban settlements from scratch is a current and crucial topic particularly in the US and in East Asia. Corresponding current projects – often designed by European planners – can be found especially in China.

Practice and thoughts of Guangxi Early-modern Old City renovation(1925-1936): Typical of Chinese Provincial-level Military Control Planning

Li Ji (Wuhan University of Technology, Guilin University of Technology)

Aiming at the old cities renovation planning practice by Guangxi Government with their military and political power from the 1920s to the 1930s, who were local warlords before and formed the New Kwai Clique ruling with Three People's Principles and Material Development Planning under the guidance of Sun Zhongshan, the paper analyzes the evolution Characteristics of urban form in the four major cities, which was Wuzhou, Liuzhou, Nanning and Guilin, includes that demolishing the walls, constructing ring roads at the original sites, straightening streets of cities, expanding and changing them to roads, then building arcades on both sides to escape the rain and the sun, and finally adding the public facilities with drainage, docks, water and power supply, and so on, that could be considered as existed old city reconstruction with gradual developments. And it also shows that planning criss-cross roads network in a new district outside the old cities of the jumping rhythm by with new urban core. Either the former or the latter were both applying western planning theories for the purpose of improving and beautifying the urban environment. While presenting different urban forms, it could be sum up that the pattern went to the style "Streets City → Arcades City → Roads City", with which presented the modernization appearance by the way to "Streets → Roads → Roads Net", that Presenting a new look of the Roadism characteristics of urban renewal planning, and which had important significance and influence on its subsequent urban planning. Investigate the reasons of urban changes, on which it has an important impact the dominant ideologies of the government leaders to mobilize the social forces and achieve modernization quickly, belongs to the subjective consciousness of municipal decision-makers, just the "City will", which has a special effect in changes for functions, space and pattern of cities, participated in urban planning management and led the development trend.

Negotiations between Progress, Privilege and Tradition: Building Riverfront Avenue and Dragon King (longwang) Park in Hankou, China, 1929-1937

Tianjie Zhang (Tianjin university Associate professor) and Rui Guan (Tianjin university Postgraduate student)

The paper examines the conceptualization and materialization of Riverfront Avenue (yanjiang malu) in Hankou during 1927-1937, a great treaty port of central China. The Riverfront Avenue was the first parkway built by the newly-established Hankou government, connecting the existed Bund in foreign concessions along the Yangtze River. In an astonishing resolution and dispatch, the Hankou technocrats cleared away thousands of shanty houses, godowns and other obstacles, and constructed the 40m-wide parkway and over 20m-high embankment in a most scientific way. The parkway was also the most influential one, changing the whole appearance of the Chinese riverfront. It remains to be a symbol of the city's former glory admired by many Hankou residents today. Noteworthy, the Avenue was never built smoothly, nor was it completely actualized in conformity with the initial plan. The paper accordingly articulates the negotiations between progress, privilege and tradition, against the background of Hankou's wider agenda of urban reform, and broader efforts to remake Chinese cities in the wake of the foreign encroachment in early twentieth-century China.

Via archival research and in-deep interviews, the paper elucidates the planning ideas of the Riverfront Avenue. The main planner Wu Guobing was ever educated in London in late 1910s and interned in Belgium. He tried his hands to transplant the European modernity into Hankou, including not only physical environments but also social lives. Besides Wu, the research also reveals the intentions and desires of multiple stakeholders, including local government, related planners and engineers, urban elites, foreign privilegers, indigenous residents, grassroots sojourners, etc. Some of them brought a variety of obstacles and interventions to the Riverfront Avenue project.

The paper will further examines the obstacles, and identify the mechanism behind. One of the most serious challenges came from the Dragon King, who was the bringer of rain, controller of water, and arch-criminal of flood and drought. In the imperial days, there had erected thousands of temples in the Dragon King's honor. In 1931, Hankou government unhesitatingly demolished the Dragon King Temple in the way. Hankou's planners and engineers thought the deity of the Dragon King, the temple and rituals in his honor were unexceptionally superstitious. However, the newly-raised Riverfront Avenue along did not withstand an immediate dreadful flood that year. The result was the inundation of almost the entire Hankou with devastation and destruction never before equaled in the century. In the wake of the catastrophic flood, more and more local people deemed that the recent dismantlement of the Dragon King Temple enraged the Dragon King. To all the criticisms and petitions, the government had to take actions to pacify the popular consensus. Via bottom-up perspectives, the paper will reveal some indigenous thoughts within Hankou's hydraulic society.

In general, the paper construes the planning and construction process of Hankou's Riverfront Avenue, and explores the spatial expressions and the social relations which informed its production and use.

The conceiving of a New Street and its building practices in Regency London.

Noemi Mafri (Politecnico di Torino)

In 1813, an ambitious plan by the architect John Nash 'to make a more convenient communication between Marylebone Park and Charing Cross' was approved and immediately carried on. Regent Street was only one of the several 'Plans of New Streets' conceived during the London Metropolitan Improvements, some of which realised and some other not. After a brief analysis of the previous proposals, the paper analyses some particulars from the challenge for the design of Regent Street. It also illustrates which was the practice of the building site for the execution of a new street passing through Crown properties and private lands. The contribution aims also to understand how the street building machine was set up and how it worked, pointing out problems and goals of the formation of the street. The paper discusses part of an ongoing research regarding the transformations of this famous street also through the study of unpublished documents.



Learning from Berlin: How to create a dense urban area - Haberland's Bavarian District

Michael Locher

Berne University of Applied Sciences, michael.locher@bfh.ch

In the specialist literature, the Berlin tenement (*Berliner Mietskaserne*) is considered as the epitome of speculative overuse of the residential block on the eve of the Modern period. This view misses the fact that at the turn of the 19th century, several urban districts in Berlin were built for an emerging middle class that are of outstanding urban quality. The entrepreneur Georg Haberland (*Berlinische Boden-Gesellschaft*) developed entire neighborhoods that contributed greatly to the history of urban development at the beginning of the 20th century – a contribution seriously underestimated. In addition to the Anglo-Saxon way of suburbanization of the middle class and the French way of urbanization of the bourgeoisie within the existing town – which are commented on extensively – the urban interventions of Haberland are a little-documented third way in the history of city expansions. In this paper, first, I address the question of the urban qualities of the Bavarian District (*Bayerisches Viertel*), drawing on previously unpublished historical sources. And second, I propose a thesis how to place Haberland's undervalued contribution in the wider context of Berlin's planning history and beyond. Planning urban settlements from scratch is a current and crucial topic particularly in the US and in East Asia. Corresponding current projects – often designed by European planners – can be found especially in China.

Keywords: urbanization, urban density, urban form, planning legacy

Introduction

This paper revisits urban development in Berlin in the first decade of the 20th century in theory and practice, seeking to exemplify 'urban qualities' by investigating the Bavarian District in Schöneberg. Much historical research has been published on the history of European cities at the end of the 19th century. The literature focuses on Paris, London, Vienna or Barcelona, while Berlin is often considered to be a poor example of urban development.¹ With regard to Modern urban development, however, it is important to state that successful examples of urbanism in Berlin at the turn of the last century do exist. They are just neglected in current urban research about the beginning of the Modern period. I claim that one of the most important and most successful example of this is the urbanism of Georg Haberland and his company, the Berlinische Boden-Gesellschaft. This was one of the dominant land companies (Terrain-Gesellschaft) in Berlin that managed the rapid growth of the population at the turn of the century. To this day the company does not receive the due scientific attention.²

To understand the value of Haberland's contribution it is important to explain the urban issue of Berlin at the end of the 19th century. At that time, Berlin was well-known for its *Mietskaserne*³, literally 'military barracks for renting'. These tenement buildings consisted of dark apartments situated around very narrow courts. To get to your apartment you often had to pass other dark courts, and the apartments had no direct access to the street. This confusing urban situation caused a number of social and hygienic problems. That is why Berlin was – at the time as well as later – generally considered an urban settlement with a very low living standard.⁴ Contemporaries criticized the situation sharply and from different angles. On the one hand, the overuse of the city for financial speculation was pointed out. In a book published in 1907, Rudolph Eberstadt – an economist and urban planner at the local university – described the urban fabric of Berlin as a highly inconvenient structure for urban living, evoking speculative economic development.⁵ Generally, Berlin was analyzed as the epitome of speculative overuse⁶ at the beginning of the Modern period. On the other hand, a formal critique of this kind of capitalist urbanism was formulated. Werner Hegemann – an urban planner from Berlin and professor in New York – described the residential block in 1930 as 'a hopeless fortress in a ridiculous baroque or renaissance façade'⁷. For Hegemann and his Modernist colleagues, Modern urbanism was the true formal answer to urban problems. As an example, Hegemann cites the *Hufeisensiedlung*⁸ designed by the architect Bruno Taut. This housing is of course a very valuable contribution to solving of urban problems, which is nowadays even found on the list of World Heritage sites. But Hegemann's indiscriminate enthusiasm for Modern urbanism ignored the fact that there were other alternatives to the so-called *Mietskaserne* – the tenement building – in Berlin. A nuanced view of pre-Modern urbanism shows there were urban solutions that have advantages over Modern concepts and that could



moreover serve as a paradigm to this day. I claim that the so-called *Bayerisches Viertel* in Berlin, the Bavarian District (cf. figure 1) is a powerful pre-Modern urban strategy. In the following I will seek to lay out why Eberstadt and Hegemann's critique is not adequately applicable to this district. I claim that the Bavarian District is an undervalued contribution to the history of urbanism.



Figure 1: Berlin, Bavarian District – Victoria-Luise-Square, 1903.

Historical classification

The Bavarian District was founded and developed by Georg Haberland. For Modern critics he was the embodiment of the evil financial speculator⁹, getting rich at the expense of the tenants. On the one hand, there is no doubt about it: With his company – the Berlinische Boden-Gesellschaft – he gained wealth at the turn of the last century, because he was one of the most active entrepreneurs in Berlin.¹⁰ But on the other hand, he managed to develop a large agricultural area into an urban structure of high quality within a few years. To this day Haberland's district is very popular and in demand. The heart of the Bavarian District – the Victoria-Luise-Square – is at present one of the squares with the highest living quality in Berlin. This can be proved by the following: The quality of life in Berlin, broken down to each street, is measured by the government of Berlin on a scientific basis, applying different criteria.¹¹ The following map (cf. figure 2) shows a detailed view of the qualities of life; evidently, the areas in the southwest are of better quality than the rest of Berlin. The map thus shows that the urban developments of Georg Haberland constitute areas of high living quality in Berlin. Haberland must have done something differently and – in the long run – he must have done it better in comparison with the other so-called Berlin tenements. I will explain this claim by beginning with a broader view.

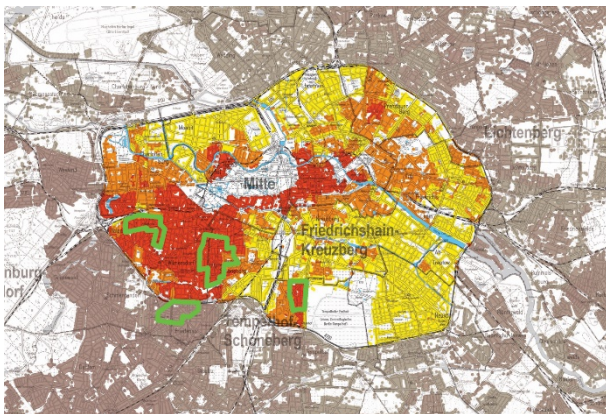


Figure 2: Wohnlagenkarte Berlin, 2018 (red areas: high living qualities, green lines: areas built by Georg Haberland, flagged by the author)

In the mid-19th century important plans were designed for many European cities. Most of these plans are well-known in the history of urbanism, and all of them determine the urban fabric to the present day. Haussmann – for example – transformed Paris fundamentally with many urban interventions in the historic city. The most important aspect of this plan was the improvement of the existing urban fabric by introducing new streets into



the old urban structure.¹² A completely different strategy was suggested by Cerda for Barcelona. He planned the city expansions without reacting to the historic part of Barcelona. Although he was an engineer, he designed a plan with a very formal approach. The main axes – of which only one was finally realized – establish an independent urban structure.¹³ So, in contrast to Haussmann, he planned alongside the existing city. Another important example is the plan for the Ringstrasse in Vienna that reacts again in a different manner and was the result of a competition.¹⁴ It treats the free areas that had been created by the removal of the medieval fortification. The plan suggests a circle around the old town that establishes a sequence of public buildings and squares. This interspace connects the inner city with the city expansions in an artistic and convincing way. And finally Berlin has its contemporaneous transformation plan too, but it is far less known in the history of city planning. It is the so-called Hobrecht Plan of 1862.

As in Paris, Barcelona and Vienna, the plan dating in the mid 18th century is one of the main reasons why the city of Berlin looks the way it does today, because it determined the urban structure in a fundamental way for the last 150 years. James Hobrecht – also an engineer – designed an urban structure that operates like a combination of the plans for Vienna and Barcelona. He suggested a large ring of residential buildings connecting the historic city with the new extra-mural areas by evolving the city expansions out of the existing urban structure (cf. figure 3). The plan was in fact just an alignment plan structured by large blocks and an important sequence of squares. The plan did not impose regulations on the blocks itself. It only described a grid that could be filled according to the existing building code.¹⁵ The regulations however were not adapted to the new plan. This fact allowed a density that was far too high and led to the speculative overuse mentioned above. Despite this fact, the red structure given by Hobrecht's plan was built very fast and completed by the First World War. At first glance, surprisingly, Haberland did not want to be part of this boom.

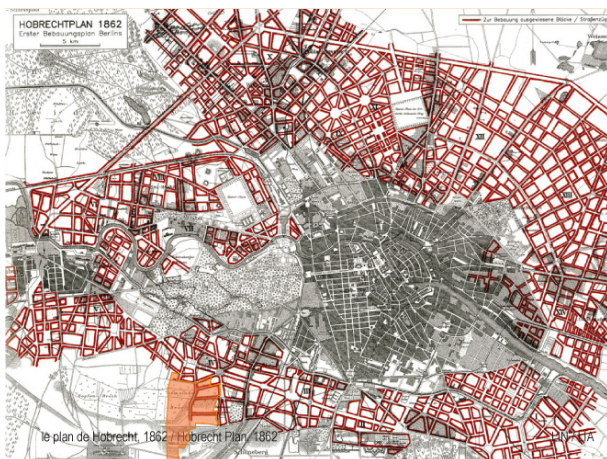


Figure 3: James Hobrecht, Plan for Berlin, 1862, Haberland's property in 1898 (orange lines, future Bavarian District, flagged by the author).

Haberland decided not to work within the alignments of Hobrecht's plan. He began to focus on the southwest of Berlin – at the time worthless farmland around a little village called Schöneberg.¹⁶ There he followed his own strategy of development. He began to persuade the farmers to sell him their farmland at a time when nobody was interested in these parcels of land, so he could buy it at a low price.¹⁷ Although he was self-taught urbanist and architect – he did an apprenticeship as a merchant – he already seemed to anticipate the problems that arose due to the high density within Hobrecht's urban concept.¹⁸ Within a few years Haberland owned a large part of the cheap agricultural area in Schöneberg.¹⁹ There he planned the future Bavarian District, the largest and most important area he would ever develop. In 1898 the streets of Hobrecht's plan still led to nowhere (cf. figure 3), and Haberland understood that he had to adapt to the Hobrecht plan while doing it better. In collaboration with the community of Schöneberg, he designed the alignment plan and defined the parcels of land.²⁰ Haberland's company started to build the streets and the squares, financing the implementation on its own.²¹ Only afterwards did he sell the parcels of land to private owners and, by lending money, Haberland encouraged them to build their own apartment buildings. He even provided the architect to control at least partially the formal expression of the new buildings. If there was no purchaser, he constructed the buildings on his own account and sold them for great profit after completion.²² So the company acted as a partner of the municipal authority as well as urban planner, land surveyor, architect, real estate seller, bank and builder at the same time what led to a very efficient construction process.

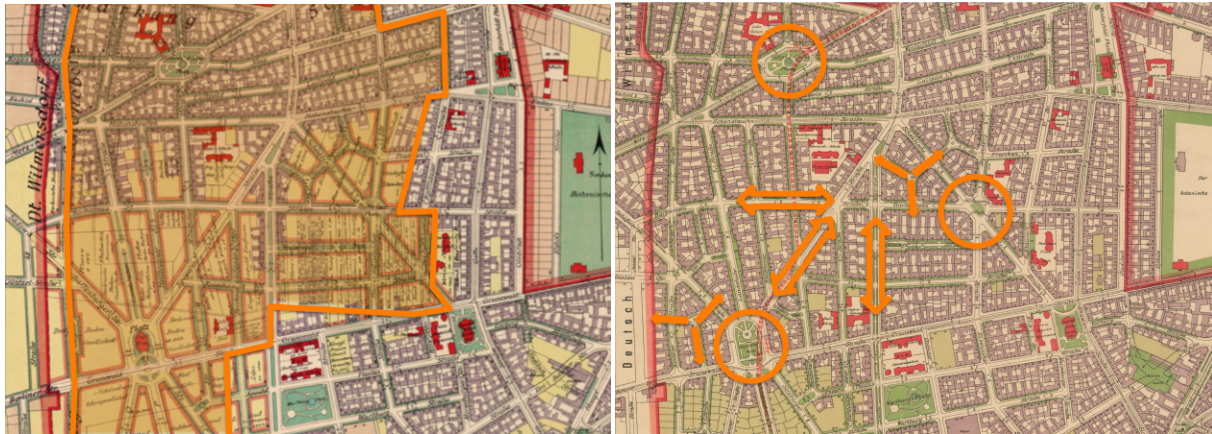


Figure 4.1: Plan of Schöneberg, detail, 1904 (orange area, Bavarian District, flagged by the author).

Figure 4.2: Plan of Schöneberg, detail, 1909 (flagged by the author)

A closer look at the plan of Schöneberg in 1904 explains Haberland's impressive way of producing an urban structure (cf. figure 4.1). The process of urban production started in the northern part where the first buildings were already completed and where they connected the new city expansion with the existing urban structure of Hobrecht's plan. In the southern part, only the streets and squares were built. The plots of the farmers are still visible; they are overlaid by the new urban structure in a steady process that developed the quarter from north to south. The plan is a fascinating historical document because it demonstrates the entire process of developing a city from farmland to dense urban structure. As such, the technical process of developing a city seems quite simple: You buy farmland, establish a master plan, build streets and squares, sell the parcels of land and let them be built. Of course, this description does not take into account the complex political and social processes Haberland had to deal with. But on a formal level Haberland's urban strategy allowed the city to grow in a predictable way and can thus be analyzed and described precisely. In this respect the crucial question is how urban quality was achieved during this process.

Analytical classification

As shown above, contemporary urban planners as well as later experts considered Berlin in general to be of poor urban quality. Yet, Haberland imposed an urban structure that was different from the contemporaneous city expansions in many respects and led to new qualities for different reasons. An analysis of the Bavarian District points out its specific urban elements (cf. figure 4.2) that are unique in this combination for Berlin and beyond. Haberland's area is structured by three squares arranged in a triangle. These squares are connected by a system of perpendicular and diagonal streets. With this arrangement he follows the contemporary literature²³ that he probably knew. But the decisive difference to the conventional urban planning in Berlin was that Haberland treated the resulting blocks in a different manner. He invented a new kind of Y- or T-shaped intersection by connecting 3 residential streets. In order to achieve a more differentiated urban structure he segmented the common building block by this innovative intersection. The combination of these elements – squares, system of streets and intersections – lead to the specific urban structure that is fundamental for the following urban qualities:





Figure 5: Berlin, aerial view of the Bavarian District, 1935.

First, Haberland distributes the squares within a walkable distance. Mixed use is concentrated in these three squares. The squares are shaped so as to get as many corner buildings as possible. In these corner buildings – and only there – shops and restaurants are allowed. In this respect the squares function as centers and meeting-points for the district. Second, Haberland's urban plan imposes a clear and detailed concept for private and public traffic. There is a clear distinction between traffic roads and residential streets with regard to sectional profile and connectivity to neighboring quarters. The residential streets are marked by small front gardens that narrow the traffic areas. The Y- and T-intersections are only planned for the residential streets and provide a local sub-center for the neighborhood in addition to the squares. The public transport system was also important for Haberland's urban strategy. He fought hard with the local authorities to get a connection to the city center by tramways.²⁴ After he had realized that the tramways were too slow, he even financed a subway line. The Bavarian district was about to be finished when Haberland - together with the local authorities - decided to reopen the main streets to get a subway for his district that connected the new squares with the existing public transport system.²⁵ This fact demonstrates the power and financial potential of Haberland's development company. And third, the system of perpendicular and diagonal streets creates small urban blocks with many corner buildings. In contrast to the blocks of Hobrecht's plan this arrangement of rather narrow buildings allows many apartments to be well-exposed. Moreover, the acute-angled intersections give views in different directions along the street. The apartments are not just oriented towards the block across the street. Consequently, this urban structure allowed Haberland to sell the parcels of land at a much higher price because of the good orientation of the buildings. And finally, Haberland managed to create residential streets of high quality. The blocks are small, and a hierarchy of streets and small intersections support orientation within the neighborhood. The small Y-shaped intersections are highlighted by a tree, and front gardens were implemented along all the residential streets (cf. figure 6). These elements, introduced by Haberland and unique in Berlin, were not even common in Europe. For these reasons Haberland's combination of urban elements in his plan is of outstanding quality and seems to be his very own invention.



Figure 6: Berlin, Lindauer Street, 2017.

The combination of these urban elements as they are realized in the Bavarian District is not found in German literature on urbanism at the time. Neither Baumeister²⁶ in 1876, nor Sitte²⁷ in 1889 or Stübgen²⁸ in 1890 – the founders of the discipline of Modern urban construction (*Städtebau*) – proposed similar solutions. The most influential book on urbanism at the end of the 19th century, Camillo Sitte's *City Planning According to Artistic Principles*, champions a picturesque urbanism based on an irregular structure.²⁹ Although he must have known Sitte's ideas, Haberland designs his plan for the Bavarian District in 1898 in the opposite way, by imposing a regular geometrical structure of streets and squares that are point symmetrically organized. He ignores Sitte's claim that planning squares with irregularity 'increases naturalness, stimulates our interest and intensifies the picturesque.'³⁰ Besides the work of Sitte, there was another important German publication on urban planning: Stübgen's instruction manual on urbanism. Stübgen cites examples from Belgium and reproduces plans of Liège, Antwerp and Brussels³¹ that show certain similarities with the urban design for the Bavarian district. Among others, Stübgen refers to an example in Verviers that is very similar to the Viktoria-Luise Square³². Haberland may have been influenced by Stübgen's work, but there is no evidence. Georg Haberland was Jewish and his remains were completely destroyed during the Nazi-Regime. Even his printed legacy gives no evidence of



influencing predecessors. On the contrary, in his books he ignores the questions of design. He published several small books where he only focuses on the economic preconditions for urban planning³³ and describes his planning practice simply as a result of the imagination of his company, the *Berlinische Boden-Gesellschaft*.³⁴ Although various examples cited by Stübben may have influenced Haberland, in particular for the layout of the squares, the combination of urban elements in the Bavarian District can be qualified as a genuine invention of the commercially trained autodidact.

Conclusions

The combination of the main reasons for the urban qualities of the Bavarian District explains why these blocks are in demand as residential areas to this day. Haberland's Bavarian District is a unique contribution to the history of planning and shows a convincing example of urbanity. 'Urban density' in combination with 'social and cultural heterogeneity'³⁵ are preconditions for urbanity and lead to urban qualities that obviously remain popular. Soon after its completion, the Bavarian District became an immediate attraction for the middle class in Berlin with an ensuing vibrant social life.³⁶ Moreover, until 1933, the district was the heart of Jewish social life in Berlin and was called the 'industrial area of intelligence'³⁷. At the same time, the Victoria-Luise-Square was a 'microcosm for Russian immigrants'³⁸. After Shoah and World War II the district has not yet fully recovered even to this day. But Haberland's urban development turned into a social and cultural melting pot, representing an urbanity of high quality soon after construction and until the outbreak of the war. A comparison between the Bavarian District and the conventional contemporaneous urban structures in Berlin shows how uniquely Haberland handled urban density.

The technical aspects of urban planning – as it was defined by Joseph Stübben – is about establishing a street hierarchy, defining parcels of land, fixing the uses and providing a public transport system.³⁹ That is exactly what Haberland did by planning the Bavarian District. But in addition, his example shows that urban qualities basically depend on the relationship between street and building (cf. figure 7) or – in other words – depend on urban density. As Hartmut Häussermann puts it, it is 'the urban density' that generates urban qualities.⁴⁰ This means that urban planning is also about dealing with the ratio of built and unbuilt surfaces or the ratio of built and void volumes. Haberland's example – in contrast to the criticized urbanism in Berlin – shows how to manage this ratio in order to effect heterogeneity and density that are preconditions for urbanity. It is a matter of a fragile equilibrium that cannot be achieved by simple rules but can be exemplified. 'Urban quality emerges and proves itself in individual cases.'⁴¹



Figure 7: Berlin, Bavarian District, Speyerer Street / Bavarian Square, 1925.

As part of this text I can only briefly indicate in a very general way what was the historical value of Haberland's example in comparison to urban planning processes in other European cities. A comparison with contemporaneous city expansions in Paris and London underlines the uniqueness of Haberland's proposal. In the first decade of the 20th century the urban development of Paris was characterized by a densification within the urban fabric.⁴² After Haussmann's plan was realized in the 19th century, there was no more master plan to follow. At that time – during the so-called Belle Epoque – architects in Paris were supposed to finalize Haussmann's ideas and to merely develop the existing streets, with interventions only in specific places.⁴³ Within the dense



urban pattern, architects sought to introduce an urban quality that led to a completely different result in comparison to Berlin. So, in contrast to Berlin, the urbanization of the bourgeoisie in Paris was an intra-mural process consisting in a consolidation of the historically grown urban structure. During the same decade the urbanization of the middle-class in London led again to a completely different solution. London's suburbs "are located on outskirts of, but remain part of the city, with an urban geography intermediate between town and country, and (...) depend upon urban centers for employment, goods and services."⁴⁴ So far this description fits to the Bavarian District. Contemporary with Haberland and driven by the same forces and needs, the solution to the urbanization however is completely different. In London the urban development around 1900 is characterized by low density and can be summarized as "residential, middle-class, owner-occupied suburbs (...) of small detached and semi-detached houses."⁴⁵ The suburbanization in London points already to the future Garden Cities and is the complete opposite of Haberland's strategy of urbanizing the middle-class in Berlin in a structure of high density.

In conclusion, the literature on the history of urbanism in European cities describes two methods of urban development at the dawn of Modern period⁴⁶: On the one hand, there is the Anglo-Saxon way of suburbanizing the middle-class, exemplified by London, Brooklyn or San Francisco. On the other hand, there is the French way of urbanizing the middle-class within the existing urban fabric, which signifies an intra-mural urban process. In contrast, the development in Berlin is generally considered a misleading path both by contemporaries and later observers: a path that leads to a narrow and badly exposed urban structure driven by the speculative overuse of the building land and followed by heavy social problems. This historiography misses the fact that Haberland built a dense urban area with qualities that are greatly undervalued. His urban plan achieved a social and cultural heterogeneity and a density that balances compactness and free space in a multifunctional and walkable city structure. I suggest that in the history of urbanism, the contribution of Haberland's *Berlinische Boden-Gesellschaft* needs a reassessment. The Bavarian District could serve as a model for a third way of urbanizing the middle class, even in the current context of rapidly growing cities in Europe, Asia and elsewhere.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Michael Locher, MSc Arch ETH Zurich / Senior Lecturer Berne University of Applied

Endnotes

¹ Harald Bodenschatz, *Städtebau in Berlin* (Berlin: Dom publishers, 2013), 28.

² Ibid., 35.

³ Dieter Hoffmann-Axthelm, *Das Berliner Stadthaus* (Berlin: Dom publishers, 2011), 197.

⁴ Werner Hegemann, *Das steinerne Berlin* (Berlin: Ullstein, 1963), 207.

⁵ Rudolph Eberstadt, *Die Spekulation im neuzeitlichen Städtebau* (Jena: Fischer, 1907), 8-10.

⁶ Franz Pfemert (ed.), *Die Aktion* (Berlin: Die Aktion, 1912), 654.

⁷ Werner Hegemann, *Das steinerne Berlin*, 210.

⁸ Ibid., 211.

⁹ Ralph Herrmanns, *Haberlands* (Stockholm: Natur och Kultur, 1996), 31.

¹⁰ Christoph Bernhardt, *Bauplatz Groß-Berlin* (Berlin: De Gruyter, 1997), 65.

¹¹ Berlin Senatsverwaltung, *Wohnlagenkarte*, accessed March 1, 2018,

<http://www.stadtentwicklung.berlin.de/wohnen/mietspiegel/de/wohnlagenkarte.shtml>

¹² André Corboz, *Die Stadt und die industrielle Revolution* (Zürich: ETH, 1989), 24.

¹³ Walter Kieß, *Urbanismus im Industriezeitalter* (Berlin: Ernst & Sohn, 1991), 150.

¹⁴ Ibid., 185.

¹⁵ Harald Bodenschatz, *Städtebau in Berlin*, 30.

¹⁶ Helmut Winz, *700 Jahre Schöneberg* (Berlin: Haupt & Puttkammer, 1964), 106.

¹⁷ Ralph Herrmanns, *Haberlands*, 30.

¹⁸ Ibid., 19.

¹⁹ Helmut Winz, *700 Jahre Schöneberg*, 110.

²⁰ Christoph Bernhardt, *Bauplatz Groß-Berlin*, 185.

²¹ Georg Haberland, *40 Jahre Berlinische Boden-Gesellschaft* (Berlin: Frisch, 1930), 9.

²² Bernhardt, *Bauplatz Groß-Berlin*, 66-67.

²³ Reinhard Baumeister, *Handbuch der Baukunde*, 3. Heft (Berlin: Toeche, 1890), 16.

²⁴ Georg Haberland, *40 Jahre Berlinische Boden-Gesellschaft*, 21.

²⁵ Gudrun Blankenburg, *Das Bayerische Viertel in Berlin-Schöneberg* (Berlin: Bäßler, 2012), 32.

²⁶ Reinhard Baumeister, *Stadt-Erweiterungen* (Berlin: Ernst, 1876).

²⁷ Camillo Sitte, *Der Städtebau nach seinen künstlerischen Grundsätzen* (Wien: Graeser, 1889).



- ²⁸ Joseph Stübgen, *Der Städtebau* (Darmstadt: Bergstrasser, 1890).
- ²⁹ Michael Mönninger, *Naturdenken und Kunstgeschichte*, in *Kunst des Städtebaus*, ed. Klaus Semsroth (Wien: Böhlau, 2005), 38.
- ³⁰ Camillo Sitte, *Der Städtebau*, 58 (translation by the author).
- ³¹ Joseph Stübgen, *Der Städtebau* (Darmstadt: Bergstrasser, 1890), 244.
- ³² Joseph Stübgen, *Der Städtebau*, 129.
- ³³ Georg Haberland, various publications, cf. Bibliography.
- ³⁴ Georg Haberland, *40 Jahre Berlinische Boden-Gesellschaft* (Berlin: Fischer, 1930), 7.
- ³⁵ Hartmut Häussermann, *Phänomenologie und Struktur städtischer Dichte*, in *Städtische Dichte*, ed. Vittorio Lampugnani (Zürich: NZZ, 2007), 28. (Translation by the author)
- ³⁶ Gudrun Blankenburg, *Das Bayerische Viertel in Berlin-Schöneberg*, 28.
- ³⁷ *Ibid.*, 50.
- ³⁸ *Ibid.*, 54.
- ³⁹ Joseph Stübgen, *Der Städtebau*, 3.
- ⁴⁰ Hartmut Häussermann, *Phänomenologie und Struktur städtischer Dichte*, in *Städtische Dichte*, ed. Vittorio Lampugnani (Zürich: NZZ, 2007), 28.
- ⁴¹ Thomas Keller, *Das Kriterium der Dichte im Städtebau*, in *Städtische Dichte*, ed. Vittorio Lampugnani (Zürich: NZZ, 2007), 45. (Translation by the author)
- ⁴² Bernard Rouleau, Paris: Histoire d'un espace (Paris: Edition du Seuil, 1997), 364.
- ⁴³ *Ibid.*, 378.
- ⁴⁴ Dion Georgiou, *Leisure in London's Suburbs*, in *The London Journal*, Vol. 39 No. 3 (London: Taylor and Francis, 2014), 175.
- ⁴⁵ Mark Clapson, *Suburban Century. Social Change and Urban Growth in England and the USA* (Oxford: Berg, 2003), 4.
- ⁴⁶ Harald Bodenschatz, *Städtebau in Berlin*, 35.

Bibliography

- Baumeister, Reinhard. *Stadt-Erweiterungen in technischer, baupolizeilicher und wirtschaftlicher Beziehung*. Berlin: Ernst, 1876.
- Baumeister, Reinhard. *Handbuch der Baukunde, 3. Heft. Städtisches Strassenwesen und Städtereinigung*. Berlin: Ernst Toeche, 1890.
- Bernhardt, Christoph. *Bauplatz Groß-Berlin. Wohnungsmärkte, Terraingewerbe und Kommunalpolitik im Städtewachstum der Hochindustrialisierung (1871-1918)*. Berlin: De Gruyter, 1997.
- Blankenburg, Gudrun. *Das Bayerische Viertel in Berlin-Schöneberg. Leben in einem Geschichtsbuch*. Berlin: Bäßler Verlag, 2012.
- Bodenschatz, Harald. *Platz frei für das neue Berlin!*. Berlin: Transit, 1987.
- Bodenschatz, Harald. *Städtebau in Berlin. Schreckbild und Vorbild für Europa*. Berlin: DOM publishers, 2013.
- Clapson, Mark. *Suburban Century. Social Change and Urban Growth in England and the USA*. Oxford: Berg, 2003.
- Corboz, André. *Die Stadt und die industrielle Revolution, Teil II*. Zürich: ETH, 1989.
- Eberstadt, Rudolph. *Die Spekulation im neuzeitlichen Städtebau*. Paderborn: Historisches Wirtschaftsarchiv, 2012 (reprint, original version 1907).
- Georgiu, Dion. *Leisure in London's Suburbs*. In *The London Journal*, Vol. 39 No. 3, 175-186. London: Taylor and Francis, 2014.
- Haberland, Georg. *Groß-Berlin. Ein Beitrag zur Eingemeindungsfrage*. Berlin: Simion Verlag, 1904.
- Haberland, Georg. *Die Entwicklung des bayerischen Viertels*. Berlin: Pass & Garleb, 1909.
- Haberland, Georg. *Das Mietverhältnis im Kriege. Vorschläge zur wirtschaftlichen Erhaltung des Hausbesitzes*. Berlin: Unger Verlag, 1914.
- Haberland, Georg. *Groß-Berlin*. Berlin: Unger Verlag, 1917.
- Haberland, Georg. *Wie kommen wir aus der Wohnungsnot heraus?*. Berlin: Unger Verlag, 1919.
- Haberland, Georg. *Die Berliner Wohnungsversorgung*. Berlin: Bauwelt-Verlag, 1928.



Haberland, Georg. *40 Jahre Berlinische Boden-Gesellschaft. Ein Bild der Groß-Berliner Wohnungsversorgung und der Tätigkeit der Gesellschaft vor, während und nach der Kriegszeit.* Berlin: Frisch, 1930.

Häussermann, Hartmut. *Phänomenologie und Struktur städtischer Dichte.* In *Städtische Dichte*, edited by Vittorio Lampugnani, 19-30. Zürich: NZZ Verlag, 2007.

Hegemann, Werner. *Das steinerne Berlin. Geschichte der größten Mietskasernenstadt der Welt.* Berlin: Ullstein, 1963 (reprint, original version 1930).

Herrmanns, Ralph. *Haberlands.* Stockholm: Natur och Kultur, 1996.

Hoffmann-Axthelm, Dieter. *Das Berliner Stadthaus. Geschichte und Typologie.* Berlin: DOM publishers, 2011.

Kieß, Walter. *Urbanismus im Industriezeitalter.* Berlin: Ernst & Sohn, 1991.

Keller, Thomas. *Das Kriterium der Dichte im Städtebau.* In *Städtische Dichte*, edited by Vittorio Lampugnani, 39-48. Zürich: NZZ Verlag, 2007.

Kieß, Walter. *Urbanismus im Industriezeitalter.* Berlin: Ernst & Sohn, 1991.

Mönninger, Michael. *Naturdenken und Kunstgeschichte. Camillo Sitte und die ästhetische Theorie im 19. Jahrhundert.* In *Kunst des Städtebaus. Neue Perspektiven auf Camillo Sitte*, edited by Klaus Semsroth, 27-45. Wien: Böhlau Verlag, 2005.

Pfemert, Franz (ed). *Die Aktion, Wochenschrift für Politik, Literatur und Kunst. 2. Jahrgang.* Stuttgart: Cotta 1961 (reprint, original version 1912).

Rouleau, Bernard. Paris: *Histoire d'un espace.* Paris: Edition du Seuil, 1997.

Senatsverwaltung, Berlin. *Die Wohnlagenkarte.*

http://www.stadtentwicklung.berlin.de/wohnen/mietspiegel/de/download/Wohnlagenkarte2017_highdpi.pdf

Sitte, Camillo. *Der Städtebau nach seinen künstlerischen Grundsätzen.* Wien: Graeser, 1889 (1st edition), Basel: Birkhäuser 2002 (reprint).

Stübgen, Joseph. *Der Städtebau.* Darmstadt: Bergstrasser, 1890 (1st edition), Wiesbaden: Vieweg, 1980 (reprint).

Winz, Helmut. *700 Jahre Schöneberg.* Berlin: Haupt & Puttkammer, 1964.

Image sources

Figure 1: Landesarchiv Berlin, F Rep. 290 (01) Nr. II3346

Figure 2: Berlin Senatsverwaltung, *Wohnlagenkarte*, accessed March 1, 2018, <http://www.stadtentwicklung.berlin.de/wohnen/mietspiegel/de/wohnlagenkarte.shtml>

Figure 3: Landesarchiv Berlin, F Rep. 270 A 2385

Figure 4.1: Landesarchiv Berlin, F Rep. 270 A 666

Figure 4.2: Landesarchiv Berlin, F Rep. 270 A 9081 B1 1 1909

Figure 5: Landesarchiv Berlin, F Rep. 290 (02) Nr. II10359

Figure 6: Photography by the author

Figure 7: Landesarchiv Berlin, F Rep. 290 (01) Nr. II12726

Urban Renewal Planning Practice and Form in Early-modern Guangxi (1925-1936)

LI Ji*

** Doctoral candidate, Wuhan University of Technology, School of Civil Engineering and Architecture; Lecturer, College of Civil Engineering and Architecture, Guilin University of Technology, candygug007@163.com*

Aiming at the old cities renovation planning practice by Guangxi Government with their military and political power from the 1920s to the 1930s, who were local warlords before and formed the New Kwai Clique ruling with Three People's Principles and Material Development Planning under the guidance of Sun Zhongshan, the paper analyzes the evolution Characteristics of urban form in the four major cities, which was Wuzhou, Liuzhou, Nanning and Guilin, includes that demolishing the walls, constructing ring roads at the original sites, straightening streets of cities, expanding and changing them to roads, then building arcades on both sides to escape the rain and the sun, and finally adding the public facilities with drainage, docks, water and power supply, and so on, that could be considered as existed old city reconstruction with gradual developments. And it also shows that planning criss-cross roads network in a new district outside the old cities of the jumping rhythm by with new urban core. Either the former or the latter were both applying western planning theories for the purpose of improving and beautifying the urban environment. While presenting different urban forms, it could be sum up that the pattern went to the style "Streets City → Arcades City → Roads City", with which presented the modernization appearance by the way to "Streets → Roads → Roads Net", that Presenting a new look of the Roadism characteristics of urban renewal planning, and which had important significance and influence on its subsequent urban planning. Investigate the reasons of urban changes, on which it has an important impact the dominant ideologies of the government leaders to mobilize the social forces and achieve modernization quickly, belongs to the subjective consciousness of municipal decision-makers, just the "City will", which has a special effect in changes for functions, space and pattern of cities, participated in urban planning management and led the development trend.

Keywords: Chinese early-modern city planning, Guangxi, city renewal, new city planning, the New Kwai Clique

Introduction

On November 7, 1911, Guangxi, a province of China was independence. Lu Rongting, the leader of the Old Kwai Clique, established Guangxi Military Government, and moved the provincial capital from Guilin City to Nanning, on which the political power sphere formed centering. Although Office of Demolishing Walls and Building Roads was set up in in 1917, which brought an initial development for Nanning, but the construction emphasis was still on the army's reorganization. Untill March 1925, Li Zongren, Huang Shaohong and Bai Chongxi, who defeated the Old Kwai Clique by wars, and teamed the warlords group too, the New Kwai Clique, and established the new military provincial government affiliated to Guangzhou National Government, and began a comprehensive construction practice in the fields of politics, military, economic and culture. They founded the Guangxi Military

Political Council and Guangxi Kuomintang Political Army Joint Conference for making decisions on the important civil affairs, formed a semi-autonomous local regime confronting with Jiang Jieshi's dictatorship of Nanjing National Government until October 1936, when and which the Guangxi Provincial Government Committee replaced and belonged to became the most influential provincial government. During the period, they responded to Sun Zhongshan's calling to carry out industrial construction, and made the first task to cities construction at the same time. With the rapid growth of commercial ports trade and population, the pattern of the existed traditional urban had become cramped because of space expansion, walls sealing and dense streets, the traditional urban form changed greatly. This paper would focus on the urban renovation planning and practice from 1925 to 1936 in major cities of Guangxi Province with the intent to discuss the evolution characteristics of modern urban planning under the role of local administrative subject in China.

Ruling Ideas of Guangxi Military Government and Practice of Early-modern City Planning in Guangxi

1. Ruling Ideas of Guangxi Military Government

In January 1923, after sending troops against Chen Jiongmeng, who was one of the warlords in Guangdong Province, Sun Zhongshan returned to took the oath as generalissimo in Guangzhou, pointed out the political slogan "Unifying Guangxi and Northern Expeditions" as the action mission. And through a second war wage in Guangdong and Guangxi Provinces, the forces of the warlords outside were removed successfully, especially Shen Hongying, Lu Rongting's former ministry, and TANG Jiyao, the warlord in Yunnan Province. In the period of February to July in 1925, the remnants of the Old Kwai Clique were eradicated completely. The New Kwai Clique was supported to control the whole territory of Guangxi Province by Sun Zhongshan. And Guangxi Provincial Civil Affairs Bureau was established subordinate to Guangzhou National Government. And then the military and civil administration authorities were both controlled by the commander-in-chief, Li Zongren, after which Guangxi Provincial Government was set up according to *Unified Plan of Guangdong and Guangxi* voted through the Kuomintang Central Political Conference in June 1926, the unification was finally officially realized. But due to Sun Zhongshan's will, Li Zongren and Bai Chongxi must be sent to the northern expedition, had no attention to provincial affairs. So Huang Shaohong, the representative of Kuomintang Army VII and the 15th Military Commander of the National Revolutionary Army previously, had replaced him to be the chairman of the government, managing civil affairs as a soldier. The military and political rule in Guangxi was revealed.

In June 1928, Bai Chongxi brought the Gui Army to occupy Beijing and overthrow the Beiyang Government, the northern expedition won, and the national was reunified, which threatening the ruling power of Nanjing National Government directly established by Jiang Jieshi on April 18, 1927. The sharp contradiction led to the War Jiang & Kwai between March and May in 1929, ending with the failure and division of the New Kwai Clique. Then Huang Shaohong went separate ways from Li Zongren and Bai Chongxi. Also owing to the event of Hu Hanmin under house arrest of, who was a patriarch of the Kuomintang, and occurrence of the *Draft Law of the Democratic Republic of China* adopted at the National Assembly, an extraordinary session in the Central Committee of the Kuomintang was held, Guangzhou National Government was founded against Jiang Jieshi on 28 May once again. The army of the New Kwai Clique was reorganized as the 4th Army of the National Revolutionary

Army, and the Provincial Government rebuilt in Nanning on July 1, 1931, so kept being semi-independent from the state of Nanjing National Government consistently.

However, not long after the New Kwai Clique formed, under the introduction of Liao Zhongkai, the member of the Kuomintang Reshuffle and Interim Central Executive Committee, Huang Shaohong, Li Zongren and Bai Chongxi had contacted with Sun Zhongshan and joined the Kuomintang in August 1923 successively, given away two books, *Three People's Principles* and *Easy to Know* by Sun Zhongshan, emphasizing that the revolution and its spirit were the sources of all the Kuomintang motivation, in which the mission of sticking at the end of the revolution and rebuilding new Guangxi encouraged and the theories foundation for the new Guangxi government laid. Therefore, influenced by Sun Zhongshan's thoughts, by 1932, the Policies of "New Civil Society", "Triune Brain", "Three-self" and "Three Fable"¹ containing local characteristics were put forward, to be ruling ideology of the provincial government.

Until 1936, *Agreement of Salvation* was signed by the New Kwai Clique with Jiang Jieshi represent the Nanjing National Government, said that the Central Government must stop its forces and maintain the existed provincial regime of Guangxi, with a slogan that "stopping civil wars and organizing a broad national united front against for Japanese invaders". Because of the appointment of Li Zongren to be the director of Appeasement Government and Bai Chongxi to be a standing committee of the Military Commission in Guangxi accept orders from Nanjing National Government on September 6 of the same year, they must conduct military operations in war zones and central government, Huang Xuchu had been recommend to be the chairman of Guangxi Provincial Government, who was the new member of the New Kwai Clique after War Jiang & Kwai. They moved the provincial capital back to Guilin City, which was also the hometown of Li Zongren and Bai Chongxi. At the same time, being the highest public decision-making body, the military nature of the of Guangxi Provincial administrative subject was ending and towards civil affairs². That is to say, it had truly achieved the governance of Nanjing National Government.

2. Urban Renovation Planning and Construction Practice in early-modern Guangxi

On December 7, 1921, when leading Northern Expedition, Sun Zhongshan gave a speech on the welcome reception of the 76th Military Government Groups in Guilin, had suggested to study and improve the streets style in Guangzhou with building running roads and enhance land value. On October 8 of the same year, Wuzhou City Hall established, which was the second city after Guangzhou in China, and Dai Ensai as the mayor, who was Sun Zhongshan's son-in-law. But the initial form of the municipal system was short-lived. In 1922, the Municipal Engineering of Wuzhou sut up and started the urban construction, to be the first city in early-modern Guangxi. In July 1923, Li Jishen was appointed to be the Supervision for Subsequent Affairs in Xijiang river system by Sun Zhongshan. In order to improve the congestions and walls barrier of Wuzhou City, he proposed to learn from Guangzhou for a city reconstruction planning with which the redevelopment model was building new roads on the site of the demolition of ancient walls, and streets pattern and building specifications were imitated through widening streets to roads and building the arcades on both sides, the new roads net network was emerging, and continued (Figure 1). With the promotion of Wuzhou's municipal

¹ TAN Zhaoyi. Three-self policy and the Military Government of the New Kwai Clique, http://blog.sina.com.cn/s/blog_61e149480100kshd.html (Sina Blog, 2010).

² HUANG Shaohong. *Memories at the Age of Fifty*. (Changsha: Yuelu Book Club, 1999),162.

construction, Municipal Preparatory Offices in Nanning and Liuzhou were both set up in 1927 by the provincial government of the New Kwai Clique. The city construction of Nanning started from the transformation of existed urban areas, there were 7 streets broadened in the 1920s, excluding Minsheng Road, Delin Road, Xingning Road and Minquan Road and so on, but the demolition of walls had been slow, which was completed until 1951. However, because of having a good geographical location, the construction of Liuzhou began at a new urban planning in 1928 located in the Da Longling area near the southwest bank of Liu River³, according to Huang Shaohong's proposition of moving the provincial capital from Nanning to Liuzhou, where the economic construction and the practice of "industrial center" were actively carried out, and the old urban streets on the same as the new district side was promoted too. But the plan had met with a lot of opposition in the provincial administration, Forcing Huang Shaohong to take another detour to order Guangxi Provincial Construction Department to go ahead with the construction of Guangxi Products Exhibition firstly preparing for the relocation of the provincial capital. The previous venue was to plan the new administrative centre of Guangxi Province in the future. Relatively later, Guilin Municipal Office was established in 1932, which the city streets were widened by 8 to 30m wide standard, the south of city walls was broken to expand combining with mountains and rivers outward, the landscape pattern of mountains, waters, and urban formed. On May 26, 1940, Guilin Municipal Government was officially established, it also the only one city in Guangxi Province before liberation in 1949.

Evolution and Characteristics of Urban Form of Major Cities in Early-modern Guangxi

Through the analysis of the planning and practicing process of the four major early-modern cities (Table 1), Nanning, Liuzhou, Wuzhou and Guilin, it can be concluded that the evolution process of modern urban form generally included the following two characteristics:

City	Key Time	Major Planning and Construction Activities	Description of Urban Form Evolution
Nanning	1917	Office of Demolishing Walls and Building Roads set up, West Gate and West Street Opened, East Gate demolished	Initial expansion of urban space
	1920	Municipal Agency set up, Zhongshan Road Opened	
	1926-1927	Guangxi Provincial Government set up, Municipal Agency established, Zhongshan Park and Commercial Port Park opened, Cangxi Gate and South Gate demolished, Great Road opened outside the city	Urban streets renovation, Extending along the edge of the city town
	1931-1934	Municipal Works Bureau set up, area of Guangxi Provincial Government Offices built, Minquan, Delin, Minsheng, Gonghe, Minzu and Taoyuan Roads opened, residential and racecourse in Taoyuan Area and Ting Zixu Road in south of Yong Raver	
Liuzhou	1917	The path outside the city expanded to be Wenhui Road, South Gate opened	Breaking through the core of old town, Roads Planning with Baroque and Grid methods
	1926.7	The First Executive Council Meeting of Liuzhou and Qingyuan held and Peixin Road opened,	
	1927	Municipal Preparatory Office set up, Jiahe Road opened	
	1928-1929	Construction Affairs Office after Fire set up, Plan of new town and streets drawn, Yufeng and Gubu Roads opened	Initial expansion of urban space, Renovation of traditional interior streets
	1930-1933	Liujiang County restored, and construction bureau established, North Gate demolished, Beida, Dongda, Qingyun, Yingshan, Luoichi and Xingren Roads opened	
1933-1936	Municipal construction committee set up, Liuyin Road and Sha Street opened, South Gate, Small South and West Gate demolished, South Xiaonan and Xida Road		
Guilin	1932-1936	Municipal Engineering Office and instead of Works Bureau set up, Ningyaun Gate, Bell and drum towers demolished, destroy the bluestone streets, western-style buildings rebuilt, Beiji, Guibei, Zhongbei, Zhongnan, Guinan, Nanxun, Guidong, Guixi, Huanhu, Dongzhen, Diecai, Furong, Fengbei, Xihua, Donghua, Zhonghua, Lequn and Taiping Roads and so on, Remove illegal buildings, Provincial Government moved back	Urban streets renovation, Extending along the edge of the city town
Wuzhou	1921.10.8	Wuzhou City Hall set up	Town center area expanded
	1922-1926	Wuzhou Municipal Engineering Department set up, Urban Renewal Programme by LI Jishen, North Mountain Park and Zhongshan Memorial Hall opened, Arcade Building Regulations formulated	
	1927-1933	Wuzhou Municipal Government and Works Bureau set up, Wufang, Jiufang, Sifang, Guilin, Zhu'an, East Great, Juren, Changsha, Hedi, Pingle, Dazhong, West Great, Danan and Xiaonan Roads Widened, the docks Transformed and planned, HeBin park	Urban streets renovation, Extending along the edge of the city town

³ Ibid., 35.

Table 1: Reform Planning Practice and Urban Morphology Evolution of Modern Cities in Guangxi.

1. Gradual Breakthrough of Traditional Urban Contour and Existed Old City Reconstruction

The Sino-French War broke out in 1883. The imperialist powers entered Guangxi. The commerce ports of Longzhou, Wuzhou, and Nanning were opened up in 1887, 1897 and 1901 respectively. France and the United Kingdom successively set up the consulates to carry out foreign trade, resulting in the gradual disintegration of the self-sufficient natural economy. In 1901, Zhang Mingqi, Guangxi Provincial governor of the Qing dynasty responded positively to the “New Policy” of the Qing Government, by means of developing economy, setting up education, and strengthening local rule. It promoted the rapid development of industry and commerce, which made the drawbacks of the ancient towns in major cities of Guangxi had gradually revealed. Walls had become an obstacle to the development of urban space, the abuse of narrow streets was hit by the emergence of early-modern advanced transportation so in the 1920s and 1930s, the renovation of the old city planning and practice in major cities of Guangxi was launching, which shows removing walls and building new roads firstly. It was going on opening new city gates, even the demolition of the city walls, and the construction of roads around or outside the city to realize the modernization of the cities’ image preliminary. And then, after the establishing of municipal administration, it was continued for achieving the modernization of city’s functions at the same time to widen and straighten the streets into roads, pull down residential buildings and construct arcade blocks. Finally, to demonstrate the modernization of the urban landscape fully, it was finished up with the expansion of urban space, district planning, and roads group construction.

From Table 1, it could be seen that the spatial forms of the major cities in Guangxi were separating in and out once because of the walls. Through the transformation from gates to large area of the city walls gradually, and the closed space of the existed old cities had been opened up step by step. Simultaneously, the streets of inner cities had also expanded increasingly, which strengthened the connection between the inner and external traffic. Where occupied a large area of walls base former had been lied new roads, the space was saved, and the openness of the cities was immediately apparent, with which the urban land utilization rate was improved, and established material foundation for promoting to modernization entirely. In the process of removing walls, the traditional urban structure centred on political and religious architectures serving the feudal regime was played down steadily, and the nature and layout of urban lands had been adjusted. Among them, there were modern transportation buildings such as stations and wharfs appeared, and the basic facilities planning of bridges, water supply, drainage, public transportation and street lamps system and so on, which drove the development of surrounding commercial areas, also changed the lands use of cities and improved the quality of urban lives significantly. The new urban extension axis gradually was framing, and instead of which the urbanized public spaces were replaced. In addition to the original commercial streets, the recreational, entertainment, educational and cultural activities areas in urban space were transformed and planned one by one, for examples, Zhongshan Park, Botanical Garden, Library and Theatre constructed in Nanning City, adding to Guangxi University and Beishan Park built in Wuzhou City etc., which made the required functional structure of modern cities was completed gradually, it could be comprehended to a gradual breakthrough reconstruction of Existed Urban Contour.

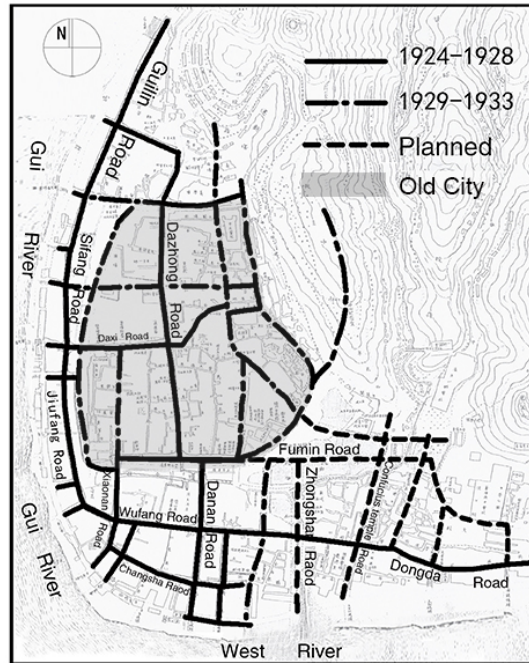


Figure 1: Map of Early-modern Roads Planning and Construction.

2. Connotation Reconstruction of Urban Spatial Structure and Planning New Additional District

According to the analysis of the urban form by the reconstruction planning of early-modern cities in Guangxi, there were two main forms and methods for the urban space expansion by the governments, that were updating inward and jumping outward respectively. Under the regulation of urban land market, the former emphasized the growth of the interior transformation, which was based on the constant external outline and urban form through the adjustment of the city's internal function structure, to improve the spatial distribution and economic benefits of urban development, and make the edge of urban space expanded along the original urban contour steadily, by which the internal modification of old cities was doing step by step for the basic purpose of progressive urban renewal ultimately, just like the Wuzhou City, because of the commercial superiority of old town in the east of Gui River, the urban form expanded gradually around the old city, and the city quality had been improved too (Figure 1).

Contrast with the latter, jumping outward often keeping a certain distance far from the city town, often showed to be on edge-like or enclave-type gathering, and also generally grouped. It often accompanied by a faster contact path, that resulting in the dual core of urban space structure, which could promote the rationalization by guaranteeing good environmental quality in a certain area, and accomplish the basic purpose of extensional urbanization rapidly, such as the Guilin City (Figure 2), due to the late start of planning, which construction was slow, the form of city jumped, but showed a slow expansion. And also the Nanning City (Figure 3), the Commercial Area was developed itself earlier in QING Dynasty was redeveloped in 1933, the outline of the city expanded gradually too. Not quite like them, because of the construction of province removal, new district plan of Liuzhou City was more prominent (Figure 4), the form was expanded outside the existed urban area. And across the Liu River to the south bank, there were roads planned and reconstructed in blocks with the administrative centre region project, which was draw up by the typical baroque classicalism planning concept, had earned its first pattern.

On the other hand, neither the former city reconstruction nor the latter new area planning, in detail, Guangxi Provincial Government had made the reconstruction plan for widening and straightening the inner streets, focusing on building the old street into a road in the form of a central lane and sidewalks on both sides, which style could protect you from the sun, wind and rain, called arcade road, paving the material of asphalt, triads or cement to improve the road conditions, for examples, Zhongshan Road planning in Wuzhou (Figure 5), still in the drawing stage, the arcades and the sewers below the streets were both designed, and Yufeng Road built in Liuzhou, which was the widest road in Guangxi(Figure 6). Like this method planning and constructing the streets from a street to a road, could be constituted a coherent “Arcade City”, that was the one character. Through the “arcade-style” transformation of the streets in cities, supplemented by modern municipal facilities, the businesses, banks, entertainments and other new material factors were gathered with the capitalist nature, and formed the embryo of the “central business district” of modern cities in it. And the centre of “arcade city” continued to spread and renewed, showing the progressive expansion of urban planning characterization.

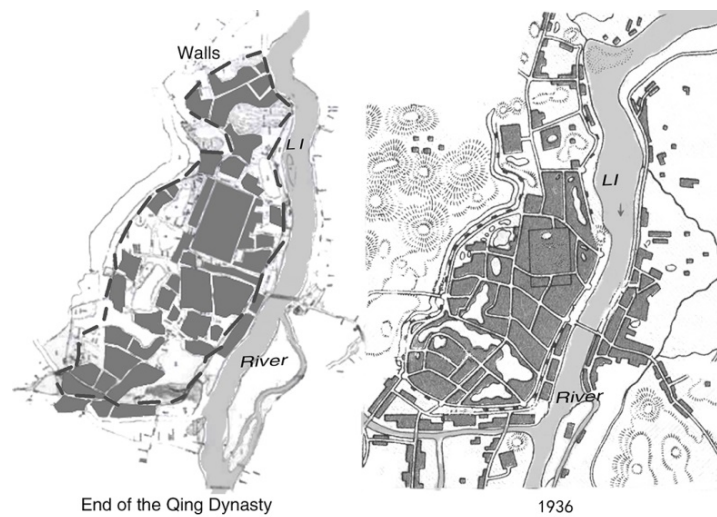


Figure 2: Evolution of Modern Urban Morphology in Guilin.

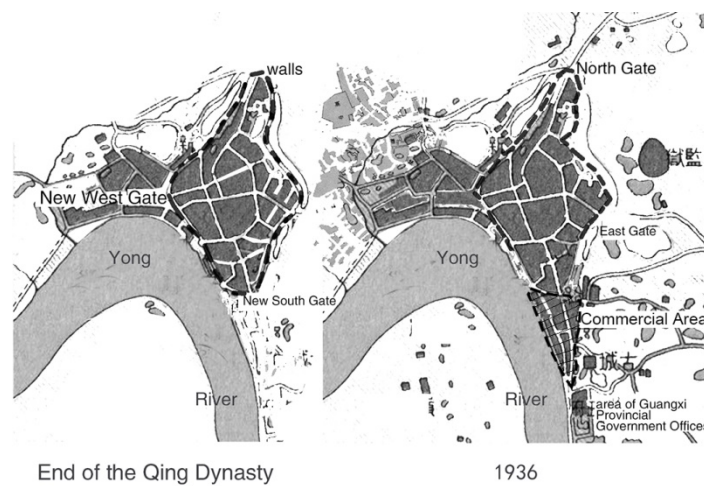


Figure 3: Evolution of Modern Urban Morphology in Nanning.

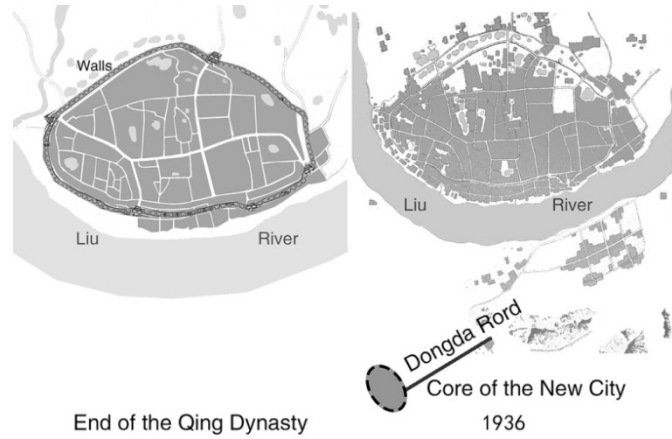


Figure 4: Evolution of Modern Urban Morphology in Liuzhou.

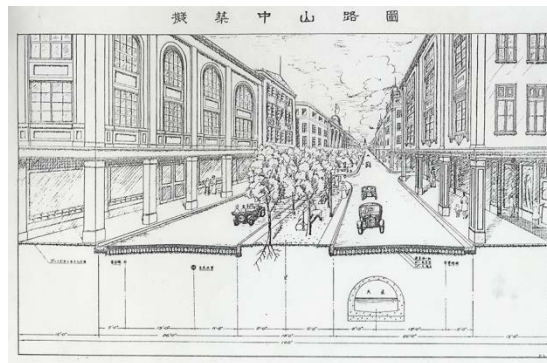


Figure 5: Section of Zhongshan Road Designed by Wuzhou Works Bureau in 1928.



Figure 6: Yufeng Road of Liuzhou Built in 1930.

In this way, the mess in the old business district could be solved to promote the prosperity of commerce. In addition, the goal of the government to build and improve roads, and carry out unified transformation planning in existed urban areas, could be achieved, which emphasized the nationalism cultural connotation. By contrast, the planning layout of jumping outward selected a wider area as a new urban area, avoiding the existed old urban areas, relatively small cities, and then built new infrastructures and social service facilities, thus constituted a new city skeleton, which Urban spatial planning characteristics reflected. With this approach, it was feasible to reduce the difficulty of urban redeveloping while increase the overall sense of the cities and improve the stability of the layout and

the efficiency of planning implementation and construction. It was more advantageous to the opening formation of new urban spatial structure.

Conclusion and Implications

In urban construction, the modernization goal of government leader, the ruling regime and the cultural construction constituted subjective factors to dominate construction, it could be not ignored. On the contrary, the functions, space, and pattern of the city could reflect the “City Will” of the municipal decision-makers, which played a special guiding role in the development direction of urban forms. The leaders of the New Kwai Clique, with a solid idea of Chinese Development thoughts to establish the modernization cities by Sun Zhongshan, had obvious influence on the overall construction of early-modern cities in Guangxi. They made the key measures for improving the physical construction of Guangxi using of political power infused by western planning thoughts and technologies, especially the changes of urban material environment with their subjective for consciousness roads reconstruction and “Arcade City” appearance.

In view of the practice to planning and construction in major cities of Guangxi, could mainly manifested two ways. First, through the removal of walls and roads construction around the cities, the interior of the old towns was refined with function and decoration, the edge was extended along the contour line of the old cities, which can be summed up as “updating inwards” with a transformation of “streets to roads”. But homochromous, due to the diversity of functional requirements new urban areas were designated and developed far away from the old towns, and the new cities expanding outward leapingly, which was summarized as “jumping outward” with a larger scales planning of “a road to roads network”. In a word, the traditional urban form had been renewed fundamentally in the way to “Streets→Roads→Roads Net”, and the appearance presented went to the style “Streets City→Arcades City→Roads City” for modernization, which the Roadism⁴ characteristics of urban renewal planning were, and had important significance and influence on its subsequent urban planning.

The development and construction of cities cannot be separated from culture. The old city is just the product of historical accumulation and urban development, although whose function couldn’t adapt to the new basic material needs, the context of its features and value wouldn’t not disappear. The early-modern renewal of the old cities in Guangxi proved its certain historical limitations for lack of historical and cultural preservation by the removal of old walls, gates, buildings and other heritages. But objectively speaking, the city reformations were performed mainly by respecting for the texture of the old cities and maintaining the traditional street pattern for the infrastructure. The reconstruction of the arcade blocks brought changes in the urban landscape and enhanced urban pedestrian functions, which were left to the present day, how valuable the traditional urban culture implied and the regional characteristics of adaptability reflected for modern cities. Therefore, the old city renewal planning should analyze the location conditions and historical context, to protect old landscapes and create the urban features.

Acknowledgements

The research is supported by Study on form of the ancient town and building energy conservation design of planning in Guangxi (Guangxi Young Teachers Basic Ability Enhancement Project. No.

⁴ LI Baihao, GUO Jian. Urban planning and Culture in Early-modern China. (Wuhan: education press, 2008),19.

KY2015LX111). Thanks to Prof. LI Baihao, my supervisors, for helping me carry out researches in the field of planning history.

Disclosure Statement

I solemnly declare that the paper submitted is my research work and achievements. This paper does not contain any research published or written by other individuals or other organizations except as indicated in the text. Individuals and groups that have made important contributions to this study have been clearly marked in this article. I bear the legal responsibility of this statement.

Notes on contributor(s)

LI Ji, female, born from Guilin in Guangxi Province, received master's degree in architecture design and theory, and is a doctoral candidate in the direction of history city and building restoration project in Wuhan University of Technology, also a lecturer of College of Civil Engineering and Architecture, Guilin University of Technology, now mainly engaged in the research and teaching work of urban planning history. E-mail is candygug007@163.com, the contact number is (+ 86) 13807738165.

Bibliography

CAI Hao. *Wuzhou Commercial Port Report for Works in first Meeting of Guangxi*. Guilin library, 1931.

LAI Delin. *Research on Chinese modern architecture*. Beijing: Tsinghua University Press, 2007.

LAI Yanyu. *View of Guangxi*. Nanning: Guangxi Printing Plant, 1935.

Liuzhou Local Chronicles Committee Office. *Liuzhou Historical Atlas*. Nanning: Guangxi Fine Arts Publishing House, 2006.

Liuzhou Local Chronicles Committee Office. *Liuzhou Old Photos*. Nanning: Guangxi Fine Arts Publishing House, 2006.

TAN Zhaoyi. *Study on the New Kwai Clique's Power*. Nanning: Guangxi people's Publishing House, 2011.

XIONG Guoping. *Evolution of Urban Form in Contemporary China*. Beijing: China Architecture Industry Press, 2006.

Image sources

Figure 1: Draw according to Wuzhou Road Planning by Wuzhou Works Bureau, 1928.

Figure 2: Draw according to Map of Guilin in Maps of Chinese Provinces, 1936.

Figure 3: Draw according to Map of Nanning in Maps of Chinese Provinces, 1936.

Figure 4: Draw according to Map of Liuzhou in Liuzhou History Atlas and View of Guangxi, 2006 and 1935, respectively.

Figure 5: Selected in Wuzhou Works Bureau, 1928.

Figure 6: Selected in Liuzhou Old Photos, 2006.



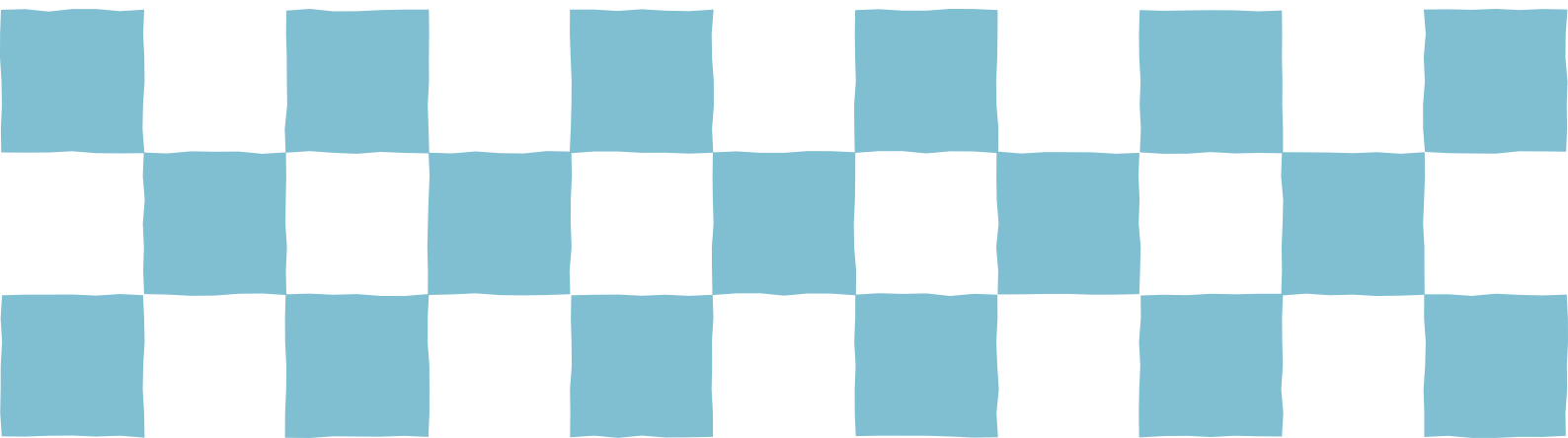
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

47 Post World War II Planning



Urban renewal in Finland: case of the workers district Kallio

Mika Mäkelä (University of Helsinki)

The modernist Finnish architecture and architects have been noticed worldwide the most famous examples being the individual works of Alvar Aalto. However, the practiced modernistic city planning and urban renewal in Finland have been less researched.

In my paper, I explore the modernistic city planning and urban renewal that has taken place in the district of Kallio in Helsinki, the capital of Finland. Why was the old timber house residential area demolished and rebuilt? Who were the key actors in the renewal process? In retrospective, was the process carried out successfully and what is there to learn from this case?

The events related to the renewal of Kallio took place between the 1930s and 1980s, but the practical implementation happened after the Second World War. The city planning ideals were sought from abroad – Sweden, Denmark, Germany, Britain and after the Second World War, also from the United States.

The justified objective of the renewal was to largen the centre of Helsinki to Kallio working-class district in building large modernistic public buildings onto the city' s owned land. The second objective was to replace the mostly privately-owned timber houses with a modern, open space urban structure.

The renewal was carried out thoroughly, as almost all of the small scale residential houses were replaced with either large public buildings or multi-storey dwelling houses. The renewal was a combined project of local town planning authorities, such as politicians, architects and private owned construction companies. For example, the renewal of the residential area was planned mainly by the city planning department of Helsinki, but the actual implementation was done mainly by private developers and organisations. The leading Finnish modernist architects, such as Aalto, were also partly involved in the design process.

The key point of the paper is to explain the stages of the Kallio renewal process from planning to the implementation as well as the role of various town planning and construction actors.

Mass-schooling in post-war Italy: a spatial issue. Two case studies from Turin and Venice metropolitan areas (1960s-70s)

Cristina Renzoni (DAStU-Politecnico di Milano)

The welfare state efforts in providing facilities such as schools, sports and cultural centres, public parks and playgrounds strongly characterized the accelerated process of expansion of Italian cities during the second half of the twentieth century.

This paper in particular focuses on the role played by public services and facilities such as public schools (3-5 years; 6-10; 11-13; 14-18) in driving the urbanisation process in Italian cities and territories in the years of the spread equipment of post-war Italy: 1960-1980.

Planning and architectural choices concerning schools had a relevant impact on the spatial organisation of Italian cities. Often built in connection with public libraries, parks, playgrounds, and sports facilities, public schools contributed to shape peripheral areas and new urban sectors. They played a role in defining the borders of medium-sized cities and the configuration of micro-interventions inside the historical inner areas. Finally, they contributed to drive dispersed processes of urbanisation of rural areas or in the outskirts of metropolitan areas.

After an overview on the relationship between public facilities and the urbanization processes in Italian cities and territories during the second half of the 20th-century, the paper will focus on two case studies in two different metropolitan areas in Northern Italy. The first one is localized in the outskirts of the city of Turin, in a moment of great metropolitan expansion inside and outside the city limits. The second one is localized within the polycentric network of small-sized cities and villages of the città diffusa in the Venice metropolitan area.

The purpose is to privilege an intermediate scale — one centred on spaces of urban proximity — that has mostly been neglected by recent researches on public facilities and welfare state legacies, mostly focused on the small scale of the architectural and design/typological aspects on the one hand, or on the wider scale of the discourses on the other hand. This intermediate perspective would make it possible to look at school areas in the relationship they established with their surroundings, focusing both on models/regulations /policies, and on actors/implementation/ place-making practices. Such an approach through “biographies” of urban fragments (made of schools and neighbourhood) could cast a new light on the Italian urbanization process, while providing a different narrative for the production of post-war cities and their legacy.

Creating Cities in the Post World War II American Southwest: The Arlington, Texas and Mesa, Arizona Experiences

Robert Fairbanks (University of Texas at Arlington)

Although historians have well documented the rapid growth of established cities in the Southwestern United States after World War II, they have failed to recognize that this era marked the emergence of new cities either from very small towns or from initial suburbs. Because these places often do not look like traditional cities they are often seen as simply large suburbs. Even those recognizing their urban status often dismiss them as “accidental cities.” This paper takes a different approach and argues that these communities were indeed intentional cities taking advantage of their place within the new metropolitan region to attract businesses, industry as well as population to become the new cities of the late 20th century. Just as city boosters of the 19th century had played a critical role in their communities’ growth and success, a new generation of city boosters emerged after World War II to create a new type of city that preserved what they saw as the best of the old and brought new aspects to make city living even more attractive.

No two cities demonstrate this better than Mesa, Arizona, the 36th largest “city” in the United States and Arlington, Texas, the 48th largest city in the country. Today, Mesa, a rural community initially settled by Mormons, is larger than Atlanta or Miami while Arlington, a small college town and collecting point for cotton, is now larger than New Orleans. Of the 100 largest cities in the United States, 16 of those emerged as significant cities only after World War II including five from Arizona and four from Texas.

This paper explores the efforts of civic leaders as well as the important role of city planners to remake these small communities into big cities. Both Mesa and Arlington took advantage of the creation of large airports nearby and also benefited from the development of a well-developed highway system that lined them to the metropolitan region. Both secured significant professional sporting venues; Arlington secured the Texas Rangers baseball team in 1972 and the city officials later lured the Dallas Cowboys football team away from nearby Irving in 2006. Mesa developed spring training facilities for several major league baseball teams including the popular Chicago Cubs who now have access to a massive new baseball facility funded by the city. Both particularly benefited from state annexation laws that allowed them to secure significant territory on which to expand their new cities. This paper explores the efforts of urban boosters and city planners to take advantage of their communities’ setting within growing Metropolitan areas and their effort to move away from a suburban identity and embrace an urban vision to become a new type of city.

Evolution of spatial planning strategies at Australian university campuses 1949-2017

Robert Freestone (The University of New South Wales) and Nicola Pullan (The University of New South Wales)

The design of university campuses is often seen as a microcosm of broader city planning trends where comparable issues of accommodating growth, dealing with traffic, allocating land uses, and architectural, landscape and urban design excellence are played out across the norms of the day. Over time, campuses have assumed diverse typologies in response to different economic, cultural, institutional and design drivers. At mid-twentieth century, campuses were legacy sites embodying design fashions from the past and awaited the exponential growth in demand for tertiary education which came in the post-war period when completely new campuses were also developed. A benchmark paradigm in campus and city planning from the late 1940s was master planning, denoting comprehensive, all-of-a-piece integrated blueprints. While the idea of holistic spatial strategies has not completely lapsed, campus planning processes have become more fluid, targeted and opportunistic, just as city planning similarly has become more creative and flexible in dealing with faster rates of economic, social, technological, environmental and educational change.

The university is now a global institution but this paper specifically explores the response of Australian university campus planning to several decades of change. Shaped by a succession of shifting socio-economic environments, tertiary education policies, and evolving cultural, educational and design practices, the meaning and mission of post-war Australian universities has changed. We identify at least five eras from the late 1940s: driving national technological development; public good; contributor to national wealth; driver of international competitiveness; and marketable commodity. In turn, campus plans and the campus planning process have evolved across these eras. Assuming some license for generalisation, foundational single-sheet architectural site-plans initially depicted the campus as a finite design. This gave way to more explicitly multi-factorial systematic master-planning reports, a planning tool that became increasingly comprehensive and complex over time. But contrasting with the earlier prescriptive approach, current models are conceived as selective interventions intended to be achieved incrementally over periods of up to a decade. They are frequently designated development plans or strategies, guided by overarching university objectives. As the campus planning model has evolved, the profession of campus planners and their role in campus development also changed, from state-appointed government architects through university staff architects, then university-based architect-planners designing with input invited from planning consultants, to a reliance on consultant planning firms charged with delivering the final product but working in partnership with university planning and facilities management teams.

The paper concludes by suggesting that current campus design trends increasingly solidify the connections and convergences between the planning of campuses and the cities and regions in which they are embedded with increased emphasis on urbanistic solutions. In this setting the heroic comprehensive, static master plan has become obsolete. The modern campus as a vehicle for increasingly entrepreneurial, competitive institutions is now shaped by a multiplicity of plans, strategies, initiatives and works programs. Within that environment, integrative and responsive planning “frameworks” and design moves are becoming established as the new norm.



Evolution of spatial planning strategies at Australian university campuses 1945-2017

Robert Freestone*, Nicola Pullan**

* Professor, Faculty of Built Environment, UNSW Sydney, r.freestone@unsw.edu.au

** PhD student, Faculty of Built Environment, UNSW Sydney, n.pullan@unsw.edu.au

The design of the university campus is often seen as a microcosm of broader city planning trends. The university is now a global institution but this paper specifically explores trends in Australian university campus planning across several decades of political, institutional, economic, social and environmental change since the late 1940s. At mid-twentieth century campuses were legacy sites embodying design fashions from the past and awaited the exponential growth in demand for tertiary education which came in the post-war period when completely new campuses were also developed. A benchmark paradigm in campus and city planning from the late 1940s was master planning, denoting comprehensive, all-of-a-piece integrated blueprints. While the idea of holistic spatial strategies has not completely lapsed, campus planning processes have become more fluid, targeted and opportunistic, just as city planning generally has become more creative and flexible in dealing with faster rates of economic, social, technological, environmental and educational change. Our brief survey covers the major phase of post-war university development, a parallel and intersecting set of design epochs, and identification of some of the leading designers of the boom period through and on either side of the 1960s.

Keywords: Australian university campus, campus design, master planning, strategic planning

Introduction

The design of the university campus is often seen as a microcosm of broader city planning trends, where comparable issues of accommodating growth, dealing with traffic, allocating land uses, and architectural, landscape and design quality are played out across the norms of the day. In the post-World War 2 environment, what has been dubbed 'search for perfection' intersected with both the unprecedented expansion of tertiary systems and the end of certainty in planning.¹ Campus design has threaded its way through planning history largely as a specialised realm of civic and urban design. Coulson et al. concentrate on key episodes and themes within university design from medieval models to the present; Turner assesses the American university plan against the 'utopian social visions' of the wider community; and more comparable to our time frame, Muthesius surveys the relationship between the underlying ideals of the institution and the design of the campus during the post-war expansionist period.²

Our focus is on the Australian experience and the making of the campus against the backdrop of a succession of shifting socio-economic environments, tertiary education policies, and evolving cultural, educational and design practices. The analysis draws on both primary and secondary sources such as archival records, annual reports, monographs, plans and accessible publications, supplement by oral recollections that have expanded and clarified the written record. The approach is synoptic and the paper is structured in three parts. The first discusses the institutional context in which the changing design of the campus played out, and we identify at least five eras from the late 1940s. The second considers the evolution of the planning process and the progression of campus plans which eventuated. The third section develops our focus on key design principles through a discussion of four planners who influenced the shape of the university campus during the years of greatest growth.

Institutional Epochs

The overall environment for evolving campus design can be best understood in the context of broader changes in Australian higher education, government policy, and cultural change.

Driving national technological development 1945 -1963

After an initial phase of austerity after World War 2, an economic 'long boom' unfurled as Australia experienced unprecedented commercial and industrial expansion. The post-war university was seen as a vocationally-oriented nation-building institution needed 'to provide the engineers, scientists, technologists, lawyers... and others without whom our civilization could not develop or even be maintained'.³ It was also

recognised that ‘countries which were most successful... and with the highest living standards were those where a large proportion of the population could easily access a good university education’.⁴ This period saw the commencement of the Australian National University, two additional capital city universities and the expansion of pre-war legacy campuses. However, all universities found themselves facing severe problems financing the capital works programs needed, as revealed by the 1957 Murray Report, until additional funds were provided by the federal government from 1959 under the auspices of the new Australian Universities Commission (AUC).⁵ The centrally-managed growth phase accelerated but by the early 1960s universities were feeling the strain.⁶

Universities as a public good 1964 -1979

In 1965, a major public enquiry was held into the future development of tertiary education.⁷ The Martin Report identified a need to promote through education those values inherent to ‘a free, democratic and cultured society’, proposed that the scale of social change required could only be provided by continued economic growth, and emphasised that the quality of the educational output was dependent on the quality of the institution.⁸ Under this philosophy, six new universities were funded, but with growing awareness that financing sufficient full research universities to cater for student demand was not economically or educationally sustainable.⁹ The solution was to establish a binary system, comprising universities and colleges of advanced education (CAEs), enabling Australia to continue to satisfy a greater spectrum of individual educational aspirations.¹⁰ From January 1974, the Commonwealth assumed full responsibility for funding higher education (HE).¹¹ However, by 1976 the effects of the global economic crisis soon forced the government to apply strict funding constraints. Recurrent funding was reduced, research funding curtailed, and full-fee paying places for international students more than doubled. Universities re-entered ‘austerity’ mode.

Contributor to national wealth 1979-1988

From 1979, the focus of HE in Australia changed, responding both to the concept that ‘economic recovery depends on adding more value to the things we do produce, and learning to export knowledge-based goods and services’, and to criticism that the nation was historically deficient in intellectual skills and disengaged from new ‘knowledge-based’ industries.¹² In line with recommendations articulated in another key government report in 1979, the Australian HE system was effectively reconceived as a producer of national wealth and extended to educate an even larger proportion of school-leavers and increased numbers of international students to global standards at a lower cost.¹³ However, federal funding still failed to cover operating costs and remained a critical issue.¹⁴

Universities as drivers of international competitiveness 1988-2002

From 1988, a succession of reviews commencing with the catalytic Dawkins Report shaped the university environment into a less systemic, more demand-driven, user-pays institutional framework in line with an emerging neo-liberal political-economic consensus.¹⁵ The reforms focused on ‘growth and quality enhancement’ were couched in terms of increasing access, enhancing international competitiveness, and retaining the best and brightest, while proposing economic liberalisation of university education and the introduction of free market forces. The national future of the university now became increasingly dependent on its position in the global marketplace.¹⁶ Compulsory contributions were introduced for domestic students while full-fee paying places for international students more than doubled. Additionally, allocation of a single federal block grant was instituted giving universities greater discretion over strategic capital works.¹⁷ Most dramatically, the binary HE system was unified, halving the number of institutions, some through amalgamations, but overall significantly increasing the number of universities by the 1990s.

Education as a marketable commodity 2002 – present

In 2002, a further review recommended per-student funding with each university setting their own level of student contributions. Commonwealth funds were increased and linked to ‘workplace productivity’, national governance protocols and equity programs. In 2008, transition to demand-driven funding and the introduction of ‘mission-based’ compacts with universities was recommended. The student visa program was re-assessed, as were conditions for undergraduate and post-graduate places. In 2012, the Behrendt Review recommended strategies to increase Indigenous & Torres Strait Islander (TSI) participation.¹⁸ Two further government reviews decisively shaped new institutional strategies.¹⁹ The first of these determined that since higher education directly benefited the individual through improved employment prospects and incomes, a lower proportion of the costs of HE should be borne by the government, with public investment in research directed to national priority areas.²⁰ The second review recommended ensuring the survival of the demand-driven system through fiscal sustainability, improved operation, and greater competition.²¹ These new funding arrangements represented a significant shift from the earlier post-war commitment to centralised control and funding, making for a far more entrepreneurial and competitive environment.

Planning process and plans

Entwined narratives in national government policies and educational ethos have decisively influenced the form of the campus master plan, planning strategies and, ultimately, the design of the post-war university campus.

First post-war campus models 1945 -1958

The first post-war campus plans typically took the form of large-format, single sheet architectural site plans depicting the layout of the campus as a 'finished composition', adopted an identifiable style of nationalistic landscape design, relied primarily on aesthetic judgements, and were usually attributed to a single architect consultant. Architect-planners continued to favour the popular pre-war City Beautiful/Beaux Arts style, featuring symmetrical architectural compositions on formal lines, with strong vistas and diagonals, usually oriented towards a large central green. The campus was conceived as a site of 'quiet, seclusion, separation and retreat'.²² New campuses commenced according to these principles were the Australian National University (ANU; Brian Lewis, designer), the University of New South Wales (UNSW; NSW Government Architect), University of New England (UNE; NSW Government Architect), and Monash University (Bates Smart and McCutcheon).

Located in the federal capital of Canberra, ANU was a research-orientated institution whose novel remit was matched by a unique low density 'parkland campus' set within an external framework informed by Walter Burley Griffin's 1912 City Beautiful-inspired city plan. UNSW commenced construction in 1949 on a constricted site which then grew incrementally and was distinguished not by a lack of planning but a rapid succession of tactical moves in response to changing circumstances. UNE focused on an existing rural homestead and developed into a scattered parkland campus inspired by the design of Aarhus University in Denmark.²³ In 1958, Monash University was the first of the Australian post-war universities to be underpinned by a comprehensive long-term plan before construction, and was conceived along the lines of an 'academical village' with a central court open to the north and two ranges of buildings which terminated at students' residences.²⁴ At the time of their establishment, these new universities were not expected to experience any significant and unpredictable long-term changes in student numbers or needs, however, both the planning format and design styles were quickly found to be unsuited as planning was not sufficiently comprehensive and the predetermined composition could not be satisfactorily extended to accommodate the growth and change which eventuated.²⁵

More adaptable physical planning 1958-1974

By the mid-1960s the comprehensive master plan ruled.²⁶ However, the form and techniques changed markedly from the late 1950s, moving away from architectonic set-pieces to more adaptable strategies. William Wurster's 1956 Long Range Development Plan for the University of California (UC) Berkeley was an important and influential trailblazer, employing systematic assessment and full planning documentation, and emphasising flexibility and regular revision.²⁷ Additionally, the plan was reviewed to a ten-year time frame, ensuring it could be 'changed... as needs may appear different from those anticipated today'.²⁸ This model was essentially adopted for Australian university campuses for at least the next twenty years, with the parallel appointment of powerful architect-planners reporting directly to the Vice-Chancellor or Registrar.²⁹ The planning process became more complex throughout the 1960s as the AUC imposed progressively more detailed planning requirements onto universities and 'exercised a much closer and detailed control over the approval of building plans... staff teaching loads... and the manner in which the revenue votes generally are expended within the universities'.³⁰

The seminal planning report in this mode was architect-planner Gordon Stephenson's 1959 modification of his first 1955 University of Western Australia (UWA) master plan, to be followed by reports guiding the extension of five other established universities and seven of the eight new greenfield campuses.³¹ With inherited processes in place for campus planning, older established universities were generally slower to develop a systematic and documented master plan for their main campus. Although Stephenson documented the UWA planning process from 1959 and a similar methodology was used by the University of Sydney architects, Walter Abraham and Max Jackson for the 1964 report on the Redevelopment of the University Extension Area, it was not until 1976 that UNSW campus architect Noel Wright could present a fully-documented master plan, despite a campus planner being appointed from 1958.³²

This era of campus planning was strongly influenced by Clarence Stein's Radburn model for urban development with its spatial segregation of pedestrians from vehicles. Stephenson's UWA plan was the first to adopt the model with central academic and residential precincts reserved for pedestrians, elements placed according to topography and additional design philosophies, and the whole encircled by a ring-road relegating traffic and car-parking to the periphery.³³ Additional to Stein's Radburn principles, campus design was influenced by the 1960

University of Leeds Developmental Plan described as a ‘deliberate attempt to implement the insights of modern urban theorists’ and bring New Town principles, scientific rigour, and empirical justification to the university environment.³⁴ At a time of relatively high population growth, expansive metropolitan planning scenarios and acceptance of car-dependency, the accent was on flexible planning for continuous growth. As Roy Simpson said of his La Trobe University master plan: ‘the plan should be devised not as an inflexible mould but rather as a guide to the fulfilment of a concept within which adjustments could be made to accommodate evolving needs’.³⁵ Modernism reigned but the typologies were still diverse, ranging from a form of bushland campus (e.g. Newcastle) to more compact ‘constructivist’ campuses exploring different models of public space (e.g. Macquarie), but all responding in their way to Australian vernacular design traditions.

Both new and extended campuses were designed to encourage ‘urban’ types of interactions between students and staff, within a larger, more dispersed, increasingly complex, and somewhat impersonal setting.³⁶ Most plans included a central quadrangle, court or great hall as a central focus. With contemporary social-pedagogic theories seeing learning as being both formal and informal, occurring inside and outside the classroom, close physical relationships between related faculties were increasingly structured to facilitate interaction and cross-fertilization of ideas between staff and students, all within an overall open-ended design philosophy which stressed extension and adaptation to suit future unknown building needs and changes in building purpose.

The new CAEs were established at this time. Located on either greenfields or repurposed teacher’s college sites, they were specifically designed to suit a limited range of vocational courses offerings; catered for local student populations; and were intended for staged expansion of what was seen as a fairly static institution.³⁷ Planned during an era of intense academic interest in sociology, social interaction and urbanism, a typical exemplar but atypical built environment was Ku-ring-gai CAE in Sydney- a suburban brutalist conception designed to emulate a self-sufficient ‘hill-top town’ within which particular activities were allocated to separate ‘laneways’ and precincts within a monolithic megastructure, with students and staff brought together in a central ‘street’ for social and communal activities.³⁸

Improving the campus environment in a no-growth era 1974-1989

Between 1976 and 1989, HE capital works funding was limited and university development entered a ‘steady state situation’.³⁹ During this period, campus planners concentrated on maintaining and reviewing current master plans for future activation.⁴⁰ As with ANU, where the 1976 Site Plan was the last to be developed until the 1992 Development Policy was prepared, most campuses were simply modified as the budget allowed, with the very few new buildings usually funded from external sources.

Architect-planner Geoff Harrison advised that during this time of austerity existing facilities needed to be ‘husbanded, efficient, and recyclable to meet new needs’ and emphasised the need for any campus plans to consider continuous growth, walkability and disabled access.⁴¹ Development across all universities re-focused on the campus environment, usually to good effect, with a continued emphasis on pedestrian movement and open space, and increased investment in landscaping and garden sculpture to enhance the outdoor experience, itself increasingly opened up to the surrounding community. At the same time, the design of the campus was also responding to greater public awareness of environmental and social issues.

Consultation, urban design and sustainability 1988-2002

As noted earlier, Commonwealth funding of capital works recommenced in 1988 and universities began to develop new campus plans which, once again, differed markedly from previous models as the wider planning environment experienced ideological and methodological advances and became institutionally more complex. Primarily designated master plans, they were guided by university goals and drew on planning, design, legislative and marketing knowledge held by specialised planning/design firms, with the university architect/planner involved in co-ordinating the assessment process and diverse planning inputs. The planning process increasingly involved contributions solicited from the university community, development advisory groups, steering committees, property departments and architecture faculties.⁴²

As with previous ‘systematic’ plans from the expansionist period of the 1960s, a variety of issues were addressed through recurrent development principles. These prioritised campus layout and image, including location of activities; land use, siting and design; circulation of people and vehicles; landscape and siteworks; and implementation. Additional aspects of campus planning included interactions with the community and the need to plan for multiple campuses as the CAE system merged with universities.⁴³ Some universities established satellite campuses while others launched international campuses, primarily in Malaysia and Singapore.⁴⁴ Private universities also made their first appearance. The 1990 Talloires Declaration saw university Vice-Chancellors globally committing to environmentally sustainable institutional practices, and Australasian Campuses Towards

Sustainability (ACTS) was formalised. These ideas would filter through into campus design. From 1992, the University of Newcastle Callaghan campus Senior Architect/Planner, Philip Pollard was associated with key environmental design initiatives.⁴⁵ Comparable green innovations for architectural, site and landscape design were adopted at other universities.

Urban design and public domain planning also featured more prominently as a means of stitching campuses together holistically, with coherence sought through building placement and relationships, urban forms, landscape, colours and materials. Designing for personal safety following CPTED (crime prevention through environmental design) principles also became major themes. Most campuses edged towards becoming predominantly pedestrian precincts and there was renewed focus on the concept of a central core designed to increase the possibilities for human interaction, surrounded by and linked to defined precincts within 10 minutes walking distance of each other.⁴⁶ In the style of Jefferson's 'academical village' at the University of Virginia, there was enthusiasm for formal gateway statements and signature buildings as marketing showpieces.⁴⁷ In S-E Queensland, Bond University and the University of the Sunshine Coast as the only two new greenfield campuses from the late 1980s embodied these ideas, a fusion of flexible planning and post-modern architecture, and both conceived within even more comprehensive integrated property development ventures.

Placemaking, design excellence and urban buzz 2002-today

Starting early this century, the campus has become central to university marketing strategies. Increasingly cut adrift from central government micro-management and targeted capital funding, Australian universities were now regarded as business enterprises which needed to be seen as leaders in the educational field, and whose 'capacity to draw notice [had] become a valuable marketing tool within an increasingly competitive and crowded higher education marketplace'.⁴⁸ As the 'shop window', the campus became linked to overall strategies. Campus master plans were now integrated into university strategy documents and given titles such as 'Infrastructure Development Plan' (Australian Catholic University in Melbourne). Plans were required to account for a raft of inclusions: landmark buildings, heritage, environment, sustainability, occupational health and safety, accessibility, student engagement, contribution to the community, technological change, new learning environments, reconciliation and indigenous support initiatives, visual impact requirements, research hubs and research parks, and alternative modes of transport, among other innovations. Invariably the campus master plan was outsourced to professional planning firms with the requisite skills and contacts to address the myriad issues involved, and the role of the university architect or architect/planner morphed into facilities managers and strategists.

Dramatically changed philosophies of learning and teaching emphasising collaborative, inter-disciplinary and digital interactions have also shaped universities' responses in the current era, and, in turn, the nature of master planning has evolved to being variously even more strategic, flexible, and design-driven. The integration of university and city has become a 'headline theme' for master planning which is also evident in many other countries, including the US where some regional institutions have struggled, and universities have established central city footholds to attract both quality staff and students.⁴⁹ One pervasive idea is that of the 'sticky' campus, aiming to keep students longer within the university environment by providing an enhanced student experience. Newly constructed student service 'hubs' have been inserted into central locations on campus; existing facilities have been modified to provide informal learning spaces necessary for connected and collegiate learning; and on-campus residential precincts are now being integrated into traditional academic zones.⁵⁰ Some suburban campuses have struggled through inaccessibility, others have received urbanistic makeovers, prominent new central city sites have been procured for research and teaching activities, adaptive re-use of historic buildings has been prominent (e.g. Notre Dame, Fremantle and Sydney; Deakin, Geelong waterfront), while longer-standing city institutions have been well placed to connect with the new 'univer-cities' rubric highlighting the nexus between universities and their host city's economic, social and cultural development.⁵¹ The new interplay between town and gown is physically manifested in the re-imagining of CBD campuses like Melbourne's RMIT University and Sydney's UTS as monolithic enclaves into more permeable central city precincts. The placement of QUT's Creative Industry faculty within the Kelvin Grove urban village redevelopment on the fringe of central Brisbane constituted a new typology of a mixed-use main-street precinct integrating retailing, office, high school, recreational, community, and residential uses within an armature of public space. This award-winning master-planned development is founded on a government/university partnership and has won numerous urban planning, landscape architecture, and sustainable environment awards.⁵²

In physical planning terms, in Australia as overseas, the idea of an identifiable symbolic focus to the campus became important and universities have started to rebuild distinctive identities to project an image of innovation to potential students, promote philanthropic donations, and transform 'drab, neglected' parts of their estates into

‘architectural showgrounds’.⁵³ While conceived earlier on the Stanford-Palo Alto model, research parks were more decisively linked to campuses in an effort to build stronger, potentially more lucrative partnerships, underpinned by aspirations for revenue-generating property development. Examples include Macquarie, Latrobe, Monash, Ballarat/Federation University and Wollongong. Industry-partnered premises and innovation precincts are now taking this into a new era. With a growing proportion of international students, universities have expanded the supply of well-designed modern on-campus accommodation often supplementing increased off-site student accommodation from private providers. Environmental concerns, sustainability and resilience have continued to influence design with larger student numbers forcing planners to address overall environmental footprint, investment in ‘greenstar’ buildings, improved public and active transport connectivity, and privileging of a quality public realm.

Planners and plans

Post-war campus planning has attracted an impressive cast of designers who have imparted their distinctive creative responses within the imperatives and accepted approaches of their times. Leaving aside the design of individual structures, from the 1950s to the 2010s, campus master plans have been shaped by leading practitioners including Brian Lewis (ANU, Melbourne), Denis Winston (ANU), Roger Johnson (Griffith), Michael Dysart (UTS), Daryl Jackson (Bond, Charles Darwin), Giurgola Mitchell Thorpe (Sunshine Coast) and Peter Elliot (RMIT). Below we briefly comment on four central figures most active and influential in the 1950s-1960s.

Gordon Stephenson

Liverpool-trained architect-planner Gordon Stephenson was arguably the most influential designer of universities from the 1950s to the early 1970s.⁵⁴ Stephenson drew from Stein’s philosophy of privileging the needs of the pedestrian; and Wurster’s technique of building densely for current needs; and used these concepts, combined with courts and precincts, as the basis for four key design principles: design major buildings for future expansion; ensure convenient physical relationships between faculties and amenities; orient buildings towards tranquil enclosed spaces; and reserve the inner campus for pedestrians.⁵⁵ These four criteria were later expanded to include: encouraging flexibility in design; restricting the palette of colour and materials; and ensuring that the physical plan expressed academic policy.⁵⁶ These basic principles were applied at UWA and in the many consultative roles Stephenson was invited to fill, singly and in collaboration with colleagues such as Gus Ferguson, James Birrell and Geoffrey Harrison.

Geoffrey Harrison

Of Stephenson’s contemporaries in Australia, Harrison, an Australian-trained architect, was perhaps the most prolific campus planner.⁵⁷ Appointed staff-architect for the new Flinders University in Adelaide, he collaborated with Stephenson on the initial site planning report, and then co-ordinated development of the site.⁵⁸ Harrison and Stephenson consciously employed the Radburn concept of a ring-road and separation of vehicle routes from pedestrian precincts, and referenced Stephenson’s four design principles as much as was practicable on a topographically challenging site.⁵⁹ Harrison also incorporated elements which would feature strongly in his subsequent campus developments, including the introduction of an expansive open court as a campus core situated between the library and student union building, oriented and sheltered to suit climatic conditions, and designed to become a central meeting place facilitating communication between students and staff.⁶⁰ Additionally, Harrison aimed for flexible, extendable, and adaptable elements; planned for ‘low-profile, strongly-horizontal’ buildings that would not overwhelm the individual; incorporated elevated walkways stretching between otherwise distant precincts; and attempted, somewhat unsuccessfully, to avoid faculty-specific ‘silos’.⁶¹ He left a tangible imprint at several universities in the 1960s and 1970s including James Cook, Ballarat, Adelaide and Deakin at Waurn Ponds.

Walter Abraham

Abraham was a senior architect-planner for the University of Sydney when he was invited to fill a similar role at the newly-established Macquarie University.⁶² On his appointment, Abraham made two trips to the US to investigate campus planning and, on his return, engineered integration of his office within Macquarie’s administrative structure, a model taken from MIT and the University of Colorado.⁶³ A formal developmental planning report was regarded as superfluous to this innovative management structure, but Abraham consciously relied on Stein’s Radburn principles to give structure to the plans for the central building group. He also drew on a sophisticated phalanx of additional ideas and principles for design direction, including the concept of imperfect knowledge of the future which underpinned an influential 1957 report for the University of Birmingham, John Weekes’ ‘indeterminate architecture’, social science frameworks from UC Berkeley, David Bell’s aesthetics of incompleteness, the concept of ‘Templum’ or ‘space bounded by the ground, horizon and sky’, and the Roman surveyor’s model of ‘decumanus maximus’, as well as historic quadrangular forms.⁶⁴ The

campus which eventuated was conceived as an urban institution within a quasi-rural context. The overall layout includes a strongly-articulated interior grid creating a compact academic core, with a straight one-kilometre central spine serving as the primary pedestrian circulation.⁶⁵ The centre of the campus is concentrated on a large, formal, open-cornered quadrangle surrounded by communal buildings in the brutalist style.

Roy Simpson

In 1964, Roy Simpson of Yuncken Freeman Architects was appointed to undertake the master planning of La Trobe University, a new university on the northern outskirts of Melbourne.⁶⁶ Plans were commenced following a study tour to investigate ‘outstanding new universities’ in the UK, US and Canada.⁶⁷ As with the campus designers discussed previously, Simpson adopted and modified Stephenson’s four principles to suit the brief, the finance available, and the site. He also introduced his own design philosophies, particularly his view that the ‘precinct is more important than the buildings, the city is more important than the precinct, the total scene is more important than the individual project’.⁶⁸ Simpson held that ‘most buildings should be in the background to permit the occasional special one to exert its proper emphasis in the group composition’ and understood ‘the need to learn humility in order to design buildings subserviently’.⁶⁹ These precepts were challenged through early university decision-making but addressed through a series of planning and design moves stressing the horizontality of development; modular integrated buildings; an ‘affinity of design between all buildings, and between buildings and landscape’ with ‘individual virtuosity... subordinate to the interests of overall cohesion’.⁷⁰ The university which evolved as a solution to these precepts is perhaps one of the most innovative in Australia. Following his appointment at La Trobe, Simpson also collaborated on a revision of ANU’s ever-evolving site plan.⁷¹

Conclusion

In the post-World War 2 period in Australia, there has been a general evolution in the form of the physical campus master plan, the principles which governed the plan, and the planning process itself. As enrolments increased, governance systems evolved, and community values shifted, planning needed to take account of an ever-increasing number of administrative and legislative requirements as well as the expectations of a growing number of stakeholders. As a result, campus plans gradually became more comprehensive and increasingly complex. Among other things, planners were increasingly required to take account of, plan for, and then to document, the estimated and approved costs of proposed developments, contracted completion times, floor-space allocations and space utilisation, vehicle movements and provision for parking, heritage and environmental protection legislation, technological advances, and academic and non-academic facilities expected by users and funding bodies.

The planning process was progressively accepted as the purview of a specialised sub-profession, with the planners involved changing from government and public service architects through university-based staff architects, to university architect-planners who designed with input from planning consultants, to a reliance on consultant planning firms charged with delivering the final product but working in partnership with the university architect or facilities management staff.

Consequently, campuses have assumed diverse typologies in response to these different economic, cultural, institutional and design drivers, evolving from finite compositions demonstrating a recognised landscape style, through townscapes and academic villages grounded in theories of social interaction and urbanism, followed by open and accessible campuses displaying a commitment to landscape improvements and environmental responsibility and, most recently, student-centred and visitor-conscious venues frequently displaying flamboyant design features but underpinned by ecologically-sustainable practices.

In this setting, the heroic comprehensive, static master plan has become obsolete as has the heroic architect-planner. The modern campus as a vehicle for increasingly entrepreneurial, competitive institutions is now shaped by a multiplicity of plans, strategies, initiatives and works programs. Although the legacy of modernism and its advocates such as Gordon Stephenson and others remains evident, within the contemporary environment, integrative and responsive planning ‘frameworks’ and design moves are becoming established as the new norm.

Acknowledgements

This research was supported by an Australian Research Council Discovery Project “Campus: Building Modern Australian Universities” (DP160100364)

Disclosure Statement

No potential conflicts of interest were reported by the authors.

Notes on Contributors

Robert Freestone is a Professor of Planning in the Faculty of Built Environment at the University of New South Wales. He is a former President of the IPHS and chair of the Editorial Board of *Planning Perspectives*. His recent books include *Planning Metropolitan Australia* (2018), *Dialogues in Urban and Regional Planning 6* (2017), and *Place and Placelessness Revisited* (2016).

Nicola Pullan is an historian, doctoral candidate and research assistant in the Faculty of Built Environment at the University of New South Wales. She is currently researching the construction and occupation of temporary dwellings between 1945 and 1960 on the suburban fringe of Sydney and the social, political and economic contexts in which they existed.

Notes

¹ Coulson, Roberts and Taylor, *University Trends*; Muthesius, *The Postwar University*, 268.

² Muthesius; Turner, *Campus*; Coulson, Roberts and Taylor.

³ Macintyre, *Australia's Boldest Experiment*, 218; Baxter, "Problems in the Administration of Modern Universities", 103.

⁴ Baxter, "Problems in the Administration of Modern Universities", 104.

⁵ Partridge, "Australian Universities," 8; CAU, *Report of the Committee on Australian Universities*, iv, 112.

⁶ AUC, *Third Report*; AUC, *Second Report*.

⁷ AUC, *Tertiary Education in Australia*, 1.

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Whitlam quoted in Forsyth, *A History of the Modern Australian University*, 88.

¹² Committee of Enquiry into Education and Training, *Education Training and Employment*.

¹³ Aitken, "Trends in Funding Arrangements", 145.

¹⁴ Karmel, "The Role of Central Government," 125; Jackson, "The Private Dollar", 196, 201.

¹⁵ DET, *Higher Education in Australia*, 34.

¹⁶ Horne and Garton, *Preserving the Past*.

¹⁷ DET, *Higher Education in Australia*, 12.

¹⁸ Panel of the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People, *Review of Higher Education Access*.

¹⁹ Hassell, *International University Review*.

²⁰ DET, *Higher Education in Australia*, 23.

²¹ Ibid., 25.

²² Davison and Murphy, *University Unlimited*, 28.

²³ Jordan, *A Spirit of True Learning*.

²⁴ Davison and Murphy, 27.

²⁵ Stephenson, "The Physical Planning of Universities", 149.

²⁶ Stephenson, "Campus Planning in Australia"

²⁷ Committee on Campus Planning, Berkeley, *Development Plan for the Berkeley Campus*, vii.

²⁸ Ibid.

²⁹ Stephenson, "Campus Planning in Australia", 19.

³⁰ Auchmuty, Editorial, 85.

³¹ Garnaut, "Gordon Stephenson and University Planning", 381; Stephenson, "Planning of the University of Western Australia", 20. The new universities completed during the 1960s were Macquarie (Abraham), La Trobe (Simpson and Harrison), Newcastle (Laurie and Heath), James Cook (Birrell and Stephenson), Flinders (Stephenson and Harrison), followed in the 1970s by Griffith (Johnson), Murdoch (Ferguson and Stephenson) and Deakin (Harrison and Marston). Macquarie did not have a pre-development planning report.

³² Stephenson, *Planning for the University of Western Australia: 1914-70*, 10; Abraham and Jackson, "Sydney University Development", 159; UNSW, "The Campus Is Changing", 1.

³³ Garnaut, "Gordon Stephenson and the Radburn Idea", 8.

³⁴ Whyte, "The Modernist Moment", 181.

³⁵ Simpson, "AS Hook Address".

³⁶ Whyte, "The Modernist Moment", 181.

³⁷ AUC, *Tertiary Education in Australia (Martin Report)*, 176.

³⁸ Mould, "New Brutalism", 14-15.

³⁹ Harrison, "Physical Facilities Planning", 137.

- ⁴⁰ Wellman, "A History of the Site Plan", 6.
- ⁴¹ Harrison, "Physical Facilities Planning", 133-138.
- ⁴² Jackson Teece Chesterman Willis, *The Campus... Development Strategy*, Preface.
- ⁴³ Ferguson, UWA, Campus Planning Review 1990.
- ⁴⁴ Altbach and Knight, "Internationalization of Higher Education."
- ⁴⁵ Pollard, "Campus as Place".
- ⁴⁶ Chesterman, "Interview", 2017.
- ⁴⁷ Webber, "Interview", 2017; Holliday, "Interview", 2017.
- ⁴⁸ Coulson, Roberts and Taylor, 45.
- ⁴⁹ Hassell, *International University Review*; Katz, "How Universities Can Renew America's Cities".
- ⁵⁰ Holliday, "Interview", 2017.
- ⁵¹ Teo, *Univer-Cities*.
- ⁵² Pancholi, Yigitcanlar and Guaralda, "Public Space Design".
- ⁵³ Coulson, Roberts and Taylor, 45.
- ⁵⁴ Garnaut, "Gordon Stephenson and University Planning", 379.
- ⁵⁵ Garnaut, "Gordon Stephenson and the Radburn Idea", 6; Stephenson, "Planning of the University of Western Australia", 20-21.
- ⁵⁶ Stephenson and Stephenson, "Planning for the University of Western Australia", 12; Garnaut, "Gordon Stephenson and University Planning", 392.
- ⁵⁷ Harrison, "Interview", 1.
- ⁵⁸ *Ibid.*, 6.
- ⁵⁹ *Ibid.*, 13-14.
- ⁶⁰ Harrison and Marston, *Deakin University, Geelong*, 6, 21.
- ⁶¹ Harrison, "The Planning of Bedford Park", 156-7; Harrison, 30; Garnaut, "Gordon Stephenson and the Radburn Idea", 12
- ⁶² Gazzard, "W. V. Abraham Obituary", 50.
- ⁶³ Mansfield and Hutchinson, *Liberality of Opportunity*, 91.
- ⁶⁴ Abraham, "Inheritance and Style", 4-7.
- ⁶⁵ Macquarie University Jubilee Hub, "Founding Fathers: 'Wally' Abraham"; Holden, "The institutionalisation of campus planning in Australia".
- ⁶⁶ Simpson, "A University in the Suburbs", 828.
- ⁶⁷ Simpson, "The Master Plan", 40.
- ⁶⁸ *Ibid.*
- ⁶⁹ Yuncken, "La Trobe University", 24.
- ⁷⁰ Simpson, "A University in the Suburbs", 831.
- ⁷¹ Wellman, 6.

Bibliography

- Abraham, W. V. "Inheritance and Style: Planning Design at Macquarie University." *Planning For Higher Education* 11, no. 2 (1983): 1-9.
- Abraham, Walter, and Max Jackson. "Sydney University Development as a Case Study in Urban Renewal." *Australian Planning Institute Journal* 3, no. 5 (1965): 59-62.
- Aitken, Don. "Trends in Funding Arrangements." *Higher Education Quarterly* 42, no. 2 (1988): 144-51.
- Altbach, P.G., and J. Knight. "The Internationalization of Higher Education: Motivations and Realities." *Journal of Studies in International Education* 11, no. 4/4 (2007): 290-305.
- AUC. *Second Report of the Australian Universities Commission*. Canberra: Australian Universities Commission 1963.
- AUC. *Tertiary Education in Australia: Report of the Committee on the Future of Tertiary Education in Australia to the Australian Universities Commission (Martin Report)*. Canberra: Australian Universities Commission 1964.
- AUC. *Third Report of the Australian Universities Commission*. Canberra: Australian Universities Commission 1966.
- Auchmuty, J. J., "Editorial." *The Australian University* 4, no. 2 (1967): 83-87.
- Baxter, J. P. "Problems in the Administration of Modern Universities." *The Australian University* 6, no. 2 (1968): 102-22.
- Committee on Australian Universities. *Report of the Committee on Australian Universities*. Canberra: Commonwealth of Australia, 1957.

- Chesterman, David. "Interview 1." architect and planner, at his home in Sydney, interview with Rob Freestone and Nicola Pullan, digital recording, in author's possession, 15 August 2017.
- Committee of Enquiry into Education and Training. Australia., *Education, Training and Employment: Report of the Committee of Enquiry into Education and Training: Volume 1. (Williams Report)*. Canberra: Commonwealth of Australia, 1979.
- Committee on Campus Planning, Berkeley. *Long Range Development Plan for the Berkeley Campus*. Berkeley, Calif.: University of California, 1956.
- Coulson, J., R. Roberts, and I. Taylor. *University Trends: Contemporary Campus Design*. London: Routledge, 2015.
- Davison, G., and K. Murphy. *University Unlimited*. Sydney: Allen and Unwin, 2012.
- DET. *Higher Education in Australia: A Review of Reviews from Dawkins to Today*. Canberra: Department of Education and Training, 2015.
- Ferguson, R. J. and Assoc., University of Western Australia, Campus Planning Review 1990. Perth WA: University of Western Australia, 1990.
- Forsyth, Hannah. *A History of the Modern Australian University*. Sydney: NewSouth, 2014.
- Garnaut, Christine. "Gordon Stephenson and the Radburn Idea in University Planning." Paper presented at the 3rd World Planning Schools Congress, Track 7 (Planning History), Perth, WA, 4-8 July 2011.
- Garnaut, Christine. "Gordon Stephenson and University Planning: A Pleasurable Professional Pursuit." *Town Planning Review* 83, no. 3 (2012): 377-95.
- Gazzard, Don. "The Planning Force for Macquarie University." *SMH*, 4 November 2006, 50.
- Harrison, G. J. "Physical Facilities Planning." *Journal of Tertiary Education Administration* 4, no. 2 (1982): 133-38.
- Harrison, G. J. "The Planning of Bedford Park: Adelaide's Second University." *Australian Planning Institute Journal* 3, no. 5 (1965): 154-18.
- Harrison, G. J., and R. H. H. Marston. *Deakin University, Geelong. Development Plan for the Campus at Waurin Ponds*. Geelong: Deakin University, 1976.
- Harrison, Geoffery. "Interview." Architect of Flinders University, conducted by Averil Holt for the Flinders Oral History Project (interview transcript), ATB122/215-7 Flinders University Archives, 15 September 1986.
- Hassell Studio. *International University Master Planning Review*. Brisbane 2014.
- Holliday, Sue. "Interview 1." UNSW Professor of Planning Practice, at UNSW, interview with Rob Freestone and Nicola Pullan, digital recording, in author's possession, 23 October 2017.
- Holden, Susan. "The institutionalisation of campus planning in Australia: Wally Abraham and the development of Macquarie University, 1964-1982". In: Paul Hogben and Judith O'Callaghan, eds. Proceedings of the Society of Architectural Historians, Australia and New Zealand: 32, Architecture, Institutions and Change. *Society of Architectural Historians, Australia and New Zealand (SAHANZ) Annual Conference*, Sydney, NSW, Australia, 7-10 July 2015, 254-266.
- Horne, J., and S. Garton. *Preserving the Past: The University of Sydney and the Unified National System of Higher Education, 1987-96*. Melbourne: Melbourne University Press, 2017.
- Jackson, G. W. "The Private Dollar – Fund Raising for Colleges and Universities." *Journal of Tertiary Education Administration* 4, no. 2 (1982): 195-201.
- Jackson Teece Chesterman Willis Pty Ltd. *The Campus... Development Strategy*. Kensington, NSW: The University of New South Wales, 1990.
- Jordan, M. *A Spirit of True Learning: A Jubilee History of the University of New England*. Sydney: UNSW Press, 2004.
- Karmel, P. "The Role of Central Government in Higher Education." *Higher Education Quarterly* 42, no. 2 (1988): 119-33.
- Katz, B. "How Universities Can Renew America's Cities." <https://www.brookings.edu/opinions/how-universities-can-renew-americas-cities/>.
- Macintyre, Stuart. *Australia's Boldest Experiment: War and Reconstruction in the 1940s*. Sydney: NewSouth, 2015.
- Macquarie University Jubilee Hub. "Founding Fathers: 'Wally' Abraham." North Ryde: Macquarie University, 2014. <http://jubilee.mq.edu.au/Story/1009/Founding-fathers-Walter-Wally-Abraham>, Accessed 13 April 2018.
- Mansfield, Bruce, and Mark Hutchinson. *Liberality of Opportunity: A History of Macquarie University 1964-1989*. Sydney: Macquarie University in association with Hale & Iremonger, 1992.
- Mould, P. "New Brutalism." *Architectural Bulletin (NSW)* March-April (2012): 14-15.

- Muthesius, Stefan. *The Postwar University: Utopianist Campus and College*. New Haven and London: Yale University Press, 2000.
- Pancholi, S., T. Yigitcanlar, and M. Guaralda. "Public Space Design of Knowledge and Innovation Spaces: Learnings from Kelvin Grove Urban Village, Brisbane." *Journal of Open Innovation: Technology, Market, and Complexity* 1, no. 13 (2015): 1-17.
- Partridge, P. H. "Australian Universities – Some Trends and Problems." *The Australian University* 1, no. 1 (1963): 7-26.
- Panel of the Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People. *Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People: Final Report July 2012*. Canberra: Department of Tertiary Education, Skills, Science and Research, 2012.
- Pollard, Philip. "University of Newcastle: Campus as Place, a Thesis: Chapters 1-3, PhD Thesis, University of Newcastle." *The Fifth Estate*, 16 August 2009. <https://www.thefifthestate.com.au/articles/university-of-newcastle-campus-as-place-a-thesis-2/17040>
- Simpson, R. "AS Hook Address." https://dynamic.architecture.com.au/i-cms_file?page=/1/17/51/1997_Roy_Simpson.
- Simpson, Roy. "The Master Plan, Building La Trobe University." In *Building La Trobe University: Reflections on the First 25 Years*, edited by W Breen and J Salmond, 39-49. Melbourne: La Trobe University Press, 1989.
- Simpson, Roy. "A University in the Suburbs." *Architecture in Australia* 10 (1967): 827-34.
- Stephenson, Gordon. "The Physical Planning of Universities." *Australian Planning Institute Journal* 3, no. 5 (1965): 149-51.
- Stephenson, Gordon. *Planning for the University of Western Australia: 1914-70: A Review of Past Plans and Future Prospects*. Nedlands: Langham Press, 1986.
- Stephenson, Gordon. "Planning of the University of Western Australia." *Vestes* 5, no. 2 (1962): 17-24.
- Stephenson, Gordon, and Flora Stephenson. "Planning for the University of Western Australia." *Town Planning Review* 37 (1966): 21-36.
- Stephenson, Robert B. "Campus Planning in Australia." UNSW: Fulbright Institute Report, 1966.
- Teo, A. S. C., ed. *Univer-Cities*. Singapore: World Scientific Publishing Company, 2014.
- The University of New South Wales, Office of the University Architect. "The Campus Is Changing." *Quarterly: The University of New South Wales* 1, no. 3 (1976): 1-2, 11-12.
- Turner, Paul Venable. *Campus: An American Planning Tradition*. Cambridge MA and London: MIT Press, 1984.
- Webber, Peter. "Interview 1." Former NSW Government Architect, at his home in North Sydney, interview with Rob Freestone and Nicola Pullan, digital recording, in author's possession, 23 October 2017.
- Wellman, Kath. "A History of the Site Plan." In *Buildings and Landscape, Australian National University*, edited by J. C. G. Banks and M. Gaardboe, 3-7. Canberra: ANU, 1996.
- Whyte, William "The Modernist Moment at the University of Leeds, 1957-1977." *The Historical Journal* 55, no. 1 (2008): 169-93.
- Yuncken, J. F. "The Planning and Design of La Trobe University." La Trobe Archives.



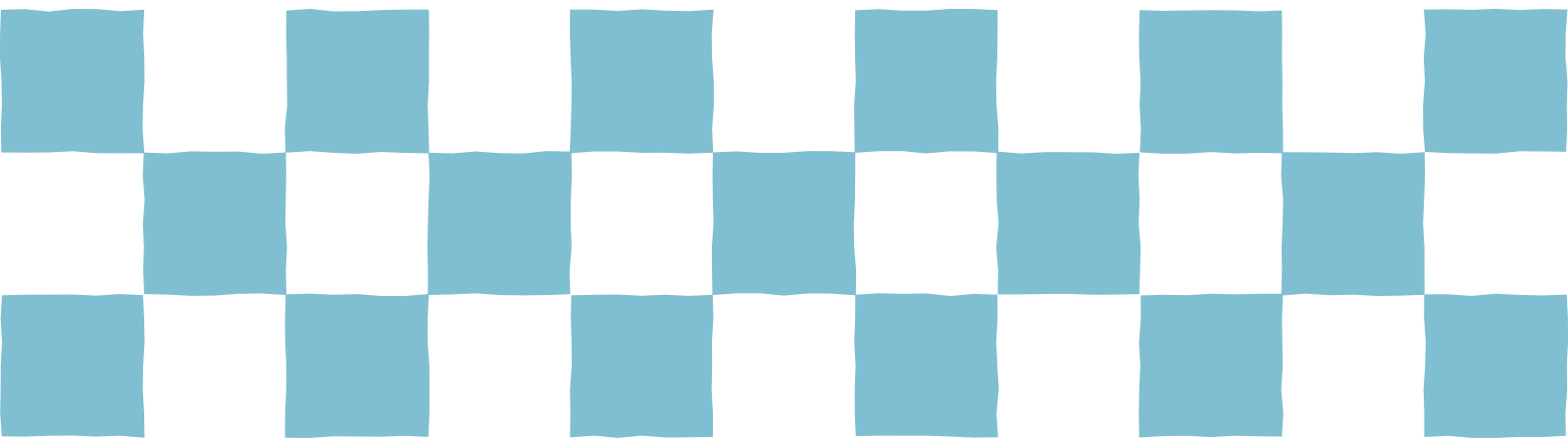
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

48 Disaster and Resiliency



Collaborative Planning for Post-Disaster Reconstruction in Italy: Community Participation in four Small Towns, Focusing on Novi di Modena.

Tomoyuki Mashiko (Waseda University), Monia Guarino (PRINCIPI ATTIVI), Gianfranco Franz (University of Ferrara) and Shigeru Satoh (Waseda University)

Community participation after a disaster is widely acknowledged to be crucial for both mitigation and reconstruction planning. In this regard, Berke and Campanella (2006, p.193) indicate that through the involvement of and consultation with residents during all planning phases, pre-disaster recovery planning can create knowledgeable constituency. Moreover, the collaborative process of reconstruction planning can help 'build the necessary momentum to keep the community moving forward' (Schwab, 2014, p.120)

Nevertheless, to date, little research has been conducted on collaborative planning in post-disaster contexts and, therefore, this paper addresses the issue of collaborative planning for post-disaster reconstruction aiming to effectively facilitate participatory processes in the community and identifies key factors in successful collaboration gleaned from past Italian reconstruction planning.

First, through a literature survey and field interviews, we surveyed the characteristics of community participation in post-disaster reconstruction in Italy, particularly examining three cases of reconstruction: the Friuli earthquake in 1976, the Abruzzo earthquake in 2009 and the Emilia-Romagna earthquake in 2012. Consequently, we classified the reviewed community participation into five types on the basis of three criteria: objective/goal, main actors and period.

Second, we outlined the legislative framework and specific rules for reconstruction in the Emilia-Romagna region.

Third, we compared community participation and the formulation of reconstruction plans in four local administrations: Novi di Modena, San Felice sul Panaro, Concordia sulla Secchia and Mirandola. Results reveal that the development of participatory action in three towns-San Felice, Concordia and Mirandola-has discontinuously proceeded and that only Novi's development progressed in a single continuous fashion through all stages of the participatory process.

Last, we verified the dynamic mechanism of Novi di Modena's reconstruction planning by using an evaluation framework with two axes: the stage of the planning process and the level of community participation. To define this framework, some established frameworks were reviewed, such as Sherry R. Arstein's 'A Ladder of Citizen Participation' (1969)

Consequently, we specifically visualised the significant gradations of community participation in Novi di Modena and verified the impacts of the participatory paths reflecting three types of outcomes.

To conclude, we identified three key factors encouraging collaborative planning for reconstruction from the planning process of Novi di Modena.

First, the timing of the participatory process must be well managed. Second, the participatory proposals shared with citizens must be considered the guiding documents for local development. Third, regeneration scenarios for the whole territory considering different periods must be defined, in addition to the implementation strategies and tactics for each urban core. Because of the lack of these three factors in the three towns, continuous community participation was impossible. Although reconstruction in Novi di Modena was delayed for the first three years, Novi di Modena was able to accomplish a greater degree of qualitative reconstruction than the other towns.

A study on the slum clearance redevelopment project and the community design project for disaster in Koto-delta

Motoki Fujisaki (The University of Chiba), Joseph Thomas Rayes (The University of Chiba) and Saikaku Toyokawa (The University of Chiba)

The paper puts its focus on the activities of university researchers to organize the top-down urban planning and bottom-up community design with the theme of disaster in Koto-delta. Moreover, comparative analysis of statistical data of Koto-delta for half a century show the necessary conditions for considering the disaster prevention planning. Koto-delta is the most dangerous area for disaster in Tokyo. Takayama presented the Koto Cross Disaster Prevention Belt Conception, after studying his laboratory, became the foundation of the current planning. While disaster prevention bases and public facilities have increased the disaster prevention performance of the area, the aging and unused facilities are now a problem. Otani and Sato aimed to improve the community by cooperative rebuilding of residents, but the discussion was difficult, and maintenance did not proceed. The statistical data shows that the safety of the area improved, but in addition to the failure of social mix due to large-scale development, the loss of regional landscape and diversity due to the promotion of detached rebuilding, the resilience is decreasing.

The Influence that the Legacy of Urban Planning Gave to Current Sanriku Coastal Villages

Kentaro Okamura (The University of Tokyo)

After the Great East Japan Earthquake in 2011, it has widely been recognized that the place called “Fukkochi” exists in a number of Sanriku coastal villages. “Fukkochi” refers to a high altitude settlement where displaced people moved after the Showa Sanriku Tsunami in 1933. It was developed as a project by the Ministry of Home Affairs using public funds. “Fukkochi” was planned at about 100 villages in total (40 villages in Iwate Prefecture and 60 villages in Miyagi prefecture)

It was one of the first projects that urban planning bureaucrats were involved in rural disaster reconstruction. Recent studies by Akihito Aoi have revealed that it was also related to the social policy of rural village economic rehabilitation movement at that time.

In recent years, case studies on individual “Fukkochi” have increased. However, the overall picture is not necessarily clarified. In some studies, the difference between plan and actual situation is ignored. In our previous works in several villages revealed that the position and the scale of “Fukkochi” are different from the plan drawing by the Ministry of Home Affairs. It is impossible to evaluate the policy without grasping how the plan was realized.

Therefore, the purpose of this research is to clarify how reconstruction planned in about 40 places in Iwate prefecture was realized. Specifically, by investigating cadastre and field survey, the location and scale of “Fukkochi” are specified and it is analyzed how it differs from the plan.

According to previous studies, the location and scale of 30 villages out of about about 40 villages were found out. In one of the remaining villages (Taro), rebuilding in the former residence was chosen instead of a tall relocation. For the rest of the villages, it is considered to have not been realized. In addition, it is clarified whether each “Fukkochi” was damaged by the Great East Japan Earthquake by map analysis and field survey.

A study about formation of community base outside administrative district in Fukushima after Nuclear Disaster

Keisuke Sugano (Delft University of Technology)

Due to the disastrous incident broke out in the First Nuclear Power Plant of Tokyo (TEPCO) in Fukushima, the entire Namie town population were compelled to leave their means for livings and evacuated themselves to other districts in Japan.

As of March 2015 this moment, four years since this disaster, the entire town people have sought refuges elsewhere, evacuated themselves and settled down in new communities built around the Namie outskirts or in several host cities. For the time being before the assurance of returning to Namie town, their private life in the refuges must be ensured for safety and stability, spiritually and materially.

As a member of Waseda University Institute of Urban and Regional Studies and Shigeru Satoh Laboratory, the author practiced the project for supporting Namie community reconstruction from autumn of 2011. We presented a concrete image of “Namie outer communities in host city” that forms a community base outside Namie administrative district, and got approval from many citizens, mayor and staff of town government office at the symposium held on March 2013. After April 2013, we proposed “Cooperative Community Development for Rehabilitation” to realize Namie outer communities, which contribute to the regional revitalization of the host city. The author worked together with citizens and governments of Namie and host cities until March 2015.

This paper describes the process of Cooperative Community Development for Rehabilitation, focusing following three contents; (1) institutional problems for forming the community base outside administrative district, (2) organization established to request institutional improvement, (3) the method of realizing the model case of outer community.

(1) There was insufficient system to support land acquisition outside the administrative district and fund procurement for living reconstruction. There were only two host cities, Kohri and Motomiya, concluded an agreement with Namie Town for developing public housing, which supports evacuees of Namie in the host city.

(2) Community Development Committee was established by a temporary Chairman of autonomy to request institutionalization for supporting Cooperative Community Development for Rehabilitation to national, prefectural government and Namie Town. In addition, Community Development forum was held to share the vision of it with entire autonomous communities struck by the Nuclear Power Plant Disaster and whole host city in Fukushima prefecture.

(3) In the neighboring land of the temporary housing complex which is located in Adachi district of Nihonmatsu City, Namie outer communities headed for realization in collaboration with the development of public housing by Fukushima Prefecture and housing development by private sector. In the public housing, clinic, living support center, meeting place organized by Namie Town will also be established, and a base of community for Namie citizens will be formed.



Collaborative Planning for Post-Disaster Reconstruction in Italy: Community Participation in four Small Towns, Focusing on Novi di Modena

Tomoyuki Mashiko*, Monia Guarino**, Gianfranco Franz***, Shigeru Satoh****

* *PhD Student, Graduate School of Creative Science and Engineering, Waseda University
Research Fellow of Japan Society for the Promotion of Science, mashiko0511@gmail.com*

** *President of the professional association PRINCIPI ATTIVI, moniaguarino@alice.it*

*** *Associate Professor, Department of Economics and Management, University of Ferrara, frz@unife.it*

**** *Emeritus Professor, Waseda University*

Senior Researcher, Waseda Institute of Urban Planning and Regional Studies, gerusato@waseda.jp

Community participation after a disaster is widely acknowledged to be crucial in both mitigation and reconstruction planning; however, to date very little research has been done on collaborative planning in a post-disaster context. This paper addresses the issue of collaborative planning for post-disaster reconstruction to effectively facilitate community participatory processes. First, we surveyed the characteristics of community participation for post-disaster reconstruction in Italy. Second, we studied the regional legislative regulations for reconstruction in Emilia-Romagna. Third, we compared the community participation and formulation processes of reconstruction planning tools used by communities. Lastly, we verified the dynamic mechanism of the town of Novi di Modena's reconstruction planning process by using an evaluation framework with two axes: stage of planning process and community participation level. As a conclusion, we identified three key factors that encourage collaborative planning for reconstruction. The first key factor is the timing of the participatory process must be well managed. The second is a participatory proposal shared with citizens, which must be considered the guiding document for local development. The third key factor is regeneration scenarios for the whole territory considering the different periods must be defined, as well as the implementation strategies and tactics for each urban core.

Keywords: post-disaster reconstruction, collaborative planning, community participation, reconstruction planning history

INTRODUCTION

Over the last half-century, Italy has had a painful history of catastrophic natural disasters, and in particular several mega-earthquakes within these disasters have caused severe damage represented by loss of life and property in different regions (Valeriani and Bertelli, 2017). Most of the devastated areas are small, isolated rural settlements, and therefore "effort to encourage decision-making and collaboration with different actors is necessary to reconstruct such suffered areas" (Ceccarelli, 2017, p.99). Communities face difficult challenges in post-disaster reconstruction since the many actors involved have diverse socio-economic backgrounds (Ceccarelli, 2017) and since the recovery process is so complex and compressed in time (Olshansky et al., 2008; Olshansky et al., 2012). Despite such difficulties, to take advantage of strengthened community bonds after a disaster strikes, communities must give voice to their citizens as participants in the post-disaster reconstruction decision-making process (Berke and Campanella, 2006; Ceccarelli, 2017; Ganapati and Ganapati, 2008).

This paper addresses the issue of collaborative planning for post-disaster reconstruction to effectively facilitate the community participatory processes and identifies key factors in successful collaboration gleaned from past Italian reconstruction planning. Community participation, after a disaster, is widely acknowledged to be crucial in both mitigation and reconstruction planning. Berke and Campanella (2006, p.193) indicate by involving and consulting residents in all phases of planning, the pre-disaster recovery planning process can create a knowledgeable constituency. In addition, the collaborative process of reconstruction planning can help "build the necessary momentum to keep the community moving forward" (Schwab, 2014, p.120). Little research has been done on the collaborative planning process for long-term reconstruction, despite some recent focus on community participation after a disaster strikes (Chandrasekhar, 2012). Some of this research has focused on the factors and requirements of a community participatory approach to residential reconstruction projects, with researchers making qualitative inquiries such as field interviews with various stakeholders (Daly and Brassard, 2011; Ganapati and Ganapati, 2008; Sadiqi and Trigunaryah and Coffey, 2017). On the other hand, in some empirical studies and practices, the authors get involved in the collaborative planning process via a university-community partnership and then detail these processes in their work (Reardon, 2009; Satoh, 2014). This type of



collaborative study with first-hand observation illustrates the complex recovery process vividly and shows an understanding of quality outcomes as collaborative processes themselves. Approaching a theory of collaborative planning in a post-disaster context, a new evaluation framework of the reconstruction planning process should be indexed to the level of community participation by referring to some established frameworks for measuring citizen participation and also by adjusting them in a post-disaster context.

This paper attempts to reveal the dynamic mechanism of community participation in post-disaster reconstruction planning in the town of Novi di Modena in Italy's Emilia-Romagna region after a 2012 earthquake from the viewpoint of collaborative planning. First, focusing on three different quake disasters, we surveyed the characteristics of community participation in an Italian post-disaster context by conducting a literature survey and field interviews. Second, we studied the regional legislation framework and specific rules for the reconstruction in Emilia-Romagna region. Third, we surveyed the pre-existing ordinary planning at the municipal level in four different local administrations; then, we compared the community participation path with the formulation process of the reconstruction plan and programme among towns with the five defined stages of reconstruction. And lastly, focusing on the town of Novi di Modena, we estimated the impact of community participation in the reconstruction planning process with the evaluation framework.

CHARACTERISTICS OF COMMUNITY PARTICIPATION FOR POST-DISASTER RECONSTRUCTION IN ITALY

As Lazzati (2018) notes, since the 1950s, Italy has adopted case-by-case solutions to post-disaster response, and community participation has had different roles in these solutions. Based on a literature survey and field interviews, this section attempts to illustrate the characteristics of community participation in an Italian post-disaster context, taking three reconstruction cases, the Friuli earthquake in 1976, the Abruzzo earthquake in 2009 and Emilia-Romagna earthquake in 2012, and classifying them under three criteria; objective/goal, main actors and period.

In the case of reconstruction after the 1976 Friuli quake, the mayor and local administration conducted several public assemblies to share with the public as a whole the most important decisions to be made in the reconstruction.¹ From the beginning of the emergency phase, citizen groups were spontaneously organised at the areas of the evacuation tents, prefabricated settlements (Consiglio Regionale del Friuli Venezia Giulia, 2016). The objective of these groups was to attract attention from outside the devastated areas to conserve the original architecture heritage as much as possible. In short, in an attempt to avoid what happened in post-disaster Sicily in 1968, when modern structures were built where many historical buildings had stood, they tried to engage inhabitants to embrace the reconstruction principle '*dov'era,com'era* (where it was, how it was)'.²

In the second case, the 2009 Abruzzo earthquake, community participation was strongly affected by the central government's top-down approach during the first three years after the emergency: DPC (*Dipartimento Protezione Civile*) managed the provision of wooden housing units and quake proof housing complex in the periphery of L'Aquila City (Mashiko et al., 2017). Immediately after the earthquake, many citizens organised and gathered in front of the main square at the historical centre to get involved in the discussion of L'Aquila reconstruction.³ They opposed the exclusion from any decision-making of not only local people but also the Mayor of L'Aquila (Lazzati, 2018). Under the restrictions on citizen participation, INU (*Istituto Nazionale di Urbanistica*) and ANSCA (*Associazione Nazionale Centri Storici Artistici*) established the LAURAq (*Laboratorio Urbanistico L'Aquila*) organisation as an initiative to confront L'Aquila reconstruction and their priority was to recover historical centres.⁴ LAURAq held a series of workshops and public forums, in which inhabitants, citizen groups, urban planners have been engaged, to encourage the population to participate in the planning for reconstruction and to help L'Aquila's administration in the formulation of its reconstruction plan. On the other hand, during the recovery plan implementation phase, Urban Center L'Aquila (UCAQ) has allied with citizen groups and associations that emerged after the earthquake, the University of L'Aquila and the municipality of L'Aquila as a third sector (Mashiko et al., 2017). The aim of UCAQ is "to create a platform for public discussion that offers an opportunity to discuss citizen participation" (Mashiko et al., 2017, p.191).

In the third case, reconstruction after the 2012 Emilia-Romagna earthquake, different local municipalities in the devastated areas devised new customs and opportunities with the local community, encouraging citizens to participate in the reconstruction process (Guarino, 2015). The regional law recognises the importance of stakeholders' participation in enhancing the effectiveness of the reconstruction plan, thanks to both the base of an active and engaged civil society and the institutionalisation of a participatory approach at the regional governmental level (Lazzati, 2018). Relying on the participation of municipalities, the regional government launched a diverse approach to participation in different stages of the reconstruction process, including sharing information about reconstruction of the historical centre with citizens and crafting a common vision for the future of urban cores and their territories. This participatory approach to the reconstruction planning process has



encouraged the dynamic community engagement of not only the local administration, professionals and citizens but also of citizen groups and local associations established after the earthquake (Guarino, 2015).

From these three reconstruction cases we classified the reviewed community participation into five types based on three criteria; objective/goal, main actors and period. Table 1 shows the five types of community participation and how these types are corresponding to three reconstruction cases. In three cases, type 1 of Grass-roots Activity is commonly measured; on the other hand, the other four types, Local Assembly, Public Forum, Discussion Platform and Collaborative Planning, are verified in each reconstruction case. Through this classification, we grasped that type 5 of Collaborative Planning is observed only in the Emilia-Romagna case, and from the next section onwards we deeply focus on it.

Table 1: Classification of community participation in an Italian post-disaster context

	TYPE 1 Grass-roots Activity	TYPE 2 Local Assembly	TYPE 3 Public Forum	TYPE 4 Discussion Platform	TYPE 5 Collaborative Planning
Objective / Goal	- Conserving the original architecture heritage as much as possible - Getting involved in the discussion for reconstruction	- Sharing with the public as a whole the most important decisions for reconstruction	- Holding workshops involved with citizens, planners and municipality - Supporting local administration for plan formulation	- Creating a platform organization (UCAQ) for public discussion - Offering an opportunity to discuss citizen participation	- Sharing information about the reconstruction - Building a common vision for the future of urban cores and their territories
Main Actors	Citizens / Citizen Groups	Mayor / Citizens / Local Administration	National Institute of Planning / National Historical Art Association	Citizen Groups / Local Associations / University / Municipality	Citizens / Professionals / Local Administration / Citizen Group & Local Association
Period	From Emergency Period	From Emergency Period	Planning Period for Reconstruction	Implementation Period of Reconstruction Plan	From Planning Period for Reconstruction
1976 FRIULI	●	●			
2009 ABRUZZO	●		●	●	
2012 EMILIA-ROMAGNA	●				●

LEGISLATIVE FRAMEWORK AND SPECIFIC RULES FOR RECONSTRUCTION AFTER THE 2012 EMILIA-ROMAGNA EARTHQUAKE

In this section, we will outline the legislative framework and specific rules for reconstruction at the regional level. Thanks to the technical structure of the Special Commission for Reconstruction, over a period of four years, the regional government has accompanied the many municipalities most affected by the earthquake step by step, particularly in the execution of the reconstruction plans, the plans for public works, the drafting of the *'Programma Speciale d'Area'*, a strategic programme for the seismic crater and, finally, the definition of the *'Piano Organico'*, a special operational program for the revitalization of the historical centres. The government undertook the tremendous job of spearheading the first three years of reconstruction, after which it spun off a special agency to continue the recovery process. It has now fully outsourced the functions and operational technical offices for the reconstruction to the Regional Agency for the Recovery–Emilia 2012. This new body is a technical structure that manages all the necessary procedures while at the political level, the regional government still define rules, norms and provisions and makes strategic decisions.

It is important to emphasise the impact that the articulation of a regulatory framework has had on the success of the first phase of reconstruction and its future fulfilment. A remarkable innovation by the regional government was the enactment of the first and only regional law for the reconstruction, the *Legge Regionale* (Regional Law) n.16/2012, designed to establish consistency among reconstruction plans and ordinary urban planning tools. For the first time in the Italian legal system, governmental response to disaster and emergency was not top down but a participatory process developed in cooperation with an Institutional Committee. Since 2012, the Institutional Committee has coordinated decisions among the Special Commissioner, several regional departments, all the municipalities involved and some specific committees.

Thanks to this continuous drive for coordination, regional mayors and commissioners were able to represent the needs, desires, wishes, problems and expectations of the many local communities and citizen groups thanks to collaboration with the Institutional Committee and its specialised organisation.

COMPARISON OF THE COMMUNITY PARTICIPATION AND FORMULATION PROCESS OF RECONSTRUCTION PLAN IN FOUR TOWNS



While our previous overview of reconstruction legislation and specific rules was at the regional level, this section will compare the community participation and the formulation process of reconstruction plans of four local administrations. We selected the four towns of *Novi di Modena* (Novi), *San Felice sul Panaro* (San Felice), *Concordia sulla Secchia* (Concordia) and *Mirandola* because they met the following criteria: (a) the towns must have suffered serious physical damage and subsequently constructed a high number of prefabricated modules in an urban area; (b) the towns must have established both ‘*Piano della Ricostruzione*’, a reconstruction plan, and ‘*Piano Organico*’, an organic operational programme; (c) the towns must have applied ‘*Bando Ricostruzione*’, regional financing to support the participation process. In the analysis of the processes of community participation and plan/programme formulation, it should be noted what types of ordinary planning tools the four towns already had in place, because a reconstruction plan is an operational urban planning tool that integrates existing plans and achieves the improvement of urban quality.⁵

A review of pre-existing ordinary planning tools before the earthquake reveals, as shown in Table 2, that the four towns are mainly divided into two types: Two municipalities, San Felice and Concordia, adopted new planning procedures before the earthquake, and the two others, Novi and Mirandola, continued to use old planning procedures after the earthquake. San Felice and Concordia implemented the new ‘*Piano Strutturale Comunale*’ (PSC), which outlines the strategic choices of arrangement and development for the whole local municipality.⁶ In short, only two of the four municipalities determined territorial strategies in their administrative district before the earthquake. Because Mirandola was in the process of establishing a new planning process right before the earthquake,⁷ only Novi had the daunting task of establishing a new territorial vision and future strategy after the earthquake while at the same time forming and carrying out a physical recovery plan for damaged buildings.

Table 2: Pre-existing urban planning tools before the earthquake

	Old Procedure for town planning		New Procedure for town planning		
	Piano Integrato di Recupero [Integrated restoration plan]	Piano Regolatore Generale [General urban development plan]	Piano Strutturale Comunale [Municipal strategic plan]	Regolamento Urbanistico Edilizio [Housing planning regulation]	Piano Operativo Comunale [Municipal operational plan]
Novi di Modena	Approved with D.C.C n.120 in 29/11/1995 [Centro Storico/Frazione]	Revision of PRG was approved with Del.G.R n.448 in 31/07/2000	Not existing	Not existing	Not existing
San Felice s/P	Not existed	Transformed to PSC/RUE/POC before the earthquake 2012	Approved with D.C.C n.25 in 22/04/2009	Approved with D.C.C n.26 in 22/04/2009	Approved with D.C.C n.46 in 28/7/2011
Concordia s/S	Not existed	Transformed to PSC/RUE/POC before the earthquake 2012	Approved with D.C.C n.23 in 24/04/2009	Approved with D.C.C n.70 in 26/10/2009	Not existed, but approved with D.C.C n.87 in 23/12/2013
Mirandola	Approved with D.C.C n.146 in 23/07/2001 [Centro Storico]	Revision of PRG was approved with Del.G.R n.153 in 17/04/2001	Not existed, but approved with D.C.C n.111 in 27/07/2015	Not existed, but approved with D.C.C n.112 in 27/07/2015	Not existed, but approved with D.C.C n.111 in 27/07/2015

Figure 1 illustrates the formulation processes of reconstruction planning tools and the community participatory process in four towns, pulled from the following official documents: 1) the reconstruction plan; 2) the organic operational programme; 3) the report on regional financing for the participation process; 4) the community participation reports edited by facilitators. Moreover, to make a comparison of community participation paths, the five stages are defined as follow: 1) activation stage of understanding community problems and identifying needs and aspirations for reconstruction; 2) visioning stage of building future vision and common strategical framework for a whole territory; 3) project planning stage of discussing participatory projects for urban regeneration; 4) project realization stage of carrying out construction projects and making an agreement for management; 5) evaluation stage of organising debate opportunities to evaluate effects and impacts of the participatory process.

Comparing the towns’ timelines, two of them, Novi and San Felice, divided their reconstruction plans into two versions, the acceptance dates of these second plans being later than the dates in Concordia and Mirandola, which drafted one version only. Novi’s second reconstruction plan, for example, was accepted by the municipal council on 22 December 2014, 13 months later than Mirandola’s acceptance date, although Mirandola had modified its plan three times after regional government approval. Looking at the processes of community participation, we can observe their four characteristics as follows: Novi has launched a single continuous participatory action, ‘*Fatti il Centro Tuo!*’, with all five stages of the participatory process from activation to evaluation; San Felice has launched a single intermediate continuous participation action, ‘*PIU’ sanFELICE*’, containing the two stages of activation and visioning; Concordia has launched two short-term separate participation actions, ‘*Focus Group*’ and ‘*Dalla calamità alla calamita*’, with the two stages of activation and project planning; Mirandola has launched a single short-term participation action, ‘*Immagina Mirandola*’, twice, at the beginning of 2014 and at the end of 2017, with the activation stage and before the earthquake had organised participatory workshops with multi-stakeholders for the elaboration of PSC. The development of participatory action in three towns, San Felice, Concordia and Mirandola, has proceeded discontinuously, and only Novi’s development progressed in a single continuous fashion with all stages of the participatory process.

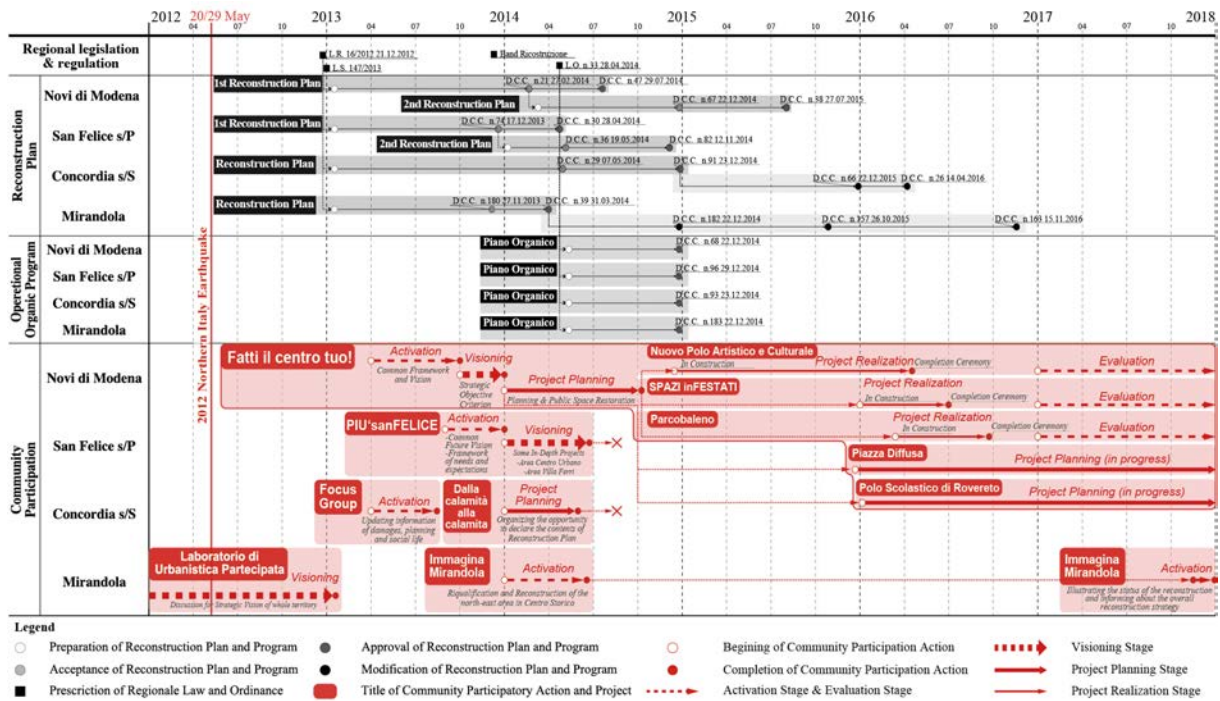


Figure 1: Processes of planning tool formulation and community participation for reconstruction

DYNAMIC MECHANISM OF THE COLLABORATIVE PLANNING PROCESS IN NOVI DI MODENA

This section covers the community participation process of Novi di Modena, which among the four towns studied had the only continuous participation action, and attempts to disclose their dynamic mechanism of collaborative planning process for the reconstruction. First, a review of community participation reports aims to discover how the ideas proposed and obtained through community participation have been integrated into planning and project implementation tools in both extraordinary and ordinary situations.

Novi's collaborative planning process is unique in that all of the involvement actions have flexibly in their decisional dynamics via a ritual of collective debate defined by careful management of the timing of participatory activities: one activity per week at first, then one every two weeks. This short-term rhythm made it possible to reconstitute the needs and aspirations of individuals into common-sense proposals. These collective ideas became the '*Documento di Proposta partecipata*' (DocPP), a participatory proposal document containing an organised synthesis of the community's proposal for the decision-making authorities to consider in their deliberations. In addition, this document represents the unique guideline and interface between the 'extraordinary' tools, such as '*Piano della Ricostruzione*' (Reconstruction Plan) and '*Piano Organico*' (Operational Organic Program), and the 'ordinary' tools, '*Programma Triennale ed Elenco Annuale delle Opere Pubbliche*' (Triennial Program and Annual List of Public Works), '*Piano urbanistico generale*' (General urban plan) and '*Accordi Operativi*' (Operational Agreements) (Figure 2). These implementation tools have helped realise participatory activities with the support of regional contributions to community participation under Regional Law n.3/2010.

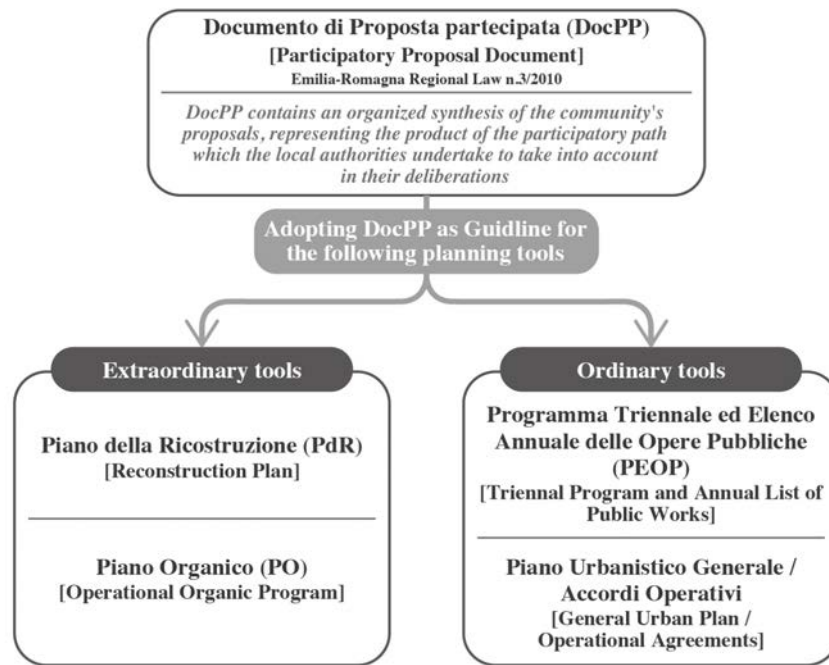


Figure 2: The relationship of outcomes through the collaborative planning process

Second, by setting two evaluation axes to categorize five different participation paths, the impacts of each path reflecting on three types of outcomes are verified. The first evaluation axis encompasses the five defined stages of the planning process discussed in the previous section. In order to define the second evaluation axis of community participation level, on the other hand, some established frameworks in an ordinary situation are reviewed. In *A Ladder Of Citizen Participation*, Sherry R. Arnstein (1969) illustrated the eight levels of citizen participation arranged in a ladder pattern; in recent years, Bratt and Reardon (2013, p.357) have offered a new theoretical understanding of the role of residents in community development, evaluated based on two planning process examples from the United States. Taking into account a peculiarity of post-disaster reconstruction, in other words, time compression (Olshansky et al., 2012), and strengthening community bonds (Ceccarelli, 2017), two of the middle three rungs, Informing and Consultation, and two of the highest three rungs, Partnership and Delegated Power, should be crucial levels for maximizing the effect of community participation in a limited period. The four levels of community participation are defined as follows: 1) Information level of sharing data, analysis and proposals to enable participants to have a voice; 2) Consultation level of asking participants' opinions based on given information; 3) Partnership level enabling participants to collaborate and negotiate in the decision-making process and 4) Empowerment level of delegating full managerial power to citizens or related citizen groups. In addition, in relation to Bratt and Reardon's three contextual variables, we are identifying three key factors to build supportive environment for community participation from catastrophic circumstances after a disaster strikes.

To measure community participation, we have used the official reports^{8,9} that are published on the website of local administration and have interviewed the programme coordinator.¹⁰ Following the evaluation framework with two axes, five participatory paths are situated as shown Table 3. This table illustrates that from STEP 1 to STEP 4, the level of community participation is gradually going up starting from 'Information', being achieved at the 'Empowerment' step and finally achieving all the levels of community participation. Subsequently, since the beginning of 2017 the participatory level of STEP 5 has been returning to the 'Information' and 'Consultation' step in order to evaluate the effects and impacts of participatory action '*Fatti il Centro Tuo!*' By measuring all participatory paths with this new framework, in other words, combining a sequence of reconstruction stages into the Arnstein Ladder framework regarding a post-disaster context carefully, we specifically visualized the significant gradation of community participation in the town of Novi di Modena.



Table 3: An evaluation framework of the participatory paths of Novi di Modena

Stages of Participatory Process		Community Participation Level			
		1. INFORMATION <i>telling data/analysis</i>	2. CONSULTATION <i>asking data/opinions</i>	3. PARTNERSHIP <i>collaborating / negotiating</i>	4. EMPOWERMENT <i>delegating</i>
1 ACTIVATION STAGE	<i>Problem & Needs</i>	STEP 1 'Fatti il centro tuo!' <i>participatory path (from April to September, 2013)</i>			
2 VISIONING STAGE	<i>Scenarios & Strategies</i>		STEP 2 'Fatti il centro tuo!' <i>participatory path (from October to December, 2013)</i>		
3 PROJECT PLANNING STAGE	<i>Project Designs</i>		STEP 3 'Fatti il centro tuo!' <i>participatory path (from January to September, 2014)</i>		
4 PROJECT REALIZATION STAGE	<i>Implementation & Management</i>			STEP 4 'Fatti il centro tuo!' <i>Parcobaleno/Spazi inFestanti/PAC</i> <i>participatory path (from 2015 to 2016)</i>	
5 EVALUATION STAGE	<i>Verification of effects and impacts</i>	STEP 5 'Fatti il centro tuo!' <i>participatory path (from 2017 in progress)</i>			

Table 4 shows how each step of the participatory path is organised with participants and activities into three types of outcomes. The impacts of each step are as follows:

In STEP 1, the critical issues and the opportunities for reconstruction are consolidated into DocPP to share basic data and analysis with participants and to gather their opinions in a common framework. For example, community needs and aspirations for the three 'frazione' (small districts) of Novi, Rovereto and Sant' Antonio can be summed up in an analytical framework.

In STEP 2, scenarios and strategies for the regeneration of the whole territory are consolidated into DocPP, collaborating and negotiating in their decision-making process based on the opinions in three different 'frazione'. For example, three vocations for the whole territory and nine common strategic measures for each 'frazione' emerged from the series of collective debates. These outcomes of the participatory processes of STEP1 and STEP 2 comprised the first version of the PdR,

In STEP 3, the priorities of intervention to encourage reconstruction are consolidated into DocPP, negotiating the concrete projects according to the given scenarios and strategies. For example, project planning was divided into 15 project conditions for 45 proposals; then, five pilot projects were considered priorities for the regeneration of the territory and the three districts. The outcomes of STEP 3 such as an urban regeneration framework, identification of project objectives and definition of interventions were included in the PO, and five pilot projects were adopted into the PEO.

In STEP 4, the collaborative agreements between the local administration and the community for the management of new common spaces were consolidated into DocPP, delegating to each community the power of participatory management of green spaces related to the project 'SPAZI inFESTATI'. According to the PEO, three participatory projects, 'Parcobaleno', 'SPAZI inFESTATI' and 'Nuovo Polo Artistico e Culturale' were completed at the end of 2016, while two projects, 'Piazza Diffusa di Novi' and 'Nuovo Polo Scolastico di Rovereto', are currently in the planning stage.

Presently, STEP 5, the evaluation stage of the effect and impact of the continuous participatory process, is a work in progress.



Table 4: The outcomes of five participatory paths

FATTI IL CENTRO TUO !		OUTCOMES		
STEP	Activities / Participants	Documento di Proposta partecipata (DocPP)	Extraordinary Tools	Ordinary Tools
STEP 1 Guiding Question: What are the critical issues to face, what are the opportunities to gather for reconstruction?	Activities Listening days : 35 Workshop : 6 Exhibition : 1 Collective Learning days : 15 Participants Citizens (adult/child) : 897 Associations / Groups : 30 Specialists : 54 University : 1	Analysis Framework: Identification of the needs and aspirations for the individual <i>frazione</i> Novi, Robereto, and Sant' Antonio	Reconstruction Plan (PdR): Plan Preparation / UMI definition / Protection of the historical-architectural heritage locating in the rural territory Considered Proposals of DocPP: Develop green-blue ecological systems and infrastructures, Improve the permeability and functionality of green spaces, Assign a structuring role to parks and river areas, Manage the coexistence of rural areas with residential functions by encouraging the multifunctionality of agriculture, Re-evaluate the agricultural areas also for tourism, Treat the territorial components that impoverish the community dimension as barriers	General Urban Planning: Being able to propose indications for the cognitive framework in the future
STEP 2 Guiding Question: What are the strategies of interventions for regeneration as a whole territory?	Activities Workshop : 19 Exhibition : 1 Collective Learning days : 12 Participants Citizens (child/teacher/merchant) : 90 Associations / Groups : 25 Categorized Associations : 3 Specialists : 31	Vision: Identification of the strategic objectives for territorial regeneration and the guidelines for project planning; 3 vocations for the whole territory and 9 strategic measures for 3 <i>frazione</i>	Reconstruction Plan (PdR): Insights and rules for redevelopment of urban areas Considered Proposals of DocPP: <ul style="list-style-type: none"> Re-qualify the center starting from neighborhood services and polarity, Strengthening the territorial links between existing structures, Enhancing community potential, Increasing the social performance of the public space through flexibility and functional mix, Introducing new concentrations of uses, Maintain in the public space a balanced presence of different social classes-age groups-cultural groups. Developing the quantity and quality of aggregation points, Exploring new ways of using public spaces, Enhancing urban fabrics with different activities that return an image of community, Acting on public space, Creating conditions for spontaneous use over time of daily life and the co-participation of structured initiatives over time, Supporting the variety of functions and widespread sociality. 	General Urban Planning: Being able to propose guidelines for urban and territorial regeneration of the territory in the future
STEP 3 Guiding Question: What are the priorities for incentive interventions for reconstruction?	Activities Group Work & Focus Group : 39 Plenary assemblies : 6 Urban Exhibition : 1 Collective Learning days : 20 Participants Citizens (adult/child/senior/teacher/merchant) : 347 Associations / Groups : 28 Categorized Associations : 3 Specialists : 34 University : 3	Priority: Identification of the pilot projects (Piazza Diffusa, Parcovaleno, Spazi in Festanti, Polo Artistico Culturale, Nuovo Polo Scolastico di Robereto); 15 projects situations for total of 45 proposals	Operational Organic Program(PO): Urban framework, identification of objectives, and definition of interventions Focus of the Plan: Definition of the interventions to qualify the reconstruction for urban cores, to regenerate public and private spaces, to revitalize social and economic functions, and to attract residents and businesses Considered Proposals of DocPP: <ul style="list-style-type: none"> Definition of urban planning and functional morphological architectural qualification of public spaces and public use in the central area, to assign an organic and recognizable urban continuity together with a more readable quality The integrated promotion of environmental and cultural heritage in support of social and economic development 	Triennial Program and Annual List of Public Works (PEOP): Piazza Diffusa: redevelop, revitalize, regenerate the urban public spaces of historical center NOVI SPAZI inFESTATI: co-project planning and co-realization equipped for the festival and conviviality for community Parcovaleno: define which urban furnitures to realize in public areas to make suitable place for young people Polo Scolastico di Robereto: design the educational spaces to complete the new school centers and community center Polo Artistico e Culturale: optimize active cultural presences by concentrating spaces, actions and visions to retain everyday life
STEP 4 Guiding Question: How to activate the community in the management of new commons?	Activities Focus Group : 3 Plenary assemblies : 1 Urban Exhibition : 2 Participants Citizens : 297 Associations / Groups : 10	Collaborative Agreement: Estimated with the collaboration agreements between local administration and community for participatory management of the green spaces, interesting with the project 'SPAZI inFESTATI	———	Triennial Program and Annual List of Public Works (PEOP): Piazza Diffusa: defined the preliminary project, and now the definitive and executive design in progress SPAZI inFESTATI: realized the interventions and defined the collaboration agreements for participatory management Parcovaleno: all the interventions have been carried out Polo Scolastico di Robereto: defined the guidelines for project planning of new educational community center in Robereto Polo Artistico e Culturale: all the interventions have been carried out
STEP 5 Guiding Question: How reconstruction is generating community and territory?	Work in progress	Work in progress	Work in progress	Work in progress

CONCLUSION

How can we effectively facilitate community participation in the planning process for post-disaster reconstruction? To answer this question, this paper examined the dynamic mechanism of Novi di Modena's reconstruction planning process via an evaluation framework with two axes: the stage of the planning process and community participation levels. From this evaluation of the participatory paths and their outcomes, we can identify three key factors for collaborative post-disaster planning as our summary findings:

The first key factor is the timing of the participatory process must be well managed: it is important to establish a rhythm for public debate activities with one activity per week at the outset then one activity every two weeks, correlating this rhythm with the timing of public decisions. Local authorities must decide quickly in the initial post-disaster recovery phase on the re-establishment of public services. They have more time to make decisions about secondary subjects including such things as community space, culture and sports. The second



key factor is the participatory proposal document, including all ideas shared with citizens must be considered the guiding document for local development, taking into account both reconstruction and urban regeneration. Ultimately, it becomes a reference tool for extraordinary and ordinary planning. In this way, the outcomes of the participatory path can be achieved gradually without losing its vision. The third key factor is in the post-event phase there is the urgent need to immediately implement individual intervention at the same time defining regeneration scenarios for the whole territory, considering the short-, medium- and long-term period of project realization. For territories to preserve their socio-economic status, each urban core must define its urban strategy and tactical plans. These are complex scenarios, strategies and tactics that take into account several thematic areas, different modes of intervention and collaboration between public and private stakeholders and communities.

Finally, this paper presents two discussions comparing Novi di Modena with the other three towns. The first discussion determines that as opposed to Novi di Modena, different conditions in the other three towns have limited or impeded the consideration of three factors identified for qualitative participation. Since they had adopted or had been revising the new municipal strategic plan, they might not draw new territorial regeneration scenarios and common vision for 'new' future after the earthquake with local community. Moreover, most of their participatory proposal documents can contain subordinate characteristic under the main planning procedure; the rhythm of their activities may be managed depending on the needed timing for the local administrations. The second discussion determines the result of reconstruction in terms of continuous community participation. The consideration of three factors has led Novi di Modena to mature the valuable process, since the different points of view have developed integrated perspective and every public debate has defined the steps to achieve a common vision. These aspects represent the greatest difference with the other three towns. The continuity of community participation has enhanced the citizen's ability to contribute to the elaboration of scenarios and to bring out the qualitative potential that only those who know their own environment of life can trace by reasoning on the desired impacts and on the future effects.

Acknowledgements

This study was supported by JSPS KAKENHI Grant Number 17J10930.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributors

Tomoyuki MASHIKO graduated in Architecture from Waseda University (Japan) in 2017, with a specialisation in Urban Planning and Design at Shigeru Satoh's Laboratory. He was involved in several international workshops and collaborative research projects in Italy and China, and in 2015, he studied abroad at the University of Ferrara as an exchange student, where he began studying Italian reconstruction methodologies after the earthquake. Since April 2017, he has been conducting his own research as a PhD student and JSPS research fellow on post-disaster urban planning in Japan and Italy in collaboration with the University of Ferrara.

Monia GUARINO's work deals with participation issues and supply assistance for decision-making, as well as managing development processes and promoting the local area, environment and public spaces. She has several years' experience in mediation, negotiation and facilitation involving multi-interest groups within urban transformation projects characterised by various conflicts and disasters. She has managed forums and theme-based workshop for urban plans and projects using various facilitation techniques. In recent years, she has collaborated with various national public bodies, NGOs and universities in coordinating and evaluating dozens of projects involving participatory planning, public relations and public space creation and revitalisation.

Gianfranco FRANZ has been an associate professor in the Department of Economics and Management of the University of Ferrara since 2008 and also teaches Urban and Regional Planning in the Department of Architecture. Since 2013, he has been a scientific coordinator on Project 2PxE, promoted by the regional government for the reconstruction of the municipalities affected by the earthquake in Emilia-Romagna. He is director of the International Master Eco-Polis on Environmental and Regional Policies for Sustainability and Local Development, organised by the University of Ferrara in collaboration with two Italian universities, six Latin American universities and the Waseda University.

Shigeru SATOH is an emeritus professor at Waseda University and a senior researcher in Waseda Institute of Urban and Regional Studies. Among other distinctions, he was appointed president of the Architectural Institute of Japan. His core ideas on urban design and planning are deeply rooted in the analysis of cultural context and



the use of local potential. Through the study of *Joka-machi* [Japanese castle town], he established a unique research methodology that explains the evolution of urban morphology in connection to historical ecological features (mountain views, water systems, etc.), community traditional groups and other regional actors.

Endnotes

¹ Istituto Nazionale di Urbanistica Sezione Friuli Venezia Giulia, "Friuli 1976: Un Modello o Un Laboratorio della Ricostruzione?."

² Aldo Di Bernardo, interview, December 14, 2017.

³ Donato Di Ludovico, interview, July 27, 2016.

⁴ "LAURAQ," Laboratorio Urbanistico per la Ricostruzione dell'Aquila, accessed March 17, 2018, <http://www.laboratoriourbanisticoaquila.eu/index.html>

⁵ Barbara Nerozzi ed., "Il Piano della ricostruzione : un nuovo approccio disciplinare metodologico," *Inforum*, no.45 (May 2015): 12-15.

⁶ Emilia-Romagna Region. Legge Regionale n.20/2000, on "Disciplina generale sulla tutela e l'uso del territorio," art. 28.

⁷ Comune di Mirandola, "Piano Strutturale Comunale," 9.

⁸ Comune di Novi di Modena, "Piano Organico" ,accessed June 1, 2018, <https://www.comune.novi.mo.it/index.php/amministrazione-trasparente/pianificazione-e-governo-del-territorio/263-atti-di-governo-approvati/1023-piano-organico-approvato>

⁹ Comune di Novi di Modena, "Fatti il Centro Tuo!," accessed June 1, 2018, <https://www.comune.novi.mo.it/index.php/fatti-il-centro-tuo>

¹⁰ Monia Guarino, interview, March 2, 2016.

Bibliography

- Abruzzoweb. "Urban Center L'Aquila: Dopo anni di stasi si va verso elezione nuovo presidente" Accessed March 17, 2018. <http://www.abruzzoweb.it/contenuti/urban-center-l-aquila-dopo-anni-di-stasi-si-va-verso-elezione-nuovo-presidente/649785-268/>
- Alexander, David. "The L'Aquila Earthquake of 6 April 2009 and Italian Government Policy on Disaster Response.", *Journal of Natural Resources Policy Research* 2, no.4 (October 2010): 325-342.
- Alexander, David. "An evaluation of medium-term recovery processes after the 6 April 2009 earthquake in L'Aquila.", *Journal of Environmental Hazards* 12, no.1 (May 2012): 60-73.
- Arnstein, Sherry R. "A Ladder Of Citizen Participation.", *Journal of the American Institute of Planners* 35, no.4 (July 1969): 216-224.
- Berke, Philip R., and Thomas J. Campanella. "Planning for Postdisaster Resiliency.", *Annals of the American Academy of Political and Social Sciences* 64: 19-31.
- Bratt, Rachel G., and Kenneth M. Reardon. "Beyond the Ladder: New Ideas About Resident Roles in Contemporary Community Development in the United States." In *Policy, Planning, and People: Promoting Justice in Urban Development*, edited by Carmon Naomi and Fainstein Susan S., 356-82. University of Pennsylvania Press, 2013. <http://www.jstor.org/stable/j.ctt3fj517.20>.
- Ceccarelli, Paolo. "Machizukuri to Europe (Machizukuri and Europe)." In *Machizukuri Kyosyo (Machizukuri Book)*, edited by Shigeru Satoh et al., 97-100, Tokyo: Kajima Institute Publishing Co.Ltd.,2017. (Uchida, Naomi trans. In Japanese)
- Chandrasekhar, Divya. "Digging deeper: participation and non-participation in post-disaster community recovery.", *Journal of Community Development* 43, no.5 (December 2012): 614-629.
- Comune di Mirandola. *Piano Strutturale Comunale*. Comune di Mirandola, 2014. Available at: http://psc.unioneareanord.mo.it/mirandola/psc/PSC_REL.pdf (accessed 20 March 2018).
- Consiglio Regionale del Friuli Venezia Giulia. *Atti e documenti sulla ricostruzione delle zone terremotate del friuli*. Pasion di Prato: Lithostampa, 2016.
- Daly, Patrick., and Caroline Brassard. "Aid Accountability and Participatory Approaches in Post-Disaster Housing Reconstruction.", *Asian Journal of Social Science* 39, no.4 (2011): 508-533.
- Emilia-Romagna Region. Legge Regionale n.20/2000, on "Disciplina generale sulla tutela e l'uso del territorio" (passed March 24, 2000).
- Emilia-Romagna Region. Legge Regionale n.3/2010, on "Norme per la definizione, riordino e promozione delle procedure di consultazione e partecipazione alla elaborazione delle politiche regionali e locali" (passed February 9, 2010).
- Emilia-Romagna Region. Legge Regionale n.16/2012, on "Norme per la ricostruzione nei territori interessati dal sisma del 20 e 29 maggio 2012" (passed Dicembre 21, 2012).
- Franz, Gianfranco. "The Reconstruction in Emilia after the Earthquake of May 2012. Successes, limits and Uncertainties of an Extraordinary Experience," *Urbanistica*, n.154: 34-38. Roma : INU Edizioni, 2016.



- Franz, Gianfranco. "Long-term vision and ordinary management: post-earthquake reconstruction in the Italian region of Emilia.", In *Cultures of Sustainability and Wellbeing. Theories, Histories and Policies*, edited by Paola Spinozzi and Massimiliano Mazzanti, 232-243. New York: Routledge, 2018.
- Forino, Giuseppe. "Disaster recovery: narrating the resilience process in the reconstruction of L'Aquila (Italy).", *Geografisk Tidsskrift-Danish Journal of Geography* 115, no.1 (November 2014):1-13.
- Ganapati, N. Emel., and Sukumar Ganapati. "Enabling Participatory Planning After Disasters: A Case Study of the World Bank's Housing Reconstruction in Turkey.", *Journal of the American Planning Association* 75, no.1(December 2008): 41-59.
- Golino, Antonella., and And Rossano Pazzagli. "Storia dell'ambiente e percezione sociale delle calamita' naturali. Il caso dell'alluvione di Firenze" In *Territori vulnerabili. Verso una nuova sociologia dei disastri italiana*, edited by Alfredo Mela et al., 169-178, Milano: FrancoAngeli Edizioni, 2017.
- Guarino, Monia. "La partecipazione delle comunità alla ricostruzione," *Inforum*, n.48: 37-42. Bologna : Regione Emilia-Romagna, 2015.
- Innes, Judith E. and David E. Booher, "Consensus Building and Complex Adaptive Systems: A Framework for Evaluating Collaborative Planning.", *Journal of the American Planning Association* 65, no. 4 (Autumn 1999): 412-423.
- Istituto Nazionale di Urbanistica Sezione Friuli Venezia Giulia, "Friuli 1976: un Modello o un laboratorio della Ricostruzione?," Accessed by September 6, 2017.
- Isola, Marcella., and Michele Zanelli. "La prospettiva dei Piani Organici per la rigenerazione dei centri storici colpiti dal sisma," *Inforum*, n.48: 13-16. Bologna : Regione Emilia-Romagna, 2015.
- Lazzati, Lorenza. "The Role of Community Engagement in Post-Disaster Reconstruction, The case of L'Aquila and Emilia-Romagna, Italy." In *Community Engagement in Post-Disaster Recovery*, edited by Graham Marsh et al., 102-114. New York: Routledge, 2018.
- Nerozzi, Barbara., and Maria Romani. "Il Piano della ricostruzione: un nuovo approccio disciplinare metodologico," *Inforum*, n.45:12-15. Bologna : Regione Emilia-Romagna, 2014.
- Mashiko, Tomoyuki., Shigeru Satoh, Donato Di Ludovico, and Luana Di Lodovico. "Post-Disaster Reconstruction Planning and Urban Resilience: Focus on Two Catastrophic Cases from Japan and Italy.", *Urbanistica Informazioni* , n.272 (December 2017): 189-194.
- Oliva, Federico. "The Difficult Reconstruction of L'Aquila," *Urbanistica*, n.154: 49-52. Roma : INU Edizioni, 2016.
- Reardon, Kenneth M., Rebekah Green, Lisa K. Bates, and Richard C. Kiely. "Overcoming the Challenges of Post-disaster Planning in New Orleans Lessons from the ACORN Housing/University Collaborative.", *Journal of Planning Education and Research* 28, no.3 (March 2009): 391-400.
- Olshansky, Robert B., Lewis D. Hopkins, and Laurie A. Johnson. "Disaster and Recovery: Processes Compressed in Time." *NATURAL HAZARDS REVIEW* 13, no.3(August 2012): 173-178.
- Olshansky, Robert B., Laurie A. Johnson, Jediaiah Horne, and Brendan Nee. "Planning for the Rebuilding of New Orleans.", *Journal of the American Planning Association* 74, no.3 (Summer 2008): 273-287.
- Sadiqi, Zabihullah., Bambang Trigunarsyah and Vaughan Coffey. "A framework for community participation in post-disaster housing reconstruction projects: A case of Afghanistan.", *Journal of Project Management* 35, no.5 (July 2017): 900-912.
- Schwab, James C. *Planning for Post-Disaster Recovery :Next Generation*. Chicago: American Planning Association, 2014.
- Soda, Osamu."Collaborative planning to Machidukuri (Collaborative planning and Machizukuri)." In *Machizukuri Kyosyo(Machizukuri Book)*, edited by Shigeru Satoh et al., 83-88.Tokyo:Kajima Institute Publishing Co.,Ltd., 2017.
- Satoh, Shigeru. "Reforming of Network Community for Dispersed Refugees by Accident in Fukushima Atomic Powered Generation.", *CITY PLANNING REVIEW* 63, no.5 (October 2014): 2-5.
- Tortoioli, Luciano., and Maria Romani. "La ricostruzione attraverso le unita' minima di intervento (UMI)," *Inforum*, n.48: 7-12. Bologna : Regione Emilia-Romagna, 2015.
- Valeriani, Elisa., and Alfredo Bertelli " L'attività del Commissario Straordinario ed il futuro della ricostruzione del Centro Italia: una strategia sostenibile," 22-45, Roma : Commissario Straordinario, 2017.



A study on the slum clearance redevelopment project and the community design project for disaster in Koto-delta

Motoki Fujisaki*, Joseph Thomas Reyes**, Saikaku Toyokawa***

* *University of Chiba, zaqplmjf@gmail.com*

** *University of Chiba, joe528judo@gmail.com*

*** *University of Chiba, Associate Professor, toyokawa-s@chiba-u.jp*

The paper puts its focus on the activities of university researchers to organize the top-down urban planning and bottom-up community design with the theme of disaster in Koto-delta. Moreover, comparative analysis of statistical data of Koto-delta for half a century shows the necessary conditions for considering the disaster prevention planning. Koto-delta is the most dangerous area for disaster in Tokyo. Takayama presented the Koto Cross Disaster Prevention Belt Conception, after studying his laboratory, became the foundation of the current planning. While disaster prevention bases and public facilities have increased the disaster prevention performance of the area, the aging and unused facilities are now a problem. Otani and Sato aimed to improve the community by cooperative rebuilding of residents, but the discussion was difficult, and maintenance did not proceed. The statistical data shows that the safety of the area improved, but in addition to the failure of social mix due to large-scale development, the loss of regional landscape and diversity due to the promotion of detached rebuilding, the resilience is decreasing.

Keywords: Koto-delta, disaster prevention, slum clearance redevelopment, community design.

Introduction

A century has passed since Japan enacted the City Planning Act of 1919. During the last century, Japan has suffered great damages from the frequent disaster such as earthquakes, typhoons, floods, sediment disaster, fires, volcanic eruptions and tsunamis. For example, the Great Kanto Earthquake (1923), the Typhoon Catherine (1947), the Typhoon Ise-wan (1959), the Great Hanshin-Awaji Earthquake (1995), the Great East Japan Earthquake (2011). Furthermore, there is a high probability of the Nankai Trough Earthquake and the Tokyo Inland Earthquake soon. Therefore, the disaster prevention is important issues regarding Japanese city planning.

Koto-delta is located at a close distance from the center of Tokyo, but it is known as an area where serious damage has occurred because of the Kanto Earthquake and the Tokyo Air Raid. Additionally, Tokyo Metropolitan General Risk Degree Map¹ explains that it is a region with particularly high risk still now.

To cope with such dangers, Tokyo metropolitan government has implemented a large slum clearance represented by Shirahige East district. Contrastly, the residents have practiced community design mainly with renovation in collaboration with university researchers. Koto-delta is positioned as a rare area where top-down urban planning and bottom-up community design for disaster have developed simultaneously.

In this study, the history of the disaster prevention urban planning of Koto-delta is overlooked by activities of university researchers, and the change of this area over half a century is evaluated by objective index such as population density. This aim is to obtain knowledge to think about the disaster prevention city plan suitable for the 21st century.



Organizing Previous Studies and Materials

Previous studies on planning in Koto-delta can be classified into three categories. First, it is a study to evaluate disaster risk in Koto-delta from a physical and engineering point of view. As a representative study of urban earthquake engineering, it is pointed out that earthquakes, flood disasters, fires etc. occur complexly. Thus, besides urban earthquake disaster mitigation engineering, various fields such as geology and landscape science have made proposals. From the field of urban earthquake disaster engineering, Kimiro Meguro et al. established evacuation plan when flood occurs.² From the field of geology, Iware Matsuda is conducting a verification of the vulnerability of natural disasters in Tokyo.³ From the field of landscape science, Ryosuke Shimoda studies improvement method of land use condition in block-development urban collective housing focusing on embankment and geologic columnar section of Koto-delta.⁴ These researches have played a major role in making disaster prevention city planning of the administration. For example, research on radiant heat by Shozo Uchida and Minoru Hamada in the 1950s have allowed Tokyo to determine the size of the large evacuation center in Koto-delta.

Second, it concerns community-based disaster prevention town development belonging to sociological research or action research.

Yukio Otani's district planning in Kyojima (1974) is the perfect example of sociological research. Otani investigated in detail what the residents of the Kyojima area in the non-hygienic environment (800 people / ha) live. As a consequence, Otani acknowledged the merit of the alleys in downtown and the mixed area of residence, commerce and industry. Moreover, he appealed the recovery of the residents' ownership and creativity through concrete construction proposal.⁵ Otani's research was handed over to Shigeru Sato et al, which seeks improvement of the living environment by thorough residents' participation and joint rebuilding method by the administration, experts, residents' discussion.⁶ Nevertheless, contrary to the thoughts of Otani and Sato, co-rebuilding did not progress in the Kyojiima area. The researchers of the university, are suggestive in criticizing top-down urban planning and seeking bottom-up community design through laboratory activities. However, sometimes the efforts by the Tokyo Metropolitan Government are completely denied and the risk of disasters are underestimated, as idealizing the discussion of citizens and evaluating the old community too much.

Third, it is a historical study on the disaster prevention planning which the Tokyo metropolitan conducted at Koto-delta. Akira Koshizawa's research is widely known about the disaster prevention city planning history that the Tokyo government has been working on. Koshigawa highly appreciates the Tokyo Metropolitan Government's "10-Year Wooden densely area incombustible Project " (2012),⁷ but little study has been done to study on the disaster prevention planning in Koto-delta in a bird's-eye view. In addition, Kaga conducted research on the transition of disaster prevention base planning in Shirahige East District,⁸ but it handled only part of the Koto Development Basic Concept.

This paper belongs to the field of the disaster prevention urban planning history and reveals two major items.

First, by focusing on the university researcher's activities, it would be reconstructed the history of disaster prevention city planning in Koto-delta. In general, disaster prevention city plan tends to be mentioned as a binomial confrontation between administrative and inhabitants. In this thesis, problem of Koto-delta can be explained by the viewpoint of researchers who are away from regional interests. Furthermore, it deals with survey reports in engineering fields such as Uchida and Hamada's "Investigation of the Great Earthquake Fire Damage in Tokyo" (1961) or Takayama's the Koto Cross Disaster Prevention Belt Conception (1966) and Shirahige East disaster prevention center (1972). It also takes up sociological studies, for instance Otani's "Survey report on the Kyojima district in Sumida-ku: Essay on District Planning" and Sato's "Kyojima town development, Status survey report".

Finally, in this paper, indicators such as population density that changed in Koto-delta during the half century will be organized objectively. Therefore, the problem of modern Koto-delta would be clarified. This area has the highest risk of disaster in Tokyo from 50 years ago to present, but the Preconditions for planning have changed. Thus, it is necessary to compare and analyze by statistical data.



Activities of University Researchers: Engineering simulation and slum clearance

(1) 1960's: Surveys on the Earthquake Fire Damage and the Koto Cross Disaster Prevention Belt Conception

In 1955, Yoshikazu Uchida (1885-1972), Professor of Tokyo University, served as the chairman of the Fire Prevention Committee of the Tokyo Fire Department. He and his subordinate Minoru Hamada (1902-1974), Professor of Tokyo University, studied about radiant heat and examined the earthquake fire damage at Tokyo. According to the simulation results published in 1961, if an earthquake occurred during summer noontime like the Great Kanto Earthquake, almost all fires in the direction of Yamanote can be blocked. On the other hand, in the downtown area, there are 8 cases in Koto city, 8 in Sumida city, 1 in Edogawa city, 1 in Katsushika city and 3 in Adachi city, totaling 21 of fire damages could not be blocked⁹.

In June 1964, the Niigata earthquake occurred. The mid-rise RC houses collapsed due to liquefaction phenomenon in the coastal area, also causing a large fire to the petrochemical complexes. At the Tokyo Metropolitan Assembly, which was near the holding of the Tokyo Olympic Games, there was a concern that complex disasters caused by a major earthquake could also occur in the Koto-delta region. After the Niigata earthquake, seismologist Hiroshi Kawasumi (1904-1972) presented the 69 years annual theory of the southern Kanto earthquake in the House of Representatives. He said that "If the Great Kanto Earthquake occurs again and a fire happens, it will almost be unable to save such areas as the Koto district, Mikawa island and Oku".¹⁰

Furthermore, in 1965, Eika Takayama (1910-1999), Professor of University of Tokyo, published "The search report about establishment of disaster prevention center in zero-meter area" at the request of Ministry of Construction. According to the report, most of areas in Koto-delta was destroyed by fire after the earthquake, and the survival rate is pointed out that 3% in the Mukojima and Terashima area, 45% in the entire Koto area (410,000 deaths), especially low in the northern part of the Koto-delta.¹¹



Figure 1: Open space and incombustible building, Flame spreading model and Flood area in Koto-delta researched by Takayama laboratory.

Following this situation, Takayama said, "Until now, the Olympics or the World Expo have been used as a means of urban development, but from now on, city redevelopment based on disaster prevention may be option".¹² Under this idea, he insisted on the construction of disaster prevention center.



Takayama's first plan was to construct 16 disaster prevention centers at 3 km intervals in the Koto-delta. One such disaster prevention base was a site size of at least 500 meters square, and it was intended to evacuate the residents of the Koto district there. In this case, it became a question whether residents can secure the actual evacuation route.

In 1966, He announced the Koto Cross disaster prevention belt concept. This initiative was to maintain a 500 meters wide open space which ran east-west and north-south. By guaranteeing the free operation of emergency vehicles at the time of emergency, this safety belt expected to improve the safety of urban fires greatly. Moreover, this safety belt functions not only as an evacuation site, but also collected public facilities such as schools, hospital parks for citizen recreation, and furthermore, it is necessary for the daily car traffic and commuting measures. It also became an axis of infrastructure improvement necessary for future development of cities such as water and electricity.

To bring the concept closer to commercialization, Takayama and the students of his laboratory, including Suenao Murakami (1935-) and others, further examined and the results of the examination were summarized as "Disaster prevention city construction survey report in Koto district No.1-6"



Figure 2:16 disaster prevention bases concept

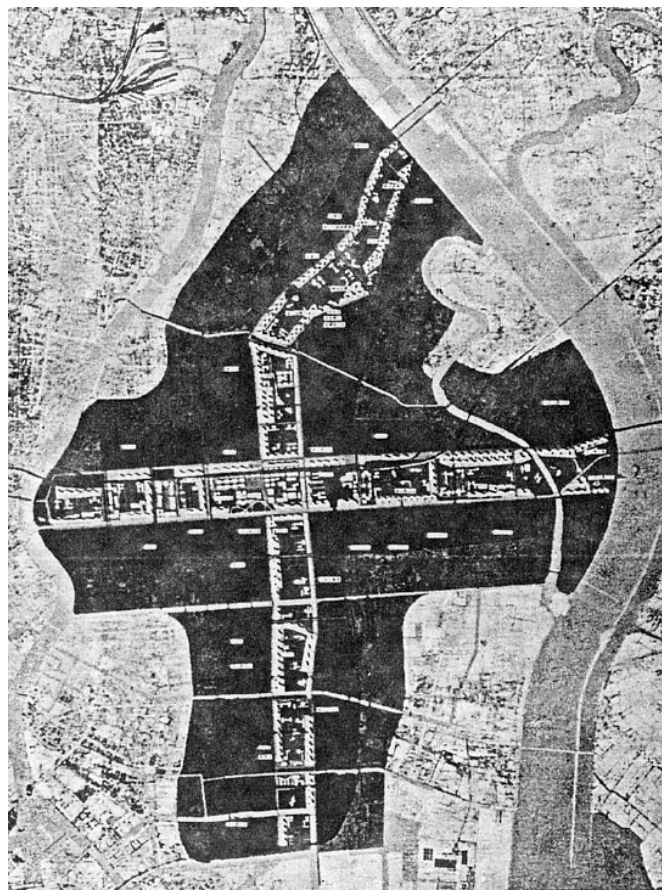


Figure 3:Koto Cross Disaster Prevention Belt Conception.

(2) Progress of the disaster prevention base development in the six districts from the 1970's to the present

In 1969, Based on the plan of Takayama, the Tokyo Metropolitan Government formulated the Koto Development Basic Concept, which is the first implemented disaster prevention city plan after the war and planned to develop disaster prevention centers in six areas, Shirahige, Yotsugi, Ryogoku, Chuo, Kiba and Ojima/Komatsugawa. It is expressed about regular and emergency usage as conditions to be considered on planning the disaster prevention base as follows.¹³



In conditions of regular, first, the lives of neighbors must not be harmed and should be even more comfortable. Second, it needs to ensure smooth urban activities integral with bases and peripheral areas. Third, ensuring a satisfactory living environment in bases. Finally, Fire prevention regulations and road projects that integrate buildings and cities that allow residents to escape to disaster prevention centers are essential.

As a condition of emergency, first, the base must have strong structure and facilities that can be escaped safely by the residents of the targeted evacuation zone. second, it must have enough food, clothing, shelter and health equipment that can maintain evacuated people lives for several days. Third, it must prevent the fire expansion from outside the site as a firewall of the city. At last, it is a place where can be the base of restoration after disaster.

In 1972, the Shirahige Higashi apartment constructed under the supervision of Takayama and Murakami, which was the first project in the Koto Renovation Basic Concept strongly reflected the above-mentioned conditions.

For example, a high-rise residential building (building No. 1 to No. 18) with a height of 40 meters was placed over the 1.2 km distance to act as a firewall, and was equipped with fire shutters, water guns, and gigantic water storage tanks. in addition, 9 hectares evacuation plaza was set with stock up drinking water, food, medicines, etc. necessary for a stay of about one week to accommodate about 80 thousand people.

Murakami Suminao, who was involved in designing Shirahige Housing development, said, "Before learning from real disasters, it is necessary to raise awareness of non-flammable disaster prevention in cities by clearance development".¹⁴

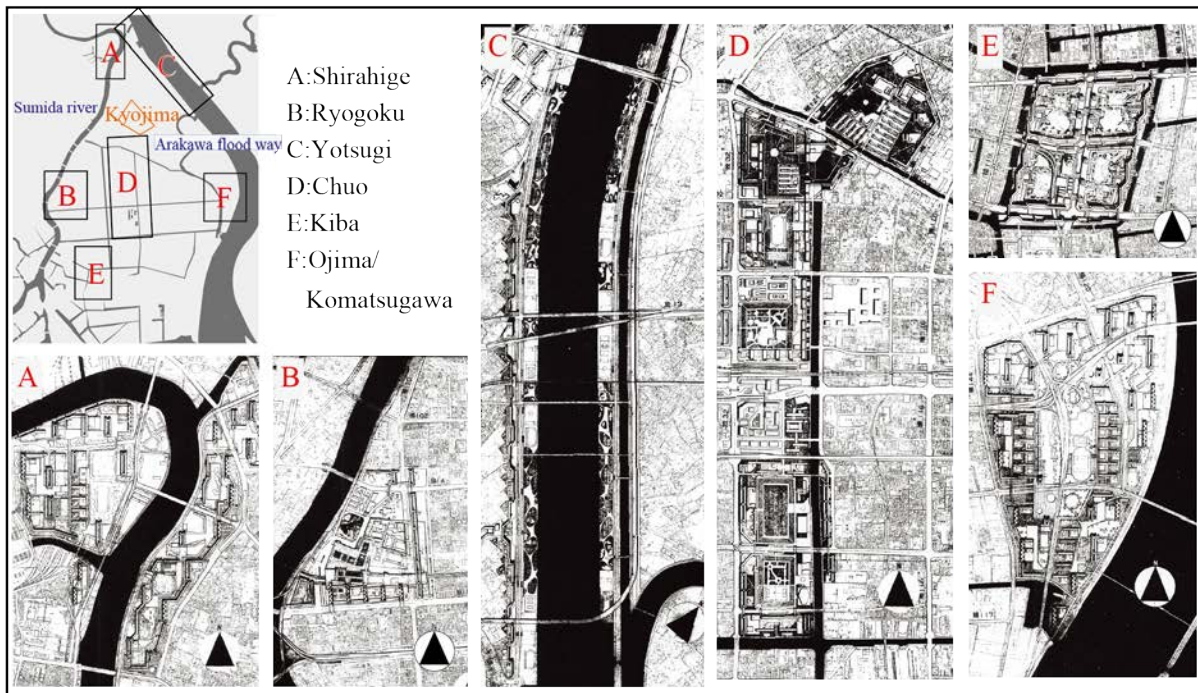


Figure 5: Conceptual Drawing of 6 Disaster Prevention Bases Made at Takayama Laboratory

Tokyo metropolitan continued the projects in other areas and public facilities and parks were located. For example, Yokokawa 5-chome apartments in Chuo district, the Ryogoku-kokugikan (1984) and the Edo-Tokyo museum (1993) in Ryogoku district and the Museum of Contemporary Art Tokyo (1995) in Kiba district. In Yotsugi district, High-standard embankment was maintained. In Ojima and Komatsugawa district, New town development have been done. Not all idea plan haven't been excuted, but some facilities and parks that have been developed take root in the area. However, they also have problems such as the aging of the building, renewal of facilities, and an increase in the number of empty shops in lower shopping streets.



Sociological Studies: Community Design and Action Research

In the Kyojima district located next to Shirahige East district, old building densely, low earthquake resistance, unsanitary living environment was formed from the process of its formation. It also featured townscapes mixed with residential, commercial and industrial sectors that continued from before the war. In 1971, Tokyo Metropolitan Housing Authority published the Kyojima district development project to reconstruct the whole district into a high-rise complexes. However, residents strongly againted the development project. Sachio Otani (1924-2013) took some surveys to find out the actual living situation there. He and his students placed importance on local community, and proposed a living environment improvement model that have less impact on people’s lifestyles. This series of research is summarized in the “Survey Report on the Kyojima Area in Sumida-ku, Essay on District Planning”(1974).

In the 1980’s, Tokyo metropolitan government came to consider that it would be hard to consult with people about redevelopment , and began supporting local residents' town planning in Kyojima. Even so, owing to the difficulty of exchanging of rights and building consensus with local residents, They did not realize rebuilding and improving incombustibility rate.

In response to this situation, Shigeru Sato (1949-) promoted cooperative rebuilding in areas with high concentration of wooden houses and actively engaged in workshops involving local residents. Such research style is considered as action research, and researchers were directly involved in the area, and aimed at improving the poor living environment by closely communicating with local residents.

However, discussion among residents for construction of cooperative houses did not go well either. Toshiya Yamamoto (1959-) mentioned the cause of not advancing collaborative rebuilding in densely built area are contiguous small scale sites, poor contact road sites, and rights relations. On the other hand, it shows that rebuilding detached houses is relatively easy even in densely built urban areas because of its low business risk, likely expected earnings, and it’s high negotiability.¹⁵

At present, the Tokyo Metropolitan Government promotes "10-Year Wooden densely area incombustible Project" from 2012. Within the noncombustible special zones, dispatched experts and subsidies heip residents to remove and rebuild old detached houses more easily, and the mentenance of urban planned roads proceed.

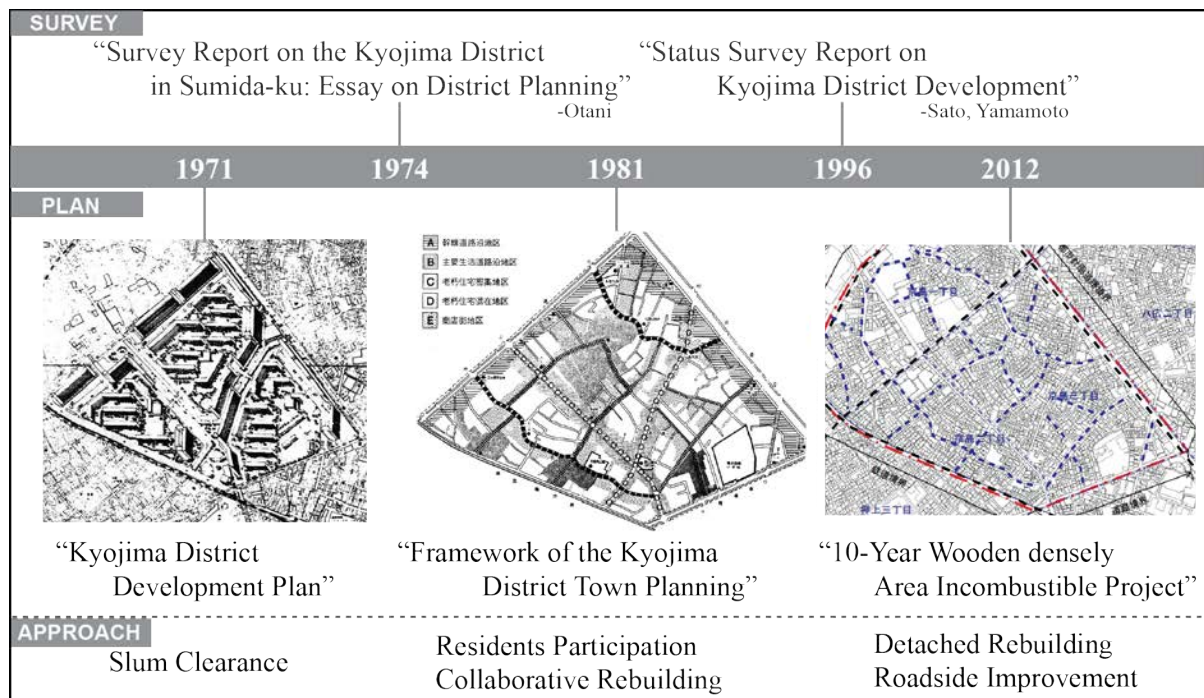


Figure 5: Transition of main plan and survey in Kyojima.



Statistical Change in Koto-delta

(1) Evaluation and analysis of indicators on slum clearance redevelopment

According to Sumida Urban Flood Hazard Map¹⁶, in case of Arakawa flood, it is estimated that the flood depth in almost all the area is under 3.0 meters (covers the ground-level roof) or under 5.0 meters (reaches the second-floor eaves). However, in terms of the disaster prevention center in the East Shirahige District, Shirahige East Park developed with an embankment such as a high standard bank is valuable as an evacuation area estimated not to be flooded. Further, the estimated evacuation population in this area is decreased from 80,000 in 1970's to 55,000 today.¹⁷ Taking it into account, a room is produced in the evacuation area.

On the other hand, focusing on high building houses in the Shirahige and Chuo district, in comparison with the aging rates of Sumida city (23.4%), the Tsutsumidori 2 (41.0%) and Yokokawa 5 (34.8%) where large apartments were built in 1970's are higher.¹⁸ The cause of high aging rate is that low-income generations moved into the high apartments at the same time. Moreover, huge buildings designed on the assumption that the population doubled prevent the area from the renewal of urban functions.

These matters indicate that, although the clearance redevelopment projects in Koto-delta make some valuable parks which can be utilized as an evacuation place and culture facilities, decreasing the population, the aged huge buildings need renewal. Furthermore, from the perspective of social mix, It is responsible for the difficulty of urban renewal that the same class generations move into an area simultaneously after clearance redevelopment projects.

(2) Evaluation and analysis of indicators on community design project

In 1960's, Kyojima district was characterized by the mixed townscape of houses, shops and workshops that continued from before the war and the high population density.

The number of office in there decreased from 1,112 in 1972 to 332 in 2014,¹⁹ in addition, regarding the percentage of a manufacturing, it decreased from 43.2% to 16.0%.²⁰ In this respect, most houses are only for living nowadays and the townscape was standardized.

From the approach of vital statistics, Kyojima has problems with the declining birth rate and aging population. The elderly population exceeded the number of children under the age of 14 before 1990, and the rate of aging is 33 percent today. Thus, there are social problems resulting from demographic change such as the retirement of the generation pursuing the community design projects with eagerness or lacking a young successor. Furthermore, due to an increase in single, elderly households to about one-fifth, it is essential to consider them in a plan.²¹

From another point of view, the state of declining to nearly one-third (587 persons/hectars in 1965 to 229 persons/hectars in 2015) of population density, and the active work of experts enable the administration to communicate with residents well.

In fact, in kyojima districts, the rate of fireproof buildings increased from 8.1% in 1980 to 52.3% in 2015.²² Owing to its comparatively favorable location in the Tokyo Metropolitan area and less friction among the neighbors, a continuous increase of rebuilding detached houses is expected. Rebuilding makes a substantial contribution for to the increasing percentages of fireproof buildings. However, owing to rebuilt highly airtight and highly heat insulating houses, former wooden townscape and emotions of a traditional working-class neighborhood have been disappearing.



Conclusion

In this study, the activities of university researchers instead of the conflict between residents and administration show the history of disaster prevention planning of Koto-delta. From the 1960's, it has widely known that Koto-delta is the most dangerous area for disaster in Tokyo. Therefore, Uchida and Hamada examined the size of the evacuation facilities based on the research on radiant heat. After that, Takayama announced the Koto Cross Disaster Prevention Belt Conception using their research, and supported the slum clearance in the Shirahige East region. Slum clearance have also developed in other areas, but after half a century passed, aging of facilities became noticeable.

By contrast, in kyojima district located next to Shirahige East district, residents objected to redevelopment, and Otani investigated the ways to sustain the community by renovation. Further, Sato promoted co-rebuilding and emphasized discussion among local residents. However, due to various reasons, joint rebuilding did not proceed, and disaster communities dreamed of by Otani and Sato haven't come true.

In addition, if statistically evaluating Koto-delta, the population density decreased compared with half a century ago, and the individual rebuilding progressed, so the risk of fire drastically decreased. On the other hand, the slum clearance caused huge housing complexes lived by many elderly people, and the community liveliness was reduced. Consequently, it can be presumed that the resilience of the region is declining compared with half a century ago.

Acknowledgements

I should like to express my gratitude to Mr. Toyokawa, carefully considered feedback and valuable comments. I would also like to express my gratitude to members of the laboratory for their moral support and warm encouragements.

Disclosure Statement

No potential conflict of interest was reported by the author.

Endnotes

- ¹ Bureau of Urban Development Tokyo Metropolitan Government, *Regional hazard level measurement survey report on earthquakes*, 2018.
- ² Kouhei MAKINODAN, Makoto FUJIO, Miho OHARA and Kimiro MEGURO, *A Study on Appropriate Human Evacuation Plan in Koto Delta Area during Large-scale Flood*, Journal of Study on Industrial Science (Seisan Kenkyu) 64 (4) 557-563 2013.
- ³ Iware MATSUDA, *Verifying Vulnerability to Natural Disasters in Tokyo*, Journal of Geography (Chigaku Zasshi) 122(6)1070-1087 2013.
- ⁴ Ryosuke SHIMODA, Shunsuke MIYAGI, Kenta SHINOZAWA, *Improvement Method of Land Use Condition in Block-development Urban Collective Housing in Koto Delta Area*, Study on Landscape (Landscape Kenkyu) 73(5) 625-630 2010.
- ⁵ Tokyo Metropolitan Planning and Coordination Bureau, *Survey report on the Kyojima district in Sumida-ku: Essay on District Planning*, (Tokyo: 1974).
- ⁶ Satou Shigeru, *Text of Town Development*, (Tokyo:Kashima, 2017), 21.
- ⁷ Akira KOSHIZAWA, *Legacy of Tokyo City Planning, Disaster Prevention, Restoration, Olympic*, (Tokyo: Chikuma, 2014), 230-266.
- ⁸ Makoto KAGA, Toshiya YAMAMOTO, *History of the planning and design of the Shirahige East district disaster prevention base*, (The City Planning Institute of Japan, 2008), 1127-1128
- ⁹ Tokyo Fire Division, *Study of damage caused by the earthquake fire in Tokyo: materials for countermeasures [1st report]* (Tokyo, 1961) ,62.
- ¹⁰ Secretariat of the House of Representatives, *The 46th Diet House of Representatives the Report of Disaster special committee No.13* (Tokyo,1964.7.3).
- ¹¹ Tokyo Metropolitan Government, *City plan outline*, (Tokyo, 1979), 271.
- ¹² Yomiuri shinbun, (Tokyo, 1968.6.25) 7.
- ¹³ Tokyo Metropolitan Capital Development Bureau, *Disaster prevention city construction survey report in Koto district,:Plan condition setting report No.1*, (Tokyo, 1969).
- ¹⁴ Suminao MURAKAMI, *Urban disaster prevention planning, Urban Planning from the view point of Time and Space Concept*, (Tokyo: Dobun, 1986), 112.
- ¹⁵ Toshiya YAMAMOTO, *Reconsideration of Densely Built Area*, (The City Planning Institute of Japan, 2008), 4-8.
- ¹⁶ Sumida Government, *Sumida City Flood / Urban Flood Hazard Map*, 2018.
- ¹⁷ Sumida government, *Sumida Ward Demographics Table*, 2018.
- ¹⁸ Ibid.
- ¹⁹ Sumida Town Planning Authority, *commercial statistics survey:Current status of the Kyojima district (Kyoshima 2.3 chome)*,2018.
- ²⁰ Sumida Town Planning Authority, *The transition of the Kyojima district (Kyoshima 2.3 chome) seen by the census*,2018.
- ²¹ Ibid.
- ²² Sumida City Urban Development Department, *Kyojima Community Design News*, 1980.
Sumida City Disaster Prevention Planning Section, *Sumida-ku non-combustibility rate survey*, 2015.



Bibliography

- Bureau of Urban Development Tokyo Metropolitan Government. *10-Year Wooden densely area incombustible Project*, 2012.
- Koshizawa, Akira. *Legacy of Tokyo City Planning, Disaster Prevention, Restoration, Olympic*. Tokyo: Chikuma, 2014.
- Manu Urban Architecture Institute. *Kyojima town development, Current status survey report* Tokyo:Sumida-ku, 1996.
- Murakami,Suminao. *Urban disaster prevention planning, Urban Planning from the view point of Time and Space Concept*. Tokyo: Dobun, 1986.
- Satou, Shigeru. Aiba, Shin. Utchida, Naomi. *Text of Town Development*. Tokyo:Kashima, 2017.
- Secretariat of the House of Representatives. *The 46th Diet House of Representatives the Report of Disaster special committee No.13*. Tokyo, 1964/7/3.
- Sumida Town Development Public Corporation. *commercial statistics survey:Current status of the Kyojima district (Kyoshima 2.3 chome)*. 2017.
- Sumida Town Development Public Corporation. *The transition of the Kyojima district (Kyoshima 2.3 chome) seen by the census*. 2018.
- Tokyo Fire Division. *Study of damage caused by the earthquake fire in Tokyo: materials for countermeasures [1st report]*. Tokyo, 1961.
- Tokyo Metropolitan Capital Development Bureau, , *Disaster prevention city construction survey report in Koto district No.1-6*. Tokyo, 1969.
- Tokyo Metropolitan Government. *City plan outline*. Tokyo, 1979.
- Tokyo Metropolitan Planning and Coordination Bureau. *Survey report on the Kyojima area in Sumida-ku: Essay on District Planning*. Tokyo, 1974.
- Yamamoto, Toshiya. *City Planning Review 273: Reconsideration of Densely Built Area*. (The City Planning Institute of Japan), 2008.
- Yomiuri shinbun. *Yomiuri Shinbun*. Tokyo, 1968/6/25.

Image sources

Figure 1: Ministry of Construction. *The search report about establishment of disaster prevention center in zero-meter area*, 1965. Plan drawing 1-3.

Figure 2: Ibid, Plan drawing 5.

Figure 3: Murakami Suminao. *Urban disaster prevention planning: Urban Planning from the view point of Time and Space Concept*, (Dobun, 1986), 21

Figure 4: Tokyo Metropolitan Capital Development Bureau, *Disaster prevention city construction survey report in Koto district: Formulation of regional development plan and project cost No.5*. Tokyo, 1969

Figure 5: Created from Manu Urban Architecture Institute. *Kyojima town development: Status survey report* (Tokyo: Sumida-ku, 1996) and Sumida-ku. *"10-Year Wooden densely area incombustible Project " Non-flammable Special Zone System Priority Implementing District Improvement Program*, 2013.



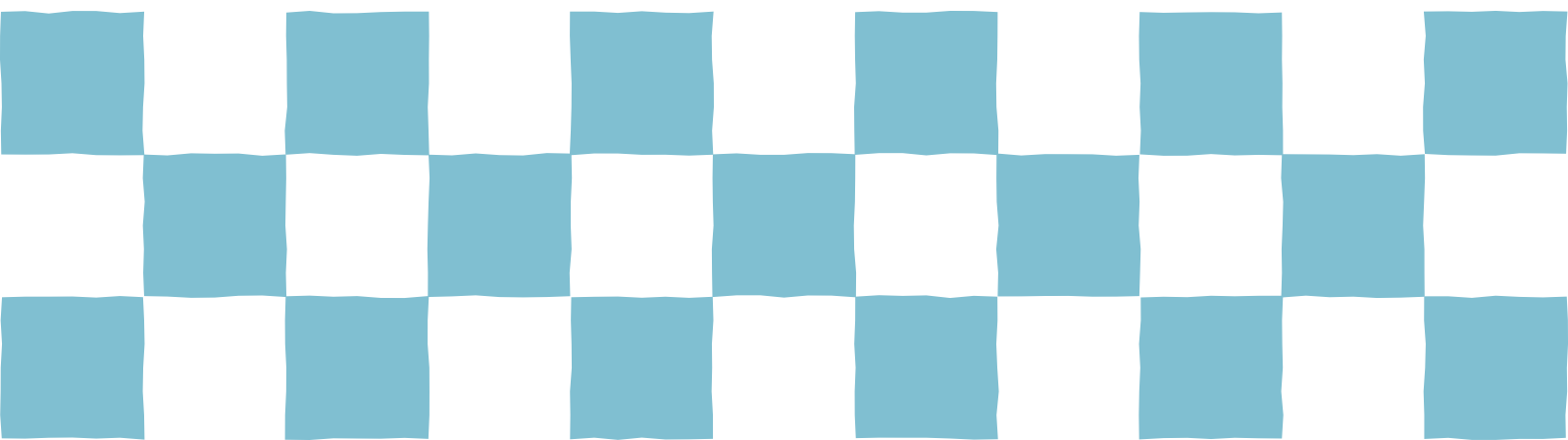
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

49 Housing Policy, Studies and Design



American Public Housing Studies in China: Retrospect and Prospect

Li Li (History Department, Humanities College, Xiamen University)

American public housing productively can be used as a lens through which to filter a range of narratives about American studies in China. Chinese scholarship on the history of U.S. public housing started in the late 1990s, but began to flourish in the new century as a research hotspot in American studies. In the past two decades, the history of public housing in the United States typically has been told in one of four ways in China. The first version narrates public housing as an evolving policy, whose significant changes deeply have affected American history during the 20th century. The second line of scholarship focuses on presenting basic information about today's public housing programs in the United States. A third group of Chinese scholars have pursued case studies, which have yielded valuable insights into the local specificities of public housing projects in Chicago, St. Louis, and Boston. The fourth approach treats public housing in the United States as a foreign experience from which China can learn lessons as it constructs its own unique affordable housing plans. Although still at an early introductory stage, the four versions of American public housing research in China provides different perspectives from American research, thus offering valuable alternative prospects. This article assembles and reviews American public housing studies in China over two decades; examines the ongoing introductions, achievements and debates of this scholarship; analyzes the insights and limitations from four perspectives; and reveals significant possibilities for future research, by putting public housing in the more comprehensive context of the social-economic, political and urban history of the United States. More specifically, this essay demonstrates the value of carefully considering the multidimensional nature of complicated policy; paying more attention to the stage of maintenance of public housing after its construction and occupancy; considering more fully the formation and impact of public housing legislation and related legislation; and following the newly opened research path of transnational housing studies.

Intensifying Gated Exclusiveness of Apartment Complex Boundary Design in Seoul, Korea

Hyo Jin Kim (Seoul National University, College of Engineering, Graduate Program in Urban Design) and Soe Won Hwang (Seoul National University, Graduate School of Environmental Studies, Department of Urban and Regional Planning)

The proliferation of enclosed private residential development as gated communities is a conspicuous global phenomenon and Asian megacities are increasingly manifesting the rapid transformation of the urban form through high-rise, high-density residential complexes. Seoul also exemplifies this phenomenon with distinctive spatial and morphological characteristics throughout the urban landscape. The exclusivity of the Apartment Complexes with higher quality of internal infrastructure and its controlled access has resulted in producing stark contrast among the urban landscape and issues of urban polarization between the relationships with the existing low-rise residential fabrics. Behind this increasing exclusivity there are concerns about property values, personal safety, and communal amenities, which provoke the layering of gates and barriers to protect one's territory. Initially, the apartment complexes construction has been led by the government housing policies that pursued the mass housing supply and switched to the market-driven, middle-class-centered and private-sector-initiative stance. Since the late 1990s, luxury high-rise apartment buildings or branded apartments were constructed which reflected the increasing trend to live within a homogeneous community of socioeconomic characteristics and the proliferation of self-contained gated communities. Several scholars consider the "complex" as reason for causing segregation, because the "apartment complex" constitutes a spectrum of private infrastructures which are included in the sales price. The rationale for building apartment complex form is driven by the government's intention to secure urban infrastructure through the private sector and minimize the public investment. As the internal community infrastructure is monopolized only by the residents of the complex, the phenomenon of "collective privatization of urban space" has been intensifying.

In order to understand this intensifying exclusiveness, two concentrated area with apartment complex, which were developed under different development methods are examined in terms of complex's boundary design, visual and physical accessibility and changes in spatial characteristics. The two regions are Mok-dong, where master-planned apartment complexes were constructed simultaneously through Housing Site Development Projects in the 1980s and Geumho-dong with individual complexes are built consecutively under Residential Redevelopment Project from the 2000s to present. Fourteen complexes are selected in each region and the surrounding vertical border condition (type, height, material, length, and thickness), control of access (pedestrian, vehicle, gate) and surrounding pedestrian and road condition are analyzed. By tracing these features over time, the extent to which exclusiveness increases and publicness decreases is studied, and the various causes and consequences to the physical and social space by development methods and period, degree of public or private intervention are examined. Some of the expected results include that (i) the total length of physical barriers is gradually increasing, (ii) discrepancy in infrastructural resources between internal complex environments and their vicinity disconnects the two neighboring spatial systems and (iii) the gating and access restrictions have been progressively reinforced while the border condition has evolved into a complicated layering of various barriers. As spatial and social polarization is intensifying along with the continual agglomeration of private enclaves, it is imperative to find resolutions for building communal sustainability that conveys multiple level of congruence.

From the National Housing Bank to the Program Minha Casa Minha Vida: reproducing old obstacles in the Housing Policy in Aracaju-SE, Brazil

Sarah Franca (Universidade Federal de Sergipe) and Vera Rezende (Universidade Federal Fluminense)

This article comparatively analyzes the policies of the National Housing Bank – BNH, and the Habitation Program entitled My Home My Life, based on the locational logic of subsidized housing complexes in the city of Aracaju-SE, Brazil. In Brazil, two programs deserve special mention: BNH, created in 1964 as the financing body for the construction of social housing, producing thousands of housing units until 2002, opening up expansion fronts for the reproduction of the real estate market. In the second, the PMCMV, initiated in 2009, one of the biggest obstacles is access to urbanized land, with alternative to the occupation of scattered, devalued and deprived areas of environmental sanitation and public transportation. So, it is questioned to what extent the actions of the PMCMV, regarding the dynamics of housing production resemble or are distinguished from those undertaken by BNH? For the development of this, quantitative and qualitative information was collected in public agencies, generating tables and mapping the insertion of the enterprises in Aracaju. Thus, there are coincidences regarding the peripheral and dispersed logic of these sets, highlighting the clear socio-spatial segregation of the lower income strata, in the search for land valuation in function of public and private investments.

The Establishment of Housing Loan Corporation (1950) and GHQ (General Headquarters of the Allied Forces)'s involvement -Japan's housing policy shift during occupation era-

Kosei Hatsuda (Kogakuin University)

This study investigates the phase of the establishment of Housing Loan Corporation (1950) and GHQ (General Headquarters of the Allied Forces)'s involvement during the occupation era (1945-1952) after World War II.

The living style of urban residents in Japan has changed dramatically, from centering on private renters before the war to ownership of the detached housing in the suburbs after the war. This "Japanese-style home ownership Urbanism" was not simply that there were a large number of home owners, but that the majority of people, deeming home ownership to be something of value, pointed toward the social system in which people could aim for it. Japan took U.S.A. to be its model, but it did so selectively in response to the situation in Japan's cities and their tastes of land ownership at that time. It was realized under high economic growth, through rapid urbanization and rising middle-class. To clarify this process partially, this study focuses on the post-war reforms as the origin. The direct origin of housing policy's shift in Japan was the abolishment of Housing Corporation (Jutaku Eidan) (1949) and the establishment of Housing Loan Corporation (Jutaku Kinyu Koko) (1950) in the occupation era. Newly discovered sources from the US National Archives and Records Administration, which indicate GHQ's involvement with the abolishment of Housing Corporation and the establishment of Housing Loan Corporation will be analyzed. And the minutes of the testimony by bureaucrats of Construction Ministry at those days will be analyzed.

This is important because until now it has been argued from the viewpoint of Japan's alone housing policy from the field of economics (Hirayama, 2009) or the propagation of images of US lifestyle through TV dramas from the field of sociology (Miura, 1999; Yoshimi, 2007), but this study will clarify the US's direct effects on Japan and will be based on the newly discovered sources and those day's actual situation of cities in Japan.



Intensifying Gated Exclusiveness of Apartment Complex Boundary Design in Seoul, Korea

Hyo-Jin Kim*, Soe Won Hwang**

* First author, PhD candidate in the Graduate Program in Urban Design at the College of Engineering at Seoul National University, zinykim@gmail.com

** Corresponding author, PhD, Environmental Planning Institute, Seoul National University, soehwang@gmail.com

The proliferation of private residential development is evident worldwide. In Seoul, these developments have distinctive spatial and morphological characteristics. Originally, government housing policies drove the construction of apartment complexes to ensure massive housing supply. Over time, development shifted, becoming more market-driven, aimed at the middle class, and built by the private sector. During the late 1990s, an increase in luxury high-rise apartment complexes increased, reflecting a tendency to live in a socioeconomically homogeneous community and propelling the proliferation of self-contained gated communities. To understand the continually increasing exclusive nature of apartment complexes in Seoul, we examine two areas with apartment complexes of different periods and development methods: Mok-dong, where the 1980s 'Housing Site Development' resulted in the simultaneous construction of multiple apartment complexes according to a single master-plan, and Geumho-dong, a neighbourhood transforming by apartment complexes under 'Housing Redevelopment' from the 1980s to the present. The research focused on 28 complexes, and measured the surrounding vertical borders, pedestrian paths, and roadways, and access control. Tracing these features over time, we investigated the increasingly exclusive nature and decreasing public nature of apartment complexes, consequences of development for physical and social space during different periods, and degree of public or private intervention.

Keywords: Apartment Complex Boundary, Urban Design, Increasing Exclusiveness, Comparison in Housing Development Methods

Introduction

Neighbourhood privatisations have increased globally over the past half-decade. Scholars recognize the universally increasing gated features of settlements as a reappearance of the fortified, enclaved ancient urban forms of the late 20th century (Judd, 1991; Blakely & Snyder, 1997; Morris, 2013). Modern privatised urban development can be attributed to the neo-liberalist and capitalist emphasis on privatisation, policies that benefit private capital interests, and global citizens' desire to live a privileged lifestyle. (Blakely & Snyder, 1997; Coy, 2006; Bekleyen and Yilmaz-ay, 2016). In particular, the modernization process of urban development led by public-private partnerships or primarily driven by private companies has resulted in gated and access-restricted residential communities targeting the upper and middle class (Roitman, 2005). In addition, Grant and Mittelsteadt (2004) cite growing concerns with property values, personal safety, and communal amenities that increase the number of gates and barriers to protect one's territory.

In Seoul, which has experienced rapid urbanisation and intense development, housing supply is a vital concern, and several government policies promote the construction of extensive apartment complexes. Today, many apartment complexes are developed with high-rise, high-density buildings with distinctive configurations and clearly demarcated private boundaries. As the private construction of apartment complexes has increased, this internalisation and exclusiveness has intensified, particularly in terms of the connectivity between complexes and their surrounding urban context.

Apartment complexes are characterized as a single large parcel of land under joint ownership or control. As a large urban cell, apartment complexes equate to what Colquhoun (1969) calls a superblock. According to him, the controlling agencies—corporations, speculators, or local authority—create large pieces of land, in other words, a superblock, within the city. These superblocks and related emerging issues represent the disconnection between the urban tissue composed of individual dwellings and the superblocks that partially take over. Furthermore, the incongruity between the existing urban context and representation of the superblock break the existing continuity. Gauthier (2006) argues that rapid transformation and disruptive development resulted in fragmentary patterns and a plurality of urban configurations. Large-scale housing complexes have been



developed as a self-contained entity that contributes towards fragmenting urban contextual continuity, thus intensifying incongruity (Colquhoun, 1969).

History of Apartment Complex Proliferation in Korea

In the 1960s, traditional, detached housing dominated the housing market in Seoul; however, at the time, the construction of exclusive collective apartment buildings began. According to C. S. Park (2016), the boundary of the first apartment complex in Seoul, Mapo Apartment Complex (1962-1964) was demarcated by installing walls, and it was only approachable through the single main entrance. These attributes formed a completely different complex territory compared to the surrounding residential fabric of traditional houses. In the 1970s, the city underwent rapid urbanisation and densification. The construction of apartments intensified during this era, and by the early 1990s, this housing form dominated the urban landscape. This was aided in the 1980s by a strong political agenda that led to the creation of a large quantity of similar or identical apartment complexes. As the family structure shifted and less people lived in traditional extended families, instead living only with their nuclear families, housing demand increased, as did people's preference for apartment housing. These buildings were considered more convenient, as they included hot water and heating systems and provided community facilities, which appealed to the growing middle class (S. H. Lim, 1995; C. D. Kang et al., 1997; H. S. Chun, 2003; S. I. Jun, 2009). As more people began to prefer living in apartment complexes, construction companies began targeting upper-class families, intensifying the exclusivity of these buildings. In the 1990s, major construction companies launched branded apartment complexes that provided distinctive, upgraded features and suggested a prestige lifestyle through their exclusive marketing techniques. A high demand developed for high-quality facilities and safety measures in apartment complexes.

Several scholars suggested that the concept of apartment 'complexes' has segregated and fragmented urban social and physical life (K. M. Lee, 2002; C. S. Park, 2013; I. S. Park, 2013). While the term *apartment* refers to an individual building, *apartment complex* denotes a range of private infrastructure included in the sales price. I. S. Park (2013) contends that the rationale for the development of apartment complexes is the government's intention to ensure private development of urban infrastructure, which minimises public investment. As only residents use the internal community infrastructure of a complex, the 'collective privatisation of urban space' is intensifying (Seoul Institute, 2009: 297). S. I. Jun (2009) suggests that apartment complexes have been built so quickly and marketed primarily to the upper class because of the policies of apartment construction agencies, social status and conspicuous consumption of apartment residents, and changing domestic norms and values.

Evolving Exclusive Design of Apartment Complexes

Apartment complexes constructed earlier were developed based on the Clarence A. Perry's 'Neighborhood Unit Plan' that reinforce self-contained nature, including a school, communal facilities, and commercial programs within a single complex (Lawhon, 2009; J. E. Kim and M. J. Choi, 2012). The entire property of apartment complex was privately owned and no through traffic was allowed. The property was privately owned and no through traffic was allowed. The few points of entry and exit were only for residents, and physical barriers such as gates, walls, and/or fences marked the boundaries.

Today, expectations are increasing regarding amenities and quality-of-life services when purchasing property in an apartment complex. These amenities include access to green space, a high level of security and privacy, quality communal space, and various programs. Many complexes offer underground parking; many outdoor spaces for resting, exercising, or walking; playgrounds; and communal facilities for residents like elder welfare centres and/or childcare centres (D. H. Kim, 2003). Residents demand that apartment complexes provide multiple quality-of-life features, rather than simply being functional living spaces (G. S. Sung, 2011; Y. S. Rim & J. P. Choi, 2011). Beginning in the 1990s, construction companies have met these demands and attracted upper-class residents through prestigious marketing strategies. However, this external differentiation, which focuses on environmentally friendly design, higher security, and premium infrastructure, increases internal discrimination, leading to limited access, environmental inequality, and increasing incompatibility. However, this external differentiation that focuses on environmental friendly design, higher security, and premium infrastructure increases incompatibility within a neighbourhood environmental inequality and leading to limited access.

Since the 1990s the barriers used to differentiate the boundaries of apartment complexes have increased, and now incorporate exclusive landscaping and environmental designs along with closed-circuit video surveillance and vehicle-based security systems. Many researchers including Gelézeau (2008), note the growing sociospatial segregation that has occurred since the 1990s with the increase of gated residential developments. These gated communities strengthen residents' internal sense of belonging while relieving them of the need or obligation to



consider and connect to the surrounding environment and urban dwellers. These exclusive complexes tend to maximise separation between the classes due to intensifying capitalism and individualism and symbolise private interests such as being unapproachable to non-residents (L. J. Choi, B. Y. Shin and G. S. Oh, 2010). Marks of exclusion in gating includes gates, wall, fences, 'buffer zone' of grass and derelict lands, cul-de-sacs and adopting monitoring systems with employing security guards or CCTVs (Atkinson and Blandy, 2005). Modern apartment design in Korea represents this exclusive differentiation between, within, and outside the complex through physical demarcated boundaries and symbolic structures or specific apartment brand signage.

In this study, we examine the changes in apartment complex boundary design and degree of gated exclusiveness by comparing two regions, each with a concentration of apartment complexes built in different periods using different development methods. By tracing changes in the boundaries of apartment complexes, we could interpret the physical and social aspects of each complex, including openness, segregation, accessibility, and incompatibility, as well as the influence of public or private intervention on urban design.

Methods

Over the past 50 years, multiple development methods have influenced the construction of apartment complexes in Seoul. Of these, two of the most prominent are the Housing Site Development Project, which resulted in the construction of 'planned' apartment complexes, and the Housing Redevelopment Project, which promoted a more spontaneous process (Figure 1). Mok-dong was developed 'en bloc' in the 1980s under a public master plan, which enabled us to examine the adaption of boundary design over time. On the other hand, apartment complexes in Geumho-dong were gradually redeveloped over time (1980s to the present), allowing us to document changing trends.

The spatial territory of boundary includes urban and private space, namely borderland, centring on the physical demarcation line of the apartment complex parcel. For the purposes of our study, 'boundary design' includes boundary types, the physical condition of boundaries, access control, and condition of the surrounding pedestrian walkway and road. We investigated total of 28 complexes (14 complexes each) in two neighbourhoods—Mok-dong and Geumho-dong—focusing on boundary design, configuration, and spatial qualities. Several field surveys were conducted and street-view¹ via internet was utilized to examine the apartment complex boundary conditions of the study area. Visual representations were executed through GIS and CAD.

Study Areas

Mok-dong: Housing Site Development Project

The Housing Site Development Promotion Act was passed in 1980 to resolve housing shortages in Seoul by aiming for constructing 5 million households (LH, 1988). The law allowed private companies to purchase vacant land at government rates (Sohn, 2003), enabling public development agencies to spearhead large-scale housing development projects in undeveloped greenfield land on the city outskirts. This eventually resulted in master-planned development with inner city 'Newtown-in-towns' and more central urban 'Newtowns'. The master plans provided a strategy for land use, road networks, common facilities, and infrastructure, and provided numerous sites on which to construct apartments (C. H. Kim, 1987). In most cases, these residential blocks were sold to the private companies that built the apartments (SMG, 1990). Mok-dong is one of these planned communities near Seoul's greenfield areas. It includes multiple apartment complexes constructed according to a single master plan. Mok-dong is a 'Newtown-in-town' community, and is a result of public sector development. The community consists of repetitive apartment complexes and is one of the city's largest homogenous morphological regions.

Geumho-dong: Housing Redevelopment Project

The Urban and Residential Renewal Act resulted in the formation of several Housing Redevelopment Projects to demolish squatter settlements (K. J. Kim et al., 2001). Over time, this project evolved into the overall renewal of substandard urban areas (K. J. Kim, 1998). In 1983, joint or partnership renewals began, making this method a privatised joint venture between landowner associations and private construction companies. Unplanned areas comprised of small houses and narrow alleys with few public amenities were cleared to build high-rise apartment complexes. Seoul's government devised a comprehensive citywide redevelopment plan to designate eligible renewal areas, enabling property owners to form associations providing collective land and hire a construction



company to lead redevelopment while ensuring a profit by exceeding the number of original units for sale (K. J. Kim, 1998).

As demand for housing increased and the amount of vacant land within city limits decreased in the 1990s and early 2000s, Housing Redevelopment Projects became the major supplier of housing. Unlike Housing Site Development Projects, which were built on the city outskirts and led to urban expansion, Housing Redevelopment Projects focused on transforming the inner city. Geumho-dong is one area that has been redeveloped. It is located close to the city centre on a hill adjacent to the Han River, and numerous apartment complexes have replaced the area's original spontaneously formed residences.

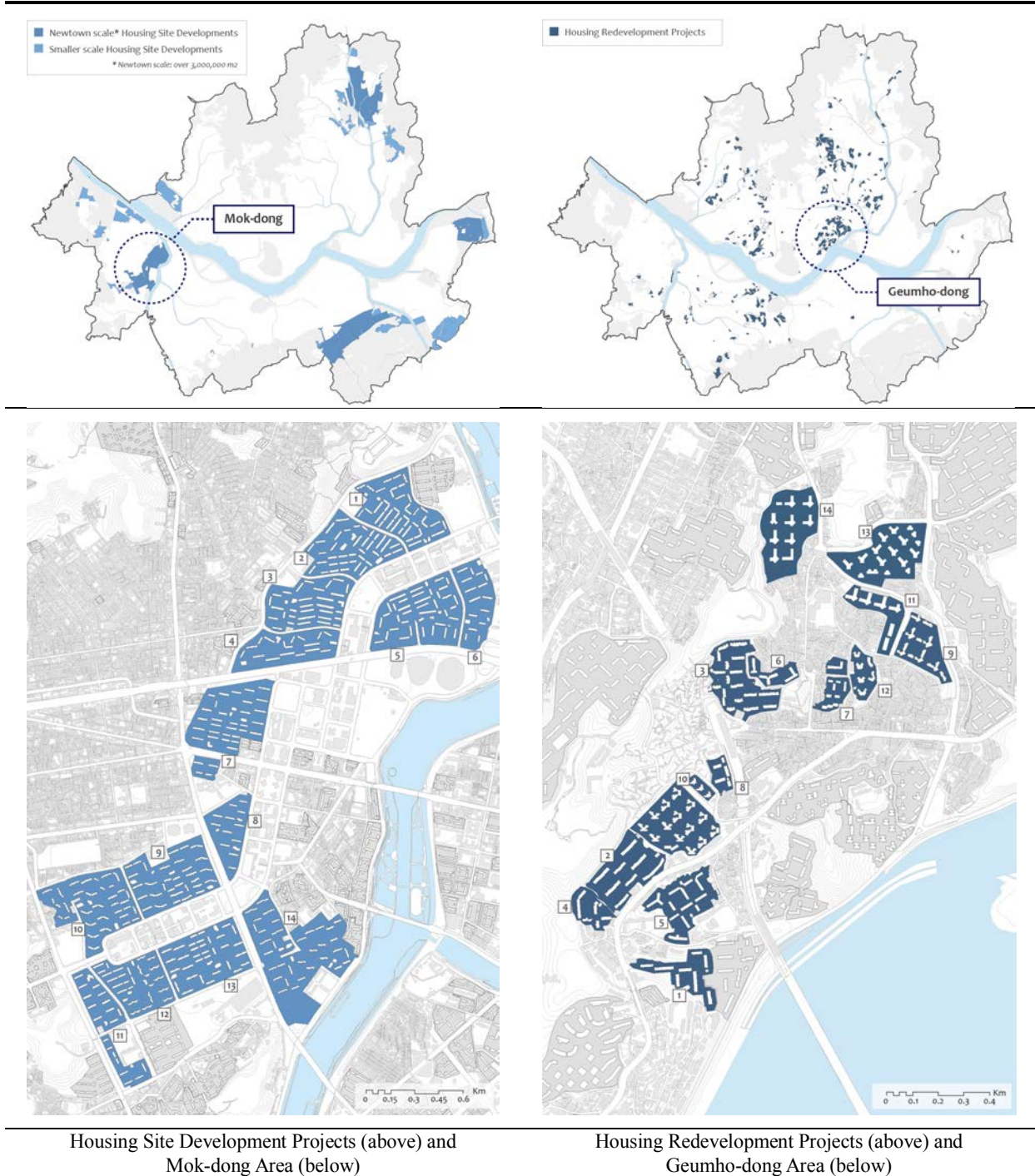


Figure 1. Citywide Mapping of the Two Development Methods and the Two Study Areas



Analysing the Boundary Design of Apartment Complexes

Mokdong Apartment Complexes

Table 1. Boundary Design Condition of 14 Apartment Complexes in Mok-dong

14 Apartment Complexes in Mok-dong		M01	M02	M03	M04	M05	M06	M07	M08	M09	M10	M11	M12	M13	M14	
General	Built year	1985	1986	1986	1986	1986	1986	1986	1987	1987	1987	1988	1988	1987	1987	
	Additions of boundary elements (harricale)	-	-	-	●	-	-	●	-	-	●	-	-	-	-	
	Apartment brand (construction company)	(Seoul construction)	(Yonon construction)	(Daewoo)	(Lotte)	(Sam/han)	(Hyundai)	(Sungm engineering)	(Hoseo Architecture)	(Luregm Architecture)	(Space Architecture)	(Chaeal Architecture)	(Sachuan Aia)	(General Architecture)	(Seoul construction)	
	Number of households	1882	1640	1588	1382	1848	1368	2550	1352	2030	2160	1595	1860	2280	3100	
Boundary Type	T1	Wall	-	-	-	-	○	-	-	-	-	-	-	-	-	
	T2	Fence	●	-	●	-	●	●	●	●	●	●	●	●	●	
	T3	Landscape	●	●	●	●	●	●	●	●	●	●	●	●	●	
	T4	Topography	-	-	-	○	○	○	○	○	○	○	-	-	○	
	T5	Facility, amenity	public	●	●	●	●	●	●	●	●	●	●	●	●	●
			private	●	●	●	●	●	●	●	●	●	●	●	●	●
T6	Symbolic structure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Physical Condition of Boundary	Height (m)	T2 1.5m T3 1.0m	T3 1.0m	T2 0.5m T3 1.0m	T3 1.0m	T3 0.5m	T1 3.5m T2 1.0m T3 1.0m	T2 1.0m T3 1.0m	T2 1.0m T3 1.0m	T2 1.0m T3 1.0m	T2 1.0m T3 1.0m	T3 1.0m	T2 1.0m T3 1.0m	T2 1.0m T3 1.0m	T2 1.5m T3 1.0m	
	Length (m)	1900m	1800m	1600m	1600m	1800m	1500m	2100m	1300m	1800m	2100m	1200m	1600m	1700m	3200m	
	Thickness (m) average	5.0m	5.0m	5.0m	5.0m	5.0m	5.0m	10.0m	10.0m	10.0m	7.0m	7.0m	5.0m	7.0m	7.0m	
	Material	T2 metal T3 shrub	T3 shrub	T2 metal T3 shrub	T3 shrub	T3 shrub	T1 panel T2 metal T3 shrub	T2 metal T3 shrub	T2 metal T3 shrub	T2 metal T3 shrub	T2 metal T3 shrub	T3 shrub	T2 metal T3 shrub	T2 metal T3 shrub	T2 metal T3 shrub	
Control of Access	Pedestrian	public	●	●	●	●	●	●	●	●	●	●	●	●	●	
		private	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Vehicle	public	●	●	●	○	●	●	-	●	●	○	●	●	●	
		private	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Other surveillance	CCTV	43	312	22	7	12	7	13	28	85	96	10	94	6	25
		guards	84	66	74	56	80	60	100	50	102	68	37	64	103	128
number of entrance		11	9	5	6	11	3	17	5	15	13	10	10	16	12	
Surrounding Pedestrian and Road Condition	Pedestrian	sidewalk	●	●	●	●	●	●	●	●	●	●	●	●	●	
		landscape	○	○	○	●	○	○	○	●	●	●	○	○	●	
	Vehicle	privatization	-	-	-	○	-	-	●	-	-	○	-	-	-	

Despite that a different company constructed each apartment complex in Mok-dong, the comprehensive master plan overseeing the area's urban design has ensured continuity between the boundaries (Table 1). Except for Complex M06, which has a 3-m wall partially installed, the other 13 complexes we studied have no physical wall demarcating boundaries. Nine complexes intentionally installed elevated topography along a boundary to obstruct views into the apartments. Most of the complexes have a 1-m ironwork fence and shrubs 1 m high delineating the boundaries. These low boundaries are seamlessly connected with pedestrian sidewalks that are actively used by apartment residents and other pedestrians. In addition, numerous trees have been planted along the complex boundaries and adjacent sidewalks. As such, most pedestrians remain unaware of their purpose as a territorial demarcation, and they form a pleasant public greenway. Most of the complexes have an average of 10 entrance points, which are open to residents and the public. No gateways or branded structures mark these entrances and no operating systems obstruct outside vehicular traffic (Figure 3). However, as more households have come to possess multiple vehicles and public parking space has become limited, parking shortages have become an issue; consequently, complexes M04, M07, and M10 have installed barricades and placed placards forbidding the parking of outside vehicles (Figure 2).



Boundary condition maintain the original design

Additional boundary element (barricade) installed

Figure 2. Maintaining and changing boundary condition of Mok-dong complexes

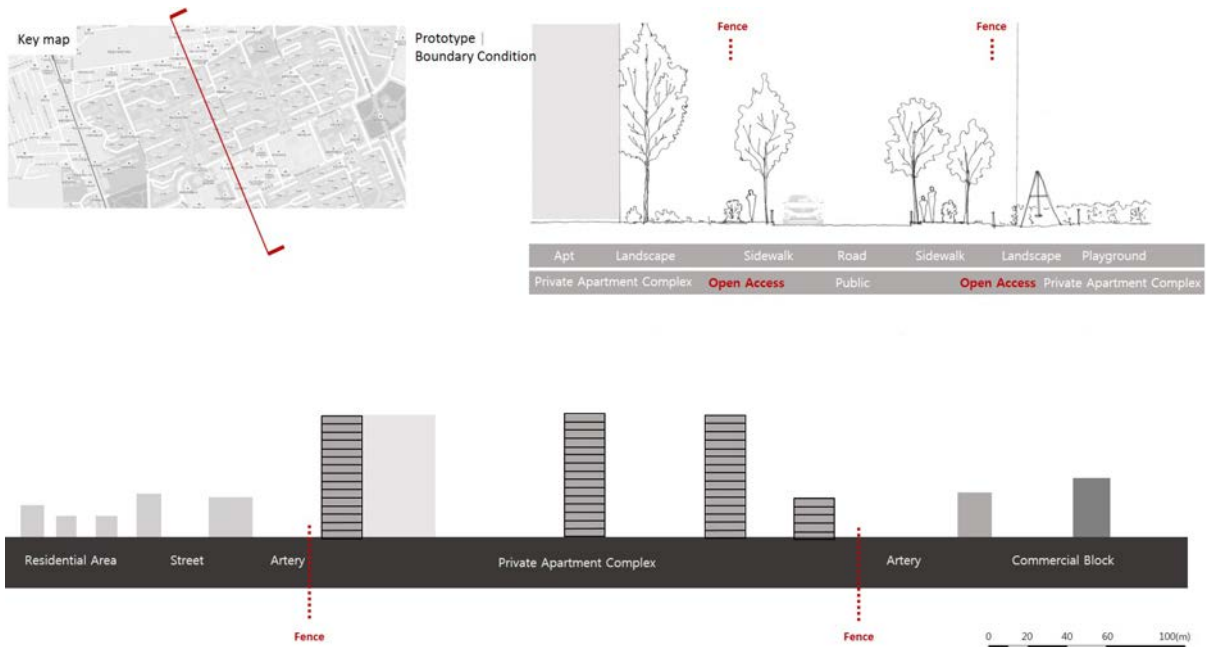


Figure 3. Diagrammatic section of apartment complex borderland and adjacent area in Mok-dong

Geumhodong Apartment Complexes

Table 2. Boundary Design Condition of 14 Apartment Complexes in Geumho-dong

14 Apartment Complexes in Geumho-dong			G01	G02	G03	G04	G05	G06	G07	G08	G09	G10	G11	G12	G13	G14	
General	Built year		1982	1986	1994	1997	1999	2005	2005	2007	2012	2012	2012	2012	2016	2018	
	Additions of boundary elements (barricade)		-	●	●	●	●	●	-	●	●	●	●	●	●	●	●
	Apartment brand (construction company)		(Heights Construction)	Kakdong Construction	W've (Daejeon Eng.)	(Kakdong Construction)	Raemian (Samsung)	Hyuplus (Handira)	Prugio (DaewooDac)	Brownstone (Ira E&C)	Raemian (Samsung)	Raemian (Samsung)	XI (GS eng.)	XI (GS eng.)	Park hills (DaewooDac)	Park XI (GS eng.)	
Boundary Type	Number of households		535	900	1267	583	1114	323	336	217	847	1511	461	403	1976	1137	
	T1	Wall	●	●	●	●	-	-	●	-	-	●	-	●	-	●	
	T2	Fence	●	●	●	●	●	●	●	-	●	●	●	●	●	●	
	T3	Landscape	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	T4	Topography	●	●	●	-	●	●	●	●	●	●	●	●	●	●	
	T5	Facility, amenity	public	●	-	-	●	-	-	●	●	●	●	●	●	●	-
			private	●	●	●	●	●	●	●	●	●	●	●	●	●	●
T6	Symbolic structure	-	-	-	-	-	-	-	●	●	●	●	●	●	●	●	
Physical Condition of Boundary	Height (m)		T1 4.0m T2 1.0m T3 1.5m	T1 3.0m T2 1.0m T3 1.5m	T1 2.5m T2 2.0m T3 2.5m	T1 4.0m T2 1.0m T3 1.5m	T1 3.0m T2 2.0m T3 2.5m	T2 2.0m T3 2.5m	T2 1.0m T3 2.5m	T1 1.5m T3 1.5m	T1 5.0m T3 3.0m	T2 1.0m T3 0.5m	T2 3.0m T3 2.0m	T2 1.0m T3 2.0m	T1 3.0m T2 1.0m T3 1.5m	T1 3.5m T2 1.0m T3 2.0m	
	Length (m)		1300m	918m	1200m	561m	1300m	708m	626m	455m	1200m	1100m	919m	622m	1500m	1000m	
	Thickness (m) average		5.0m	2.0m	3.0m	2.0m	2.0m	5.0m	2.5m	5.0m	5m	1.0m	3.0m	5.0m	5.0m	3.0m	
	Material		T1 concrete T2 metal T3 shrub	T1 concrete T2 metal T3 shrub	T1 brick T2 metal T3 shrub	T1 concrete T2 metal T3 shrub	T1 blocks T2 wood T3 shrub	T2 metal T3 shrub	T2 metal T3 shrub	T1 stone T3 shrub	T1 concrete T3 shrub	T2 metal T3 shrub	T2 wood T3 shrub	T2 metal T3 shrub	T1 concrete T2 metal T3 shrub	T1 panel T2 metal T3 shrub	
	Layer (number of layers)		T1, T2, T3 (3)	T1, T2, T3 (3)	T1, T2, T3 (3)	T1, T2, T3 (3)	T1, T2, T3 (3)	T2, T3 (2)	T2, T3 (2)	T1, T3 (2)	T1, T3 (2)	T2, T3 (2)	T2, T3 (2)	T2, T3 (2)	T1, T2, T3 (3)	T1, T2, T3 (3)	
Control of Access	Pedestrian	public	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
		private	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Vehicle	public	-	-	-	-	●	-	-	-	-	-	-	-	-	-	
		private	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	Other surveillance	CCTV	n/a	22	7	15	6	45	n/a	21	29	n/a	13	n/a	13	n/a	
guards		23	34	10	13	6	7	-	11	17	6	6	-	6	-		
number of entrance		1	1	2	2	2	4	4	2	2	1	2	4	2	2		
Surrounding Pedestrian and Road Condition	Pedestrian	sidewalk	-	-	-	●	-	●	●	●	●	●	●	●	●	●	
		landscape	-	-	-	-	-	-	-	●	-	●	-	-	●	●	
	Vehicle	privatization	●	●	●	●	-	-	●	●	●	●	●	●	●	●	

In Geumho-dong, boundaries are delineated through combinations of materials including fencing, concrete retaining walls, soundproof walls, and brick walls (Table2). These boundaries surround each complex, preventing through traffic and forcing people to detour around the properties. Only residents of each apartment complex are allowed to access the entrances, and there is an average of two entrances for each of the 14 complexes we studied. There is a noticeable difference between the area's earlier apartment complexes, built in the 1990s and early 2000s, and buildings constructed later in the 2010s. The earlier complexes tend to be surrounded by high walls and intentionally high landscaping, while newer buildings mark boundaries with low fences or walls and tend to avoid tall vertical elements. These buildings deliberately place other functional



buffering elements along the peripheral boundaries. Public parks or commercial businesses can be public or semi-public, while other complexes deny entry through private communal buildings or parking towers (Figure 5).

Unlike the Mok-dong complexes, which are mostly open to public pedestrians and vehicles, 12 of the complexes in Geumho-dong prohibit public access. The privacy of these complexes is ensured by intentionally placing the entrance gates on a secondary road, requiring that residents detour from the main road. This creates an explicit privatisation of public roads, which are only used by residents from the apartment complexes they lead to. In order to further control access, recent complexes have installed vehicle control systems and erected aggrandized entrance gates, prominently displaying signs of luxury living, privacy, and exclusivity.



Private and public amenity along the boundary



Gateway of specific apartment brand

Figure 4. Different boundary conditions of Geumho-dong complexes

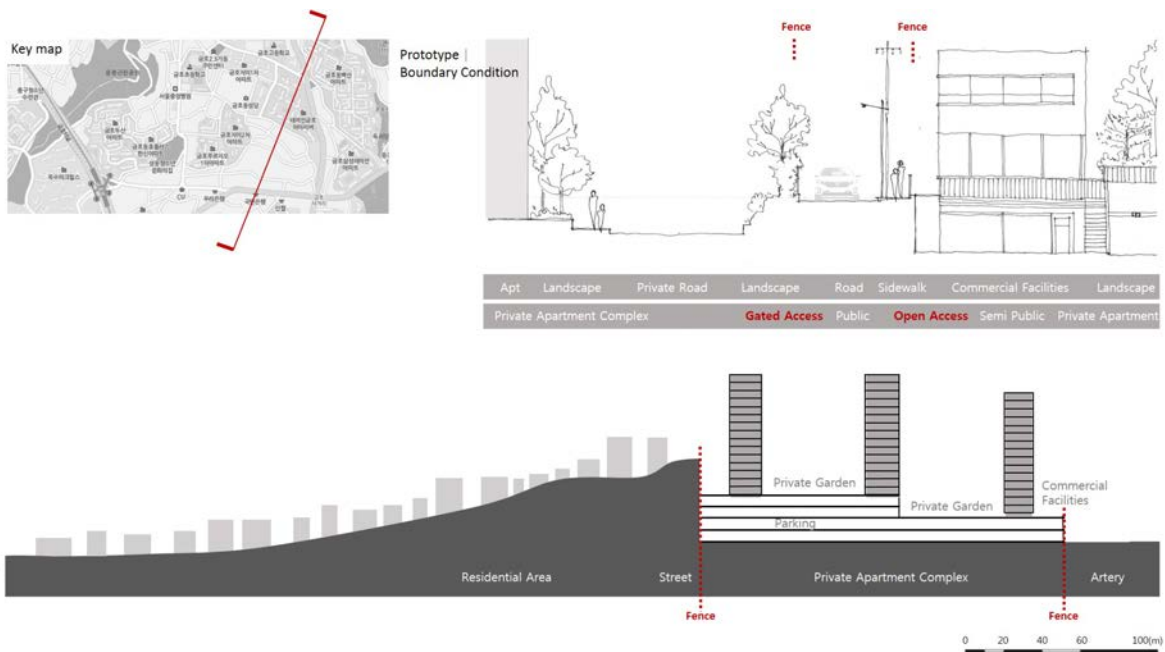


Figure 5. Diagrammatic section of apartment complex borderland and adjacent area in Geumho-dong

A comparison of the two neighbourhoods reveals that Mok-dong's master plan and unified urban design have allowed for open and connected boundaries. Low and minimum boundary elements and urban green space provide a sense of openness, consistency, and overall integrity between adjacent apartment complexes, public sidewalks, and roads. However, new elements to control pedestrian or vehicular passage are noticeable in some complexes, indicating a slow movement towards gating. On the other hand, the redevelopment plan and individual construction companies responsible for the apartment complexes in Geumho-dong reflect a more introverted configuration and self-containment. Over time, the 'apartment brand' has become more significant than the construction company, and specific brands are used as a marketing strategy to attract residents to a distinctive residential environment and luxurious lifestyle. As a result, branded apartments have dominated Geumho-dong's real estate since the 1990s. Each branded complex focuses more on enhancing its own internal infrastructure rather than considering its relation to the surrounding area. Boundaries are used to suggest exclusivity in a way that is not present in Mok-dong, through the layering of diverse boundary types, heights, and materials compressed in a relatively narrow width of borderland that generates a sense of fortification rather than blurring the division between private and public.



Discussion

Apartment complexes have become a common residential type more or less transformed into enclosed, self-contained communities that include housing, an internal road network, open spaces, and communal facilities. As privately owned land, access to internal amenities is allowed only to residents, and signs of exclusion proliferate. Segregating the area is accomplished through security gates, building boundary fences that resemble ramparts, installing closed-circuit television for video surveillance, and implementing exclusive landscapes and environmental designs. Recent research shows that the many recently built apartment complexes have been part of a public agenda to provide an enhanced infrastructure and preferred public space through private developers. However, the design of these complexes lacks careful consideration of space in terms of harmony with the existing community and urban fabric (Park, 2013b; Gelézeau, 2007). At the same time, attention has grown on the increasingly exclusive and isolated features of gated housing in terms of physical and socioeconomic aspects (Park, 2013a). This has resulted in a strong distinction between the privacy of internal dwellings and outer public territory (Rowe, 2005).

Low (1 m) fences and shrubs and abundant trees are the primary boundary elements in Mok-dong, whereas in Geumho-dong, the borders are marked by high boundaries constructed with multiple materials. This reflects the development of Mok-dong complexes en bloc in the 1980s and slow movement of the complexes towards supplementing their boundaries with gating elements like barricades to block outside vehicles. On the other hand, the complexes in Geumho-dong, which were spontaneously built by different companies, highlight their gated nature through the layering of boundary elements, limiting entry points to one or two and to residents, using symbolic structures or gateways to signify the apartment 'brand', and controlling pedestrian and vehicle access.

The housing development methods applied differ between the two areas. Mok-dong adopted a Housing Site Project with a master plan that ensured consistency in terms of the boundaries, which were conceived as a public section. In contrast, Geumho-dong lacks an overall vision of the area, where Housing Redevelopment Projects incrementally converted spontaneous squatter settlements into apartment complexes as individual entities.

The use of boundaries in Mok-dong and Geumho-dong suggests that total physical barriers have increased over time. Our results also suggest that there is a growing differentiation and discrepancy in infrastructural resources between apartment complexes and the surrounding area, which promotes a sense of incompatibility and disconnects the two neighbouring spatial systems.

Moreover, gating and access restrictions have changed over the past decade, becoming progressively more intense. In the 1970s, boundaries were usually simply marked by a low wall or fence and by placing a safety guard. However, our findings in Geumho-dong reflect the work of Gelézeau (2008), who argues that the neo-liberal transformation of Korean housing construction since the mid-1990s has led to the emergence of 'gated community-style residential environments'. Borders have evolved from a simple fence to a complicated layering of various barriers, and access control has become excessively fortified. This has ushered in a steady decline in overall public spaces and increased the number of privatised, high-quality spaces for private complex residents. Because these communities are comprised of families with similar social statuses, the private enclaves become more homogeneous and sociospatial segregation intensifies, resulting in 'spatial stratification' and urban fragmentation.

Our findings show that Mok-dong is currently wrestling with the need to pay more attention to public infrastructure. For example, the lack of public parking among the surrounding neighbourhoods means that several complexes are adding gates to prohibit outside parking that causes internal parking shortage within the apartment complex. In Geumho-dong, there is a need for an overall strategy to harmoniously situate new apartment complexes within their surroundings and provide more connection, interaction, and community with the surrounding urban context.

Conclusion

Increasing privatisation of land and housing raises complicated spatial, physical, and social issues. According to Atkinson and Blandy (2005) attempts in expressing a mark of exclusion resulted in lack of permeability with in the surrounding context, however, the broader debate involves "freedom of access to the wider city, social inclusion and territorial justice." Banjee (2001: 12) points out that the substitution of private for government participation has resulted in the 'commodification of urban space and public good' and a decline in the quality and supply of public spaces. This results in the extensive privatisation of public spaces and expansion of privately controlled spaces. This is generating socio-spatial differentiation, leading to discontinuity and fragmentation of urban spaces. Aggravating social polarisation further instigates a desire for a more homogeneous lifestyle and surrounding environment, which alleviates communal solidarity between different



social groups (Janoschka & Borsdorf, 2004). In this study, boundary design as one type of expression for demarcating gated exclusiveness has been explicitly taken to be investigated.

Since the 1990s, luxury high-rise apartment buildings and branded apartments have reflected the ‘deregulation and neo-liberal logic structuring the Korean housing production system’ (Gelézeau, 2008: 317). According to S. I. Jun (2009), branded apartments developed in the 2000s because of the increasing tendency to live in socioeconomically homogeneous communities. Many believe that the proliferation of apartment complexes is led by government housing policies aimed at supplying mass housing through private sector initiatives centred on the middle class and driven by market forces initiatives (S. H. Lim, 2005; Gelézeau, 2007; S. I. Jun, 2009; I. S. Park, 2013).

This type of living situation continues to proliferate, and the yearning to live in private, enclosed complexes does not seem likely to disappear. Land is limited, public infrastructure is insufficient, and the private sector dominates housing construction, meaning that private complexes will continue to be built. Urban issues surrounding such private enclaves are not only spatial and physical, but also most importantly social. As spatial and social polarisation intensifies along with the continual agglomeration of private enclaves, it is imperative to determine how to reconsider the isolating gated exclusiveness of apartment complexes in alternative ways to allow residents to connect while maintaining a certain degree of privacy. Since respecting the need of gated boundary for internal security and maintenance in response to rising urban crime issue cannot be equivalently overlooked (Breetzke, Landman and Cohn, 2014). To preserve the existing urban fabric, the public sector must propose a master development plan for residential areas that is not deconstructive or fragmentary, but integrated. For instance, complexes should provide well-connected passageways and various public or buffering spaces. A thicker borderline that is composed with various communal program, such as public bench, small open library or reading area, green wall and so on would be a positive proposition that not only faces but invites access along the complex boundary. Understanding the increasing exclusivity of gated communities and finding regional-based solutions for spatial and social disconnection is vital to recovering the fragmenting residential community in Seoul. In addition, efforts to understand the resident’s preference, satisfaction, and mutual perception between the internal and external community of apartment complexes should be made for further residential regeneration and preserving the sense of neighbourhood community (Bekleyen and Yilmaz-ay, 2016).

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Soe Won Hwang

Soe Won Hwang holds a PhD in Urban Planning from Seoul National University, a Master’s degree in architecture from Harvard University Graduate School of Design, and a Bachelor’s degree in interior architecture from the School of the Art Institute of Chicago. Her research focuses on community/residential development, urban regeneration, and shaping of the urban form. Publication includes urban regeneration of public spaces, reutilization of urban void spaces and embedded resources.

Hyo Jin Kim

Hyo Jin Kim is a PhD candidate at Seoul National University. Hyo Jin earned her Master’s degree from the Graduate School of Design, Harvard University, and a Bachelor’s degree in architectural engineering from Keimyung University. Her research interests range from infill housings of low-rise residential areas, housing types, and urban regeneration. Publication includes large-scale residential district development, spatial exclusion mechanism, and gated effects and artificial ground of complex housing.



Bibliography

- Atkinson, Rowland, and Sarah Blandy. "Introduction: International Perspectives on the New Enclavism and the Rise of Gated Communities." *Housing studies* 20, no. 2 (2005): 177-86.
- Banerjee, Tridib. "The Future of Public Space: Beyond Invented Streets and Reinvented Places." *Journal of the American Planning Association* 67, no. 1 (2001): 9-24.
- Bekleyen, Ayhan, and İlham Yılmaz-Ay. "Are Gated Communities Indispensable for Residents?". *Urbani izziv* 27, no. 1 (2016): 149.
- Blakely, Edward James, and Mary Gail Snyder. *Fortress America: Gated Communities in the United States*. Brookings Institution Press, 1997.
- Breetzke, Gregory D, Karina Landman, and Ellen G Cohn. "Is It Safer Behind the Gates? Crime and Gated Communities in South Africa." *Journal of housing and the built environment* 29, no. 1 (2014): 123-39.
- Coy, Martin. "Gated Communities and Urban Fragmentation in Latin America: The Brazilian Experience." *GeoJournal* 66, no. 1-2 (2006): 121-32.
- Gelézeau, Valérie. "Changing Socio-Economic Environments, Housing Culture and New Urban Segregation in Seoul." *European Journal of East Asian Studies* 7, no. 2 (2008): 295-321.
- Ha, Seong-Kyu. "Housing Renewal and Neighborhood Change as a Gentrification Process in Seoul." *Cities* 21, no. 5 (2004): 381-89.
- Janoschka, Michael, and Axel Borsdorf. "The Rise of Private Residential Neighbourhoods in Latin America." *PRIVATE CITIES* (2004): 89.
- Judd, Dennis. *The Rise of the New Walled Cities*. Maxine Goodman Levin College of Urban Affairs, Cleveland State University, (1991).
- Kim Chul Ha. Seoul Mok-dong Newtown Development Project Status [in Korean]. *Architecture* 31, no.4 (1987): 46-54
- Kim Kwang Joong. New Form, Classic Problem: Pseudo-Public Residential Redevelopment in Seoul. *Built Environment* (1998): 235-250
- Kim, Kwang Joong et al. Seoul, twentieth century : growth & change of the last 100 years [in Korean]., Seoul Institute., Seoul. (2001)
- Kirby, Andrew. "The Production of Private Space and Its Implications for Urban Social Relations." *Political Geography* 27, no. 1 (2008): 74-95.
- Le Goix, Renaud. "Gated Communities: Sprawl and Social Segregation in Southern California." *Housing studies* 20, no. 2 (2005): 323-43.
- LH (Korea Land & Housing Corporation). *Mok-dong Newtown Development Project Case Study* [in Korean]., Seoul, (1988).
- Low, Setha M. *Behind the Gates: Life, Security, and the Pursuit of Happiness in Fortress America*. Vol. 35: SciELO Chile, 2003.
- Morris, Anthony Edwin James. *History of Urban Form before the Industrial Revolution*. Routledge, 2013.
- Naver Map, <http://map.naver.com/>.
- Park, Hyun Chan et. al. *Urban Form Study of Seoul* [in Korean]. Seoul: Seoul Institute, 2009.
- Roitman, Sonia. "Who Segregates Whom? The Analysis of a Gated Community in Mendoza, Argentina." *Housing studies* 20, no. 2 (2005): 303-21.
- Shin, Hyun Bang. "Property-Based Redevelopment and Gentrification: The Case of Seoul, South Korea." *Geoforum* 40, no. 5 (2009): 906-17.
- SMG (Seoul Metropolitan Government) *Mok-dong Newtown Development* [in Korean]. Seoul., (1990)
- Vesselinov, Elena, Matthew Cazessus, and William Falk. "Gated Communities and Spatial Inequality." *Journal of Urban Affairs* 29, no. 2 (2007): 109-27.



Endnotes

¹ “Naver Street View,” Naver Map, accessed 10, April, 2018, <https://map.naver.com>

Image sources

Figure 1: Author generated image utilizing GIS

Figure 2: Naver Street View image modified by authors, <https://map.naver.com> (Accessed 10, April, 2018)

Figure 3: Author generated image and Naver Street View image modified by authors, <https://map.naver.com> (Accessed 10, April, 2018)

Figure 4: Naver Street View image modified by authors, <https://map.naver.com> (Accessed 10, April, 2018)

Figure 5: Author generated image and Naver Street View image modified by authors, <https://map.naver.com> (Accessed 10, April, 2018)



From the National Housing Bank to the My Home My Life Program: reproducing old obstacles in the Housing Policy in Aracaju-SE, Brazil

Sarah Lúcia Alves França*; Vera Lúcia F. Rezende**

* *Departamento de Arquitetura e Urbanismo, Universidade Federal de Sergipe. sarahfranca@ig.com.br*

** *Programa de Pós-Graduação em Arquitetura e Urbanismo, Universidade Federal Fluminense. vrezende1234@gmail.com*

This article comparatively analyzes the policies of the National Housing Bank – BNH, and the Habitation Program entitled My Home My Life, based on the locational logic of subsidized housing complexes in the city of Aracaju-SE, Brazil. In Brazil, two programs deserve special mention: BNH, created in 1964 as the financing body for the construction of social housing, producing thousands of housing units until 2002, opening up expansion fronts for the reproduction of the real estate market. In the second, the PMCMV, initiated in 2009, one of the biggest obstacles is access to urbanized land, with alternative to the occupation of scattered, devalued and deprived areas of environmental sanitation and public transportation. So, it is questioned to what extent the actions of the PMCMV, regarding the dynamics of housing production resemble or are distinguished from those undertaken by BNH? For the development of this, quantitative and qualitative information was collected in public agencies, generating tables and mapping the insertion of the enterprises in Aracaju. Thus, there are coincidences regarding the peripheral and dispersed logic of these sets, highlighting the clear socio-spatial segregation of the lower income strata, in the search for land valuation in function of public and private investments.

Keywords: Social Housing; State; Marketplace; National Housing Bank; My Home My Life Program.

Introduction

In Brazil, the housing policy highlights two programs that constitute the funding agencies for the construction of thousands of dwellings: the National Housing Bank [Banco Nacional de Habitação-BNH], which operates from 1964 to 1986, and the My Home My Life Program [Minha Casa Minha Vida Program –PMCMV], created in 2009.

In Aracaju, since the BNH, the housing production has been towards the periphery, and with active participation of real estate agents and effectiveness of their interests in urban expansion. The State abandoned its role of protagonist, to become a mediator and feasible of the real estate sector, especially in the choice of places of implantation of the enterprises. Making the same mistakes, the PMCMV obeys the same logic of capitalist production of social housing by the market, highlighting the clear segregation and socio-spatial exclusion.

At the same time, one of the major obstacles is access to urbanized land, with the alternative of occupying devalued areas and lacking environmental sanitation and public transportation. So, it is questioned to what extent the actions of the PMCMV, in what concerns the production of housing complexes, resemble or are distinguished from those undertaken by the extinct BNH?

Therefore, this article aims to analyze, comparatively, the policies of the BNH, and of the PMCMV, based on the locational logic of the subsidized housing complexes. Aracaju-SE, Brazil. For this, a survey was carried out on projects, visits to the site, as well as the elaboration of tables and cartograms, which reflect the urban sprawl in the process of insertion of these developments.

National Housing Bank: the peripherization of housing

The State has great responsibility in the production of Brazilian cities through the provision of housing units. From 1964, It began a new scenario of policies for low income class starts. Federal Law No. 4,380 / 64, which created the BNH and the Housing Financial System [Sistema Financeiro de Habitação – SFH], with the intention of financing housing and solving the housing deficit. Since then, it has been settled the State Housing Company [Companhia Estadual de Habitação – COHAB] and the National Institute for Guidance to Housing Cooperatives [Instituto Nacional de Orientação às Cooperativas Habitacionais – INOCOOP].

The BNH had as premise to improve the quality of the housing, due to the population increase that the industrialization had provoked. However, the Bank became a state institution that prepared the cities for the



development of the monopoly capital that was being established, because it promoted the use of resources collected by all the workers, through their savings and, also, the Guarantee Fund for Time of Service [Fundo de Garantia por Tempo de Serviço – FGTS].

In Sergipe, the COHAB and the INOCOOP, were established in 1966 and 1967 respectively, and were constituted in the main financing and housing agencies (FRANÇA, 1999). COHAB served families with income between one and three minimum wages [MW], then extending to five, while INOCOOP had attracted those whose income was from 5 to 10 minimum wages. Those who did not have a minimum monthly income, or could not prove it to them, were not considered. In Aracaju, the performance of these institutions occurred between 1968 and 2002 and resulted in the insertion of 67 remote developments, contributing to the breakdown of the urban network (Table 1).

	COHAB		INOCOOP		Total	
	Housing Developments	Housing Units	Housing Developments	Housing Units	Housing Developments	Housing Units
Total	46	20.595	20	6.333	67	26.928

Table 1: Aracaju, Production of Popular Housing COHAB and INOCOOP, 1960 to 2002 *

Source: Elaboration Sarah França, 2016. Data collected in FRANCE, (1999); CEHOP (2003); CARVALHO (2013); Field Visits; Interviews.

The COHAB has built 20,595 residential units in 47 dispersed housing complexes, contributing significantly to the urban expansion. The first sets were delivered in 1968 and 1969, outside the consolidated network and with precarious access. In the 1970s, the construction of 21 housing complexes (5,732 dwellings) was intensified, inserted in a disjointed and peripheral way.

In the 1980s, the state began to build large-scale settlements, to house a larger population, and to act as a speculator, storing land to intervene in neighboring municipalities (CARVALHO, 2013). Of this period, Gov. Augusto Franco (4,510 dwellings), in the Farolândia neighborhood, the journalist Orlando Dantas (3,656 dwellings), in the São Conrado neighborhood, and Santa Tereza, which originated the neighborhood of the airport, led the expansion to the south, because they are distant from the central nucleus. The opening of Beira Mar and Heráclito Rollemberg Avenues (main access to Augusto Franco and Orlando Dantas), in 1981, ensured the occupation of gaps between these complexes and the nearby districts. The State, compacted with the achievement of real estate profits, valuing the land to be later occupied by developments of the Sergipe construction companies (Figure 1).

From 1990 to 2002, housing production declined due to the extinction of the BNH in 1986 and the state crisis that hit the country. França (1999) recalled that the reduction of federal investments was reflected in Sergipe, with the reduction in projects financed by Caixa financing cut of several projects that were in the Caixa. During this period, federal programs focused more on granting direct credit to the population, encouraging housing self-construction and programs to improve housing conditions, such as Pro-Moradia and Habitar-Brasil.

This period was also marked by expansion outside the municipal boundaries, towards the municipalities of São Cristóvão, Nossa Senhora do Socorro and Barra dos Coqueiros, still with rural characteristics and without adequate infrastructure. The justification was the high value of the land, which made it impossible to construct sets in the urbanized network. Thus, the public power has removed the needy population from areas with infrastructure, public services and job opportunities. Subsequently, the insertion of these houses boosted the occupation in their surroundings, bringing serious obstacles in the environmental, economic and social spheres (CARVALHO, 2013).

Housing production was concentrated in neighborhoods such as Farolândia (south), which received the largest amount (5,518 dwellings), São Conrado (north) with 3,902 units produced, Santa Maria (south), with 2,509 dwellings and finally, Bugio housing 2,263 housing units. This demonstrates urban shredding, which subsequently required the expansion of the infrastructure, further enhancing the empty spaces (FRANÇA, 1999).

On the other hand, INOCOOP built 20 housing complexes with 6,333 new dwellings, attending higher income categories, contributing to the ripping of peripheral tissue, such as the Inácio Barbosa and Beira Rio developments in the Inácio Barbosa neighborhood, and the Juscelino Kubitschek and Sol Nascente developments, in the Jabotiana neighborhood. In this case, 54% of the housing units are apartments, with several blocks of up to 4 floors. Some have been designed with architectural elements such as walls, such as the Mar do Caribe and Mar Mediterrâneo, in the Estrela do Mar, others open as the Estrela do Mar, which persist in this format to the present day (FRANÇA, 2016).

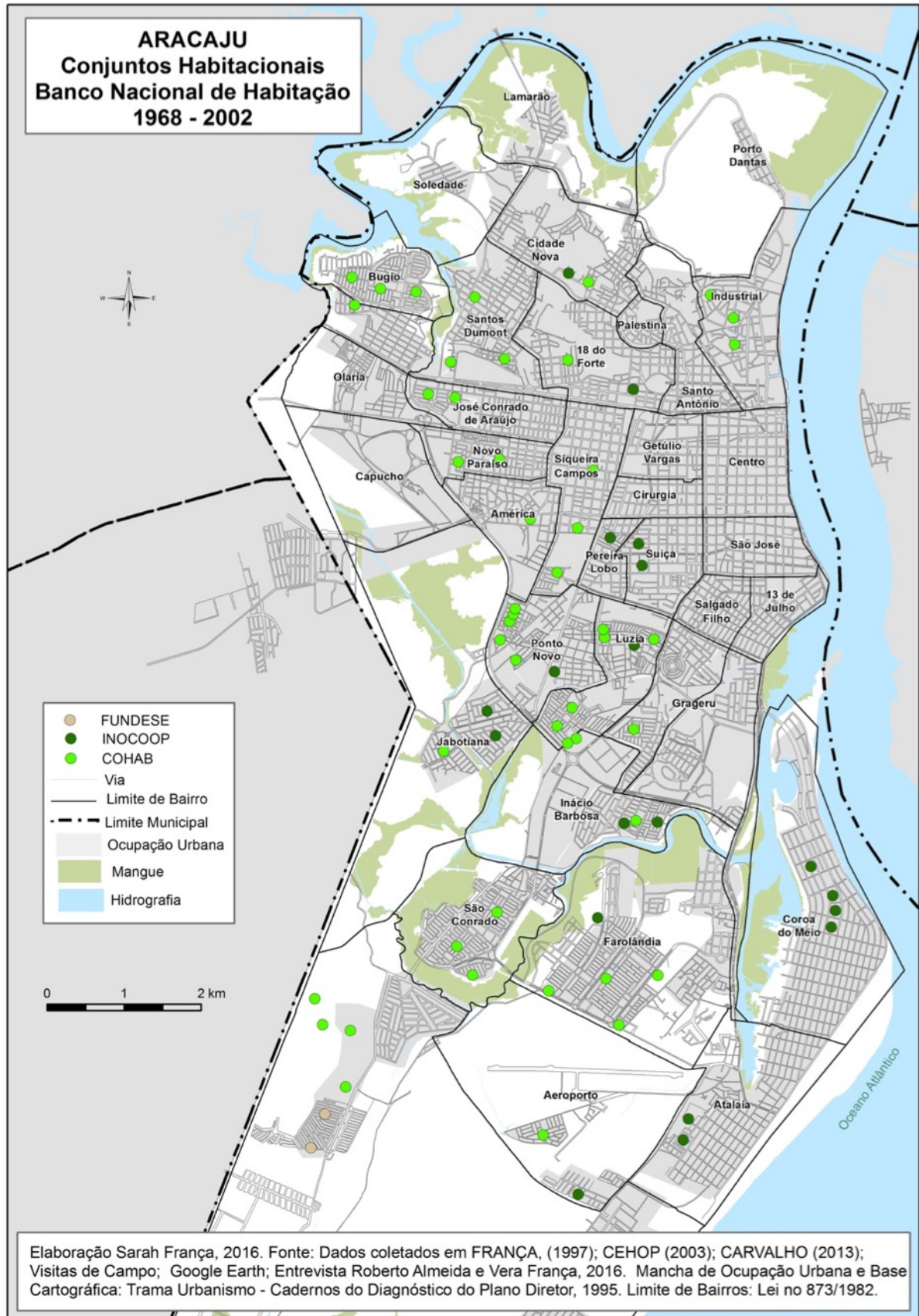


Figure 1: Aracaju, Housing Set, National Housing Bank - BNH, 1968-2002.
Source: Elaboration Sarah França, 2016.



Another form of occupation took place in the belt of housing communities, in small nuclei directed to the middle income group, in addition to vertical condominiums erected by construction companies (FRANÇA, 1997). In addition, public resources invested in infrastructure valued the land of allotments built for the middle and upper middle classes, located in the southern area.

The hope of "winning a house" brought to Aracaju a large population contingent, in the hope of allying housing and employment, which did not always occur (FRANÇA, 1999). However, those who were not contemplated, with no place to live, occupied empty land, irregular lots, and places without infrastructure. In addition, they occupied environmentally fragile areas, such as riverbanks, mangroves, floodable areas, with serious consequences.

This irregular housing, which corresponds to the spaces that are "left over", which do not interest the formal real estate market, can still be seen around housing estates, as a way of putting pressure on the government to obtain the home. These houses were built in stages, in the self-construction system, without engineering and architecture technical accompaniment, without financing and disregarding land, urban and building legislation, increasing the housing deficit (FRANÇA, 2016).

My Home My Life Program: a new housing program?

In the face of the international economic collapse that began in the United States and the Federal Government's willingness to accelerate the growth of cities, in 2009, the Residential Lease Program - PAR [Programa de Arrendamento Residencial – PAR] was replaced by the Minha Casa Minha Vida - PMCMV (Law no. 11,977 / 2009) as a strategy to guarantee access to the housing market with the objective of taking care of the families with income up to 10 minimum wages. In fact, the goal was to leverage civil construction in the midst of the economic crisis that plagued the country.

The financing of the housing takes place through the partnership between constructors and the public sector, through the Union, Caixa and City Hall. The initial goal (PMCMV 1) was to build one million houses in 2 years, the distribution of this number was due to the income levels established by the Program. In 2011, the PMCMV 2 was launched, with a doubling target for 2 million homes for the same period, in addition to presenting revised standards for service by the affiliated municipalities.

In Aracaju, the Municipality joined the PMCMV on April 30th, 2009, with the pronouncement of the then Mayor from that time, stating that "the project will contribute to reducing the housing deficit and increase investment in construction and job creation." The detail was that the construction of the houses would be through the constructors, allowing speed to the works, without limitations and bureaucracies of the public sector (FRANÇA, 2016).

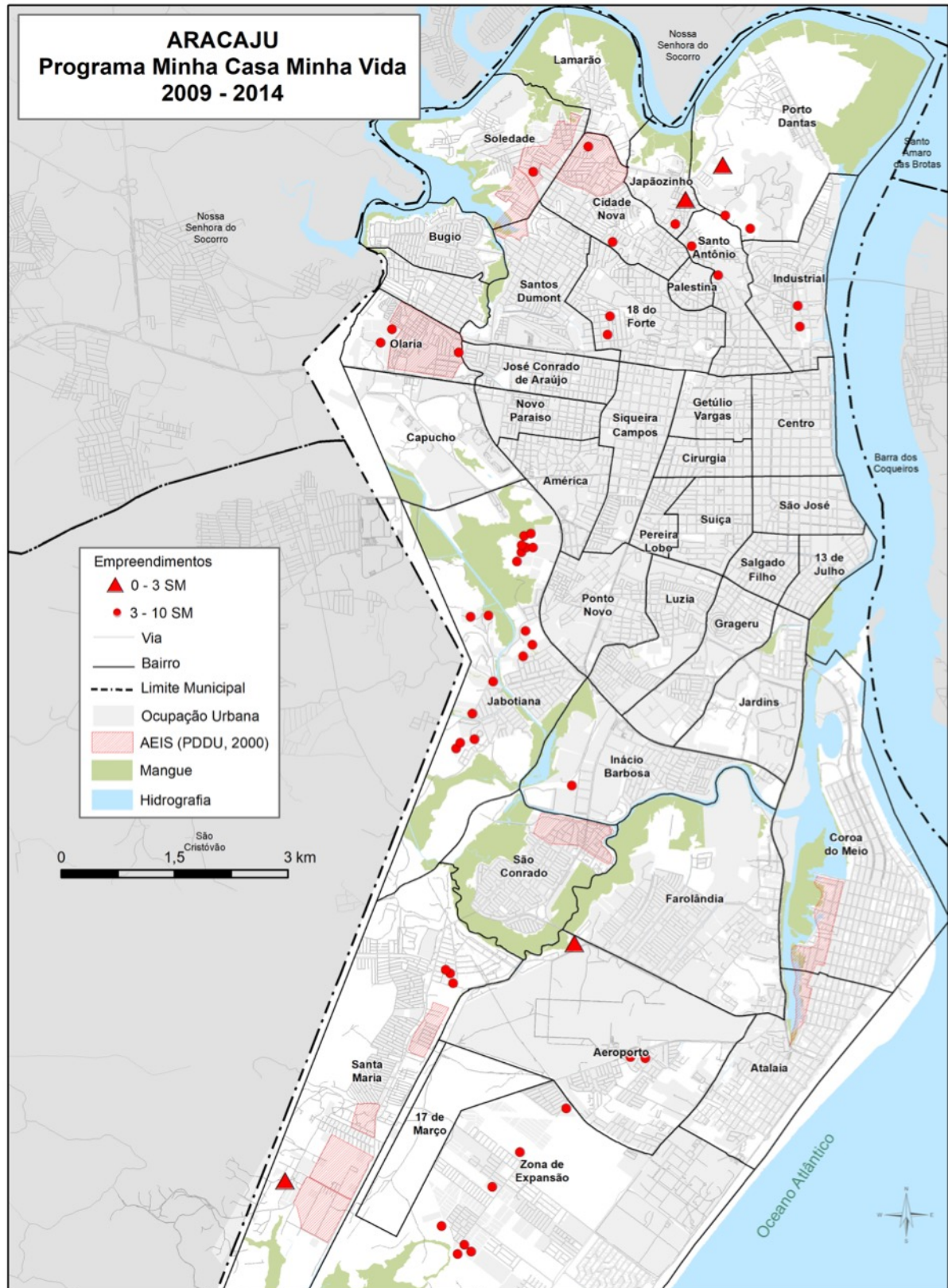
The Program is divided into two service axes: income range between 0 to 3 minimum salaries and 3 to 10 minimum salaries per family. In Aracaju, for the first axis there was a limited production of only 4 projects, located in districts that present infrastructure and public services insufficient and far from the offers of work and public transportation. These 1,262 households correspond to only 12.6% of the total produced, with a small portion of the more than 20 thousand families making up the housing deficit of 2010 (Table 2).

	Up to 3 Minimum Wages	From 3 to 10 Minimum Wages	Total
Housing Developments	4	45	49
Housing Units	1.262	8.724	9.986

Table 2: Aracaju, Programa Minha Casa Minha Vida, Distribution of Enterprises and Housing Units by Income, 2009 - 2014

Source: Elaboration Sarah França, 2016. Data provided by CAIXA (2015).

The small number of projects intended for the 0 to 3 minimum salaries range shows the difficulty in access to urbanized and cheap land to enable the social housing. Therefore, the main obstacle is the pursuit of the real estate market by greater profitability, concentrated in the products intended to the higher income classes, which requires a more incisive action of the State to attend this band (FRANÇA, 2016) (Figure 2).



Elaboração Sarah França, 2018. Fonte: Dados fornecidos pela AIXA (2015). Visitas de Campo; Google Earth; Base Cartográfica: SEPLOG/PMA, 2014. Limite de Bairros: SEPLOG/PMA, 2015. Mancha de Ocupação Urbana/Use do Solo: SEFAZ, 2014.

Figura 1: Aracaju, Programa Minha Casa Minha Vida - PMCMV, 2009-2014.

Source: Elaboration Sarah França, 2016.



Another factor is the institutional and legislative incentives. The Municipal Law No. 93/2009 was enacted, which established flexibility criteria for the enterprises introduced in the ZEIS Special Areas of Social Interest defined in the Master Plan, although these alternatives are not enough to encourage the real estate market to operate in these areas. The lack of articulation by the government to donate public land made it difficult to implement the program in the care of lower income families. Those families that receive from 3 to 10 minimum salaries found a greater offer of housing, for the sale to be favorable to the real estate market. There are 45 housing developments in this range, resulting in 8,724 houses spread across several neighborhoods. In total, between 2009 and 2014, 49 projects were built, totaling 9,986 dwellings. The bulk of the population is located in the northern, western and southern portions of the Porto D'Antas, Jabotiana and ZEU districts, covering 6,410 households (Figure 2)

It is important to point out an advance of the projects on the municipal territory of São Cristóvão, approved by Caixa as if they were from Aracaju. Three projects are located on the banks of the São Cristóvão-Aracaju municipal boundaries, closer to the Jabotiana neighborhood, where a large number of housing units built by PMCMV are located (FRANÇA, 2016).

The guidelines established to carry out the PMCMV provided the free choice of land. However, inefficiency in the implementation of land value instruments has led to the occupation of cheap areas, without availability of infrastructure and public services, attenuating the peripherization, as occurred intensely in the district of Jabotiana and ZEU, places of higher real estate growth in last years.

In these localities, mainly in the Jabotiana neighborhood, in the west zone, the PMCMV's concentration of enterprises, in the range of 3 to 10 minimum wages, occurred continuously. Condos were built close to each other, enhancing the impacts of the transformation from rural to urban (sites were replaced by condominiums) and the predominantly horizontal residential use has given rise to vertical housing (Figure 2)

The agents involved in the PMCMV activities (landowners, developers, builders and state) show that the high value of land urbanized is a major obstacle to the progress of the program, which should be que deveria ser enfrentada... with the application of the tools to combat land speculation included in the Master Plan, especially the ZEIS, whose use by the PMCMV was later encouraged through municipal legislation (FRANÇA, 2016).

It is important to observe the effectiveness of PMCMV not only in quantitative terms, as it is exploited by the public power in the media, but especially, qualitative. The data presented here allowed to consider that the contributions of the program to the fulfillment of the right to housing and to the city are insignificant.

Production of Houses of Social Interest: direction of expansion by the State

The need for an interlocking of land, housing and infrastructure policies and road system is evident in order to guarantee access to urbanized land, allowing the enterprises to be built ZEIS and to a greater extent for those who are concentrated in the income range of 0 a 3 MW. However, Aracaju does not demonstrate this alliance of public management in the sense of providing a fair and egalitarian city.

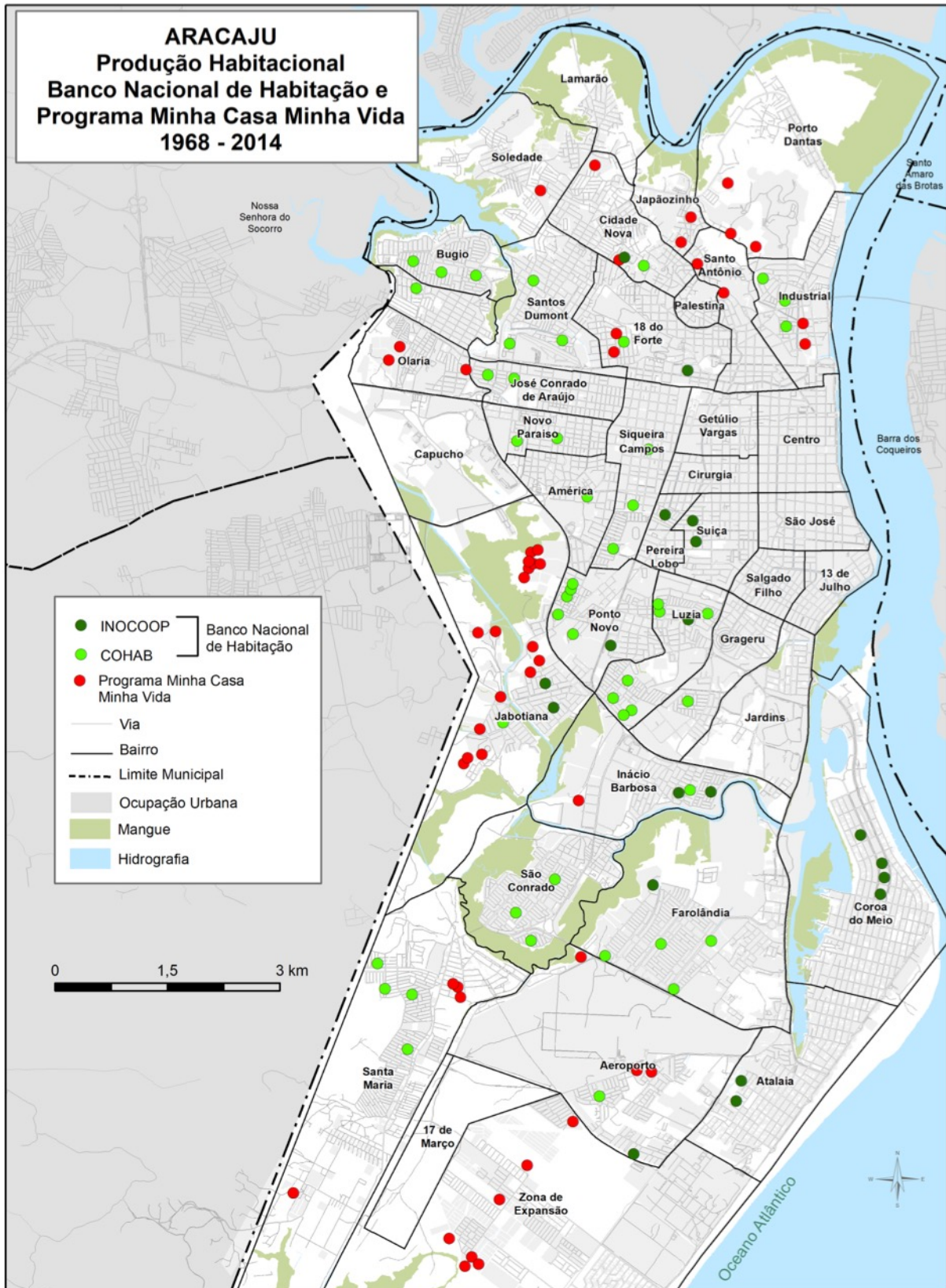
The insertion of these ventures in places that present bigger parcels with less value was decisive factor in the choice of location. It is noticed that the concern of the management was associated to the dynamization of the economy by means of the established quantitative targets, than by the real fulfillment of the right to housing. It was observed that the programs studied have had serious impacts, even in relation to those implemented in the surrounding municipalities (FRANÇA, 2016).

The 116 housing complexes built between 1968 and 2014 were responsible for spatial fragmentation, resulting in an exclusionary and unequal city. There was no concern to engage in the implementation of other policies, such as infrastructure and mobility. In addition, it can also be noticed that the recent PMCMV ventures are more distant from the urbanized neighborhoods than the former BNH-subsidized residential buildings, re-reading the old experiences and repeating the same difficulties (Figure 3 and Table 3).

	BNH		PMCMV		Total	
	Housing Developments	Housing Units	Housing Developments	Housing Units	Housing Developments	Housing Units
Total	67	26.928	49	9986	116	36.914

Table 3: Aracaju, Housing Programs, Enterprises and Housing Units by Neighborhood, 2000-2014

Source: Elaboration Sarah França, 2016. Data collected at the City Hall and State Government; Data provided by CAIXA, (2009, 2015)



Elaboração Sarah França, 2018. Fonte: Dados fornecidos pela AIXA (2015). Visitas de Campo; Google Earth; Base Cartográfica: SEPLOG/PMA, 2014. Limite de Bairros: SEPLOG/PMA, 2015. Mancha de Ocupação Urbana/uso do Solo: SEFAZ, 2014.

Figure 3: Aracaju, Housing Production, BNH and PMCMV, 2000-2014

Source: Elaboration Sarah França, 2016.



The popular housing peripherization was very clear since the BNH period. The recent process continued the expulsion of the low-income classes, extending the occupation out of the urbanized areas and further away from the central neighborhoods than the BNH-funded settlements. The PMCMV is aligned with the same localization strategies adopted by the previous program, distancing the residents of these groups from job offers and from the city with opportunities.

The residential projects of both programs were built in the north, west and south, the latter receiving 13,843 dwellings, equivalent to 37.50% of the total, which reinforces a Santa Maria neighborhoods and Expansion Zone. Analyzing the neighborhoods that have housed the largest amount of housing, it is noted that São Conrado, Jabotiana, Farolândia and Santa Maria account for more than 46% of the total, comprising 17,051 units (FRANÇA, 2016).

As for the housing stock replenishment aspect, these programs have as discourse the reduction of the housing deficit, however, it is not what is verified. The data point to the low effectiveness of care for families with incomes lower than 3 minimum wages, due to the greater difficulty of access to formal housing. The majority of the beneficiaries are in the range of 3 to 10 minimum wages, especially PMCMV which corresponds to more than 90% of the housing offer. This proves the contradictory performance of the program, favoring the segment of higher income, with families from 0 to 3 minimum wages, still lacking the possibility of acquiring their housing. Thus, the same situation that occurred with BNH, with greater employability of resources in the INOCOOP projects, than in Aracaju, financed 67 sets, in contrast to the 47 built by COHAB.

In the speech of the federal government, the PMCMV should meet progressive goals in fulfillment of previous ones, which meant a concern only in quantity of housing, without considering important aspects such as housing quality and the place where these enterprises were inserted. Thus, the rationalization of construction occurs, above all, with the repetition of projects and the construction process, expanding scales and promoting standardization. Unlike BNH, the maximum number of dwellings per enterprise was defined by Federal Law No. 11,977 / 2009, which established a limit of 300 dwellings, in the case of closed condominiums and 500 units in allotments, which is considered an advance in normative terms in the PMCMV. However, builders easily "circumvent" this rule by subdividing projects into stages, but on contiguous land, with the same typologies, constructive solutions, and architectural designs. This practice was identified in the licensing processes, and of the 45 condominiums, 13 were approved in up to 5 stages, totalling 3,567 dwellings, most of them located in the Jabotiana neighborhood and the Expansion Zone (FRANÇA, 2016).

With regard to the quality of housing, both consider only the guarantee of housing (considering the quantity), without taking into account access to infrastructure and public services, further deepening social inequalities. The most recent program deserves severe criticism for directing poor families to peripheral and neighboring areas, deepening the process of segregation and social exclusion and distancing, contradictory to the realization of the right to the city and housing, as guaranteed by the City Statute. In this aspect the PMCMV is considered more aggressive than the BNH of the military that foresaw the removal of the poor to the periphery, but had the idea of the industries and nearby commerce, which did not happen with the recent program, that did not allow commercial activity in its enterprises. That is, a setback.

Brief reflection: is PMCMV a replicate model?

If the PMCMV, in the general scope, evolved in the normative aspect, also reached an amount of housing units *quantidade de unidades habitacionais* much larger than the BNH. In 5 years, 9,986 houses were built, corresponding to 37% of the total financed by BNH in 34 years. That is, quantitatively, the PMCMV was successful. On the other hand, it has regressed on the architectural characteristics of the dwellings and town planning of the enterprise and the environment. It is pointed out, as the main cause, the protagonism of the real estate market in the decisions. The objective of mass profit, violates the right to the city and disregards the quality of the dwellings (in the broad concept), as it applies the quantitative rationality, instead of the qualitative personification of the dwelling and the city.

In an attempt to limit the effects of the economic crisis, as occurred in the 1960s, and repeatedly in the first decade of the twenty-first century, housing policy served to warm up the civil construction sector, inserting it as a determining actor in construction of the dwelling. Considering similarities in the service delivery structure, the families from 0 to 3 minimum salaries that make up the housing deficit, were not reached as the other classes from 3 to 10 minimum salaries. In both, the premise of equating the problematic housing scenario, was not achieved, and there was a sharp chasm between discourse and practice.

The most relevant point is based on the difficulty of access to urbanized land for the implementation of residential groups facing the lower layers, an obstacle that neither the BNH nor the PMCMV were able to face effectively. In contrast, these programs have contributed to aggravate land speculation and social exclusion.



Each new housing complex built in scattered areas, with the justification of the low land value, later implementing infrastructure and road system, with state resources, stimulate land speculation. The population in need of housing, without being able to pay for more equipped areas, moves further, increasing the peripheralisation. There is no doubt that the absence of effective implementation of the instruments to combat speculative land retention and urban real estate and the democratization of access to housing established by the City Statute has contributed, contradictorily, to the rise of the real estate market, for the ineffectiveness of housing policies, and for distancing the fulfillment of the right to the city.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Sarah L. A França

Architect and Urbanist from Universidade Tiradentes (2004) and specialist in Urban Planning and Management of Cities by Salvador-UNIFACS University, Master's and PhD in Architecture and Urbanism from Fluminense Federal University. Adjunct Professor, Department of Architecture and Urbanism, Federal University of Sergipe and Leader of the Center for Urban Studies, Planning and Practice - CEPUR. Evaluator of the Right to the City Magazine, Tesista Fellow, Lincoln Institute of Land Policy, Member of the Latin American Network of Urban Theory Researchers. State Councilor of the Architecture and Urbanism Council of Sergipe.

Vera L. F. Rezende

Architect and Urbanist from the Federal University of Rio de Janeiro (1975), PhD and postdoctoral degree in Architecture and Urbanism from the University of São Paulo (USP). She is an associate professor at the Universidade Federal Fluminense - UFF and the Postgraduate Program in Architecture and Urbanism. He has experience in the area of Urban and Regional Planning, with emphasis on Fundamentals and Theory of Urban and Regional Planning and History of Urbanism, working mainly in the following subjects: urban planning, history of urbanism, environmental planning, urbanism and urban and environmental policies. Research Fellow at CNPQ Productivity Level 1C.

Bibliography

Lygia Nunes Carvalho. "*As políticas públicas de localização da habitação de interesse social induzindo a expansão urbana em Aracaju-SE*". Dissertação (PhD diss., FAUUSP, 2013).

Sarah Lúcia Alves França. "*Estado e Mercado na produção contemporânea de habitação de Aracaju-SE*". (PhD Thesys., PPGAU/UFF, 2016).

Vera Lúcia Alves França. *Aracaju: Estado e Metropolização*. (São Cristóvão: UFS, 1999).



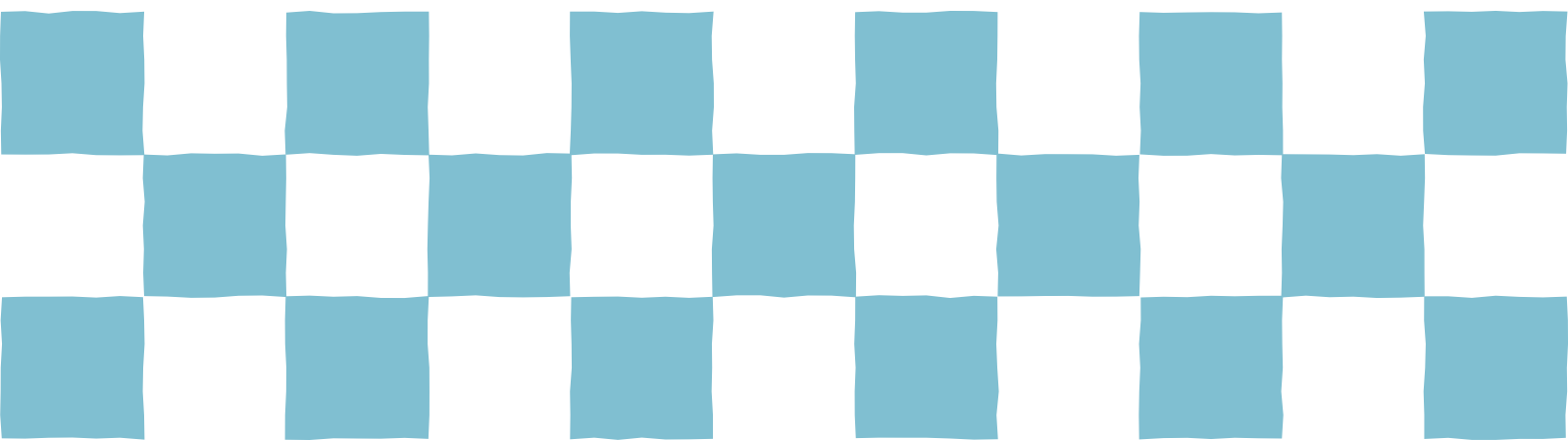
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

50 Housing Typologies



Transplanting Hong Kong High-rise Housing During the Time of Transition: Wanglongmen Residential Quarter, Chongqing, 1982-1992

Liran Chen (Faculty of Architecture, University of Hong Kong)

As a developed region with overseas identity but maintaining close relationship with mainland China, Hong Kong had profound influences on architectural and urban modernization of mainland Chinese cities in China's post-1978 economic reform era, especially during the early stage of reform. Chongqing is an inland city of China that has been receiving the influences from Hong Kong since the outset of reform, which is a significant aspect of the recent urban history of Chongqing that remains to be explored. Located on Yangtze riverfront area of Chongqing, Wanglongmen residential quarter project (1982-1992) was designed by local architects in Chongqing in the early reform, but was influenced by Hong Kong modern high-rise residential quarters in terms of its general layout, individual building design, flat type design and landscape design. However, the finalized design scheme of Wanglongmen project was significantly different from the orthodox Hong Kong high-rise housing. This paper focuses on the case study of Wanglongmen project in terms of how it was planned, designed and implemented to preliminarily explore how Chongqing learned from Hong Kong in pursuit of modernity in China's early reform era. The study finds that when the orthodox Hong Kong high-rise housing mode was transplanted to Wanglongmen project in Chongqing, such mode interacted with the legacies of China's pre-1978 planned-economy era, including small economic volume, underdeveloped housing commodification owing partly to ideological controversy, and vague building code. The interactions produced walk-up high-rise residences, and influenced building massing and landscaping. Besides, due to the inertia of China's planned economy in the early reform, the design of Wanglongmen project was not aimed primarily at serving capitalist production, so the logic behind some high-rise housing design tactics changed from pursuing commercial profit to pursuing public interest during its transplantation from Hong Kong to Chongqing. The paper argues that when China was transforming from the planned economy to the market economy in the early reform, the influences from Hong Kong were emerging but the remains of the planned-economy era still prevailed. Such inertia of China's planned-economy era hindered Chongqing architects from duplicating Hong Kong housing comprehensively in the early reform, but allowed them to transplant and reinterpret the housing modernity of Hong Kong in an idealistic and creative way.

The Special Interior Reform Plans: An instrument to improve the working class housing estates in Spain during the first years of the current democracy. The case of Valladolid

José Luis Sáinz Guerra (Universidad de Valladolid)

During the first years of the current democracy in Spain, between 1976 and 1990, a period of city government began in which there was a predominance of actions aimed at modifying the city planning of almost all Spain's cities. The city planning policies carried out by these corporations during this first period were of two kinds; on the one hand, a new General Plan was drawn up that curbed the speculative excesses of the preceding period; on the other hand, there were interventions in the peripheral housing estates that needed most doing to them and which had been forgotten by the Administration until that moment. During the periods of intense economic development in the 1960s, faced with the inability of the official city planning to provide answers to the need for housing, many suburbs were built outside the law, lacking municipal authorisations, without architects or planners. Sometimes, they originated in land grabs, irregular sales of plots and self-built slums. The objectives of these plans were to deal with the problems of these housing areas in an integral fashion, through the provision of public facilities and the improvement of both infrastructures and housing. The ideas put forward to justify these policies were: to redress the neglect of these areas by previous governments and the demand for an egalitarian city. In the case of Valladolid, the new city council that arose from the first democratic elections in 40 years selected several suburbs in which to intervene and organised a team of professionals who drew up a Special Interior Reform Plans, known as the "PERIS", with these same objectives. The "PERIS" were the base upon which were built the city planning decisions for these neglected suburbs. This policy was used in the following suburbs: España, Belén-Pilarica, Pajarillos Altos, Las Flores, San Adrián, Las Villas, La Farola, etc.

In conclusion, various operations were set up to recuperate the urban fabric of the city, opening up the field to new experiences in urban interventions; interventions which would clearly mark a renewal of the city planning instruments.

Housing Development Methods as Generator of Forming and Transforming Seoul into an 'Apartment Complex City': 1960s-present

Soe Won Hwang (Seoul National University, Graduate School of Environmental Studies, Department of Urban and Regional Planning)

Seoul has materialized a unique built form on its urban terrain through aggressive apartment building over the last half-a-century. The morphological attributes of Apartment Complex (AC) – a large-scale, single-parcel private territory in Korea – such as diversification of complex design and expansion of green-space allowed by underground parking, and higher density have been increasing. The historical formation of apartment complexes differs significantly based on elements such as the development policies in each period, development mechanisms, the degree of public control, and the extent of private engagement. The development methods as an implementation tool of public policy and city planning dictated how apartment complexes were shaped and where they were to be located. As such, aggressive conversion has resulted in the current urban landscape; Seoul now has over 3,000 apartment sites. The research will examine the consequences of the entire 'apartment complexes' which is defined as possessing more than two apartment buildings in a single complex parcel, in Seoul and their morphological characteristics, particularly affected by development methods over time.

The analysis is composed of (1) basic historical overview on planning policies and development methods that principally encouraged the apartment complex construction in the context of Seoul's urban expansion since the 1970s and (2) morphological attribute of Seoul's entire apartment complexes (2,172)

The main development that promoted apartment complex construction include the Han River Land Reclamation Project (1970s), Gangnam Development and Land Readjustment Project (1970s and 1980s), Housing Site Development Project (1980s to present), Residential Redevelopment and Reconstruction Projects (1990s to present) and other spontaneously built-up areas. The morphological attribute includes the size, shape, layout, density and other spatial aspects of physical elements that constitute apartment complex. To this objective, the formal characteristics of apartment complexes are analyzed in term of such morphological elements as plot (apartment complex as single parcel), building, street and density among others. 'Internal forces' and 'external forces' influencing the morphological characteristics is examined, where internal force refers to the interrelationship between the morphological elements and external force means the influences coming outside of the physical form itself, such as development method and development period. Evidences based on data analysis will present a grounded typological understanding of the form of apartment complexes. The morphological characteristic in relation to development method provides insights related to genesis aspects of apartment complex emergence regarding its morphological characteristics. This study aims at understanding Seoul's urban form and landscape through apartment complexes. By focusing on a morphological aspect, the study intends to examine the spatial manifestation of an aggressive apartment complex building that has formed and transformed Seoul over the modernization years.



Transplanting Hong Kong High-rise Housing During the Time of Transition: Wanglongmen Residential Quarter, Chongqing, 1982-1992

Liran Chen

* PhD Candidate, Department of Architecture, University of Hong Kong, clraaa@sina.com

Hong Kong has been influencing the urban development of Chongqing since China's post-1978 reform, which is a significant aspect of the contemporary urban history of Chongqing that remains unstudied. This case study focuses on the planning, design and implementation of Wanglongmen residential quarter project (1982-1992) to preliminarily explore how Chongqing learned from Hong Kong in pursuit of modernity in the early reform. The study finds that its planning and design were inspired by orthodox Hong Kong high-rise housing mode, but when transplanted to Chongqing, such mode interacted with the legacies of China's pre-1978 planned-economy era, including small economic volume, underdeveloped housing commodification owing partly to ideological controversy, and vague building code. The interactions produced walk-up high-rise residences, and influenced building massing and landscaping. Besides, the logic behind some design tactics changed from pursuing commercial profit to pursuing public interest during the transplantation. The paper argues that when China was transforming from planned economy to market economy in the early reform, the influences from Hong Kong were emerging but the remains of the planned-economy era still prevailed. Such interim hindered Chongqing from duplicating Hong Kong housing comprehensively, but enabled Chongqing to reproduce Hong Kong's modernity in an innocent and creative way.

Keywords: Housing; China's Early Reform; Hong Kong; Transplantation; Planned-economy Legacies

Introduction

Mainland China re-opened itself to the western world since 1978 to practice economic reform, trying to receive overseas influences as a way to modernize the state. During the early reform era, the first wave of impact on mainland China was from overseas Chinese regions, including Hong Kong.¹ Hong Kong was a developed region with overseas identity but geographically adjacent to mainland, and Hong Kong residents were familiar with Chinese culture and could effectively communicate with mainland in Chinese language, which facilitated the communication and exchange between mainland and Hong Kong. Hong Kong had significant influences on the architectural and urban modernization of mainland China in the reform era. For example, in the early reform, by referring to Hong Kong, mainland was able to develop land marketization and housing marketization, and by introducing the practice of Hong Kong architects to mainland cities, mainland was able to be familiar with the modern design concepts and approaches of some building types (such as international hotel).²

As an inland major city of China, Chongqing was influenced by Hong Kong at the outset of reform as well. Wanglongmen residential quarter was among the earliest modern high-rise residential quarters of Chongqing. The project was conducted from 1982 to 1992, a period when China was transforming from the socialist planned economy system to the market economy system, and when Hong Kong high-rise housing cases were being introduced to mainland China. The general layout, individual building design, flat type design and landscape design of the project were all influenced by Hong Kong. However, the finalized design scheme was significantly different from the orthodox Hong Kong high-rise housing. The case study analyses the process of Wanglongmen residential quarter design to answer the following questions: what influences did Hong Kong have on the planning and design of Wanglongmen residential quarter? In what ways did the architect absorb such influences, and how were the ways of absorbing the influences related to the context of China's early reform? The paper attempts to contribute to the research of the influences of Hong Kong on the urban development of Chongqing during the early reform, a significant aspect of the contemporary urban history of Chongqing that remains to be explored.

Learning from Hong Kong Proactively: Designing Wanglongmen High-rise Residential Quarter

During the socialist planned-economy era before 1978, China followed the development strategy prioritizing production over consumption. Industrial development gained priority, while housing, categorized as part of social welfare and not directly productive, did not receive adequate investment. Such development mode incurred low-level housing development and housing shortage.³ During the early reform era, Chinese cities launched urban regeneration and attempted to resolve urban housing shortage.



Located on the riverfront mountainous slope of Chongqing, Wanglongmen area used to be a shanty town with poor living conditions.⁴ In 1982, the Real Estate Bureau of Chongqing (hereafter abbreviated as REBC) listed Wanglongmen area as one of the key areas for regeneration.⁵ The regeneration of Wanglongmen area was primarily aimed at resolving the housing shortage and improving the living conditions of local residents by replacing the shanty town with modern residential environment, rather than pursuing commercial profit: the commercial property market in the early 1980s of Chongqing remained to be developed.

REBC entrusted the regeneration design to the local architect Congzheng Zhang.⁶ Assisted by his colleagues, Zhang produced a design of high-rise residential quarter for Wanglongmen area in 1983.⁷ Zhang planned to set high-rise residences along the edge of the site (Figure 1), arguing that such layout could not only accommodate all the residents wishing to move back after the regeneration, but also leave adequate open space at the centre of the area.⁸ Therefore, Zhang set five high-rise buildings along the edge of the site, including Building I, II, III and V as residences and Building IV for office and commerce use.⁹ By applying high-rise housing, the number of households the site could accommodate raised: before regeneration, 494 households were to be relocated, while Wanglongmen residential quarter would provide dwelling for 901 households.¹⁰ Meanwhile, the site coverage decreased from 67% to 44%.¹¹

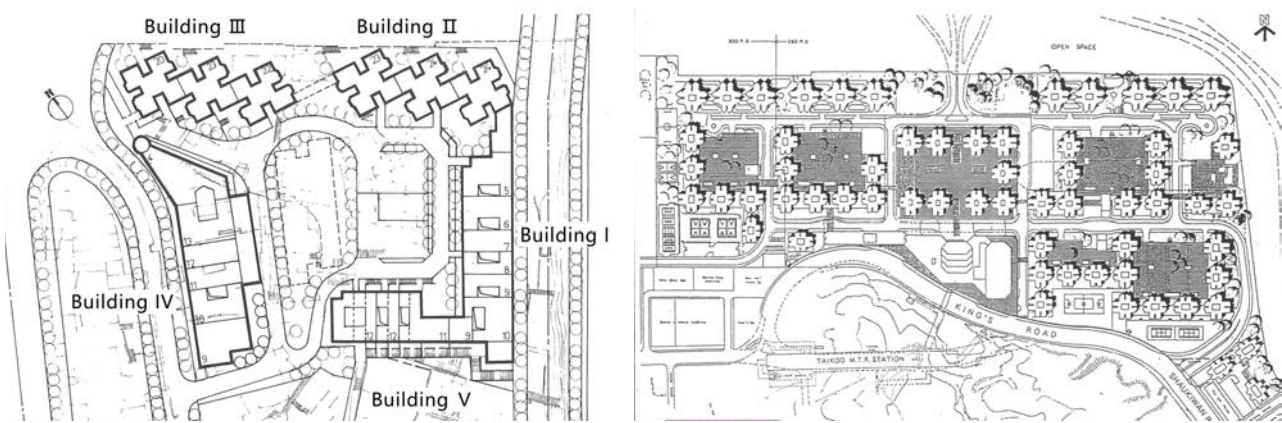


Figure 1. The Master Plan of Wanglongmen Residential Quarter in Chongqing (Left) and Taikoo Shing in Hong Kong (Right)

As Zhang recalled, in the early reform era, mainland architects were beginning to be exposed to Hong Kong high-rise housing cases.¹² In the mid-20th century, Hong Kong bore massive influx of immigrants from mainland China.¹³ In 1956, Hong Kong government released the new Building Ordinance allowing the increase of building height to accommodate the increasing population,¹⁴ which triggered the high-rise development in Hong Kong. Faced with constructive land shortage, both the public housing and commercial housing development in Hong Kong fought for every inch of land: public housing strived to increase the number of floors to provide residential space for the soaring population, while commercial housing increasingly added floors to enhance plot ratio to maximize commercial profit. Besides, both of them evolved towards modern high-rise residential quarters with integral planning and equipped with comprehensive supporting facilities. Such residential quarters as public housing appeared in the late 1950s, represented by North Point Estate (completed in 1957).¹⁵ For commercial housing, in the late 1960s, as the economy of Hong Kong started to take off, the middle class of Hong Kong emerged, and their demand for housing promoted commercial housing development, and high-rise residential quarters with superior quality started to be popularized after the commercial success of Mei Foo Sun Chuen (developed from 1965-1978).¹⁶

Since China's reform, the planning and design approaches of high-rise and high-density residential quarters in Hong Kong were widely introduced to mainland China, and "it was fashionable at that time to learn from them."¹⁷ By reviewing the available papers published in mainland architectural journals between 1978 and 1983 that involved high-rise and high-density housing development of Hong Kong,¹⁸ one can catch a glimpse of how mainland architects at that time perceived Hong Kong high-rise housing:

Firstly, on the one hand, some of such papers emphasized the capitalist nature of Hong Kong and its housing problems incurred partly by capitalism and free market, such as high housing price, scarce housing resources and uneven distribution of housing resources to different social classes; on the other hand, most papers accepted and praised Hong Kong high-rise and high-density housing design approaches, and expressed the authors' eagerness



to learn from them. This to some extent reflected an ambivalent attitude of mainland Chinese towards overseas civilization during the early reform.

Secondly, these papers frequently referred to some Hong Kong housing design approaches, including: the comprehensive planning of residential quarters; taking advantage of high-rise housing to increase residential density and decrease site coverage simultaneously; the mixed-use development of residential quarters; the emphasis on landscaping for exterior space, even if such space was very limited; the three-dimensional design mode, such as “podium & tower” mode;¹⁹ the popularity of high-rise tower, or the connection of individual high-rise towers into a slab; and the popularity of the concept of “living room” in the flat type design in Hong Kong. These Hong Kong high-rise housing design tactics had profound influences on mainland urban housing development.

The design of Wanglongmen residential quarter coincided with some of the features listed above. Firstly, as aforementioned, Zhang placed high-rise residences on the site edge and left open space in the middle to increase residential density and decrease site coverage simultaneously, and it was inspired by Hong Kong. In addition, when the concept of living room was not popularized in mainland during the early reform, in Wanglongmen residential quarter design, each household in Building II and Building III was equipped with a living room, which was also influenced by Hong Kong. Furthermore, the plans of Building II and Building III were not perpendicular to the riverbank, but were rotated to provide river view to as many households as possible. At that time, Taikoo Shing, a large scale commercial residential quarter in Hong Kong, was frequently exposed in mainland architectural journals. In this project, the edges of the plans of the 13 residential towers set closest to Victoria Bay were not parallel to its waterfront bank line. Instead, such plans were diamond-shaped to provide more households with river view,²⁰ and this inspired Zhang to rotate Building II and Building III for the same purpose. These features demonstrate the influences of Hong Kong high-rise housing on Wanglongmen residential quarter in China's early reform.²¹

The Controversies of High-rise Housing in the 1980s of China

However, when Hong Kong high-rise housing mode was being introduced to mainland in the early reform, whether high-rise housing was suitable for relieving urban housing shortage was controversial in China. The proponents argued that high-rise housing would help save land resources, improve the living condition of the residents, increase urban greening, enhance residential density, and modernize the cityscape; the opponents argued that high-rise housing would demand high investment, long duration of construction, high consumption of energy and building materials, and provide the residents with less livable environment, etc.²² Elevator was an important factor that put high-rise housing in dispute. For example, during the National Colloquium on the Economic Effects of High-rise Housing held in 1981 in Shanghai,²³ the participants pointed out that the cost of the operation and maintenance of elevators was the main source of the everyday operation cost of high-rise residences. For instance, “the total cost of elevator operation and maintenance of the high-rise in residences in Qiansanmen area in Beijing in 1980s reached 750000 yuan, while the rental income of these residences was no more than 500000 yuan, insufficient to cover the expenses incurred by elevators. In Shanghai, for the high-rise residences in such areas as Baijiudian, Beizhan, Lujiazhai and Caixibeilu, the cost generated by elevators took up 61%-98% of the rental income of high-rise residences.”²⁴

Therefore, developing high-rise housing in the early reform was a challenging option, and scarce finance was an important obstacle. It should be noted that such scarcity was not only because of the small economic volume of China in the early reform era, but also partly because of the economic system then: although the state initiated housing reform since 1979,²⁵ in the early 1980s, due to the remains of China's socialist planned economy, whether urban housing should be regarded as commodity remained ideologically controversial: some insisted on the nature of housing as welfare, while some totally denied it, or regarded its nature as the combination of welfare and commodity.²⁶ Such controversy to some extent impeded housing commodification in the early 1980s, and hindered the diversification of the sources of housing finance, which partly contributed to the shortage of housing investment as well.

However, REBC accepted Zhang's high-rise housing scheme, largely because the residences in the scheme were not equipped with elevators at all.

Localizing Hong Kong High-rise Housing: Walk-up High-rise Residences

Zhang faced two problems during the project design. Firstly, high-rise residences would request the provision, operation and maintenance of elevators, imposing significant financial pressure on the project owner and the residents, thus reducing the feasibility of project implementation. Secondly, the project was located on the riverfront mountainous slope: when the residents returned, they would have to walk down 20-38m on the slope to



the bottom floors of the residences and take elevators to ascend to their respective households; when they went out, they would have to climb 20m-38m up the slope on foot after descending to the bottom floors by elevator.

Zhang attempted to resolve the two problems simultaneously by taking advantage of mountainous topography to equip the residences with extra entrances that directly accessed the middle floors. Taking Building II and III as an example: Zhang set an elevated corridor that connected the waists of Building II and III with the top of the adjacent slope, so that the residents could directly enter the waists of Building II and III without walking down the slope, and then ascend or descend to respective floors on foot, which could significantly reduce the vertical walking distance (Figure 2). Also, by controlling the elevation of the corridor and the height of Building II and III, Zhang managed to guarantee that any resident in the buildings could access the nearest entrance by ascending or descending no more than 9 floors. In 1983, the first version of *Code for Fire Protection Design of Tall Buildings GBJ45-82 (Trial)* was put into trial. In this building code, residences with no more than 9 floors were categorized as multistory buildings.²⁷ As the earliest version of *Code for Fire Protection Design of Tall Buildings* in mainland China, the code remained to be deepened, and did not allow for the condition of building practices on mountainous topography. In other words, whether the residences in the cases such as Wanglongmen residential quarter should be considered as the high-rise or the multistory was not specified in the code. By taking advantage of the vague point of the code, Zhang argued that Building II and III could be built following the standards of multistory residences, so that the installation of elevators could be cancelled to save budget.



Figure 2. Transforming the High-rise into the Multistory with the Corridor by Taking Advantage of Mountainous Topography

As an approach without any historical precedent, the design of walk-up high-rise residences triggered controversies and doubts. To verify whether this design approach was really reasonable, by taking Building II and III as an example, Zhang compared the proposal of “walk-up high-rise residences with elevated corridor” with “high-rise residences with elevators without elevated corridor”, calculating the estimated vertical walking distance of the residents and the estimated investment in respective cases. As the result indicated, in the condition of “high-rise residences with elevators without elevated corridor”, the residents of Building II and III would have to ascend and descend on foot for a daily total height of 21.57km, while such height would be only 10.77km in the condition of “walk-up high-rise residences with elevated corridor”. In the aspect of investment, for Building II and III, the estimated cost of the construction and management of elevators was 2.097 million Chinese yuan, while it would cost only 0.3385 million Chinese yuan to build the elevated corridor.²⁸ Therefore, Zhang managed to convince different parties that the proposal of walk-up high-rise residences with elevated corridor could save both climbing distances and cost, and the proposal was finally accepted by all parties. However, Zhang still reserved the space for elevator shaft in each residential unit of Building II and III (Figure 3), in case of the future need for elevators.

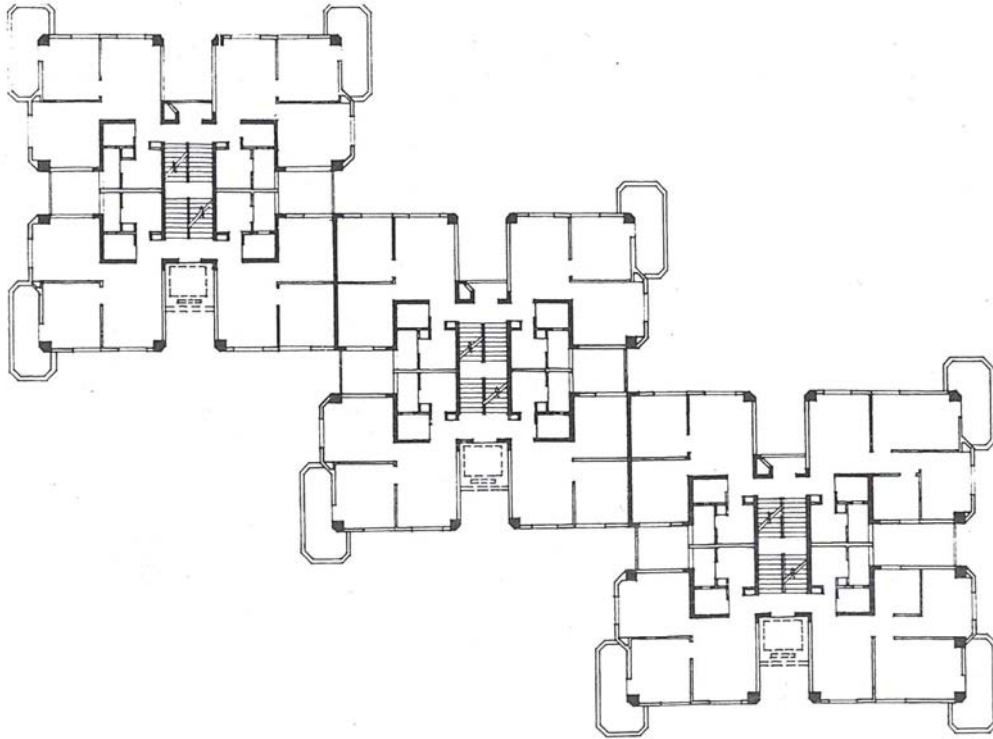


Figure 3. Zhang Reserved Space for Elevator Shafts, Marked with Dotted Lines

Wanglongmen walk-up high-rise residential quarter was a variation of Hong Kong high-rise housing planning and design mode after being introduced to Chongqing. On the one hand, it was the shortage of housing investment that led to the cancellation of elevator installation; on the other hand, the vagueness of building code facilitated such adjustment. The investment shortage, as aforementioned, was not only due to the small economic volume of China during the early reform, but also because of underdeveloped housing commodification in China's early 1980s partly because of ideological controversy.²⁹ The vagueness of building code was another legacy of planned-economy era that reflected the backwardness of housing development techniques in the planned-economy period and its low starting point of development in the early reform. Therefore, Wanglongmen walk-up high-rise residential quarter was produced by the interaction between the high-rise housing mode introduced from Hong Kong and the economical, ideological and technical legacies of China's planned-economy era.

Such interaction also affected the massing of Building I along the riverbank. Compared to the other three residences, Building I could offer its households the best access to river view, which would be a significant selling point for commercial property today. However, instead of maximizing its volume, Zhang shaped it into a terraced form, which generated a void of 60 meters wide so as to "provide access to beautiful river view to around 75% of the households in the residential quarter".³⁰ In other words, by sacrificing the number of households in Building I with the best river view, Zhang created the terraced form for public interest. Since the 1990s, however, as housing commodification developed in Chongqing, commercial property projects occupied riverfront sites with maximum development intensity competing for access to river view as a selling point, and a growing number of commercial high-rise residences along the riverbanks formulated a "high-rise wall" that separated the rivers from the built areas behind the riverbanks, privatizing the river view and making it the privilege of the households closest to the riverbank (Figure 4). In contrast, for Wanglongmen residential quarter, on the one hand, the high-rise housing introduced from Hong Kong made it possible to maximize the volume (and therefore, the commercial potential) of Building I as the building with best river view resource; on the other hand, as China's socialist planned economy system remained to be fully transformed to market economy system in the early 1980s, and whether housing should be regarded as commodity remained controversial, the design of Building I was not based on the maximization of commercial profit, but was aimed at public interest. Such riverfront high-rise residence with terraced form was produced by the interaction between the high-rise housing introduced from Hong Kong and the legacies of the the planned-economy era (including the remains of planned economy system and the inertia of positioning housing as welfare).



Figure 4. The Terraced Form of Building I (Left) that was Aimed at Public Access to River View, and the “High-rise Wall” in Chongqing since the 1990s that Privatized River View (Right)

Although Zhang strived to reduce project budget via design, after the design scheme was produced, the parties concerned still could not provide sufficient funds for project implementation. Besides, the complex topography also increased the difficulty of construction. Consequently, the project was suspended for five years.³¹

1985: Visiting Hong Kong and Its Consequences

In 1985, Zhang was working for the project of The South China Oil Center, which was co-invested by the investors from mainland China and Hong Kong. The Hong Kong investor invited the project design team to pay a short visit to Hong Kong to broaden their eyesight. This influenced the design of Wanglongmen residential quarter.

As Zhang recalled, he was greatly impressed by the commercial housing properties he visited in Hong Kong, such as Taikoo Shing: “I found that some residential quarters of Hong Kong, despite limited site area, were beautified with elaborate landscape design, while we did not attach importance to landscaping at that time.”³² “Even a small segment of space was carefully decorated.”³³ This echoed the general impressions of mainland architects on Hong Kong high-rise development then: in the early reform, practicing exquisite landscaping for residential quarters was a relatively novel concept for mainland architects, and they perceived the delicate landscape elements in Hong Kong residential quarters as a representation of modernity. Inspired by the landscape he saw in Hong Kong, Zhang practiced landscape design for Wanglongmen residential quarter after returning to Chongqing, mainly in the form of roof landscaping (Figure 5). Zhang particularly hoped to enliven the terraced roof of Building I with landscaping, making it a public space accessible not only to the residents in Building I, but also to the whole residential quarter.³⁴

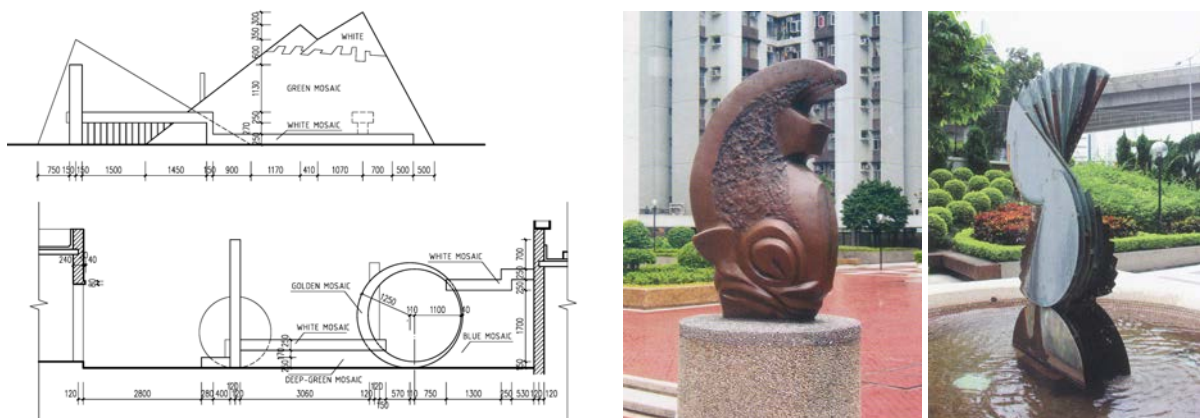


Figure 5. Rooftop Landscape Design for Wanglongmen Residential Quarter, Chongqing (Left), and the Landscape Elements Built in 1979 in Taikoo Shing, Hong Kong (Middle & Right)

Zhang’s reaction to the landscape design in Hong Kong exemplified how Hong Kong impressed mainland-China architects as a highly modern city and how eager mainland China was for modernity at that time. However, it



should be noted that the landscaping for the Hong Kong commercial housing properties that Zhang visited, including Taikoo Shing, was based on the logic of capitalist production: such landscaping was part of the means of stimulating the sale of property. By transplanting such landscape elements from Hong Kong to Chongqing, Zhang attempted to beautify the public space of Wanglongmen residential quarter only for public good. In other words, the logic behind such landscape elements changed during the transplantation, from pursuing capitalist profit to pursuing public interest. During the 1980s, on the one hand, China began to re-open itself to the western world, and the overseas design approaches could be introduced to China; on the other hand, the commercial housing market remained to be developed. It was this intermediate state of China's 1980s that enabled Zhang to absorb design experiences from Hong Kong commercial properties, but apply them for public good instead. Such interim nature of China's 1980s made it possible for mainland architects like Zhang to remain a pure and idealist attitude towards modernity at that time.

To improve the chance of getting the landscape design implemented, Zhang designed landscape elements with simplified form as a way to control construction cost.³⁵ Compared to the landscape elements with diverse decorative materials in Taikoo Shing, the rooftop landscape sculpture elements was covered only with the mosaic of different colors. However, during the working drawing joint review, it was still decided that the construction of rooftop landscape be cancelled.³⁶ The scarcity of housing finance, a legacy of China's planned-economy era, once again conflicted with the architect's pursuit for housing modernization inspired by Hong Kong.

The Progress of Housing Commodification and Project Implementation

In 1987, Chongqing made considerable progress on the housing reform, such as the establishment of the real estate trading center of Chongqing in April,³⁷ the release of *The Reform Plan of Chongqing Urban Housing System (Exposure Draft)* on 31st April,³⁸ the imposition of land use fee on the departments and individuals using urban land starting on 1st July,³⁹ and the organization of two Real Estate Individual Trade Fairs in September and October.⁴⁰ In this context, not only some enterprises showed their willingness to invest in Wanglongmen residential quarter project, but also REBC itself estimated that there should be an increasing number of individuals purchasing housing in the future.⁴¹ The progress in housing commodification in Chongqing gave REBC the confidence for project implementation. In the same year, REBC re-evaluated the feasibility of Wanglongmen residential quarter project, and was convinced that the project construction was financially feasible.⁴² The construction started in 1988,⁴³ and the project was completed in 1992,⁴⁴ ten years after it was initiated.

Conclusion: Housing Transplantation During the Time of Transition

As an inland city, Chongqing had less direct communication and interaction with Hong Kong than the Pearl River Delta region, and Wanglongmen residential quarter project was conducted locally without involving any Hong Kong stakeholders. However, the local architect proactively absorbed housing design experiences from Hong Kong. This reflects the strong motivation of mainland architects in the early reform to learn from overseas in pursuit of modernity, and indicates how profound and wide Hong Kong's influences had on the urban development of mainland China then.

However, the project design was conducted when mainland China was still transforming from the socialist planned economy to the market economy, and such transitional nature obstructed Chongqing from learning from Hong Kong comprehensively. When Hong Kong high-rise housing was introduced to Chongqing, it frequently conflicted with the scarcity of financial and technical resources, due to the legacies of the socialist planned-economy era: economically underdeveloped during the planned-economy era, Chongqing could not fully afford the introduced Hong Kong high-rise housing mode at the outset of reform; as whether housing should be commodified remained controversial then, housing property market remained to be developed, leading to the lack of diverse sources of housing investment, which exacerbated the scarcity of housing finance; the development strategy of mainland China during the planned-economy era that prioritized production over consumption led to low-level housing development, and resulted in the low starting point of the development of housing-related techniques in the early reform, which brought about the vagueness of building code then. These legacies of the planned-economy era combined to interact with the Hong Kong high-rise housing mode introduced to mainland China. Sometimes, the interaction hindered the implementation of some introduced design strategies, such as the landscaping for the residential quarter. Sometimes, it dramatically produced the variations of Hong Kong high-rise housing, such as walk-up high-rise residences, embodying the local architects' creativity peculiar to the early reform. Besides, due to underdeveloped housing commodification in Chongqing, when the architect was being exposed to the impact of Hong Kong commercial housing design tactics, he was able to transplant them in pursuit of public interest instead, during which he unconsciously endowed such tactics with new meaning, reflecting an innocent and idealized mentality of local architect in pursuit of modernity in the early reform. The case of Wanglongmen



residential quarter indicates the complexity and uniqueness of architectural knowledge exchange between mainland China and Hong Kong during the early reform, owing to the interim nature of this period.

Acknowledgements

The author thanks: Mr. Congzheng Zhang and Prof. Feng Lu for providing valuable historical clues for this research during the interview; Dr. Tao Zhu, Dr. Eunice M. F. Seng, Dr. Cole Roskam and Dr. Bin Jiang and others concerned for giving comments and suggestion on the research.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Liran Chen holds Bachelor of Architecture (Chongqing University) and Master of Architecture (Chongqing University) and is now a PhD candidate (University of Hong Kong). He is the member of Society of Architectural Historians (2017-present) and serves as the project coordinator in the organizing committee of HKU Student Chapter of the International Council for Research and Innovation in Building and Construction (2015-present).

Bibliography

Chongqing Shi Di Fang Zhi Bian Zuan Wei Yuan Hui (Chongqing Chorography Compilation Committee), *Chongqing Yearbook 1987*, Chongqing Nian Jian Fa Xing Bu (Chongqing Yearbook Circulation Department), Chongqing, 1987

Chongqing Shi Di Fang Zhi Bian Zuan Wei Yuan Hui (Chongqing Chorography Compilation Committee), *Chongqing Yearbook 1988*, Chongqing Nian Jian Fa Xing Bu (Chongqing Yearbook Circulation Department), Chongqing, 1988

Chongqing Shi Di Fang Zhi Bian Zuan Wei Yuan Hui (Chongqing Chorography Compilation Committee), *Chongqing Yearbook 1989*, Chongqing Nian Jian Fa Xing Bu (Chongqing Yearbook Circulation Department), Chongqing, 1989

Han, Shaoqing, Tuo, Lianyu, and Guo, Jiang, "Guang Sha Qian Wan Jian, Pian Qu Ju Huan Yan---Wanglongmen Pian Qu Gai Zao Gong Cheng Jian Jie" ("Thriving Housing and Delightful Residents: Introduction to the Regeneration of Wanglongmen Area"), *Chongqing Jian Zhu (Chongqing Architecture)*, No. 1 (1993): 52-55

Huang, Weiwu, "Xiang Gang Jin Nian Xin Jian De Ji Ge Zhu Zhai Qu" ("A Few Hong Kong Residential Quarters Built in Recent Years"), *Housing Science*, No. 11 (1982): 13-16

Interview with Zhang, Congzheng, 5th February 2016. Agreed by the interviewee, the face-to-face interview was conducted by author and was audio-recorded to collect information about Wanglongmen residential quarter. The interview was based on the ethical approval from Human Research Ethics Committee (HREC), The University of Hong Kong. According to HREC, the audio recordings must not be spread.

Interview with Zhang, Congzheng, 9th March 2017. Agreed by the interviewee, the face-to-face interview was conducted by author and was audio-recorded to collect information about Wanglongmen residential quarter. The interview was based on the ethical approval from Human Research Ethics Committee (HREC), The University of Hong Kong. According to HREC, the audio recordings must not be spread.

Interview with Zhang, Congzheng, 18th March 2018. Agreed by the interviewee, the face-to-face interview was conducted by author and was audio-recorded to collect information about Wanglongmen residential quarter. The interview was based on the ethical approval from Human Research Ethics Committee (HREC), The University of Hong Kong. According to HREC, the audio recordings must not be spread.

Lu, Xiaodi, and Chen, Dexiang, "Gao Ceng Jian Zhu Gui Hua She Ji Zhong De Yi Xie Wen Ti" ("On Some Problems about High-rise Building Design"), *Chongqing Jian Zhu (Chongqing Architecture)*, No. 1 (1984): 1-4

Lv, Junhua, Rowe G, Peter, and Zhang, Jie (eds.), *Modern Urban Housing in China, 1840-2000*, Tsinghua University Press, Beijing, 2002

Shelton, Barrie, Karakiewicz, Justyna and Kvan, Thomas (translated by Hu, Daping and Wu, Jing), *The Making of Hong Kong: From Vertical to Volumetric*. Publishing House of Electronics Industry, Beijing, 2013



Shi Jian Wei Gui She Chu (Planning and Design Office of Chongqing Municipal Commission of Urban Development), “Chongqing Shi Gao Ceng Jian Zhu Xiang Mu” (“High-rise Projects in Chongqing”), *Chongqing Jianzhu (Chongqing Architecture)*, No. 1 (1986): 65

Sun, Zhijing, “Gao Ceng Zhu Zhai Duo Ceng Hua De Tan Suo---Chongqing Wanglongmen Zhu Zhai Qun She Ji Jian Jie” (“Transforming High-rise Housing to Multi-story Housing: Introduction to the Design of Wanglongmen Residences, Chongqing”), *Sichuan Jian Zhu (Sichuan Architecture)*, No.2 (1989): 43-44

The Ministry of Public Security of the People’s Republic of China, *Code for Fire Protection Design of Tall Buildings GBJ45-82 (Trial)*. The Ministry of Public Security of the People’s Republic of China, Beijing, 1983

Wanglongmen Baixiangjie Qun Zhai 1# Lou Gong Cheng (The Working Drawings of Building I of Wanglongmen Residences in Baixiang Street), stored in Chongqing Urban Construction Archive, archive number: 070100-154, 1991

Wu, Luoshan, “Guan Yu Gao Ceng Zhu Zhai Jian Zhu Jing Ji Xiao Guo De Ji Ge Wen Ti---Zai Gao Ceng Zhu Zhai Jing Ji Xiao Guo Xue Shu Tao Lun Hui Shang De Xiao Jie Fa Yan (Zhai Yao)” (“On Some Problems of the Economic Effects of High-rise Residences”---Abstract of the Concluding Remark of the Academic Seminar on the Economic Effects of High-rise Residences”), *Jian Zhu Jing Ji Yan Jiu (Building Economics Research)*, No. 4 (1981): 26-29

Xu, Shengmo, “Tan Tao Gao Ceng Zhu Zhai De Jing Ji Xiao Guo He Fa Zhan Tu Jing” (“The Discussions on the Economic Effects and Development Paths---The Report on the National Academic Seminar on the Economic Effects of High-rise Residences”), *Fang Chan Zhu Zhai Ke Ji Dong Tai (Real Estate Housing Technology Trends)*, No. 11 (1981): 1-2

Xue, Qiuli, *Building A Revolution: Chinese Architecture Since 1980*, Tsinghua University Press, Beijing, 2009

Xue, Qiuli, *Contextualizing Modernity: Hong Kong Architecture 1946-2011*. The Commercial Press, Hong Kong, 2014

Xue, Qiuli, *The Global Impact: Overseas Architectural Design in China*. Tongjing University Press, Shanghai, 2006

Zhang, Chengji, Sun, Zhijing, and Zhang, Yueqing, “An Exploration in Fire-control Design for High-rise and High-density Block of Flats”, *Journal of Chongqing Institute of Architecture and Engineering*, Vol. 11, No. 2 (1989): 102-109

Zhang, Congzheng, “The Design of High Residence Building Group without Elevators---A Planning and Design of the Reconstruction of the Wanglongmen Region in Chongqing”, *Journal of Chongqing Jianzhu University*, Vol. 18, No. 4 (1996): 54-63

Zhang, Xingguo, and Xie, Wutong (eds.), *Jiao Shi Jian Zhu Yu Gui Hua She Ji Zuo Pin Ji (Academic Staff Planning and Design Works)*, China Architecture & Building Press, Beijing, 1997

Image sources

Figure 1: Zhang, Xingguo, and Xie, Wutong (eds.), *Jiao Shi Jian Zhu Yu Gui Hua She Ji Zuo Pin Ji (Academic Staff Planning and Design Works)*, China Architecture & Building Press, Beijing, 1997, 22, with additional illustrations by author (Left); Chan, K. W., *Density and design: high density private residential development in Hong Kong (TaiKoo Shing and Mei Foo Sun Chuen)*. Master’s Dissertation, University of Hong Kong, Hong Kong, 1993, 83 (Right)

Figure 2: Zhang, Congzheng, “The Design of High Residence Building Group without Elevators---A Planning and Design of the Reconstruction of the Wanglongmen Region in Chongqing”, *Journal of Chongqing Jianzhu University*, Vol. 18, No. 4 (1996): 60, redrawn by author

Figure 3: Zhang, Xingguo, and Xie, Wutong (eds.), *Jiao Shi Jian Zhu Yu Gui Hua She Ji Zuo Pin Ji (Academic Staff Planning and Design Works)*, China Architecture & Building Press, Beijing, 1997, 22

Figure 4: Zhang, Xingguo, and Xie, Wutong (eds.), *Jiao Shi Jian Zhu Yu Gui Hua She Ji Zuo Pin Ji (Academic Staff Planning and Design Works)*, China Architecture & Building Press, Beijing, 1997, 22 (Left); Chongqing Shi Wen Hua Ju (Chongqing Municipal Culture Bureau) and Chongqing Shi Bo Wu Guan (Chongqing Museum) (eds.), *A Picture Album of Millennium Chongqing*, Chongqing Publishing House, Chongqing, 2002, 15 (Right)

Figure 5: *Wanglongmen Baixiangjie Qun Zhai 1# Lou Gong Cheng (The Working Drawings of Building I of Wanglongmen Residences in Baixiang Street)*, stored in Chongqing Urban Construction Archive, archive number:



070100-154, 1991, redrawn by author (Left); Tai, Sheung Shing Victor, and Chow, Shun Keung, *Guide to Urban Sculpture in Hong Kong - Hong Kong Island*, Hong Kong Sculpture Society, Hong Kong, 2007, 146 (Middle) & 150 (Right)

Endnotes

¹ Qiuli Xue, *Building A Revolution: Chinese Architecture Since 1980* (Tsinghua University Press, Beijing, 2009). 71

² Ibid., 72, and Qiuli Xue, *The Global Impact: Overseas Architectural Design in China* (Tongjing University Press, Shanghai, 2006). 9-13

³ Junhua Lv, Peter G Rowe and Jie Zhang (eds.), *Modern Urban Housing in China, 1840-2000* (Tsinghua University Press, Beijing, 2002)

⁴ Before regeneration, the rate of dilapidated housing in Wanglongmen area was 80%, and most of the extant built structures within the area were improvised column-and-tie buildings constructed in 1930s and 1940s. In 1970s, two residents in Wanglongmen area died from the collapse of dilapidated buildings. Besides, the area was also threatened by unsafe geologic conditions such as unstable rocks. In addition, the living conditions in this area was extremely crowded. For dwelling space, the residences with a total floor area of 12639m² were occupied by 494 households, namely over 2200 residents. In 95 households, two generations shared one room; in 31 households, three generations shared two houses, and for the households with extremely crowded residential space, the average floor space per capita was merely 3.16m². See Shaoqing Han, Lianyu Tuo, Jiang Guo, "Guang Sha Qian Wan Jian, Pian Qu Ju Huan Yan---Wanglongmen Pian Qu Gai Zao Gong Cheng Jian Jie" ("Thriving Housing and Delightful Residents: Introduction to the Regeneration of Wanglongmen Area") [*Chongqing Jian Zhu (Chongqing Architecture)*, No. 1, 1993]. 52

⁵ Ibid.

⁶ Interview with Congzheng Zhang, 6th February 2016. Agreed by the interviewee, the face-to-face interview was conducted by author and was audio-recorded to collect information about Wanglongmen residential quarter. The interview was based on the ethical approval from Human Research Ethics Committee (HREC), The University of Hong Kong. According to HREC, the audio recordings must not be spread.

⁷ Interview with Congzheng Zhang, 9th March 2017. Agreed by the interviewee, the face-to-face interview was conducted by author and was audio-recorded to collect information about Wanglongmen residential quarter. The interview was based on the ethical approval from Human Research Ethics Committee (HREC), The University of Hong Kong. According to HREC, the audio recordings must not be spread.

⁸ Congzheng Zhang, "The Design of High Residence Building Group without Elevators---A Planning and Desing of the Reconstruction of the Wanglongmen Region in Chongqing" (*Journal of Chongqing Jianzhu University*, Vol. 18, No. 4, 1996). 56

⁹ Chengji Zhang, Zhijing Sun, and Yueqing Zhang, "An Exploration in Fire-control Design for High-rise and High-density Block of Flats" (*Journal of Chongqing Institute of Architecture and Engineering*, Vol. 11, No. 2, 1989). 103

¹⁰ Shaoqing Han, Lianyu Tuo, Jiang Guo, "Guang Sha Qian Wan Jian, Pian Qu Ju Huan Yan---Wanglongmen Pian Qu Gai Zao Gong Cheng Jian Jie" ("Thriving Housing and Delightful Residents: Introduction to the Regeneration of Wanglongmen Area") [*Chongqing Jian Zhu (Chongqing Architecture)*, No. 1, 1993]. 53

¹¹ Congzheng Zhang, "The Design of High Residence Building Group without Elevators---A Planning and Desing of the Reconstruction of the Wanglongmen Region in Chongqing" (*Journal of Chongqing Jianzhu University*, Vol. 18, No. 4, 1996). 57

¹² Interview with Congzheng Zhang, 5th February 2016. Agreed by the interviewee, the face-to-face interview was conducted by author and was audio-recorded to collect information about Wanglongmen residential quarter. The interview was based on the ethical approval from Human Research Ethics Committee (HREC), The University of Hong Kong. According to HREC, the audio recordings must not be spread.

¹³ Barrie Shelton, Justyna Karakiewicz and Thomas Kvan (translated by Daping Hu and Jing Wu), *The Making of Hong Kong: From Vertical to Volumetric* (Publishing House of Electronics Industry, Beijing, 2013). 69

¹⁴ Ibid., p. 77

¹⁵ Qiuli Xue, *Contextualizing Modernity: Hong Kong Architecture 1946-2011* (The Commercial Press, Hong Kong, 2014). 53

¹⁶ Barrie Shelton, Justyna Karakiewicz and Thomas Kvan (translated by Daping Hu and Jing Wu), *The Making of Hong Kong: From Vertical to Volumetric* (Publishing House of Electronics Industry, Beijing, 2013). 118

¹⁷ Congzheng Zhang, "The Design of High Residence Building Group without Elevators---A Planning and Desing of the Reconstruction of the Wanglongmen Region in Chongqing" (*Journal of Chongqing Jianzhu University*, Vol. 18, No. 4, 1996). 56

¹⁸ The papers reviewed are the ones accessible via the database of China National Knowledge Infrastructure (CNKI). As Zhang produced the design of Wanglongmen residential quarter in 1983, the reviewed papers only include the ones between 1978 and 1983 so as to precisely reflect the context of the housing knowledge diffusion from Hong Kong to mainland China, against which the design was produced.

¹⁹ The "podium & tower" mode means covering usually the entire site with a super-scale skirt building incorporating different public and commercial functions, while placing residential towers on the top of the skirt building, and the rooftop of the skirt building is usually landscaped as the exterior space of the residential quarter.

²⁰ Weiwu Huang, "Xiang Gang Jin Nian Xin Jian De Ji Ge Zhu Zhai Qu" ("A Few Hong Kong Residential Quarters Built in Recent Years") (*Housing Science*, No. 11, 1982). 14

²¹ The Influences of Hong Kong high-rise housing on Wanglongmen residential quarter was confirmed by Zhang during the interview on 18th March 2018. Agreed by the interviewee, the face-to-face interview was conducted by author and was audio-recorded to collect information about Wanglongmen residential quarter. The interview was based on the ethical approval from Human Research Ethics Committee (HREC), The University of Hong Kong. According to HREC, the audio recordings must not be spread.

²² Xiaodi Lu, and Dexiang Chen, "Gao Ceng Jian Zhu Gui Hua She Ji Zhong De Yi Xie Wen Ti" ("On Some Problems about High-rise Building Design") [*Chongqing Jian Zhu (Chongqing Architecture)*, No. 1, 1984]. 2

²³ Shengmo Xu, "Tan Tao Gao Ceng Zhu Zhai De Jing Ji Xiao Guo He Fa Zhan Tu Jing" ("The Discussions on the Economic Effects and Development Paths---The Report on the National Academic Seminar on the Economic Effects of High-rise Residences") [*Fang Chan Zhu Zhai Ke Ji Dong Tai (Real Estate Housing Technology Trends)*, No. 11, 1981]. 1

²⁴ Luoshan Wu, "Guan Yu Gao Ceng Zhu Zhai Jian Zhu Jing Ji Xiao Guo De Ji Ge Wen Ti---Zai Gao Ceng Zhu Zhai Jing Ji Xiao Guo Xue Shu Tao Lun Hui Shang De Xiao Jie Fa Yan (Zhai Yao)" ("On Some Problems of the Economic Effects of High-rise Residences"---Abstract of the Concluding Remark of the Academic Seminar on the Economic Effects of High-rise Residences") [*Jian Zhu Jing Ji Yan Jiu (Building Economics Research)*, No. 4, 1981]. 29

²⁵ Junhua Lv, Peter G Rowe and Jie Zhang (eds.), *Modern Urban Housing in China, 1840-2000* (Tsinghua University Press, Beijing, 2002). 198

²⁶ Ibid., 197



- ²⁷ The Ministry of Public Security of the People's Republic of China, *Code for Fire Protection Design of Tall Buildings GBJ45-82 (Trial)*. (The Ministry of Public Security of the People's Republic of China, Beijing, 1983) 3-4.
- ²⁸ Congzheng Zhang, "The Design of High Residence Building Group without Elevators---A Planning and Design of the Reconstruction of the Wanglongmen Region in Chongqing" (*Journal of Chongqing Jianzhu University*, Vol. 18, No. 4, 1996). 57-58
- ²⁹ For example, by 1985, only 7.22% of the housing property in Chongqing was private, which means housing commodification was underdeveloped and therefore the potential of individual and social finance remained to be exploited. For the proportions of different ownships of housing in Chongqing in 1985, see Chongqing Shi Di Fang Zhi Bian Zuan Wei Yuan Hui (Chongqing Chorography Compilation Committee), *Chongqing Yearbook 1987* [Chongqing Nian Jian Fa Xing Bu (Chongqing Yearbook Circulation Department), Chongqing, 1987]. 258
- ³⁰ Congzheng Zhang, "The Design of High Residence Building Group without Elevators---A Planning and Design of the Reconstruction of the Wanglongmen Region in Chongqing" (*Journal of Chongqing Jianzhu University*, Vol. 18, No. 4, 1996). 56
- ³¹ Shaoqing Han, Lianyu Tuo, Jiang Guo, "Guang Sha Qian Wan Jian, Pian Qu Ju Huan Yan---Wanglongmen Pian Qu Gai Zao Gong Cheng Jian Jie" ("Thriving Housing and Delightful Residents: Introduction to the Regeneration of Wanglongmen Area") [*Chongqing Jian Zhu (Chongqing Architecture)*, No. 1, 1993]. 52-53
- ³² Interview with Congzheng Zhang, 5th February 2016. Agreed by the interviewee, the face-to-face interview was conducted by author and was audio-recorded to collect information about Wanglongmen residential quarter. The interview was based on the ethical approval from Human Research Ethics Committee (HREC), The University of Hong Kong. According to HREC, the audio recordings must not be spread.
- ³³ Interview with Congzheng Zhang, 9th March 2017. Agreed by the interviewee, the face-to-face interview was conducted by author and was audio-recorded to collect information about Wanglongmen residential quarter. The interview was based on the ethical approval from Human Research Ethics Committee (HREC), The University of Hong Kong. According to HREC, the audio recordings must not be spread.
- ³⁴ Ibid.
- ³⁵ Ibid.
- ³⁶ The decision to cancel the rooftop landscape construction was marked on the 3rd floor plan working drawing of Building I. See *Wanglongmen Baixiangjie Qun Zhai 1# Lou Gong Cheng (The Working Drawings of Building I of Wanglongmen Residences in Baixiang Street)* (stored in Chongqing Urban Construction Archive, archive number: 070100-154, 1991)
- ³⁷ Chongqing Shi Di Fang Zhi Bian Zuan Wei Yuan Hui (Chongqing Chorography Compilation Committee), *Chongqing Yearbook 1988*, [Chongqing Nian Jian Fa Xing Bu (Chongqing Yearbook Circulation Department), Chongqing, 1988]. 254
- ³⁸ Ibid., 240
- ³⁹ Ibid., 253
- ⁴⁰ Chongqing Shi Di Fang Zhi Bian Zuan Wei Yuan Hui (Chongqing Chorography Compilation Committee), *Chongqing Yearbook 1989*, [Chongqing Nian Jian Fa Xing Bu (Chongqing Yearbook Circulation Department), Chongqing, 1989]. 221
- ⁴¹ Shaoqing Han, Lianyu Tuo, Jiang Guo, "Guang Sha Qian Wan Jian, Pian Qu Ju Huan Yan---Wanglongmen Pian Qu Gai Zao Gong Cheng Jian Jie" ("Thriving Housing and Delightful Residents: Introduction to the Regeneration of Wanglongmen Area") [*Chongqing Jian Zhu (Chongqing Architecture)*, No. 1, 1993]. 53
- ⁴² Ibid.
- ⁴³ Ibid., 54
- ⁴⁴ Xingguo Zhang, and Wutong Xie (eds.), *Jiao Shi Jian Zhu Yu Gui Hua She Ji Zuo Pin Ji (Academic Staff Planning and Design Works)* (China Architecture & Building Press, Beijing, 1997). 22



Seoul's Morphology as 'Apartment Complex City' Shaped by Housing Development Methods

Soe Won Hwang*

* PhD, Environmental Planning Institute, Seoul National University, soehwang@gmail.com

Seoul has materialized a unique built form on its urban terrain through aggressively constructing apartment complexes, a large-scale, single-parcel private territory, over the last half-a-century. The historical formation of apartment complexes differs significantly based on elements such as the development policies in each period, development mechanisms, the degree of public control, and the extent of private engagement. The research will examine the consequences of the entire 'apartment complexes' in Seoul and their morphological characteristics, particularly affected by development methods over time. The analysis is composed of (1) basic historical overview on planning policies and development methods that principally encouraged the apartment complex construction in the context of Seoul's urban expansion since the 1970s and (2) morphological attribute of Seoul's entire apartment complexes (2,172). The formal characteristics of apartment complexes are analysed in term of such morphological elements as plot (apartment complex as single parcel), building, street and density among others. The morphological characteristic in relation to development method provides insights related to genesis aspects of apartment complex emergence regarding its morphological characteristics. By focusing on morphological aspect, the study intends to examine the spatial manifestation of massive apartment complex building that has formed and transformed Seoul over the modernization years

Keywords: Apartment Complex Urbanism, Seoul, Housing Development Methods, Apartment Complex Morphology

Apartment Complex City as Asian Urbanism

During the past half century, Asian cities and their urban landscapes have undergone dynamic, chaotic, and contradictory evolution through the periods of colonization, modernization, urbanization, and globalization (Rowe, 2005; Lim, 2008; Watson, 2011). According to Parent et al. (World Bank, 2016), higher-income countries in East Asia demonstrate a higher degree of urbanization in terms of land and population, exemplifying the close relationship between urbanization and urban growth. In these countries, economic prosperity enables a proactive state to promote a world-class city in terms of infrastructure and reputation, resulting in similar urban environments. This is evident in the emergence of similar business districts, cultural venues, iconic towers, consumption architecture, and gated communities alongside increasing global activities (Marshall, 2003; Buck, 2006; Chang and Kim, 2016). The similarity of the Asian urban form has also been ascertained in residential environments. The limited time in which to become a prosperous world city and limited territory mean that similar high-rise and high-density apartment complex buildings have emerged in East Asian cities. Rowe (2014) explains that the 'superblock configuration' which was widely adopted in the form of mega-plots implemented with multi-unit housing with community facilities that were commonly developed in East Asian countries. In Singapore and Hong Kong, most public housing is supplied in the form of blocks, or otherwise complexes comprise mid to high-rise apartment buildings. The high-quality communal domain is grouped with diverse outdoor common spaces and facilities around tall residential towers (Rowe, 2005). Japan controls large-scale apartment complexes in the city center and channels them to the outskirts of the city. Since the early 21st century, China has strived to successively construct numerous apartment complexes. In Seoul, apartment complex buildings are regarded as the most efficient way to supply large-scale modern housing (Lim, 2008; Jun, 2009; Park I.S., 2013).

Seoul as an 'Apartment Complex City'

Seoul's apartment complex development is an extraordinary urban phenomenon in which traditional housing types were replaced with new ones over a period of half a century, and distinctive spatial and morphological attributes materialized across the urban terrain. Apartment complexes have been aggressively constructed in Seoul, primarily to address its chronic shortage of housing (Figure 1). However, the quality and standard of housing has not been guaranteed as the supply focus has been on quantity and feasibility. The consequences are



high-rise, high-density apartments everywhere irrespective of the urban landscape, enforcement of uniform or standardized living environments, and native residents who cannot afford the redeveloped environment that is oriented to development profit (Lee, 2002: 114–115). Nevertheless, how did apartments become the popular housing type preferred by the majority, and specifically the middle class? Gelézeau brings up the profit-gain alliance between the government, the private sector (explicitly Jaebol, who owns major construction companies), and the middle class that supports the massive provision of apartments (Gelézeau, 2007). The intervention of the government and housing policy have been based on a market-dominated approach, encouraging ownership rather than renting because the notion of a “house” possesses high value as an asset and high marketability (Jun, 2009: 56).

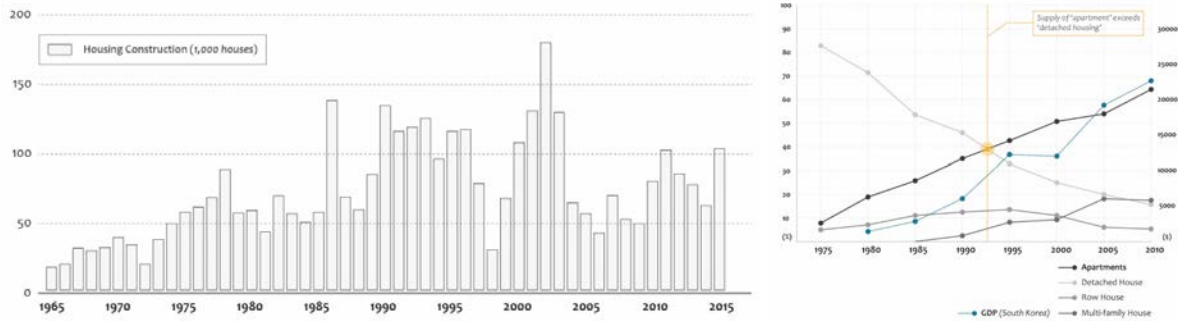


Figure 1. Annual housing constructions between 1965–2015 (left) and supply quantity by housing types in Seoul (right)

Forming and Transforming Seoul by Multiple Housing Development Methods

Seoul became an apartment city consequent to the aggressive development of apartment complexes over the last half century. Unlike the traditional infill developments on small parcels, apartments were constructed on large parcels, resulting in numerous apartment complexes. Apartment complexes are constructed individually or in a group, spontaneously or following master plans depending on the development method applied. The historical formation of apartment complexes differs significantly based on elements such as the development policies in each period, development methods, degree of public control, and the extent of private engagement. The development methods as an implementation tool of public policy and city planning dictated how apartment complexes were shaped and their location. This section overviews the planning policies and development methods that principally encouraged the construction of apartment complexes in the context of Seoul’s urban expansion since the 1970s.

As Table 1 shows, mainly seven development methods that were applied in the formation and transformation of apartment complexes in Seoul from the 1960s to 2010s. Development methods are differentiated as new development methods and redevelopment methods. The former applies to the construction of new apartment complexes on vacant sites, while the latter refers to renewal projects in existing built-up areas or apartment complexes. These development methods are supported by the planning laws institutionalized to respond to city planning issues pertaining to city growth, renewal, and housing supply at different times (Figure 2).

Table 1. Development methods and construction of apartment complexes over time

Development Method		1960s	1970s	1980s	1990s	2000s	2010s	Total ACs*
Han River Land Reclamation Project	HLR							64 ACs
Land Readjustment Project	LRA							259 ACs
Housing Site Development Project	HSD							288 ACs
Urban Development Project	UDP							138 ACs
General Built-up Area	GBA							534 ACs
Housing Redevelopment Project	HRD							380 ACs
Housing Reconstruction Project	HRC							509 ACs

* Total Apartment Complexes (AC)s count up to 2,172 in Seoul based on author’s investigation

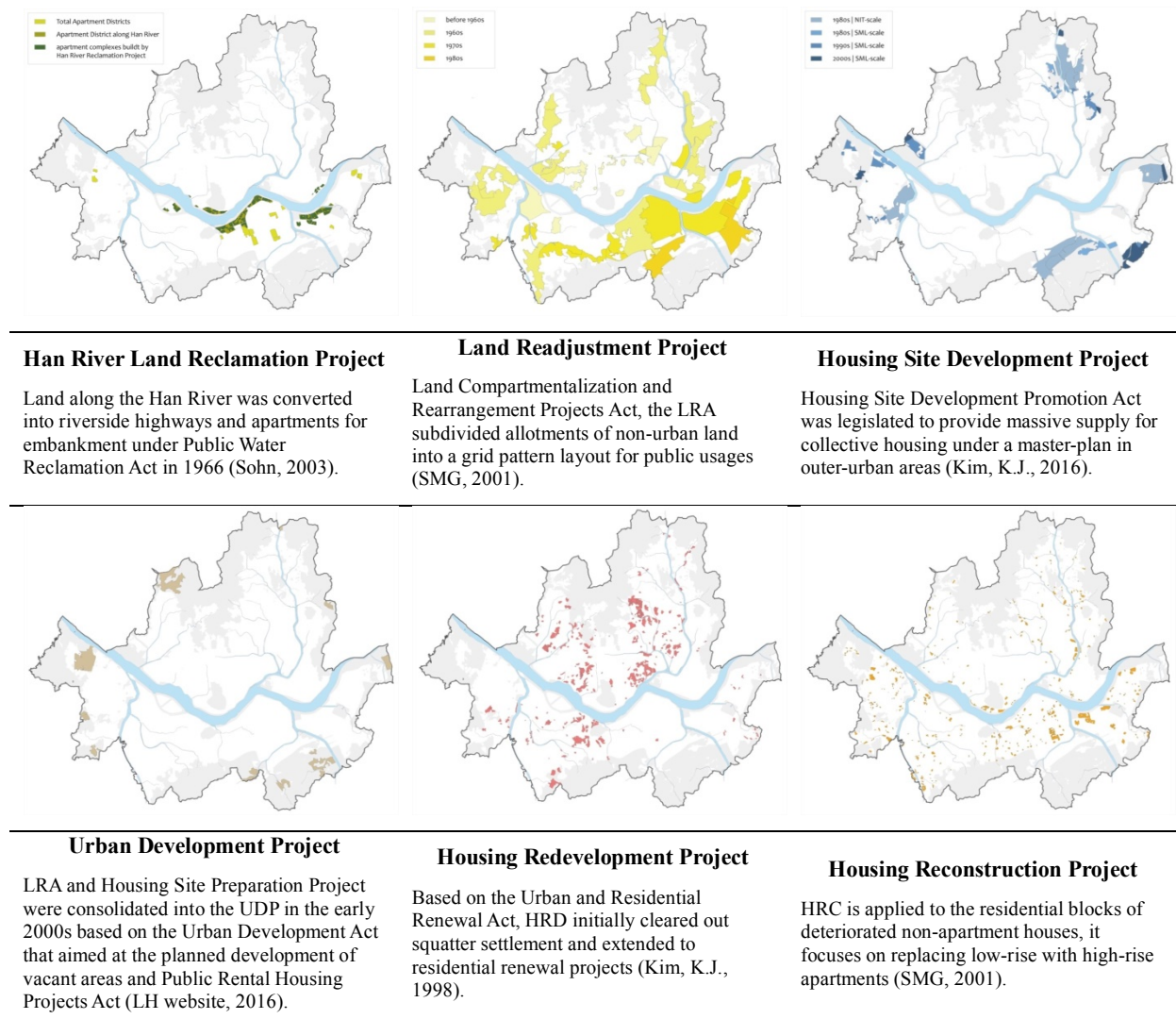


Figure 2. Multiple housing development methods promoting apartment complex construction

Method

This study is based on the premise that Seoul demonstrates unique and indigenous morphological characteristics of apartment urbanism through the ‘cumulative effects’ of different periods of development in terms of the construction of apartment complexes. Based on this intention, the study employs analysis framework from the urban morphological studies, where a parcel is the base unit of urban form, while containments within a parcel such as buildings, building use, or open space around the building are considered as urban cells (Moudon, 1994). An apartment complex is a development unit viewed as an urban cell, and simultaneously embeds the quality of the urban tissue based on a large parcel that comprises multiple buildings as well as an internal road system, broad open space for parking, and greenery. Locational and geographical siting and density is added to the traditional methodology of analysing the dimensions of parcel, building, and street (Table 2). In addition the database, which was coded by formal type for each apartment complex, enables an examination of the internal and external forces influencing the morphological characteristics. The term internal force refers to the limitations and opportunities of morphological element, whereas each dimension of the morphological elements is investigated in terms of development methods, as they reflect the specific external forces shaping the urban form. The morphological elements were statistically examined through a descriptive analysis and chi-squared test to determine the current condition according to development method.

The database on Seoul’s apartment complexes was constructed based on two resources: 1) The Seoul Metropolitan Government’s “2015 status of multi-unit housing data of Seoul,” and 2) the “2015 new address base map,” which is open data provided by the National Spatial Information Clearinghouse (NSIC), while other data information was employed to supplement these main sources (Table 3). The chronological extent of this study spans 45 years from January 1970 until December 2014, and encompasses 2,172 apartment complexes.



Table 2. Morphological analysis framework

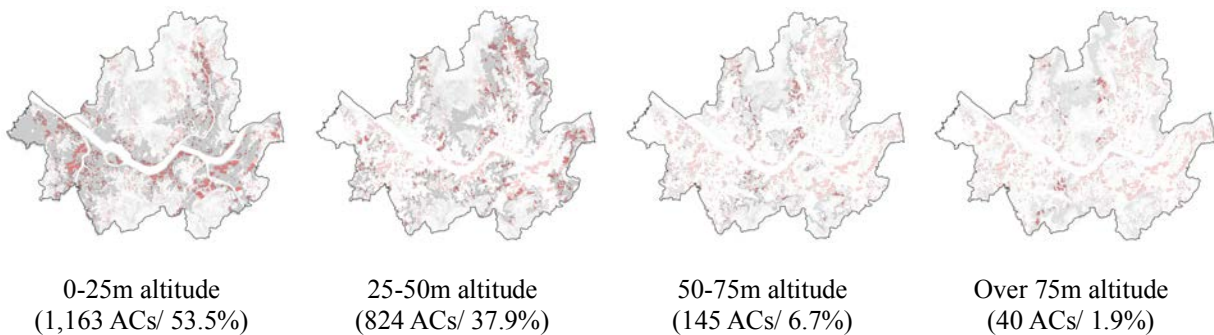
	Morphological Elements	Dimensions
	Locational and geographical siting	<ul style="list-style-type: none"> • Planar spatial distribution • topographical siting
	Parcel	<ul style="list-style-type: none"> • Parcel Size • Parcel Shape
	Building	<ul style="list-style-type: none"> • Number of Buildings • Building Height • Architectural Style • Building Arrangement
	Density	<ul style="list-style-type: none"> • Building Coverage Ratio (BCR) • Floor Area Ratio (FAR)
	Street	<ul style="list-style-type: none"> • Street Shape • Bordering Street Proportion • Bordering Street Hierarchy

Table 3. Surved database and sources

Classification	Morphological Elements	Data	Type	Source	Date
General Urban Information	Geography	Topographical contour map with 5 and 10m interval	GIS	National Spatial Information Clearinghouse	2014
	Seoul Development Projects	Seoul's development methods and strategies	GIS	Seoul Institute Korea National Spatial Data Infrastructure Portal	2014
		Seoul's development projects	GIS	Korea National Spatial Data Infrastructure Portal	2015
Morphological Survey	Parcel - total	Cadastral map	GIS	Korea National Spatial Data Infrastructure Portal	2015
	Parcel _ AC	New address base map	GIS	National Spatial Information Clearinghouse	2015
	Building - AC	2015 Status of multi-unit housing data of Seoul	Excel	Seoul Metropolitan Government via Open Data Portal	2015
	Building & Density	Building ledger	Excel	Building Data Open System & Naver Real Estate	2015
	Street	Surrounding street condition	Excel	Naver & Daum Map (Aerial and street views)	2015, 2017

Morphological Characteristic by Seven Development Methods

Siting Topography



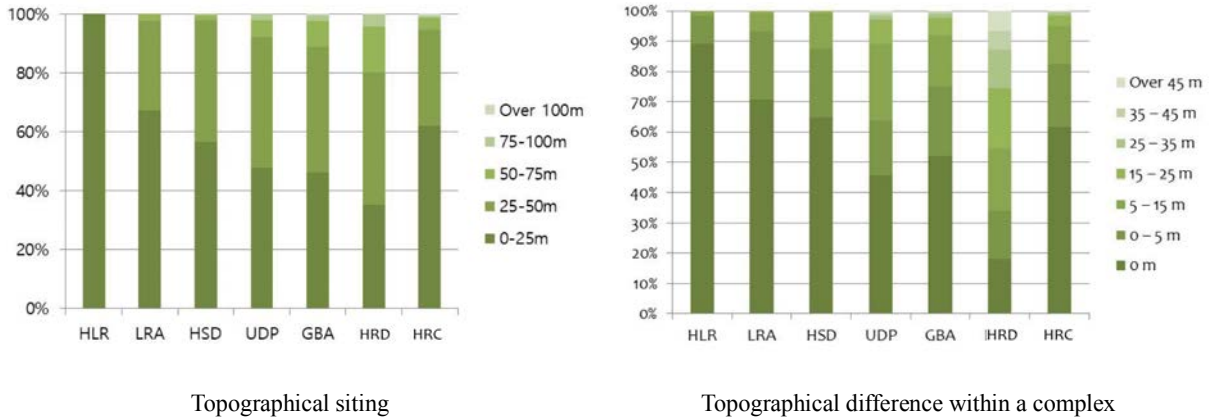
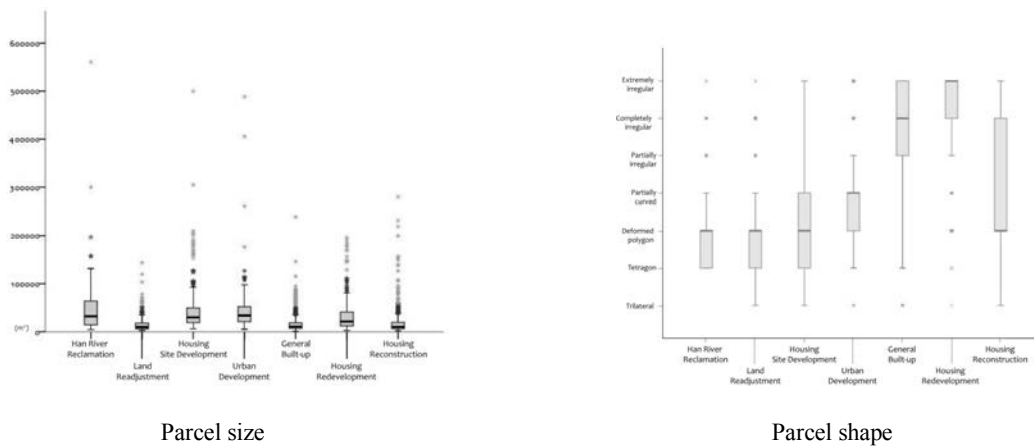


Figure 3. City-wide siting topography and topographical difference within a complex

In general, most planned apartment complexes are located at a low altitude in terms of topography. In addition, most low-level flatlands are distributed along the lower area of the Han River, namely in the Gangnam region and towards the Southwest area which has a broad flatland area lower than 5 m. Over the years, Seoul apartment complexes have become located at a higher elevation. Among those situated at an altitude higher than 50 m, more than 50% were developed in the 2000s and after, mostly through the Housing Redevelopment Project. This siting pattern sometimes exaggerates the natural topography, creating a massive enclosure of ordinary residential neighborhoods in the lower part of the city. Most apartment complexes were developed on the flatlands or slightly inclined sites under Han River Reclamation, Land Readjustment and Housing Site Development, while spontaneous and individual development method shows certain degree of topographical differences in a single complex (Figure 3)..

Parcel



Regular				Irregular		
Trilateral Right/ Acute/ Obtuse	Tetragon Square/ Rectangle/ Trapezoid/ Parallelogram	Deformed polygon Protruded/ Recessed/ Deflected (bent)	Partially curved Partially planned curve with straight lines	Partially irregular mixed with straight lines	Completely irregular over all shape 'or' meandering, crooked boundary	Extremely irregular Overall warping shape 'and' zig-zagging boundary

Reference for specific parcel shape classification

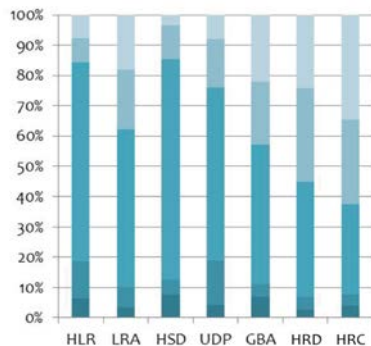
Figure 4. Parcel size and specific parcel shape by different housing development methods



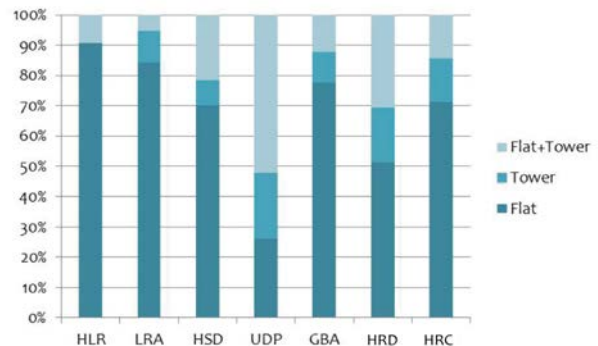
A relatively high proportion for the largest type measuring more than 100,000 m² can be attributed to the population influx, which exceeded 10,000,000 people in 1988, and the government's active role in promoting the provision of large-scale complexes in policies such as the Housing Site Development Promotion Act, Housing Construction Promotion Act, and projects like the Han River Reclamation and Housing Site Development. Housing Redevelopment Projects were implemented on a smaller scale according to the Housing Redevelopment Master Plan and smaller apartment sites of less than 50,000 m² were under the developing Land Readjustment Projects and Housing Reconstruction Projects executed for smaller complexes. This was reflected in the overall decrease in parcel size in the 1990s and 2000s. However, in the 2010s, large development projects such as the Eunpyeong Newtown, Sang-am Housing Site Developments executed under the Housing Reconstruction Projects of large apartment complexes along the Han River and these reconstructions of existing apartment complexes increased the portion of parcel sizes ranging from 10,000 m² to 50,000 m².

Relational patterns emerge from the specific parcel shapes and development methods. Regarding the form of the parcel, those in the Land Readjustment and Housing Site Development Project are mostly of a square, rectangle, or protruded rectangle shape. However, in the Urban Development Project, most parcels are partially curved, which is also evident in Housing Site Development. This is related to the locational siting of the two development methods, which were planned for the hilly or mountainous outskirts areas of Seoul. There is slight difference between the General Built-up Area and Housing Redevelopment Project in terms of shape, although the extremely irregular shape dominates, as the General Built-up Area includes parcels in the polygonal and completely or partially irregular shape. Most of the Housing Redevelopment Project is composed of extremely irregularly shaped parcels. This may be the result of topographical siting differences, as the former type is likely to be located among flatlands and the latter on hilly or mountainous areas. The Housing Reconstruction Project includes parcels shaped like a square, rectangle, or deformed polygon, and a high portion of parcels is extremely irregularly shaped, as reconstruction occurs in both planned and spontaneous areas (Figure 4).

Building

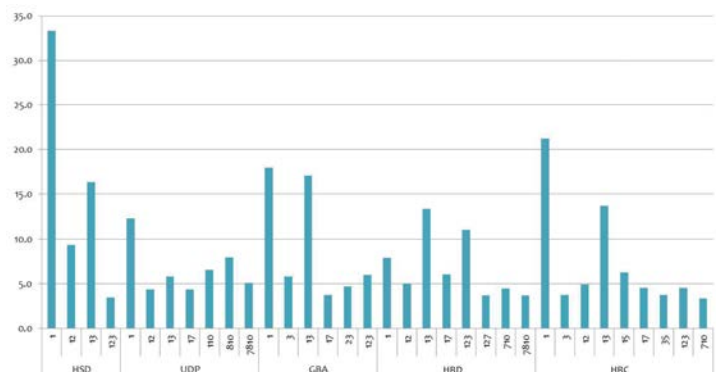


Building height



Building style-general

General Shape	Specific shape	
	Classification	code
Flat-type	Row	F1
	Stepped Row	F2
	Bent (0-point)	F3
	Bent (2points)	F4
	Intersect	F5
	Combined	F6
Tower-type	Compact	T1
	L/T Shape	T2
	H/X Shape	T3
	V/Y Shape	T4



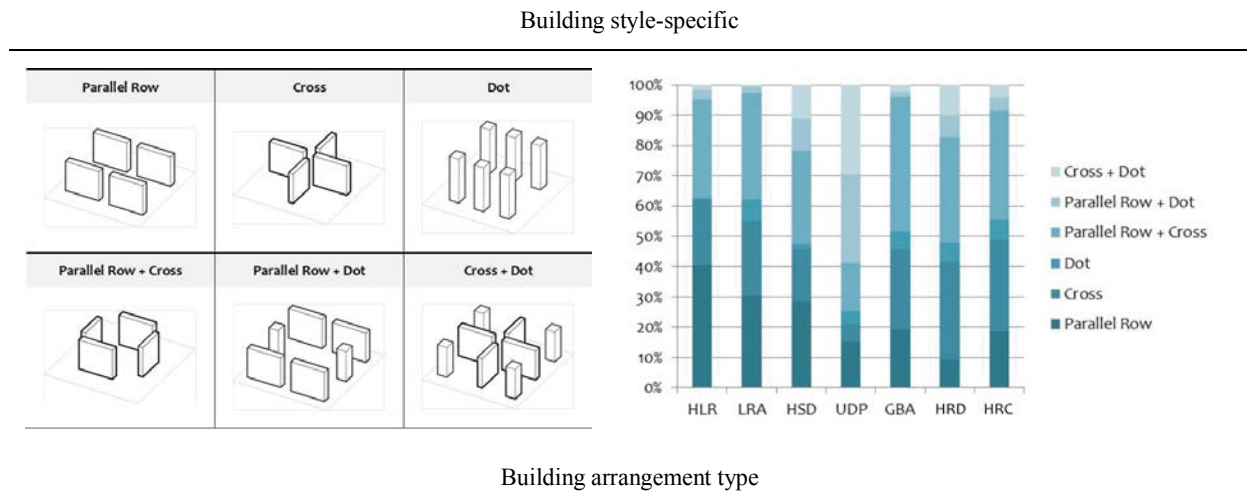


Figure 5. Building height, general/specific-style, arrangement types by different housing development methods

Large-scale apartment complexes with many buildings were developed through the Han River Reclamation Project or extremely large-scale Housing Site Development Projects in the 1970s to 1980s, followed by medium and small-sized developments through the Housing Site Development Project, Land Readjustment Project, and Housing Redevelopment Project in the 1990s to 2000s. Recently, the Residential Reconstruction Project has been implemented for the previously large block apartment complexes.

The changing patterns in building height over time are related to the development methods. Medium height apartment buildings (11 to 15 stories) were the norm in the Land Readjustment Project and Land Development Project in the 1970s and 1980s. After the 2000s, buildings constructed through the Development Project were also mostly of medium height of 11 to 15 stories. Park I.S. (2013) mentioned that the Housing Redevelopment and Reconstruction Projects elevated the average building height through the construction of extremely high buildings ranging around 30 to 40 stories. To control the ever-increasing height of apartment buildings, the Seoul Metropolitan Government’s Comprehensive Plan set a 35-story height limit for these constructions.

During the 1970s-1980s, Han River Reclamation Project, Land Readjustment Project, Housing Site Development Project, and general built-up area project were majorly built with flat-type buildings. Specific architectural style includes significant proportion of row (F1) and row and bent together (F1F3). In the 1980s and 1990s, Housing Redevelopment projects also showed flat-type as the main building style, but more recently tower-type or mixed type relatively took high portion. In the 2000s and 2010s, Urban Development Project employed mixed-type the most while flat-type building scored low. Specifically, compact and ‘V-shape’ tower building mixed turns out to be the most dominant style along with various tower and flat-type combinations of F1T4, T1T2T4, F1T1 and so on. Similarly, in general built-up area project and Housing Reconstruction Projects in recent years, there are more variation of different flat-type buildings mixed, such as F1F3, F1F2, F1F5 and F1F2F3.

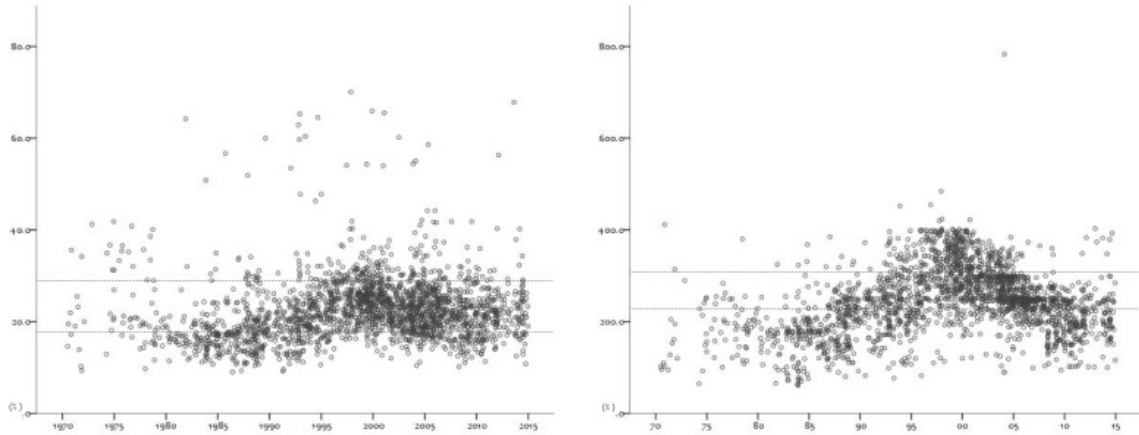
This is also similarly apparent in Housing Redevelopment Projects where mixed type of F1T1 and F1F2T1 is dominant followed by combinations of tower-type, such as T1T4 and T1T2T4. All these patterns show that Seoul’s apartment buildings are getting higher, slimmer and more free-shaped in architectural style, leaving the traditional south-faced, regularly-shaped forms. This change gives Seoul a character of its own urban form.

The dominant arrangement was the “parallel row,” in which multiple rows were lined up to face the south, as seen in the Han River Reclamation Project and Land Readjustment Project. This type produced the uniformly repetitive, monolithic horizontal landscape. In the 1980s, along with parallel row, the courtyard style (parallel row + cross) emerged as the most dominant arrangement, as seen in the Housing Site Development Project. During this period, the cross arrangement became popular, involving simple variations by rotating the building’s orientation. From the 1990s, the parallel row arrangement lost steam, making way for the parallel row + cross (courtyard style) and cross arrangements. This changing pattern is related to the decreasing parcel size of apartment complexes alongside higher density development pressure in development methods including the Housing Redevelopment Project and a number of small and medium-scale Housing Site Development Projects. In the 2000s, when the tower type apartment buildings were introduced through the Housing Redevelopment Project, Housing Reconstruction Project, and Urban Development Project, the arrangement shifted towards the dot arrangement, as the linear footprint was no longer necessary. Thus, the cross arrangement became as popular



as the parallel + cross type, while the dot arrangement also increased in popularity, either in the dot form or mixed with the parallel row and cross arrangements. However, the preference for row type apartments persisted, resulting in mixed arrangements of tower and row or cross type apartments (Figure 5)

Density



BCR (left) and FAR (right) change over time period

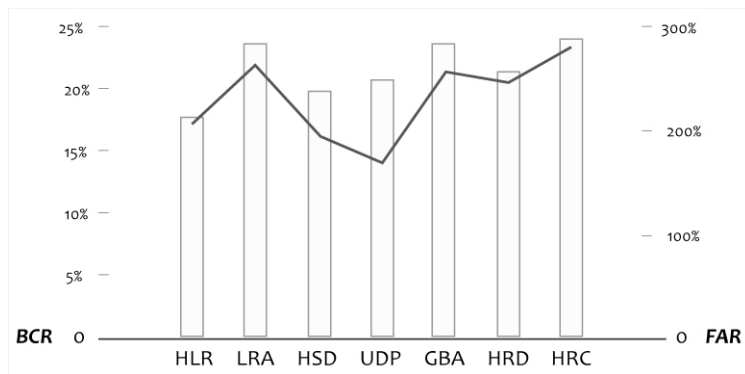


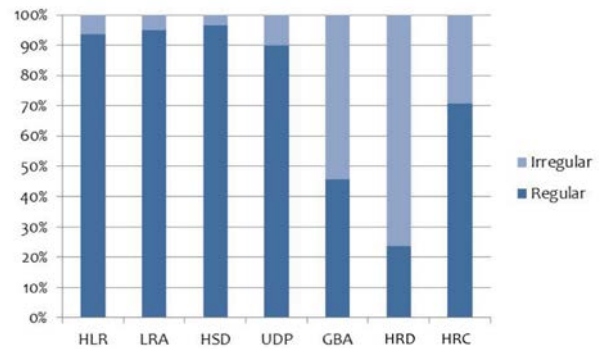
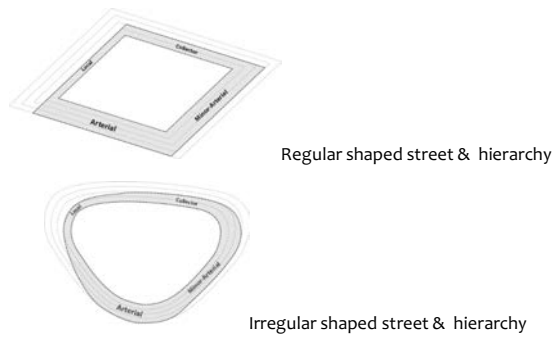
Figure 6. Density (BCR and FAR) by different housing development methods (line graph: BCR, bar graph: FAR)

The average BCR of the 2,172 apartment complexes in this study is 22.4%. During the period 1970–2015, the average BCR remained at around 20%, more or less similar despite a slight decrease to 18.6% in the 1980s . However, an examination of the BCR pattern over the 10-year period indicates a slight decrease in BCR. As seen in Figure 00, the portion of complexes with a BCR higher than 30% is decreasing, while that of complexes with a BCR less than 20% is increasing, although this is not significant. In the 1980s, the BCR pattern deviates, likely because of the Housing Site Development Projects implemented as master-planned promotion projects at the time.

The average FAR fluctuated between 186 and 278% during the period 1970–2015. In the 1970s, only 5-story walk-up apartments were constructed with FAR values of less than 100%. The average FAR during the 1980s was similar (186%), although from the 1990s, it increased significantly to more than 250%. The average FAR was 276% in the 1990s and 261% in the 2000s. This trend in terms of density can be attributed to the housing demand and market-driven housing policy that relaxed height and FAR regulations and promoted privately initiated residential renewal. At this time, in Seoul’s housing industry, most apartment constructions were based on the self-financing formula, especially in the Housing Redevelopment Projects and Housing Reconstruction Projects that supplied housing in the 1990s to 2000s (Figure 6).

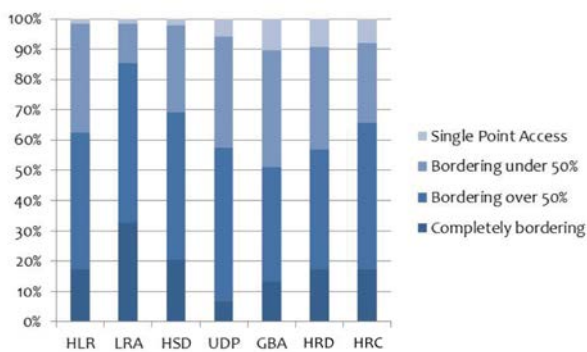


Street

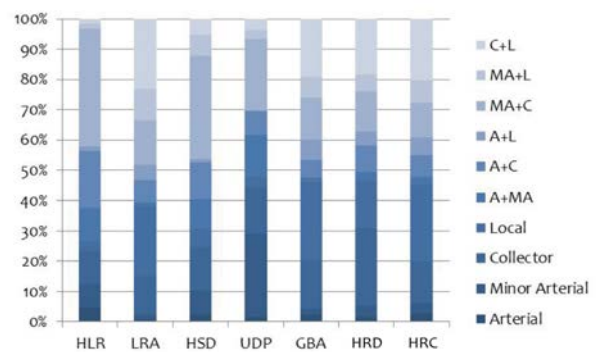


Diagrammatic reference for street element

Street shape



Bordering street proportion



Bordering street hierarchy

Figure 7. Street shape, bordering proportion and bordering hierarchy by different housing development methods

Regular-shaped streets dominated, since most apartment complexes were developed on relatively flat land in a planned manner through the Housing Site Development, Land Readjustment, and Urban Development methods. The Housing Redevelopment Projects were implemented throughout the 1990s and 2000s, and numerous individual parcels were joined for redevelopment. Apartment complexes developed with grid-based road structure, such as Land Readjustment and Housing Site Development tend to be bound with more amount of street. In addition, master-planned super-block complexes are likely to border wider street hierarchy including Han River Land Reclamation Project, Housing Site Development and Urban Development Project (Figure 7).

Discussion

Urban morphology as a field of studying urban form has both descriptive and explanatory dimensions in its inquiries. this section reviews the relation of development method and the morphological characteristics of apartment complexes. As an external force, the development method is assumed to reflect public policy, residential planning, and the housing market at the time it was employed. The development methods applied to the construction of apartment complexes in Seoul can be classified into 7 categories.

The statistical correlation analysis shows if these 7 development methods demonstrate correlations with the formal character of morphological elements. Table 4 shows that except for building layout and hierarchy of the bordering road, all other formal aspects are meaningfully related with the development methods (Chi-square value <0.005). Specifically, parcel shape and street shape demonstrate a relatively strong correlation ($R > 33\%$), followed by building height and FAR. This indicates that in general, the morphological characteristics of apartment complexes are influenced by the development methods applied, although this correlation is not strong enough to have explanatory power. Yet, the relationship is strong enough to explain that parcel shape and road shape were influenced by what development methods were applied.



Table 4. Correlations between morphological elements and 7 development methods

Morphological elements	Pearson R value*	Chi-square (p-value)**
Parcel size	14%	0.000
Parcel shape	36-41.5%	0.000
Specific shape	33-40%	0.000
No. of buildings	7%	0.001
Building height	24-27%	0.000
Building style	7-10%	0.000
Building arrangement	4%	0.039
BCR	14-15.5%	0.000
FAR	24-26%	0.000
Bordering street shape	32.4-36.7%	0.000
Bordering street portion	11-14%	0.000
Bordering street hierarchy	1-3%	0.124

*Converted into percentage (Pearson R value * 100)

** Statistically significant when $p < 0.05$

In general, in the Land Readjustment Project produced a regularly shaped parcel in small scale. Most apartment complexes constructed using this development method in the 1970s and 1980s comprised buildings that were of the flat type, had 11 to 15 stories, an average BCR of 15–25%, and average FAR of 150–250%. The Housing Site Development projects also produced regularly shaped parcels, where most of the complexes were small or medium sized, although the projects were large in scale. Furthermore, plank type apartments with buildings 10 to 15 stories high were typical in the 1980s and 1990s. The density pattern differs slightly depending on the project scale. The Urban Development Project, a newer version of public planned development, demonstrated a pattern similar to that of Housing Site Development. It is evident that flat and tower architectural style with a taller height was dominant, while the density pattern follows the typical development of apartment complexes with an average BCR of 15–20% and average FAR of 150–200%. In the General Built-up Area projects, a less planned nature is conspicuous with irregularly shaped parcels and bordering roads abound. Most are also flat type buildings of 10–19-stories. The dominant density pattern is an average BCR of 20–25% and average FAR of 200–300%, which is typical of apartment complexes constructed in the 1990s and 2000s. Housing Redevelopment Projects as a clearance renewal of spontaneous deteriorated areas on hilly locations, an irregular parcel shape and irregular and narrow bordering roads are common. The density pattern is an average BCR of 15–25% and average FAR of 200–250%. Regarding architectural style and building height, the tower style is more common and buildings tend to have more than 20 stories, as is more common in recent developments. The Housing Reconstruction Projects showcase visually outstanding aspects in terms of super-high-rise buildings, high density, and relatively low BCR. Mostly, these have replaced former apartment complexes with newer versions. When existing apartment complexes were constructed through planned methods these are of a regular parcel and street shape, while irregular shape was more common in the housing reconstruction implemented in the general built-up area.

Conclusion

Seoul's active construction of apartment complexes was promoted through various development methods and strategies supporting the urban and housing policies of the central government and City of Seoul. The most direct spatial and morphological consequences of Seoul's apartment complex construction for the last 45 years is its ubiquity. Although the 2,172 apartment complexes occupy less than one fifth (18.4%) of the residential area, these complexes are widely scattered across the urbanized area, because the residential area (88% of the built-up area) dominates the space in which most are located. This ubiquity forms the unique visual pattern of the urban grain, spatial configuration, skylines, and general collective form. It provides Seoul with its image of an apartment city, as the clustered tall apartment buildings hide the more widespread low-rise areas, dominating the city's visual exposure.

The morphological patterns of each development method reconfirm the evolutionary process of the development of Seoul's apartment complexes. Only the shapes of the parcel and bordering street are related to the development methods, which differ in terms of public intervention and planning approaches as well as in the



topographical and local situations in which they are applied. Other elements demonstrated only a weak relationship with development methods, reflecting that they are determined by the financial feasibility of the project in the market-driven, privately initiated apartment complex construction industry in Seoul. This private sector nature of Seoul's apartment construction industry is accompanied by the weak provision of roads and other community infrastructure. In many cases, apartment complexes were poorly serviced in terms of the hierarchy and bordering portion of the roads, even though most were planned and developed through development methods for which the government provided legal foundations.

The development methods examined in this chapter demonstrate that the morphological characteristics of apartment complexes have largely been determined by the nature of the methods. Each development method has its own policy goals and subsequent land provisions that require different planning approaches and development processes. Furthermore, each method reflects the period in which it was introduced under the current socio-economic situation. As such, development methods are the window through which to understand the morphological origin of apartment complexes. Further studies would integrate various factors such as market forces, regulation changes regarding BCR and FAR, architectural style and complex design majorly determined by construction companies would also broaden the spectrum of understanding urban morphological change by apartment complexes in Seoul along within the frame of development methods.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Soe Won Hwang

Soe Won Hwang holds a PhD in the Urban Planning from Seoul National University, a Master's degree in architecture from Harvard University Graduate School of Design and a Bachelor's degree in interior architecture from the School of the Art Institute of Chicago. Her research focuses on community/residential development, urban regeneration, and shaping of the urban form. Publication includes urban regeneration of public spaces, reutilization of urban void spaces and embedded resources.

Bibliography

- Baker, Judy. "East Asia's Changing Urban Landscape." *Measuring a decade of spatial growth. The World Bank, Washington, DC* 184 (2015).
- Buck, David N. (2006). *Asia now: architecture in Asia*: Prestel.
- Building Data Open System, <http://open.eais.go.kr>.
- Chang, Ji-in, & Kim, Kwang-Joong. (2016). Everyday life patterns and social segregation of expatriate women in globalizing Asian cities: cases of Shanghai and Seoul. *Journal of Housing and the Built Environment*, 31(3), 545-564.
- Daum Map, <http://map.daum.net/>.
- Gelézeau, V. (2007). Ap'at'ŭ Konghwaguk (On the Republic of Apartments) [in Korean]: Kil Hye-yŏn (trans.). *Humanitas, Seoul*.
- Jun, Sang-In. (2009) *Indulging in Apartments* [in Korean], Seoul: Design House
- Kim Kwang Joong. New Form, Classic Problem: Psuedo-Public Residential Redevelopment in Seoul. *Built Environment* (1998): 235-250
- Kim Kwang Joong . *Seoul's Growth and Urban Development in Seoul History Compilation Institute (ed), Seoul 2000-Year History* [in Korean]., Seoul: Sisapyeonchanhyue, Vol.35
- Korea National Spatial Data Infrastructure Portal, <http://www.nsd.go.kr>.
- Korean Statistical Information Service, <http://kosis.kr>.
- Lee, Kyu-Mok (2002) *The modern Korean townscape* [in Korean], Seoul: Yeolhwadang.
- LH (Korea Land & Housing Corporation), <http://world.lh.or.kr>.



- Lim, William. (2007). *Asian Alterity: with special reference to architecture and urbanism through the lens of cultural studies*.
- Marshall, Richard. (2013). *Emerging urbanity: global urban projects in the Asia Pacific Rim*: Routledge.
- Moudon, Anne Vernez. (1994). Getting to know the built landscape: typomorphology. *Ordering space: types in architecture and design*, 289-311.
- National Spatial Information Clearinghouse, <http://market.nrsdi.go.kr/>.
- Naver Map, <http://map.naver.com/>.
- Naver Real Estate, <http://land.naver.com/>.
- Park, In Seok (2013) *Korean Society of Apartment* [in Korean]. Seoul: Hyunamsa.
- Rowe, Peter G. (2005). *East Asia modern: shaping the contemporary city*: Reaktion books.
- Rowe, Peter G, & Kan, Har Ye. (2014). *Urban Intensities: Contemporary Housing Types and Territories*: Birkhäuser.
- Seoul Metropolitan Government(SMG) (2001) *Seoul's Urban Historical Record*. Seoul: Seoul Metropolitan Government.
- Seoul Metropolitan Government via Open Data Portal, <https://www.open.go.kr>.
- Seoul Solution, <https://seoulsolution.kr>.
- Seoul Statistics, <http://stat.seoul.go.kr>
- Son, Jeong-Mok. (2003). *The Story of Seoul Urban Planning 1-5* [in Korean].. *Hanwool, Seoul*.
- Watson, Jini Kim. (2011). *The New Asian City: Three-Dimensional Fictions of Space and Urban Form*: U of Minnesota Press.

Image sources

- Figure 1: Compiled data of utilizing Seoul Solution and Korean Statistical Information Service (left) and utilizing 1970-2010 Census Data and Seoul Statistics Chronology (right) by author
- Figure 2: All maps by author generated image utilizing GIS
- Figure 3: Author utilizing GIS (above), original work (lower left) and generated in Excel by author (lower right)
- Figure 4: Generated in SPSS (upper left and right) and original work (lower) by author
- Figure 5: All bar graphs generated in Excel and original work (middle and lower left) by author
- Figure 6: All generated in SPSS by author
- Figure 7: All bar graphs generated in Excel and original work (upper left)



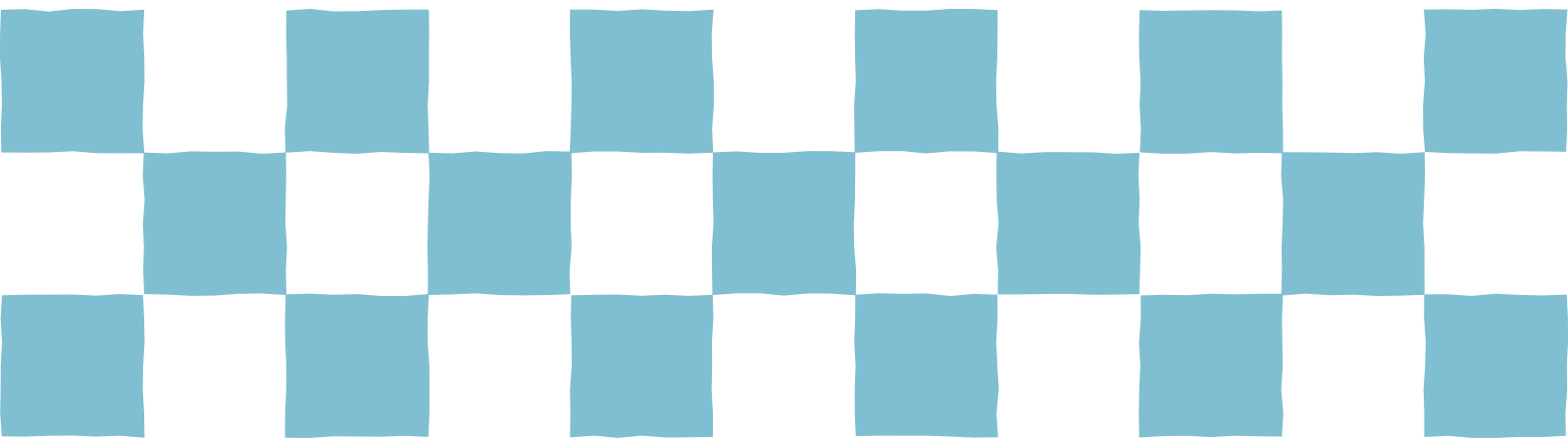
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

51 European Planning Culture



European planning traditions of visualising revisited

Stefanie Dühr (University of South Australia)

Spatial planning systems in Europe have over the past years undergone significant changes in response to changing political agendas, new policy directions and in response to challenges for existing governance arrangements. The in some cases fundamental changes to the goals for, and scope of, strategic spatial planning also have implications for how spatial policy is cartographically represented. Previous scholarship has noted that while spatial policy text may undergo often rapid and profound revisions, the corresponding visualisations of spatial policy carry forward traditions of spatial planning more consistently. This can result in a considerable distance between policy goals as communicated through text versus those expressed on maps, and raises questions about the communicative power of strategic spatial plans and the messages about spatial futures planning that policy text and maps convey.

The research questions addressed in this paper are threefold against this background of significant changes to strategic spatial planning in Europe in a comparative perspective. First, how has strategic spatial planning, as expressed in policy text and policy maps, changed in national spatial planning systems over the past decade? Second, how can the changing planning traditions of visualising be characterised and conceptualised? Third, what implications for an effective communication of spatial policy goals to different user groups and for the implementation of spatial plans can be expected as a result of these changes to spatial planning systems and the cartographic representation of spatial futures?

The paper is based on a cross-national comparative analysis of national and regional spatial plans from selected European countries. The findings of the analysis allow a discussion of how strategic spatial planning and its communication instruments of policy text and maps are changing and how the effectiveness of such powerful instruments could be increased and for maps to play a greater role in planning processes. The paper concludes with a discussion of what such changes to spatial planning and the visualisation of spatial policy mean for the role of strategic spatial plans in the context of wider changes to political and socio-economic systems in European countries.

The Landscape: comparison between Italy and Russia. The general values for legislative and planning instrumentation

Olga Maximova (Sapienza University of Rome)

The paper is dedicated to the landscape planning after European Landscape Convention, in particularly to the Italian experience, demonstrates the differences of understanding the landscape related to social, linguistic, economic, environmental aspects and its interrelationship. European Landscape Convention (Florence, 2000) defined that landscape has “an important public interest role in the cultural, ecological, environmental and social fields” . These intends various possibilities for new programs, for new tools, for new process and activity in regard the city as a landscape. The research investigates the theme of landscaping planning in Italy to answer the main question of the thesis: how can the ELC's addresses be applied to the Russian case through experience of Italian landscape planning. To achieve this goal, has been verified: the process of integrating the European Landscape Convention, the Italian legislative system and landscape planning tools.

SPAIN IN THE INTERNATIONAL URBAN NETWORKS AROUND THE FIRST WORLD WAR

María Cristina García-González (Universidad Politécnica de Madrid) and Salvador Guerrero (Universidad Politécnica de Madrid)

The neutrality of Spain in the First Great War had brought with it significant economic growth. From then on, the main Spanish cities — fundamentally Madrid, Barcelona and Bilbao — faced the implementation of ambitious plans of urban extension to provide housing in healthy conditions for a growing population. The problems of the municipal regime requested the attention of thinkers, legislators and governors and the multidisciplinary and international points of view converged around the management of the city and its complex problems.

So Spain timidly joined the forums of meeting, debate and exchange, that were intensified since the Town Planning Conference in London (1910) and which had led to urban planning to cross national borders, through the courses, conferences, exhibitions, competitions, articles, technical books, manuals, essays, translations, etc. In 1913 the presence in Madrid of Alderman W. Thompson and Henry H. Aldridge, the authorities of the English National Housing and Town Planning Council, invited by the Instituto de Reformas Sociales, public institution responsible for housing service under the Labour Ministry, and the presence of foreign urban professionals, mainly Germans, who studied Spanish cities, such as Oskar Jürgens, or who participated, later on, in the debates and in the numerous public competitions for towns extension plans from the second half of the 1920s, were significant events.

The congresses of the International Garden Cities and Town Planning Association, later on International Federation of Housing and Town Planning (IFHTP), had the attendance of Salvador Crespo, one of the Vice-President of the Federation, and Federico López Valencia, from the Instituto de Reformas Sociales, and since 1923 César Cort, first Professor of urban studies at the Architecture School of Madrid, joined some of the congresses.

Cebrià de Montoliu, librarian of the Social Museum of Barcelona and editor of Civitas magazine, one of the main centers of urban reflection in Spain, Arturo Soria, promoter of Madrid Lineal City, Tomás Bilbao and Ricardo Bastida from Bilbao City Council, and Amos Salvador, from Madrid City Council, participated in the Union Internationale des Villes et Pouvoirs Locaux (IULA) first meeting held in Ghent in 1913. Arturo Soria, together with Hilarión González del Castillo, continued to disseminate the Lineal City at the international congresses that they attended.

Professor César Cort contacted La Renaissance des cites at the Paris Inter-allied Housing and Town Planning Congress held in 1919. One year later, London Inter-allied Housing and Town Planning Congress was promoted by the National Housing and Town Planning Council, of which Cort had been designated delegate in Spain. The Spanish delegation was composed of representatives of the Instituto de Reformas Sociales, Sociedad Central de Arquitectos, Bilbao City Council, Madrid City Council, and Nicolau M^a Rubió i Tudurí, successor of Cebria de Montoliu, representing the Civic Society "Ciudad Jardí" of Barcelona.

The aim of this paper is to show the contributions and networks established by the planners and technicians abroad to the consolidation of the urban science; there laid part of the foundations for the making of the modern Spanish city.

The Town Planning congresses at the Paris Universal Exhibition of 1937. Ultimate encounters

Corinne Jaquand (ENS Architecture Paris Belleville)

1937 is a correct focal point to take stock of the internationalization of urbanism and its networks on the eve of the Second World War. Indeed, the International Exhibition of Paris has hosted several congresses devoted to urban planning. We will hold two major international congresses, the International Federation for Housing and Town Planning (IFHTP), which dealt with regional planning, and the CIAM 5, "Logis, loisirs", which the pavilion, les Temps nouveaux, set by Le Corbusier inside the international exhibition, reported on.

Constitutive of the garden city movement, the IFHTP brought together experts, representatives of institutions and administrations involved in operational planning, such as social housing companies, municipalities, regional planning agencies, states. Whereas the CIAM congress consisted of individuals carrying radical research.

This contribution proposes to present the relations that the two congresses maintained between them in 1937, but also in the years which precede and which follow. Emphasis will be put more on the convergences than on the divergences of topics carried by the experts of the IFHTP and by the avant-garde architects of the CIAM. The bibliography on CIAM and the role of Le Corbusier is already well established (Mumford, 2000)

The historiography on the IFHTP congresses has demonstrated more recently the richness of the corpus (Riboldazzi, 2010, Geerste, 2012)

In our view, it is appropriate to return to the supposed divisions between the vanguard and the experts by putting in context the influence of CIAM in the years preceding the Second World War. This contribution will be based on the comparison of the networks, the topics and the methods, Le Corbusier then being inspired by the operating mode of the IFHTP.

The two events will be watched under the magnifying glass of the French political and urban context but also of the international geopolitics which had effects on both congresses. In France, the year 1934 was presented the first master plan for Greater Paris, known by its acronym PARP, while 1936 saw the electoral victory of the Popular Front and its first social laws in favor of paid holidays that foreshadowed new programs for mass recreation. The arrival of the Nazis in power in Germany had adverse effects on both congresses. Modern Germans and Austrians, on the road to exile, leave Le Corbusier the free hand in the CIAM. With its integration into the IFHTP, the International Housing Association, based in Frankfurt, gives more influence to German experts appointed by the Nazi regime.

The Paris International Exhibition of 1937 offers European urban planners the ultimate common ground, while international tensions increase with the militarization of Nazi Germany and its rivalry with the Soviet Union symbolically represented by the architecture of their two pavilions standing face to face in the perspective of the Eiffel Tower.



The Landscape: Italy and Russia. The general values for legislative and planning instrumentation.

Olga Maximova*

*PhD, olga.maximova@uniroma1.it

The paper presents the results of the PhD research of author supported by the Erasmus Mundus Action 2 Programme of the European Union.

The paper is dedicated to the landscape planning after European Landscape Convention, in particularly to the Italian experience, demonstrates the differences of understanding the landscape related to social, linguistic, economic, environmental aspects and its interrelationship. European Landscape Convention (Florence, 2000) defined that landscape has “an important public interest role in the cultural, ecological, environmental and social fields”. These intends various possibilities for new programs, for new tools, for new process and activity in regard the city as a landscape. The research investigates the theme of landscaping planning in Italy to answer the main question of the thesis: how can the ELC's addresses be applied to the Russian case through experience of Italian landscape planning. To achieve this goal, has been verified: the process of integrating the European Landscape Convention, the Italian legislative system and landscape planning tools.

Keywords: landscape planning, planning legacy, values, heritage, management

Introduction

The paper is dedicated to the landscape planning after European Landscape Convention, in particularly to the Italian experience, is concerned with the integration of the European Landscape Convention (Florence, 2000) into the Italian legal system and with development of the regional landscape planning tools, focusing on its organizational, operational structure, its legislative content, disciplinary and managerial innovations, mechanisms and procedures for the processing of the general planning instruments (landscape plan) in order to identify criteria, principles and tools to produce the base model, which can be applicable in different countries, for example, in Russia.

The main aspects for motivation of the research. The European Landscape Convention entered into force more than 17 years ago. During this period the Parties form and develop the tools to applicate the guidelines of the Convention. Italy was one of the first to sign the European Landscape Convention on 20 October 2000, 1 September 2006 the Convention entered into force on Italian territory.

During this period Italy has elaborated and continues to develop its instruments to update the guidelines of the Convention and to respond to the present problem of the intensive transformation of the contemporary landscape, taking into consideration the strongest presence of the cultural and world heritage, Italy stands at the top of the UNESCO list of World Heritage Sites in terms of the number of registered sites.

The transformation of the world economy, the mutation of trade and the migration (the United Nations Organization provides a relevant figure, between 1990 and 2013 international migration had an increase of over 50%, compared to the statistics of the years previous, about 77 million people - 'international migration stock' -), has accelerated the process of globalization. The coexistence between different cultures and traditions that arise at the border of this reality, partly inside and in partly outside these intensive changes of the territory, are the causes and consequences of catastrophic changes.

The analysis of this experience, especially in relation with cultural heritage and landscape, the research for the effectiveness of the integration process and its mechanisms, strengths and weaknesses, represents a complex scientific problem at the global and national level. The increased practical interest of research is for the possible Parties that have not signed and ratified the Convention.

Russia has not signed the European Landscape Convention and doesn't implement its guidelines, but it is a member state of the Council of Europe, therefore has the possibility to ratify the Convention and to implement its guidelines in the land management and landscape management systems. Russia is completely involved in global processes of the transformation of the territory. Has its own urban planning system, the system of ecological and environmental legislation. The framework of the Russian laws concerning territorial planning, cultural heritage and ecological legislation presents a complex system of concepts for the protection of the environment, cultural heritage, nature and natural resources, and has its own structure and contents.



The research investigates the theme of landscaping planning in Italy to answer the main question of the thesis: how can the ELC's addresses be applied as a basic model through Italian experience of landscape planning in another State, for example, in Russia.

There were identified three main research goals structured as:

1. To verify the integration process between the European Landscape Convention, the Italian legislative system and landscape planning tools;
2. Conceptual, cultural and operational comparison between Italy and Russia in planning (in the Italian case, landscape planning);
3. To Identify ways to manage the landscape transformations that can be declined to the Russian case.

To achieve this goal, has been verified: the process of integrating the European Landscape Convention, the Italian legislative system and landscape planning tools.

Methodology

The methodology of research includes complex analysis of the subject of study: collection of materials, materials analysis, full-scale survey, empirical analysis, interviewing. The research path has been organized in 3 phases:

- 1) Cognitive phase;
- 2) Evaluation phase;
- 3) Proposal phase.

The first phase represents the preliminary investigation which includes: identification of the basic concepts of landscape planning in Italy and emerging issues; definition of the legislative framework on the national / regional level, mechanisms and principles that regulate the protection and safeguard, conservation, transformation and management of the landscape values; framework of the system of planning in Russia.

The second phase represents the critical reading of significant good practices, verification of the real degree of interaction / integration between the landscape plan and principles of the ELC, identification of the critical and successful aspects; interview with Russian specialists on the theme of landscape and its management.

The third phase proposes the elaboration of a methodological path for the draft guidelines / general principles, declined to the Russian case.

Values

The transformation of the world economy, the mutation of trade and the migratory movement (the United Nations Organization provides a relevant figure, between 1990 and 2013 international migration had an increase of over 50%, compared to the statistics of the previous years, about 77 million people - 'international migration stock' -), has accelerated the process of globalization. The coexistence between different cultures and traditions that arise at the border of this reality, partly inside and in part outside these intensive changes of the territory, are the causes and consequences of catastrophic changes. Transformation and fragmentation of the landscape, that according to the ELC is 'an important part of the quality of life for people everywhere'. The Convention is an international result in the framework of the Council of Europe's co-operation.

Landscape, the visual perception of the environment around us (Fig. 1), its qualities and values, its importance for everyday life and for the future, can we have the adequate methods and instruments to manage it? The "landscape" of each other fully reflects significance of the environment around? How important is the landscape for living and everyday life? How can be define the objectives for management the landscape in the global world? Why is it necessary to preserve, protect, safeguard, enhance, manage and transform the landscape? Why we need the planning instruments for manage them?

Every Party has to think about landscape and its future as a local part of global. Such questions have to be mentioned and taken into consideration when we think about landscape and its future, when we decide to manage the landscape for purpose to create the more adequate and balanced paradigm for every work with the territory in each scale.

The legal concepts defined in the Convention are 'landscape', 'landscape policy', 'landscape quality objective', 'landscape protection', 'landscape management', 'landscape planning'. Those basic concepts form a fundamental network to move inside for the Parties. The conceptual chain:



cultural and natural heritage - landscape - identity - population,

creates a link between the landscape and the European cultural and natural heritage and the local population. This link is a legal connection. It creates a new legal object, that is 'landscape', between two other legal objects: European cultural heritage and population. The ELC recognizes that changes in the habitat, the changes of landscape transform our culture and the culture of commons.

By the 'promotion the protection, management and planning of landscapes' the Convention activates the less used areas of economy, with their involvement in active life. The landscape is represented as 'a resource favourable to economic activity' and its 'protection, management and planning can contribute to job creation', that aims to identify and to recognize the additional possible economic resources. The process of management and planning, in each case, involves the possible transformation that, from the evolutionary point of view, is the obvious process. On the one hand, it opens the possibility for rethinking the concept 'landscape', but also opens the possibility for its changes and transformation, in consequence, conduct the risks associated with the realization of programs and with the qualification of the professionals involved in the planning and management and risks related to legal procedures of territory management on the implementation and integration of the Convention, including economic risks, legal, environmental, climate, social and others.

Framework. Italy.

In Italy, the integration of the addresses of the Convention is regulate by D.Ls. 22 January 2004, n.42 – The Code of Cultural Heritage and Landscape (The Code)¹. The control functions on cultural heritage has 'The Ministry of cultural goods and activities and tourism' / Ministero dei beni culturali e delle attività culturali e del turismo (MIBACT). The Constitution of the Italian Republic has introduced the term 'landscape protection' / 'tutela del paesaggio', by the Code the term landscape has been legally recognized and has been defined. The Code is an integrated document applicable throughout Italy. The current concepts, principles and objectives, obligations and issues of the European Landscape Convention have been analysed with a comparison of the current concepts, principles and objectives, obligations and issues of the Italian Code of Cultural Heritage and Landscape (Fig.2).

By the Code are introduced the basic concepts (Fig. 3) for the activation of the process of management the cultural heritage in Italy. The cultural heritage consists of cultural values and landscape values (art. 2.1). The Republic protects and enhances cultural heritage, according to the provisions of the present Code. The protection and the enhancement are the main basic concepts for operation with cultural heritage. The enhancement is implemented in compliance with the requirements of protection (art. 131 c. 5).

The functions of protection can be defined:

- to recognize cultural values;
- to safeguard cultural values;
- to recover cultural values.

The functions of enhancement can be defined:

- to promote the development of culture;
- to requalify buildings and areas;
- public use of the landscape;
- to create the new landscape values.

It can be defined that the enhancement is the new integrated concept to safeguard the territory, to use the territory, to develop the territory, to build a new landscape and a new city, that Italy follows to be applied with the Code. The protection and enhancement all together form the principles to activate concepts of the Code in legislation and planning for the management of the Italian territory and landscape.

By that Code was introduced a new type of plan on the entire Italian territory: the landscape regional plan or urban-territorial plan with specific consideration of landscape values is mandatory on the regional level. The Code and the plan are the main tools for the multilevel governance to achieve the 'Landscape policy' (ELC) on the Italian territory. Where for 'Landscape quality objective' (ELC) have been put at the centre of conceptual level the cultural development and the memory of the national community and the territory.

¹ D.Lgs 22 gennaio 2004, n. 42 - Codice dei beni culturali e del paesaggio.



The landscape plan has priority above other types of plan, is a key tool for landscape planning. By the Code for the regional landscape plan is required to identify the landscape areas (it. 'ambiti') at the defined borders: the landscape plans, with reference to the considered territory, recognize the peculiar aspects and characters, as well as the landscape characteristics, and delimit them into the relative areas (from Art. 135 c. 2).

The criteria for identifying the landscape areas are defined by plan, that represents for each region a complex research and design problem. Identification of landscape areas with prescriptions and requirements for different use or functions with definition of the appropriate quality objectives (Art. 135 c. 3, Art. 143 c. 1, s) corresponds to an innovative tool for the landscape plan, because it is a new tool to achieve the protection and enhancement of the landscape. For scopes are defined requirements for different use and functions with attention to the specific issues, those are mentioned in the art. 135 c. 4 of the Code: conservation, rehabilitation, protection, the identification of guidelines for the urban development.

The plan can have required actions and possible actions, such measures make the plan a more flexible tool and allows for each region to create its own language for management the landscape and allow for the plan to be more independent. Each region should have their own landscape plan in their own borders. The plan should be elaborated through the protection and enhancement tools.

Basic model

A critical reading of significant good practices was developed, as a verification of the real degree of interaction / integration between the landscape plan and the principles of the ELC, identification of the elements of success and criticality for the purpose of identifying ways to manage the transformations of the landscape that can be declined to the Russian case. The current situation of Italian landscaping has been observed in the twenty regions (fig. 4). Based on this observation by case of a critical reading study, four regional landscape plans were selected: The Regional Territorial Landscape Plan (PTPR) of the Lazio Region (adopted 2007), Territorial Direction Plan with Value of the Landscape Plan (PIT) of the Tuscany Region (approved Integration Act 2015), the Regional Landscape Territorial Plan (PPTR) of the Apulia Region (approved 2015), the Regional Landscape Plan (PPR) of Piedmont (approved 2017).

There were elaborated the methodology to analyse these plans based on the 10 criteria. The plans were evaluated and analyzed on the following criteria:

- normative documents for reference;
- types of elaborated materials of plans;
- strategies and goals system of the plans;
- specific landscape quality objectives for landscape areas;
- system of territorial structures;
- areas and other territorial units / elements of the landscape;
- criteria for identifying the landscape areas;
- areas, division structure;
- typologies of schemes for landscape areas;
- programs, guidelines and other elaborates materials of the plan.

For each criterion the effective, more or less preferable model have been identified. The plans have non-homogeneous structures and types of elaborated materials. The general and / or specific objectives have been identified differently by each plan. The simplest system is the system of the general objectives of the Lazio PTPR. The most complex system is elaborated by the Piedmont PPR. In the four landscape plans analyzed the different types of structural readings of the territory have been proposed. The first is a landscape type, where the typologies of the system of the landscape areas, structured in different ways. The alternative typologies are of geographic type, regional structure or of structural reading of the territory. Each plan elaborated its own language of the interpretation the application of landscape areas, of the addresses of the European Landscape Convention and of the regulations of the Code of cultural heritage and landscape. The types of the system of landscape areas of plans are structured in various ways (Fig. 5). Effective / preferable criteria have been defined for the identification of landscape areas with approach: the historical-cultural, morphological, ecosystem and environmental, structures of settlement, perceptive.



Each plan has elaborated its own language of interpretation of the addresses of the European Landscape Convention and norms of the Code of Cultural Heritage and Landscape. The priority for all the decisions made in the plans are the protection and enhancement of cultural heritage and landscape.

The possibility of application of the ELC addresses through experience of Italian landscape planning has been evaluated. The methodology, the principles, the tools for applying the CEP guidelines through experience of Italian landscape planning have been identified. There were elaborated the basic model of application of the ELC addresses through experience of Italian landscape planning, structured in 2 actions:

1. Structure of the landscape plan with obligatory / possible actions, which makes the plan as a more flexible and adaptable instrument in different conditions:
 - a) Actions for the strategic programs and projects / recognizing the initiatives already started.
 - b) Atlas / catalog of cultural heritage and landscape values.
 - c) Landscape areas as a tool to manage the landscape.
 - d) Strategies / strategic scenarios.
 - e) Guidelines, strategic projects, integrated landscape projects and etc.
2. Method of defining the criteria for identifying the landscape unit.
 - a) Historical and geographical conformation of the Regions;
 - b) The characters of the hydro geomorphological structure;
 - c) Environmental and ecosystem characters;
 - d) Settlement types: cities, city networks, infrastructures, agricultural structures;
 - e) The articulation of perceptual identities of landscapes.
3. Methodology to work with landscape areas: analysis (systems: hydro-geomorphological, eco systemic, anthropic and cultural history etc.), territorial structures (areas), landscape quality objectives, actions / regulations for use.

Framework. Russia

The concept of landscape explored from the conceptual and cultural point of view, in the different traditions and in the ELC, also in case of Russia. The aim is to identify the analogical-related concepts and their importance, for the possible integration of the ELC. The language is a reflection of our life and culture, shows the importance of the local environment and everything around us. The concept of perception includes the different ways of human perception: visual, sensory, through taste, hearing, smell, touch, temperature, humidity, etc. That is obviously depends on surrounding conditions and characteristic of the environment and the landscape and the mode of individual and collective perception. It was made an etymological-cultural comparison of the 'landscape' concept in different cultures, making more specific attention to the Italian-Russian case, throughout the general concept, the cultural context, the practice of the planning, design, legislation, the similarities possible. It has been observed that for each country it is necessary to create its own language for the 'landscape' with the specific local tools.

The framework of the Russian laws and planning system have been analysed more specifically on the concept of 'landscape' and related concepts, to define where and how the addresses of the European Landscape Convention can be included. Within the framework of the laws related to spatial planning, cultural heritage and ecological legislation, the term 'landscape' can be found in the following laws:

- About cultural heritage [cultural heritage objects] (historical and cultural monuments) of the people of the Russian Federation;
- For the protection of the environment;
- About protected areas;
- Forestry code of the Russian Federation;
- Land code of the Russian Federation.

In the Constitution of Russian Federation, the term 'landscape' is not present. But there are alternatives and related concepts such as: historical and cultural heritage, conservation of nature and the environment and so on. In the Urban Development Code of the Russian Federation the term 'landscape' is not present. But there are also



alternative and related concepts such as: sustainable development, favourable natural conditions for life and conservation of cultural heritage, balance of environmental / ecological, economic, social factors and other factors in the execution of activities urban development, environmental protection and ecological security requirements, conservation needs of cultural heritage and protected areas, and others.

In the Federal Law "About cultural heritage [objects of cultural heritage] (historical and cultural monuments) of the people of the Russian Federation" the concept 'landscape' presents as: landscape architecture, cultural and natural landscapes, protected area of the natural landscape, historical environment landscape, landscape features. The law has its system of concepts / objects for conservation, use, promotion and protection of cultural heritage values, where also part of the landscape is included. In the Federal Law "About the protection of the environment" is defined what is a 'natural landscape'. Also, in the present laws there is a complex system of concepts / objects for the protection of the environment.

The term 'landscape' is not defined in the documents observed, but presents or as a natural landscape, or as a cultural landscape, or as a place of interest, or as a natural complex and so on. That is why it can be concluded that the framework of laws relating to spatial planning, cultural heritage and ecological legislation presents a complex system of concepts for the protection of the environment, cultural heritage, nature and resources, and has its structure and contents. connected to each other.

There were taken the interview of the Russian professionals and experts on the topic of landscape in Russia. How landscape can be considered by professionals and how they think about the role that the landscape can take in planning and what is conceptual and practical references can be appropriately adapted to the Russian case. The objective of the interview is to try to analyse how architects in the Russian Federation take the landscape theme into consideration. That is why the purposes of the interview can be structured according to the following criteria:

- concept of "landscape" in use by architects in planning and design, especially, if there are other related terms;
- importance of the landscape for the contemporary daily life;
- the objectives for landscape management, view by the architects;
- how architects and another specialist see the tendency of landscape transformation on the territory of the Russian Federation;
- importance of landscape for planning in the Russian Federation.

Additionally, to the basic model of application of the ELC addresses through experience of Italian landscape planning in Russian case there were proposed such actions (Fig. 6):

1. Transformation of the structure of the normative - hypothesis of two possible scenarios. To applicate the Italian method declined in the Russian case to illustrate the necessity to implement the addresses of the Convention:
 - through the elaboration a single code to manage all the assets, areas, objects of protection;
 - or through each document related to the environment, territory, cultural heritage and landscape and so on.
2. Definition what is the 'landscape';
3. Applicate Convention addresses to all normative documents, applying the basic concepts of the Constitution to preserve nature and the environment and to preserve the historical and cultural heritage;
4. Enhance the concept of 'landscape' for planning;
5. Develop landscape planning as a basis for spatial planning as a whole landscape;
6. Evaluate the risks, weaknesses and strengths more detailed with the possibility of advantages and benefits.

Conclusion

There were analysed the framework of the European Landscape Convention, the framework of the Italian landscape planning: the regional landscape planning tools, focusing on its organizational, operational structure, its legislative content, disciplinary and managerial innovations, mechanisms and procedures for the processing of the general planning instruments (landscape plan). The framework of the Russian laws been analysed more specifically on the concept of 'landscape' and related concepts, to assess where and how the addresses of the European Landscape Convention can be included. There were elaborated the methodology, the principles, the criteria and the tools for applying ELC guidelines. In case of Russia 4 types of actions are proposed. The results of the study



can be used as a basis for the preparation of methodological guidelines, duly declined to the Russian case, aimed at studying, planning and designing documents and documents at federal level; the guidelines will be aimed to the conservation and management of landscape values and can provide methodological and scientific support for the drafting of some urban planning instruments of the Russian Federation.

Acknowledgements

I would like to express my sincere thanks to my tutors Dr. Prof. Arch. Pier Paolo Balbo, Dr. Prof. Arch. Elio Trusiani for valuable and constructive suggestions during the planning and development of this research work.

I would like to acknowledge the support of the Erasmus Mundus Action 2 Programme of the European Union.

I would like to thank Department of Planning, Design, Technology of Architecture, University of Rome - La Sapienza.

A special thanks to Prof. F.S. Kudryavtsev (Head of the Laboratory of Urban Studies, Moscow University of Architecture), Dr. Arch. A.A. Skokan (President, Founding Member, Project Chief Architect in the Architectural Bureau Ostozhenka), Arch. A.L. Gnezdilov (First Deputy Director, Founding Member, Project Chief Architect in the Architectural Bureau Ostozhenka), Dr. A.A. Tishkov (Deputy Director of the Institute of Geography of the Russian Academy of Sciences), Dr. Prof. A.V. Khoroshev (Lomonosov Moscow State University, Faculty of Geography, Department of Physical Geography and Landscape), Prof. O.E. Druzhinina (Moscow University of Architecture).

To everybody else who accompanied me in this beautiful research.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Dr. Arch. Olga Maximova

October 2012 – July 2016, PhD student at University of Rome - La Sapienza, Department of Planning, Design, Technology of Architecture, PhD program in Environmental Design.

PhD research: *“The Landscape: Comparison Between Italy and Russia. The General Values for Legislative and Planning Instrumentation”*. Supported by the Erasmus Mundus Action 2 Programme of the European Union.

2005 – 2011, Architect, the State Educational Institution of Higher Professional Education Moscow University of Architecture (State Academy). 2009 – bachelor's degree, 2011 – specialist's degree.

Bibliography

Amorosino, S., *Introduzione al diritto del paesaggio*, Ed. Laterza, Bari, 2010.

Balbo P. P., and B. De Cola. *Il progetto urbano*. Vol. 1. Gangemi, 1992.

Barbati C., Cammelli M., Sciuolo G., *Diritto e gestione dei beni culturali*, Il mulino, Bologna, 2011.

Baldeschi P. *Paesaggio e territorio*. Le lettere, 2011.

Campos Venuti G., and F. Oliva. *Città senza cultura. Intervista sull'urbanistica*. Laterza, Roma-Bari, 2010.

Cartei, G. F., *Codice dei beni culturali e del paesaggio e Convenzione europea: un raffronto*, in: *Aedon*, 3, 2008: 0-0 / URL: <https://www.rivisteweb.it/doi/10.7390/28463>.

Casini, L., *La globalizzazione dei beni culturali*, Il mulino, 2010.

Casini, L., *La valorizzazione del paesaggio*, in: *Rivista Trimestrale di Diritto Pubblico* 64, 2, 2014: pp. 385-396.

Clément G. *Manifesto del terzo paesaggio*. Ed. Filippo De Pieri. Quodlibet, 2005.

Crosetti, A., Ferrara, R., Francchia, F., Olivetti Rason, N., *Diritto dell'ambiente*, Laterza, Bari, 2007.

Corboz A. *Il territorio come palinsesto*. *Casabella* 516, 9, 1985: 22-27.



- Cosgrove D. *Realtà sociali e paesaggio simbolico*. Unicopli, Milano, 1990.
- Daniels S. and D. Cosgrove 1988. *Introduction: iconography and landscape*. In *The Iconography of Landscape*, S. Daniels and D. Cosgrove (eds), 1–10. P 1.
- Donadieu P. *Campagne urbane: una nuova proposta di paesaggio della città*. Ed. Mariavaleria Mininni. Donzelli, 2005.
- D.Lgs 22 gennaio 2004, n. 42 - Codice dei beni culturali e del paesaggio.
- Europa, Consiglio di, Carta europea dell'autonomia locale (traduzione italiana del testo ufficiale 1987), Strasburgo, 1985.
- Europa, Consiglio di, Convenzione europea sul Paesaggio (traduzione ufficiale), Firenze, 2000.
- Europe, Council Of, European landscape convention, Florence, 2000.
- Europe, Council Of, European Charter of Local Self-Government, Strasbourg, 1985.
- Europe, Council Of, Resolution 53 (1997) on the preliminary draft European landscape Convention (document CG (4) 6, draft Resolution presented by Mr P. Hitier, Rapporteur), Congress of Local and Regional Authorities of Europe, 1997.
- Europe, Council Of, The preliminary draft European landscape convention - cg (4) 6 part II, presented by Mr P. Hitier, Rapporteur, Congress of Local and Regional Authorities of Europe, 1997.
- Europe, Council Of, The Mediterranean Landscape Charter (Sevilla Charter) in Resolution 256 (1994) of the Congress of Local and Regional Authorities of Europe on the 3rd Conference of Mediterranean Regions (Taormina, Italy, 5-7 April 1993), Strasbourg, 1994.
- Farinelli F. *Geografia: un'introduzione ai modelli del mondo*. Einaudi, Torino, 2003.
- Ferrara G. *L'architettura del paesaggio italiano. The Italian landscape*. Marsilio editori, 1968.
- Gambino R. *Conservare, innovare: paesaggio, ambiente, territorio*. Utet, 1997.
- Giedion S. *Time, Space and Architecture*. Cambridge, Mass, 1941. (Italian translation, Giedion S. Spazio, tempo architettura. Hoepli editore, Milano (1954), (1984)).
- Italiana, Repubblica, Costituzione della Repubblica Italiana, Gazzetta Ufficiale della Repubblica Italiana, 298, 1947.
- Jakob M. *Il paesaggio*. Il mulino, 2009.
- Jellicoe G.A., *L'architettura del paesaggio*, Milano, Comunità, 1969 (ed. orig. 1960).
- Jellicoe, G. and S. *The Landscape of Man: Shaping the Environment from Prehistory to the Present Day*. Thames And Hudson, 1975.
- Ingold, T. 1993. *The temporality of the landscape*. World Archaeology 25, 152–74. P.156
- Landscape 10, ELC in Action, Experience Before and After*, Ed. IFLA, 2011.
- Lanzani A. *I Paesaggi italiani*. Meltemi Editore srl, 2003.
- Lanzani A, et al. *In cammino nel paesaggio: questioni di geografia e urbanistica*. Carocci, 2011.
- Maximova, O., *Enhancement of landscape of Moskva-river, in: Tasting the landscape*. 53rd IFLA WORLD CONGRESS APRIL, 20th - 22rd 2016 TORINO ITALY, Edifir-Edizioni, Firenze, 2016: p. 366
- MIBACT. Pianificazione paesaggistica – Quadro sinottico, a cura del Servizio IV della DG PBAAC, Direttore del Servizio IV: Roberto Banchini, Novembre 2014.
- MIBACT. Pianificazione paesaggistica – Quadro sinottico, a cura del Servizio IV della DG PBAAC, Direttore del Servizio IV: Roberto Banchini, Ottobre 2015.
- Piano di indirizzo territoriale (PIT) con valenza di piano paesaggistico della regione Toscana / URL: <http://www.regione.toscana.it/-/piano-di-indirizzo-territoriale-con-valenza-di-piano-paesaggistico> .
- Piano di indirizzo territoriale (PIT) con valenza di piano paesaggistico della regione Toscana. Atto di integrazione approvato ai sensi dell'articolo 19 della legge regionale 10 novembre 2014, n. 65. Relazione generale del Piano Paesaggistico.



The 18th International Planning History Society Conference - Yokohama, July 2018

Piano di indirizzo territoriale (PIT) con valenza di piano paesaggistico della regione Toscana. Atto di integrazione approvato ai sensi dell'articolo 19 della legge regionale 10 novembre 2014, n. 65. Cartografia identificativa degli ambiti.

Piano paesaggistico regionale (Ppr) del Piemonte / URL:
<http://www.regione.piemonte.it/territorio/pianifica/ppr.htm> .

Piano paesaggistico regionale (Ppr) del Piemonte adottato con D.G.R. n. 20-1442 del 18 maggio 2015. Norme di attuazione.

Piano paesaggistico regionale (Ppr) del Piemonte adottato con D.G.R. n. 20-1442 del 18 maggio 2015. Relazione.

Piano Paesaggistico Territoriale Regionale (PPTR) della regione Puglia / URL:
<http://paesaggio.regione.puglia.it/> .

Piano Territoriale Paesistico Regionale (PTPR) della regione Lazio / URL:
http://www.regione.lazio.it/rl_urbanistica/?vw=contenutiElenco&id=8 .

Provincia autonoma di Bolzano - Alto Adige / URL: <http://www.provincia.bz.it/natura-territorio/temi/piano-paesaggistico.asp>.

Priore, R., *No people, no landscape. La Convenzione europea del paesaggio: luci e ombre nel processo di attuazione in Italia*, Angeli, Milano, 2009.

Raffestin C. *Dalla nostalgia del territorio al desiderio di paesaggio. Elementi per una teoria del paesaggio*. Alinea Editrice, Firenze, 2005.

Regione Abruzzo / URL: <http://www.regione.abruzzo.it/pianoPaesisticoReg/> .

Regione Autonoma Friuli-Venezia Giulia / URL: <http://www.regione.fvg.it/rafv/cms/RAFVG/ambiente-territorio/tutela-ambiente-gestione-risorse-naturali/FOGLIA200/FOGLIA2/> .

Regione Autonoma Valle d'Aosta / URL:
http://www.regione.vda.it/territorio/territorio/pianificazione_territoriale/ptr/default_i.asp .

Regione Basilicata / URL:
<http://www.regione.basilicata.it/giunta/site/giunta/departement.jsp?dep=100050&area=2990434&level=0> .

Regione Calabria / URL:
http://www.regione.calabria.it/ambiente/index.php?option=com_content&task=view&id=779&Itemid=116 .

Regione Campania / URL: <http://www.regione.campania.it/it/tematiche/magazine-urbanistica/piano-paesaggistico-regionale-insediato-comitato-tecnico> .

Regione Emilia Romagna / URL: <http://territorio.regione.emilia-romagna.it/paesaggio/PTPR> .

Regione Lazio / URL: http://www.regione.lazio.it/rl_urbanistica/?vw=contenutiElenco&id=8 .

Regione Liguria / URL: <http://www.regione.liguria.it/argomenti/territorio-ambiente-e-infrastrutture/piani-territoriali-e-progetti/piano-territoriale-di-coordinamento-paesistico.html> .

Regione Lombardia / URL:
http://www.arca.regione.lombardia.it/cs/Satellite?c=Page&childpagename=DG_Territorio%2FDGLayout&cid=1213296298201&p=1213296298201&pagename=DG_TERRWrapper .

Regione Marche / URL: <http://www.ambiente.marche.it/Territorio/Paesaggio/PPRPianopaesisticoregionale.aspx> .

Regione Molise / URL: <http://www3.regione.molise.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/4818> .

Regione Piemonte / URL: <http://www.regione.piemonte.it/territorio/paesaggio/> .

Regione Puglia / URL: <http://paesaggio.regione.puglia.it/> .

Regione Sardegna / URL: <http://www.sardegnaterritorio.it/pianificazione/pianopaesaggistico/> .

Regione Sicilia / URL: <http://www.regione.sicilia.it/beniculturali/dirbenicult/bca/ptpr/ptpr.html> .

Regione Toscana / URL: <http://www.regione.toscana.it/-/piano-di-indirizzo-territoriale-con-valenza-di-piano-paesaggistico> .

Regione Umbria / URL: <http://www.umbriateo.regione.umbria.it/pagine/piano-paesaggistico-regionale> .

Regione del Veneto / URL: <http://www.regione.veneto.it/web/ptcr/ptcr> .



- Rossi F. *Lecture di paesaggio*. Aracne, 2010.
- Salzano E, ed. *Cinquant'anni dalla legge urbanistica italiana: 1942-1992*. Editori riuniti, 1993.
- Sandulli, M. A., *Codice dei beni culturali e del paesaggio*, Giuffrè Editore, Milano, 2012.
- Sciullo, G., *Il paesaggio fra la Convenzione e il Codice*, in: *Aedon*, 3, 2008: 0-0.
- Sica P. *Antologia di urbanistica dal Settecento a oggi*. Laterza, 1980.
- Sica P. *Storia dell'urbanistica. Vol. 7*. Laterza, 1983.
- Simmel G. *Filosofia del paesaggio* //G. Simmel, *Il volto e il ritratto*. Saggi sull'arte, il Mulino, Bologna (ed. orig. 1912), 1985.
- Settis S. *Paesaggio costituzione cemento*. Giulio Einaudi Editore, 2012.
- Trusiani E., a cura di. *Pianificazione paesaggistica: Questioni e contributi di ricerca*. Gamgemi Editore, 2015.
- Trusiani, Elio. *Orientarsi nell'urbanistica*. Carocci, 2008.
- Turri E. *Semiologia del paesaggio italiano*. Longanesi, Milano, 1979.
- Turri E. *Il paesaggio come teatro. Dal territorio vissuto al territorio rappresentato*. Marsilio, Venezia, 1998.
- Turri E. *La conoscenza del territorio*. Marsilio, Venezia, 2002.
- Urbanistica, 147, 2011 / URL: <http://www.inuedizioni.com/it/prodotti/rivista/n-147-urbanistica-luglio-settembre-2011> .
- Urbanistica Informazioni, 258, 2014 / URL: <http://www.inuedizioni.com/it/prodotti/rivista/n-258-urbanistica-informazioni-novembre-dicembre-2014> .
- Urbanistica Informazioni, 259-260, 2015 / URL: <http://www.inuedizioni.com/it/prodotti/rivista/n-259-260-urbanistica-informazioni-gennaio-aprile-2015>
- Voghera, A., *After the European landscape convention. Volume 1 di Territorio, pianificazione, ambiente*, Alinea Editrice, Firenze, 2011.
- Дроздов А. В., et al. *Ландшафтное планирование с элементами инженерной биологии*. Москва: Товарищество научных изданий КМК, 2006.
- Косенкова Ю. Л. *Город: концепция, проект, реализация* // Серия «Теория и история архитектуры», 9.
- Махрова А., Т. Нефедова, and А. Трейвиш. *Московская агломерация и «Новая Москва»*. Pro et Contra, 6, 2012: 57.
- Махрова А. Г., Т. Нефедова, and А. Трейвиш. *Московская область сегодня и завтра: тенденции и перспективы пространственного развития*. Новый хронограф, 2008.
- Нефедова Т. Г., Трейвиш А. И. *Города и сельская местность: состояние и соотношение в пространстве России // Региональные исследования*, 2, 2010: 42-57.
- Нефедова Т. Г., Трейвиш А. И. *Теория дифференциальной урбанизации и иерархия городов в России на рубеже XXI века // Проблемы урбанизации на рубеже веков* / [отв. ред. Махрова АГ], Смоленск: Ойкумена, 2002: 71-89.
- Перчик Е. Н. *Районная планировка: (Геогр. аспекты)*. Мысль, 1973.
- Трейвиш А. И. *Региональное развитие и регионализация России: специфика, дилеммы и циклы // Регионализация в развитии России: Географические процессы и проблемы*. М.: Институт географии РАН, 2001: 44-45.
- Трейвиш А. И., Нефедова Т. Г. *Экономическое пространство России: проблемы регионального расслоения // Институт географии РАН, Центр изучения российских земель журнала «Ваш выбор»*, Москва, 1994.
- Хорошев А. В. *Географическая концепция ландшафтного планирования*. Известия РАН серия географическая, 4, 2012.



Image sources



Figure 1: Artina, Italy, Author's photo.

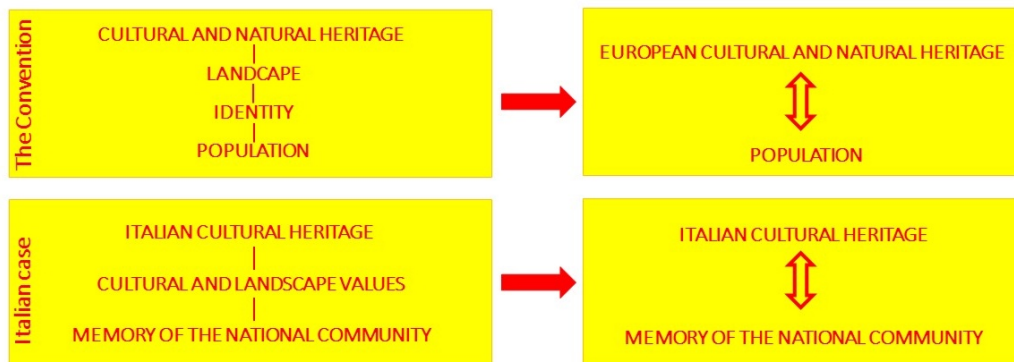


Figure 2: Identification of the basic concepts of the landscape planning in Italy and the emerging issues in comparison with principles of ELC.

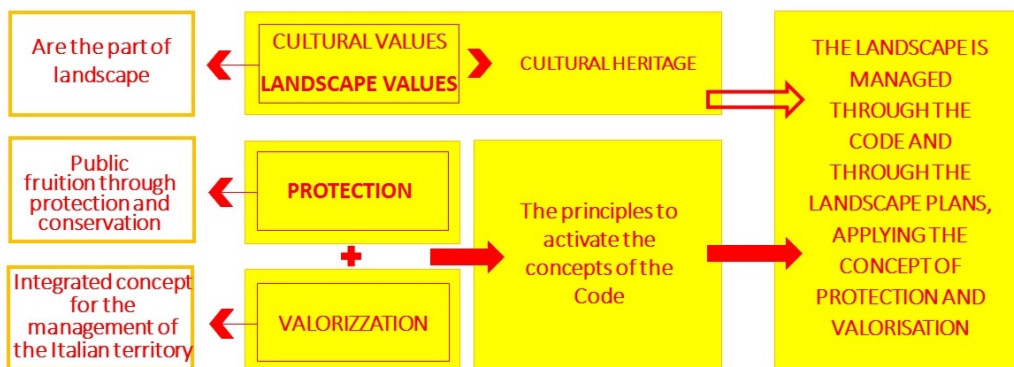


Figure 3: Definition of the national / regional legislative framework, mechanisms and principles which regulate the protection, conservation, transformation and management of the landscape values.

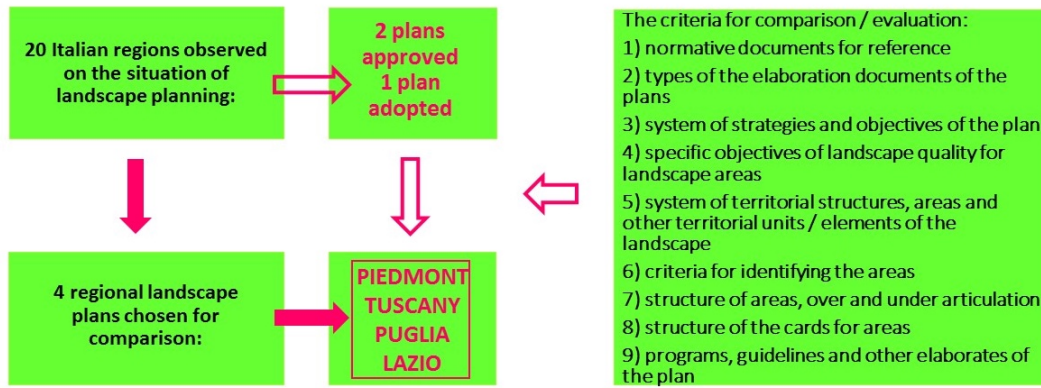


Figure 4: Critical reading of significant good practices, verification of the real degree of interaction / integration between the landscape plan and the principles of the ELC.

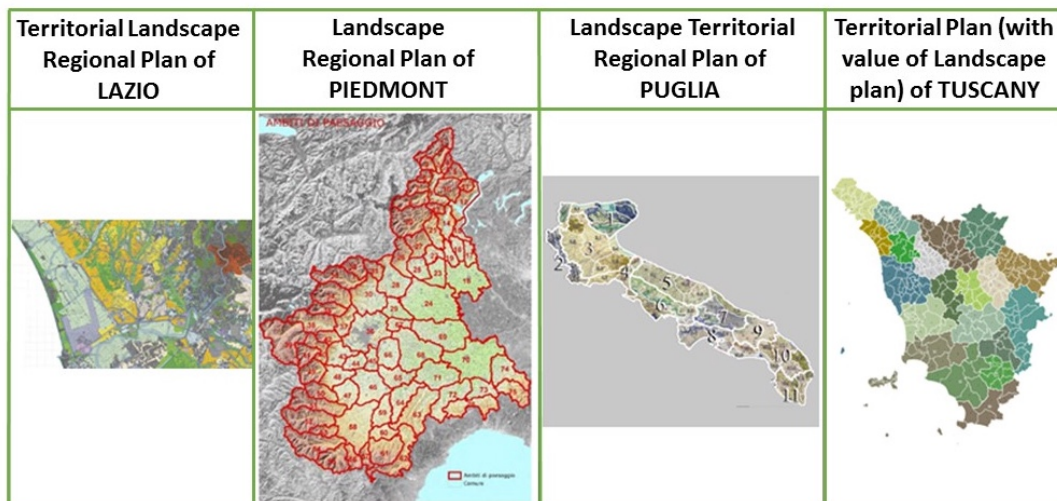


Figure 5: Landscape areas in plans of Regions: Lazio, Piemonte, Puglia, Toscana.



Figure 6: The basic model with additional actions for the Russian case.



Spain in the International Urban Networks around the First World War

María Cristina García González*, Salvador Guerrero**

*PhD, Universidad Politécnica de Madrid, mariacristina.garcia@upm.es, ORCID <http://orcid.org/0000-0001-5381-7055>

**PhD, Universidad Politécnica de Madrid, salvador.guerrero@upm.es, ORCID <http://orcid.org/0000-0001-6766-8695>

The neutrality of Spain during First World War brought with it a significant economic growth. Then, Spain timidly joined the town planning forums of meetings, debates and exchanges that took place in the post-war European era. Some Spanish public institutions as the Instituto de Reformas Sociales, responsible for the social housing policy, and the City Councils of Madrid, Barcelona and Bilbao, which tried to order their development; private institutions such as the Compañía Madrileña de Urbanización, promoter of the Madrid Linear City by Arturo Soria, and the Civic Society Ciudad Jardí in Barcelona, diffuser of the Garden City movement in Catalonia; and the first Town Planning Professor in the School of Architecture of Madrid, César Cort, attended different congresses looking for a solution to the housing problem along with the town planning extension issue. The aim of this paper is to show the Spanish town planners and technicians who participated in the international urban networks in order to consolidate the Spanish urbanism through the new technical, theoretical and legal tools that were being implemented in Europe. They also attended to proudly show some Spanish advances.

Keywords: International Federation of Housing and Town Planning (IFHTP), Inter-allied Housing and Town Planning Congresses, Union Internationale des Villes et Pouvoirs Locaux (IULA), Spain, First World War, Town Planning

Introduction

In 1920, the architect Leopoldo Torres Balbás — installed in Medina del Campo, where he had just reached the position of municipal architect — wrote a beautiful text about "the future city" where, with a sober and balanced prose, he expressed a profound "faith" in the progressive march of humanity "and focused on" the ideal of the redeemed crowds", in a world where the silhouette of the city of the future was still "distant and blurred".¹

The neutrality of Spain during the First World War brought with it a significant economic growth in the country. From then on, the Spanish cities Madrid, Barcelona and Bilbao faced the implementation of ambitious plans of town extension to provide housing in healthy conditions for a growing population. The problems of the municipal regime requested the attention of thinkers, legislators and governors. The multidisciplinary in connection to the international points of view converged around the management of the city and its complex problems.

In 1910, the Royal Institute of British Architects held an international conference dedicated to town planning. This was one of the consequences of the events that took place in 1909, the key year for the consolidation of urbanism as a new disciplinary area in the international context. That year, the first conference dedicated specifically to town planning in the United States took place in Washington. *The Plan of Chicago*, by Daniel H. Burnham and Edgard H. Bennet, was published. In the field of university teaching, a Town Planning course had been taught for the first time, within the Landscape Architecture College of Harvard University, and the Civic Department of the University of Liverpool had been founded. The English Town Planning Act had been approved that year, as a result of which, Raymond Unwin published his book *Town Planning in practice: an introduction to the art of designing cities and suburbs*. The list of participants in the London Conference of 1910 included the Spanish architects Joaquín Bassegoda and Emiliano Amann and of the Professor Manuel Rodríguez i Codolà, what evidenced the timid Spanish presence, together with Patrick Abercrombie, Stanley D. Adshead, Daniel H. Burnham, Reinhard Eberstadt, Patrick Geddes, Eugène Hénard, Ebenezer Howard, Thomas H. Mawson, Agustin Rey, C. H. Reilly, Josef Stübben and Raymond Unwin, among others.



The 18th International Planning History Society Conference - Yokohama, July 2018

At the height of 1910 the way of solving the transformation of the Spanish cities had been inherited from the interior reform operations of the nineteenth century —see the opening of the Vía Layetana in Barcelona begun in 1908 and the Gran Vía in Madrid started in 1910— and the practices of regular bourgeois expansions— Nuñez Granés Plan (1909) for Madrid and Jaussely Plan (1903) for Barcelona—. But the inability to solve the growth of cities due to the pressure of working-class housing and the new issues of mobility, public facilities or open spaces, put it in a crisis that model.

Faced with this situation and the lack of technical and legal modern tools, the new generation of Spanish professionals tackled the new problems of the city through the study of the different alternatives disseminated in the international scene through the travel to Germany, England and, lesser extent, to the United States. Most of the time, thanks to the support role assumed by the Junta para Ampliación de Estudios e Investigaciones Científicas² (Board for the Extension of Studies and Scientific Research), a public institution under the Minister of Education and Public Arts. Since 1907, the Junta para Ampliación de Estudios led some Spanish technicians to look out the new ways to achieve urbanism through the attendance to some of the most relevant international study centres at the moment, such as the Charlottenburg Seminary of the Technical School of Berlin. The Junta was inspired by the Institución Libre de Enseñanza (ILE), a Krausist cultural and pedagogical renewal project that promoted a series of reforms in the legal, educational and social fields that Spain really needed. It was created in Madrid in 1876 by a group of professors from the Universidad Central de Madrid. They were liberal and humanistic thinkers under the leadership of the pedagogue and philosopher Francisco Giner de los Ríos

The concern to lay the foundations of adequate legislation justifies the early presence of the president of the Minister Council, Segismundo Moret, one of the founders of the ILE, in the VII International Housing Congress of Liege (1905). He was one of the promoters of the Instituto de Reformas Sociales (IRS)—the public institution responsible for housing service created in 1903 under the Labour Ministry —, that was represented in the Congress by the lawyer Maluquer i Salvador. The architect Luis Cabello Lapiedra, Ángel Ramirez, representing the housing cooperative El Hogar and the civil engineers Rene Lafleur and Domingo Mendizábal also attended the Congress.³ They looked for both effective public and private initiatives to satisfy the strong demand for working-class housing in the Spanish cities. The Congress Sections focused on social housing: ways of intervention by public authorities in social housing, legislation, sanitary inspection, the garden city, housing statistics from social economic and health point of view, and aesthetics conditions in social housing and green spaces in social housing. The international public presentation of the movement of the Garden City in the aforementioned Congress was definitive for its evaluation as an alternative proposal to the problem of social housing in Europe, but its echoes would not reach Spain yet.

In these cross-relationships, the presence in Madrid and in Barcelona in 1913 of Alderman W. Thompson and Henry R. Aldridge,⁴ President and Secretary of the English National Housing and Town Planning Council respectively, was significant. They were introduced by Cebrià de Montoliu and invited by the IRS, chaired at that time by the lawyer and politic Gumersindo de Azcárate (Member of the ILE). They gave lectures on the innovative experience of the English Garden City at the Ateneo in Madrid, within a cycle about garden cities and lineal cities that also included the participation of Amós Salvador, Arturo Soria and Hilarión González del Castillo.⁵

The most active figure at the moment was, undoubtedly, the versatile Cebrià de Montoliu, with an active presence in Germany and England, where he travelled pensioned by the Junta de Ampliación de Estudios in 1910. His publications *L'activitat internacional en matèria d'habitatció y construcció cívica durant l'any 1913* is a good example of his hard work. The result was that, at the crossroads of 1914, one of the main focuses of urban reflection in Spain was linked to the creation of the Social Museum in Barcelona, where Montoliu occupied the position of librarian. The journal *Civitas*, published from 1914 to 1924, was the best exponent. However, his extraordinary work failed to respond to their many concerns, so that he left Spain to the United States in 1919. The architect Nicolau Maria Rubió i Tudurí would be the successor.

The Spanish architects Amadeo Llopart⁶ and Guillem Busquets i Vautravers, both pensioned by the Junta de Ampliación de Estudios in 1912 and 1913, also left to Berlin. The first one became responsible for the teaching of Town Planning in the School of Architecture of Barcelona. His German stay allowed him to get in touch with the great masters of the construction of cities, such as Camillo Sitte, Reinhard Baumeister, Josef Stübber and Rudolf Eberstadt. By the other hand, Guillem Busquets, architect and councillor in the Barcelona City Council, became responsible for the teaching of the urban discipline in the School of Public Employees in the Mancomunidad de Cataluña. In addition, the engineer of the City Council of Barcelona José María Lasarte, attended in 1915 the International Congress of Engineering of San Francisco, held on the occasion of the Panama-Pacific International Exposition, and translated into Spanish the conference City Planning, by the American engineer Nelson P. Lewis, which was published under the title *Urbanización*⁷ in 1917.



Adolfo Posada, a follower of Francisco Giner de los Ríos, Professor of Municipal Law of the Universidad Central de Madrid, and President of the Law Section of the IRS from 1903 to 1924, correctly located the problems of urban planning in those years, clearly showing the multidisciplinary and international points of view that converged around the management of the city and its complex problems in the following terms: “Since 1916, interest in the municipal problems of the city has not only declined, as one might think given the deep and often tragic upheavals that constantly agitate and disturb the people, but that interest has intensified, constituting the condition of cities, and the municipal regime of his life, one of the most pressing concerns of politicians of action, and technicians of many branches and professions. In these last post-war years, and for various reasons, the problem of the municipal and local regime has been soliciting the attention of thinkers, legislators and governors, promoting surveys of high value in England, causing extensive reforms in the various German states, worrying in France and in Spain to politicians and governors, while in North America, it continues to be the municipal regime of the city, the field of the richest, most daring and fruitful experiences”.⁸

The International Garden Cities and Town Planning Association as a global proposal: from housing to regional planning

In the prologue of one of the pamphlets published by the IRS Ebenezer Howard wrote: “I hope that the author of this book [Federico López Valencia] and its collaborators will get, in the beautiful Iberian Peninsula, results of the greatest importance for humanity.” This ambitious conception of the scale of housing problem as a global problem, had led him to create the International Garden Cities Association in 1913 as a tool for exchanging the different experiences.⁹ And he was right. In fact the international congresses that the association organized became a key as forums for reflection and debate on modern urbanism until the 1930s.¹⁰ Since 1920, The IRS was the most significant Spanish presence in the International Garden City Association. One of its members, Salvador Crespo, Head of the Servicio Especial de Casas Baratas (Special Service of Cheap Houses), would be named one of the Vice-President of the IFHTP, and Federico López Valencia, Head of Advertising and Statistics Section of the Servicio Especial de Casas Baratas, would be named Board member by 1920. Because of the pamphlets about all the conferences Federico López Valencia attended, the IRS became one of the most active diffuser of the IFHTP in Spain.

The Congress of the International Garden Cities and Town Planning Association in London (14, 15 and 16 March 1922) reunited 160 delegates. Luis de Ponte and Federico López Valencia represented the IRS. There, López Valencia met Edith Elmer Wood, the first American *houser*. She had already written the article “The Spanish Linear City”, in the *Journal of the American Institute of Architects* (1921) and after this meeting, she published *Housing Progress in Western Europe* (1923), with the appendix “The Spanish Housing Laws of 1911 and 1921”. Both interesting articles represent one of the first international critic analyses of Spanish proposals about town planning.

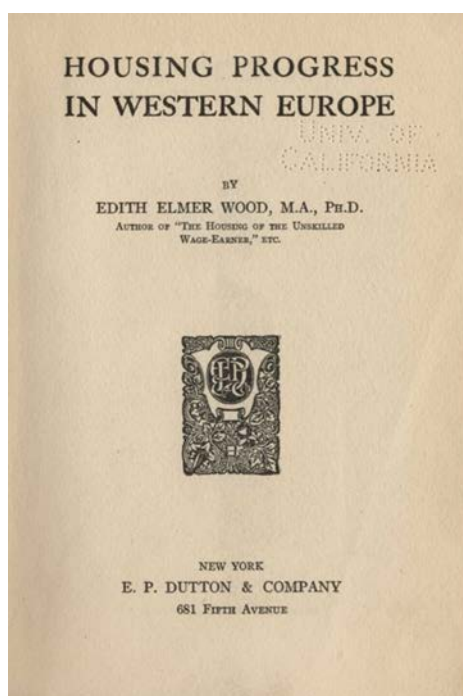




Figure 1: *Housing Progress in Western Europe* (1923), by Edith Elmer Wood included an appendix about the Spanish housing law: *Ley de Casas Baratas*. What is a cheap house?, pamphlet by the Instituto de Casas Baratas for explaining the concept of *casa barata*.

The congress held in the Swedish city of Gothenburg in 1923 was the one with the strongest Spanish presence. This Congress consolidated housing as a State responsibility. The Spaniards Salvador Crespo and Federico López Valencia, Juan García Cascales and José Cabestany from the Madrid Town Council, and Town Planning Professor César Cort¹¹, introduced the Spanish advances among a cast that included the names of Werner Hegemann, Clarence S. Stein, John Nolen, Eliel Saarinen and Charles Benjamin Purdom.

Besides the IRS, César Cort, first Professor of Town Planning at the Architecture School of Madrid since 1918 —In 1914 a subject about town planning was incorporated for the first time to the Architecture studies— would be the most assiduous presence in the congresses since 1923. In this Congress César Cort met John Nolen, and in 1928, in one of his letters, he told about two of the main values for him: the concern about the diffusion and the conception of the knowledge as a net:

“Dear Sir [John Nolen];

Perhaps you may recall myself when thinking in Town Planning Conference held at Gothenburg, where I have had the pleasure of knowing you, and I remember even the trip we had together in Sweden. I beg to remark these details as I want to address yourself begging for your cooperation for a Review I am just about to publish under the name URBANOLOGIA [Urbanology].

I want to get the collaboration of the most important town planners in the world, and of course yours is a very precious one for my Review”.¹²

The Gothenburg exhibition showed the works of the Compañía Madrileña de Urbanización, promoter of Madrid Linear City, together with historical views and maps of Spanish cities. Hilarión González el Castillo, diffuser of Arturo Soria’s Madrid Linear City, were the most representative Spanish presence in the urban networks in the first 20s. César Cort introduced the Town Planning teaching of the School of Architecture of Madrid with the exhibition of the drawings and maps for the extension and interior reform of Elche elaborated by the students.¹³ The civic survey, including aerial photographs, showed the importance of the identity of the site as a new principle.

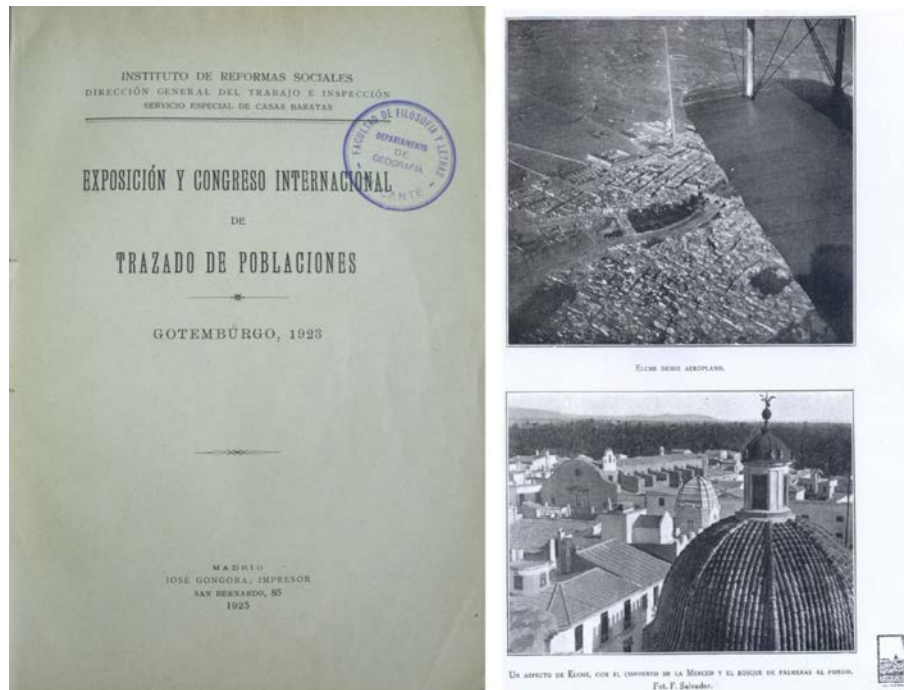


Figure 2: Translation and resume into Spanish of the proceedings of the IFHTP Congress (1923) and images of the students’ work about Elche exposed in the Gothenburg Exhibition.

l'Union Internationale des Villes et Pouvoirs Locaux (IULA) and the first exchanges: The triumph of the Spanish Linear City

Another focus of interest was l'Union Internationale des Villes,¹⁴ founded in Ghent in 1913. The original idea was to create an international association for the development of the cities covering the two-fold aspect of what



they called Civic Construction, with the Belgian architect Paul Saintenoy as responsible, and the organisation of City Life, dealing by Emile Vinck. Paul Otlet, General Secretary of the Union of the International Association was responsible of Cities Exhibition.¹⁵

The origin of the IULA was in the Premier Congrès International et Exposition Comparée des Villes, that took place in July during the Ghent Universal and Industrial Exhibition (26 April-3 November); it was considered by Patrick Abercrombie as “the first professedly international one on municipal activities”. The Congress reflects how global the town planning was in 1913 and how was critically linked to the reformist movements of the time and product of the peace movement in that pre-war time. The event was the first step to the international and comparative study of cities and local authorities. Patrick Abercrombie, Patrick Geddes, Augustin Rey, Josef Stübben, and Raymond Unwin attended the first meeting.¹⁶ The Spanish presence was: Bilbao City Council, represented by Tomás Bilbao and Ricardo Bastida, Sociedad Central de Arquitectos (Central Society of Architects), represented by its President Amos Salvador, IRS, Cità Jardí, represented by Cebrià de Montoliu, Compañía Madrileña de Urbanización, represented by Hilarión González del Castillo, and Professor José Gascó Marín, of the Universidad de Saragossa.

The lawyer and Professor José Gasco Marín was the only Spanish member of the General Provisional Council of the Association.¹⁷ In the question of the unifications and associations of municipalities “a place of honour belonged to Spain”. Gascó Marín made a concise and clear explanation of the municipal law of 1877, which regulates not only the annexes but also the aggregations and municipal associations, adding some remarks about the state of affairs of this issue in Spain and the reform projects, as the local Government.¹⁸

The two problems that were posed in the Congress: the depopulation of the countryside due to the harsh living conditions and the agglomerations in the city had a solution in the Spanish Linear City. Hilarión González del Castillo, advisor of the Compañía Madrileña de Urbanización (Madrid Urbanization Company), promoter of the Madrid Linear City, that was conceived in 1882 by Arturo Soria, and delegate of the Sociedad Ciudad Jardín (Garden City Society), presented in the Civic Construction Section “La Ciudad Lineal, como arquitectura nueva de ciudades: Memoria presentada por la Compañía Madrileña de Urbanización en el primer congreso internacional del Arte de Construir Ciudades y Organización de la Vida Municipal de Gante.” Because of Saintenoy and specially Emile Vinck interest, the report was translated into French by Georges Benoit-Levy, who was thus introduced to the movement which he was later to promote with such enthusiasm. Certain revisions were made in the course of preparing the French edition, which was entitled “La Cite Lineaire, nouvelle architecture de villes”. In the Reconstruction Exhibitions in Brussels in 1919, Hilarión González del Castillo presented the Brussels Linear City Project. The organization was very active in its scientific meetings and city exhibitions and soon joined the International Garden Cities and Town Planning Association.



Figure 3: Issue of the journal *La Ciudad Lineal* dedicated to the Gante Congress by Hilarión González del Castillo.



Inter-allied Housing and Town Planning Congresses: from La Renaissance des Cités to “Homes fit for heroes”

In 1919 (11, 12 and 13 June) took place the Paris the Inter-allied Housing and Town Planning Congress. This was a significant milestone. The Sociedad Central de Arquitectos sent the Town Planning Professor César Cort¹⁹, probably due to his command of French and English, as well as for the teaching activity that he was carrying out at the School of Architecture of Madrid. The extensive program of the Congress, attended by representatives of France, England, the United States, Belgium, Holland, Switzerland, Norway, Poland and Spain, was held at the Musée Social in Paris and at the École Supérieure d'Art Public, an entity created at the behest of the Belgian refugees. The chronicles of the Congress and the Exhibitions, as the reconstruction of Chauny by La Renaissance des Cités, were published by the bulletin of the Sociedad Central de Arquitectos and the journal *Architecture*, created a year before and nowadays celebrating its centennial.

La Renaissance des Cités, subtitled as “Oeuvre d'entre aide sociale” (Work of welfare), had been founded in 1916. The American Red Cross with the experts of the Rockefeller Foundation, contributed directly to the reconstruction of the devastated regions in France and Belgium through La Renaissance des Cités. The association established an office of cooperation, information and documentation in the works of the economic, social and architectural reconstruction of the post-war period.²⁰ The fundamental principle on which the efficient and practical organization has been built up is that of co-operation with local authorities in the ultimate solution of the problems with which they have to deal. Since 1919, George B. Ford, was City Planning Adviser,²¹ and became one of the most active diffuser. A curious testimony of the town planning reconstruction was shown in an exhibition that took place in United States: “These plans show how local engineers, in order to improve traffic conditions, had planned to straighten the street lines on the familiar American gridiron plan. La Renaissance des Cites has been able to substitute another method of widening the streets for new traffic requirements by cutting back as a general rule only on one side and on the other retaining the picturesque irregular house fronts.”²² After the Spanish Civil War (1936-1939), Professor César Cort, proposed to the new dictatorship the instauration of a Spanish Renaissance des Cités for the reconstruction, but he failed. Without dismay, he created the Federación Nacional de Urbanismo y Vivienda de la Hispanidad inspired in the IFHTP under the Spanish Dictatorship.

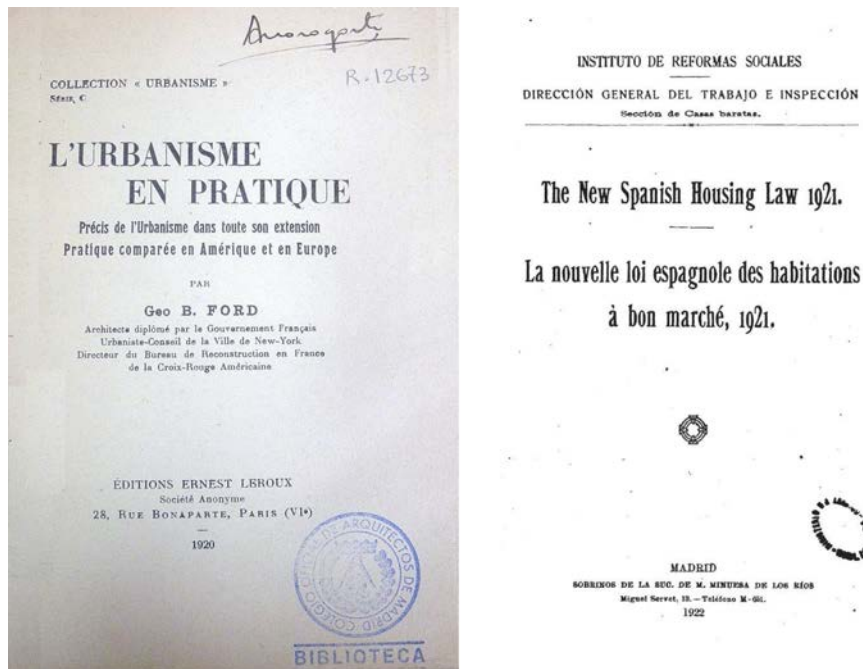


Figure 4: Book (1920) by George B. Ford belonging to the Spanish architect Teodoro Anasagasti and pamphlet in English and French explaining the Law of Casas Baratas (1923)

The Inter-Allied Congress adopted a resolution demanding a minimum standard of comfort in homes. With reference to town planning, a resolution was adopted advocating to definite limitation of dwellings per acre, not to exceed ten, so defending the single housing, and defended the decentralisation of industries, considered one of the most dangerous aspects.



The 18th International Planning History Society Conference - Yokohama, July 2018

In this Congress, César Cort contacted George B. Ford, the sociology Henry R. Aldridge and Alfred Agache, secretary of the Musée Social and the Société Française des Urbanistes, organiser of the Congress. Because of Agache, Cort attended the Congrès International d'Urbanisme et d'Hygiène Municipale in Strasbourg (1923) and a meeting in the Soviet Union organised by *L'Architecture d'Aujourd'hui* (1932). Ford influenced in Cort ideas considering the aspect of the *scientific city*; Aldridge's book *The Case for Town Planning. A Practical Manual for the Use of Councillors, Officers and Others Engaged in the Preparation of Town Planning Schemes*, inspired Cort to write his book *Murcia. Un ejemplo sencillo de trazado urbano* (1932), as a manual for Spanish town planners and a syllabus of his teaching. Cort was very anglophile, and so, he was named Honorary Member of the Royal Institute of British Architects in 1925.

The National Housing and Town Planning Council was the promoter of the London Inter-allied Housing and Town Planning Congress. From June 3 to 11 1920, the Congress brought together eight hundred congressmen of which seventeen were Spaniards.²³ The Congress was “destined to summary of the policy of the room and of the urban and rural plan that the current situation of the world demands”²⁴. César Cort had been appointed delegate in Spain of the National Housing and Town Planning Council and he disseminated the Congress in Spain. The Spanish delegation consisted of Federico López Valencia and Salvador Crespo, and Rafael Vélaz de Medrano, regional inspector of Labour, as delegates of the Ministry of Labour; Ricardo Bastida and Ramón de Belausteguigoitia representing the City Council of Bilbao; Nicolau M^a Rubió i Tudurí, representing the Civic Society Ciutat Jardí of Barcelona; and the architect José Salaberry and the engineer José Casuso representing the Madrid City Council, among others.

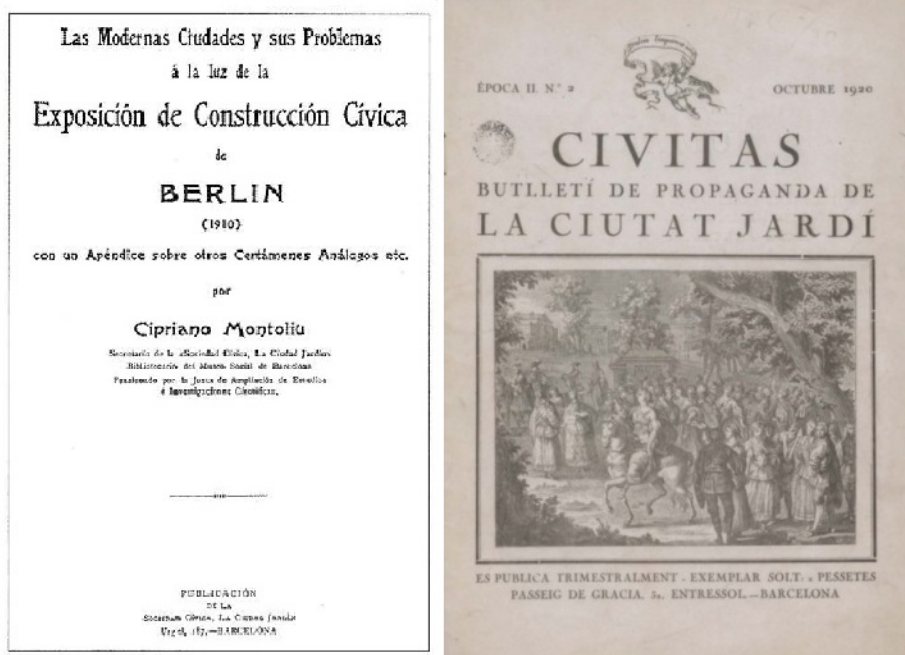


Figure 5. Pamphlet about Berlin Exhibition (1910) and journal *Civitas* edited by Societat Jardí. First, under the direction of Cebriá de Montoliu (Cipriano Montoliu) and later on, under Nicolau M. Tudurí. This is the first issue edited by Tudurí, with an article about the London Inter-allied Congress (1920).

The real objective for most of the Spanish delegates was to analyze and evaluate the solutions for the problems derived from the very strong demand for new homes that, in Great Britain, meant the construction of 500,000 houses in a very short period of time.²⁵ In fact, in August, Salvador Crespo, gathering the ideas expressed in the Congress, elaborated a renewal of the Casas Baratas Law (1911) —named cheap housing instead of social housing—. In the proposal, the modern housing doctrine is contained, based on the limitation of the number of buildings per hectare, the scientific layout of populations and the creation of city gardens, and represents the biggest advance made to date in the solution of the housing problem in Spain, although the complexity and contradictions in the regulations limited a lot the success of Casas Baratas Law (1921).

The Casas Baratas Law (1921), administrated by the IRS, established which houses may be legally termed cheap houses —houses for the working classes and middle–low income classes—, putting some limitations on the proportion of global investment including land purchase plus construction, and the income of the tenant or owner.



The law also set hygienic and building standards to which they must submit, as long as they were part of a housing scheme, gardens, parks, gymnasia, bath, schools, co operative stores, will be legally assimilated to the houses. The law had different features as exemption from taxes, direct grants and rent guaranty for the poorer classes. Provincial and local authorities were empowered to lease, rent or sell land and preference was given to building cooperative societies and trade-unions had preference.²⁶ Continuing with the effort of diffusion, the IRS issued a number of useful pamphlets, which included translation into English and French, explaining the law and its workings.

About the singular German exchanges

This situation of openness also caused the presence of some Germans town planners and architects, mainly, to study our cities and their urban morphologies or to participate directly in the debates, if not in the numerous public competitions for town extension plans from the second half of the 1920s, as Josef Stübben, Hermann Jansen and Otto Bunz. The Estatuto Municipal in 1924 forced the Spanish towns of more than 10,000 inhabitants and a growth rate of 20% in the decade of the 1910s, to have a proper urban extension plan. Josef Stübben would coincide with César Cort in the international contest of Bilbao of 1926, in which both participated separately, later to do it together in the one of Madrid of 1929, where also participated Hermann Jansen, associated with Secundino Zuazo.

Thus, reciprocally, we could assess the presence in Spain of foreign technicians and their benefit in favour of professionalizing town planning. A singular case was represented by the German Oskar Jürgens, doctor engineer and architect, collaborator of Felix Geuzmer—director of the Charlottenburg Seminary of the Technical School of Berlin—and Josef Stübben, as author of the book *Spanische Städte. Ihre bauliche Entwicklung und Ausgestaltung*, published in Hamburg in 1926.²⁷ Paradoxically, it was the remarkable diffusion reached by the book among the German technicians that led to its dissemination in Spain.

If we take as reference the treatise *Der Städtebau* by Josef Stübben, the presence of Spanish urban references in its first edition of 1890 is null. On the contrary, in the 1924 edition there is recognition of the contribution of the engineer Ildefonso Cerdá, the Barcelona plan of the French town planner Leon Jaussely of 1904 is reproduced and César Cort, Guillem Busquets and Cebrià de Montoliu are mentioned. Curiously, the Linear City of Arturo Soria was not listed.

Conclusion

The figures that tried to involve Spain in the International Urban Networks during the complicated times around the First World War, returned the knowledge they received in different ways. Cebrià de Montoliu applied the knowledge to the diffusion of Garden Cities experiences in Catalonia, but also introduced the new town planning concepts through the Social Museum and the journal *Civitas*; Federico López Valencia and Salvador Crepo applied their knowledge to housing policies through the IRS, with the result of the Casas Baratas Law (1921). Three years after, the Estatuto Municipal (1924) was passed: the first Municipal Law that involved the expansion responsibilities and can be considered the first Spanish town planning law. The Town Councils applied their technicians' knowledge in their proper urban development as the contest of Bilbao (1926), Madrid (1929) and the proposal for Barcelona (1934), with Le Corbusier and the architect Fernando García Mercadal one of the leaders of the CIAM in Spain. Hilarión González del Castillo diffused proposals for Linear and Garden Cities in many publications, and Professor César Cort introduced the Garden City theories in his teaching at the School of Architecture in Madrid with concepts as zoning, civic survey, park systems, satellite-towns, parkways, super-blocks and regional planning.

These new ways had to be adapted to the Spanish tradition. And it was really tried, until the interruption of the Spanish Civil War in 1936. That the future city find some images in the numerous urban transformation plans formulated during those years, was not an obstacle for "the people of old spirit, educated in an ancient aesthetic, attracted perhaps by the new spirit, but feeling the love of the past distance", they would find their refuge in "the separated corners that were then to contemplate a rudimentary and primitive architecture, ignorant of itself, like that of our current poor villages", as Torres Balbás finished his meditation on the future city, in a reflection that did not eliminate the inheritance left in its physical trace by the civilizations of the past.²⁸

Disclosure Statement

No potential conflict of interest was reported by the author.



Notes on contributor(s)

María Cristina García González: PHD Universidad Politécnica de Madrid with an Extraordinary Doctorate Award in 2011. She is Doctor Assistant Professor in the Department of Urban Planning and Territory of the Escuela Técnica Superior de Arquitectura of the Universidad Politécnica de Madrid. She has been a professor at the Escuela Politécnica Superior (Architecture) of the Universidad de Alicante. She has been pensioned by the Spanish Academy in Rome and Visiting Scholar at the University of California at Berkeley. Her research career focuses on theory and history of the city and urban planning.

Salvador Guerrero López: PHD Universidad Politécnica de Madrid with an Extraordinary Doctorate Award in 2017. He is Associate Professor of the Department of Architectural Composition of the Escuela Técnica Superior de Arquitectura of the Universidad Politécnica de Madrid. Previously, he has been teaching at the Universidad de Alicante and Universidad de Alcalá. He is Advisor to the Residencia de Estudiantes Foundation. He was curator of the exhibitions *Antonio Flórez, arquitecto (1877-1941)*, celebrated in 2002, *Le Corbusier, Madrid, 1928. Una casa-un palacio*, and *El arte de saber ver. Manuel B. Cossío, la Institución Libre de Enseñanza y El Greco*, in 2016; and editor of the monograph *Maestros de la arquitectura moderna en la Residencia de Estudiantes* (2010).

Bibliography

Aldridge, Henry R. "La habitación popular y la construcción cívica." and "Las condiciones del albergue de los más pobres." *Civitas*, Vol. 2, nº 9, April 1916: 36-9 and 39-44.

"Chronicle of Passing Events." *The Town Planning Review*, v. 5, n. 3, Oct. 1914: 245-256.

Cohen, Jean-Louis. *La temptació d'Amèrica*. Barcelona: Centre de Cultura Contemporània de Barcelona, 1996.

"Congrés d'edificació i urbanisme, a Londres." *Civitas*, Època II, nº 1, Juny 1920: 15.

Cort, César. "La reconstrucción de Chauny." *Arquitectura*, nº 15, 1919 : 177-180.

Cort, César. "La Conferencia Interaliada de Urbanismo", *Boletín de la Sociedad Central de Arquitectos*, n. 63, 1919: 3, n. 64, 1919: 3-6, n. 65, 1919: 3-7, and n. 66, 1919: 4-6.

Geddes, Patrick. "Two Steps in Civics: Cities and Town Planning Exhibition and the International Congress of Cities: Ghent International Exhibition, 1913." *The Town Planning Review*, v. 4, n. 2, 1913: 78-94.

Ford, George B. "Town Planning in the Devastated Regions of France." *American City*, Vol. XXII, n 3, March 1920: 217-221.

García González, María Cristina. "César Cort y la cultura urbanística de su tiempo: redes internacionales y canales de difusión del urbanismo en la europa de entreguerras." *Cuadernos de investigación urbanística*, n. 87, 2013.

González del Castillo, Hilarión. "La ciudad jardín y la ciudad lineal en el Ateneo." *La Ciudad Lineal*, n. 521, May 2013: 1-4.

Guerrero, Salvador. "La Junta para Ampliación de Estudios y la arquitectura de su tiempo (1907-1936)", *Boletín de la Institución Libre de Enseñanza*, n. 63-64, 2006.

Instituto de Reformas Sociales. *The new Spanish Housing Law 1921- La nouvelle loi espagnole des habitations à bon marché, 1921*. Madrid: Instituto de Reformas Sociales, 1922.

Jürgens, Oskar. *Ciudades españolas. Su desarrollo y configuración urbanística*. Madrid: Ministerio para las Administraciones Públicas, 1992.

Lebas, Elizabeth, Magri, Susanna & Topalov, Christian. "Reconstruction and popular housing after the First World War: A comparative study of France, Great Britain, Italy and the United States." *Planning Perspectives*, v. 6, n. 3, 1991: 249-267.

Lewis, Nelson P.. *Urbanización* (trad. de José María Lasarte). Barcelona: Imprenta de Henrich y C.ª, 1917-1918.



Llopart, Amadeo. "El Urbanismo en la Escuela de Barcelona." *Arquitectura*, n. 71, March 1925: 45-46.

Meller, Helen (ed.). *Ghent Planning Congress 1913. Premier Congrès International et Exposition Comparée des Villes*. London: Routledge, 2014.

Montoliu, Cebrià de. "Ressenya L'activitat internacional en matèria d'habitació i construcció cívica durant l'any 1913." *Arxius de l'Institut de Ciències*, v. 3, n. 1, 1915:5-18.

Posada, Adolfo. *El régimen municipal de la ciudad moderna*. Madrid: Julio Cosano, 1927.

Saunier, Pierre-Yves. "Sketches from the Urban Internationale. Voluntary Societies, International Organizations and US Foundations at the City's Bedside 1900-1960" *International Journal of Urban and Regional Research*, June 1999: 380-403.

Torres Balbás, Leopoldo. "Utopías y divagaciones." *Arquitectura*, v. III, n. 24, 1920: 104-107.

VII^{ME} Congrès Internationale des Habitations a Bon Marché, tenu a Liège, du 7 au 10 Août 1905. Liège: Publies par le Bureau du Congrès, 1906.

"Open reconstruction exhibition in Robinson. French Society, La Renaissance des Cites, Illustrates War Zone Work by Exhibition." *Harvard Crismon*, 1 June 1921.

Z., V. "Los trabajos realizados en Elche por los alumnos de urbanización.» *Arquitectura*, n. 38, 1922: 256-264.

Imagen sources

Figure 1: Edith Elmer Wood. *Housing Progress in Western Europe, 1923*. Nueva York: E. P. Dutton & Co. 1923; and "¿Qué es una casa barata?" Madrid: Instituto de Reformas Sociales, 1922.

Figure 2: Instituto de Reformas Sociales. *Exposición y congreso internacional de trazado de poblaciones de Gotemburgo*. Madrid: Instituto de Reformas Sociales, 1923; and V. Z. "Los trabajos realizados en Elche por los alumnos de urbanización." *Arquitectura*, n. 38, 1922: 256-264.

Figure 3: Hilarión González del Castillo. "La ciudad en Bélgica." *La Ciudad Lineal*, August 1913, 253-254.

Figure 4: George B. Ford. *L'Urbanisme en pratique*. París: Ernest Leroux, 1920. and The New Spanish Housing Law 1921. La nouvelle loi espagnole des habitations á bon marché, 1921. Madrid: Instituto de Reformas Sociales, 1923.

Figure 5: Cebrià de Montoliu, *Las modernas Ciudades y sus Problemas a la luz de la Exposición de Construcción Cívica de Berlín (1910)*. Barcelona: Sociedad Cívica La Ciudad Jardín; and Nicolau M. Tudurí, *Civitas*, n. 2, October 1920.

¹ Torres Balbás, "Utopías y divagaciones," 107.

² Salvador Guerrero, "La Junta para Ampliación de Estudios y la arquitectura de su tiempo (1907-1936)", *Boletín de la Institución Libre de Enseñanza*, n. 63-64, 2006.

³ VII^{ME} Congrès Internationale des Habitations a Bon Marché, tenu a Liège, du 7 au 10 Août 1905, XXXVIII.

⁴ Aldridge, "La habitación popular y la construcción cívica" and "Las condiciones del albergue de los más pobres," 36-39 and 39-44.

⁵ González del Castillo, "La ciudad jardín y la ciudad lineal en el Ateneo," 1-4.

⁶ Llopart, "El Urbanismo en la Escuela de Barcelona." 45-46.

⁷ Lewis, Nelson P.. *Urbanización* (trad. de José María Lasarte). Barcelona: Imprenta de Henrich y C.ª, 1917-1918.

⁸ Posada, *El régimen municipal de la ciudad moderna*, IV-V.

⁹ The Association changed the name to International Garden Cities and Town Planning Association in 1922 and to International Federation for Housing and Town Planning in 1926.

¹⁰ Saunier, "Sketches from the Urban Internationale. Voluntary Societies, International Organizations and US Foundations at the City's Bedside 1900-1960," 380-403.

¹¹ García González, "César Cort y la cultura urbanística de su tiempo: redes internacionales y canales de difusión del urbanismo en la europa de entreguerras," n. 87.

¹² Letter from César Cort to John Nolen, 10th February 1928. Cornell University Library.

¹³ V. Z., "Los trabajos realizados en Elche por los alumnos de urbanización."

¹⁴ Later on, l'Union Internationale des Villes et Pouvoirs Locaux (IULA).

¹⁵ As documented by Geddes, "Two Steps in Civics: Cities and Town Planning Exhibition and the International Congress of Cities: Ghent International Exhibition, 1913."



The 18th International Planning History Society Conference - Yokohama, July 2018

¹⁶ Meller (ed.), *Ghent Planning Congress 1913. Premier Congrès International et Exposition Comparée des Villes* (London: Routledge, 2014). Introduction by William Whyte.

¹⁷ "Chronicle of Passing Events," *The Town Planning Review*, 245-256.

¹⁸ Cebrià de Montoliu, "Ressenya L'activitat internacional en matèria d'habitació i construcció cívica durant l'any 1913." *Arxius de l'Institut de Ciències*, 5-18.

¹⁹ Cort, "La reconstrucció de Chauny," 177-180 and "La Conferencia Interaliada de Urbanismo," 3, 3-6, 3-7 and 4-6.

²⁰ Cohen, *La temptació d'Amèrica*, 49-50.

²¹ Ford, "Town Planning in the Devastated Regions of France." 217-221.

²² "Open reconstruction exhibition in Robinson. French Society, La Renaissance des Cites, Illustrates War Zone Work by Exhibition." *Harvard Crismon*.

²³ Do not confuse with the 4th International Garden Cities and Town Planning Association Conference that took place in London, February 1920.

²⁴ "Congrés d'edificació i urbanisme a Londres." 15.

²⁵ Lebas, Magri and Topalov, "Reconstruction and popular housing after the First World War: A comparative study of France, Great Britain, Italy and the United States." 249-267.

²⁶ Instituto de Reformas Sociales, *The new Spanish Housing Law 1921- La nouvelle loi espagnole des habitations à bon marché, 1921*.

²⁷ Jürgens. *Ciudades españolas. Su desarrollo y configuración urbanística*.

²⁸ Torres Balbás, "Utopías y divagaciones," 107.



The Town Planning congresses at the Paris International Exhibition of 1937. Ultimate encounters.

Corinne Jaquand

PhD, Ecole nationale supérieure d'Architecture Paris-Belleville ENSAPB, Ipraus-UMR Ausser,
corinne.jaquand@paris-belleville.archi.fr

1937 is an excellent focal point to look at the international planning movement on the eve of the Second World War. Indeed, the International Exhibition of Paris has hosted several congresses devoted to urban planning in the world. Dealing with regional planning, the International Federation for Housing and Town Planning (IFHTP) held its 15th congress, while the CIAM 5, dedicated to “*Logis et loisirs*” (Dwelling, recreation) was organised by Le Corbusier in connection with an exhibition at the Pavillon les Temps nouveaux. This contribution proposes to present the relations between both congresses in the thirties. Emphasis will be put more on the convergences than on the divergences of topics carried out by the experts of the IFHTP and by the avant-garde architects of the CIAM, at a time when planning and politics were challenged by the rise of fascism and the threat of a world conflict.

Keywords: world planning history, cross-cultural exchanges, city planning and politics



Figure 1: International Exhibition “Arts et Techniques”, Paris 1937. Postcard showing Speer Pavillon (Germany) facing Iofan Pavillon (UdSSR) [*Promenades à travers l'exposition. 20 cartes détachables. Série 3 (Boulogne-sur-Seine, M. Chipault), 1937, Front cover*]

Introduction

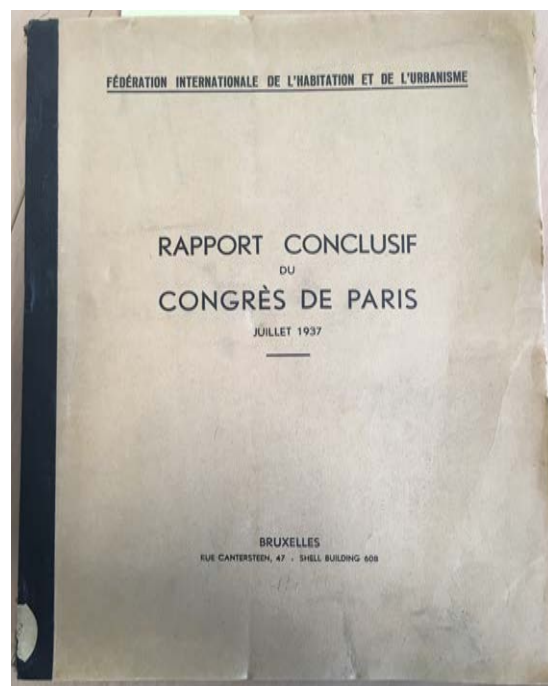
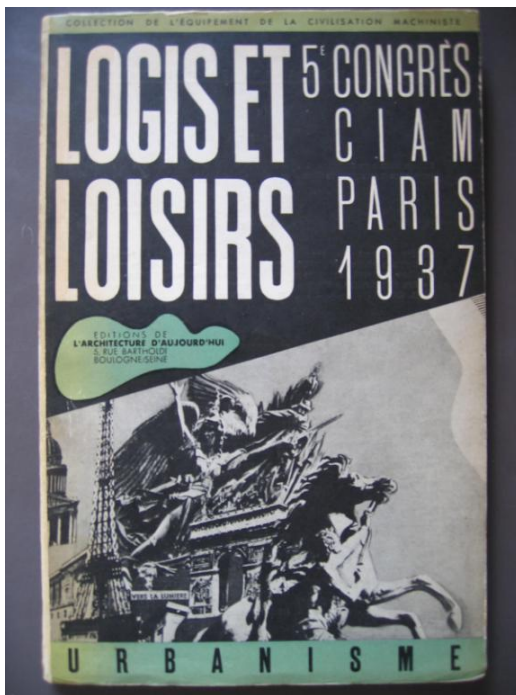
The Paris International Exhibition of 1937, dedicated to the “Arts et Techniques appliqués à la Vie moderne”, took place in a geopolitical climate of rising tensions. Standing face to face in the axis of the Eiffel Tower, the pavilions of Soviet Union and Nazi Germany (built respectively by Boris Iofan and Albert Speer) were a harbinger of the world war to come (Figure 1)¹.

This exhibition is an excellent focal point to look at the international planning movement on the late thirties. From July 4th to 8th, the International Federation for Housing and Town Planning (IFHTP) holds its 15th congress, merging this year with the International Housing Association (*Internationaler Verband Für Wohnungswesen*) (IHA). The joint congress is dealing with housing for the poorest, high-rise construction, national and regional planning. From July 8th to 13th, the Study Group of the Underground Urban Center (GECUS) held its first congress (*Congrès de l'Urbanisme souterrain*). French and foreign experts sail from one conference to another,



joining for visits and attending the garden party on the 14th July². Two weeks before from June 28th to July 2nd, CIAM gathered for their 5th congress dedicated to “*Logis et loisirs*” (Dwelling, Recreation)³. Under the rule of Le Corbusier, the Pavillon des Temps nouveaux opens on the Porte Maillot site of the International Exhibition.

The interferences between the IFHTP and the CIAMs deserve to be highlighted in order to go back on the assumed cleavages between avant-garde and operational planners (Figure 2 and 2 bis). If the historiography on CIAM is well established (Mumford, 2002), that on the IFHTP has recently opened a rich corpus (Riboldazzi, 2010, 2011, 2015, Geerste, 2012, 2016, Graham, 2011, Wagner, 2016). In the inter-war period, IFHTP proceedings and thematic bulletins provide a precise apparatus, as the association expands its networks to America, Asia, Australia and Pacific countries. A brief survey of the CIAM’s link to other ‘big’ international congresses still exists (Somer, 2007) but needs to be detailed. By crossing the chronology of the meetings of the CIAM and its organizing committee CIRPAC with that of the IFHTP, we notice temporal coincidences in Berlin 1931 and Paris 1937. Besides some characters are part of both institutions, such as the German Ernst May and the Polish Tadeusz Tolwinski. The comparison of calendars, the crossing of lists, themes and methods, thus show even more convergences. Moreover, it is important to compare how IFHTP and CIAM react to the political tensions of their time.



Figures 2–2 bis: Front covers of the CIAM 5 Report and of the IFHTP congress Report. [*Logis et Loisirs. 5^e congrès CIAM Paris 1937*. Boulogne-sur-Seine: Editions de l’Architecture d’Aujourd’hui, 1938 ; Fédération internationale de l’habitation et de l’urbanisme. *Rapport conclusif du congrès de Paris, juillet 1937*, typed. Brussels: IFHTP, 1937]

IFHTP 1937 and CIAM 5 in international and French context

Founded in 1913 in Paris, the IFHTP is rooted in the garden city movement and brings together officials engaged in operational planning within social housing companies, municipalities, regional planning agencies, public ministries. For their part, the CIAM, organized from 1928 around the nucleus of Siegfried Giedion, Le Corbusier and Hélène de Mandrot, bring together architects mostly without institutional affiliation but sharing a common opposition to academicism.

The two conferences deserve to be watched under the magnifying glass of the French context as well. The year before, in 1936, the Popular Front government came to power bringing social laws in favor of paid holidays that foreshadow new programs for cultural and outdoor recreation. The International Exhibition of 1937 hosted a section at the new Musée d’Art moderne (section 17) showing extension plans for French medium-sized towns as required by the Cornudet law (1919-1924)⁴, and also the Paris Regional Development Plan (*Plan d’aménagement de la région parisienne*) (PARP) which has been formalized in May 1934⁵. The PARP has been outlined by the architect Henri Prost who designed superb perspectives showing landscaped highways to be built in the outskirts



of Paris and a so-called 'Route des parcs' linking Versailles to other historical parks West of Paris. The GECUS exhibition on "The Underground World" (section 17 TER) shows a large electrified model of Paris underground with the metropolitan, sewers, pipelines, geological strata (Figure 3)⁶. Following the IFHTP and GECUS congresses, many visits are taking place in Paris and its suburbs, including new tunnels built along the the ring road and the highway already under construction between Marly and Versailles.

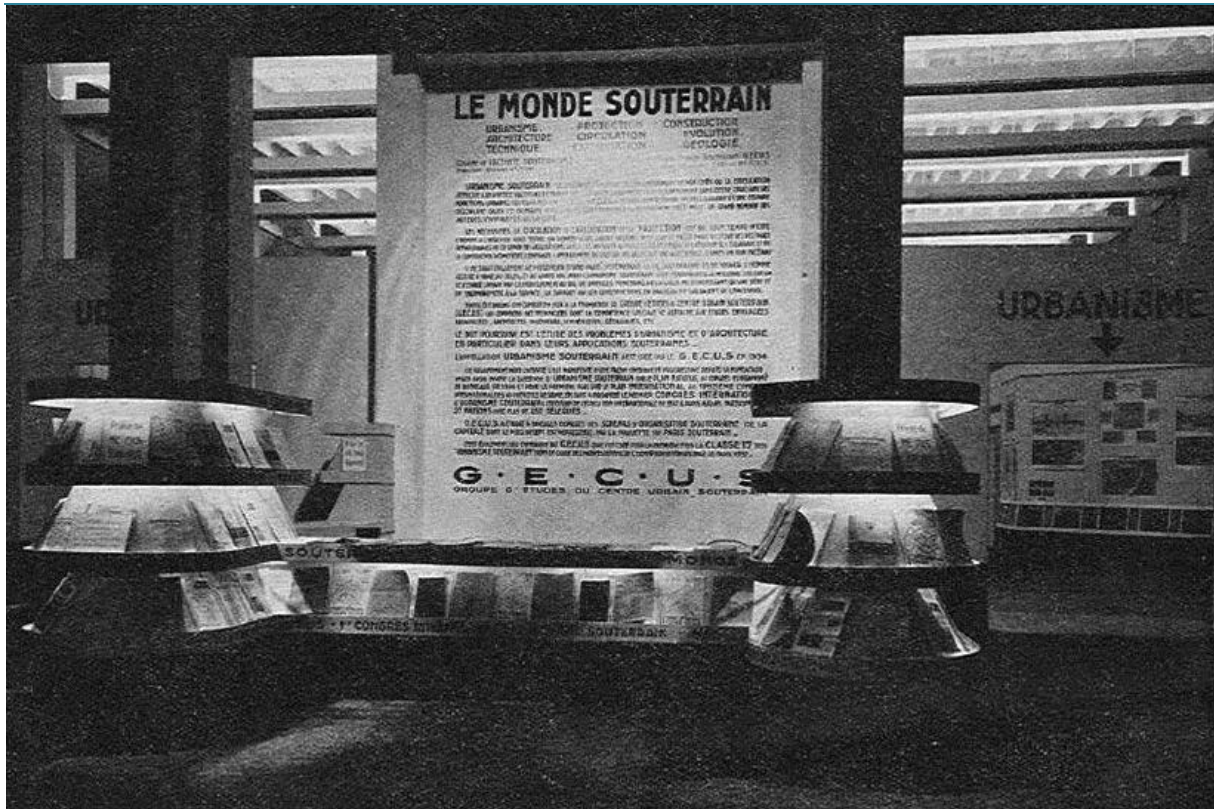


Figure 3: Exhibition of the GECUS "Le Monde souterrain", section 17 TER of the main Exhibition Arts et Techniques at the Musée d'Art moderne [Le Monde souterrain, no.15-16-17 (November 1937): 161].

IFHTP assuming political neutrality of town and regional planning

With its headquarters in London and its presidency entrusted to Raymond Unwin and George L. Pepler, the IFHTP is dominated by the British who favour satellite cities, green belts and industrial decentralization. By changing name in its beginnings the association switches from garden city to large scale urban planning⁷.

The congress process is then reorganized by introducing two different sessions dedicated to housing and urban development. Rapporteurs and session chairs follow a strict protocol inspired by supranational institutions set up after the First World War, like the International Labor Organization. Before each congress, written contributions are gathered in a first book which is sent to the participants who have to register to make comments on the spot. Statements are transcribed in a second volume which appears after the congress as well as a third which summarizes the course of the sessions, the speeches and the visits. The result of the congresses can lead to a list of resolutions, such as in Amsterdam (1924) and New York (1925), respectively on regional and urban planning and on traffic reorganization in metropolitan areas.

The whole is translated quite accurately in at least three languages, English, French, German. In addition, booklets issues open up the horizon on urban planning in many countries. A glossary of urbanism in several languages French, English, German, Italian, Spanish is published in 1932. From 1938, a quarterly magazine and the minutes of the Federation meetings is published in Germany⁸. Since the Vienna Congress (1926) there is talk of establishing an "international quotation that should be used in the development of [all] civic surveys and city plans"⁹. Looking for a similar standard mapping, CIAM does not seem to have succeeded either.



The 18th International Planning History Society Conference - Yokohama, July 2018

The life of the IFHTP is ritualized by banquets and visits scheduled the days following the congress. Ministers and sometimes the heads of state include these international meetings in their diplomatic agenda. Since the mid-twenties, congress attendance often exceeds 1,000 people.

The original English and French nucleus is rapidly expanding to a second circle of personalities from a dozen countries. The Presidency, Vice Presidency and Treasurer are relatively stable over the period. The elected Council and the appointed Executive Committee, in charge of the next congress to be held, evolve according to geographical transplants inside and outside Europe¹⁰. Thus one crosses in the council representatives from Scandinavian, Central and South Europe. Finally, UdSSR, Japan, Latin America, Australia, New Zealand and, episodically, Zionist Palestine, make their appearance in the mid-twenties¹¹.

The project of a merger with IHA, based in Frankfurt am Main, follows the Berlin Congress of 1931. However, the coming to power of the Nazis leads to a negative missive of the IFHTP in April 1933, confirmed at the London Congress in 1935¹². Then the discussions resume and lead to a memorandum presented at the Paris Congress in 1937. The establishment of a seat in Brussels is planned for the following year with a joint secretariat: Donald C.L. Murray from IFHTP and assistant Paula Schäffer from IHA. The merged body take over the name of the IFHTP. From October 1938, the mayor of Stuttgart, Karl Strölin, will assume the presidency, succeeding the English George L. Pepler.

What happened to the Federation to change its mind? Probably the ousting of German Social Democrat and Jewish colleagues first shocked, especially that of Robert Schmidt, member of the Executive Committee, Vice President and Treasurer of the IFHTP. A valued pioneer in regional planning, Robert Schmidt has been managing the *Siedlungsverband Ruhrgebiet* (SVR) since 1920, the regional planning agency of the industrial Ruhr area. In 1933, he is dismissed and dies in 1934. The renewal of the actors in Germany is a result of aryanization and political purges. In 1933 Karl Strölin takes the helm of the IHA and is appointed mayor of Stuttgart by the Nazi party. It is likely that after the death of Schmidt, the relations of the IFHTP with the new German leaders gradually resume. Supporting good planning practice must go beyond political resentment.

Until the end of 1941, Strölin aims to keep the town planning movement a political neutrality. Despite the narrowing of delegations, he does not cease to operate the IFHTP effectively with colleagues whose countries have been subjected to the German occupation. He is receiving valuable assistance from Paula Schäfer, alone at the IFHTP secretariat in Brussels since the death of Murray. Under her supervision, the trilingual quarterly journal will not have to suffer from the war, nor the bi-weekly newsletter whose bibliography is thickening including information on the Chinese city of Hsinking, the capital of Manchukuo state, then ruled by Japan¹³.

NSDAP member since 1923, Strölin is one of those few Nazi notables for whom Hitler betrayed the interests of Germany. In 1944, he plotted with Rommel and was worried after the failed attack against Hitler in July 1945. Excluded from the party, he remains mayor of Stuttgart and takes contact with the allies for a peaceful surrender of his town. Despite his responsibility for the deportation of Jews from Stuttgart, he is little worried by the denazification commissions, unlike another member of the IFHTP, Guido Harbers, who was director of urban planning and housing in Munich and remains three years in jail.

The French within the IFHTP

What is the implication of the French within the IFHTP before the Second World War? It can thus be summarized as follows: they occupy permanent places in the bodies¹⁴, but they contribute weakly in the writings of the federation. At the Paris 1928 and 1937 congresses, they represent less than 20% of the attenders, whereas those of the country concerned are normally the majority¹⁵.

The French random presence in the IFHTP is reflecting a certain backwardness inside the international movement for urban planning. Thus the Minister of Labor and Hygiene, Louis Loucheur, author of a law bearing his name for the improvement of defective suburbs (1928), introduced the IFHTP Paris congress of 1928 in these terms: "It is necessary that in these international meetings [...] you bring us your thoughts, your ideas and very often your lights. Alas, apart from some remarkable efforts made in France in recent years, we may not have enough to show you beautiful things [...]"¹⁶. Even if Beaux-Arts planners export their know-how abroad (Jaussely in Barcelona, Prost in Antwerp, Gréber in Philadelphia, Agache in Rio de Janeiro and Le Forestier in Argentina), the debates is not very international comparing to Germany, Holland and Great Britain. Some people are exceptions like Henri Sellier who disseminates plenty of informations on foreign countries in the journal *La Vie urbaine*¹⁷. Senator of the Seine, Minister of Public Health under the government of the Popular Front, and Mayor of Suresnes, Sellier is a major figure in the debate on Greater Paris. As director of the OPHBM of the Seine (Public office for social housing), he initiated the garden cities built around the capital city. The magazine *Urbanism*, created in 1932 by the French Society of Planners (SFU), give accounts on the IFHTP congresses in Berlin 1931 and Paris¹⁸. Other



newspapers are quite indifferent to foreign references with the exception of *L'Architecture d'Aujourd'hui* appearing in 1930.

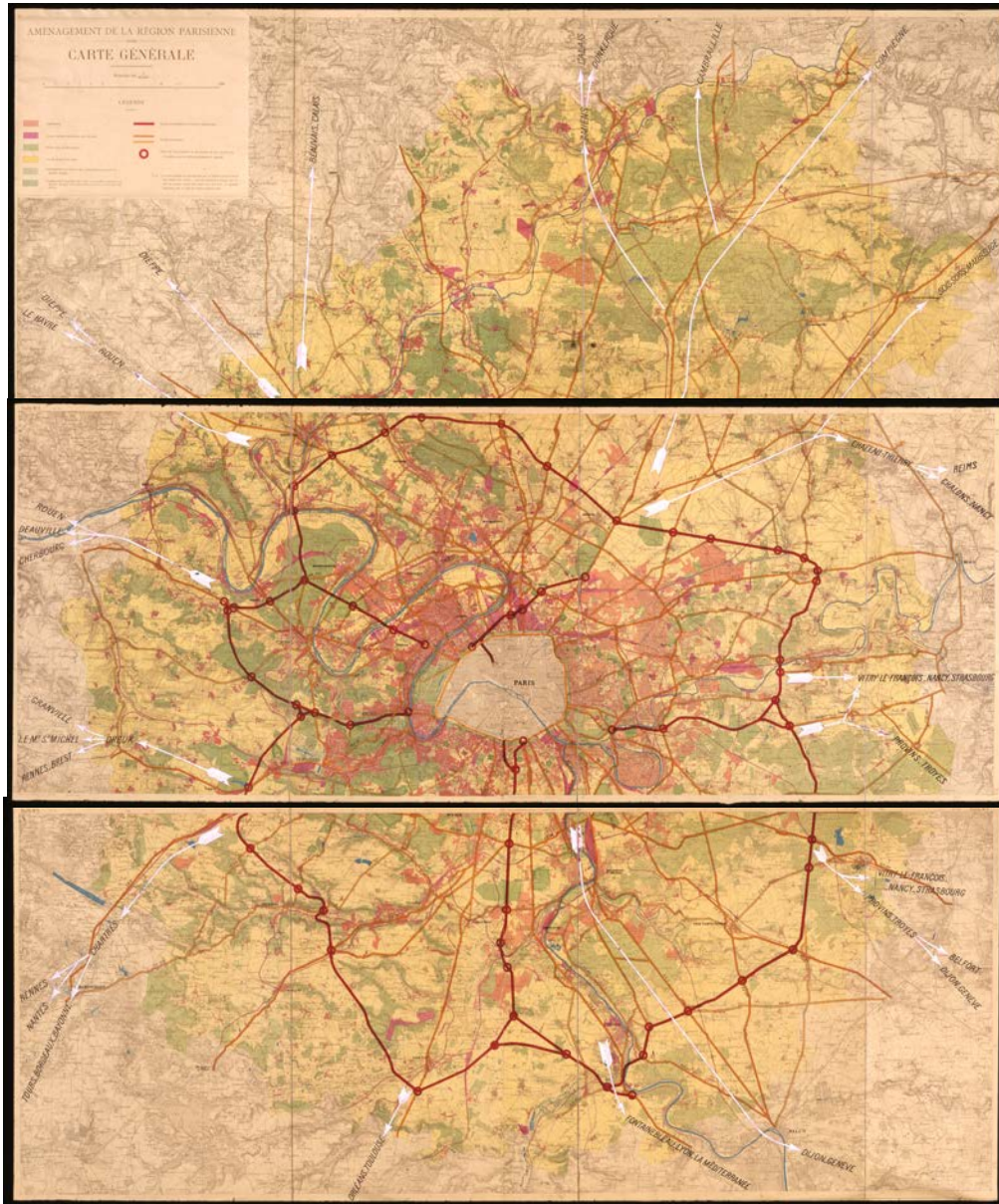


Figure 4: *Plan d'aménagement de la région parisienne PARP*, May 14, 1934, original scale 1:50 000 [Archives d'architecture du XX^e siècle. Fonds Henri Prost, 343 AA: HP-DES-002-04-01, -02, -03]

The discussion on the Paris Regional Development Plan (PARP) (Figure 4) was expected to occupy an important place in the congress of 1937. The Berlage extension plan, studies for New York and its environs, Regulatory Plan of Rome, Berlin Plan of 1929, were respectively at the heart of the IFHTP congresses of Amsterdam (1924), New York (1925), Rome (1929) and Berlin (1931). On the contrary, French planners do not seem to seize this international opportunity to give a broader echo to the PARP. In London (1935), Henri Prost gave a general statement on “The development plan of the Paris region currently in the process of approval”. In 1937, he is retained in Turkey for his first studies on Istanbul¹⁹. Some statements are delivered by his assistants, Jean Royer and Pierre Remaury, and by Georges Sébille another expert. The Greater Paris paradigm is based on the densification of the suburbs and the improvement of road traffic by the construction of landscaped motorways. Projects of satellite towns have been abandoned due to land expropriation difficulties and financial uncertainty. In 1941, the master plan will be applied by the French State to a set of heterogeneous municipalities without a single metropolitan governance²⁰.



In 1937, French participants seem to have mobilized more for the first Congress of Underground Urban Planning which deals with road infrastructures but also passive defense against air attacks, for which Germany appears at the forefront. There will be referred to a Goebbels speech on measures listed by the National Air Defense League (*Reichsluftschutzbund*)²¹.

After WWII the life of the IFHTP/IFHP resumes with a very active participation of French delegations as their country embraces the culture of voluntary planning as headline for the national reconstruction.

The handling of CIAM 5 by Le Corbusier

This lack of international challenge highlights the originality of LC on the French scene. The native Swissman is close to Germanic avant-gardes that manipulates slogans and manifestos. LC knows how to combine French inductive thinking with German propaganda efficiency.

After the CIAM 4 of Athens, the researches on the “Functional City” had to be continued, but the next congress is several times postponed. Le Corbusier explicitly reinforces the preparations of CIAM 5 and is careful to publish the conference report just after. In the same way as IFHTP congress, the topics are introduced and moderated by rapporteurs and chairmen. The main session deals with the functionalist mantra “Living, recreating, working, transporting”²².



Figure 5: Le Corbusier, Pavillon des Temps nouveaux, Exhibition *Habiter, Recréer, Travailler Transporter* [Photo: Albin Salaün © FLC/ADAG]

The second part of the congress is a mix of themes, none of which predominates such as: “Spatial organization of recreation”, “Urbanism and rural architecture”²³, “Urbanism and aerial threat” with a statement of Colonel Vauthier, expert at the GECUS²⁴. High-rise buildings and land issues are also discussed, but rather superficially if compared to the IFHTP.

Le Corbusier introduces a questionnaire sent in advance and commented during the meeting. Thus the French Quétant is given an investigation on “Settlement and the high-rise building”. Le Corbusier entrusted also Norbert Bézard with a memorandum on “Villages coopératifs” and “Agrarian unity”. Presented as a ‘corresponding specialist, agricultural worker’, Bézard had published in 1934 together with Le Corbusier *La Ferme Radieuse*. By inviting Bézard and Dr. Pierre Winter to CIAM 5, Le Corbusier shows acquaintances with French fascist groups²⁵.

The book of CIAM 5, *Logis, Loisirs* (Dwelling, Recreation), is remarkable for its graphic and the exhibition presented at the Pavillon des Temps Nouveaux for its innovative scenography (Figure 5). With an abundance of



slogans, plans, drawings and large photos, the subject is somewhat scattered but is a pleasure to the eye²⁶. However, two major themes emerge: rural urbanism and a project of LC for Paris which completes his Plan Voisin of 1925.

CIAM's narrative of resistance to the conformity reaches its limits. If, Le Corbusier still shows a certain disregard for the 'phynance [sic]²⁷, the German and Dutch members of CIAM are then engaged in large social housing programs such as Ernst May in Frankfurt and JJP Oud in Rotterdam. In La Murette-Drancy (1935), Marcel Lods, member of CIAM France (then associated with Eugène Beaudouin) has just experienced large-scale prefabrication in what is considered the first French 'grand ensemble'. Besides, in peripheral European countries avant-garde and city architects are part of the same patriotic elite, like in Poland where the CIAM section includes both the radical Simon Syrkus and Tadeusz Tolwinski who has been in charge with the master plan of Warsaw.



Figure 6: Front cover of Le Corbusier's book, *Des Canons, des munitions ? Merci! Des logis... s.v.p.* Boulogne-sur-Seine: Editions de l'Architecture d'Aujourd'hui, 1938.

Conclusion: City planning or war ?

In the 1930s, the arrival of the Nazis in power thwarts the equilibrium at the CIAM and IFHTP. Once leftist and Jewish Germans and Austrians gone into exile, Le Corbusier got the way free to take the CIAM direction. The integration of IHA into the IFHTP in 1937-1938 insures the influence of German experts appointed by the Nazi regime. Towards UdSSR, the CIAM testify sympathy – in spite the cancellation of the Moscow congress – and the IFHTP shows a benevolent opening – at the previous London congress of 1935, the Soviet delegation was numerous but for any reason absent from Paris in 1937. Whether in the CIAM or the IFHTP, the Fascist Italian regime is perceived favourably. The IFHTP Congress in Rome in 1929 is a success. In 1937 rural settlement programs of Pontine Marshes are widely discussed within IFHTP and CIAM. In France, the book of Gaston Bardet on the Rome of Mussolini comes out well in 1937²⁸.

Pleading for peace by urban planning seem absurd with historical distance, but it was not so at that time. Planning is presumed to smooth social tensions and to contribute to peace between nations.

This is evidenced by the polite exchanges of Karl Strölin with his French hosts on July 4th, 1937: Strölin: "Social discontent can, as you know from history, easily influence foreign policy. I see [...] in the sanitation of the housing conditions of the working class, an essential means for the stabilization of world peace, in general. [...] All our work must strive for this goal and we Germans want to work hard to solve this problem."²⁹ Then Jean Royer replying: "Henri Sellier told us yesterday that congresses, such as ours, were a striking example of international solidarity and that there should no longer be national borders when considering such questions."³⁰

"Et maintenant, préfères-tu faire la guerre?"³¹. Le Corbusier takes up the same plea vehemently in his book, *Des canons des munitions ? Non des logis s.v.p.*, issued in 1938 as the exhibition catalogue of the Pavillon des Temps nouveaux (Figure 6). Everyone is preparing for hostilities, but the enemy is not named.



Acknowledgements

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Corinne Jaquand is lecturer at the ENSA-Paris-Belleville and researcher at the IPRAUS. She has worked as urban planner for the city of Paris, the Senate of Berlin and for private investors. She earned a PhD at the EHESS, dealing with the metropolization of Greater Berlin at the beginning of the 20th century and received a grant from the CCA Montréal to research on regional planning and landscape urbanism overseas. She is co-editor of the website www.inventerlegrandparis.fr which provides the proceedings of conferences on the history of Greater Paris, comparing international planning cultures up to the present.

Endnotes

¹ The 1937 International Exhibition has left on the site two buildings in neo-classical style : the Palais de Chaillot, transformed by the architects Jacques Carlu, Louis-Hyppolite Boileau and Léon Azéma, and the new Musée d'Art moderne/Palais de Tokyo, built by Jean-Claude Dondel, André Aubert, Paul Viard et Marcel Dastugue.

For the lay-out, pavillons and light scenographies at night, see: Emile Labbé. *Exposition internationale des Arts et Techniques dans la vie moderne 1937* (Paris: Ministère du Commerce et de l'Industrie, 1937) ; Bertrand Lemoine (ed.), *Paris 1937: cinquantenaire de l'Exposition internationale*, exhibition catalogue (Paris: IFA, 1987).

² IFHTP and GECUS congresses take place in the "International Fortnight of Housing and Town Planning", from 5-17 July 1937 at the Maison de la Chimie, rue Saint-Dominique. The Fortnight will also host the conference of the Brussels-based International Union of Cities, as well as other national conferences, such as the Congress of Social Housing Societies (OPHBM). This Fortnight was inaugurated by the President of the French Republic, Albert Lebrun, and is held under the patronage of the French Government, the City of Paris and the General Council of the Department of the Seine. "Les congrès de la Quinzaine internationale des administrations publiques, de l'urbanisme et de l'habitation", *Urbanisme*, no. 58 (1937): 204-sq.

³ CIAM 5 is held at the Palais d'Iéna, recently completed by architect Auguste Perret. LC obtained the patronage of four Ministers: Foreign Affairs, National Education and Fine Arts, Agriculture, Public Works; of the Under-Secretary of Sports and Recreation, of the Director General of Beaux-Arts school.

⁴ On the city-planning exhibitions: *Exposition internationale des arts et des techniques dans la vie moderne. Catalogue général officiel* (Paris, R. Stenger: 1937). 2 vol.; "Exposition Universelle : Classe 17 l'Aménagement des villes et des campagnes", *Paris et la région capitale*, no. 1 (May 1937): 32 ; "L'Urbanisme à l'exposition", *L'Architecture*, no.12 (December 15, 1937): 415-426; *Urbanisme*, no.56 (June-July, 1937).

⁵ The Cornudet law requires the establishment of PAEE (development and extension plans and embellishments) to cities with more than 10,000 inhabitants. The PARP follows the Cornudet law and concerns Paris, the department of Seine and part of the departments of Seine-et-Oise, Seine-et-Marne and the Oise, within a radius of 35 km from Notre-Dame. The studies began in 1928 and were headed by the Higher Planning and Organization Committee of the Paris region (CSAORP) under the auspices of the Ministry of the Interior and the Seine Department. Following the law of May 14, 1932, the architect Henri Prost, assisted by Pierre Remaury and Jean Royer, receives order to establish the plan to 1: 10.000, jointly with the National Railways Cie, the geographical service of the army and the bureau of Extension of the City of Paris. Presented in May 1934, it has since been submitted to a public inquiry. The plan finally approved in 1941, then revised in 1956.

⁶ "Exposition Universelle: Classe 17 TER urbanisme souterrain", *Paris et la région capitale*, no. 1 (May 1937): 32; *Le Monde souterrain*, no.15-16-17 (November 1937). The passive defense shelter was built by: The Society of Government-Certified Architects (SADG); the aeronautical group [students] of the School of Beaux-Arts (GAEDBA); the Association of Veteran Architects (AAAC) and the Underground Urban Center Study Group (GECUS). Besides the GECUS had since 1933 a magazine: *L'Urbanisme souterrain*, under the direction of Edouard Utudjian and Gaston Bardet as editor. On the GECUS see: Catherine Blain. "La ville épaisse d'Édouard Utudjian. Un concept et ses ramifications", *Dossiers du Lacth #2, La ville souterraine: représentations et conception. La part de l'invisible* (December 2017): 55-60.

⁷ Designations of IFHTP: 1913 (1st Congress, Paris): *The International Garden Cities and Town Planning Association* (IGCTPA); 1922 (6th Congress Paris): *International Garden Cities & Town Planning Federation*; 1923 (7th Congress Göteborg): *International Federation for Town & Country Planning and Garden Cities*; 1926 (10th Congress, Vienne): *International Federation for Housing and Town Planning* (IFHTP). In the post-war period the federation will take the name of: *International Federation for Housing and Planning* (IFHP) (24th Congress, 1958, Liege).

⁸ After the merger of IFHTP and IHA, is published by Julius Hoffmann (Stuttgart) the quarterly review : *Habitation et Urbanisme/Housing and Town Planning/Wohnungswesen und Städtebau*, no. I, II, III/IV (1938) ; no. II, III/IV (1939) ; no. I/II, III/IV (1940) ; no. I/II, III/IV (1941) and the bi-monthly newsletter : *Informations de la Fédération Internationale de l'Habitation et de l'Urbanisme/Notes of the International Federation for Housing and Town Planning/Mitteilungen des Internationalen Verbandes für Wohnungswesen und Städtebau*, no. 1-6 (1939) ; no. 1-5/6 (1940) ; no. 1-6 (1941).

⁹ Xth *International Housing and Town Planning Congress*, Vienna 1926, Part III. Reports (Brussels: IFHTP), 15-16.

¹⁰ Thus the important role of John Nolen at the IFHTP until his death in 1937, and for the Mexico of Carlos Contreras.

¹¹ On Japan, see "The Procedures, powers and duties. Japan, Finland", *IFHTP Bulletin*, no. 5 (1924). Japan appears in the IFHTP bodies for the Vienna Congress (1926).



¹² Decision April 28th, 1933, on the basis of a Joint Committee report. End of the discussion. A similar merger with the International Union of Cities will not happen.

¹³ “Mandchouco/Mandchukou/Madschukuo”, *Informations de la Fédération Internationale de l’Habitation et de l’urbanisme/Notes of the International Federation for Housing and Town Planning/Mitteilungen des Internationalen Verbandes für Wohnungswesen und Städtebau*, no.3 (1939): 124-125; no.5/6 (1940): 174 ; no.2/3 (194): 64-65.

¹⁴ In IFHTP’s bodies, we find since the early 1920s: Louis Bonnier (Vice-President) and Marcel Poëte, the garden city activists, Henri Sellier, George Benoit-Lévy, the economist Charles Gide, Sentenac, and the polyglot Bruggeman, depending on the year, members of the Council and of the Executive Committee. These people are linked to the Musée Social and defend a multi-disciplinary approach to urban planning that finds continuity in the teaching provided from 1919 at the Institute of Urban Planning of the University of Paris (IUUP). They revolve around the magazine *La Vie urbaine*, also founded in 1919 and chaired by Henri Sellier. Later leading architects from the Beaux Arts will enter the instances, as Jacques Gréber, Henri Prost, Jean Royer. From 1937, the young Gaston Bardet, editor-in-chief of the journal *Urbanisme*, became also active. This sphere of practicing architects draw together a pole linked to the French Society of Urban Planners (SFU).

¹⁵ Before that of 1937, two congresses of the IFHTP are held in Paris. The first for its inauguration in 1913, and the 11th in 1928, which is held at the University of La Sorbonne parallel to an exhibition of urban planning situated at the Parc des Expositions Porte de Versailles.

¹⁶ *XIth International Housing and Town Planning Congress, Paris 1928*, Part III (Brussels: IFHTP), 24.

¹⁷ Founded in 1919, in connection with the Institute of Urban Planning of the University of Paris (IUUP), *La Vie urbaine* follows the major metropolitan plans of New York (1925-1929), Berlin (1929), Greater London (studies of Unwin, then Abercrombie), the planning of the region of the Ruhr, expansion plans in the French colonies, the concept of neighborhood unit set up in Radburn.

¹⁸ Alfred Agache, “Exposition d’urbanisme à Berlin”; Louis Dausset, “La politique foncière à Berlin”, *Urbanisme*, special issue (1932): LI-LV ; LVI.

¹⁹ Henri Giraud and Henri Prost, “L’aménagement positif en France”, *XIVth International Housing and Town Planning Congress, London 1935*, Part I. Papers and General Reports (Brussels:IFHTP, 1935), 93-99.

²⁰ Indeed no supra-communal body is set up that is comparable to the London Council Council. Municipalities lack the means and the political will to expropriate. The PARP is thus the object of criticism including among the high officials like François Latour, councilman of Paris and member of the IFHTP.

²¹ Gérald Nissen, “La défense aérienne”, *Paris et la région capitale*, no. 3 (September 1937): 96-97.

²² CIAM 5, we found : “Solutions of principle” based on the four fundamental principles “Living, recreating, working, transporting”, rapporteur Le Corbusier, president Weissmann (Yugoslavia), “Application cases of cities”, J.-L.L. Sert (Spain) and Emery (France-Algeria), “Case of application of regions and countryside”, Syrkus (Poland) and Bézard (France), Limberg (Holland). In *Logis et Loisirs*, 112-119.

²³ Pollini, Figini (Milan), “Notes on Leisure Areas”; Tolwinski (Poland), “Organization of leisure in the workers’ cities”; Paul Nizan (writer), “The problem of recreation in contemporary society”. The discussion distinguishes daily, weekly, annual, bi-annual leisure activities.

Bierbauer (Hungary), “The Basics of Rural Reconstruction in Hungary”; Banfi, di Belgioso, Peressutti, Rogers, Radice-Fossati, Banfi, “Rural town planning”. Le Corbusier posits as a principle the city-countryside interaction: “The biological essence of the city and the countryside”. Cf.: D. Chenut, *CIAM 1928-1956*, 102.

²⁴ Lieutenant-colonel Vauthier, *Le Danger aérien et l’avenir du pays*. Préface de M. le maréchal Lyautey (Paris, Berger-Levrault: 1930). From 1936 up to 1939, Vauthier is chief camp of Marshal Pétain at the Ministry of War.

²⁵ Norbert Bézard (1896-1956) belonged to the movement *Faisceau*, close to Italian fascism. In 1945, he joined ASCORAL (Assembly of Architects for an Architectural Renovation). Le Corbusier had a close relationship with the doctor Pierre Winter who also intervened in CIAM 5. Since 1932 Winter participated in the magazine *Plan* before founding with Hubert Lagardelle *Prélude* (subtitled : Avant-garde of architecture and politics) to which LC contributed. Winter animated with Philippe Lamour the french Fascist Revolutionary Party. The connection of LC to fascism has been well established since its bi-century: François Chaslin, *Un Corbusier* (Paris: Seuil, 2015) ; Jean-Louis Cohen, *Le Corbusier, la planète comme chantier* (Paris: Librairie Eyrolles, 2015) ; Marc Perelmann, *Le Corbusier, une froide vision du monde* (Paris: Michalon, 2015) ; Xavier de Jarcy, *Le Corbusier, un fascisme français* (Paris: Albin Michel, 2015).

²⁶ See the reissue: *Le Corbusier et Norbert Bézard, La Ferme radieuse et le centre coopératif* (Dijon, Les Presses du réel: 2015). 84p. And: Gilles Ragot, “La Ferme et le Village radieux de Le Corbusier. Nouvelle déclinaison du principe d’équilibre entre l’individuel et le collectif”, *In Situ*, no. 21 (2013), <http://journals.openedition.org/insitu/10445>, DOI : 10.4000/insitu.1044

²⁷ *Logis et Loisirs*. 5^e congrès CIAM Paris 1937 (Boulogne-sur-Seine: Editions de l’Architecture d’Aujourd’hui, 1938). See also the comments on CIAM 5: D. Chenut, *CIAM 1928-1956*, Graduation thesis under direction of Robert Auzelle (Paris: IUP, 1956). And as well: Archives Fondation Le Corbusier. D2-6 Congrès CIAM; D2-10 Congrès CIAM V (Paris Exposition 1937 – Participation de CIAM, Pavillon des Temps nouveaux) ; D2-13 (typed manuscripts for the book *Logis et Loisirs*).

²⁸ Gaston Bardet, *Une nouvelle ère romaine sous le signe du faisceau, la Rome de Mussolini* (Paris: Ch. Massin, 1937). This book follows his thesis presented June 25, 1932 at the Institute of Urban Planning of the University of Paris (IUUP), under the direction of Marcel Poëte.

²⁹ Karl Strölin, “Session Financement de la construction d’habitation des classes peu aisées”, in Fédération internationale de l’habitation et de l’urbanisme, *Rapport conclusif du congrès de Paris 1937*, typed (Brussels: IFHTP, 1937).

³⁰ Jean Royer, “General Rapporteur Session Construction at Height and Surface”, in International Federation of Housing and Town Planning, *Rapport du Congrès de Paris juin 1937*, typed (Brussels: FHTP, 1937), 24. The architect Jean Royer had built the garden city of Plessis-Robinson with Maurice Payret-Dortail.

³¹ Le Corbusier, *Des Canons, des munitions ? Merci ! Des logis... s.v.p* (Boulogne-sur-Seine: Editions de l’Architecture d’Aujourd’hui, 1938), 143.



Bibliography

- Blain, Catherine. "La ville épaisse d'Édouard Utudjian. Un concept et ses ramifications", *Dossiers du Lacth* #2, *La ville souterraine: représentations et conception. La part de l'invisible*, December 2017, 55-60, https://issuu.com/catherineblain/docs/dossierslacth02_villesouterraine
- Chenut D. *CIAM 1928-1956* (Graduation thesis under direction of Robert Auzelle), Paris: IUP, 1956.
- Fédération internationale de l'habitation et de l'urbanisme. *Rapport conclusif du congrès de Paris, juillet 1937*, typed. Brussels: IFHTP, 1937.
- Geertse, Michel A. *Defining the universal city: The International Federation for Housing and Town Planning and Transnational Planning dialogue 1913-1945* (Unpublished doctoral dissertation). Amsterdam: VU University, 2012.
- Geertse, Michel A. "The international garden city campaign: Transnational negotiations on town planning methods", *Journal of Urban History*. Advance online publication., (2015), doi:10.1177/0096144214566974
- Geertse, Michel A. "Cross-Border Country Planning Dialogue in Interwar Europe", *SAGE Open*, July-September 2015, 1-12.
- Geertse, Michel A. "The International Garden City Campaign: Transnational Negotiations on Town Planning Methods 1913-1926". *Journal of Urban History* 42, no. 4 (2016): 733-752.
- Graham, Allan. *A Hundred Years at the Global Spearhead: A Century of IFHP 1913-2013*. Copenhagen: IFHP, 2011.
- Labbé, Emile. *Exposition internationale des Arts et Techniques dans la vie moderne 1937*. Paris: Ministère du Commerce et de l'Industrie, 1937.
- Le Corbusier (ed.), *Logis et Loisirs. 5^e congrès CIAM Paris 1937*. Boulogne-sur-Seine: Editions de l'Architecture d'Aujourd'hui, 1938.
- Le Corbusier, *Des Canons, des munitions ? Merci! Des logis... s.v.p.* Boulogne-sur-Seine: Editions de l'Architecture d'Aujourd'hui, 1938.
- Lemoine, Bertrand (ed.), *Paris 1937: cinquantenaire de l'Exposition internationale*, exhibition catalogue, Paris: IFA, 1987.
- Mumford, Eric. *The CIAM discourse on urbanism 1928-1960*, The MIT Press, 2002.
- Riboldazzi, Renzo. "Historical heritage, landscape and modernity: aspects of the Italian contribution to the IFHTP congresses between the two wars". *Planning Perspectives* 28 (2013): 399-419.
- Riboldazzi, Renzo. "The IFHTP discourse on urbanism in colonial Africa between the wars", In *Urban Planning in Sub-Saharan Africa: Colonial and Post-Colonial Planning Culture*, edited by Carlos Nunes Silva. Oxford: Routledge, 2015, 41-52.
- Riboldazzi, Renzo. *La costruzione della città moderna. Scritti scelti dagli atti dell'IFHTP, 1923-1938*. Milan: Jaca Book, 2010.
- Riboldazzi, Renzo. *Un'altra modernità. L'IFHTP e la cultura urbanistica tra le due guerre, 1923-1939*. Rom: Gangemi, 2009.
- Somer, Kees. *The Functionnal City. The CIAM and Cornelius van Eesteren, 1928-1960*, chap. "CIAM and the 'Big Congresses'". Rotterdam/Den Haag: NAI Publishers/EFL Foundation, 2007, 25-29.
- Wagner, Philipp, *Stadtplanung für die Welt? Internationales Experten wissens 1900-1960*. Göttingen: Vandenhoeck & Ruprecht, 2016. 400p.
- Wagner, Phillip. "Facilitating planning communication across borders: The International Federation for Housing and Town Planning in the interwar period". *Planning Perspectives* 31 (2016): 299-311.



Image sources

Figure 1: *Promenades à travers l'exposition. 20 cartes détachables. Série 3* (Boulogne-sur-Seine, M. Chipault), 1937, Front cover

Figure 2-2 bis: *Logis et Loisirs. 5^e congrès CIAM Paris 1937* (Boulogne-sur-Seine: Editions de l'Architecture d'Aujourd'hui, 1938), Front cover; Fédération internationale de l'habitation et de l'urbanisme. *Rapport conclusif du congrès de Paris, juillet 1937*, typed (Brussels: IFHTP, 1937), Front cover.

Figure 3: *Le Monde souterrain*, no.15-16-17 (November 1937): 16.

Figure 4: Académie d'architecture/Cité de l'architecture et du patrimoine/Archives d'architecture du XX^e siècle. Fonds Henri Prost 1874-1959 (343 AA: HP-DES-002-04-01, -02, -03)

Figure 5: Photo: Albin Salaün © FLC/ADAG,

http://www.fondationlecorbusier.fr/corbuweb/morpheus.aspx?sysId=13&IrisObjectId=5070&sysLanguage=fr-fr&itemPos=45&itemSort=fr-fr_sort_string1%20&itemCount=78&sysParentName=&sysParentId=64

Figure 6: Le Corbusier, *Des Canons, des munitions ? Merci! Des logis... s.v.p.* (Boulogne-sur-Seine: Editions de l'Architecture d'Aujourd'hui, 1938), Front cover.



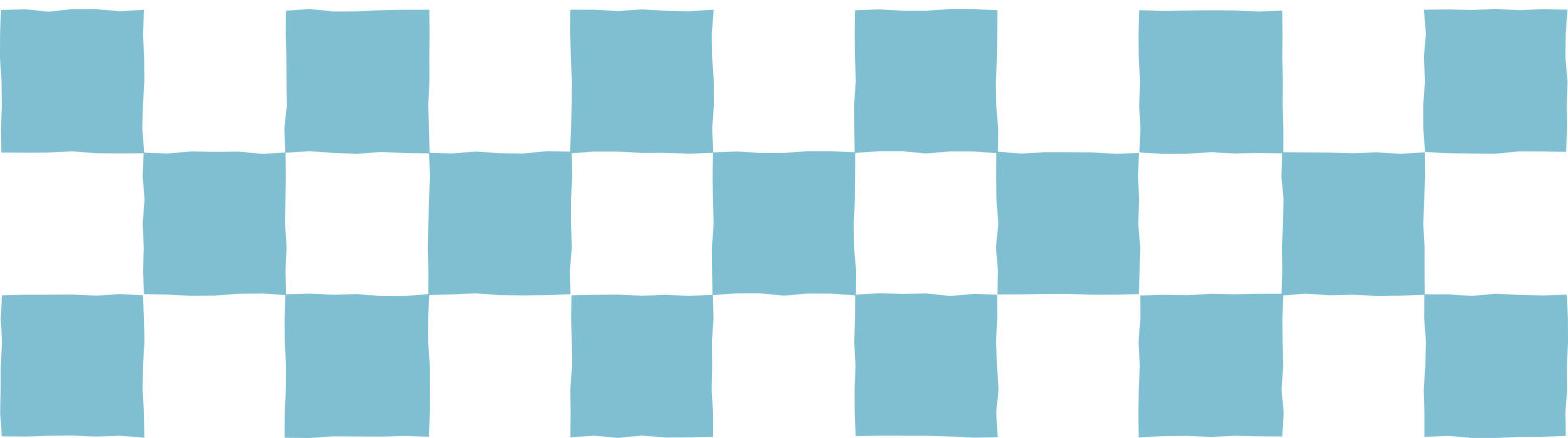
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

52 Open Spaces in Changing Cities



Historical Processes of Urban Form and Land Use Change at the Shwedagon Pagoda's Surrounding Area in Yangon, Myanmar.

Kuniomi Hirano (The University of Tokyo) and Makoto Yokohari (The University of Tokyo)

Myanmar is an Asian Theravada Buddhist nation. Shwedagon Pagoda (hereinafter called "the Pagoda") is located at the center of Yangon, Myanmar. It is one of the nation's most respected religious monuments. Yangon, formerly known as Rangoon, had originally started its history as a religious town under the Pagoda since the dynastic regime. The objective of this research was to identify the details of the historical processes of urban form and land-use change in the area surrounding the Pagoda in relation to political regime transition. This research also focused on the evolving processes of the Pagoda festival and its land use in the surrounding area; the festival is a typical occasion during which the relationship between the pagoda and the surrounding area is prominently visible. This research intends to identify how temporary, multi-purpose open spaces have been divided, fixed for individual land uses, and segmentalized in the area surrounding the Pagoda in the historical processes. This research involved an interview survey, newspaper review survey, field survey, mapping work, and a literature review to accomplish this research's goals. The interview and newspaper review surveys were key methods in this research since official documents have remained unpublished in Myanmar since 1964.

The Pagoda's land property and the land use of the surrounding area have undergone significant changes. This research identified that the religious use relationship between the Pagoda and the surrounding area weakened during these historical transitions. The temporary, multi-purpose open spaces of the surrounding area used to play important religious roles, especially when the festival was held during the dynastic regime. Although such roles were suspended during the colonial regime, they appeared to have somewhat resumed during the BSPP (Burma Socialist Program Party (1962-1988)) military regime. However, the roles of the surrounding area have nearly disappeared subsequent to the establishment of the SLORC (State Law and Order Restoration Council (1988-2011)) military regime. This research identified the historical processes through which temporary, multi-purpose open spaces in the area surrounding the Pagoda have been divided, fixed for individual land uses, and segmentalized according to role during the Pagoda festival. For example, this includes markets and stalls that have been altered for use as permanent shops and restaurants, entertainment and amusement facilities that were enclosed in parks, and smaller forms of lodging that have become hotels. These drastic changes occurred during the 24-year prohibition period implemented by the SLORC military regime. Thus, the roles of the Festival are no longer needed by modern citizens, except praying and donating. It is remarkable that the open spaces of the surrounding area have become modern parks through historical transitions. This adds to the understanding of urban form and the establishment and development of parks in colonial cities.

Study on Kaishochi Changes Before and After the War-Camage-Recovery Land Readjustment Programs of Nagoya City, Japanese Castle Town

Kenjiro Matsuura (Chiba University)

In the grid block in the big city, high-rise buildings are arranged to compete, and flat parking lots are scattered randomly. These are planned block districts on a per site basis and are not planned for each city block. On the other hand, in the grid block district of the castle town, which is a planned city, there is an example where the open space called kaishochi was arranged in the central part of the block systematically. It is one of the tasks for redevelopment of an attractive central urban area, after reevaluating such a historical kaishochi and planning a new kaishochi that is adapted to modern urban life.

Under the above problem consciousness, in this paper, focusing on open temple-type kaishochi (open areas ensconced in the design of urban blocks) located in the district of Nagoya City in Japan's Aichi Prefecture, we will review the effects of the war-damage-recovery land readjustment programs, through which the city has experienced a number of major transformation. In the castle town Nagoya of Edo period, there were many kaishochi within blocks. Many sites of kaishochi are temple types with temples, and in addition there are other types used as mansion or public facility, and shrine types with shrines.

Specifically, we will elucidate the actual state of such kaishochi before and after the project by examining residual trends of temple-type structures by using maps produced before and after the project implementation. Targeting 66 Edo-period kaishochi blocks in the Nagoya Castle district, we first analyzed the differences between the land usage decrease rate for the whole district and that for the targeted kaishochis. Next, we analyzed transformations of usage and form using the maps produced before and after the project implementation.

As a result of the analysis, the following three points were clarified. First, even though the number of temple-type kaishochis is decreasing, there has been little change in the area they occupy. The total number of kaishochi was 50 before enforcement, but it decreased to 40 after enforcement. From the remnant trend of Temple-type, the decrease in the number of Temple-type has occurred before the execution of the land readjustment project, and it also decreased after the project. Second, there has been little change in kaishochi usage before and after the project implementation. When looking at usage of kaishochi, many of the other types were changed from the temple types. The reason may be that the temple moved to the suburbs along with the graveyard due to the influence of the cemetery relocation that was done during the land readjustment project. Third, looking at the kaishochi forms, we can find changes from Flagpole type, no-contact type, and integrated type. In Nagoya, it was common that the site shape was maintained because of the land reorganization project based on the actual converted site. However, by integrating with the surrounding premises, it is confirmed kaishochi that changes from the Flagpole type to Integrated type did it.

Skateparks, Cultural Memory, and Redevelopment

Evangeline Linkous (University of South Florida)

TAMPA — "Squaring off on a downtown street corner Tuesday, the two sides shouted, pointed fingers and accused each other of being insensitive. One side waved signs. The other shot video. A police helicopter circled overhead. Close by, a couple officers watched. But, no, the protest had nothing to do with Trayvon Martin or George Zimmerman. The yelling was generational. The history was local. And the focus of everyone's anger was the future of a graffiti-splotched skateboard park known as the "Bro Bowl." " (Danielson, July 16, 2013)

Just two years after it was listed in the National Register of Historic Places in 2013, the landmark skateboard park known as the Bro Bowl was demolished as part of a Tampa, Florida redevelopment initiative. Prior to its demolition, the Bro Bowl was just one of four skateboard bowls built in the 1970s—skateboarding's "Golden Age"—still in existence in the United States (National Register of Historic Places, 2013). The listing of the Bro Bowl in the National Register prompted international interest in the preservation of skateboarding heritage sites. In 2014, Rom skate park in London, England became the second skatepark in the world to be listed as a historic property, followed by the Albany Skate Run in Albany, Western Australia in 2016.

This paper includes two related research paths. I first construct a history of the Bro Bowl from its conception through to its demolition and relocation as part of a redevelopment project. The Bro Bowl was relocated to make way for a public park that celebrates Tampa's black cultural history and includes exhibits showcasing black community institutions that were devastated by urban renewal. The redevelopment project pit "skaters vs. black leaders" and raised questions about the inclusion of cultural memory in redevelopment projects (Danielson, 2013). Although the redevelopment emphasizes the incorporation of cultural memory and history, the planning process had to identify and select which narratives were ultimately included (black history) or excluded (skateboarding heritage). Inspired by the work of Gordon (2008), which builds on Horkheimer and Adorno, I examine how the planning process that led to the demolition of the Bro Bowl interacted with repressed and repressing histories, ideas, and forces. The case provides insights into the ways redevelopment processes grapple with—sometimes summoning, sometimes creating, sometimes retreating from—the ghosts of cultural histories and memories. The case in particular highlights the emerging treatment of skateboarding heritage as a legitimate area of planning and public policy concern. Second, I unpack the Bro Bowl case within the context of broader research on skateboarding, planning, and public space—a literature that raises issues of race, age, and competing cultural identities in the urban landscape (Chiu, 2009; Nemeth, 2011; Stratford, 2002). I review the efforts that led to the listing of the other two skate heritage sites. Finally, I describe the recent trend of including new skateparks in contemporary urban redevelopment projects, and compare planning interventions related to new skateparks with those for heritage skateparks.

Street Art as a Way to Enhance the Vitality of Urban Public Spaces -----Inspiration Based on the Experience of Taipei

Zhang Peng (Urban planning department of the school of architecture, southeast university of Nanjing, China) and Dong Wei (Urban planning department of the school of architecture, southeast university of Nanjing, China)

Street art is a unique artistic behavior that takes place in the urban public space. Its uniqueness is not only manifested in the form of immediacy, participation, and mobility, but also has a great value to enhance space dynamism, increase human interaction, and shaping the spirit of place. In most Chinese cities, street art is often equated with "fraud", which not only hampers the development of street art, but also hinders the promotion of vitality of public space, for a livable and lively city, the public space should not be merely a purely physical space, but should be the sum of the spirit of the place and the vitality of the space. The research question of this paper is: how to reduce the external negative effects of street art and actively shape and regenerate the vitality of urban public space? Research based on literature review and the summary, first of all, review and define the concept of "street art", and carries on the classification, it is believed that street art can change from "urban problem" to "urban landscape", then, the relationship between "street art" and "urban public space vitality" is discussed, performance analysis found a busker behavior can not only enhance the vitality of the public space (one-way intervention), also can attract audience participation, through the interaction with the audience to arouse public space activity (two-way intervention)

And then from the perspectives of government, NGO and ordinary citizens, multi-dimensional detailed analysis the art management experience on the streets of Taipei, found that through the government management, system design, the multi-agent organization and the public participation to cultivate a variety of means such as, the urban public space of street art promotion activity provides effective guarantee system and management, and reduce the street art of the outer space of the city has negative effects. Based on this, the paper puts forward the spatial layout pattern of "centralized and decentralized complementarity", the behavioral restraint mechanism of "rigidity and elasticity", and the multi-agent intervention management of "organization and self-organization", "Planning for Positive Public Opinion and Strict Enforcement of Law Enforcement" and other planning strategies. This paper argues that, by using the experience of management of Taipei street artists, from space, organization, policy formulation, implementation and operation aspects improve mainland China the level of city governance, with a view to providing references for the regeneration and shaping of the vitality of urban public space in China, and to provide a useful reference for the management of street artists.



Historical Processes of Urban Form and Land-Use Change at Shwedagon Pagoda's Surrounding Area in Yangon, Myanmar

Kuniomi Hirano*, Makoto Yokohari**

* Graduate School of Engineering, The University of Tokyo, kuniomihirano@gmail.com

** Graduate School of Engineering, The University of Tokyo, myoko@k.u-tokyo.ac.jp

Shwedagon Pagoda is located at the centre of Yangon, Myanmar. It is one of the nation's most respected religious monuments. The objective of this research was to identify the details of the historical processes of urban form and land-use change in the area surrounding the pagoda in relation to political regime transition. This research also focused on the evolving processes of the pagoda festival and its land use in the surrounding area; the festival is a typical occasion during which the relationship between the pagoda and the surrounding area is prominently visible. An interview survey, newspaper review survey, field survey, mapping work, and literature review were conducted to accomplish this research's goals. The pagoda's land property and the land use of the surrounding area have undergone significant changes. This research identified the historical processes through which temporary, multi-purpose open spaces in the area surrounding the pagoda have been divided, fixed for individual land uses, and segmentalized according to role during the pagoda festival. For example, this includes markets and stalls that have been altered for use as permanent shops and restaurants, entertainment and amusement facilities that were enclosed in parks, and smaller forms of lodging that have become hotels.

Keywords: Shwedagon Pagoda, Pagoda Festival, Land-Use Change, Historical Process of Urban Form, Park Establishment, Yangon, Myanmar

1. Introduction

Research Background and Objectives

Asian Theravada Buddhist nations, Buddhism, and royal authorities were deeply connected during the dynastic period. The legitimacy of these royal authorities was guaranteed through their protection of Buddhism¹. Buddhist belief entails the accumulation of merit not only by regularly worshipping at pagodas, but also by constructing or maintaining them². Pagoda festivals are religious events that provide opportunities for large numbers of worshippers from both rural and urban areas to gather at influential pagodas³. During such festivals, temporary multi-purpose, open spaces are (were) secured and utilized in the area surrounding the pagoda. Such areas are necessary to provide facilities and spaces for markets, trading, dining, entertainment, and lodging for worshippers⁴. Through historical and political transitions including colonization and urbanization, the original land-use purposes of these open spaces as they were established during the dynastic period have changed. That is, these spaces have been altered and fixed for specific purposes.

Myanmar⁵ is an Asian Theravada Buddhist nation⁶. As such, Shwedagon Pagoda⁷ (hereinafter "the Pagoda") is situated in the city of Yangon (Figure 1). The Pagoda is one of the nation's most respected religious monuments for those of the Buddhists faith. The Pagoda is located at the centre of Yangon⁸, which was founded as the area's colonial capital. The objective of this research was to identify the details of the historical processes of urban form and land-use change (including the development of parks) in the area surrounding the Pagoda⁹ in relation to political regime transition. This research also focused on the evolving processes of the Shwedagon Pagoda Festival¹⁰ (hereinafter "the Festival") and its land use in the surrounding area; the Festival is a typical occasion during which the relationship between the Pagoda and the surrounding area is prominently visible. Since the area surrounding the Pagoda has been the most important religiously and politically centre in Yangon, the governments have made changes to land use in the area as their political intentions. Considering the urban form and land use change of Yangon, it is, therefore, meaningful to focus on the area where the political intentions remarkably appear in the historical backgrounds.

Related studies were reviewed before conducting this research. The history of Myanmar has been studied by Ma Mya Sein (1944), Noel (1993), Mya Maung (1999), Nishizawa (2000), Yamaguchi (2011), and Nemoto (2014), etc. The history and current conditions of Buddhism in Myanmar have been studied by Ikeda (1995), Kuramoto (2014), etc., while those of the Shwedagon Pagoda have been examined by Win Pe (1972), Mg Su Shin (1972),



Noel (1995), Moore (2000), Philp (2002), Penny (2006), Donald (2013), and Nay Chi Zay Ya (2015), especially in the military regime by Donald (2005). The social history and urban form of Yangon during the colonial regime have been studied by Wright (1910), Webb (1923), Pearn (1931), Osada (2013), etc. Finally, current land-use practices and changes that have recently occurred in Yangon have been studied by JICA (2013), especially in terms of parks by Hirano and Yokohari (2017).

This original research aims to develop an understanding of the historical processes involved in urban form and land-use change in the secret Buddhist area of colonial Yangon. This especially includes changes that took place under the military regime, when official documents had not yet published. This research intends to identify how temporary, multi-purpose open spaces have been divided, fixed for individual land uses, and segmentalized in the area surrounding the pagoda in the historical processes.

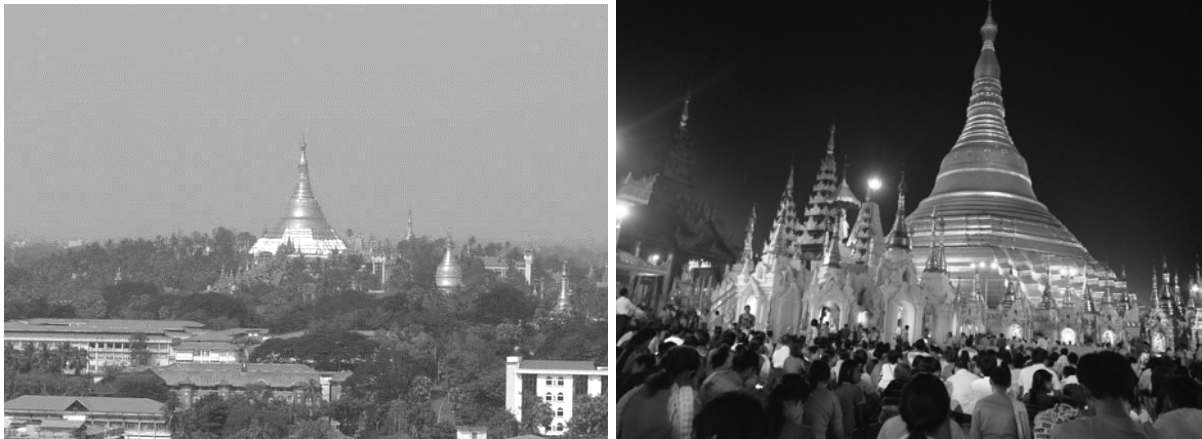


Figure 1: Pictures of Shwedagon Pagoda. The Pagoda stands on Singuttara Hill, which sits at an altitude of 58m. Building height is regulated in Pagoda's surrounding areas (left). Worshipers visit the Pagoda on the full-moon day of Tabaung (around March), when the Shwedagon Pagoda Festival is held (right). [Hirano: 2018]

Research Methodology

This research involved an interview survey, newspaper review survey, field survey, mapping work¹¹, and a literature review. The interview and newspaper review surveys were key methods in this research since official documents have remained unpublished in Myanmar since 1964¹². Interviews were conducted with Shwedagon Pagoda Trustees, the Ministry of Construction, Yangon City Development Committee, shop, park and hotel operators, and worshipers to understand the historical transitions of the Pagoda property, as well as its land use, religious use, park development, and activities involved in the Festival¹³. Copies of the state-owned English newspaper "The Working People's Daily"¹⁴ were reviewed on a biennial basis to investigate transitions in the Festival activities and political treatment from 1967 to 2017, as well as on and around the opening of People's Park in 1989¹⁵. Field surveys of the surrounding area were also conducted¹⁶. The Ananda Pagoda Festival in Bagan was surveyed as a point of reference and comparison. A field survey was then conducted on all 62 parks in Yangon¹⁷. Finally, this research set four historical classifications (i.e., the dynastic, colonial, military (BSPP and SLORC)¹⁸, and civilian regimes) according to key benchmarks regarding changes in politics and the status of Buddhism. In each classification, land use maps were made to visualize physical changes in land use.

2. The Dynastic Regime

Yangon was known as the secret town of the Pagoda¹⁹. Buddhism prospered as a state religion during the dynastic period²⁰. The greatest supporters of Buddhism during that time were the royal authorities, who made a number of donations to the Pagoda that included land property²¹. Donation to the Pagoda has always marked the "control of the delta" and "rule of the country" in Yangon²². This research involved the arrangement of a map indicating the Pagoda's property, and then calculated the area (Figure 2)²³. Calculations revealed that the area of owned lands covered 799 km² during the reign of Queen Shinsawbu, and 280 km² during that of King Dammazedi.

During the late-16th century, Fitch recorded the Festival as involving "the full moon of Tabaung (around March)," and that "the occasions of great religious festivals brought a great press of people"; during "the Festival, a man can hardly pass by water or by land," "they come from all places of the Kingdom," and "such festivals were normally accompanied by a great fair"²⁴. Moreover, the Festival was considered to be a cosmopolitan market



from abroad as well as from rural area²⁵. The image in Figure 3 indicates that religious events used open-spaces in the surrounding areas of the Pagoda during the dynastic regime²⁶.

The field survey of the annual Ananda Pagoda Festival in Bagan²⁷ revealed that it is an important occasion during which people that live in and around the area are able to shop for commodities and experience entertainment, even at present.

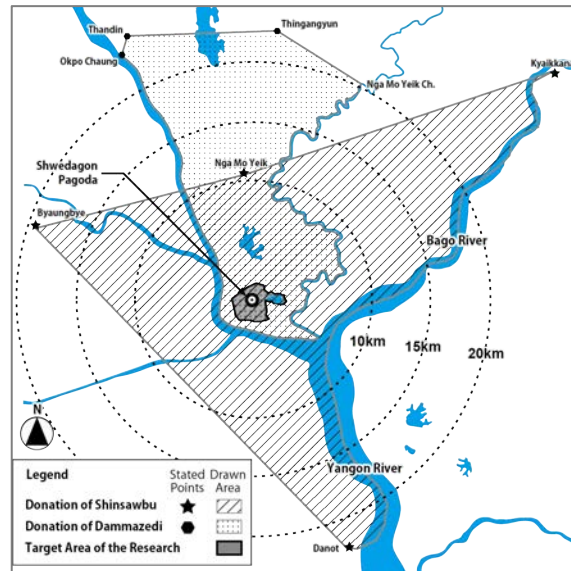


Figure 2: A map indicating the Shwedagon Pagoda's Property during the 15th Century. Pearn (1939) mentioned that Queen Shinsawbu made a land donation during the 1470s, and that King Dammazedi reduced its land boundary so as not to cross the river and canal. Fruit trees were cultivated on the donated land²⁸. [Hirano: 2018]

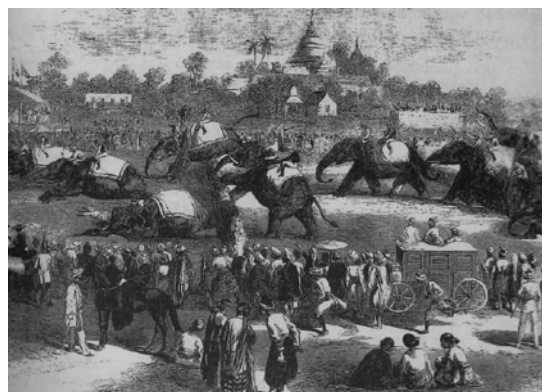


Figure 3: A depiction of the Elephant Event, which celebrated the Pagoda in the open-space in front of the west gate. The image's caption says that the "the surrounding area became fortress and cantonment and such event was not being performed during the colonial regime."²⁷ [Mag Su Shin: 1972]

3. The Colonial Regime

Yangon was colonized by the British in 1852²⁹, at which point Buddhism lost its status under the religious neutral policy. All land owned by the Pagoda became the property of the colonial government³⁰. Numerous small pagodas had been demolished by the 1850s, while fruit trees and related buildings had disappeared by the 1880s³¹. This research created a land-use map describing the surrounding areas, which were mainly under the control of the military as a cantonment (Figure 4). The cantonment contained two parks (described later), a golf course, and a racetrack as well as the arsenal, barracks and a parade ground³². The open-spaces left in the surrounding area depicted in a picture of Mag Su Shin (1972)³³. The Festival had declined in popularity during the early 1830s³⁴, and was fully interrupted as a result of colonization³⁵.

The colonial government established two parks³⁶. This included Cantonment Park, which was the first park in Yangon. It was constructed during the 1960s to provide amenities to cantonment residences at the cantonment



boundary. The park became crowded during band performances at night. The second was the Dalhousie Park, which was constructed during the 1890s³⁷.

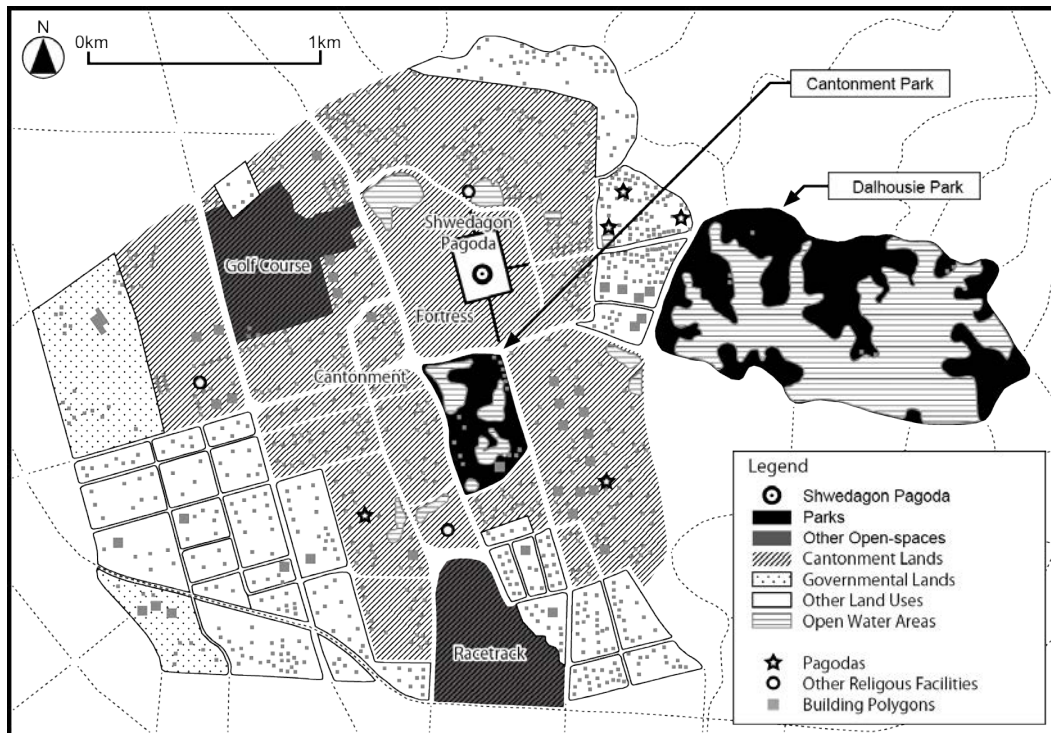


Figure 4: Land-use map of the colonial regime. The map indicates that the Pagoda was surrounded by a cantonment in which entertainment facilities (e.g., two parks, golf courses, and racetracks) were located. [Hirano: 2018]³⁸

4. After Nation's Independence and the Military Regime

After conservation movements³⁹, in 1930, the cantonment relocated to the suburbs of north Yangon, at which point the Pagoda's property was returned to an area of 44.2ha⁴⁰. The Festival also recommenced in 1930⁴¹. Performances surrounded by many worshipers were observed in the space depicted in a picture of Mag Su Shin (1972)⁴² during the Festival.

The BSPP Military Regime

The BSPP military regime adopted socialist policies that resulted in the closing of entertainment facilities and a revocation of the protection of Buddhism⁴³. This research identified situations related to the Festival through newspaper reviews, as follows: "*The Festival was crowded with many worshipers. The west gate was the centre of the Festival activities*⁴⁴." "*Worshipers visited the Festival from the suburbs*⁴⁵." "*A concert was held and lasted through night time*⁴⁶." "*Market fairs and entertainments were held with various communities' participation*⁴⁷." and "*Youths and girls look forward as seasons of birth and flirtation; long nights at the open-air theatre, feasting, and perpetual amusement, the pleasanter*⁴⁸."

This research also identified that the Festival became active on an annual basis, and that the Pagoda's land property and surrounding open spaces were used for markets, stalls, entertainment, and amusements that resulted in temporary crowds of worshipers⁴⁹. Entertainment lasted until dawn at these events⁵⁰.

The SLORC Military Regime

The SLORC military regime returned the protection of Buddhism to Myanmar⁵¹, dispersed propaganda about projects involving pagoda construction and restoration, sent high-ranking politicians to attend ceremonies, and donated to pagodas and monks in various ways⁵². In the meantime, Mahah Wizaya Pagoda, which stands at the foot of the Shwedagon Pagoda, was constructed by the SLORC military as the traditional custom of dynastic authorities⁵³. This research identified top articles in newspapers concerning high-ranking politicians who celebrated and donated to monks in addition to many pages covering the full-moon day of Tabaung (around March)⁵⁴. On the other hand, articles concerning the Festival were less common⁵⁵. This research also identified that Festival activities were limited to prayers and donations while markets, street stalls, and entertainment



activities were prohibited from 1988 to 2012⁵⁶. Shops along the access road to the east gate (these buildings are generally two-storied, reinforced concrete structures) were constructed beginning in 1989⁵⁷. The access gate shops cover a distance of about 200m, and sell treats, goods related to religious donations, and Buddha statues⁵⁸. Amusement facilities were set up in Cantonment Park during the late 1990s⁵⁹. During the same period, supermarkets and hotels opened in Yangon city⁶⁰. Thus, the commercial activities of the area's citizens underwent significant change. In addition, five parks were established in the surrounding area⁶¹. Remarkably, a top page newspaper article detailing its opening ceremony revealed that People's Park opened as the largest park in Yangon by using military land⁶². The newspaper emphasized connectivity of the park and Pagoda as *"the People's Park to link the ancient architecture at the Shwedagon Pagoda and the modern architecture of the Parliament building: creating a place for the residents of Yangon to take a rest,"* and that *"visitors can revere the Pagoda that stands in elegance"*⁶³. The four other parks, Ziwaka Park (0.7 ha, established in 1989), Blood Cleansing Lake Park (0.4 ha, established in 1990), Thirinandar Kan Park (0.8 ha), and Dagon Park (0.8 ha) were constructed during this period⁶⁴.

5. The Civilian Regime and the Present

The civilian regime established freedom of religion under a policy separating religion and politics⁶⁵. The Pagoda's property was limited to 45.6ha⁶⁶. The area contained related stupas, museums, parking lots, service facilities, a backyard, and maintained open-spaces⁶⁷. This research identified that the Festival had not been promoting activities related to markets, shop stalls, or entertainment in the surrounding area at that time. These activities were prohibited under the SLORC military regime, and remained so under the civilian regime with the exception of the access road to the east gate⁶⁸. Parks and large-scale public facilities did not conduct religious activities inside during the Festival, but the number of visitors to the amusement facilities in Cantonment Park and People's Park doubled, and that of shops tripled as usual⁶⁹. According to interviews with 30 worshipers, eight visited the Festival's amusement facilities⁷⁰. It was observed that approximately 130 shops selling commodities and foods temporarily opened on the access road between the permanent shops during the Festival⁷¹.

This research created a land-use map (Figure 5) indicating that military and government lands occupied the south and the west sides. Land use has been changing through rapid urbanization. It was observed that the number of buildings used for housing, monasteries, and commercial activities increased, with a high-density of land use mainly occurring on the north and east sides of the surrounding area. Approximately 75% of these buildings were occupied by monasteries and related buildings over the five-block area on the east side⁷². In addition, Martyr's Mausoleum Park (3.1 ha) was established on the north side in 2013⁷³. Thus, a total of eight parks have been established in the surrounding area⁷⁴.

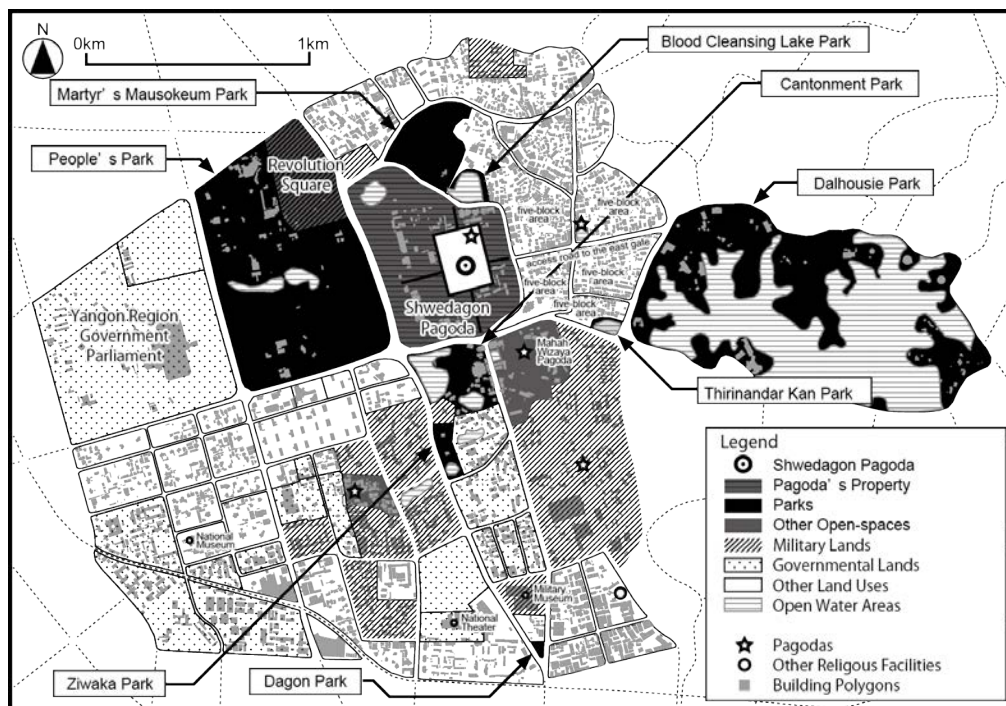


Figure 5: Land-use map of the civilian regime. The map indicates that military and government lands occupied the south and west sides. Many large-scale public facilities exist in these areas, including the Yangon Regional Government Assembly, National Museum, National Theatre, and Military Museum. [Hirano: 2018]⁷⁵



This research also conducted a park facility survey, and identified that five out of all 62 parks in Yangon city contain amusement facilities (e.g., roller coasters, merry-go-rounds)⁷⁶. Two of these parks, Cantonment Park and the People's Park, are located in the surrounding area.

6. Discussion

Pagoda-owned property reached a maximum size of 799km² during the late-15th century due to donations from the royal authorities. As Pearn (1931) pointed out that many worshipers gathered from rural areas and abroad during the Festival⁷⁷. Commodity and goods-trading markets⁷⁸, food and drink stalls, events and entertainment⁷⁹, and lodging for worshipers⁸⁰ were provided in the open spaces of the surrounding area. This research considers that there was a temporally, multi-purpose relationship involving religious use between the Pagoda and its surrounding open spaces, as it can be seen at the Ananda Pagoda Festival in Bagan in the present day.

As Philp (2002) pointed out that the ruler was well aware of the political significance of the Pagoda⁸¹. The colonial government condemned the Pagoda's property and utilized the surrounding area as a cantonment for military activities, living quarters, and ruler demonstrations. The Festival was interrupted, and was not held during the colonial regime until the 1930s. In the meantime, Yangon's first park was established in the surrounding area. The park was used as a space to hold entertainment events such as evening band performances⁸². As Hirano and Yokohari (2017) pointed out, the open spaces were used for people of the ruler's side, not for religious use⁸³. This research considers that the Pagoda was obligated to suspend its religious use activities with the surrounding area for approximately one century.

The Pagoda's property was returned in 1930 when the cantonment relocated to the suburbs. The returned property, however, was limited in regard to the surrounding area. The Pagoda's land was not as expansive as it was during the dynastic regime. The Festival activities resumed at this time, and the surrounding area was temporarily used for markets, stalls, entertainment, and amusement. This research considers that the religious use relationship between the Pagoda and the open spaces of the surrounding area was restored. This was also true regarding political circumstances; the entertainment facilities were obligated to close and commercial activities were limited under the BSPP military regime.

As Philp (2002) pointed out, the SLORC has consciously and actively appropriated Buddhism⁸⁴. Additionally, as Donald (2005) pointed out the SLORC have aggressively transformed Yangon city, and exercised control of public spaces, including the Pagoda to sever or neutralize their historical connections with revolutionary nationalism⁸⁵. On the other hand, the Festival activities involving markets, stalls, and entertainment were prohibited for a 24-year period beginning in 1988 under SLORC military policy⁸⁶. Structured shops along the access road were developed in the surrounding area, and supermarkets and hotels opened in Yangon city, which were triggered by economic policy changes. In the meantime, a total of five parks were established, starting with the opening ceremony of People's Park in the surrounding area during October 1989. Amusement facilities were later set up in Cantonment Park during the 1990s. This research considers that the Festival activities diminished, and the religious use relationship between the Pagoda and the surrounding area was nearly eliminated because areas in which former required the Festival functions took place had been repurposed for permanent shops, supermarkets, hotels, and parks.

Land use has changed to accommodate a variety of commercial, residential, and religious uses in the area surrounding the Pagoda. These changes were accelerated by rapid urbanization movements subsequent to the shift to civilian rule in 2011. Although the open space in the surrounding area contains eight parks and large-scale public facilities, the Festival activities are not conducted in these areas. This research considers that the direct religious use relationship between the Pagoda and the surrounding area was ultimately lost through historical transitions. During the Festival, shops along the access road and amusement facilities in the parks accommodated more visitors for specific land-use purposes.

7. Conclusion

As discussed regarding each of the historical classifications above, the land property and land-use of the surrounding area has changed greatly while the status of Buddhism has been destabilized through various regime transitions. This research identified that the religious use relationship between the Pagoda and the surrounding area weakened during these historical transitions (Figure 6).

The temporary, multi-purpose open spaces of the surrounding area used to play important religious roles, especially when the Festival was held during the dynastic regime. Although such roles were suspended during the colonial regime, they appeared to have somewhat resumed during the BSPP military regime. However, the roles of the surrounding area have nearly disappeared subsequent to the establishment of the SLORC military regime. Through



the development of parks and large-scale public facilities, the open spaces physically remain in the surrounding area today, but have practically changed as religious activities are no longer conducted inside.

This research identified the historical processes through which the temporary, multi-purpose open spaces of the surrounding area established during the dynastic regime were divided, fixed for individual land use, and given segmentalized roles. This occurred especially during the SLORC military regime, which was obligated to prohibit the Festival activities. This research considers that the roles previously required by the Festival worshipers and citizens have been supplemented and replaced in both the surrounding area and Yangon city. This includes the roles of markets and stalls being replaced with permanent shops and restaurants, entertainment and amusement facilities being enclosed in parks, and lodging that was altered into hotels. These drastic changes occurred during the 24-year prohibition period implemented by the SLORC military regime. Thus, the roles of the Festival are no longer needed by modern citizens, except praying and donating.

It is remarkable that the open spaces of the surrounding area have become modern parks as well as many large-scale public facilities such as Yangon Region Government Parliament, National Museum, National Theatre through historical transitions. This adds to the understanding of urban form and the establishment and development of parks in colonial cities. As Philp (2002) and Penny (2006) pointed out that the Pagoda and the Singuttara Hill is the most important religiously and politically centre area in Yangon⁸⁷, the governments have made changes to land use with their political intentions especially at this area in Yangon. It is possible that the governments (especially the SLORC military regime) aimed to establish parks and other public facilities by taking the originality and history of the area into account⁸⁸, which used to involve annual gatherings in which people enjoyed the Festival. It should be also noted that the military regime also made a regulation to control building height, which has currently been enacting, at the surrounding area to conserve the views of the Pagoda and probably to secure the status of the Pagoda. Thus, the value of the attraction and the attention it gathers⁸⁹ of the Pagoda could be used as political propaganda in the historical process of urban form and land use change in Yangon.

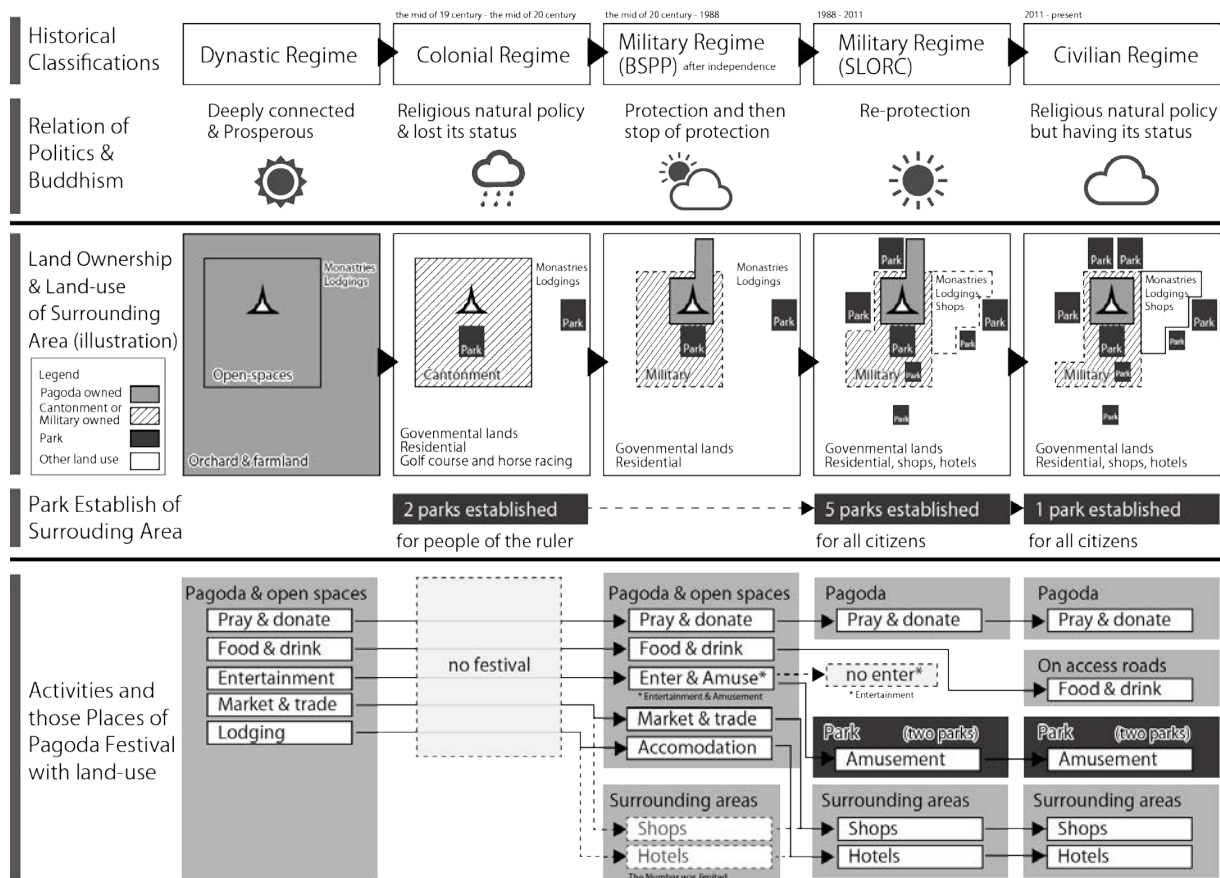


Figure 6: Diagram showing the historical processes of relation of politics and Buddhism, land ownership and land use change of the surrounding area, park establishment, and activities at the surrounding areas when the Shwedagon Pagoda Festival. The land use has changed from open spaces owned by the Pagoda to other land uses owned by British military (cantonment), military, public or individual private through historical process. The parks have been also established and accumulated in the area. The activities of the Festival were taken place in the Pagoda and the open-spaces in dynastic regime has been outspreaded to other land uses. [Hirano: 2018]



Acknowledgements

I would like to express my sincere appreciation toward Daw Aye Aye Myint, Daw Than Than Soe, and U Htin Myaing, the Ministry of Construction, U Toe Aung, Tin Tin Kyi, U Hla Win Aung, and Min Aung, Yangon City Development Committee, and U Maung Maung Win, the Shwedagon Pagoda Trustee, and all members of Yokohari Laboratory, the University of Tokyo, for their valuable advice. This research was greatly supported by Ms. Khin Thuzar, Ms. Myet Chae, and Ms. Tun Thin Zar May, my colleagues in Yangon. I would also like to thank Editage (www.editage.jp) for the English language editing; all remaining errors are my responsibility.

Endnotes

¹ Nemoto (2014), pp.39, and Kuramoto, *monk living* (2014), pp.4.

² Kuramoto, *monk dwelling* (2014), pp.81. Definitions of pagoda, temple, monastery are different in each Theravada Buddhist nations. In Myanmar it is common that pagoda and monastery are separated.

³ There are historically influential pagodas and temples in the major cities of the nations. Large cities, such as Bangkok, Phnom Penh, Vientiane, Yangon, has influential pagodas or temples. Kuramoto, *monk living* (2014), pp.21, mentioned that the larger cities tend to have more potential that pagodas or temples receive more donations.

⁴ According to interviews with Shwedagon Pagoda Trustee and Yangon City Development Committee, stalls, performances, and entertainment facilities used to be set up in open spaces (vacant lands) at the surrounding area and on streets during the Shwedagon Pagoda Festival. The details are discussed later sections.

⁵ Myanmar is located on the west side of the Indochinese Peninsula, has a land area of 676,577 km², and has a population of 51.49 million (Department of Population (2014), Census). In this research, the name of the nation is unified as "Myanmar", although it was "Union of Burma" from 1948 to 1989 after the nation's independent.

⁶ In Myanmar, currently 89% of the population is occupied by Theravada Buddhists, while the remaining 10% is composed of Christians, Muslims, Hindus, the Spiritual Belief.

⁷ Shwedagon Pagoda was said to have been built on a hill, namely Singuttara hill, to pay the holy hair brought back by the Mong Merchants who travelled India 2,500 years ago during the life of Buddha. The height from the terrace to the apex of the Pagoda is about 99m. The Singuttara hill, has been worshiped as a sacred place from the dynasty according to Pearn (1939), pp.1.

⁸ Yangon, the largest city of the nation, is located on the south side of the national land and has an area of 10,277 km² and the population is 7.36 million (Department of Population (2014), Census). It was the capital city until the transition to Ney Pyi Taw in 2006. In this research, the name of the city is unified as "Yangon", although it was "Rangoon" from 1852 to 1989 under the British colony.

⁹ The scope of the surrounding area in this research corresponds to the range of enacted regulations that building height control is being carried out. The government and citizens generally recognize the range of said regulation is the "surrounding area" of the Pagoda.

¹⁰ The Shwedagon Pagoda Festival, officially called as "Buddha Pujaniya Tabaung Festival of the Shwedagon Pagoda", is held for about a week on and before the full moon day in Tabaung that is around March based on the lunar calendar in Myanmar. The Festivals are generally held for the purpose of worship and donation. During the Festival, a ritual religious event that donates the monk robe to the Buddha statues sitting on the four sides of the Pagoda terrace is carried out, meanwhile, the monks chant Buddhist sutra. Other pagodas in the nation has their own festivals which are mainly held in the dry season and summer season (from November to May).

¹¹ Maps were created in this research in the dynastic regime and the civilian regime. Details were written in each part.

¹² The National Archives Department, Ministry of National Planning and Economic Development has not disclosed the official documents from 1963 until the present.

¹³ The interview with Shwedagon Pagoda Trustee (U Maung Maung Win, a board member) was done on 3rd Apr. and 9th Aug. 2017. That of Department of Urban and Housind Development, Ministry of Construction (Daw Aye Aye Myint, the deputy director general, Daw Than Than Soe, the former director, and U Htin Myaing, the former deputy director) was on 16th Aug. 2017 and 13th Feb. 2018. That of City Planning and Land Administration Department (U Toe Aung, the former deputy department head, Tin Tin Kyi, the deputy department head), and Parks and Playgrounds Department (U Hla Win Aung, the deputy department head, and U Min Aung, the deputy department head), Yangon City Development Committee was on 6th Nov. 2012, 26th Aug. 2016, and 24th Feb. 2017. That of shop, hotel, and park operators were done on 14th Feb. and 1st Mar. 2018. That of worshipers visiting the Festival targeting 30 samples in total were done on 1st Mar. 2018.

¹⁴ "The Working People's Daily" changed its name to "New Light of Myanmar" since 1994, and to "Global New Light of Myanmar" since 2014. All articles can be obtained at the Library of Institute of Developing Economies, JETRO.

¹⁵ The articles of the Festival were observed in the newspaper as follows (titles and dates). "At the Great Shwedagon (1967, 24th Mar.)", "Tabaung fullmoon marked (top page) (1971, 11th Mar)", "Shwedagon-scene of Tabaung Festival (top page) (1975, 26th Mar)", "Tabaung Fullmoon Day Observed (top page) (1977, 3rd Mar)", "Fullmoon Day of Tabaung observed in Rangoon (top page) (1979, 12th Mar)", "Fullmoon Day of Tabaung observed in Rangoon (top page) (1981, 20th Mar)", "Fullmoon Day of Tabaung observed (1983, 28th Mar)", "Fullmoon Day of Tabaung observed (1985, 5th Mar)", "Fullmoon Day of Tabaung observed (1987, 14th Mar)", "Shwedagon Pagoda's Tabaung Festival concludes (top page) (1989, 21th Mar)", "Buddha Pujaniya Festival held at Shwedagon (1991, 27th Feb)", "Shwedagon Pagoda Buddha Pujaniya Tabaung Festival concludes (1997, 23th Mar)", "Pagodas, monasteries crowded with Buddhist devotees on Fullmoon Day of Tabaung (1999, 1st Mar)", "Meritorious deeds performed at pagodas, religious buildings on Fullmoon Day of Tabaung (2001, 8th Mar)", "Tabaung festival held (2003, 17th Mar)", "Prime Minister cleanses Shwehtidaw of Shwedagon Pagoda (2005, 24th Mar)", "Buddhists perform meritorious deeds on Fullmoon day of Tabaung (2007, 2th Mar)", "Pagodas in Nay Pyi Taw, Yangon packed with devotees on Fullmoon Day of Tabaung (2009, 10th Mar)", "Meritorious deeds performed at religious edifices throughout nation on Fullmoon Day of Tabaung (2011, 19th Mar)".



Mar)", "Yangon religious edifices crowded with devotees (2013, 26th Mar)", and "Yangon crowded with pilgrims and holiday-makers on fullmoon day (2015, 4th Mar)". The articles of the Park were as follows (titles and dates). "The People's Square and the People's Park that will reveal history (1989, 7th Oct) and (1989, 8th Oct)", "People's Square and People's Park to be open to public (1989, 9th Oct)", "People's Square and People's Park constructed under special arrangements of SLORC, opened (1989, 11th Oct)", "To rest, recreation and reverence (1989, 12th Oct)".

¹⁶ The visit day of Shwedagon Pagoda Festival was 1st Mar. 2018 and that of Ananda Pagoda Festival in Bagan was 13th Jan. 2018. The interview with Ananda Pagoda Trustee (U San Win, a member of the trustee, and U Aung Kyi, a member of the trustee) was also done on 13th Jan. 2018. Field surveys of building uses and land uses at the surrounding area of Shwedagon Pagoda was conducted from Jun. to Aug. 2017.

¹⁷ The park field survey checking park facilities inside was conducted between Dec. 2017 and Feb. 2018.

¹⁸ In 1948, Myanmar fulfilled its independence from colonial rule. But the nation was governed by military rules, namely BSPP and SLORC, from 1962. BSPP is "Burma Socialist Program Party" started from 1962 by the military coup. SLORC is "State Law and Order Restoration Council" started from 1988 by the military coup to seize anti-government and democratization demonstration. This research set a benchmark during the period of the military regime when the ruler changed from BSPP to SLORC. In this research, the name is unified as "SLORC", although it was changed to "State Peace and Development Council (SPDC)" from 1997.

¹⁹ Osada (2013), pp.24.

²⁰ Since the Bagan dynasty beginning from the 11th century, the dynasty regime has continued until the middle of the 19th century in Myanmar.

²¹ Pearn (1939), pp.22, and pp.297-299, Ma Mya Sein (1944), pp.25-26, and Donald (2013), pp.142.

²² Moore (2000), pp.5.

²³ The map was drawn in this research by means of GIS software according to several location names on the property boundary recorded in Pearn (1939), pp.297-299. The area calculation was done by GIS.

²⁴ Pearn (1939), pp.27-30, mentioned Fitch, Ralph visited the Pagoda in the 1580's.

²⁵ Pearn (1939), pp.72, mentioned that the great festival was held at the full-moon of Tabauing, which its cosmopolitan market to which men and women came even from China.

²⁶ Mag Su Shin (1972), pp.93.

²⁷ The field survey was conducted on 13th Jan. 2018 to visit the Ananda Pagoda Festival which is one of the largest and oldest festivals in the nation. The number of stalls was more than 1,900 which mainly treat commodities such as clothing, shoes, tableware, hardware, furniture, bedding, agricultural machineries, toys, rugs, etc according to the conducted interview with the Ananda Pagoda Trustee and field observations. Amusement facilities for kids was observed to set up. Performances on a stage were also held from 8 P.M. until 5 A.M on every other day.

²⁸ Nay Chi Zay Ya (2015) mentioned the owned lands cultivated fruit trees such as coconuts, palms, mangos and jack fruits, and about 500 workers were also donated for cultivating and harvesting.

²⁹ After the second Anglo-burmese War of 1824, Yangon was declared consolidation to British India and developed as a capital city of one state of British colony and a port city of foreign trade.

³⁰ The Singuttara hill where the Pagoda stands used to be subject to scramble as fortification due to its topographical condition during the wartimes. It was also the basement of the independence movement from the colonial ruler. As a purpose of the surrounding area being occupied as the cantonment, it is considered to secure military defence, to provide good living environment with cooler climate, and to demonstrate ruler's power to ruled. Penny (2006), pp.197, mentioned, the worshippers would be admitted to the Pagoda only through the southern entrance, all other entrances would remain closed for military use.

³¹ Noel (1995), pp.6 and pp.47.

³² Donald (2013), pp.144-145.

³³ Mag Su Shin (1972), pp.45.

³⁴ Pearn (1939), pp.134, mentioned after the first Anglo-burmese War, the trade shrank from around 1830 in Yangon, and it was recorded in 1832 that there were about 10 traders from the Shan visiting the Festival.

³⁵ Pagoda Trustee Interview (2017). Additionally, Pearn (1939), pp.30, mentioned that the fair continued to be held for centuries, until, indeed, the British period of Burmese history.

³⁶ Hirano and Yokohari (2017), pp.373-376.

³⁷ The Dalhousie Park exists at the present which is known as Kandawgyi Lake Park, but it was divided into several parks (total 23.5 ha, excluding the water surface).

³⁸ The map was drawn in this research based on Rangoon Guide Map (1930) published under the direction of Brigadier R.H.Thomas, Surveyor of India. The cantonment boundary was based on Osada (2013), pp. map1. The locations of entertainment facilities, pagodas and individual buildings were drawn based on information written in the Guide Map. Additional information of the parks were from Wright (1910) and Pearn (1939).

³⁹ Penny (2006), pp.202-205, mentioned the details of conservation movement such as the Burma Archaeological Survey (BAS) during the late colonial regime.

⁴⁰ Pagoda Trustee Interview (2017). Firstly 31.6ha was returned in 1930. Additionally, 0.3ha at the east side in 1935, 12.3ha at the west and northwest side in 1939, 0.5ha at the southwestern side in 1950, and then in 0.9ha at the east side in 1961 were returned accordingly. Donald (2013), pp.145, mentioned that the jurisdiction over 654 acres was transferred from the military to the municipal authorities in 1930.



- ⁴¹ Mag Su Shin (1972), pp.241.
- ⁴² Mag Su Shin (1972), pp.241. The image depicting land use in the surrounding area in 1870 after related pagodas and buildings, and fruit trees were demolished.
- ⁴³ After the nation's independence in 1948, the government protected and restore the Buddhism which played the role of uniting domestic peoples in the independence movement. On the other hand, BSPP stopped the protection of Buddhism, which obtained political power and restrained politics, under the policy of separation of religion and politics.
- ⁴⁴ The Working People's Daily (1971) on 11th March
- ⁴⁵ The Working People's Daily (1975) on 26th March and (1977) on 3rd March
- ⁴⁶ The Working People's Daily (1975) on 26th March
- ⁴⁷ The Working People's Daily (1977) on 3rd March and (1985) on 5th March
- ⁴⁸ The Working People's Daily (1977) on 3rd March
- ⁴⁹ Pagoda Trustee Interview (2017)
- ⁵⁰ Pagoda Trustee Interview (2017) and Ministry of Construction Interview (2018)
- ⁵¹ Kuramoto, *monk living* (2014), pp.12, mentioned that SLORC intended to utilize the image of Buddhism for acquiring legitimacy because the regime which began by the coup had problems not to have the legitimacy.
- ⁵² Mya Maung (1999), pp. 266-267, Kuramoto, *monk living* (2014), pp.12, and Philp (2002), pp.1590.
- ⁵³ Mya Maung (1999), pp. 275-276.
- ⁵⁴ The Working People's Daily from 1989 to 2009 during SLORC, the top pages introduced mainly regarding the articles that high rank politics celebrated and donated to monks.
- ⁵⁵ The Working People's Daily from 1989 to 2009 during SLORC, the articles regarding the Festival was not specialized in Shwedagon Pagoda, but these came to be regarding several monasteries and pagodas.
- ⁵⁶ Pagoda Trustee Interview (2017). No clear answer of the reason why it was prohibited was given in the interview. It is considered that the prohibition of the Festival was affected by the policy to prohibit gatherings more than 5 people that the SLORC military regime adopted.
- ⁵⁷ Shop Operators Interview (2018)
- ⁵⁸ Field Survey of Building Uses and Land Uses (2017) and Shop Operators Interview (2018)
- ⁵⁹ Park Operators Interview (2018)
- ⁶⁰ Ministry of Construction Interview (2018) and Hotel Operators Interview (2018). Regarding hotels, interviews with key hotels of Yangon to understand the opening year were done by phone in Feb. 2018. According to it, Kandawgyi hotel opened in 1993, Trader hotel in 1996, Sedona hotel in 1996, and Nikko hotel in 1998.
- ⁶¹ Hirano and Yokohari (2017), pp. 375, mentioned that 43 out of 62 parks (total parks at present) in Yangon were established between 1989 and 1992 during the SLORC military regime.
- ⁶² The Working People's Daily (1989) on 11th Oct.
- ⁶³ The Working People's Daily (1989) on 11th Oct.
- ⁶⁴ Hirano and Yokohari (2017), pp.375.
- ⁶⁵ In 2011, Myanmar shifted civilian regime even under the military regime, and in 2015 civilian regime was established by the national election. The policy separating religion and politics is based on the Constitution established in 2008, but the government gives Buddhism as the special honorable religion of the nation.
- ⁶⁶ Pagoda Trustee Interview (2017)
- ⁶⁷ Pagoda Trustee Interview (2017)
- ⁶⁸ Pagoda Trustee Interview (2017) and practical check by Field Survey of the Festival (2018)
- ⁶⁹ Park Operators Interview (2018) and Shop Operators Interview (2018)
- ⁷⁰ Worshipers Interview (2018)
- ⁷¹ Field Survey of the Festival (2018)
- ⁷² According to the Field Survey of building uses and land uses, approximately 250 buildings out of 335 of 5 blocks at the east side are monasteries or religious related buildings. Kuramoto, *monk living* (2014), pp.18 and pp.21, mentioned that monasteries tend to accumulate around influential pagoda in Myanmar
- ⁷³ The park has a memorial ceremony which is held every year on 19th July when the General Aung San and the others were assassinated. At the beginning, the mausoleum was set up by the Ministry of Religion utilizing a part of military land at the same place in 1952. Afterwards, it became the park in 2013. Hirano and Yokohari (2017), pp.375, and Donald (2005), pp.268-269.
- ⁷⁴ Apart from 8 parks, a military land which has an area of about 13ha at the north of the People's Park has been open to the public as "Revolution Square".



⁷⁵ The map was drawn in this research based on the satellite image (2012). The land use was based on the result of the Field Survey of building uses and land uses at the surrounding area which was conducted from Jun. to Aug. 2017 in this research. Parks boundary were based on data from Interview of the Parks and Playgrounds Department, and Yangon City Development Committee on 6th Nov. 2012. The boundary of military land and locations of public facilities was based on observation through the Field Survey.

⁷⁶ Park Facility Survey (2017-2018)

⁷⁷ Pearn (1939), pp.72.

⁷⁸ Pearn (1939), pp.72, mentioned that the Pagoda still continued to be a centre of pilgrimage and of trade, especially, it was noted, for the Shans (a state of Myanmar), who brought to Yangon the Pegue (dynastic name of Myanmar) ponies for export to India in the Festival.

⁷⁹ Pearn (1939), pp.38, mentioned that the governor, chief men and a greater number of the inhabitants solemnize the festival by consuming a considerable quantity of spirits; there are also performances and dances and fireworks, which are discharged at night-time based on the record from "the History of Syriam".

⁸⁰ Pearn (1989), pp.27-30, mentioned that there were many buildings for lodging of monks and worshipers and planted fruit trees along four gate ways stretching about 2 miles in length at the surrounding area based on the record by Fitch.

⁸¹ Philp (2002), pp.1602-1603, mentioned regarding Shwedagon Pagoda that the British were well aware of the political significance of religious sites and of the performance of religious act as politically meaningful.

⁸² Hirano and Yokohari (2017), pp.377.

⁸³ Hirano and Yokohari (2017), pp.379, mentioned that the established parks were for the rulers according to historical background.

⁸⁴ Philp (2002), pp.1590.

⁸⁵ Donald (2005), pp.258.

⁸⁶ It is possible that one of the background why the government intended to weaken the relationship between the Pagoda and democratic movement since the Pagoda were often used as a base for demonstration and strike by opposition to regime. Donald (2005), pp.257, mentioned the Shwedagon functioned not only as a Buddhist holy site, but also as a public space for political activism.

⁸⁷ Philp (2002), pp.1602-1603 and Penny (2006), pp.205-206.

⁸⁸ According to Mg Su Shin (1972) and Patoda Trustee Interview (2017), the Pagoda was the basement for student demonstrations in 1920, worker strikes in 1938, Pasapara speech in 1945, Aung San Suu Kyi speech in 1988, citizen demonstration in 2007, as examples of representative event.

⁸⁹ Yanagisawa (2004), pp.81, mentioned that importance of historical originality and religious status of the place as a case of Indian religious sanctuary, Varanasi, which originates as the British colony.

Bibliography

Department of Population. *Population and Housing Census of Myanmar: Provisional Result*. Ministry of Immigration and Population, 2016

Donald, Seekins. *Sacred Site or Public Space? The Shwedagon Pagoda in Colonial Rangoon*. Buddhism, Modernity, and the State in Asia, pp.139-159, 2013

Donald, Seekins. *The State and the City: 1988 and the Transformation of Rangoon*. Pacific Affairs, Vol. 78, No.2, pp.257-275, 2005

Hirano, Kuniomi, and Yokohari, Makoto. *Characteristics of the Development and Usage of Urban Parks in Yangon, Myanmar*. Journal of Japanese Institute of Landscape Architecture, Vol.79(5), pp.513-518, 2016

Hirano, Kuniomi, and Yokohari, Makoto. *Historical Process of Park Establishment in Yangon, Myanmar*. Journal of the City Planning Institute of Japan, Vol.52, No.3, pp.373-380, 2017

Ikeda, Masataka. *Burma Buddhism (provisional translation)*. Houzokan, 1995

Japan International Cooperation Agency and Yangon City Development Committee. *A Strategic Urban Development Plan of Greater Yangon*. 2013

Kuramoto, Ryusuke. *Monks Dwelling with the Vinaya*. Journal of Asian and African Studies, No.88, 2014

Kuramoto, Ryusuke. *Monks Living in a City: A Case Study of Yangon in Myanmar*. Bulletin of the National Museum of Ethnology, Vol.39(1), pp.1-44, 2014

Ma Mya Sein. *Burma*. Oxford University Press, 1944

Mg Su Shin. *Noble Shwedagon*. Myanmar Heritage, 1972

Moore, Elizabeth. *Ritual Continuity and Stylistic Change in Pagoda Consecration and Renovation*. Universities Historical Research Centre Conference, pp.5, 2000



- Moore, Elizabeth. *Unexpected Spaces at the Shwedagon*. A Comparison to Asian Art and Architecture, Blackwell Publishing
- Mya Maung. *The Burma Road to the Past*. Asian Survey, Vol.39, No.2, pp.265-286, 1999
- Nay Chi Zay Ya. *The Dictionary of Shwedagon*. 2015
- Nemoto, Kei. *Story of Burma History (provisional translation)*. Thuko Sinsho, 2014
- Nishizawa, Nobuyoshi. *Economic Change and Development Policy of Myanmar (provisional translation)*. Keisoshobo, 2000
- Noel, Singer. *Burmah: A Photographic Journey 1855-1925*. Paul Strachan Kiscadale, 1993
- Noel, Singer. *Old Rangoon: City of the Shwedagon*. Kiscadale Publication, 1995
- Osada, Noriyuki. *Formation of National Framework of Burma in Colonial Port City, Rangoon (provisional translation)*. The University of Tokyo, 2013
- Pearn, B.R. *History of Rangoon*. American Baptist Mission Press, 1939
- Penny, Edwards. *Grounds for protest: placing Shwedagon pagoda in colonial and postcolonial history*. Postcolonial Studies, Vol.9, No.2, pp.197-211, 2006
- Philp, Janette, and Mercer, David. *Politicised Pagodas and Veiled Resistance: Contested Urban Space in Burma*. Urban Studies, Vol.39, No.9, pp.1587-1610, 2002
- Webb, Morgan. *The development of Rangoon*. Town Planning Review, Vol.10, pp.37-42, 1923
- Win Pe. *Shwedagon Rangoon*. Printing and Publishing Corporation, 1972
- Wright, Arnold. *Twentieth Century Impressions of Burma*. White Lotus Press, 1910
- Yamaguchi, Yoichi. *Story of Myanmar History (provisional translation)*. Canaria Communications, 2011
- Yanagisawa, Kiwamu, and Funo, Shuji. *Relationship between Spatial Formation of Varanasi City and Pilgrimage Routes, Temples and Shrines*. Journal of Architecture Planning, Architectural Institute of Japan, No.583, pp.75-82, 2004



Study on Kaishochi Changes Before and After the War-Damage-Recovery Land Readjustment Programs of Nagoya City, Japanese Castle Town

KENJIRO MATSUURA*

* Associate Prof., Graduate School of Science and Engineering, Chiba Univ., Dr. Eng., matsuura@chiba-u.jp

In this paper, focusing on open temple-type *kaishochi* (open areas ensconced in the design of urban blocks) located in the district of Nagoya City in Japan's Aichi Prefecture, we will review the effects of the war-damage-recovery land readjustment programs, through which the city has experienced a number of major transformation. Specifically, we will elucidate the actual state of such *kaishochi* before and after the project by examining residual trends of temple-type structures by using maps produced before and after the project implementation. Targeting 66 Edo-period *kaishochi* blocks in the Nagoya Castle district, we first analyzed the differences between the land usage decrease rate for the whole district and that for the targeted *kaishochis*. Next, we analyzed transformations of usage and form using the maps produced before and after the project implementation. As a result of our analysis, the following three points were clarified. First, even though the number of temple-type *kaishochis* is decreasing, there has been little change in the area they occupy. Second, there has been little change in *kaishochi* usage before and after the project implementation. Third, looking at the *kaishochi* forms, we can find changes from Flagpole type (large inner area with narrow outside access), no-contact type (large inner area with no public access to outside roads), and integrated type (large access to outside road).

Keywords: *kaishochi*, the war-damage-recovery land readjustment programs, Nagoya, Japanese Castle town

Introduction

In the grid blocks that make up major cities, high-rise buildings commonly compete for space and parking lots are often scattered about randomly. In such districts, blocks are primarily developed on a per-site availability basis and no planning is performed for each city block. In contrast, in the planned grid block districts of Edo-period Japanese castle towns, there are numerous examples of open spaces called *kaishochi* that were deliberately and systematically arranged in the central parts of the city blocks. According to S. Ibaraki (1994), such *kaishochi* were incorporated into the planned districts of numerous Japanese cities including Tokyo, Shizuoka, Nagoya, and Kumamoto. As a result, when urban planners engage in redevelopment projects, they are often tasked with examining such historical *kaishochi* to ensure that they are incorporated into modern central urban areas in attractive and innovative ways⁽¹⁾.

Focusing on the numerous temple *kaishochi* in Nagoya City, Aichi Prefecture, this paper explores the work of the war-damage-recovery land readjustment programs, through which the city underwent a number of major transformations. Herein, we aim to elucidate the actual state of changes to *kaishochi* before and after the project completion. In the Nagoya City Edo-period castle town, many of the original *kaishochi* incorporated into the city blocks included temples, but there were also other types, including those hosting mansions, public facilities, and shrines.

The center of Nagoya City forms a grid with block sizes primarily based on three archetypes. Previous research, established that two of these had outer dimensions of 50×50 Ken (90×90 m), but in one portion of the town, the block sizes were set at 50×70 Ken (90×127 m). From an examination of Fig. 1 (Nagoya City (1999)), it appears that the first type occupies 60% of the total land. In addition, although *kaishochi* in Nagoya were most commonly the site of temples, they also hosted mansions or government facilities such as prisons, fire-watch towers, and **restaurants**. Therefore, it can be said that there were rather few *kaishochi* open to the general public (Hayashi T. (2007)).

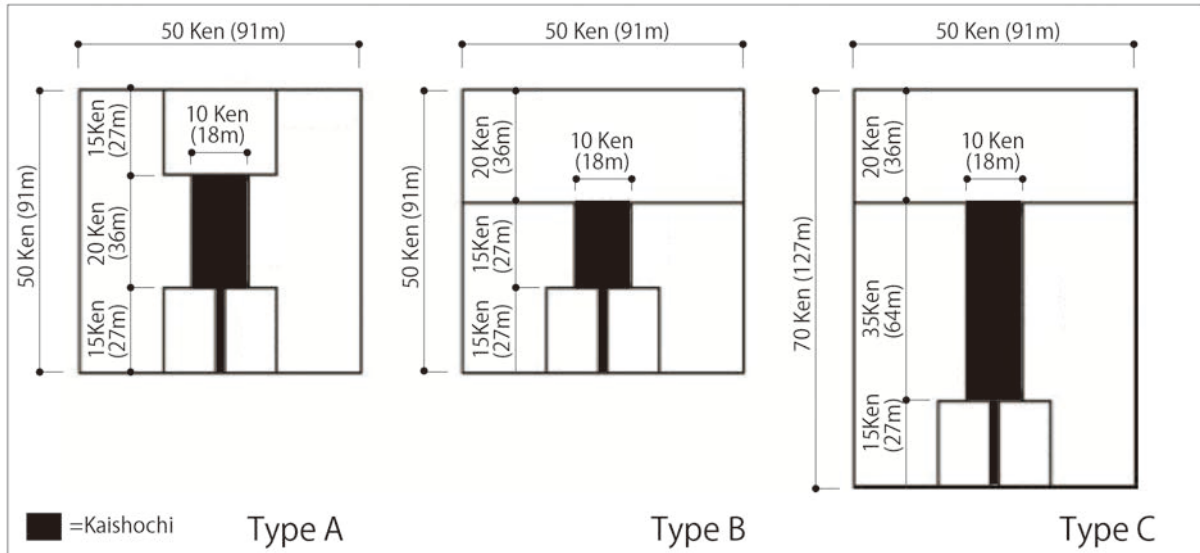


Figure 1: Archetypes of Nagoya's Kaishochi¹⁰⁾

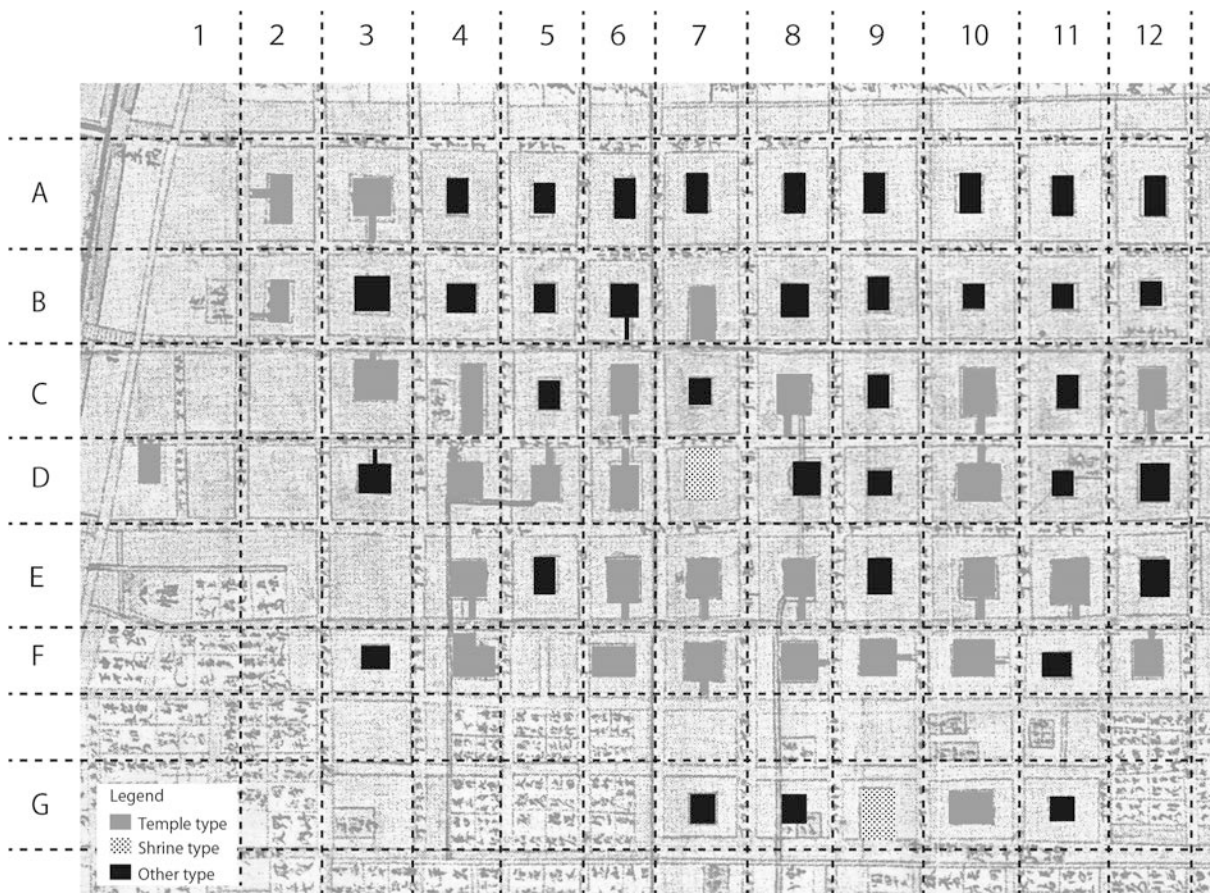


Figure 2: The location of Kaishochi to study (Categorized in Nagoya Castle Map (1746))

This research examines 66 *kaishochi* blocks that could be confirmed to exist in the “Nagoya Castle Map” created in Enpo 3 of the Edo Period (1746), as shown in Fig. 2. Note here that, in this paper, we define *kaishochi* as sites where a line drawn diagonally across a block will intersect the free space making up the center of the block, and the shortest distance between the intersection and the site boundary line is 4 m or more. Furthermore, this study designates



kaishochi based on three primary usages: temple, shrine, and other. The latter category includes office buildings, commercial buildings, residences, and multi-level parking lots.

Looking at past *kaishochi* studies focusing on the Edo period, we find that Tetsuo Tamai (1986) analyzed block sizes while Lee Soeong (2007, 2008) analyzed changes in land ownership, bankruptcies, and alleyways, and S. Ibaragi (1994) analyzed *kaishochi* by districts. As for Nagoya City *kaishochi*, Toshiji Terashima et al. (2009) analyzed their transformations and their related factors.

The differences between Terashima's research and this study can be broken down into the following six points:

1) Terashima analyzed transformations in 61 street blocks that were confirmed in 1884 cadastral register figures, while this article examines *kaishochi* from 1746, which was near the end of the Edo period.

2) This study focused on events occurring before and after land readjustment project renovations.

3) This study makes a point of analyzing the transitions to the size of the sites examined.

4) We divide *kaishochi* into types (temple, shrine, and other).

5) We point focus on site integration with connection sites.

6) *Kaishochi* archetypes are examined.

It is noted that the usage and form of *kaishochi* changes according to the era in which they were constructed. In connection with the relocation of temple cemeteries that occurred during the war-damage-recovery land readjustment programs, it was also determined that temple-type meeting places have undergone area changes that are different from the other *kaishochi* types. Based on the above, we will conduct our analysis by focusing on *kaishochi* 1) usage transformations, 2) form transformations, and 3) temple-type area transformations. We will begin our research by analyzing the influence of temple-type *kaishochi* resulting from temple cemetery relocations that were carried out as one phase of the war-damage-recovery land readjustment programs.

Because it has recently become commonplace to relocate inner-city cemeteries to suburban locations, the temple-type *kaishochi* affected by such relocations obviously experience more radical use transformations than other types. Specifically, we will examine the relics and traces of temple-type *kaishochi* using maps produced before and after the implementation of the war-damage-recovery land readjustment programs, and then analyze reduction rate differences between the entire district and the *kaishochi*. Next, after dividing *kaishochi* by type, we will analyze changes in their usage and form by using maps created before and after the project implementation.

Temple-type area transformation by cemetery relocation

Because the presence of cemeteries within the central city target blocks was considered environmentally and aesthetically unfavorable, a plan to relocate those memorial areas to a concentrated location called Nagoya *Heiwa Koen* (Peace Park), which is located on the outskirts of the western part of the city, was undertaken during the reconstruction phase of the war-damage-recovery land readjustment programs. In all, 279 temple cemeteries that were originally located within the central city project area were relocated.



After giving thoroughgoing consideration to the petitions of temples officials, the city authorities who decided on the site of the new tomb gardens established policies calling for not only the meticulous handling of the cemetery monuments being relocated but also the groundbreaking policies for the sanctuary areas located inside the temple complexes, as follows: 1) The rate of land decrease is calculated by adding 1/2 of the transferred cemetery area to the area before land readjustment. 2) The temple has a guaranteed minimum site area, the temple type is maintained despite the relocation of the cemetery to the suburbs, temple types were replaced by these incentives.

Next, an analysis of the remnants located at temple-type *kaishochi* that have existed since the Edo period (Table 1), before and after the relocation phase, was conducted. In the Edo period, when these *kaishochi* first appeared, 28 were temple-type. However, that number decreased to 14 before the project implementation, and then to eight afterwards. Furthermore, although they were not located on a *kaishochi*, we confirmed the existence of six temples within the survey area before the project implementation and two afterwards.

Changes in the number of Edo period temple-type *kaishochi* before the project implementation are considered to be caused by the fact that some temples were driven into disuse by the the anti-Buddhist movement at the beginning of the Meiji era. Additional factors related to the change in the before and after project number of temple-type *kaishochi* included: 1) temple destruction due to war damage, 2) the loss of the patronage that had economically supported the temple, and 3) the relocation of temples to *Heiwa Koen* that accompanied the project implementation.

Next, the block areas where temple remains could be found, even after the project implementation (Table 1), were examined. Looking at the increase and decrease of temple-types before and after the project implementation, we can see an increase of four and a decrease of six temple-type *kaishochis*. As a result, despite a decline in the war-damage-recovery land readjustment programs, land area was reduced, even though things increased in some areas. After conducting an interview survey with Nagoya City officials, it was clarified that some sites were changed due to relocation work difficulties involving war damaged sites and buildings that had had not been refurbished since the war. In addition, regarding areas where the number of temples decreased, when comparing the reduction rate of the block areas with the reduction of the prefecture as a whole, it became clear that the reduction rate of temples in the prefecture was lower than the reduction rate within the block areas. More specifically, at 39%, the reduction rate was particularly large in the E-11 block districts compared to just 7% for other prefectural areas. From this result, it was confirmed that the temple-type *kaishochi* were given preferential treatment over the other-type *kaishochis* when land substitution work.

***Kaishochi* use transformation before and after the project**

As mentioned above, *kaishochis* can be divided into three types: temple, shrine, and other. For each era, the use type of each *kaishochi* examined was incorporated into a survey sheet and changes in the land use pattern were determined based on the investigation sheet.

The total number of *kaishochis* decreased year by year from 66 in the Edo period, to 50 before the project implementation, and then 40 after project implementation. By use type, temple-type *kaishochis* decreased from 28 in the Edo period to 14 before the project implementation and eight after the project implementation. As for shrine-type *kaishochis*, the number decreased from three in the Edo period, to two before the project implementation, down to one after the project implementation. In contrast, the number of other-type *kaishochis*, which was 35 in the Edo period, decreased by just one to 34 before the project implementation, and then to 31 after project implementation. This change was moderate when compared to other two types (Figure 3).

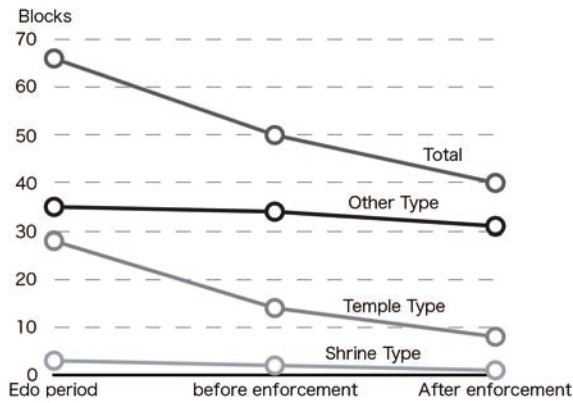


Figure 3: Transition of the usage of "Kaishochi"

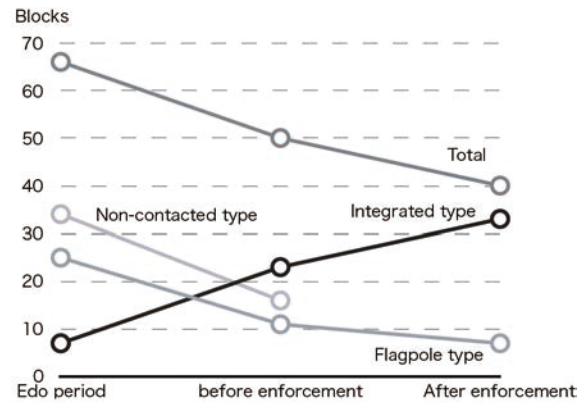


Figure 4: Transition of form of "Kaishochi"

Next, we analyzed blocks with "Kaishochi" in either or both before and after eNext, blocks were analyzed from the combination of the presence of kaishochis before and after the project implementation. Before and after the project implementation: presence, there are 33 blocks, before the project implementation: presences, after the project implementation: absence, are 17 blocks, before the project implementation: absence, after treatment: presence, are seven blocks, and Before and after the project implementation: absence are nine blocks. Before and after the project implementation: absence, it is understood that a kaishochi has completely disappeared from a block. Next, we analyzed kaishochi blocks where before or after the project implementation: presence, focusing on use transformations. Comparing before and after the project implementation, six blocks stayed temples, six blocks changes from temple to other, one block change from other to temple, 19 blocks stayed other, and one

Table 1: Residual trend and reduction rate of Temple type "Kaishochi"

Block number	Presence or absence of Temple Type			Block area before enforcement (㎡)	Block area after enforcement (㎡)	Breakthrough rate of block (%)	"Kaishochi" area before enforcement (㎡)	"Kaishochi" area after enforcement (㎡)	Breakthrough rate of "Kaishochi" (%)
	Edo Period	Before enforcement	after enforcement						
A-2	○	×	×	11,649	10,621	9			
A-3	○	○	○	16,017	10,560	34	1,466	1,279	12
B-2	○	×	×	8,296	6,747	19			
B-7	○	×	×	10,667	7,033	34	683		
C-3	○	○	×	11,694	6,830	42	1,265		
C-4	○	×	×	11,058	6,408	42			
C-6	○	○	×	11,257	6,980	38			
C-8	○	×	×	10,582	6,900	35			
C-10	○	○	○	10,570	6,858	35	745	627	15
C-12	○	○	○	10,135	7,007	30	1,490	1,176	21
D-4	○	×	×	10,362	6,078	41			
D-5	○	○	×	9,997	6,732	33	615		
D-6	○	×	×	10,424	7,007	33			
D-10	○	○	×	10,084	6,914	31	739		
E-4	○	×	○	10,488	6,394	39		932	
E-6	○	×	×	10,403	7,447	28			
E-7	○	○	○	9,800	7,351	25	719	815	-13
E-8	○	×	○	9,937	7,620	23		977	
E-10	○	○	×	9,885	7,286	26	1,372		
E-11	○	○	×	10,127	6,142	39	682		
F-4	○	○	○	11,475	6,513	43	526	623	-18
F-6	○	×	×	11,601	7,563	35			
F-7	○	○	○	11,009	7,441	32	1,008	904	10
F-8	○	○	×	10,524	7,675	27	3,125		
F-9	○	×	×	10,755	7,327	32			
F-10	○	×	×	10,398	7,185	31			
F-12	○	○	×	10,201	7,052	31	804		
H-10	○	×	×	8,297	6,707	19			
Number of presence	28	14	8						



blocked changed from shrine to shrine. Thus, it is found that many blocks maintained their previous uses: 26 blocks compared to seven blocks changing their uses.

The reason one designation switched from temple- to other-type *kaishochi* is that some temples were fully transferred to the suburbs along with their affiliated cemeteries during the relocation phase of the project. There was also one example of an other-type *kaishochi* that changed to a temple-type *kaishochi*. In this case, a temple that was present in the block before the project implementation was expanded to include a position within the *kaishochi* during the implementation phase. There were also cases where part of the land that was not initially part of the *kaishochi* became part of a *kaishochi* due to the implementation phase, even though the use remained the same. As for cases in which *kaishochi* disappeared due to the project, two were temple-type *kaishochis*, one was a shrine-type *kaishochi*, and 14 were other-type *kaishochis*. This indicates that a number of *kaishochi* in the city center disappeared as a result of the implementation phase.

The shrine-type *kaishochi* disappeared because the shrine itself burned down before the project implementation and the site was converted to another use. As for cases in which *kaishochis* were renewed after the project implementation, one was a temple-type *kaishochi* and six were other-type *kaishochis*. In the case of the temple-type *kaishochi*, a temple was located on the site before the project implementation and the block size remained small after the project implementation. Since the proportion of the temple in relation to the block went up, it was revived as a *kaishochi*. As for the features of the other-type *kaishochi*, although it was a temple-type *kaishochi* in the Edo period, it lost *kaishochi* status because the temple disappeared and it is thought that the land, which was originally residential, had been transformed into a *kaishochi* due to section changes imposed by the project implementation.

Changes in the *kaishochi* form before and after the project

Using survey sheets, we assembled and categorized *kaishochi* groups with similar transformations. First, we divided the meeting place form into three types: flagpole type (large inner area with narrow outside access), no-contact (large inner area with no public access to outside roads), and integrated type (large access to outside road). (See Fig. 5.)

In the Edo period, about 40% of the blocks were the flagpole type (25 blocks), about 10% were the integrated type (seven blocks), and the no-contact type comprised about 50% (34 blocks). However, prior to the project implementation, the number of integrated type blocks had increased and accounted for about 50% (23 blocks), after which the no-contact type disappeared and the integrated type accounted for about 80% (33 blocks) (Fig. 4). From this, we can see that the integrated type of *kaishochi* had become the dominant form.

Next, we analyzed the morphological change of *kaishochi* for each combination of *kaishochi* presence before and after the project implementation (Fig. 5). Comparing before and after the project implementation, three stayed flagpole type, four changed from flagpole type to integrated type, 15 stayed integrated type, three changed from no-contact type to flagpole type, and eight changed from no-contact type to integrated type, confirming five pattern of change did it. Thus, 18 blocks kept the same form, and 15 blocks changed.

As for *kaishochi* that were flagpole type both before and after the project, there was an accessway transformation in the A-3 block, and one side of the F-7 block came into contact with two renovated paths. Prior to the project implementation, the A-3 block had access to the road along the south side of the *kaishochi*, but afterwards, the main road passed along the east side, thereby requiring an accessway transformation. Before the project implementation, the F-7 block only had one corridor road, but afterwards it came to have two roads. From these two examples, we can see that changes in the contact direction and number of accessways were made during the project implementation while maintaining the flagpole type (Fig. 5).

There were numerous cases where *kaishochi* retained their integrated form after the project implementation. For example, Asahi Shrine has been present on block H-9 from the Edo period to the present day. As in B-4 and H-11, there are blocks where there are two or more accessways with an adjacent road, even though they were integrated before the project implementation. In those cases, they were transformed during the project implementation to eliminate an approach road or to make an accessway in another section. Additionally, there are blocks with different sections before and after the project implementation. In those cases, the *kaishochi* section before the project implementation was reduced in size during the arrangement adjustment, so the original site was no longer in the central part of the block, thus causing another section to become the *kaishochi* instead (Fig. 5).

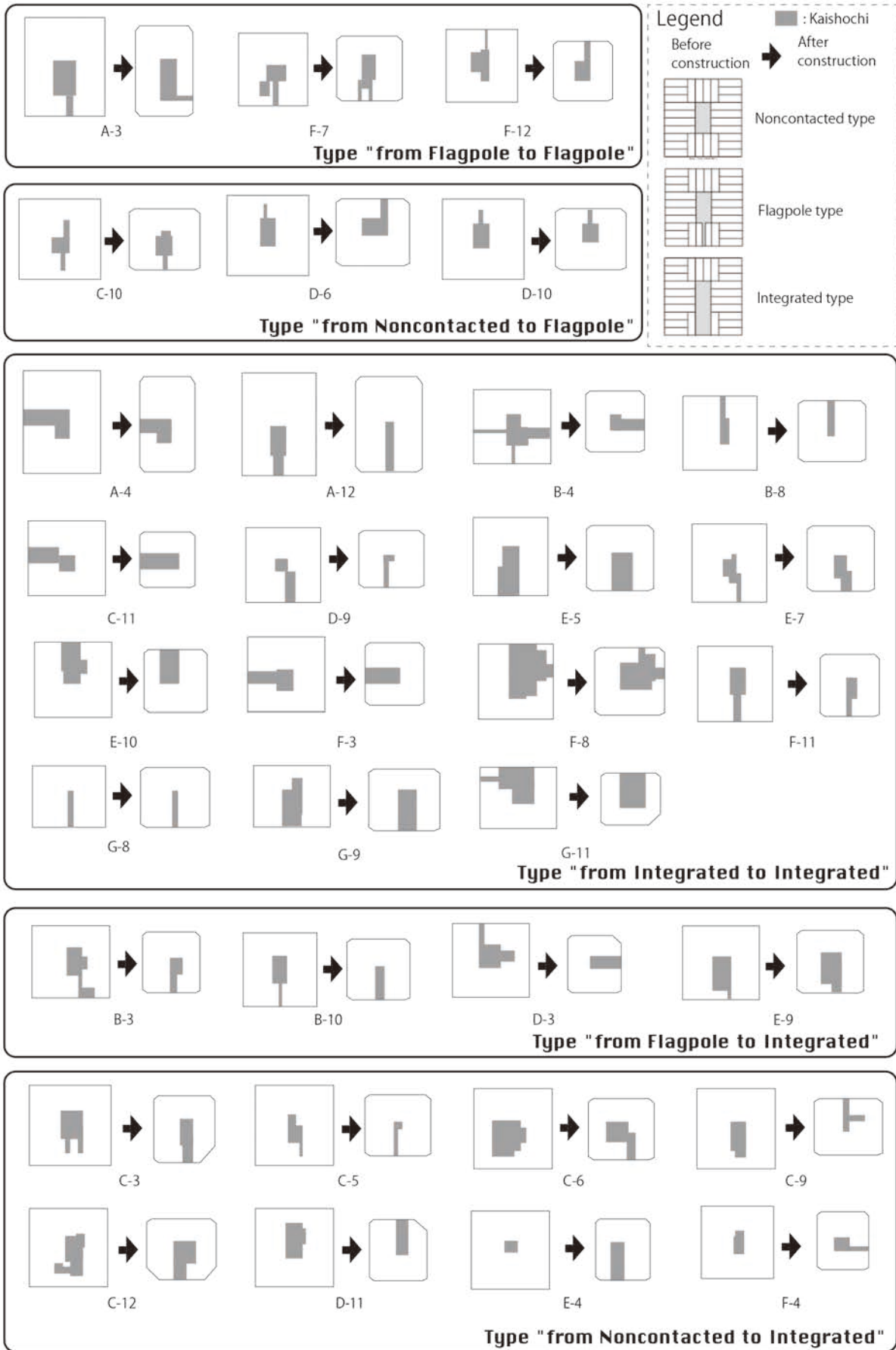


Figure 5: Transfiguration pattern of Kaishochi



As for flagpole to integrated type transformation, as seen in B-10 and E-9, the conversions were produced by expanding the approach roads that existed before the project implementation. In those cases, amplification was achieved by integrating land around the *kaishochi*. Additionally, at D-3, a main road was created on the east side, thereby changing the contact path. In that case as well, the morphology was transformed by integrating it with the sections surrounding the *kaishochi* (Fig. 5).

As for no-contact to flagpole type transformations, in cases where no accessway was seen before the project implementation, the original section was similar to the flagpole type and there was little change in the size of *kaishochi* after the project implementation. However, it became possible to access the city block, which became smaller (Fig. 5).

For no-contact to integrated type transformations, we saw that the forms before the project implementation were already close to the integrated type and that access in numerous blocks was created by integrating them with the surrounding parcels during the project implementation. In E-4, the temple that has existed on the *kaishochi* since the Edo period had declined in size before the project implementation phase and another section had been designated as the *kaishochi*, making it a no-contact type. However, due to issues that arose during project planning, the block size was reduced, whereas the temple grounds stayed the same. As a result, the temple once again occupied the central part and the *kaishochi* was designated as an integrated type (Fig. 5).

Conclusion

As a result of the analyses conducted in this study, the following three points were clarified. First, even though the number of temple-type *kaishochis* is decreasing, the resulting area changes have been small. The total number of *kaishochis* was 50 before the project implementation but decreased to 40 afterwards. From an examination of temple-type remnant trends, we find that the decrease in the number of temple-type *kaishochis* was occurring before the war-damage-recovery land readjustment programs and has continued since the project. However, since residential areas have also been decreasing step by step, it was also found that the temples remaining area after the project implementation are being maintained .

Second, there has been little change in *kaishochi* usage before and after the project, with most that had undergone transformations changed to residential land when various temples were relocated to the *Heiwa Koen* simultaneously with their affiliated cemeteries. As for other-type *kaishochis*, there are numerous offices that disappeared during arrangement adjustments, but since there were also many uses for the newly vacant areas, the numbers were maintained. When looking at *kaishochi* usage, we can also see than many of the other-type *kaishochis* had originally been temple-type *kaishochis*. The reason here might also be related to the fact that the temples originally on that land had been moved to the vicinity of *Heiwa Koen* simultaneously with their affiliated cemeteries as part of the relocations done during the war-damage-recovery land readjustment programs.

Finally, looking at *kaishochi* forms, we can see changes from flagpole and no-contact types to integrated type. In Nagoya City, site shapes were commonly maintained because of the Land Reorganization Project made decisions based on the actual converted sites. However, we confirmed that changes from flagpole to integrated type did occur by integrating a *kaishochi* with the surrounding premises. *Kaishochi* that remains a flagpole type was also a flagpole type in the Edo period. In other words, it can be said that the *kaishochi* has been maintained in the same form as when it was first created.

Notes on contributors

This research is the result of collaborative research with Yoshinori Kato. In the interview survey, I received great cooperation from administrative officials and others. I thank you for writing here.

Endnotes

(1) For example, the Nagoya-shi Nishiki 2-chome town development communication council is examining the utilization policy of the club.



Bibliography

Hayashi T.,The world of the modern era Nagoya Genkou picture scroll,2007

Ibaragi S. ,About the people living in the Edo period in the early modern period,Architectural History No.23,pp.108-117,1994

LEE Kilhun, A STUDY ON THE LANDOWNERSHIP OF "KAISHOCHI",Transactions of AIJ. Journal of architecture, planning and environmental engineering (633), pp2527-2532,2008

LEE Kilhun, A STUDY ON THE PROCESS OF "KAISHOCHI" CHANGING TO THE HOUSING LOT,Transactions of AIJ. Journal of architecture, planning and environmental engineering (621),pp 237-242,2007

LEE Kilhun, Study on the alleys to the open space in the block ("Kaishochi") of Edo town,Summaries of technical papers of annual meeting Architectural Institute of Japan,pp.303-304,2007

Nishiki 2 chome town planning liaison meeting,Nishiki 2-chome Chouja-machi town development plan concept in the future (2011-2030),pp.28-31,2011

Nagoya city,New work Nagoya city history 3rd volume,pp.140-141,1999

Tamai T.,Edo Read the lost urban space,Heibonsha,1986

Terashima T.,A study on the shifting situation of the urban public space in the center of block,Summaries of technical papers of annual meeting Architectural Institute of Japan,pp.379-380,2009

Image sources

Figure 1 : Archetypes of Nagoya's *kaishochi*

Figure 2 : The location of *kaishochi* to study(Categorized in Nagoya Castle Map (1746))

Table 1 : Residual trend and reduction rate of Temple type *kaishochi*

Figure 3 : Transition of the use type of *kaishochi*

Figure 4 : Transition of form type of *kaishochi*

Figure 5 : Transfiguration pattern of the location of *kaishochi*



Street Art as a Way to Enhance the Vitality of Urban Public Spaces----Inspiration Based on the Experience of Taipei

Zhang Peng*, Dong Wei**

**PhD, Urban planning department of the school of architecture, southeast university of Nanjing, China, 54507355@qq.com*

***Prof, Urban planning department of the school of architecture, southeast university of Nanjing, China, dongwx@163.com*

Street art is a unique artistic behavior that takes place in the urban public space. Its uniqueness is not only manifested in the form of immediacy, participation, and mobility, but also has a great value to enhance space dynamism, increase human interaction, and shaping the spirit of place. In most Chinese cities, street art is often equated with "fraud", which not only hampers the development of street art, but also hinders the promotion of vitality of public space, for a livable and lively city, the public space should not be merely a purely physical space, but should be the sum of the spirit of the place and the vitality of the space. The research question of this paper is: how to reduce the external negative effects of street art and actively shape and regenerate the vitality of urban public space? Research based on literature review and the summary, first of all, review and define the concept of "street art", and carries on the classification, it is believed that street art can change from "urban problem" to "urban landscape", then, the relationship between "street art" and "urban public space vitality" is discussed, performance analysis found a busker behavior can not only enhance the vitality of the public space (one-way intervention), also can attract audience participation, through the interaction with the audience to arouse public space activity (two-way intervention). And then from the perspectives of government, NGO and ordinary citizens, multi-dimensional detailed analysis the art management experience on the streets of Taipei, found that through the government management, system design, the multi-agent organization and the public participation to cultivate a variety of means such as, the urban public space of street art promotion activity provides effective guarantee system and management, and reduce the street art of the outer space of the city has negative effects. Based on this, the paper puts forward the spatial layout pattern of "centralized and decentralized complementarity", the behavioral restraint mechanism of "rigidity and elasticity", and the multi-agent intervention management of "organization and self-organization", "Planning for Positive Public Opinion and Strict Enforcement of Law Enforcement" and other planning strategies. This paper argues that, by using the experience of management of Taipei street artists, from space, organization, policy formulation, implementation and operation aspects improve mainland China the level of city governance, with a view to providing references for the regeneration and shaping of the vitality of urban public space in China, and to provide a useful reference for the management of street artists.

Keywords: Street Art, Public Space, Space Energy, Taipei.



Introduction

The rapid development of information technology has greatly changed the way that people interact with each other. In the past, the traditional face-to-face language exchange was gradually replaced by the interaction of online platforms. What has happened with this change is the tremendous change in people's understanding of public space: urban public space gradually returns to its original meaning as a "container," so Richard Sennett asserted that "public life is dead." [1]. In this context, the vitality of urban public space has become the focus of attention. For a livable and lively city, the public space should not be merely a purely physical space, but should be the sum of the spirit of the place and the vitality of the space. Therefore, the vitality of public space should not be limited to the transformation of material space, but should also reflect the "urbanism" and spiritual nature it carries.

In recent years, art as a means and important strategy for the regeneration and revival of urban public space has begun to be used in urban and rural planning and construction. The existing focus includes the discussion of the importance of art for space from a theoretical perspective [2], the influence of artistic works on public space [3-4], and the artist's transformation of space (mainly rural and community) from a practical perspective, the research on the mechanism of action of art intervention space [5-7]. Although these theoretical and practical achievements have greatly advanced the study of "art intervention space," most of them have remained in the "static art work" for the material transformation of space, but have paid less attention to the effects of temporal and dynamic artistic behavior and space activity on the vitality of space. This article attempts to start with a special type of art-- "Street Art", and explores the way that artistic behavior of "immediateness", "liquidity", and "interactivity" to promote the vitality of urban public space, by analyzing the development experience of street art in Taipei, and at the same time propose a planning strategy to avoid negative intervention.

1. THE CONCEPT AND CLASSIFICATION OF STREET ART

1.1 The Concept of Street Art

Street art is a common phenomenon in more economically developed cities. At present, there is no strict definition of street art in mainland China. Linli An pointed out that the four characteristics of street art are "liquidity", "culturality", "spontaneity", and "aggregation". She believes that street art refers to street musicians, such as musicians, painters, and performance artists, who are dedicated to public performances in public places, including singing, oral skills, mime, musical instruments, painting, juggling, and storytelling. Diverse performance forms. She believes that street art refers to street musicians, such as musicians, painters, and performance artists, who are dedicated to public performances in public places and include a variety of performance forms such as singing, oral skills, mimes, musical instruments, and paintings. , juggling performances, storytelling, etc. [8] The street art defined in this article has three elements: location, behavior and purpose. It has three characteristics: mobility, appreciation and participation. First, the place where street art takes place is an urban public place like "street," and due to the public nature of the place, its occupation of space is usually temporary. It can be changed, so it has considerable mobility; Second, street art should be admirable, the level of performing arts is the core measure of whether or not it is called an "artist". Higher appreciation for them to attract more viewers; once again, the admiration of street art has brought about its






participatory difference from the group of vagrants, The process of attracting the attention of passers and participation is the prerequisite and basis for interaction generated.

1.2 Classification of Street Art

According to the form and content of street art performance, street art can be divided into three types of performing arts, visual arts, and creative arts [9]. Among them, performing arts is a type of street art that provides audiovisual experience as its main features. (Table 1). It can be divided into vocal music and instrumental music. The visual arts category mainly refers to street art types characterized by providing visual appreciation, which can be divided into calligraphy, painting, birds and flowers, etc.; Creative crafts refers to the types of street art that are mainly characterized by the creation of creative products and handicrafts. The types of street art can be divided into dough, clay, sugar and plastics.

Table 1. Main types, characteristics and schematics of street art. *The graphic classification is based on the author's tracking survey of street entertainers in a large Chinese city. The photos are taken taken by the author on site*

	Performing Arts	Visual Arts	Creative Crafts
Features	Mainly to provide audiovisual experience and experience as the main features;	Mainly to provide visual appreciation characteristics;	Mainly characterized by the creation of creative products and handicrafts;
Types	Drama, Mime, Ugly, Acrobatics, Reading, Vocal Music, Instrumental Music, Magic, Street Dance, Performance Art	Calligraphy, painting, graffiti, figures, photography, birds and flowers	Plastic sculptures, clay sculptures, sugar and plastics, etc.
Schematic			

According to the perspective of the relationship between Street artists and audiences, street art can be divided into two types: "composition scenes - audience separation" and "creative scenes - audience interaction". The former mainly refers to the audience can only see the artistic achievements of street performers, but can't see the creative process (such as graffiti), it is a relatively traditional, static, display-based art form; The latter refers to the artist creative process can be seen by the audience, and can participate in it. People appreciate the creative concept of the artist through appreciation of the creative process. It is an art form in which the artist interacts with the audience.

With the development of the times, the types of street art are constantly changing and developing, and some traditional forms of performance are gradually being eliminated (such as the traditional folk arts of cross-talk, storytelling, and Pingtan), and new forms of art are emerging (such as hip-hop, performance art, etc.), but in essence still fail to break away from the basic relationship dimension of "scene-audience". Therefore, the types of



street art studied in this article are mainly limited to "creative scenes - interactive audiences", while the art forms include but are not limited to the above three types.

2. THE RELATIONSHIP BETWEEN STREET ART AND THE VITALITY OF URBAN PUBLIC SPACE

2.1 Street Art Creates a Spirit of Place in Public Spaces

The characteristics of public space are not only manifested in the uniqueness of material space and environment, but more importantly, the interaction between people and the environment and the improvement of the spirit of the place brought about by people-to-person exchange ^[10]. The rich content of street art forms can not only reshape the quality of public space, but also attract more crowds and stops for specific places, and its flexible changes and flowing artistic behavior also affect the overall artistic atmosphere and cultural image of the city. The improvement of the spirit of public space places is of great value.

2.2 Street Art Promotes Human Communication in Public Space

Because of the ambiguity of public space ownership, the involvement of any individual will trigger changes in the attributes of other space owners. As a result, individuals gradually tend to retreat from self-power boundaries and consciously weaken the relationship between individuals and the built environment. ^[11]Street art can not only shape the quality of the material space environment, but also its rich art form provides a medium for the promotion of human communication in space. The artist performed live performances by moving the artwork creation scene into the public space and interacted positively with the audience through viewing, buying, selling, donating, and language exchange. (Figure 1).

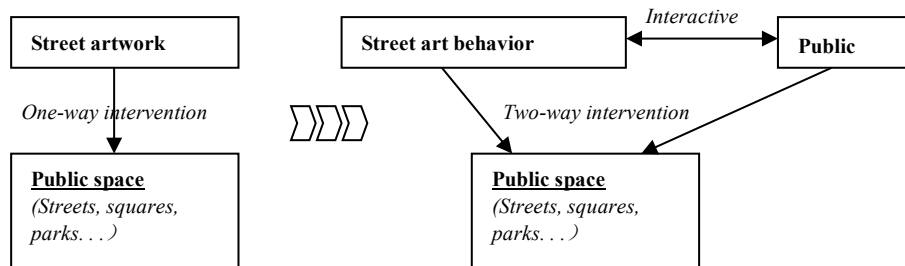


Figure 1. The influence of the interaction between street art behavior and the public on space. The data comes from the author's drawing

2.3 The "Positive and Negative Effects" of Street Art on Public Space

The narrative in public space often has two sides. With the generalization of the semantics of street art and the differentiation of the composition of street artists, many practitioners gain sympathy through bad performances in the name of art. They occupy public spaces, disrupt normal public order, and cause traffic jams and noise disturbances. The negative effects of people, fraud, and difficult governance^[12]. Looking at the domestic and overseas markets, street art is entirely possible to provide positive effects for promoting the revitalization of urban public space and creating a sense of urban environmental quality through reasonable management and



guidance. Based on this, the following analysis provides an inspiration for the management of street art in mainland cities by analyzing the experience of street art management in Taipei.

3. TAIPEI STREET ART MANAGEMENT

3.1 Taipei Street Art Development Overview

As the capital city of Taiwan Province, Taipei City is one of the cities that prioritized the development of urban public art. Taipei City is located in the Taipei Basin in the northern part of Taiwan Island. It has 12 districts under its jurisdiction with a total area of 271.8 square kilometers. In 2014, it had a total population of 2,701,600. Inspired by the overall artistic soil and cultural atmosphere in Taiwan, as early as more than 20 years ago, the Taipei City Cultural Bureau began to promote street performers to engage in the standardized management of street art performances. It is hoped that culture and arts can better integrate into people’s lives. Today, the streets of Taipei have become more and more widely acknowledged and respected by the society and have spawned a relatively complete cultural industry chain.

3.2 The Municipal Government is Responsible for the Formulation of Standardized Management Regulations

The Taipei City Government is the leading force in promoting the healthy development of street art. Since the 1990s, the Taipei City Government has successively promulgated the “Licensing Measures for in Arts Activities in Taipei City” (April, 1994), “Planning Scheme for Licensed Artists of Taipei Street Performers” (February 1997) and other related regulations. The rules and regulations on the rights and conduct of Street Performers have been meticulously stipulated, and it has been ensured that there are rules to follow in the streets. [13]. In addition, in addition to the management of the above measures, street performance activities must also be carried out under the provisions of the “Environmental Noise Control Act,” “Regulations on the Management of Traffic Safety,” and “The Law on the Maintenance of Social Order”, otherwise the law enforcement agencies has the right to withdraw or even terminate the qualifications of Street artists for street performers. (Table 2).

Table 2.Laws related to Street Art Management formulated by the Taipei City Government.*Source: Taipei city busker licensing program for arts and cultural activities*

Promulgation Time	Legal Regulations	Related Content Involving Street Performers
April 1994	"Taipei Street Artists Engage in Art and Cultural Activities Licensing Measures"	Article 1: These measures are specially formulated to encourage diversified development of arts and cultural activities in Taipei, to cultivate the spending habits of people participating in arts and cultural activities by means of payment, to enrich the cultural features of public spaces in the city, and to permit artists to engage in street arts and cultural activities. Article 2: (1) Public Space: Refers to a space such as sidewalks, squares and parkland more than eight meters wide in the city, with the consent of the administrator to provide venues for arts and cultural activities. (2) Art and cultural activities: Environmental arts, photography, and other arts that engage in fee-based drama, dance, singing, musical instruments, magic, folk arts, painting, sculpture, action art, use of non-permanent media, or water-soluble pigments. Text related to live creative activities. (3) Street artists: Refers to natural persons or groups of ten or less engaged in arts and cultural



The 18th International Planning History Society Conference - Yokohama, July 2018

		<p>activities in public spaces. Article 4: Street artists should apply to the competent authority to issue licenses for licensing activities before engaging in arts and cultural activities in public spaces in this Municipality. Article 6: Street performers who have obtained an activity permit may engage in arts and cultural activities in public spaces in the city. However, it should comply with the relevant laws and regulations and the management of public spaces. Article 7: When Street artists engage in arts and cultural activities, they shall reveal the activity permit at a conspicuous location on the scene and shall be subject to examination by the competent authority and public space management personnel. Article 8: When Street artists engage in arts and cultural activities, they must not cause obstacles such as pedestrian or vehicular traffic, obstruction of barrier-free facilities, building entrances and exits or fire safety equipment, and other actions that impede traffic or public safety.</p>
February 1997	<p>“Taipei Street Artists Engage in Art and Cultural Activities Permit Implementation Plan”</p>	<p>First, implement the artist's "Application System for Performing Qualifications" (see below for details);</p> <p>Second. Behavioral norms of Street artists: (1) Produce activity permits, and consciously accept inspections by competent authorities, public space managers, and other related personnel; (2) Do not cause difficulties for pedestrians or vehicles, and leave at least 3 meters of pedestrian access space. Must not obstruct building entrances or fire safety facilities; (3) The distance between individual artists is more than 4 meters, the distance between groups increases to more than 6 meters, visual arts and creative technology can use a space of 1 meter times 2 meters square or according to the regulations of the venue authorities; (4) Content needs to be created or performed on site; non-site creations must not be sold and must be marked "not for sale"; (5) fees are set by the artist and can be accepted freely Donations, rewards or pricing methods should be clearly marked on the site in advance; (6) Time of performance: from 10:00 to 22:00; (7) Compliance with other management norms and regulations in public spaces; (8) Keeping the site tidy, Immediately after the show is completed, the site will be restored to its original state and the waste generated will be cleaned up; (9) If damage is caused to the site, it shall be responsible for repairs and liability</p> <p>Third. Auditing operations: The “Inspection Management Operational Notification System” will be established by the Bureau of Culture and various space management units.</p>
December 1999	<p>Environmental Noise Control Act</p>	<p>Article 6: Noise-control zones shall not engage in acts that may cause harm to the peaceful environment of others; Article 7: The sounds of places and facilities in noise-control zones shall not exceed the noise control standards; Article 8: In designated zones The announcement by the competent authority of the Internal Control Office for the designation of a noise-prone facility is subject to the approval of the local competent authority before it can be set up.</p>
July 1987	<p>Traffic Safety Management Regulations</p>	<p>Article 81: In a railway highway station or other traffic-frequent location, guests who violate guest regulations and hinder traffic order shall be fined NT\$1,500 to NT\$3,000; Article 82: if there is one of the following circumstances, In addition to ordering the perpetrator to stop and remove the obstacles in real time, the perpetrator or his employer shall be fined NT\$1,200 but is less than 2,400 yuan: Holding a competition without permission on the road or setting up a banquet, acting, filming or other Similar actors, who set up booths in places where the announcement prohibits the establishment of a share.</p>

3.3 Institutional Design and Innovation of Street Artists Management



3.3.1 Street artist licensing system

The Taipei City Government has established a perfect licensing system for street performers. Artists need to pass a strict examination standard before they can obtain street licenses. With their licenses, they can qualify for street performances, thereby enhancing the level of street art. The certification assessment process is sponsored by the Municipal Bureau of Culture, and the applicants submit their applications on their own. The available application items include performing arts, visual arts, and creative arts. (Figure 2); Application mechanism includes deliberation body, deliberation process and deliberation procedures Three aspects (Table 3 for details).

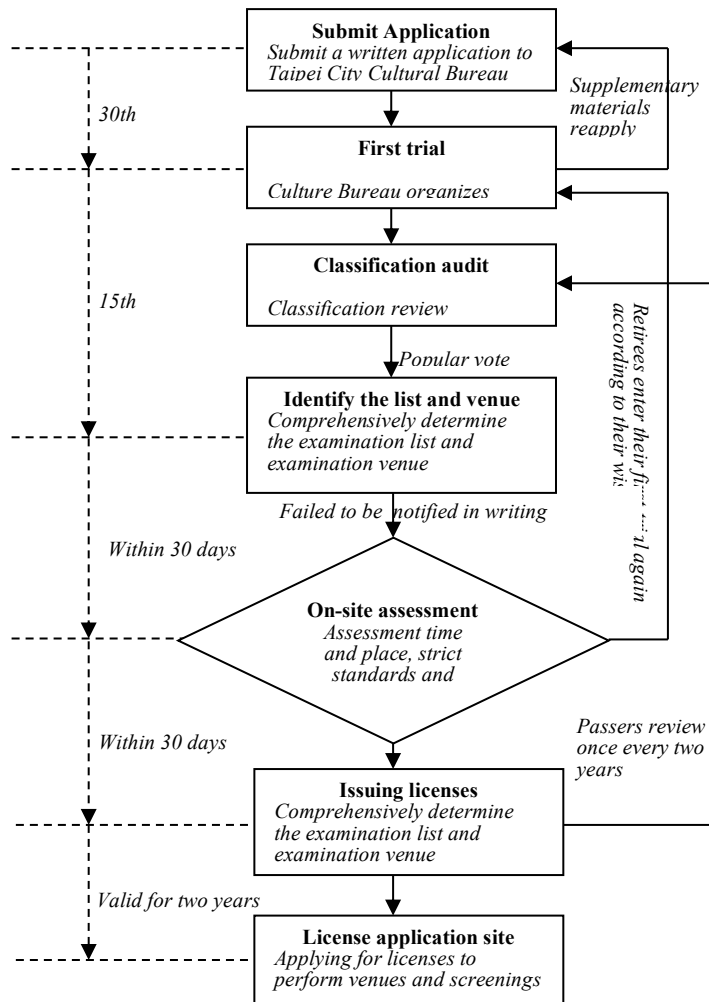


Figure 2. Street artists licensing license application process. The data comes from the author's drawing

Table 3. Permission for applying for street artist license. Data from the summary of network data

Subject of Review	After the application is accepted, a review committee shall be convened to invite the deliberation committee and the public to participate in the voting;	Review Committee	Including 1, arts and crafts professional experts and scholars (categorized according to the attributes of street performers); 2. representative of the competent authority; 3. representative of the venue management unit; 4. representative of Street artists;
		General people	Open the scene to participate in the popular vote, if the negative votes reach 10%, then ask the deliberation committee to discuss;



Review process	The applicants were invited to explain, demonstrate or perform on the scene. After the deliberative personnel scored, the reviewers issued the licenses.		
Deliberation procedure	The review adopts the negative elimination method and is divided into two phases;	The first stage	In the first stage, the public and the deliberation committee voted at the same time. If the voter thinks that the content of the applicant's performance is not suitable for the street performance, cast a negative vote;
		The second stage	If any applicant is (1) professional, venue management representative, cultural bureau, street artist representatives cast negative votes or (2) the public cast negative votes by 10%, then enter the second phase of deliberation;

Street artists' assessment venues are usually located in the corridor of the "National Father's Memorial Hall" where there is a large number of people. Each participant only has 3 minutes of performance time. The specific assessment criteria include the maturity of artistic expression and skills, and the attraction of the performance to the audience and the environment, the effect, the artist's own packaging, the completeness of the performance, etc. [14]. Due to the high assessment standards, the pass rates are generally between 15% and 20%. Those with poor artistic skills are eliminated. There is no special treatment for assessment. People with disabilities must pass the same standards as ordinary people. Since its deliberation on Street artists in 2005, the Taipei City Government has accumulatively licensed 1,399 permits for street performers. Most of these members are professional performers, and there are also many institutional teachers. The composition of the entire group of street artists is approximately 80 percent of the professionals, 15% of retirees, 3% of students, 1% of foreigners, and other 1%. These licensees can vouch for performances at venues in Taipei City.

3.3.2 Defining a Fixed Show Venue

The street performers who qualify for the badge qualify as street performers, but it does not mean that they can perform at any location. First of all, the use of street licenses is within the scope of the area where the documents are issued, that is, the licensing permit obtained through examination in Taipei City, it is valid only for local use in Taipei City; secondly, Taipei City based on the types of street art, audience characteristics, and external interference levels, 231 spots in 82 performance venues in the city were designated as street performers' fixed performance venues^②.

3.3.3 Implementing a venue registration application system

As the level of venue flow directly affects the artist's attention and income levels, it inevitably results in competition for better venues. Based on this, the Taipei City Government created and implemented a venue registration application system. According to the gradient of the number of people registering for the venue, three methods of registration lottery, registration use and self-coordination are adopted. For venues with a large number of registered users and unable to meet the needs of all artistes in turn, the method of registration lottery determines the sequence of performers. At the government designated window to participate in the drawing to determine the venue of the day, for example at the MRT Danshui Station, a daily draw arrangement takes place at 10 o'clock in the morning, generally more than a dozen applicants compete for 8 venues; for venues with fewer registered users Self-coordinated approach. The form and timing of the performances are also stipulated. It is generally stipulated that from 10:00am to 10:00pm it is allowed to perform on the specified venues, but at the



exit of the MRT station where the flow of people is relatively large, in order to restrict street performances. The negative effect on the urban order, therefore prohibiting street performers during the rush hour; and some venues with a strong capacity to accommodate the performance of dynamic, open time control measures, such as in Ximending Pedestrian Street, weekdays The show's performance time is from 18 to 22 hours, while the holiday is from 11 to 20 hours.

3.4 Encourage Non-governmental Organizations to Participate in Management

The government provides top-down management rules to restrict street performers, while non-governmental non-government organizations also manage and organize themselves through the bottom-up approach. The folk organizations of street Street artists in Taiwan developed earlier. As early as 2003, Zhang Bowei and many artists created the first street artist development association in Taiwan^③. The functions of the association include coordinating street performers' performance venues and helping artists to safeguard their rights. Increased exchanges between artists and organized new artists team, effectively increased the social status of Street artists, and made positive contributions to promoting the organization of Street artists in Taiwan. The Street artists Development Association also actively developed online platforms and established the “Taiwan Street Artist Network” to regularly publish excellent street performers’ videos on the Internet. This has aroused more attention from the community to this group. At the same time, it also set up public donation accounts. To some extent, it solved the problem of the daily operation of the association. In addition, he is also responsible for regularly planning the “Street Arts Festival” and invites more street artists to join the association to enhance the overall performance level and popularity of Street artists.

Through the introduction of non-governmental organizations, Taipei City has achieved good results in multi-party management practices for street performers. Unlike the government’s top-down one-way control approach, the Artists Development Association provides a bottom-up feedback path for street artistes, effectively linking managers, Street artists, and the public to form a benign approach.(Figure 3).

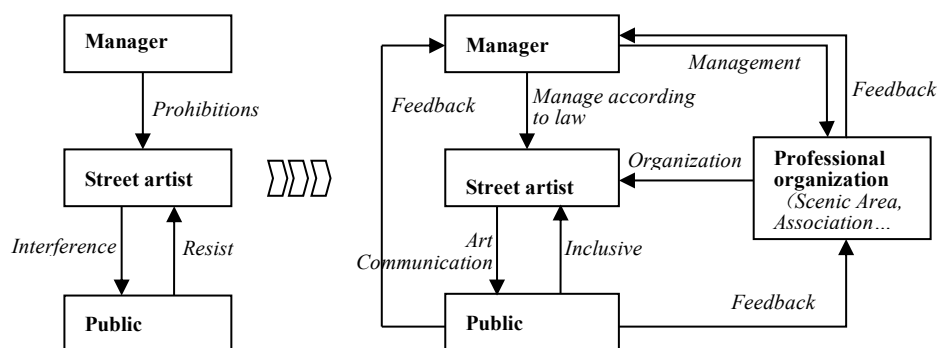


Figure 3. The bottom-up feedback path for professional organizations. The data comes from the author's drawing

4. THE ENLIGHTENMENT OF TAIPEI STREET ART MANAGEMENT EXPERIENCE TO MAINLAND CHINA

4.1 Centralized and Scattered Complementary Spatial Layout Patterns



Street art has great dependence on urban public space, so the spatial layout of street art should closely integrate the distribution rules of urban public space. In the traditional planning model, the public space usually occupies the center of gravity of the urban space, focusing on the symbolic significance of some kind of collective activity or event. The public space that emphasizes centrality and concentration is increasingly unable to satisfy the residents' participation in space, practicality and pleasantness requirements, so it can be predicted that the function of urban public space will be divided in the future. Under this trend, street art should fully integrate the distribution and evolution of public space, strengthen the dual functions of art display and participation in terms of content form and participation methods, and adopt a centralized and decentralized complementary layout model from the perspective of spatial distribution.

4.2 Rigid and Elastic Behavioral Restraint Mechanism

In order to minimize the external negative effects of street art, it is necessary to rationally restrict its behavior. For example, the timetable for the specific land plots allowed to entertain is allowed to be allowed to entertain for free during the prescribed time period, while it is strictly forbidden for other time periods; for the performance venues and performance forms, etc., an application for appointment is submitted to the management department in advance and managed. After the screening and co-ordination, the party effectively restricts the performing behavior of Street artists.

4.3 Multi-agent Intervention Management of Organization and Self-organization

On the one hand, the government has strengthened its responsibilities, led the government's management and control through stringent laws and regulations, and on the other hand, the government has Legitimacy was confirmed, and the street performers were provided with more humane help to encourage their formal development. At present, only a handful of cities in mainland China have started implementing the "Artist Licensing System" and proposed relatively specific regulations for the management of street performers^④, but more cities still use Street artists as an urban parasite. Driven everywhere, the attitude and methods of managing Street artists in the Taipei area should serve as a model for learning in the mainland. In addition, there is still a lack of more formal artists' self-organized groups in the mainland. There is no centralized feedback channel for artists' demands.

4.4 Positive Public Opinion Guidance and Strict Law Enforcement Guarantee

Drawing on Taipei's experience in managing street performers, the government should cultivate social soil for the active development of street art, guide public appreciation of the habit of performing show-paying through public opinion, and adopt a more open and tolerant attitude towards artists; in addition, government departments should formulate detailed and transparent artist management. The rules and regulations clarify the functional boundaries of the management departments and regulate the actions of the law enforcement agencies to more targetedly improve the efficiency and level of management of Street artists.

5. CONCLUSION



This article first introduces the concept and classification of street art, and analyzes the relationship between street art and the vitality of urban public space. Then it analyzes the city's street art management in detail from four perspectives: government perspective, institutional perspective, organizational perspective, and public perspective. The experience suggests that through effective planning intervention, the existing external negative effects of street art can be reduced and their positive effects can be brought into play. Specific planning strategies include centralized and decentralized complementary spatial layout patterns, rigid and elastic combination of behavioral constraint mechanisms, organization and self-organized multi-agent intervention management and active public opinion guidance, strict law enforcement protection. It hopes to provide references for the regeneration and shaping of the vitality of urban public space in China, and provides a useful reference for the management of street artists and the healthy development of street art.

Acknowledgements

Thanks for the mentor's help during thesis writing.

Endnotes

- ①For example, the Chiang Kai-shek Memorial Hall, Da-an Forest Park, Lutheran Park Plaza Xinyi, Xinguang Xiangdi Avenue, and Ximending pedestrian walking area are mostly areas with high traffic.
- ②<http://www.busker.org.tw/>
- ③According to incomplete statistics, cities in mainland China that have already implemented "certificate posts" include Xiamen (2004), Shanghai (2014), Shenzhen (2015), and Guangzhou (2017).

Bibliography

- [1]Richard Sennett, Li Jihong. The Decline of Public People[M]. *Shanghai: Shanghai Translation Publishing House*, 2008.
- [2]ZHANG Yuxin, XI Dongfan. Focus on public space art, promote urban soft power - thinking about the planning and construction of Shanghai urban public space[J]. *Shanghai Urban Planning*, 2013(06):23-27.
- [3]XU Yunfei. Construction of city characteristic ways: art under the intervention of space planning[J]. *Planners*, 2016(08):18-21.
- [4]QIU Bing, ZHANG Fan. Based on the urban construction of urban public art planning of collective memory - a kind of public art in the environment space planning and design path[J]. *Planners*, 2016(08):12-17.
- [5]ZHAO Ronghui, ZENG Hui, ZHUO Xiang. Art intervention strategies under the new rural community construction earth ditch, Taiwan tainan city community construction[J]. *Planners*, 2016(02):109-115.
- [6]LIU Yuhan, ZHANG Shanshan, BAO Ziting. Art involvement in community construction and planning of thinking[J]. *Planners*, 2016(08):29-34.
- [7]CHEN Rui, QIAN Hui, WANG Hongyang. Governance structure point of view of art intervenes model village renewal mechanism - based on empirical observation of the seto island sea of Japan art offering[J]. *Planners*, 2016(08):35-39.
- [8] An Linli. Extraction of Street Art Features of Urban Landscape[J]. *Art Observatory*, 2010(12): 187.



The 18th International Planning History Society Conference - Yokohama, July 2018

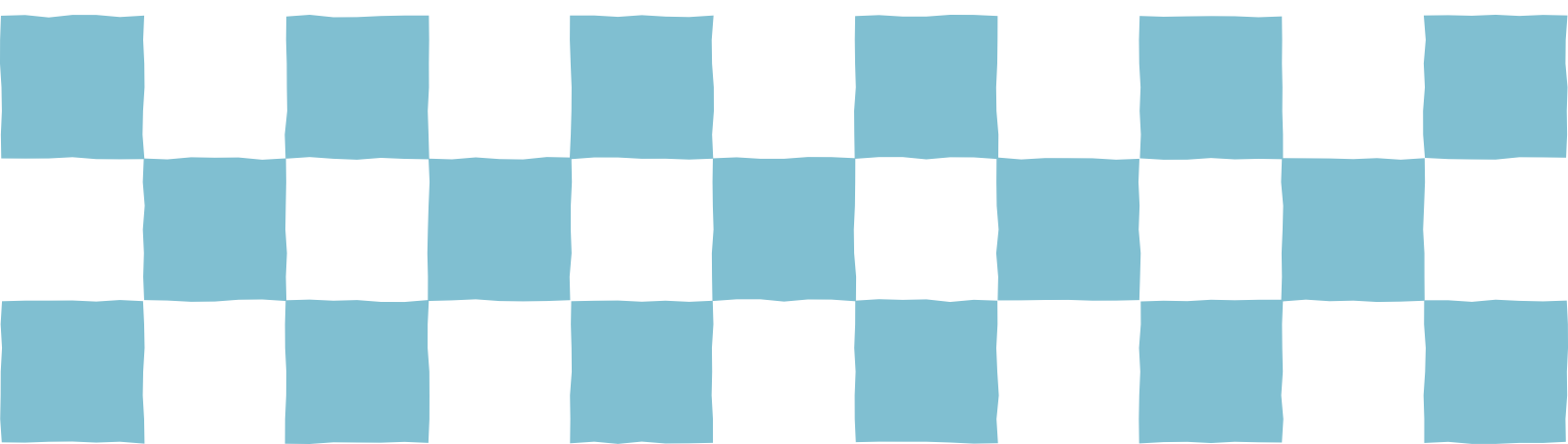
- [9] Zhao Zhen, Street Art Phenomenon Research[D]. *Nanjing Art Institute*,2016.
- [10]Jan Gehl, Communication and Space[M].*Beijing: China Building Industry press*, 1992.
- [11]Richard Sennett,Hang Yuwen. The Body and Stone[M].*Shanghai: Shanghai Translation Publishing House*, 2011.
- [12]Zhang Peng. Spatial Justice Perspective of Nanjing Street Entertainers Space-Time Distribution Characteristics and Planning[A]. *China Urban Planning Association, Shenyang Municipal People's Government*. 2016:11.
- [13]Ruan Rufang,Zhao Shengyu. Development and Enlightenment of Taipei Metro Public Art[J]. *Urban Rail Transit*, 2012,15(12):10-13+35.
- [14]Zheng Na,Wu Yaming. How to Manage a Busker in Taiwan[J]. *Relations across the Taiwan Straits*,2013 (07) : 64-65.



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

53 Getting Published / Round Table



Tue. July 17, 2018

Session 5 (11:15AM-1:00PM)

Small Meeting Room, Yokohama Information Culture Center

Moderators:

David Goldfield, Robert Lee Bailey Professor of History, UNC-Charlotte, Editor, Journal of Urban History

John R. Gold, Professor, Oxford Brookes University, United Kingdom

Margaret Gold, Senior Lecturer, London Metropolitan University, United Kingdom

The purpose of the Roundtable is to inform attendees how to publish a scholarly article in our journals and related journals. Each of us will take ten minutes to explain the mission of our journal, the editorial review process, the mechanics of “revise and resubmit,” and, most important, how to tailor the manuscript to suit the editorial criteria of the particular journal. We then open the floor for questions, and this portion of the Roundtable is often the most rewarding for the attendees. This is especially so for our junior colleagues and graduate students. It is surprising to us how little tutelage graduate students and junior faculty have had from their advisers in developing a scholarly article for publication. Our publishing Roundtables have been very well attended in the past, and we feel that word has gotten out that this is a worthwhile “nuts and bolts” session to attend.



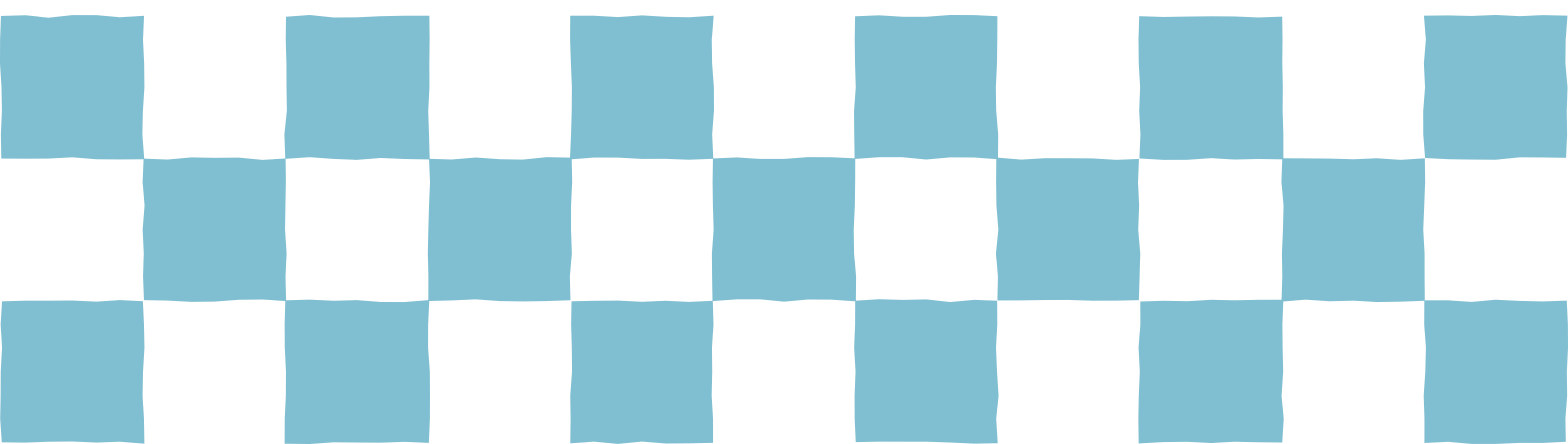
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

54 What Is Happening in Contemporary Cities?



Social Inclusion or Gentrification towards Tokyo 2020; in the case of Sanya, a poor district in Tokyo

Magokoro Yoshihira (YUI Associates Inc.)

Sanya is known as a poor district in Tokyo, where day laborers congregated for construction works especially the time during mid 1950' s to 1980' s, when Japan enjoyed its high economic growth and land speculation. Although the name "Sanya" was erased from official indication of residential address, the identity – with pride and stigma – still exists in the area.

Nowadays, there are approximately 140 hostels exist in Sanya area; about 20 host tourists including businessmen and youngsters seeking for jobs and 120 accommodate mostly welfare recipients – many of them used to be day laborers. YUI Associates Inc. is a social enterprise aiming to create a socially inclusive and diverse community, Sanya. YUI runs two hostels for tourists, Hotel Meigetsu and Juyoh Hotel under hotel operating agreements with the owner. Besides, YUI manages one hostel for welfare recipients, Ariake, by renting a hostel.

YUI Associates Inc. aims for realizing social inclusion in the area through implementing the followings:

- 1) Promoting tourism in the area to cause job creation and economic revitalization in Sanya community,
- 2) Upgrading hostels for welfare recipients physically, as well as psychosocially based on the Recovery Model,
- 3) Creating ties among diverse people associated in the area to have meaningful social inclusion, and
- 4) Community development planning to realize Reappropriation of Sanya as well as avoid having unnecessary gentrification in the area.

In the presentation, recent activities 3) SANYA Cafe and 4) Community Development Plan will be explained mostly;

SANYA Cafe for diversity and social inclusion

We will open a cafe in Sanya, in the end of February, 2018; we are hoping that "SANYA Cafe" will serve as an entrance of Sanya area for everybody associated with the place. We will operate this cafe restaurant to provide meals to foreign visitors, Japanese visitors, and local residents, and also set a time frame to provide occasions for homeless individuals to take part in community activities, such as cleaning on streets in exchange of coffee and meals – as a means of realizing social inclusion of this area.

Social Inclusion or gentrification towards Tokyo 2020

Tokyo 2020 Olympics has been causing gentrification in some areas in Tokyo triggered by increase of land values and Sanya is not an exception. In meantime, facing the risk of earthquake disaster, there is a pressure for rebuilding hostels from wooden-structure to fire resistant structure as well as converting them from welfare-use to tourist oriented use. We rather propose to have seismic retrofit for wooden structured buildings for welfare-use hostels to lessen the effect of gentrification in order not to increase homeless population in the area.

Other possible solutions through urban planning methods will be discussed as well.

A Study on Urban Regeneration Policy Change in Korea

Hyunjin An (Environmental Planning Institute Seoul National University), Aeijung Song (Environmental Planning Institute Seoul National University), Hyeonyoung Park (Environmental Planning Institute Seoul National University) and Meeyoung Kim (Busan Development Institute)

Prosperity and decline are a natural phenomenon in urban growth. Therefore, all efforts to regenerate a city are not new.

After the Korean War(1950-1953), Korea had experienced rapid urbanisation from the 1960s to the 1970s, and the redevelopment projects based on the 'Urban Redevelopment Act' started in 1976. Maintenance projects have begun in 2002 with the enforcement of the 'Act on the Maintenance and Improvement of Urban Areas and Dwelling Conditions for Residents(Urban Maintenance and Improvement Act)', however, and the 'Urban Redevelopment Act' had lost its power. In 2012, the Urban Maintenance and Improvement Act was revised and the 'Special Act on Promotion and Support for Urban Regeneration' was enacted in 2013. According to those legal changes, restoration and sustainability have become the critical part for maintenance cities. Particularly the policy of 'Urban Regeneration New Deal(New Deal Policy)' of Moon Jae-in' s administration emphasised empowerment of local governments and communities participation. 50 trillion won will be invested in New Deal Policy for 5 years from 2018 and this is an unprecedented public investment. But the most important thing is that Korea have experienced compressed policy changes on urban regeneration over a short period of time.

What leads to rapid policy changes? This study suggests an analysis framework that compensated for the theoretical limits of Hogwood and Peters. Furthermore this study analysed Korea' s urban regeneration policies since the 1970s in terms of the content change(targets, special scales, and project types) and the process change(development methods, agents, and citizen participation)

As a result, this study shows that the urban regeneration policy of Korea is changing dynamically due to the combination of defects of the existing system and domestic and foreign socio-economic factors. Particularly Korea' s policy changes on urban regeneration for about 20 years are almost like what the Western cities have experienced for more than half a century.

It is significant that this study created historical records on urban regeneration policies in Korea. This approach suggests policy implications for cities that have similar processes in urban growth to Korea. We hope that this research is able to provide a steppingstone.

Nature of the city, nature within city: a few perspectives on the forms of nature.

Mireille Tchapi (National School of architecture of Strasbourg)

Urban nature is facing social and ecological challenges to target the sustainable ideal, in which nature would associate the idea of human and ecological well-being. Worldwide, are increasing the citizen ecological awareness and their participation to the shaping of urban greening, portraying nature as a powerful instrument for the regeneration or the planning of qualitative public space in urban neighbourhoods. It is the emergence of a sensitive relationship toward landscape, in which nature became a key mediator on the individual and social search for local meaning and sense of place. In the globalizing context of megacities, this relationship is extended from the urban neighbourhood to the regional scale.

Since its independence, Singapore successfully went through the tremendous challenge of accommodating its citizen in decent and affordable housing. The increase of public housing number has been the opportunity in parallel to challenge the neighbourhood landscape for more than 50 years, from monotonous typologies inherited from the two first generations of public housing neighbourhoods, toward the implementation of new prototypes more recently. In the city-state nature became a national emblem by serving both a political vision and economic interests.

The “technicizing” of nature through the prism of innovation questions its intrinsic value. Nature enslaved? Within urban contexts, the perception of nature is denatured. Whether planned or fortuitous, nature has various appearances ranging from highly manicured to informal or even “wild” forms, which reflect its socio-cultural level of acceptance and understanding.

This article will present an historical overview of the landscape typologies in the public housing of Singapore, proclaimed garden city by the former Prime Minister Lee Kuan Yew. On the new environmental paradigm spectrum, it will depict and question the evolving status of nature within public housing neighbourhoods, which is the object of diverse experimentations of the landscape of the public space, from the vertical green to the biophilic city ideal.

Balancing Environment, Economy and Equity: planning initiatives in three cities in Brazil, Mongolia and India

Swati Ramanathan (Jana Group) and Vidhu Gandhi (Extent Heritage Advisors)

By 2050, 66 per cent of the world’s population will be living in urban areas, with approximately 90 per cent of this increase occurring across Africa and Asia. While urbanisation is proving to be rewarding in terms of providing access to employment and infrastructure, its rapid pace is equally challenging to deal with as poverty, urban sprawl and environmental degradation are some outcomes of urban life that far outweigh the positives. Most often noticeable in developing countries is a trend of disproportionate distribution of population across urban areas, which in most cases has led to huge pressures on land, infrastructure, environment and economy(s) of cities. This paper seeks to examine the role of urban planning and the integration of current concerns of environment, economy and equity into master planning of three cities, on the basis that master plans can be more effective in enabling the sustainable growth of cities. The master plans of three cities – Sawai Madhopur in India, Curitiba in Brazil and Ulaanbaatar in Mongolia, are discussed in this paper with the intention of examining how these cities have dealt with rapid urbanisation and economic growth by employing master planning initiatives that seek to protect the environment, while allowing for sustainable growth in terms of the city’s landuse and its infrastructure.



A Study on Urban Regeneration Policy Change in Korea

Hyunjin, An*, Aeijung, Song**, Hyeonyong, Park***, Meeyoung, Kim****

* PhD, Environmental Planning Institute of Seoul National University, jinnie4u@snu.ac.kr

** PhD, Environmental Planning Institute of Seoul National University, aeijung@gmail.com

*** PhD, Environmental Planning Institute of Seoul National University, phy1102@snu.ac.kr

**** PhD, Busan Development Institute, mipre81@gmail.com

After the physical redevelopment and reconstruction in the late 1970s, the paradigm on urban regeneration in Korea shifted from maintenance to restoration and sustainability. This study highlighted that those changes occurred rapidly and not gradually over a short period of time. This study researched diachronic changes on urban regeneration policies after the 1970s in Korea using an analysing model that compensated for the theoretical limits of Hogwood and Peters. The limitations of former policies and internal and external socio-economic factors are shown to have affected dynamic policy changes. This study's academic significance is that it suggests policy implications for cities that have similar urban growth processes to Korea.

Keywords: urban regeneration, policy change, urban regeneration paradigm, Korea's urban regeneration policy

Introduction

Globally, cities are undergoing a paradigm shift from urban development to urban regeneration. This is because prolonged low growth rates and persistent population stagnation has limited urban growth. Additionally, the decline of inner city populations, the change of the industrial structure, and the deterioration of housing are accelerating.

In Korea, after the 'Special Act on Promotion of and Support for Urban Regeneration (Urban Regeneration Act)' was enacted in 2013, urban regeneration projects are being actively pursued nationwide. As Moon Jae-in took over the government in 2017, Korea's urban regeneration policy faced a period of great change. Moon Jae-in announced the government task of the 'Urban Regeneration New Deal' policy, a large-scale public project to invest 50 trillion won for five years in 500 depressed areas nationwide. It differs from the previous policy in terms of content, such as inducing and supporting the expansion of private participation and strengthening local governments' executive power.

Korea's urban regeneration policies date back to the 1970s. In the 1960s and 1970s, indiscriminate urban development was inevitable in the process of rapid economic growth and urbanisation. Disorderless urban regeneration and ageing housing redevelopment became major tasks of the urban administration.¹ Korea's urban regeneration policy has since changed according to the nucleus environment.

This paper analyses the changing process of urban regeneration policy and the cause of policy change in Korea since the 1970s. Since this is a case study limited to Korea, there is a limit to the general theorisation of changes and development of urban regeneration policy. Nevertheless, it is a meaningful diachronic study that comprehensively analyses Korea's urban regeneration policy changes. The experiences of Korean urban regeneration have implications for the urban management of third world cities.

Theoretical Background and Analysis Framework

1. Theoretical Background

¹ Kim, Kwang-joong & Yoon, Il-Sung. "Urban Renewal and Change of the 20th Century Seoul", in The Seoul Development Institute, *Seoul, Twentieth Century: Growth & Change of the Last 100 Years*, Seoul: Seoul Development Institute(2001).



Policy change is not a singular process but happens continuously, a universal rather than exceptional phenomenon. The environment surrounding policy is constantly changing, and changes in policy objectives, direction, means, and strategies are inevitable. The policy environment includes social, economic, and political backgrounds, the nature of the policy target group, the characteristics of the policy-making body, and the interest of the general public.²

What does policy change mean specifically? Policy consists of goals, means to achieve them, and ancillary devices to ensure the policy's realisation.³ If the structure is transformed into practical and empirical standards, it can be divided into ① policy contents and ② policy process. The policy content change is a change of the major constituent elements of policy; the goals and policy content are not changed but policy procedures are changed.⁴ Generally, policy changes are based on the degree of policy change, except when the degree of change is zero. The modification or termination of the policy and all the changes occurring in the enforcement phase are included in policy changes.

Policy change is classified into four types.⁵ First, policy innovation means that the government decides on a new policy that has not yet been implemented. This refers to completely renewing a policy without an existing organisation, law, or budget. Policy innovation is the intentional intervention of governments in new fields.

Second, policy succession is the modification and adjustment of existing policies. This is policy replacement that changes policy contents to something new within the scope of the unchanging policy objective, and includes the partial termination of policies. Third, policy maintenance refers to revising detailed program adjustments and legislative amendments while maintaining macro policy objectives. Fourth, policy termination intentionally suspends a policy and does not determine other replacement policies.

Hogwood and Peters' research has some limitations. First, the criteria for distinguishing policy types are unclear. For example, if the existing characteristics of an existing policy remain unchanged, the policy's maintenance and the change or substitution of the basic characteristics is referred to as policy succession, but no standard is provided. Although based on organisational change, change in legislation, and budgetary provisions as indicators of policy change, it is difficult to distinguish the type of policy change on this basis alone. Policy change does not necessarily lead to organisational change, and mechanically limits the link between law and policy.

2. Analysis Framework

This study investigates the changes in urban regeneration policies and the causes of policy changes in Korea. We present an analytical framework that complements the limitations of Hogwood and Peters' theory. The degree of policy change is used as a criterion to distinguish the type of policy change. It is used to grasp the degree of change of the book from 0 to 1 on a continuous line, thereby flexibly applying the actual situation. If the degree of change is 'zero', it is desirable to exclude it in the policy change as an unchanged state in which no policy change occurs. When the degree of change is 'one', there can be three types of policy change: ① policy innovation, ② policy termination, and ③ policy cancellation.

This study suggests that Korea's urban regeneration policy has continued the process of partial policy change since the 1970s. The partial change in degree of change between 0 and 1 is largely typified by ① a content change and ② a process change. The content change is mainly related to what is done (targets, spatial scales, and project types), and the process change is related to how to do it (development methods, agents, and citizen participation). By reviewing the changes in the policy environment that brought about such policy changes, we can understand the causes of the changes in Korea's urban regeneration policy, the various socio-economic needs at the time of policy change, and the change of the political power group that determines the establishment or implementation of policies.

² de Neufville, J. E., & Christensen, K.S. "Is optimizing really best?", *Policy Studies Journal* 2(1980): 1053-60.; Kim, Young-pyong. *Uncertainty and Legitimacy of Policy*, Seoul: Korea University Press(1991).

³ Grumm, J. G. "The Analyses of Policy Impact", in Greenstein, F. I. & Polsby, N. W.(ed.), *Handbook of Political Science*, Vol. 6.(1975); Robinson, J. *Congress and Foreign Policy-Making*, Homewood: The Dorsey Press(1962).

⁴ Halperin, M. H. *Bureaucratic Politics and Foreign Policy*, Washington, D.C.: The Brookings Institution(1974):251.

⁵ Hogwood, B. W. & Peters, B. G. *Policy Dynamics*, New York: St. Martin's Press(1983):25-29.

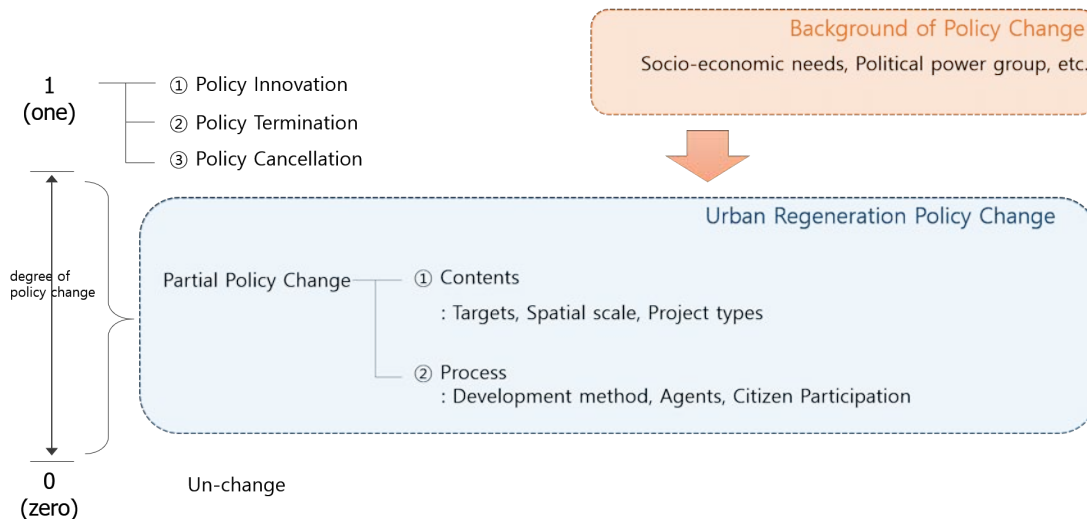


Figure 1 : Analysis Framework

The History of Korea's Urban Regeneration Policy

The history of Korea's urban regeneration policy can be divided into three periods. From the 1970s to the 1990s, large-scale clearance projects were carried out because of the rapid urban growth after the Korean War. In the 2000s, the strategy focused on the maintenance and management of cities, and the regeneration and sustainability of cities was emphasised in the early 2010s.

After the Korean War (1950~1953), urbanisation rapidly occurred in the 1960s and 1970s. With the enactment of the 'Urban Redevelopment Act' in 1976, Korea started 20 years of large-scale clearance projects. However, this led to conflicts among residents and to the dissolution of the existing community. This strategy also ignored socio-economic and local deterioration issues. The view of urban regeneration changed from redevelopment and reconstruction to maintenance and management in the 2000s.

In 2002, the 'Act on the Maintenance and Improvement of Urban Areas and Dwelling Conditions for Residents (Urban Maintenance and Improvement Act)' was enacted. This law considered the quality of housing and improvements to the physical environment. However, changes in socio-economic conditions such as the financial crisis and the real estate market depression forced the introduction of projects that assured stability. The 'Urban Maintenance and Improvement Act' was revised to emphasise small-scale projects and the participation of local residents. This law was revised and only three project types are currently being developed.

In 2005, Seoul's New Town project was promoted to improve poor housing conditions and enhance infrastructure, and the 'Special Act on the Promotion of Urban Renewal (New Town Act)' was enacted. This project was carried out based on the neighbourhood unit, but it still advanced clearance.

With the enactment of the 'Urban Regeneration Act', 'regeneration' was applied to the legal name. This law stressed that residents should be the main agents of projects. This overcame the superficial and procedural limits of the past and also noted the causes and aspects of decline in different regions. The Korean government forged ahead with leading projects in 13 areas nationwide in 2013 to induce the effects of urban regeneration projects and ended these efforts in 2017. In 2016, 33 general urban regeneration projects were started that will be completed by 2021. The National Basic Policy for Urban Regeneration created by the Ministry of Land, Infrastructure, and Transport divided urban policy into three stages: introduction (2014–2017), growth (2018–2021), and maturity (after 2022). In the introduction stage, urban regeneration projects were carried out by the central government to create a successful model by providing and supporting leading projects. In the stages of growth and maturity, projects are designed by local governments. This is because it is necessary to establish and provide a system of financial resources and agents since local governments lack the necessary knowledge and experience.

In 2017, Moon Jae-in's administration officially announced the promotion of the 'Urban Regeneration New Deal'. The New Deal Policy differs from the past in that it emphasises sustainable urban innovation led by local governments and communities. In December 2017, 68 pilot projects were selected, and 100 projects will be carried out in 2018.



Analysis on the Change of Urban Regeneration Policies in Korea

1. Content Changes

1) Target

The target of urban regeneration policy in Korea has been expanded. When the policy was introduced in the early 1970s under the name of urban redevelopment, Korea had to rebuild after the Korean War. Due to the explosive post-war population growth, urban areas were forming indiscriminately, and many unauthorised buildings were built. The country also lacked housing and commercial and business facilities for population and urban growth. The initial urban redevelopment policy was aimed at improving poor buildings and providing housing and offices⁶. Naturally, the ageing physical environment became the policy's target.

Korea's redevelopment policy, which focused only on improving the physical environment, has had negative effects. It was only concerned with the removal of poor housing, and there was insufficient consideration of the low-income inhabitants. Tenants and low-income homeowners were driven out of their homes due to the demolition. Since 1986, tenant regulations have been added to provide immigration subsidies and pre-sale rights⁷. However, this is insufficient to solve the housing problems of tenants and low-income families. After redevelopment projects, the resettlement ratio was only about 10%.⁸ Continuous policy restructuring has taken place, such as the construction of rental housing and the mandatory construction of housing below the size of national housing for low-income people.

In the early 2000s, the imbalance in urban areas emerged as an important buzzword. The Seoul Metropolitan Government tried to solve the unbalanced development of Gangnam/Gangbuk in Seoul with the New Town policy. This led to the enactment of the 'New Town Act', and the urban renewal promotion project became a representative rehabilitation project in Korea. Through improving the poor areas, Korea wanted to achieve balanced urban development.

The urban economic area was outside the scope of the Korean urban regeneration policy. Due to the decline of the first and second industries, the decline of jobs due to low growth and the shift of the industrial system, and the increase in the unemployment rate, the urban economic area has become the main object of urban regeneration policy. Therefore, an economy-based regeneration type was added to the 'Urban Regeneration Act'. According to the detailed criteria for the 'Urban Regeneration Activation Area' in the 'Urban Regeneration Act', the project target is as follows: areas where the population and the total number of businesses have decreased, and where the residential environment has deteriorated. Social, economic, and physical environmental issues have all been targeted by the policy in the form of legislation.

2) Spatial Scale

The spatial scale covered by the urban regeneration policy has fluctuated. When the policy was implemented by the early 'Urban Redevelopment Act', the project was carried out individually in local units without any specific regulations on area. When the 'Urban Maintenance and Improvement Act' was enacted, the minimum unit was specified for each project. The urban environment maintenance project did not have an area regulation, but in the case of the residential environment improvement project and the housing redevelopment project, an area of 2,000 m² or more, or more than 50 households, was designated. For housing reconstruction projects, 300 households, more than 300 residential areas, or an area of 10,000 m² or more were designated as project districts. These regulations have been removed or decreased over time, but most have been maintained.

In 2005, as the 'New Town Act' was being enacted, the scope of the policy area was expanded. The urban redevelopment project was not developed in a planned way and urban infrastructure such as roads, schools, and parks was not sufficiently installed. Therefore, it is necessary to designate a district for the new town project that

⁶ The Seoul Development Institute, Seoul, *Twentieth Century: Growth & Change of the Last 100 Years* (Seoul: The Seoul Development Institute, 2001):559.

⁷ Ibid, 575-576.

⁸ The Seoul Institute, *Key Issues and Improvements of New Town Project In Seoul*(Seoul: The Seoul Development Institute, 2008): 72.



integrates several redevelopment projects. The district for the new town project was as large as 500,000 m² or more for residential terrain.

As the urban regeneration of Seoul commenced in 2012, the scale of the policy shifted back to a smaller scale. This was because of criticism of large-scale maintenance projects such as the difficulties involved in project promotion and concerns over the destruction of local characteristics due to large-scale demolition and redevelopment. With the 2012 amendment of the ‘Urban Maintenance and Improvement Act’, a ‘block-unit housing rearrangement project’, a construction project for street houses in areas of less than 10,000 m², was newly established. In the 2013 ‘Urban Regeneration Act’, there is no specific area regulation; ‘The Special Act for the Maintenance of Empty Housing and Small-Scale Housing’ was enacted in 2017 and implemented from 2018 onwards.

3) Project Types

Housing redevelopment, reconstruction, urban environment maintenance and residential environment improvement projects under separate laws were integrated into the ‘Urban Maintenance and Improvement Act’ in 2002. From 1990 to 2008, 47,000 out of 89,000 housing units were provided as the public rental housing through the maintenance and improvement projects. Moreover, 19% and 13.3% of the infrastructure facilities in the Seoul redevelopment and reconstruction districts were expanded.⁹

In 2012, residential environment maintenance projects and block-unit housing rearrangement projects were added. The strategy was changed to focus on the maintenance and management of the residential environment by considering the quality of the housing environment beyond the limits of the physical project. This law was amended in February 2018, and housing redevelopment and reconstruction and residential environment improvement projects are now being processed. Since the ‘Urban Maintenance and Improvement Act’ had a complex legal system, the project types needed to be simplified in 2017.

It was strategically highlighted that the pattern and cause of the decline varied according to the region after the enactment of the ‘Urban Regeneration Act’ in 2013. Project types were divided into ‘economy-based’ and ‘neighbourhood-based’ regeneration, and 13 areas that urgently required urban regeneration and have high ripple effects were designated as priority areas. Urban regeneration projects were put into place in 33 regions in 2016 and are expected to be completed by 2021.

In 2017, Moon Jae-in’s administration launched the New Deal Policy under the determination that residents should lead urban regeneration projects to ensure lasting urban regeneration policy effects. It emphasised small neighbourhood restorations and expanded the project types. The amount of government financial support varied depending on the type of project, and 68 pilot projects were designated in December of 2017.

Project types have also changed in response to systematic changes, such as expansion, integration, and transfer. Although the ‘Urban Maintenance and Improvement Act’ recently simplified the types of projects, the ‘Urban Regeneration Act’ project still contains some confusion with regard to type classifications. In the past, the project in question changed large-scale physical projects to small-scale neighbourhood regeneration projects. This project will be carried out under the initiative of residents to activate and restore communities.

2. Process Changes

1) Development Method

Past Korean regeneration methods mostly took the form of clearance. As a way of redevelopment, the ‘joint redevelopment method’ was implemented in 1983. It aimed to provide land to local governments and landowners rather than having to pay for it, and the builders would charge the costs required to complete the buildings from demolition to fixing the faulty housing. The landowners found new houses in return for providing their faulty housing, while the builders took on the costs and profits from selling these houses. After 1984, this method was applied to almost all housing redevelopment projects.

⁹ Korea Planning Association & Korea Housing Institute, *the Seminar for Basic Policy on the Maintenance and Improvement of Urban Areas and Dwelling Conditions for Residents*, 2013.



In clearance-led redevelopment, the public maintains residential areas without having to provide much assistance, and it has produced many achievements. However, local communities have collapsed, indigenous people have found it difficult to resettle, and it could not be applied in small and medium cities where business demands were low or in areas requiring small renovations.

Areas were regenerated after the 2000s to overcome the limitations of maintenance and management paradigms, such as conservation, improvement, and rehabilitation. The revised 'Urban Maintenance and Improvement Act' of 2012 reflects these changes. Under that amendment, the residential environment management project was created. This project can be carried out in areas where it is necessary to improve the residential environment, but where it is difficult to remove the entire structure. With this method, the public needed to improve the infrastructure of densely populated ageing residential areas, such as single and multiplex houses, and residents could manage and improve their own houses. The block-unit housing rearrangement project led to gradual and sustainable regeneration in areas where street conditions were relatively good by maintaining the existing urban organisation and landscape, while allowing for small improvements in the residential environment.

This paradigm shift was also applied to projects that were carried out after the enactment of the 'Urban Regeneration Act', such as in priority and general areas of urban regeneration projects and pilot projects of the New Deal Policy. Those projects' purpose was also improved beyond the housing and residential environment improvements such as community revitalisation and restoration, housing welfare, social cohesion, and job creation.

2) Agents

Various agents participated in the regeneration of related policies in Korea. Regeneration policies, while seeking public interest, also affect private property. It is reasonable to expect agents to play different roles in the public and private sectors¹⁰.

At the beginning of the enactment of the 'Urban Redevelopment Act' in 1976, the public sector, especially the national government, designated the project area. Since the mid-1990s, when local governments were in control of project planning and designating areas for regeneration, the role of the national government has been reduced.

In 2002, the 'Urban Maintenance and Improvement Act' established local governments' comprehensive plans. In 2005, the 'New Town Act' expanded the project scale into super blocks to facilitate efficient housing supply and infrastructure construction. Despite these laws, the public's role was confined to suggesting guidelines, designating project districts, and approving projects.

After launching a joint redevelopment method in the 1980s, the actual projects had been focused on the redevelopment or reconstruction methods of property-owner associations, a private sector. These owner-driven projects caused conflict with residents¹¹. Only the project's profitability was considered rather than public interests, and small landlords or tenants were not taken into consideration, problematizing the resettlement of residents.

Since the 2008 global financial crisis, the profitability of redevelopment projects greatly deteriorated due to external factors. Private-led projects no longer worked. In 2012 the 'Urban Maintenance and Improvement Act' was revised. The revision strengthened the public's role by introducing new public-led methods, expanding financial support, coordinating with existing plans, and encouraging residents' participation. Establishing the 'National Basic Policy' strengthened the role of the national government. This resulted in strengthened support for bottom-up proposals, rather than public top-down regulations, and reinforced the role of the public in supporting and facilitating projects.

In 2013, the 'Urban Regeneration Act' was enacted and reflects the great transformation in the urban planning paradigm. This law seeks to restore the physical environment and to preserve socioeconomic values¹². It includes public support for communities to solve their own problems through urban regeneration projects. The new law can establish 'Urban Regeneration Support Centres(URSC)' which are middle-support organisations that strengthen the linkage between the public and the private. It supports communities in running projects to solve their own problems with the use of public finance. Until recently, it was difficult to find communities with sufficient abilities to run self-renewal projects and the public could not easily support the community in terms of efficiency and ties

¹⁰ Lee, Myeong-hoon, "Strengthen public roles and responsibilities in urban maintenance projects", *Urban Information Service* 325(2009):3-4.

¹¹ Bae, Woon-kyu, "Introduction and task of new maintenance business according to revision of Urban Maintenance and Improvement Act" *Urban Information Service* 366(2012):3-21.

¹² Jang, Nam-jong, Kim, Sangil, Lee, Hyun-jung, and Baik, Ce-na, *Search for Main Issues and New Direction on Urban Regeneration in Seoul*, (The Seoul Institute, 2017):9.



with the field. It is a 'third sector', not a private sector or a public entity and its role in the success of urban regeneration will be strengthened in the future¹³. The number of URSCs has been increased since 2013, and there are 77 centres in 2017¹⁴.

3) Citizen Participation

Citizen participation is increasing in Korea's urban regeneration policy changing process. In the urban regeneration policy, devices for 'citizen participation' have been applied in a variety of ways: 'allowing residents to browse administrative documents', 'holding public hearings', 'obtaining residents' consent', and 'organising a community council'¹⁵. Through an analysis of these factors in accordance with Arnstein's (1969)¹⁶ 'Ladder of Citizen Participation' theory, the changes in the level of participation in urban regeneration in Korea will be explained.

The 1976 'Urban Redevelopment Act' allows residents to view documents related to redevelopment projects and requests residents' consent for project implementation. However, 'residents' only referred to property owners who only consider their property rights without considering the impact on those around them. Actual inhabitants were not sufficiently considered, and the resettlement rate of residents after the project was less than 20%.

The revised 'Urban Redevelopment Act' of 1995 required local governments to establish a 'Maintenance and Improvement Comprehensive Plan' and hold a public hearing as part of the proposal. The 2003 'Urban Maintenance and Improvement Act' strengthened the consideration of tenants in the 2005 revision. For some projects, the tenant's consent was included in the project execution conditions. However, the effect was negligible because the number of projects requiring tenant consideration was low in the total number of regeneration projects. Until the late 2000s, the factors of 'administrative document disclosure', 'public hearings', and 'residents' consent' amounted to mere 'tokenism' to meet the legal requirements for project implementation¹⁷.

The expansion of citizen participation was an important issue in the amended 'Urban Maintenance and Improvement Act' of 2012. After the global financial crisis, as large-scale redevelopment projects became more difficult, the amended law allowed residents to request zoning cancellation. By introducing the citizen participation-type methodology, the 'urban environment maintenance project' and the 'block-unit housing rearrangement project', residents could participate in urban regeneration projects. With the 2013 enactment of the 'Urban Regeneration Act', resident-led small-scale rehabilitation projects became possible. This strengthened the capacity of the people by supporting public-private partnerships and raised the citizen participation level to 'Citizen Power'. Although it has only been five years since the beginning of the 'Citizen Power' phase, small-scale projects led by 'resident councils' and the excavation of 'the third sector' are rapidly expanding¹⁸.

¹³ Park, Se-hoon & Yim, Sang-yeon, *Rebuilding Intermediary Organizations for Urban Regeneration in Korea : A Government-Civil Society Relation Perspective*, (Korea Research Institute for Human Settlements, 2014):21.

¹⁴ Kim, Yea-Sung, *Improvement Strategies for Urban Regeneration Center*, (Seoul: NARS, 2008):22

¹⁵ Kim, Jong-su, "Expansion of Residents' Participation in Urban and Regional Planning", *The Journal of Korean Policy Studies* 10, no2(2010):51-67

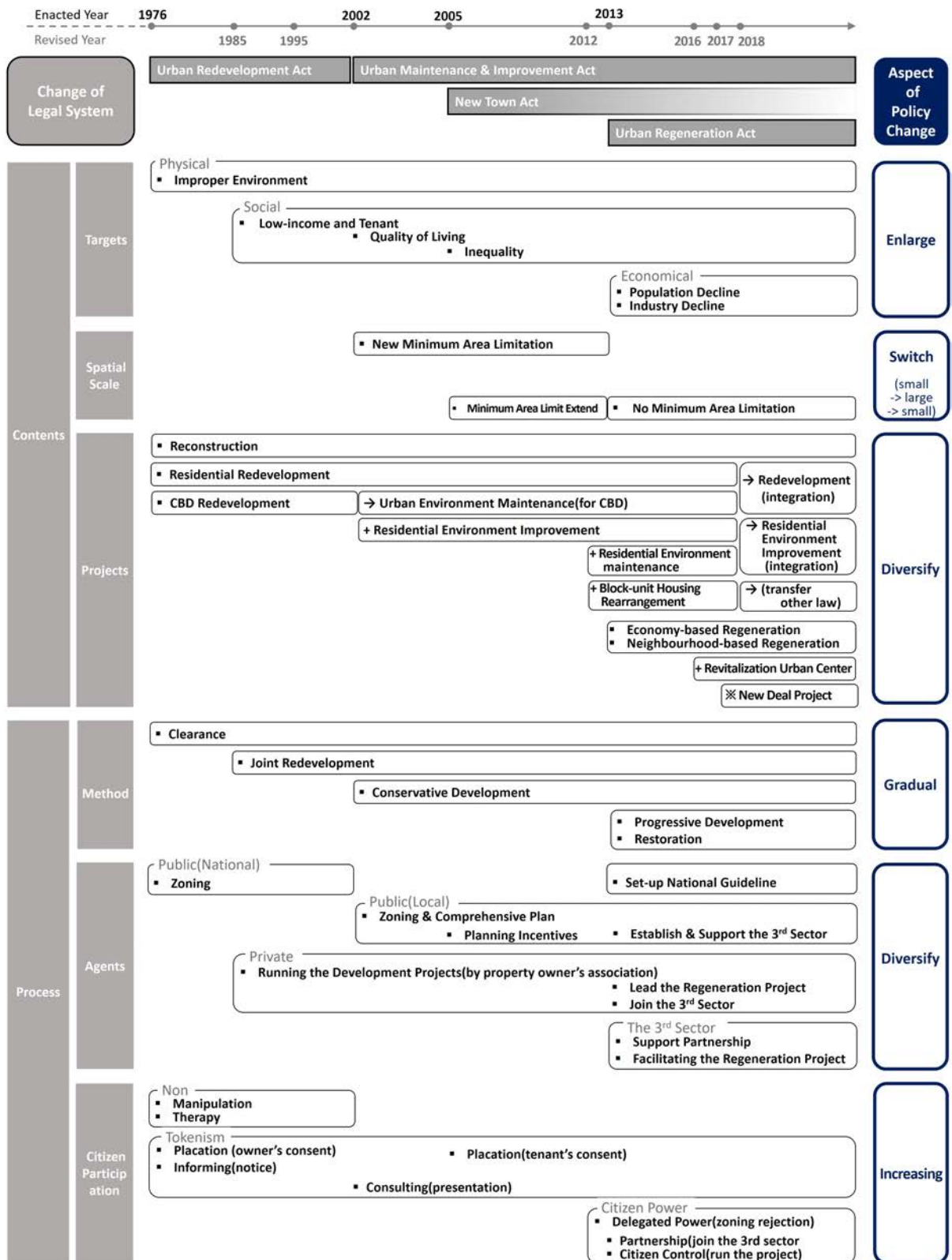
¹⁶ Arnstein, Sherry R. R. "A Ladder Of Citizen Participation." *Journal of the American Planning Association* 35, no. 4 (1969): 216-24.

¹⁷ Shin, Hyun-ju., and Kang, Myoung-gu. "Level of Community Participation in Urban Regeneration: Focusing on Haebangchon Case, Yongsan-gu, Seoul." *Journal of The Korean Regional Development Association* 29, no. 3 (2017): 25-46.

¹⁸ Heo, Ja Yun, Jung, Chang Mu, and Kim, Sangil, "Gentrification and Local Communities of Shopkeepers on Commercial Areas in Seoul.", *Space and society* 55 (2016): 313-16.



Figure 2: Urban Regeneration Policy Change in South Korea 1976~2018





3. Discussion

Policy changes related to Korean urban regeneration have occurred in stages that complemented previous systems and considered changes in socioeconomic conditions. Previous policies' cumulative adverse effects confirmed that existing policies lost their purpose and major changes occurred when the socioeconomic context was rapidly changing. In the late 1970s, the 'Urban Redevelopment Act' put a policy in place to provide space for housing and offices. In the 1990s, when the existing system was unable to show its strength due to conflicts between stakeholders and the pursuit of lasting good interests in the process of the redevelopment project for the past 20 years, the government established the 'Urban Maintenance and Improvement Act' in 2003. It stipulated spatial scales, project types, and the role of stakeholders. As unbalanced growth emerged as a social problem, the 2005 'New Town Act' was introduced to develop relatively low-growth areas into rehabilitation projects.

During the designation of the maintenance district by the 'New Town Act' and the scale of the enlargement, the existing urban development mechanism became inoperable due to the 2008 global financial crisis¹⁹. The sluggish maintenance project caused both urban and national competitive decline. The 2012 amendment of the 'Urban Maintenance and Improvement Act' and the 2013 'Urban Regeneration Act' reorganised the relevant policies. The transformation of urban regeneration policy was based on economic conditions, the response to the low growth era, and the growing demand for public services due to the growth of civil society. The related decline in population and urban industry became regeneration targets, and urban regeneration policy became an integrated policy dealing with the physical, social, and economic environment. The scale of the urban regeneration project was reduced and the project was flexibly promoted. Public and private roles were simultaneously strengthened, but the public role played a service (support) role to the private sector. A new entrant, 'the third sector', strengthened residents' participation and the governance of urban regeneration policy.

Policy changes are also related to changes in the political environment surrounding the policy²⁰, as is true for the Korean urban regeneration policy. Before 2012, policy makers tried to drive development through large-scale development projects. However, in 2011, with the election of a progressive civil society-based mayor in Seoul, the policy changed from being place-based to people-based²¹. Small-scale maintenance and citizen participation have become important policy factors. The capital's policy change affected all of Korea. As the Moon Jae-in government, whose own policies are in line with the policy trend in Seoul, took office in 2017, the 'Urban Regeneration New Deal' became the country's main policy.

Conclusion

This study attempted to explain urban regeneration policy changes and their causes in Korea. Since the 1970s, Korea's urban regeneration policy has undergone 'partial change'. This can be divided into 'contents' and 'processes'. By examining the 'contents change' of the policy, policy targets were expanded and the types and sizes of the projects varied. In terms of 'process change', the regeneration methodology was diversified, 'the third sector' was added to the 'public' and 'private' divisions, and citizen participation increased.

This study shows that the Korean urban regeneration policy is changing dynamically due to the combination of the existing system's defects and domestic and foreign socio-economic factors. The changes were rapid and a result of ground-breaking work. From the introduction of the 'comprehensive maintenance and improvement planning system' in the late 1990s to the 'national government's' 'New Deal' initiated in recent decades, policy changes in Korea took the form of a compressed process. In 20 years, Korea underwent 'the urban regeneration paradigm shift' that Western cities have experienced for over 50 years.

Particularly, this study shows that Korea's urban regeneration policy has been lack of socio-economic consideration and a comprehensive policy is needed. Urban regeneration policy should work with housing welfare policy for the low-income and the former residents. Now, Korea's 'New Deal for Urban Regeneration' includes the public rental housing. Korea's experience will provide implications for the urban maintenance and management of third world cities, which are in a similar developmental process to that of Korea in the past.

¹⁹ Cho, Myung-Rae, "From Housing Development to Human-Centered Residential Regeneration: Focused on the New Residential Policy of Seoul," *Space and Society* 46, (2013): 6–7.

²⁰ Daniel A. Mazmanian and Paul A. Sabatier (eds.), *Effective Policy Implementation* (Lexington: Heath, 1981):178–181.

²¹ Cho, Myung-Rae, 31–54.



Bibliography

- Arnstein, Sherry R. R. "A Ladder Of Citizen Participation." *Journal of the American Planning Association* 35, no. 4 (1969): 216-24.
- Bae, Woon-kyu, "Introduction and task of new maintenance business according to revision of Urban Maintenance and Improvement Act" *Urban Information Service* 366(2012):3-21.
- Cho, Myung-Rae. "From Housing Development to Human-Centered Residential Regeneration: Focused on the New Residential Policy of Seoul." *Space and Society* 46 (2013): 5-57.
- de Neufville, J. E., & Christensen, K.S. "Is optimizing really best?", *Policy Studies Journal* 2(1980): 1053-60.; Kim, Young-pyong. *Uncertainty and Legitimacy of Policy*, Seoul: Korea University Press, 1991.
- Grumm, J. G. "The Analyses of Policy Impact", in Greenstein, F. I. & Polsby, N. W.(ed.), *Handbook of Political Science*, Vol. 6.(1975); Robinson, J. *Congress and Foreign Policy-Making*, Homewood: The Dorsey Press, 1962.
- Halperin, M. H. *Bureaucratic Politics and Foreign Policy*, Washington, D.C.: The Brookings Institution, 1974.
- Heo, Ja Yun, Jung, Chang Mu, and Kim, Sangil, "Gentrification and Local Communities of Shopkeepers on Commercial Areas in Seoul.", *Space and society* 55 (2016): 313-16.
- Hogwood, B. W. & Peters, B. G. *Policy Dynamics*, New York: St. Martin's Press, 1983.
- Jang, Nam-jong, Kim, Sangil, Lee, Hyun-jung, and Baik, Ce-na, Search for Main Issues and New Direction on Urban Regeneration in Seoul, The Seoul Institute, 2017.
- Kim, Jong-su, "Expansion of Residents' Participation in Urban and Regional Planning", *The Journal of Korean Policy Studies* 10, no2(2010):51-67
- Kim, Kwang-joong & Yoon, Il-Sung. "Urban Renewal and Change of the 20th Century Seoul", in The Seoul Development Institute, *Seoul, Twentieth Century: Growth & Change of the Last 100 Years*, Seoul: Seoul Development Institute, 2001.
- Kim, Yea-Sung, Improvement Strategies for Urban Regeneration Center, Seoul: NARS, 2008.
- Korea Planning Association & Korea Housing Institute, the Seminar for Basic Policy on the Maintenance and Improvement of Urban Areas and Dwelling Conditions for Residents, 2013.
- Lee, Myeong-hoon, "Strengthen public roles and responsibilities in urban maintenance projects", *Urban Information Service* 325(2009):3-4.
- Mazmanian, Daniel A., and Paul A. Sabatier (eds.). *Effective Policy Implementation*. Lexington: Heath, 1981.
- Park, Se-hoon & Yim, Sang-yeon, Rebuilding Intermediary Organizations for Urban Regeneration in Korea : A Government-Civil Society Relation Perspective , Korea Research Institute for Human Settlements, 2014.
- Shin, Hyun-ju., and Kang, Myoung-gu. "Level of Community Participation in Urban Regeneration: Focusing on Haebangchon Case, Yongsan-gu, Seoul." *Journal of The Korean Regional Development Association* 29, no. 3 (2017): 25-46.
- The Seoul Development Institute, *Seoul. Twentieth Century: Growth & Change of the Last 100 Years*. Seoul: The Seoul Development Institute, 2001.
- The Seoul Institute, *Key Issues and Improvements of New Town Project In Seoul*, Seoul: The Seoul Institute, 2008.

Balancing Environment, Economy and Equity: planning initiatives in three cities in Brazil, Mongolia and India

Swati Ramanathan (*Co-founder, Jana Group, India, swati.ramanathan@janagroup.org*); and Vidhu Gandhi, (*Senior Heritage Advisor, Extent Heritage, Australia, vidhugandhi@gmail.com*)

By 2050, 66 per cent of the world's population will be living in urban areas, with approximately 90 per cent of this increase occurring across Africa and Asia. While urbanisation is proving to be rewarding in terms of providing access to employment and infrastructure, its rapid pace is equally challenging to deal with as poverty, urban sprawl and environmental degradation are some outcomes of urban life that far outweigh the positives. Most often noticeable in developing countries is a trend of disproportionate distribution of population across urban areas, which in most cases has led to huge pressures on land, infrastructure, environment and economy(s) of cities. This paper seeks to examine the role of urban planning and the integration of current concerns of environment, economy and equity into master planning of three cities, on the basis that master plans can be more effective in enabling the sustainable growth of cities. The master plans of three cities – Sawai Madhopur in India, Curitiba in Brazil and Ulaanbaatar in Mongolia, are discussed in this paper with the intention of examining how these cities have dealt with rapid urbanisation and economic growth by employing master planning initiatives that seek to protect the environment, while allowing for sustainable growth in terms of the city's land use and its infrastructure.

Keywords: urban planning, sustainable urbanisation, environment, economy, equity

Introduction

Urbanisation has been increasing at a tremendous rate – in 2016, 54.5 per cent of the world's population lived in urban settlements, and by 2050 this number is expected to rise to 66 per cent. Approximately 90 per cent of urbanisation will occur in Africa and Asia up until 2050.¹ While urban areas provide greater opportunities in terms of education, health, social services, livelihood and employment, stress on existing city infrastructure along with disparities in access to public services and utilities, has resulted in fast growing urban areas often being marked by poverty, urban sprawl, pollution, and environmental degradation. This paper seeks to examine the role of urban planning in cities in developing countries, with a focus on the integration of current concerns of environment, economy and equity into master planning of cities, on the basis that master plans can be more effective in enabling the sustainable growth of cities.

Master planning or modernist urban planning as we know it today, has its origins in 19th century Western European planning and the values espoused by developed countries. Its spread through the rest of the world has occurred through “processes of colonialism, market expansion and intellectual exchange”, and through the influence of “professional bodies and international and development agencies”.² It is now widely acknowledged that the colonising imperative of ‘modernizing and civilizing’ was seen reflected in urban planning systems which sought to control urbanization processes and urbanizing populations. The legacy of modernist urban planning systems has persisted in many regions of the world, especially in developing countries like India where the “early 20th-century idea of master planning and land-use zoning, used together to promote modernist urban environments” continues to be employed.³ The result is a planning system which,

...fails to accommodate the way of life of the majority of inhabitants in rapidly growing, and largely poor and informal cities, and thus directly contributes to social and spatial marginalization or exclusion...fails to take into account the important challenges of 21st-century cities...fails to acknowledge the need to involve communities and other stakeholders in the planning and management of urban areas.⁴

In growing recognition of these issues there is a move towards urban planning initiatives which seek to make cities inclusive, safe, resilient and sustainable – this is also the basis of one of the goals of the *17 Sustainable Development Goals* (SDG) of the *2030 Agenda for Sustainable Development*.⁵ SDG 11 seeks to “enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries”.⁶ In fact, this is accentuated by the very idea of a sustainable city, as

achieving sustainability in an urban context requires balancing the often-competing demands of economy, environment and equity, such that “development, property and resource discourses” have equal and adequate representation in strategies that seek to make the city “more profitable, fairer and greener” for stakeholders, developers and administrators.⁷

The methodology adopted for this paper accordingly employs these three intersecting concerns of economy, environment and equity to examine the master plans of Curitiba in Brazil, Ulaanbaatar in Mongolia and Sawai Madhopur in India. These three lenses have been chosen as they broadly cover the challenges being faced by each of these cities – Ulaanbaatar’s nomadic heritage and environmentally sensitive natural environment; Sawai Madhopur’s historic city centre and environmentally sensitive natural reserve; and Curitiba’s highly applauded public transport system – each provide existing conditions of environment or equity that needs to be integrated with much needed economic growth and accompanying development. While the paper is limited in terms of a detailed examination of each of these cities, the aim is to present cases where master planning has been relatively successfully employed to provide guidelines for the development of a sustainable city.

Brazil’s ecological city – Curitiba

Curitiba recognised as one of the most sustainable cities in the world, is equally known for its master plan which has sought to integrate economy and environment into the development of the city as it faced unprecedented growth in its population in the late 1960s and early 1970s. With a current population of 1.8 million, Curitiba is Brazil’s eighth most populous city, and has a “higher per capita GDP and a lower unemployment rate than the Brazilian national average, as well as 55m² of green space per resident compared to the World Health Organization’s recommended area of 16m² per resident”.⁸ Its planning which is an economic strategy for the region has involved the following three aspects – identifying and building industry networks in the region and the country; investing in the city’s transportation; and establishing and building in the physical environment of the city and its surroundings.⁹ Four industries have been identified as being critical to the growth of Curitiba: the automotive – Curitiba being the second largest manufacturer in Brazil; communications software & information technology – second largest concentration of IT companies in Brazil; infrastructure – investments in transportation systems in and out of the city have enabled the growth of businesses in the region; and tourism – including business and leisure travellers.

Investment in the city’s transport has been one of the primary driving forces behind Curitiba’s planning – the attention to transport since 1934 saw the city’s roads being restructured into a radial system. This was subsequently replaced by a system of liner growth with the 1966 Master Plan that sought to streamline public transport and infrastructure, accompanied by appropriate zoning regulations. The objectives of the Master Plan included “strict controls on urban sprawl, a reduction of traffic in the downtown area, preservation of Curitiba’s historical sector, and building a convenient and affordable public transport system based on express buses”.¹⁰ This has resulted in a city which has limited growth in its historic centre, thereby ensuring its continued conservation, while having simultaneously encouraged commercial activities along five transport axes radiating out from the city centre.¹¹ Transport was therefore employed successfully to generate spatial growth. Critical to the provision of transportation was the idea of providing accessible and affordable public infrastructure, and this promoted the establishment of the Bus Rapid Transport system for the city and its surrounds.

Perhaps the most impressive aspect of Curitiba’s Master Plan has been the attention to sustainability and the environment since the 1970s – with early initiatives such as reservation of river and wooded areas, the city now has over 28 parks and wooded areas. The city has over 52sqm of green space per person as compared to 1970 when there was less than 1sqm per person. This has been made possible by the efforts of the city authorities and its residents who have played an equal and critical role in planting 1.5 million trees along streets and partaking in the creation of parks at neighbourhood levels – often from abandoned dumps and quarries.¹² Other environmentally sensitive initiatives have included the successful “garbage that’s not garbage” program that was started in 1980 to cater to the recycling needs of the city.¹³ An affordable alternative was floated by the government as it encouraged residents to sort their own garbage into organic and inorganic categories and has resulted in over 70% of the city’s trash being recycled by its residents.¹⁴ The establishment of the Free Open University for the Environment in 1991, which offers courses on environmental management and protection is another incentive developed to incentivise people to partake in the protection of their physical environment.

Ulaanbaatar: a smart city with Nomadic heritage

The Ulaanbaatar 2030 Master Plan for the capital city of Mongolia is a bold initiative that seeks to ensure the development of a city that is set in a unique geographical location with an equally unique nomadic heritage, and the need to meet demands of a globally competitive and technologically advanced world. The Master Plan for the

city has been prepared as a result of the increasing population which the Ulaanbaatar Capital Region – comprising of Ulaanbaatar city and a number of regional towns – has faced in recent years with migration from the surrounding provinces within the country. Currently standing at 1.38 million (2015) the population of the Ulaanbaata capital region is expected to grow to 1.76 million by 2030, forming 50.3% of the country's population.¹⁵ While the concentration of the population is largely within the boundaries of the city, the Master Plan aims to develop ten regional towns and three satellite cities within the Capital Region so as to encourage the establishment and growth of local industry and agriculture in the vicinity of the city, while ensuring that smaller settlements in the area are sustained.

Ulaanbaatar's history can be traced back to its establishment in 1639 as a nomadic Buddhist monastic centre. However, it has been the recent shift of Mongolia to a democracy and a market economy, from a formerly socialist nation, which has brought forth the need for sustainable development in the city and its surrounding areas. This transition that occurred in the 1990s, combined with a series of severe winters, resulted in large migration of many low-income families from the countryside into the city, causing issues of overcrowding, diseases, pollution of air, water, and other natural resources.¹⁶ This influx of Mongolians from other parts of the country into Ulaanbaatar continues as the city generates more than 60 percent of Mongolia's gross domestic product (GDP) and accounts for 50 percent of the total investment in the country.¹⁷ While urban planning has been in place in Mongolia since the 1950s when it was a socialist regime with Soviet-style urban planning, it has not been until 2000 – ten years after Mongolia democracy was established – that urban planning has been re-established in the county.¹⁸ The 2020 Master Plan precedes the existing one and was reworked on the basis that it lacked legislative backing in terms of implementation.

The 2030 Master Plan seeks to build on the existing city of Ulaanbaatar which was largely established between 1950s and 1980s under the Soviet-urban planning system.¹⁹ The city central area, residential blocks and districts in the inner-city areas, and apartment complexes in the areas surrounding the city, were established in the pre-democracy time period. This concentration of city central areas with centralized activities and services is being changed by the new Master Plan, as a multi-centric city model with decentralised government services, businesses and banking services is proposed to increase efficiency, reduce congestion and pollution. It includes a four-tier system of centres including two city centres, six sub-city centres, and neighbourhood based district centres and community centres. Land use zoning will also be introduced to plan and regulate new development in the city.²⁰ However, the most critical aspect of the 2030 Master Plan is that it recognises that Ulaanbaatar city and its surrounding areas cannot be considered as an independent development zone, but as part of a larger region in which surrounding regional towns and satellite cities are integrated and developed so as to alleviate population concentration in the city area.

Economic development of the Ulaanbaatar Capital Region is proposed with the aim of enabling the socio-economic growth of the surrounding ten regional towns and satellite cities, such that these areas are able to provide employment opportunities and livelihoods, thereby stemming migration to the city areas. It is proposed that each town and satellite city will have a particular focus of agriculture, or manufacturing, or logistical industry. Communications and utilities are planned to be developed in satellite cities together with the promotion of small and medium enterprises, thereby leading the development of satellite cities into integrated settlement clusters.²¹ Critical to the economic growth of this region and the county as a whole is transport infrastructure development, as Mongolia is a landlocked country, and this often results in comparatively high costs for consumers' products and transportation. Therefore, the regional development structure for Ulaanbaatar involves linking major urban activity centres to trunk roads such as the airport access, railway networks, and Asian Highway (AH)-3 connecting the country from the Chinese border to the Russian border.²²

Environment and its protection is of utmost importance to a formerly nomadic and still agrarian Mongolian culture. The Master Plan proposes that an Ulaanbaatar City green belt be introduced around the edges of the city. This green belt will include areas for agricultural uses, rural communities, summer camp areas, natural preservation areas, recreation and tourism activities, water resource protection and forest preservation, and existing restricted areas. While providing the city and its surrounds with public green space for tourism and recreation, the green belt will also function as an urban growth boundary for the city of Ulaanbaatar. In fact, land use of the city has been guided by strategies that seek to conserve the environmentally sensitive watershed forest areas and special protection areas; control development in areas unsuitable for urbanization, including steep lands and flood prone areas so as to mitigate disasters; conserve fertile lands suitable for agriculture; and maintain and improve existing biological networks of flora and fauna.²³

Sawai Madhopur: balancing equity, economy and environment

Located in the western Indian state of Rajasthan, Sawai Madhopur is a city of strategic importance for the state, given its triumvirate of national assets – a 9th Century UNESCO World Heritage site, a hill forest, and a national

park – all located within the city development region. With a current population of 133,165 which is expected to double to 234,563 by 2035, the city was identified as an ideal candidate for the preparation of a progressive, integrated master plan, that would inform the growth and development of the city for the next 20 years. Formulated in 2016 the draft Master Plan 2035 for Sawai Madhopur demonstrates the integration of concerns of environment, economy and equity into the master planning and implementation processes. To accommodate the future growth of the city, it has been proposed to increase the existing urban area of 1651 hectares to 5135 hectares so as to ensure that the city is planned for the future, and does not grow in an ad-hoc manner as is the situation with most cities in India.²⁴ Integral to the Sawai Madhopur Master Plan is the fact that the regulation of land use has been designed to conserve the assets of the city-region – heritage, forests, hills, water bodies, rural periphery – while at the same time accommodating changing economic energies and providing for the infrastructure needs of a diverse socio-economic population. Development regulations are detailed and tailored with specificity to the city’s environment notably the Ranthambore National Park, Forest hills, and Ranthambore Fort.

Tourism and agriculture as the mainstay livelihood providers, are recognised as the two key economic drivers in the Master Plan 2035. While 50 per cent of the expanded urban area is zoned for built-up urban use, the rest remains as an “urban agriculture zone” which is open, natural, and agricultural land.²⁵ This zone which along with cultivable land will encompass associated industries including food processing, cold storage, and an agricultural research institution, seeks to sustain and encourage an incentivised agricultural livelihood. Furthermore, its location within the reach of the city, will allow the urban agricultural zone to be an economically and ecologically viable model of agriculture. Environmental concerns are integral to the Master Plan 2035 with dedicated green spaces at the neighbourhood, sector and city levels. The amount of area dedicated for residential development in the Master Plan 2035 will be 36 per cent, as opposed to the existing 54 per cent. This lower gross density of the Master Plan 2035 is due to the increased allocation of recreational and green space of 22 sqm per person.²⁶

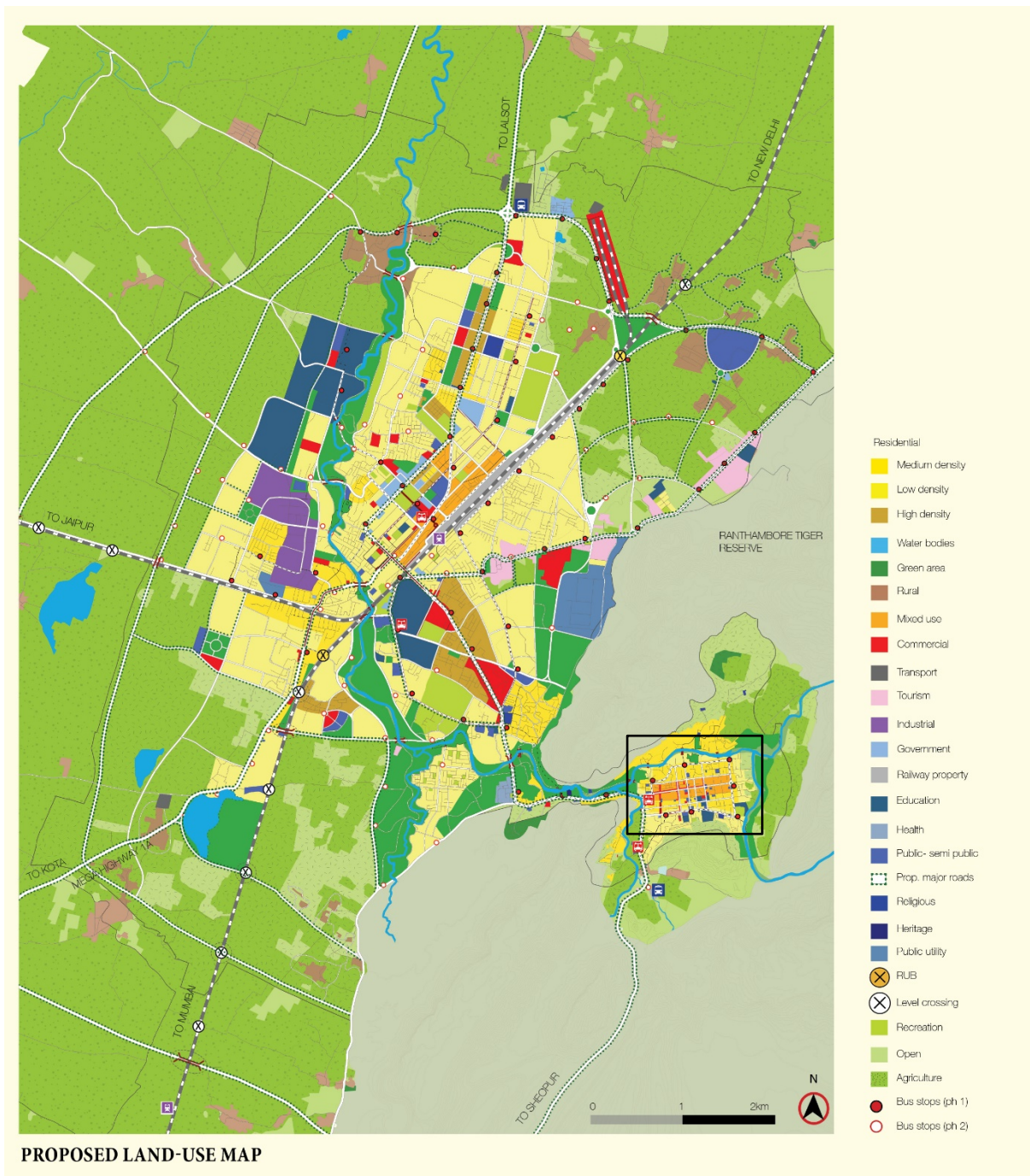


Figure 1: Jana Urban Space Foundation. *Proposed land-use map for Sawai Madhopur with the old city to the east (outlined by the box) surrounded by the Ranthambore National Park, and new development proposed to the north and west [Bangalore: 2016]*

The ecological imperatives of the agricultural zone are common with the heritage conservation measures identified in the Master Plan 2035. Ranthambore National Park, known for its large Bengal tiger populations, Ranthambore Fort as one of the Rajasthan Forts listed on the World Heritage List, and the Forest Hills form the context for the conservation initiatives for the city. Accordingly, a forest buffer of 1000 m has been zoned around the National Park, and a protective zoning for heritage is applied to 373 hectares of the urban area, which also includes The Old Town of Sawai Madhopur. A water infrastructure and landscape development project that involves the conservation, preservation and conservation of the 12.5 km long water body flowing through Sawai Madhopur is also proposed.²⁷ These conservation initiatives seek to safe-guard these ecological and heritage sensitive areas

from further development, and in doing so support the continuing growth of tourism industry in the city and its surrounds.



Figure 2: Jana Urban Space Foundation. *View of heritage listed Ranthambore Fort from inside the Ranthambore National Park* [Bangalore: 2016]

To enable the growth of economy in the area, connectivity is a primary concern that has been integrated into the Master Plan in terms of the development of a comprehensive network of roads in neighbourhoods, the city, and the surrounding rural region. A few key proposals to improve mobility, and therefore economic vitality in the city and its region, include developing a planned hierarchy of new roads, buildings roads to increase connectivity to surrounding rural settlements, provision of transport and trucking facilities at key locations, and provision of bus shelters, bridges, pedestrian pathways and parking lots. Public development projects such as civic and social infrastructure projects including a sports arena, a convention centres, a farmer’s market, a city park and festival celebration ground are also included in the Master Plan to support the local economy of the city. Other economically driven measures include redevelopment, specifically infill urban development within the existing city area of 1651 hectares, of which only 882 hectares are built up. The remaining 567 hectares are zoned for infill development so as to allow for greater density and use within the city.²⁸

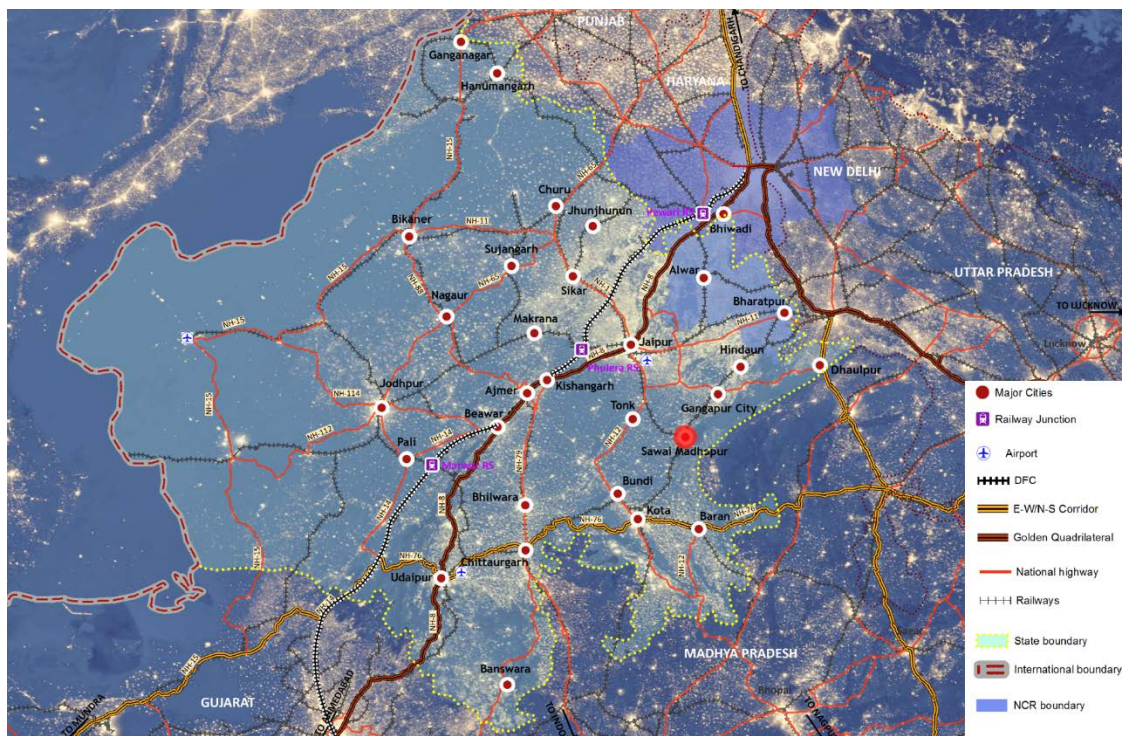


Figure 3: Jana Urban Space Foundation. *Map of Sawai Madhopur showing its location in the western Indian state of Rajasthan, and the larger regional context of the city in terms of connectivity* [Bangalore: 2016]

Central to the infill development zoning is the idea of spatial equity – the Master Plan 2035 introduces mixed income zoning, with affordability in housing for all socio income groups. Plotted and flatted residential land of varying sizes, with access to civic infrastructure and social amenities have been delineated in the Master Plan. The need for affordable housing in the city can be evidenced in terms of the number of slums in the city accounting to 45.²⁹ A total of 974 hectares of land have been reserved for residential zoning with nine categories of housing types proposed so as to cater to the housing needs of different economic groups. The idea of equity has also informed the new classification of road networks, in recognition of the hierarchy prevalent in high density lower income housing developments. For such developments, road widths have been set at between 5m to 1m, and have been classified as lanes – primary access, secondary access, and pedestrian access lanes.³⁰ It is also proposed that infrastructure networks be designed for such lanes, and zoning regulations be customized appropriately.

Other infrastructure projects proposed include water, sewage, drainage, power, and health facilities. The Master Plan 2035 encourages a “zero waste” city through the development of a comprehensive sewage and drainage network plan which will include large and smaller sewage treatment plants, and a proposed landfill site, which it is hoped will help arrest the current ad-hoc, ill-managed and polluting waste disposal processes currently in place in the city. Water supply and coverage for the Sawai Madhopur region is expected to increase from 72 per cent to 100 per cent, as a result of a state developed urban infrastructure project, and the construction of overhead water tanks and new household water connections. To counter the existing condition of 66 per cent of sewage flow into open storm water drains, a new sewage network that delivers sewage from the primary source to the sewage treatment plant is planned for the area. 35 per cent of Sawai Madhopur homes do not have toilets and the Master Plan 2035 necessitates a 100 per cent coverage. Digital connectivity is emphasised for the city to support the growth of industry and enterprise in the city and its region.³¹

Conclusion

This paper has sought to demonstrate that the modernist approach to master planning has undergone considerable changes notably in developing countries where cities are faced with rapid urbanisation, and concerns of poverty, urban sprawl, pollution, and environmental degradation. Moving towards the larger global agenda of creating cities that are sustainable, resilient, inclusive and safe, urban planning in cities like Curitiba, Ulaanbaatar, and Sawai Madhopur seeks to balance the intersecting yet competing demands of economy, environment and equity. While the master plans for Ulaanbaatar and Sawai Madhopur are very recent initiatives a few issues and concerns have emerged pertaining to the overall long-term targets of these master plans. This can be evidenced in the case of Ulaanbaatar as the master plan is seen as catering to the larger urban context but failing to address the housing shortage faced in the city, and its impacts on the surrounding traditional nomadic areas. The master plan of Curitiba best known for its transport system, is facing challenges in terms of continuing to provide affordable transport, as the city grows out towards new suburbs which are largely occupied by the urban poor. While the effectiveness of these master plans cannot be ascertained as yet, the fact that these are regionally, economically and environmentally sensitive responses to each city’s own unique set of urban circumstances, is a step in the direction of a sustainable city.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Swati Ramanathan is co-founder of Jana Group, a clutch of social enterprises in India, committed to deepening democratic engagement, urban transformation, and financial inclusion. Ms Ramanathan was honored by the Government of Rajasthan for her work on the Jaipur 2025 Master plan, and Guaranteed Land Title Certification. She has been named a Young Asian Leader by the Asia Society, and honoured by the National Democratic Institute in Washington DC, with the Democracy and Civic Innovator Award. She and her husband have been honored with the Social Entrepreneurs Award by Forbes India. Ms Ramanathan holds a BS from India, and an MS from Pratt Institute for Planning Architecture and Design, N.Y.

Vidhu Gandhi is an architect, heritage consultant and researcher with experience in heritage conservation, architecture and urban planning in Australia and in India. She has worked with heritage conservation and architectural practices in Sydney and Adelaide in the role of heritage consultant and advisor. In India, she worked with Jana Urban Space Foundation as Team Lead for Planning Policy. Subsequently she joined Srishti Institute of Art, Design and Technology, as Dean of Postgraduate Studies, Head of Liberal Studies, and coordinator of the

UNESCO Chair in Culture, Habitat and Sustainable Development in India. She is currently located in Sydney, working with Extent Heritage as Senior Heritage Advisor.

Endnotes

- ¹ United Nations, Department of Economic and Social Affairs, Population Division, *The World's Cities in 2016 – Data Booklet* (ST/ESA.SER.A/392, 2016); Urbanet, “World Urban Population Infographics”, accessed February 20, 2018, <http://www.urbanet.info/world-urban-population/>, 2018
- ² United Nations Human Settlements Programme, *Planning Sustainable Cities: Global Report on Human Settlements*, (UN-Habitat, 2009), xxiv, 11, <https://unhabitat.org/books/global-report-on-human-settlements-2009-planning-sustainable-cities/>
- ³ United Nations Human Settlements Programme, 11
- ⁴ United Nations Human Settlements Programme, 12
- ⁵ United Nations, “The Sustainable Development Agenda”, accessed February 20, 2018, <http://www.un.org/sustainabledevelopment/development-agenda/>
- ⁶ United Nations, “Sustainable Development Goal 11”, accessed February 20, 2018, <https://sustainabledevelopment.un.org/sdg11>
- ⁷ Steven. A. Moore, *Alternative Routes to the Sustainable City: Austin, Curitiba, and Frankfurt* (Lanham Lexington Books, 2007)
- ⁸ Alicia Fazzano, and Marc A. Weiss, *Global Urban Development – Curitiba, Brazil: Metropolitan Economic Strategy Report* (s.n., 2004), 3, http://www.globalurban.org/GUD_Curitiba_MES_Report.pdf
- ⁹ Jonas Rabinovitch, “Curitiba: towards sustainable urban development”, *Environment and Urbanisation* 4, no. 2 (October, 1992)
- ¹⁰ Ali Soltani, and Ehsan Sharifi, “A case study of sustainable urban planning principles in Curitiba (Brazil) and their applicability in Shiraz (Iran)”, *International Journal of Development and Sustainability* 1, no. 2 (September 2012): 5
- ¹¹ Ibid
- ¹² Ali Soltani, and Ehsan Sharifi, “A case study of sustainable urban planning principles in Curitiba (Brazil) and their applicability in Shiraz (Iran)”, *International Journal of Development and Sustainability* 1, no. 2 (September 2012)
- ¹³ Rabinovitch, 62
- ¹⁴ International Council for Local Environmental Initiatives, *Curitiba Orienting Urban Planning to Sustainability: Case Study 77* (Canada: ICLEI, 2002), http://www.iclei.org.br/polics/CD/P2_4_Estudos%20de%20Caso/1_Planejamento%20Urbano/PDF106_EC77_Curitiba_ing.PDF
- ¹⁵ The Asia Foundation, *Ulaanbaatar 2020 Master Plan and Development Approaches for 2030: General Summary for Public* (The Asia Foundation: Ulaanbaatar, 2014), <https://asiafoundation.org/resources/pdfs/1-MasterPlanPublicSummaryEnglish.pdf>
- ¹⁶ The Asia Foundation
- ¹⁷ The Asia Foundation, xv
- ¹⁸ Tseregmaa Byambadorj, *(Re)constructing planning in face of uncertainty: Challenges for urban planning in Mongolia*, (Australia: Macquarie University, n.d.)
- ¹⁹ Byambadorj, *(Re)constructing planning in face of uncertainty*
- ²⁰ The Asia Foundation
- ²¹ Japan International Cooperation Agency, *The Study on City Master Plan and Urban Development of Ulaanbaatar City (UBMPS) Final Report Vol.2 Main Text* (s.n., n.d.), http://open_jicareport.jica.go.jp/pdf/11937158_02.pdf
- ²² The Asia Foundation, *Ulaanbaatar 2020 Master Plan and Development Approaches for 2030*
- ²³ The Asia Foundation, *Ulaanbaatar 2020 Master Plan and Development Approaches for 2030*
- ²⁴ Swati Ramanathan, *Spatial Development Plan for Sawai Madhopur* (Jana Urban Space Foundation: Bangalore, 2016)
- ²⁵ Ramanathan
- ²⁶ Ramanathan
- ²⁷ Ramanathan
- ²⁸ Ramanathan
- ²⁹ Ramanathan
- ³⁰ Ramanathan
- ³¹ Ramanathan

Bibliography

Ali Soltani, and Ehsan Sharifi, “A case study of sustainable urban planning principles in Curitiba (Brazil) and their applicability in Shiraz (Iran)”, *International Journal of Development and Sustainability* 1, no. 2, September 2012

Byambadorj, Tseregmaa. *(Re)constructing planning in face of uncertainty: Challenges for urban planning in Mongolia*. Australia: Macquarie University, n.d.

Fazzano, Alicia, and Marc A. Weiss. *Global Urban Development – Curitiba, Brazil: Metropolitan Economic Strategy Report*. s.n. 2004. http://www.globalurban.org/GUD_Curitiba_MES_Report.pdf

International Council for Local Environmental Initiatives, *Curitiba Orienting Urban Planning to Sustainability: Case Study 77*. Canada: ICLEI, 2002.

http://www.iclei.org.br/polics/CD/P2_4_Estudos%20de%20Caso/1_Planejamento%20Urbano/PDF106_EC77_Curitiba_ing.PDF

Japan International Cooperation Agency. *The Study on City Master Plan and Urban Development of Ulaanbaatar City (UBMPS) Final Report Vol.2 Main Text*. (s.n., n.d.). http://open_jicareport.jica.go.jp/pdf/11937158_02.pdf

Jonas Rabinovitch, “Curitiba: towards sustainable urban development”, *Environment and Urbanisation* 4, no. 2, October, 1992

Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India. “Census of India 2011”. Accessed February 21, 2018. http://censusindia.gov.in/2011-prov-results/paper2/data_files/India2/1.%20Data%20Highlight.pdf

Ramanathan, Swati. *Spatial Development Plan for Sawai Madhopur*. Jana Urban Space Foundation: Bangalore, 2016

The Asia Foundation, *Ulaanbaatar 2020 Master Plan and Development Approaches for 2030: General Summary for Public*. The Asia Foundation: Ulaanbaatar, 2014. <https://asiafoundation.org/resources/pdfs/1-MasterPlanPublicSummaryEnglish.pdf>

Urbanet. *World Urban Population Infographics*. Accessed February 20, 2018. <http://www.urbanet.info/world-urban-population/>

United Nations. “The Sustainable Development Agenda”. Accessed February 20, 2018. <http://www.un.org/sustainabledevelopment/development-agenda/>

United Nations, “Sustainable Development Goal 11”, accessed February 20, 2018, <https://sustainabledevelopment.un.org/sdg11>

United Nations, Department of Economic and Social Affairs, Population Division. *The World's Cities in 2016 – Data Booklet*. 2016. ST/ESA.SER.A/392

United Nations Human Settlements Programme. *Planning Sustainable Cities: Global Report on Human Settlements 2009*. UN-Habitat, 2009, <https://unhabitat.org/books/global-report-on-human-settlements-2009-planning-sustainable-cities/>

Image sources

Figure 1: Jana Urban Space Foundation, (Accessed March 15, 2018)

Figure 2: Jana Urban Space Foundation, (Accessed March 15, 2018)

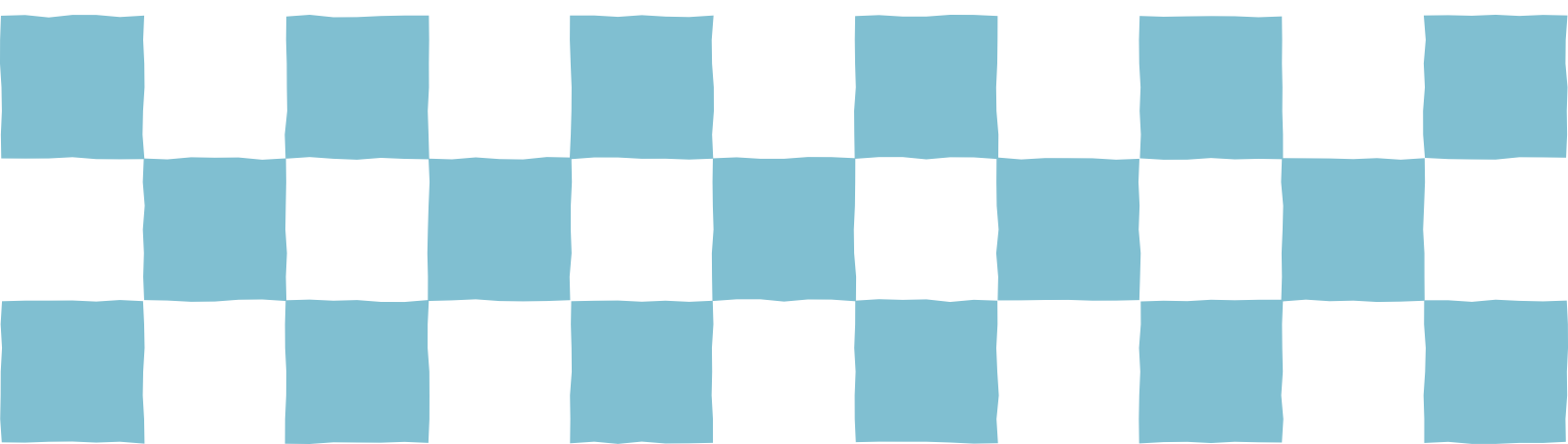
Figure 3: Jana Urban Space Foundation, (Accessed March 15, 2018)



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

55 **The Japanese 1919 City
Planning Act System in the
World History of Planning**



The Japanese 1919 City Planning Act System in the World History of Planning: An Overview and Some Hypothetical Propositions

Shun-Ichi J. Watanabe (Tokyo University of Science)

The City Planning Act of 1919, established under the strong influence of Western modern planning, was the nation's first modern planning legislation. The planning system that the Act created formed the basic character of the Japanese planning system and is still largely discernible in current planning practice.

This paper is an attempt to position the Japanese 1919 planning system within the framework of the world history of planning. The Japanese contact with the Western modern planning in the 1910s ended up, however, as a one-way flow from the West to Japan, but is not our concern in this paper. Instead, we try to discuss some special characteristics of the 1919 system which can be seen as quite unique in contrast to the Western modern planning system.

Unlike the Western countries, the Japanese system was not created by planning professionals but by the elite bureaucrats of the central government who eventually gained a fairly high level of professional expertise. We propose the name "bureaucratic professionalism" to describe this phenomenon. This paper attempts to give a preliminary overview of this situation.

When Japan encountered Western modern planning in the 1910s there existed no word, that is, no concept, of "city planning" in Japan. There existed no planning professional nor planning expertise. What did exist was a strong central bureaucratic system. The Home Ministry, having jurisdiction over city planning, prescribed the nation-wide, pre-established, uniform standards, and asked the local government to follow them. The Home Ministry institutionalized the City Planning Local Commission in the prefectural governments as a de facto branch office of the Ministry. The Ministry regularly dispatched its elite planning bureaucrats with their assistants to its secretariat. They consisted of general administrative officers and three kinds of specialist technical officials in civil engineering, architecture, and parks. These specialists worked respectively for street plans, land-use plans, and park plans; the general administrators collated and coordinated their outputs.

According to the Act's prescription, the secretariat presented the draft proposal to the Local Commission, which deliberated and decided. Upon its conclusion, the Home Ministry officials made it the official city planning decision in the Minister's name and sent it to the Cabinet for nominal approval.

Thus, the 1919 planning system was a highly centralized one in which a small number of elite planning bureaucrats efficiently controlled the planning decisions over the entire country. They were a fairly coherent group of higher-ranking officials of administrative and technical bureaucrats. They, as a group, seem to satisfy most of the elements of professionalism in general. But the group was, in reality, a compound of administrators and three clearly separated specialists of civil engineers, architects and park people. It may be hard to say that these professional bureaucrats have established a city planning profession as a whole.

Translating the Idioms of Japanese Planning: The City Planning Act of 1919 as seen from a European and North American perspective

Carola Hein (Delft University of Technology)

Planning history is a discipline with diverse terminology, multiple interpretations and manifold applications through space and over time and the methodological and theoretical approaches towards planning history reflect that. To develop a truly global planning history, scholars need to clarify the idioms they are using, notably for cross-cultural investigation.

Planning and planning history in Japan have a long tradition and a strong engagement with Western practices, yet their integration into global narratives has happened in a somewhat haphazard way. Exploring the debates by European and American scholars of the City Planning Law of 1919, this contribution aims to gain advanced understanding of different Japanese and foreign perspective on urban planning.

Many comprehensive studies of Japanese planning as a discipline since the Meiji Restoration exist in Japanese, but are not translated. The Japanese planner and historian Ishida Yorifusa, wrote the most comprehensive history of Japanese planning by a Japanese author: *Nihon Kindai Toshikeikaku no Hyakunen* (100 Years of Modern City Planning in Japan), its expanded version including a very detailed time-line (Ishida 1980, Ishida 2004)

Several other publications provide an overview. The writings of Japanese architect-planner, Watanabe Shunichi, another key figure of Japanese planning history, have had more impact in the English-speaking world. Much of the literature, however, comes from foreign scholars, such as Andre Sorensen, who have developed their particular view on the evolution of Japanese planning system and urban form (Sorensen 2002)

The choice of terminology is particularly important in the context of Japanese planning history. As Shunichi Watanabe has pointed out, the City Planning Act of 1919, often called the Old Act, gave Japanese planning its distinct flavor. In contrast to the comprehensive planning at the root of North American and European planning, it focused on urban infrastructure, particularly streets, as the foundation for urban development. This made planning the domain of the engineer rather than the politician. It also placed the responsibility for planning at the level of the central government (Watanabe 2016a, Sorensen 2002)

As many authors have emphasized, the Old Act established the main practice of Japanese planning: land readjustment (*kukakuseiri*)—a technique to create continuous land parcels for development while sharing the project costs among landowners.

Since the very beginning of establishing city planning as a discipline in Japan in the late 19th century, the country's leaders had seen innovation not primarily as an issue of aesthetics but one of economic dominance and particularly transportation (which is why streets were important) They would go on to use this idea of planning in their own colonial endeavors, as Japanese planners and their concepts set up systems in Taiwan and Korea during the Japanese occupations from 1895 to 1945 and 1910 to 1945 respectively. Integrating Japanese colonial and later post-colonial planning into the Japanese, Asian, and global developments, and clearly defining terminology, will also provide insights in transnational planning history.

The Formation of Modern Planning Law System in China: Comparing with the Japanese 1919 Act

Shulan Fu (Zhejiang University) and Baihao Li (Southeast University)

In general, the formation of modern planning system started at the end of the 19th century, while local autonomy was promoted in China. From the establishment of a "municipal law" and the construction modern vehicle roads, the development of urban planning has gone through an early stage when planning was seen as a part of "Shi-zheng (municipal administration)". After the establishment of the Nanjing National Government in 1927, a decade of stable political environment brought about the golden age of urban planning practice, which directly contributed to the phase of national legislation in the late 1930s.

But once the discussions were held in detail, either the planning of individual cities or the legal system at the national level, it is difficult to find a clear and consistent development process, since the whole process has undergone repeated wars, separatism between the north and the south, and changes in political power. As a significant reflection, two urban planning acts were formulated in 1930s, one is the "Du Yi Ji Hua Fa (City Planning Act)" promulgated by the Puppet Manchukuo in 1936, and the other is the "Du Shi Ji Hua Fa (Urban Planning Act)" released by the Kuomintang government in Chongqing in 1939.

In order to clarify the overall process, this paper regards the urban planning act as the staged product of the earlier urban planning practice combined with the introduction of foreign experiences and techniques. Discussions about the two acts' relevant governments, law drafters, their local practice and foreign experiences will be done to sketch overall appearance of the urban planning law system in 1930s, and the comparison of different use of terms will be a key entry point for judging the source.

Reading the City Planning Law 1919 as decisive critical juncture in Japanese City Planning: Conceptual and methodological considerations

Andre Sorensen (University of Toronto)

There is no doubt that the Japanese City Planning Law of 1919 was a major watershed in Japanese planning, as the law remained in place for almost 50 years until 1968, and Japanese planning still shows many influences from the approaches it established. This paper examines the 1919 law as a major critical juncture in Japanese planning, applying a historical institutional comparative research method to its analysis. This includes careful attention to the antecedent conditions before its passage, the range of alternative approaches that were considered and dropped before it was passed, consideration of the 'cleavage' or crisis that provoked a new approach to the regulation of urban space, analysis of the timing and sequencing of its passage in relation to planning legislation elsewhere, and an examination of both the major historical causes of the development of this new approach, and the primary 'mechanisms of reproduction' that have ensured that this approach to planning remained dominant until 1968, and to considerable extent, to the present. This analysis helps to better understand the 1919 City Planning Law, and contributes to theory building in planning history.



The Japanese 1919 City Planning Act System in the World History of Planning: An Overview and Some Hypothetical Propositions on “Bureaucratic Professionalism”

Shunichi J. Watanabe *

* *Professor Emeritus, Tokyo University of Science, shun.watanabe@nifty.com*

The City Planning Act of 1919, established under the strong influence of Western modern planning, was the nation's first modern planning legislation. This paper is an attempt to position the planning system created by the 1919 Act within the framework of the world history of planning.

Unlike the Western countries, the Japanese system was created -- not by planning professionals -- by the bureaucrats of the central government, who eventually had a fairly high level of professional expertise. We name this situation "bureaucratic professionalism", which may be quite unique in contrast to the Western planning system.

The 1919 planning system was highly centralized in which small number of elite planning bureaucrats of the Home Ministry efficiently controlled the planning decisions all over the country. The Ministry prescribed the nation-wide, pre-established, uniform planning standards and asked the local government to follow. The Ministry created the City Planning Local Commission in all prefectures as its de facto branch offices and regularly dispatched its elite planning bureaucrats to the Commission's secretariat.

These bureaucrats consisted of general administrative officers and three kinds of specialist technical officials in civil engineering, architecture, and parks. They, as a group, seem to satisfy most of the elements of professionalism in general. But in reality, the group was a compound of administrators and three clearly separated specialists. It may be hard to say that these professional bureaucrats have established a city planning profession as a whole.

Keywords: City Planning Act of 1919, the 1919 planning system, Home Ministry, Western modern planning, City Planning Local Commission, Bureaucratic Professionalism

1. Introduction

The basic structure of the Japanese planning system was founded by the City Planning Act of 1919 (hereafter "the 1919 Act") which was enacted as the nation's first modern planning legislation 99 years ago. Since then, many features of the planning system have survived even the Act's drastic post-war amendment into the City Planning Act of 1968 which forms the basic core of Japan's current planning legislation. Analyzing the planning system put in place by the 1919 Act (hereafter "the 1919 (planning) system") is therefore an important research theme in understanding our past history as well as our current standing and our search for future perspectives on our current planning system.

The 1919 Act, as seen in the context of the world history of planning, was strongly influenced by the Western modern planning system, which was then being formed through the international exchange of ideas between Western Europe and North America in the late 19th and early 20th centuries. Outside of these areas, Japan was an almost exceptional case as a nation that made contact with and learned from Western modern planning ideas based on its own initiative.

This paper is an attempt to position the Japanese 1919 planning system within the framework of the world history of planning. Here, however, we face problems right away. Historical facts show us that, while these Western countries enjoyed rich mutual exchange, Japanese contact with the West resulted only in a one-sided flow from the Western countries to Japan and ended with Japan hardly contributing to the formation of the modern planning system. Understanding how the Japanese contact with the West occurred as well as its results may be an important research theme for Japanese planning history but may not be an attractive or productive theme in the world history of planning as a whole.

Here, we propose a different approach. We try to discover and discuss features of the 1919 planning system which may have been unique in comparison to the Western planning system at the time and which may still be an attractive theme in relation to the basic nature of planning systems in general. We present here a concept that we have named "bureaucratic professionalism" which obviously requires some preliminary explanations.

In Western countries, urban planning as a social technology and institution was developed by a group of private and governmental "planning professionals".⁽¹⁾ In other words, the planning institution and its professionals grew in parallel with one another. In Japan, in contrast, planning was almost entirely developed by



bureaucrats in the central government's Home Ministry. These bureaucrats eventually came to have a fairly high level of professional expertise but they identified themselves basically as bureaucrats rather than as "planning professionals". We have named this situation "bureaucratic professionalism" and the people involved "professional bureaucrats".

Having said so, the next question is what "bureaucratic professionalism" and these "professional bureaucrats" meant within the actual context of Japanese history, and what new insights can come from these concepts regarding the 1919 planning system in the context of the world history of planning.

In order to answer these questions, this paper will take the following steps: After identifying precedent research relevant to this paper the theoretical framework of professionalism will be discussed, as this framework will be used to further detail the Home Ministry's bureaucratic professionalism near the end of this paper.

After these preliminary discussions the topic will advance to the core historical discussions on the 1919 City Planning Act, the Home Ministry and the City Planning Local Commission. Based on these discussions an evaluation of the Home Ministry's bureaucratic professionalism will follow using the above framework, and finally the paper will close with some concluding remarks.

2. Precedent Research

As one of the most important elements in Japanese planning history, there has been plenty of research on and around the 1919 Act – the most famous being the general history textbook by Ishida⁽²⁾ and Watanabe's book detailing the formative process behind the 1919 Act.⁽³⁾ But when it comes to the subject of the 1919 planning system as a whole there have been relatively few results and practically none that discuss the 1919 system within the context of the world history of planning. Watanabe deals with the historical features of the Japanese planning system as a whole; identifying central bureaucracy and non-professionalism as key components.⁽⁴⁾ This paper more or less develops this earlier work, focusing more specifically upon the bureaucrats in the Home Ministry in charge of the actual technical planning around the 1910s and 1920s.

This type of research requires basic knowledge of the Home Ministry and its bureaucratic system in general and, in particular, of the City Planning Local Commission, which was where the actual planning work was carried out. The Home Ministry, as a very important research theme in the social sciences and history, has been much recorded and discussed in works such as the 4 volume book *The History of the Home Ministry*⁽⁵⁾ and recent books in social and political history.⁽⁶⁾ What we need is more works specializing in city planning. Nakamura provides a good discussion of the politics of the 1919 planning system including the City Planning Local Commission.⁽⁷⁾ This paper relies greatly on this work with, however, a slightly different view regarding planning expertise and professionalism.

Around the 1980s on, planning academics began their research and interviews with former planning bureaucrats who also began to record their memories.⁽⁸⁾ These records are another information source that this paper is based upon.

3. Professionalism

In Western countries and, in fact, much of the entire world, urban planning as a social technology is carried out by planning professionals — a fact that seems to form the fundamental basis of universal discourse on the world history of planning. The present author, however, believes that a more careful examination is necessary as far as the Japanese planning system is concerned.

In order to examine this issue theoretically, the word "professionalism" must first be defined. Let us rely upon that of Millerson, which is a rather old definition but is reliable for the purpose of our discussion.⁽⁹⁾ Millerson's definition of professionalism contains six aspects:

- (a) A profession involves a skill based on theoretical knowledge.
- (b) The skill requires training and education.
- (c) The professional must demonstrate competence by passing a test.
- (d) Integrity is maintained by adherence to a code of conduct.
- (e) The service is for the public good.
- (f) The profession is organized.

This definition gives us a fairly clear picture that planning professionals work with certain planning expertise which they obtain through training and education as well as a test, which bestows upon them a kind of status. Planning professionals also organize themselves into an identifiable group and maintain integrity through a code of conduct, working for public good.

This picture gives us the impression that the term may also be applicable to "bureaucratic professionals," because this definition allows planning professionals to work both in the private and governmental sectors. We will examine this point in depth later by using the 6 aspects mentioned above.



4. The City Planning Act of 1919

Systematic contact between Japan and Western modern planning ideas began with the "Town Planning Conference" organized by the Royal Institute of British Architects in London in 1910.⁽¹⁰⁾ At the time in Japan, there was no word for – and therefore no concept of – "town or city planning." And, more crucially, no one had the technical skills to carry it out. However, there did exist something that we can now consider the predecessor to "*toshi keikaku* (city planning)," a new term coined by Hajime Seki in 1913.⁽¹¹⁾ In this formative period of city planning, we should note both what kind of Japanese traditional soil the seeds of Western planning ideas fell onto, and, as a result, what kind of a new flower blossomed as the 1919 planning system.

The 1919 Act was born both from the influence of Western modern planning ideas and by 30 some years of experience gained through the urban program put in place by the Tokyo Urban Improvement Ordinance of 1888 (hereafter "Urban Improvement"). Urban Improvement was a program for planning and implementing a long-range construction plan for urban infrastructure, targeting the streets and parks in Tokyo's built-up areas. As for its planning system, three features should be noted as they were eventually inherited into the 1919 system.

First, Urban Improvement was defined as the central --- not local--- government's program, and was administered by the Home Ministry. Second, it institutionalized a unique system involving a "commission" with strong administrative powers. In fact, the Urban Improvement Ordinance prescribed the establishment of the Tokyo Urban Improvement Commission which was empowered to officially determine the Urban Improvement plan and report it to the Home Minister who would then receive the Cabinet's approval.⁽¹²⁾ Third, Urban Improvement, which was basically a construction program, was administered by non-technical bureaucrats with technical help from civil engineers.

The 1919 Act introduced new elements, mostly by learning from the Western modern planning model as follows:

- (1) Expanding the act's application from Tokyo to the six major cities in Japan and later to all cities;⁽¹³⁾
- (2) Establishing the City Planning Area to include areas outside the central city;
- (3) Providing new planning tools in the form of construction projects like land readjustment and land-use controls like zoning. Overall, however, construction was emphasized more than restriction. Land readjustment came to be widely used thereafter,⁽¹⁴⁾ but zoning was only accorded weaker powers and did not become a central tool in the entire planning system.

Looking back at the 1919 planning system within the background of Western planning developments at the time, we may be able to say that it was a fairly comparable system as a whole. The soil onto which the seeds of Western planning fell was rich in terms of bureaucracy but rather poor in terms of technical skills. So the next question is: how was city planning as a technical matter actually carried out in the 1919 planning system?

Before we go further, however, we must take a glance at the 1919 system's relationship to building controls. In Western countries, land-use controls occupy a central place in the planning system but not so in Japan, as discussed above. Zoning was only briefly prescribed in the 1919 Act and detailed regulations on zoning were contained in the Urban Building Act of 1919.⁽¹⁵⁾ This Act, enacted as a sister legislation to the City Planning Act, was formed to control the engineering aspects of individual buildings (materials, structure, hygiene, fire, etc.) and, at the same time, their urban aspects (use, shape, size, height, building lots, etc.). In this way, land-use controls were, in a sense, separated from the planning system.

It should be noted that, prior to the Building Act, building controls had been administered on an ad hoc basis by the prefectural police. After the Act, a new system was put in place in the prefectural government and a Building Inspector was established under the strict control of the Home Ministry. This, however, gave rise to the problem that the planning of land-use and the actual control of individual buildings were administered by different people which eventually led to a serious need for coordination.

5. The Home Ministry

5-1. The Bureaucratic System

The 1919 planning system was carried out by a variety of bureaucrats in the Home Ministry. It is therefore necessary to take a look at the central government's bureaucratic system in the prewar days.⁽¹⁶⁾

The bureaucratic system in those days was strictly designed with a focus on the elite, generalist administrative officials (*jimu-kan*). Those who had passed the special *kôbun* examination⁽¹⁷⁾ were appointed as higher officials (*kôtô-kan*). They were the top-ranking elite group of bureaucrats with 10 steps to climb during their career. The ranks of the higher officials were as follows (from high to low):

- (1) Higher officials, who were specially selected from (2) and appointed by the emperor (*shin'nin-kan*), like ministers.
- (2) Imperial appointees (*chokunin-kan*) who were bureaucrats in classes 1 and 2, like vice-ministers and bureau directors general
- (3) Senior higher officials (*sônin-kan*) who were bureaucrats in classes 3 to 10, like division directors.



Under these higher officials were (4); lower officials (*han'nin-kan*) who were the non-elite bureaucrats. Further down, there were (5); many employees who were not considered government bureaucrats.

In this system the higher officials were the true elite bureaucrats who were small in number but controlled the vast number of non-elite lower officials.⁽¹⁸⁾ They played a decisively leading role in forming national policies. City planning was no exception; the administrative officials who occupied the Ministry's central positions in city planning were all higher officials like Ikeda Hiroshi.⁽¹⁹⁾

It should be remembered that this system was basically designed for the generalist administrative officials and, in fact, most of the higher officials were graduates from the Faculty of Law at the Imperial Universities, especially Tokyo Imperial University. On the other hand, what was the system of technical officials (*gijutsu-kan*) like?

There were actually many technical officials who were employed as specialists in fields such as engineering, medicine and agriculture. There was no systematic system or examinations for them as with the administrative officials, but the above concept was roughly applied to them as well. In the Home Ministry, elite technical officials given the status of *gishi* (literally, engineer or technical teacher) were treated like higher officials (*kôtô-kan*); non-elite technical officials, or the so-called *gite* (or *gishu*, which literally means technical hand) were the equivalent of lower officials (*han'nin-kan*). In the city planning world, the *gishi* played a leading role with the help of the *gite*, which we will see in the section on the City Planning Local Commission.

5-2. The Home Ministry

The Home Ministry, established in 1873, had jurisdiction over the police (Police Affairs Bureau), local government (Local Affairs Bureau) and civil engineering (Civil Engineering Bureau) among other branches and was one of the strongest ministries in the central government.

The prefecture, which was the local government, was in many ways almost the local branch of the Home Ministry and the prefectural governor was appointed out of the Ministry's higher officials. Furthermore, the prefectural police department, which was responsible for building regulations, was controlled by the Ministry's Police Affairs Bureau. So it is crucially important to look at the relationship between the Ministry and the prefecture in order to understand how city planning was actually administered.

5-3. The City Planning Division

The City Planning Division was established in the Ministry's secretariat in 1918. Hiroshi Ikeda became the first director of the Division and began drafting the City Planning Bill. The following year, the Bill became the City Planning Act of 1919 which was enforced at the beginning of 1920.⁽²⁰⁾

Interestingly enough, the Division's successive directors were all administrative --- not technical --- officers. This situation may seem quite strange to Western planners but, as we shall discuss later, it is here that the secret nature of Japanese city planning can be found.

The City Planning Division, led by Director Ikeda, consisted of four units: general affairs, civil engineering, architecture and parks. Each was headed by a higher official of its own specialization. It should be noted here that the technical units were clearly separated into the units of civil engineering, architecture and parks. This separation, which can be traced back to the Urban Improvement days, was strictly enforced not only in the central government but also in the prefectural governments.

Hideki Sakurai, who started working in the Division after graduating from the Department of Civil Engineering at Tokyo Imperial University in 1922, witnessed everyday life in the Home Ministry as follows: "At the time, there was hardly any substantial city planning work and the newcomers like us spent much time studying and translating Western material."⁽²¹⁾

6. The City Planning Local Commission

The 1919 Act prescribed the establishment of the City Planning Commission.⁽²²⁾ There were, in fact, two kinds of commissions: central and local. The City Planning Central Commission was established in 1920 but did not function much and was abolished in 1941.

6-1. The City Planning Local Commission

In 1920, the City Planning Local Commission (hereafter "the (Local) Commission") was established first in the six major cities where the 1919 Act was applied and then in all the prefectures from 1922 on.⁽²³⁾ In terms of its status in the government structure, it was a prefectural organization but in terms of planning practice, it was a branch of the Home Ministry's City Planning Division. (Remember the prefectural government itself was a de facto branch of the Home Ministry). The Local Commission is our focus of interest as it was the place where the work of city planning was actually carried out.

The 1919 Act prescribed that all planning cases, including the designation of city plans and city planning projects, go through the following process. First, the City Planning Commission was to deliberate the



case; second, the Home Minister was to form a decision; ⁽²⁴⁾ and third, the Cabinet was to give its approval. This was a very centralized system in that even small local planning cases had to go through cabinet approval. The Home Ministry --- in other words the planning bureaucrats --- therefore wielded a great amount of power in the actual administration.

As mentioned above, the Act assigned the Minister the power to form the final decisions, however the planning bureaucrats used the Local Commission as their place to deliberate and determine planning cases. This was possible due to the fact that various interests, particularly that of the central government, were well represented within the Commission. In other words, as Nakamura points out, the Commission functioned for the planning bureaucrats to coordinate the interests of the central government's ministries. ⁽²⁵⁾

6-2. The Members

Membership in the Local Commission was prescribed in the Minister's orders. The meeting was chaired by the prefectural governor, or by the vice-minister in the case of Tokyo. The members included: the mayor of the city where city planning was to be applied, members of the city and prefectural assemblies, and, in Tokyo, the governor and superintendent general (*keishi sōkan*).

It should also be noted that the members also included higher officials from various ministries. This was the arrangement used to carry out the abovementioned process. The meeting was oftentimes attended by planning specialists from the Ministry's City Planning Division, including Director Ikeda, and this made it possible for the planning bureaucrats to assume leadership in the decision-making process in the Local Commission.

6-3. The Secretariat

The Ministry provided technical and administrative staff as the central government official to all the prefectural governments as a means of supporting their Local Commissions. In 1934 the numbers of officers stationed in the 47 prefectural governments were as follows according to rank: higher officials, consisting of 12 administrative bureaucrats (*kanji*) and 70 technical *gishi*, and lower officials, consisting of 73 administrative bureaucrats (*shoki*) and 163 technical *gite*. ⁽²⁶⁾ These officers were stationed in the prefectures' City Planning Divisions, ⁽²⁷⁾ which functioned as the secretariats of the Local Commission, together with the prefecture's own staff. The Ministry's staff members were on the prefecture's payroll but belonged to the Ministry and held themselves to be above the prefectural staff. The higher officials were appointed by the cabinet and the lower officials by each Local Commission.

In the major prefectures the City Planning Division consisted of one administration unit as well as three technical units specializing each in civil engineering, architecture and parks, with one or more *gishi* from each specialization. This clear division between the technical specializations was decisive and universal throughout the country. In short, the prefectural City Planning Divisions all over the country were exactly a miniature of the Home Ministry's City Planning Division.

The Division's director was an office assumed by an administrative --- not technical --- bureaucrat in the higher official rank. ⁽²⁸⁾ The director played a crucial role in coordinating the technical staff in the three specializations. The civil engineering staff were working in street planning, the architectural staff in land-use planning, and the park staff in park planning. In another words, the technical staff were devoted more to their own fields of specialization rather than to a comprehensive view of the city planning expertise. So the real core of comprehensive planning was in the hand of the administrative --- not technical --- staff who had rich administrative expertise but relatively poor technical planning expertise. This may explain why the entire city planning system of Japan has been heavily inclined to legal procedures rather than to planning ideas and technology as such.

6-4. The Actual Process

Finally, let us trace the actual processes taken in the Local Commission, which eventually led up to the official decision on the planning case. The first job was to prepare a draft to be submitted to the Commission. This was mainly done by the secretariat's higher official technical bureaucrats, often with the guidance of their counterparts in the same field of specialization within the Ministry. Sometimes the Ministry's planning bureaucrats took business trips to the local prefectures to teach their planning expertise to their local counterparts. ⁽²⁹⁾

At the Commission's meeting, the administrative *kanji*, who were often the Division's director, explained the purpose of the draft which was then deliberated by the Commission members. In that sense, the *kanji's* work formed the core of the Commission and, behind the curtain, he was technically supported by the technical staff in the three different specializations. As the other Commission members representing their own interests had little planning expertise, the draft was passed smoothly in most cases. The difference in knowledge in the specialized subjects allowed the secretariat to assume technical leadership.



The results of the meeting was then notified to the Ministry's City Planning Division which formed the official decision in the name of the Home Minister. The Division then obtained the Cabinet's approval and finally published the plan in the Official Gazette as the Home Ministry's Notification.

7. Concluding Remarks: "Bureaucratic Professionalism"

This paper has so far studied the activities of the Home Ministry bureaucrats who supported the 1919 planning system. Based on this, we would like to look at the characteristics of "bureaucratic professionalism" through the six elements (skill, training, competence, integrity, public good and organization) proposed by Millerson's definition on professionalism described above.

The urgent problems at the time were: how to promptly provide planning expertise to a large number of expanding cities throughout the country, and, in the absence of planning education and private professionals, how to utilize the existing central bureaucracy. The answer was the 1919 system, and the key to it was the development of professional bureaucrats.

These professional bureaucrats were adopted by the Ministry without any prior training in city planning. Afterwards, they were trained on the job in the Local Commission or by studying foreign literature on their own. They grew by demonstrating competence in their daily work and serving the public good with integrity and pride as higher official bureaucrats. They interacted well among themselves, beyond their differences in position – administrative or technical, working in the central or local workplace. They were organized in formally bureaucratic and informally personal ways. In these terms, within the framework and limitations of the bureaucracy, we can assume that they formed one city planning profession.

At the same time, we must also point out the problems with this system. It certainly looked like a single profession from the outside, but in reality, it was a compound of clearly separated elements: the administrative staff and three technical staff in the civil engineering, architecture and parks divisions. It is hard to say that a single unified city planning profession was actually formed. Another problem was the basic structure of the system in which the central bureaucrats made the decisions and the local staff followed. Although efficient, this system has left problems even up to this day.

Finally, we may say that the bureaucratic professionalism of Japan as described above is a quite different approach set in distinctly different social and historical conditions compared to the world history of planning. However, for the countries of East Asia including Japan, where there has been a weak tradition of civil society and a strong tradition of centralized bureaucracy, this system may have some degree of universality, a topic that merits further research.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Shun-ichi J. Watanabe is Professor Emeritus, Tokyo University of Science. He holds B.A. (Tokyo), MCP (Harvard) and PhD (Tokyo). He taught city planning at TUS for 24 years and at Michigan State, U. of Washington, National Taiwan U., and KRIHS, Korea. His publications (all in Japanese) include: *American Urban Planning and the Community Ideal* (1977), *Introduction to Comparative Urban Planning* (1985), *The Birth of 'City Planning': Japan's Modern Urban Planning in International Comparison* (1993), *Machizukuri by Citizen Participation* (ed. 1999), and *Practical Guide to Citizen-Made Machizukuri Plans* (ed. 2001). He has been an IPHS member since its establishment in 1993, serving as council member for a number of years, and is now Chair of its East Asia Planning History Prize Committee.

Endnotes

- 1 Peter Hall, *Cities of Tomorrow: An intellectual History of Urban Planning and Design in the Twentieth Century*, Oxford, Blackwell, 3rd ed. 2002. Stephen Ward, *Planning the Twentieth-Century City: The Advanced Capitalist World*. John Wiley & Sons, 2002.
- 2 Yorifusa Ishida, *Nihon Kin-Gendai Toshi Keikaku no Tenkai (Historical Development of the Modern and Contemporary City Planning in Japan), 1868-2003*. Tokyo: Jichitai Kenkyū-sha, 2004; original version, 1982.
- 3 Shun-ichi J. Watanabe, "Toshi Keikaku" no Tanjō: *Kokusai Hikaku kara mita Nihon Kindai Toshi Keikaku (The Birth of "City Planning": Japan's Modern Urban Planning in International Comparison)*. Tokyo: Kashiwa Shobō, 1993.
- 4 Shun-ichi J. Watanabe, "A Historical and Comparative Analysis of the Basic Character of the Japanese Planning System: Toward a Drastic Reform for Decentralization and Participation," Paper presented at the 14th International Planning History Society Conference, Istanbul, 2010.
- 5 Editing Committee of the Home Ministry History, ed. *Naimushō Shi (History of the Home Ministry)*. Tokyo: Taika-kai, 1971. 4 vols.
- 6 Yoshiya Soeda, ed., *Naimushō no Shakai Shi (The Social History of the Home Ministry)*. Tokyo: University of Tokyo Press, 2007. Ryō



The 18th International Planning History Society Conference - Yokohama, July 2018

- Kurosawa, *Naimushô no Seiji Shi (The Political History of the Home Ministry)*. Tokyo: Fujiwara Shobô, 2013.
- 7 Akira Nakamura, "Taishô Hachi Nen Toshi Keikaku Hô Saikô: Toshi Keikaku Kuiki to Toshi Keikaku Chihô Inkai no Seijiteki Danmen (Reconsideration of the City Planning Act of 1919: The Political Aspects of the City Planning Area and the City Planning Local Commission)," *Seiji Keizai Kenkyûjo, Meiji University*, 1980, 59-99.
https://m-repo.lib.meiji.ac.jp/dspace/bitstream/10291/1690/1/seikeironso_49_1_59.pdf
- 8 City Planning Association of Japan, ed., *Toshi Keikaku no Pioneer no Ayumi (The Course of Pioneers of City Planning)*. Tokyo: CPAJ, 1986. "Tokushû: Naimushô Jidai no Toshi Keikaku: Toshi Keikaku Shi Kenkyû no Miryoku to Hôhō (Special Issue: City Planning in the Era of the Home Ministry: Interest and Method of Planning History Research)," *City Planning Review*, No. 144, 41987, 8-61.
- 9 G. Millerson, *The Qualifying Associations: A Study in Professionalization*. London: Routledge & Kegan Paul, 1998, p. 4; original version, 1964.
- 10 Watanabe (1993), 61-77.
- 11 Watanabe (1993), 90.
- 12 Article 2.
- 13 Three years later, an additional 25 cities fell under the Act, and the number went up to 49 in 1926. In 1933 the Act was applied to all the cities and some towns and villages. This means the 1919 planning system which was intended for large cities came to be applied to various sizes of cities all over the country.
- 14 The land readjustment tool was intensively used in the Capital Reconstruction Program after the Great Kanto Earthquake of 1923. In Tokyo, it treated over 3,000 hectare of burn down area, which can be seen as one of the greatest planning accomplishments in the world at that time.
- 15 The Urban Building Act of 1919 was enforced in December, 1920, or 11 months later than the enforcement of the City Planning Act.
- 16 Translations of the names of the governmental organization are as follows: bureau (*Kyoku*), department (*Bu*), division (*Ka*, *Shitsu*), office (*Shitsu*, *Sho*), section (*Han*), unit (*Kakari*); vice-minister (*Jimu-jikan*), director general (*Kyoku-chô*), director (*Ka-chô*), chief (*Kakari-chô*). <http://www.cas.go.jp/jp/seisaku/hourei/name.pdf>
- 17 This was the high-rank civil servant examination (*Kôtô-bunkan shiken*).
- 18 In 1942, higher officials and their equivalents numbered only 33,884, or 2.1%, of the 1,577,455 people working in all the central, local and other governmental organizations. See "Senzen no Kanryô Seido ni tsuite (Bureaucratic System in Prewar Japan)" Material 4, distributed at the Prime Minister's Administrative Reform Headquarters Meeting, September 7, 2007.
<https://www.gyokaku.go.jp/senmon/dai13/siryô4.pdf>
- 19 Hiroshi Ikeda (1881-1939) graduated from the Faculty of Law, Imperial Kyoto University and entered the Home Ministry in 1905. The next year he passed the *kôbun* examination and soon started his elite carrier as the higher official (class 7). When promoted to the director of the Road Division, Civil Engineering Bureau in 1915, Ikeda was in class 3. Then he was promoted to class 2 in 1918 as the director of the City Planning Division, and class 1 in 1923 as the director general of the Planning Bureau, Capital Reconstruction Agency. He left the ministry as the governor of Kanagawa prefecture in 1940. For his biography, see Shun-ichi J. Watanabe and Yasuhiro Sadayuki, "Ikeda Hiroshi Denki (The Biography of Hiroshi Ikeda) in *Toshi Keikaku no Pioneer no Ayumi (The Course of Pioneers of City Planning)*, Part 2, 139-228.
- 20 The Division was upgraded to the City Planning Bureau in 1922 but was assigned back to its position as a division in the Minister's Secretariat two years later. The City Planning Division was moved to the Planning Bureau in 1937 and to the Home Ministry's National Land Bureau in 1942.
- 21 "Sakurai Hideki Sensei ni Kiku (Interview with Mr. Hideki Sakurai)" in *Toshi Keikaku no Pioneer no Ayumi (The Course of Pioneers of City Planning)*, 1986, 37.
- 22 Article 4.
- 23 The Tokyo Commission was established in the Home Ministry, not in the prefecture. From 1922 onward, the Commission's name was changed from that of the city to the prefecture.
- 24 This decision, often called "city planning decision", made by the minister is one of the most important concepts in the 1919 planning system because it controls future land-use and construction projects in the name of the cabinet approval.
- 25 Nakamura, *op. cit.* p.82.
- 26 In 1938, these numbers increased each to: 23, 82, 106 and 264. Teizô Takeshige, "Toshi Keikaku Chihô Inkai no Jidai wo Omou (Remembering the Days of the City Planning Local Commission)," *Shin Toshi*, January, 1986, 47.
- 27 In Tokyo, they were stationed in the Home Ministry.
- 28 The technical *gishi* were not happy with the situation that they could not become the Division's director. But finally in the mid-1930s, the chance came in Kanagawa Prefecture, where Sukeyuki Nosaka, who, entering the Home Ministry in 1934, was a higher official civil engineering *gishi*, became the director for the first time in all prefectures. Takeshige, *loc. cit.*
- 29 Hideo Kimura, who became the higher official park bureaucrat of the Home Ministry in 1935, witnesses in: Hideo Kimura, "Naimushô Jidai no Toshi Keikaku: Honshô (City Planning in Home Ministry)" in *City Planning Review*, No. 144, 1987, 59.

Bibliography

- City Planning Association of Japan, ed., *Toshi Keikaku no Pioneer no Ayumi (The Course of Pioneers of City Planning)*. Tokyo: CPAJ, 1986.
- Editing Committee of the Home Ministry History, ed. *Nainushô Shi (History of the Home Ministry)*. Tokyo: Taikakai, 1971. 4 vols.
- Hall, Peter, *Cities of Tomorrow: An intellectual History of Urban Planning and Design in the Twentieth Century*, Oxford, Blackwell, 3rd ed. 2002.
- Ishida, Yorifusa, *Nihon Kin-Gendai Toshi Keikaku no Tenkai (Historical Development of the Modern and Contemporary City Planning in Japan), 1868-2003*. Tokyo: Jichitai Kenkyû-sha, 2004; original version, 1982.
- Kimura, Hideo, "Naimushô Jidai no Toshi Keikaku: Honshô (City Planning in Home Ministry)" in *City Planning Review*, No. 144, 1987, 59.
- Kurosawa, Ryô, *Naimushô no Seiji Shi (The Political History of the Home Ministry)*. Tokyo: Fujiwara Shobô, 2013.
- Millerson, G., *The Qualifying Associations: A Study in Professionalization*. London: Routledge & Kegan Paul,



- 1998; original version, 1964.
- Nakamura, Akira, "Taishō Hachi Nen Toshi Keikaku Hō Saikō: Toshi Keikaku Kuiki to Toshi Keikaku Chihō Inkaï no Seijiteki Danmen (Reconsideration of the City Planning Act of 1919: The Political Aspect of the City Planning Area and the City Planning Local Commission)," *Seiji Keizai Kenkyūjo, Meiji University*, 1980, 59-99. https://m-repo.lib.meiji.ac.jp/dspace/bitstream/10291/1690/1/seikeironso_49_1_59.pdf
- "Sakurai Hideki Sensei ni Kiku (Interview with Mr. Hideki Sakurai)" in *Toshi Keikaku no Pioneer no Ayumi (The Course of Pioneers of City Planning)*, 1986, 37.
- "Senzen no Kanryō Seido ni tsuite (Bureaucratic System in Prewar Japan)" Material 4, distributed at the Prime Minister's Administrative Reform Headquarters Meeting, September 7, 2007. <https://www.gyoukaku.go.jp/senmon/dai13/siryō4.pdf>
- Soeda, Yoshiya, ed., *Naimushō no Shakai Shi (The Social History of the Home Ministry)*. Tokyo: University of Tokyo Press, 2007.
- Takeshige, Teizō, "Toshi Keikaku Chihō Inkaï no Jidai wo Omou (Remembering the Days of the City Planning Local Commission)," *Shin Toshi*, January, 1986, 43-47.
- Takeshige, Teizō, "Naimushō Jidai no Toshi Keikaku no Kaisō (Memories of City Planning in the Days of the Home Ministry)" in *City Planning Review*, No. 144, 1987, 49.
- "Tokushū: Naimushō Jidai no Toshi Keikaku: Toshi Keikaku Shi Kenkyū no Miryoku to Hōhō (Special Issue: City Planning in the Era of the Home Ministry: Interest and Method of Planning History Research)," *City Planning Review*, No. 144, 1987, 48-61.
- Ward, Stephen, *Planning the Twentieth-Century City: The Advanced Capitalist World*. John Wiley & Sons, 2002.
- Watanabe, Shun-ichi J., *"Toshi Keikaku" no Tanjō: Kokusai Hikaku kara mita Nihon Kindai Toshi Keikaku (The Birth of "City Planning": Japan's Modern Urban Planning in International Comparison)*. Tokyo: Kashiwa Shobō, 1993.
- Watanabe, Shun-ichi J., "A Historical and Comparative Analysis of the Basic Character of the Japanese Planning System: Toward a Drastic Reform for Decentralization and Participation," Paper presented at the 14th International Planning History Society Conference, Istanbul, 2010.
- Watanabe, Shun-ichi J. and Yasuhiro Sadayuki, "Ikeda Hiroshi Denki (The Biography of Hiroshi Ikeda) in *Toshi Keikaku no Pioneer no Ayumi (The Course of Pioneers of City Planning)*, 1986, Part 2, 139-228.



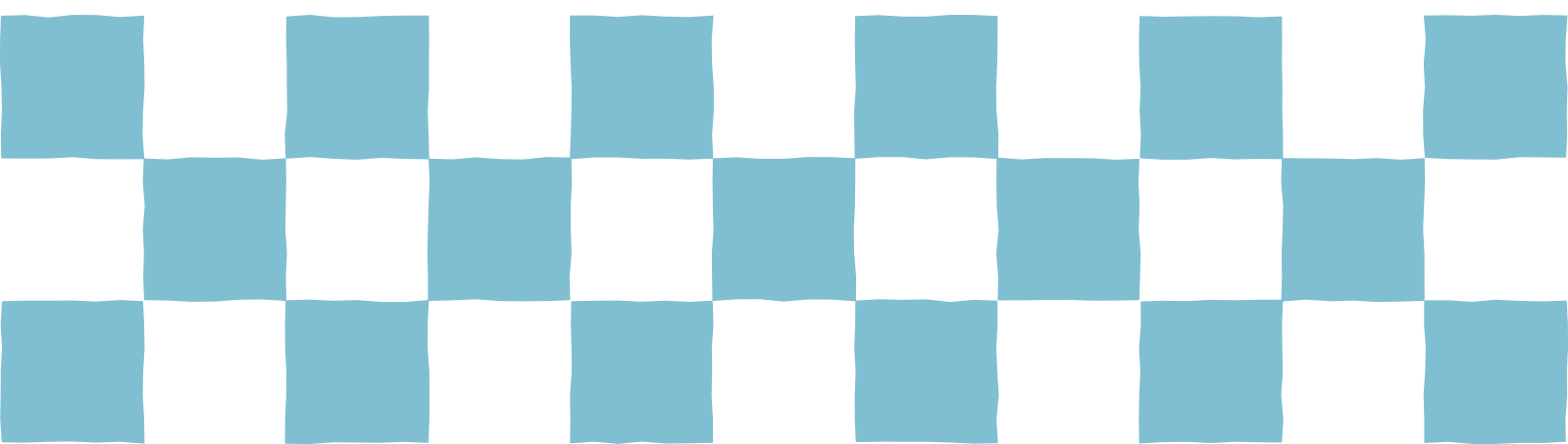
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

56 Urbanization and Planning Heritage



Evaluation of Urbanization Process of Galata (İstanbul) in the 19th Century Through Huber, Ostoya and Goad Maps

Merve Özbay Kınacı (İstanbul Technical University Faculty of Architecture Urban and Regional Planning PhD Programme) and Nuran Zeren Gülersoy (İstanbul Technical University Faculty of Architecture Department of Urban and Regional Planning)

Istanbul underwent great changes to its urban texture as a result of the period of westernization that took place in the 19th Century. Beyoğlu and Galata which represented the occidental and cosmopolitan face of the city, have been among the settlements most influenced from these changes. In this context, this paper focuses on spatial changes that took place in Galata, located in Beyoğlu County on the western part of Istanbul, which had been a settlement for Turks, Greeks, Jews and Galatians throughout the centuries. Galata underwent a rapid development process in the 19th century regarding urban and architectural characteristics such as the demolition of city walls, new design and planning approaches as well as regulations and precautions against fires.

This study aims to examine the spatial effects of the changes which occurred due to diverse processes, through old city maps of Beyoğlu and Galata, using the methods integrated to Geographic Information Systems (GIS)

The maps of G. D'Ostoya (1858-1860), R. Huber (1887-1891) and Charles E. Goad (1904-1906) are the documents which are used in this context. The common characteristic of these maps is the detailed depiction of urban and road patterns, buildings and open, green spaces. Moreover, there are other unique characteristics in each map about the context of urban change. For instance, the Ostoya Map reflects urban texture before the Great Fire of Beyoğlu (1870)

On the other hand, the Huber Map contains details about the urban pattern after this fire and some other small ones as well as the changing urban texture which reflected the impact of new regulations and the activities of the Sixth Municipal, the first local government. The third and last map, Goad Map, was the first chart to be used for insurance against fires and indicates the physical situation of the urban fabric at the beginning of the century.

In this regard, in the first part, a literature survey has been made about the existing situation of Galata in the 19th century which provides a fundamental starting point for the study. However for a more useful framework urban development of Galata is examined with GIS methods to explore similarities and differences on urban pattern in different time periods using old maps. The maps are coordinated with GIS software and the items such as blocks, buildings, and open spaces are transformed into vector data to make comparisons and superpositions. A general assessment has been made in the last part in light of all data obtained as a result of both a literature survey and a map analysis. Thus, the process of urbanization and the social, functional and physical transformation of urban space is revealed, and conclusions are drawn about how Galata is exposed to changes in the 19th century.

“Western Imitation” in modern China’s urban planning practice between the Late Qing Dynasty and the Early Republic of China (1860-1927)

Xiaogeng Ren (Southeast University), Baihao Li (Southeast University) and Diwen Shi (Southeast University)

At the Late Qing Dynasty and the Early Republic of China, the ancient Chinese city was gradually transformed into a form that closes to a city with modern significance in terms of nature, the concept of construction, the management system and the spatial structure. The driving force behind the transformation of Chinese cities lies in two parts: first, foreign colonialists who planned and constructed the concessions, leased territories and colonial cities; second, Chinese who promoted the improvement of the old cities, established self-opening port cities, constructed a new type of cities. Since the Western powers had previously dominated the global capital trade model and implemented the urban planning and construction paradigm, most of the modern Chinese learned and imitated the western models when they re-planned the original Chinese city areas. Especially since the Sino-Japanese War of 1894-1895, due to the change in the ideology of "Western science", the Chinese truly had recognized the modernity brought by Western urban planning and implemented urban planning practices that imitated the "Western model."

Based on relevant historical materials and existing research literature, this paper analyzes how the Chinese (government) learned and imitated the knowledge of Western urban planning at the stage of late Qing and the early Republic of China (1860-1927)

From the source of imitation, this paper tried to construct a basic framework for the history of urban planning in early-modern China: (1) The renewing planning for old urban areas and the planning for self-opening trading port, which were modeled on the treaty ports (concession); (2) Nantong, Kunming and other cities' planning which imitated Japan; (3) Guangzhou, Shantou and other cities' planning which imitated the model from Europe and the United States. Most of these planners are politicians, social reformers, intellectuals and overseas Chinese with advanced notions. Their understanding and longing for the western urban planning have laid the foundation for China's urban planning towards modernization and have become an important part of the history of modern urban planning thought.

Heritage value attribution: the case of the Alagadiço Novo Historical Site, Fortaleza, Ceará, Brazil

Marina de Castro Teixeira Maia (Federal University of Rio Grande do Sul) and Inês Martina Lersch (Federal University of Rio Grande do Sul)

This paper aims to investigate the attribution of heritage value to the Historical Site Alagadiço Novo, located in Fortaleza, capital of the state of Ceará, Brazil. The Site is protected by the National Artistic, Historical and Heritage Institute (IPHAN), Brazil's federal heritage entity. The relevance of the investigation lies on the verified gap regarding the history of the Site, its insertion in Fortaleza's urban context and its comprehension as an heritage asset, recipient of historical and cultural values. The guiding question of this study is: what legitimized the preservation of the Alagadiço Novo over time?

The Alagadiço Novo was a significant scenario to the trajectory of the Alencar, which was an important family of the local politics. The Site was bought in the beginning of the 19th century by José Martiniano de Alencar, priest, republican rebel, president of the Province of Ceará between 1834 and 1837 and also senator for the Empire. His son, José de Alencar, a great writer from the Brazilian literary Romanticism period, was born there. At that time, the region was called Messejana and consisted in an old village of Indians created by royal document in 1760. The Site also witnessed the birth of the most famous heir of José Martiniano, the writer José de Alencar, great representative of Brazilian literary Romanticism. Since 1964, the Site belongs to the Federal University of Ceará (UFC) and it houses academic and museological activities.

There is an evident connection between the Alagadiço Novo and the life of the novelist. However, the saga of the Alencar family and its relation to those lands are previous to that. The place housed other events of the family that interfered in the political narrative of the capital. In its origin, the Site was located in the suburbs of Messejana and, nowadays, it is immersed in Fortaleza's urban sprawl process, which is why it lost vertiginous portions of its original territory.

The Site currently consists of 7 ha of densely arborized land, centenary species included. The list of elements that are preserved within its limits includes: a small historical building where the novelist was born, the ruins of the first steam mill of Ceará, an administrative pavilion built by UFC in 1965 and the remnants of a pond installed by the Alencar family in the mid 19th century.

Recovering Alagadiço Novo's history is part of the comprehension of a larger process: the Fortaleza and Messejana's area transformation, and it was undertaken through the study of Urban Evolution. This paper had the purpose to understand the configuration of the territory along with the values that legitimated the heritage protection. Also, the existent link with novelist José de Alencar was taken into consideration, as the institution that today makes use of the Site's area is called Casa de José de Alencar (House of José de Alencar) - an UFC entity - and publicizes it as the author's birthplace.

Regarding the method, the historiographic path was chosen in order to better understand both the Site's configuration and insertion in the city transformation and the heritage value attribution conferred to Alagadiço Novo by the national and international preservation regulations. In addition to being historiographical, this research is also qualitative and was carried out through literature review in what it refers to the biography of the historical characters, and documentary research in what it concerns the Site's land documents.



An Evaluation of the Urbanization Process of Galata (İstanbul) in the 19th Century Through the Maps of Huber, d'Ostoya and Goad

Merve Özbay Kınacı*, Nuran Zeren Gülersoy**

* *PhD Student, Graduate School of Science, Engineering and Technology, Urban and Regional Planning PhD Program, Istanbul Technical University & 85.merv@gmail.com*

** *Faculty Member, Department of Urban and Regional Planning, Istanbul Technical University & zeren.gulersoy@gmail.com*

İstanbul underwent great changes to its urban texture as a result of the period of westernization that took place in the 19th Century. Beyoğlu and Galata, which represented the occidental and cosmopolitan face of the city, were among the settlements most influenced by these changes. This study aims to examine the spatial effects of these changes through the integration of old city maps of Beyoğlu and Galata with modern Geographic Information Systems (GIS). The maps of G. d'Ostoya (1858-1860), R. Huber (1887-1891) and Charles E. Goad (1904-1906) are the documents which are used in this context. The maps have been coordinated with GIS software and the items (such as buildings, roads, empty spaces) which they included as raster data have been transformed into vector data to make comparisons and superpositions possible within the GIS environment. Thus, the transformation of urban space can be revealed, and conclusions about how Galata was exposed to changes in the 19th Century can be drawn.

Keywords: urbanization, historic urban fabric, 19th century, geographic information systems, old city maps, İstanbul, Beyoğlu, Galata

Introduction

Urban development of İstanbul in the 19th Century was guided by social and political events such as deep-rooted administrative reforms, comprehensive urban legislation, economic and educational innovations as well as post-war agreements. During this period, the urban texture of the city also went through several essential transformations as a consequence of new regulations stemming from responses to natural disasters such as fires and earthquakes. In this context, this paper focuses on the spatial changes that took place in Galata, which is located in Beyoğlu County in the western part of İstanbul. The goal of this study is to use comparative data acquired from old maps and modern GIS methods to reveal the changes to Galata.

Methodology and the Originality of the Study

The methodology of the study includes two main steps. The first consists of a study of the literature regarding Galata's situation in the 19th Century. The second involves the process of putting forward the changes made to the urban fabric through the use of old maps. In this step, firstly, the maps of G. D'Ostoya, R. Huber and Charles E. Goad, were coordinated. Then, the elements of the urban fabric (roads, buildings, building blocks etc.) were transformed into vector data using ArcMap 4.1 software. Thus it is possible to make schemes for these three maps and to compare them with each other.

As a result of this comparison, together with the help of information provided by the literature, the spatial changes that occurred in Galata were examined under two titles: "Changes in the Road Scheme" and "Changes in the Urban Texture". Thus, conclusions can be made about the scope and dimensions of the urban change, and also the effects of different processes on these changes that took place during the 19th Century.

The difference between this study and the others which have aimed to examine changes in urban textures is that its scope includes quantitative analysis and comparisons as well as a study of the literature. Within this scope, changes in the urban space are open to inquiry via vector data on GIS databases. These inquiries can be presented with different visualization techniques, and can be examined through thematic maps (schemes).

Galata in the 19th Century

Galata had been a settlement for Turks, Greeks, Jews, and Galatians throughout the centuries. In the mid-19th Century, the western and northern borders of Galata, which were by then dense residential areas, were set by the city's ancient fortifications. However, because of the increasing population, the settlement spread beyond the walls. As the Ottoman Empire surrendered to the economic hegemony of the European States during the Westernization



Era, Galata became the first region to host western merchants and to respond their needs.¹ As a result of the commercial agreements signed with the dominant European States in 1838, mainly England, large commercial retail enterprises and banks developed in Galata, and Karaköy in particular became a lively central business district.²



Figure 1: *The existing location of Galata and its environs* [Google Earth Aerial Photo: Accessed April 15, 2018]

In the 19th Century, Galata was subject to more urban planning activities than the İstanbul Historical Peninsula, and some innovations were also first implemented there.³ For his reason, many administrative organizations were first established in Beyoğlu-Galata.⁴ Within the borders of the Ottoman Empire, the first municipality to follow a European model was the Sixth Municipality which was founded in 1857 in Galata.⁵ There were also significant investments in transportation in Galata. These include the Galata Bridge, which took its final form in 1878,⁶ and the Tunnel connecting Karaköy and Pera which was constructed between 1871-1874.⁷

The process of rapid urbanization in Galata resulted in regulations being implemented by the Sixth Municipality. These dealt with the area's urban texture and included the demolition of the Galata Walls, the removal of the cul-de-sac, the opening of broader streets and squares, and the improvement of ruined areas.⁸ Apart from the urban projects implemented by the local government, there were also significant developments regarding the area's architecture. In the 19th Century, as a result of Galata and Beyoğlu being exposed to a considerable number of Italian workers and the unemployed, the construction of the masonry building stock became the work of Italian architects, master-builders and labourers.⁹

¹ Çelik, *19. Yüzyılda Osmanlı Başkenti Değişen İstanbul*, 34-35.

² Ortaylı, "Sanayi Çağında İstanbul."

³ Şehsuvaroğlu, *İstanbul'dan Sesler ve Renkler*, 134.

⁴ DİA, "İstanbul", 266.

⁵ İnalçık, "Galata", 352-353.

⁶ Çelik, 117.

⁷ Kuban, *İstanbul Bir Kent Tarihi: Bizantion, Konstantinopolis, İstanbul*, 360.

⁸ Çelik, 38-39.

⁹ Ortaylı, "Galata", 305-306.



Figure 2: Renate Schiele and Wolfgang Müller-Wiener. *A streetscape from the Rue Hendek (Büyük Hendek Street) ended with Galata Tower in the 19th century* [İstanbul: 1988]

Another situation that affected Galata in the 19th Century was its wooden housing stock and its vulnerability to the periodic fires that broke out. The biggest of these was the Beyoğlu (Pera) Fire of 1870 which caused the loss of 3000 buildings¹⁰, although the Galata region was less affected by this enormous fire than Taksim and its environs. There were several other major fires during the same period. These occurred on the outskirts of Galata Tower and Kemeraltı Street (1852), in Yüksek Kaldırım Street (1860), between Tophane and Galata (1874), on the northern sides of Galata Tower, around the Municipal building (1880s) and on the northern sides of Galata (1890s).¹¹ These fires brought about some major changes in the road scheme, urban texture and architectural features of Galata. Furthermore, the reorganization and reconstruction of the urban patterns damaged by these fires were made in accordance with new planning rules, and this contributed to the physical change and development of the Galata.¹² As a consequence, the urban texture of Galata underwent constant change throughout the century due to the impact of disasters, administrative arrangements and variations in its social structure.

Examining the Changes to Galata During the 19th Century

The method described in the first part of this paper will be used to examine the urban changes that took place in Galata in the 19th Century. In this context, the schemes obtained from the maps will be analyzed and compared with each other under two main titles: “The Changes in the Road Scheme of Galata” and “The Changes in the Urban Texture of Galata.” Thus, the arrangements and changes related to transportation can be put forward, and conclusions can be made about the changing situations of figure-ground perception and open-green space distribution.

Three maps were used in this study. Of these, the d’Ostoya and Huber Maps were drawn in the second half of the 19th Century, and the Goad Map was prepared at the beginning of the 20th century when the Ottoman Empire still provided continuity for mapping and planning activities. Particularly in the second half of the 19th Century, cadastral maps started to be prepared after questions of ownership increased in importance. Another factor regarding the increase in cartographical activity is the necessity of identifying the houses, and plots damaged by fire and those maps were beneficial in the matter of determining ownership and property lines after major conflagrations.¹³

¹⁰ Tekeli, *İstanbul’un Planlanmasının ve Gelişmesinin Öyküsü*, 47.

¹¹ Öncel, *Apartman Galata’da Yeni Bir Konut Tipi*, chap. 1.

¹² Özyurt, “19. Yüzyılın İkinci Yarısı ve 20. Yüzyıl Başındaki Yangınlar Sonrası Galata’da Kentsel Dokunun Değişimi ve Korunmuşluk Durumunun İncelenmesi”, 42.

¹³ Kayra, *Eski İstanbul’un Eski Haritaları*, 69.



The first map is the 1:2000 scale d'Ostoya Map. It is often considered more important because it was drawn during the period before the Great Pera (Beyoğlu) Fire (1870). It shows the area between Galata and Taksim, and contains details of the blocks, buildings and building materials. The d'Ostoya Map also includes monumental buildings such as towers, mosques, churches and embassies, and furthermore one can understand the road pattern and the distribution of the open and green spaces from this map.¹⁴ According to the d'Ostoya Map, wooden buildings were concentrated on the western side of Galata Tower and were the dominant element of that part of Galata's urban pattern. It also shows dense masonry buildings on the southern side of Galata Tower and an overall urban pattern determined by the ancient walls. Moreover, the road network contains a large number of cul-de-sac, and most of the buildings have gardens. The building density decreases and the amount of open-green spaces increases further towards the western side of the Tower (Figure 3).



Figure 3: G. D'Ostoya. *Map of the Galata, Pera and Pangaltı and the detailed study area*: [İstanbul: 2017]

Towards the end of the 19th Century, the 1:1000 scale Huber Map of Beyoğlu and Galata, dated 1877, was drawn.¹⁵ It contains details of buildings, roads, monumental buildings, trees, empty spaces and plots. This map was drawn for insurance companies rather than for urban planning requirements.¹⁶ However, it shows how the urban texture was influenced by the Great Pera Fire (and several smaller fires) at the end of the century, as well as the spatial effects of the Sixth Municipality's activities. When the Huber Map is compared to the d'Ostoya Map, it can be seen that most of the cul-de-sac had been opened and the transportation network had wider streets. Furthermore, by the time of the Huber Map, the ancient walls of Galata had been demolished, and the urban pattern inside the walls had been re-designed. Moreover, large squares had been opened in Şişhane and Karaköy, the building density had increased, and the shoreline had gained a different appearance due to new arrangements (Figure 4).

¹⁴ Dağdelen, "İstanbul'u Haritalarda Gezme: Atatürk Kitaplığı Harita Arşivi", 34.

¹⁵ Kayra, 69.

¹⁶ Tekeli, "Haritalar", 559.



Figure 4: R. Huber. *Map of the Beyoğlu and Pera and the detailed study area: [İstanbul: 2017]*

The third map examined in this study is the 1:600 scale insurance map of Beyoğlu and Galata which was drawn by Goad between 1904 and 1906. This map contains details about the urban texture such as buildings, building usage, construction techniques, materials, walls, windows and roof types, and includes both public and monumental buildings.¹⁷ The Goad Map contains almost the same road scheme as the Huber Map, but the wooden building stock shown in the d'Ostoya Map has been replaced by brick and stone buildings. Furthermore, the map indicates changes to the distribution of open spaces, urban pattern and the shoreline (Figure 5).

¹⁷ *ibid*, 559.

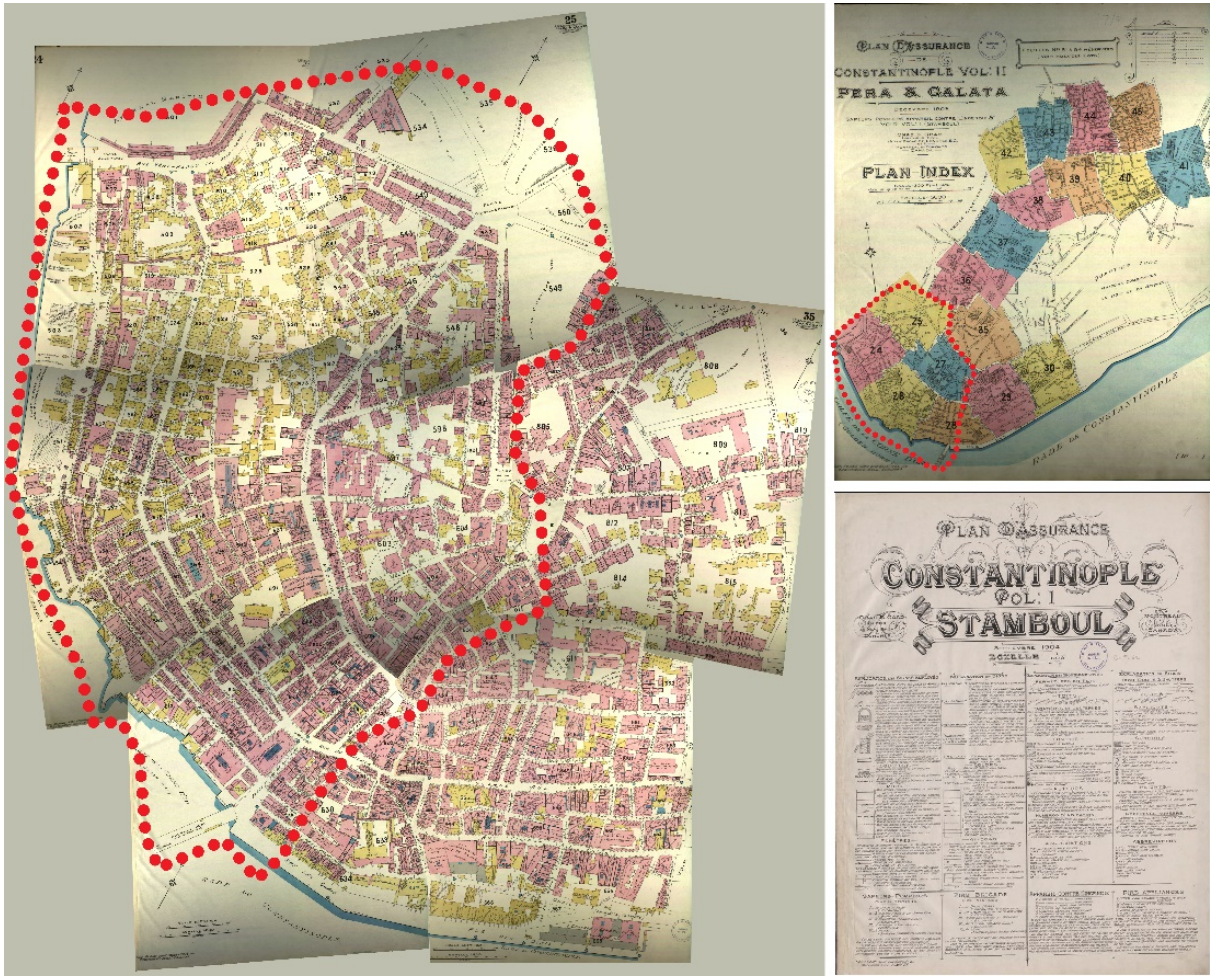


Figure 5: C. E. Goad. *Map of the Pera and Galata and the detailed study area*: [İstanbul: 2017]

The Changes in the Road Scheme of Galata

The most important and notable changes in Galata are those made to the transportation structure. The road texture in the d'Ostoya Map (Figure 6-a) is a mostly organic pattern that has lots of cul-de-sac. However, the Huber Map (Figure 6-b), has fewer cul-de-sac and shows a hierarchy regarding the road texture between main and other roads. On the other hand the Goad Map (Figure 6-c), shows a road scheme that consists of two main arteries in the east-west direction and secondary roads which are connected to them.

Due to the increased commercial activity in Galata, the need to expand the road network emerged, and investments to connect the settlement to the other side of Golden Horn were made throughout the 19th Century. During the reign of Sultan Mahmud II, two bridges were built. The first was the Unkapanı Bridge, which was built to connect Azapkapı and Unkapanı, and the other was the Galata Bridge, which was built in 1845. The original Galata Bridge was built with wood and served the citizens for 18 years. It was replaced with a wider wooden bridge in 1863 and finally in 1878, it was replaced by a permanent iron structure.¹⁸ It is possible to see the Unkapanı and Galata Bridges in the schemes of Ostoya, Huber and Goad Maps (Figure 6-a, 6-b and 6-c).

The expansion of the road network in Galata was not limited to the construction of bridges but also included projects which were implemented by the Sixth Municipality. The most radical of these was the demolition of the Galata walls and the design of new streets and settlement areas such as Yenikapı, Şişhane, Büyük Hendek, Boğazkesen and Galata Streets.¹⁹ The demolition of the walls also made it possible for the municipality to carry out some transformation projects. For instance, Mumhane Street, was one of the most dilapidated areas of Galata, but it was transformed into “one of the most beautiful streets”.²⁰ It is also possible to observe all these changes in the urban space from the maps. In the scheme of the d'Ostoya Map (Figure 6-a), the walls of Galata are still standing.

¹⁸ Çelik, 117.

¹⁹ Tekeli, 78.

²⁰ Çelik, 95.



However the walls are not present in the scheme of the Huber Map (Figure 6-b), and there are new streets and settlement areas where the city walls stood. Although according to the scheme of the Goad map (Figure 6-c), a small part of the walls still remained, when this is compared the situation in the mid-19th Century (Figure 6-a) it is clear that most of the walls have disappeared. This is a consequence of the demolition activities which began in 1864.



Figure 6: Schemes of Galata according to old maps using the methods integrated to Geographic Information Systems (ArcGIS 4.1 Software): (a) Ostoya Map, (b) Huber Map, (c) Goad Map

Another significant change affecting the road scheme and urban fabric in Galata was the design of squares which were implemented by the Sixth Municipality. The first one is Şişhane Square, a focal point located at the intersection of several main arteries which has a feel of European urban design projects, enhanced by the Sixth Municipality building which stood at its centre.²¹ Şişhane Square does not exist in the scheme of the d'Ostoya Map (Figure 6-a), but it can be seen in the scheme of the Huber Map (Figure 6-b). The final version of the square is shown in the scheme of the Goad Map (Figure 6-c).

The second square implemented by Sixth Municipality is Karaköy Square, which was created at the foot of the Galata Bridge in 1858. It was created in response to the changes in Karaköy that were due to the increasing population and commercial activities. The square was intended to prevent confluence in the area and to facilitate police inspections.²² In the scheme of the d'Ostoya Map (Figure 6-a), it is possible to see the first instance of this square. The Huber map (Figure 6-b) shows the situation of the square at the end of the century, and the nearest situation to that of the present day can be seen in the scheme of the Goad map (Figure 6-c).

²¹ *ibid*, 59.

²² *ibid*, 91-92.



The Changes in the Urban Texture of Galata

The factors that led to changes in the texture of the Galata in the 19th Century can be grouped under two headings. The first is the area's intense urbanization, and the second is the destruction caused by fires. As a result of the rapid urbanization, the empty spaces in 1840 in Galata filled up in the 1870s, and the built environment expanded to the north and north-west in the early 20th century.²³ This situation can also be seen clearly throughout the schemes in Figure 7. According to the scheme of the d'Ostoya Map (Figure 7-a), large spaces and green areas are located in the northern and western parts of Galata. However, in the scheme of the Huber Map (Figure 7-b), these green areas are replaced by buildings, and there is a visible decrease in the number of empty spaces. The situation at the beginning of the 20th century can be seen from the Goad Map (Figure 7-c). According to this scheme, the built parts are more dense, and there are fewer open and green areas.



Figure 7: Schemes of Galata in terms of built environment and green areas according to old maps using the methods integrated to Geographic Information Systems (ArcGIS 4.1 Software): (a) Ostoya Map, (b) Huber Map, (c) Goad Map

The rapid urbanization of the 19th Century also affected Galata's shoreline. In this period, the warehouses of merchants, coffee houses, boat houses and some mansions existed along the Galata coast, but the dominant factor was the commercial activities of the Greek merchants.²⁴ It is possible to see the increasing construction along the shoreline from the schemes in Figure 5. In the scheme of the d'Ostoya Map (Figure 7-a), there is a small built-up area on the west side of the seashore near the Unkapanı Bridge, and the buildings are concentrated closer to the Galata Bridge. However in the Huber Map (Figure 7-b), the built-up area sprawls along both the western and the eastern parts of the shoreline. The most remarkable form of this situation is shown in the later Goad Map (Figure 7-c).

²³ *ibid*, 35-36.

²⁴ Şehsuvaroğlu, 133.



The changes to, and developments of, the urban fabric not only occurred due to the urbanization but also because of several enormously destructive fires. Since Beyoğlu and Galata had kept their wooden urban fabric until the mid 19th Century, the urban pattern experienced large-scale change and transformation processes after each fire.

As previously stated, 3000 buildings were damaged in the 1870 Beyoğlu (Pera) Fire which was the largest fire occurred in the 19th Century.²⁵ Apart from this great fire, many others also affected Galata. Dozens of houses and offices were burned on Yüksek Kaldırım Street in 1860, and a fire which affected the whole Kemeraltı neighbourhood broke out in 1865. The Galata Fire of 1874, which actually started in Tophane, affected Galata Street as well and destroyed more than 300 buildings.²⁶ Because of these fires, the urban fabric shown in the scheme of the d'Ostoya Map (Figure 7-a) changed in terms of the transportation network, building order and figure-ground situation. The Huber Map (Figure 7-b) shows new and wider roads, and new squares and blocks with open spaces. These radical changes and designs could only be undertaken in the aftermath of these fires.

The fires that affected Galata continued throughout the 1880s. As a result of a fire in 1887, the buildings, constructed on new plots between Büyük Hendek Sokak (between the Galata Tower and Şişhane Square in the east-west direction) and the Şişhane Square Municipality building was demolished. In 1888, the buildings on Şair Ziya Paşa Street (between Galata Tower and Şişhane Square in the north-south direction) were damaged by another fire.²⁷ In order to understand what kind of changes these fires caused to the urban fabric, it is necessary to compare the schemes of the Huber Map (Figure 5-b) and the Goad Map (Figure 5-c). It is possible to determine that although the main axes remain the same, there are changes in the routes of some alleys. In addition, in some affected areas, the roads have expanded, and small squares have appeared. Moreover, according to the scheme of the Goad Map, in some parts of the urban pattern, the configuration of buildings has turned to a more discrete form when it is compared to the scheme of Huber map. Another detail of the Goad map scheme is the appearance of fire hydrants located on the main roads, representing the fire prevention measures taken at the beginning of the 20th century.

Conclusions

Beyoğlu and Galata were the areas most effected by the westernization that occurred during the 19th Century. Galata became an important commercial centre during this period, and continued to grow in parallel with the development of Beyoğlu. It lead the field regarding administrative innovations, urban development, infrastructure and transportation implementations, and these developments accelerated its urbanization process. As a consequence, the urban pattern of Galata changed and transformed. The most prominent of these changes occurred in built-up areas and transportation links. The designs of new roads, settlements and squares, the construction of bridges, the arrangements of open-green spaces and the shoreline, together with the fires which broke out periodically during the century have been the main factors responsible for shaping the urban texture of the area.

The changes that took place in Galata's urban texture during the 19th Century can be revealed by using three maps which were prepared between 1850 and 1906, and GIS. The clearest conclusion to be made in this context is that Galata was subject to rapid urbanization in which the processes of change, transformation and reconstruction were intertwined. The urbanization that took place in Galata had both negative and positive aspects. Galata, which had a reputation as a commercial centre, became the centre of contemporary urban planning and design which produced a similar infrastructure and similar social services as European cities. Despite these positive effects, as a result of the radical arrangements and urbanization process, some historical structures such as the ancient walls were almost completely destroyed due to a lack of understanding of urban conservation. On the other hand, the urban pattern which originally had a less intense built-up area with more open-green spaces, evolved into one consisting of more adjacent blocks. Thus, both positive developments, which emerged through urbanization and improved infrastructure, and negative ones, in terms of conservation and effects on the natural environment, occurred together in Galata.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Merve ÖZBAY KINACI is currently a Graduate student at Istanbul Technical University's Graduate School of Science, Engineering and Technology, Urban and Regional Planning PhD Programme. She completed her Masters

²⁵ Tekeli, 47.

²⁶ Öncel, chap. 1.

²⁷ *ibid*, chap. 1.



at Istanbul Technical University as in the Interdisciplinary Urban Design Programme. Her primary areas of interest are urban design, urban conservation, GIS in urban planning and urban sociology. She has worked in the Istanbul Metropolitan Municipality Directory of City Planning as an urban and regional planner since 2009.

Nuran Zeren GULERSOY graduated as an architect from Istanbul Technical University in 1974. She received her master's degree and her doctorate in urban planning from the same University. Presently, she is a professor of the Department of Urban and Regional Planning at the ITU Faculty of Architecture. Her primary areas of interest are urban planning, urban conservation and urban design. She is a member of the ICOMOS National Committee, a Council Member of Europa Nostra and Secretary General of IPHS (International Planning History Society).

Bibliography

- Çelik, Zeynep. *19. Yüzyılda Osmanlı Başkenti Değişen İstanbul*. İstanbul: İş Bankası Kültür Yayınları, 2016.
- Dağdelen, İrfan. "İstanbul'u Haritalarda Gezmek: Atatürk Kitaplığı Harita Arşivi". *Journal of İstanbul's Culture and Art*, no. 13 (2012), 23-34.
- DİA (Türkiye Diyanet Vakfı İslam Ansiklopedisi)*. İstanbul: Ali Rıza Baskan Güzel Sanatlar Matbaası A.Ş., 1988.
- İnalçık, Halil. "Galata". In *Dünden Bugüne İstanbul Ansiklopedisi*, 349-354. İstanbul: Ana Basım A.Ş., 1994.
- İstanbul Metropolitan Municipality (İBB) Directory of City Planning Archive, 2017.
- Kayra, Cahit. *Eski İstanbul'un Eski Haritaları*. İstanbul: İstanbul Büyükşehir Belediyesi Kültür İşleri Dairesi Başkanlığı Yayınları, 2004.
- Kuban, Doğan. *İstanbul Bir Kent Tarihi: Bizantion, Konstantinopolis, İstanbul*. İstanbul: Türkiye Ekonomik ve Toplumsal Tarih Vakfı, 2004.
- Ortaylı, İlber. "Sanayi Çağında İstanbul". Accessed December 12, 2016.
<http://www.istanbul.net.tr/istanbulrehberi/yazilar/sanayicagindaistanbuli/98/1>.
- Ortaylı, İlber. "Galata". In *Türkiye Diyanet Vakfı İslam Ansiklopedisi*, 304-307. İstanbul: Ali Rıza Baskan Güzel Sanatlar Matbaası A.Ş., 1988.
- Şehsuvaroğlu, Haluk Y. *İstanbul'dan Sesler ve Renkler*. İstanbul: Creative Yayıncılık ve Tanıtım Ltd. Şti., 1994.
- Tekeli, İlhan. *İstanbul'un Planlanmasının ve Gelişmesinin Öyküsü*. İstanbul: Tarih Vakfı Yurt Yayınları, 2013.
- Tekeli, İlhan. "Haritalar". In *Dünden Bugüne İstanbul Ansiklopedisi*, 557-560. İstanbul: Ana Basım A.Ş., 1994.
- Öncel, Ayşe Derin. *Apartman: Galata'da Yeni Bir Konut Tipi*. İstanbul: Kitap Yayınevi, 2010.
- Özyurt, Ekin Deniz. "19. Yüzyılın İkinci Yarısı ve 20. Yüzyıl Başındaki Yangınlar Sonrası Galata'da Kentsel Dokunun Değişimi ve Korunmuşluk Durumunun İncelenmesi." MSc Thesis, İstanbul Technical University, 2007.

Image sources

Figure 1: Google Earth Aerial Photo, (Accessed April 15, 2018.)

Figure 2: Schiele, Renate and Müller-Wiener, Wolfgang. *19. Yüzyılda İstanbul Hayatı*, 16. İstanbul: Roche, 1988.

Figure 3, 4 and 5: İstanbul Metropolitan Municipality Directory of City Planning Archive.



"Western Imitation" in modern China's urban planning practice between the Late Qing Dynasty and the Early Republic of China (1860-1927)

Ren Xiaogeng*, Li Baihao**, Shi Diwen***

* *PhD, School of Architecture in Southeast University, renxiaogeng@126.com*

** *Professor, School of Architecture in Southeast University, libaihaowh@sina.com*

*** *Master, School of Architecture in Southeast University, 271255470@qq.com*

At the Late Qing Dynasty and the Early Republic of China, the ancient Chinese city was gradually transformed into a form that closes to a city with modern significance in terms of nature, the concept of construction, the management system and the spatial structure. Since the Western powers had previously dominated the global capital trade model and implemented the urban planning and construction paradigm, most of the modern Chinese learned and imitated the western models when they re-planned the original Chinese city areas. From the main source of imitation, it contains three categories: the concession, Japan, Europe and the United States. From the practitioner of imitation, most of them are politicians, social reformers, intellectuals with western culture and overseas Chinese with advanced notions. Their understanding and longing for the western urban planning laid the foundation of the transformation of China's modern urban planning. Based on relevant historical materials and existing researching literature, this paper analyses the process of understanding, imitating and implementing in modern China's urban planning practice between 1860-1927 so as to make it clear that the particularity and universality in the birth and formation of modern Chinese urban planning.

Keywords: Planning history, Urban planning practice, Western imitation, The exchange of planning ideas, Modern China

Introduction

The period of Late Qing and the Early Republic of China was the transition phase from Chinese traditional cities to modern cities. After the defeat of the Opium War in 1840, China was forced to be involved in the development of the world capitalist economy and to shake the traditional Confucian values that have been formed in China for thousands of years. With the tide of China's opening to the outside world and the rise of advanced productivity, a batch of coastal and littoral port cities took the lead in developing into industrial and commercial cities and drove the rise of traffic, industrial and mineral cities as well as the transformation process of traditional cities.¹ Such a revolution has actually opened up the process of the modernization of Chinese cities, and the force for the revolution comes from two mutually opposite subjects: One is foreign settler, as forerunners, they constructed concessions and leased territories and colonized cities in order to operate Chinese market; The other is rejuvenated Chinese people, as latecomers, they have established self-operated trading ports and constructed new markets and new cities (in order) to resist the impact of foreign capital. According to historical researchers, China (Chinese people) who lack of modernization experiences was extremely puzzled when facing such a new administrative unit—Urban— especially in terms of administrative organization, planning for construction, and management system, etc. Actually, in order to construct the so-called modern city in their mind, they not only explored by themselves but observed, researched and selectively simulated the Western practices².

The modern time in China was generally begun on the Opium War of 1840³, however, for the modern urban planning of China, it actually began in 1860, and the construction of municipal facilities such as building roads in Shanghai was taken as the prototype of modern city planning in China⁴. After continuous efforts and exploration, until the establishment of the Nanjing National Government in 1927, Chinese modern urban planning has entered an institutionalized stage⁵. In this paper, the period of the late Qing Dynasty and the early Republic of China was mainly concentrated between 1860-1927. This period is not only the transition period of traditional Chinese cities and ideological concepts but also the birth and breeding period of modern city planning in China. At this stage, under the constant impact of Western material and spiritual civilization, the Chinese people continue to think and explore the mode of modernization that suits the Chinese cities themselves and has a different understanding of the West⁶.

What needs to be emphasized is that the West here is actually the West in the eyes of the Chinese people, and it is not a specific geographical concept but refers to an external, new knowledge system compared with the Eastern philosophy system. In addition, the Chinese understanding of the West in modern times was actually a dynamic



development process, and It has been constantly changing under the circumstances that were defeated by the Western invaders and the continuous infiltration of western capitalist economy and culture. From the rejection of the West in the early 19th century to the acceptance of the West in the 1920s, China has been going through a long time. Since the Opium War of 1840, “first, technologies affecting material existence; then principles concerning state and society; and finally, ideas touching the inner core of intellectual life. The Self-strengthening Movement of the T’ung-Chih [Tongzhi] period, the reform movement of 1898, and the May Fourth Movement of 1919 marked the climactic points of these three stages”⁷. As part of the influence of western culture, modern urban planning in China was continuously introduced and implemented in this historical context.

Based on relevant historical materials and existing research literature, this paper analyzes how the Chinese (government) learned and imitated the knowledge of Western urban planning at the period of late Qing and the early Republic of China(1911-1949). From the imitation perspective, this paper tries to construct a basic framework for the history of urban planning in early-modern China which could be divided into three parts: (1) Imitating Concession: The renewing planning for old urban areas and the planning for self-opening trading port; (2) Imitating Japan: Nantong, Kunming and other cities’ planning; (3) Imitating Europe or America: Guangzhou, Shantou and other cities’ planning.

Imitating Concession

After the Opium War(1840), due to the economic and trade invasion of foreign colonizers, foreigner’s residence, also being called the concession⁸, appeared in coastal areas and along rivers in China. The earliest concession was obtained in 1843 by the United Kingdom in Shanghai, and then Western countries successively established concessions in cities such as Shanghai, Xiamen, Guangzhou, Tianjin, Zhenjiang and Hankou by the time of the Boxer Rebellion (1902). These Western-style blocks have become ‘windows’ for contacting Chinese and western cities and their municipal construction techniques⁹.

In 1865, 26 roads had been built in Shanghai’s public concessions, which were designed in a chessboard layout and formed a network of urban main road. At the same time, the concession also developed road cleaning management and road public facilities, and it has become a neat, clean and advanced Western-style block, which is different from the very beginning of “a mudflat, number of huts”. The concession, with its neat and flat roads, modern carriages and streetlights, is presented to the Chinese people of Shanghai in its advanced posture, so that they think that the difference between the concession and the Chinese community is too huge and even felt “the roads to the concession are flat, while the Chinese communities are in turmoil”, and even marvels at the difference between them just as heaven and hell”¹⁰. In order to change the worse sanitary conditions, they attributed the construction advantage of concession to urban engineering and practically absorbed public works construction and public health among them¹¹.

In Shanghai, from the 1860s onwards, Shanghai taotai(道台) and Shanghai county magistrate(知县) began to imitate the concession of municipal management methods to improve the Chinese territory.¹² In the 1890s, the Chinese territory became more and more decayed, even becoming an important reason for Cross-border road construction in the concession. Therefore, it has become imperative to emulate the West and concession to improve the Chinese territory.¹³ In December 1895, the Nanshi Road Engineering Bureau was established by Qing Dynasty and began to construct the first road in Nanshi, that is Nanshi Waimalu (now Zhongshan South Road). The construction and management of Nanshi Road Engineering Bureau directly imitate Municipal Committee and Shanghai Land Regulations. In 1905, Shanghai Merchants Yu Huaizhu and Li Zhongyu established the General Engineering Bureau Inside and Outside of City. This organization was set up entirely in accordance with the concession system, and continuously improve the municipal modernization of the Shanghai Chinese territory¹⁴. At the same time, the construction of municipal projects in other regions of China continued to develop under the influence of the concession and Shanghai. In 1894, Zhang Zhidong built the first modern road in Nanjing, which is basically the same as the technical structure of the Shanghai concession road. In 1905, Zhang Zhidong set up the Hankou Road Engineering Bureau in Wuhan, which is specially used to improve the traditional street and ally in Wuhan¹⁵.

Because of the high cost and slow effect of old city renovation, the Chinese (government) began to develop new urban areas according to the Western model. After the Sino-Japanese War, in order to self-strengthen to save the country, boycott foreign colonizers, and safeguard its sovereignty, the Qing government imitated the concession to carry out the planning and construction of self-opening trade ports. In 1898, Zhang Jian set up Wusong Opening Port Engineering Bureau and begun to build the road and develop the land by imitating the operation mode of concession. In 1900, Zhang Zhidong opened a commercial port in Wuchang, established Market Bureau, hired a British engineer Murray to map and draw a full map of Wuchang commercial port(Fig. 1).¹⁷ In 1904, Jinan has opened the commercial port, the local authorities in Shandong immediately set up General Commitment of



Trade Port, which consists of Engineering Bureau, Patrol Police Bureau and Adjudication Hall. At the same time, it also elaborated *Jinan Self-opened Commercial Port Regulation*¹⁸.

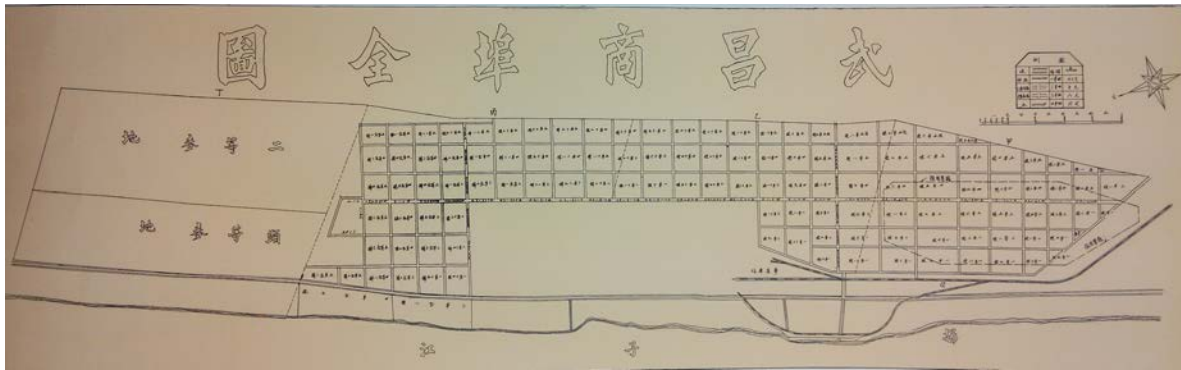


Fig.1 The New District Plan of Wuchang

It can thus be seen that the Western concession has brought about a certain demonstration effect in the construction of Chinese cities. In particular, the opening and construction of the Shanghai Concession triggered the imitation and learning of the concession by the Shanghai Chinese territory, which has led to the development of urban planning, such as road and other municipal infrastructure, and has brought modern urban civilization and urban modernity.

Imitating Japan

The modern Chinese urban autonomy movement originated from the learning and reference of the Western urban autonomy system. During this process, Japan became the most important source of imitation, and the person who accepted or contacted with western culture and education are foreigners from the West. They introduced and spread autonomy system, while the minister of the late Qing Dynasty were those who had mastered political rights to practice.¹⁹ In 1905, the five great ministers visited the United States, Europe, and Japan to inspect institutions of foreign countries and compared them with China. After returning China, they thought that some urban planning matters such as landscape, dwellings, ditch and road all belong to the task of autonomy system. They also clearly proposed to imitate Japan carrying out autonomy system and to establish modern public space gradually such as libraries, museums, zoos, and parks, etc²⁰.

In 1903, Zhang Jian travelled to Japan and conducted a 70-day inspection of Japan. He witnessed the tremendous changes that Japan's Meiji Restoration brought to Japan, including industry, education, urban planning and construction and political systems, which triggered his idea to imitate Japan and began to implement the grand vision of overall improvement in Nantong²¹. In July 1906, Zhang Jian organized a surveying and mapping class at Tongzhou Normal University, inviting Japanese teacher Miyamoto to teach courses, which contained mapping surveying, flat-panel surveying, needle surveying, levelling, practice and drawing. In 1908, Nantong established the Surveying and Mapping Office to map the entire city and carried out large-scale urban construction and planning, specifically including establishing of road construction office (1912), creating modern transportation, development urban electricity and lighting, protecting the old city and constructing new city, establishing modern communication agencies, building city parks and road, planting trees, etc. With the efforts of Zhang Jian, Nantong was eventually built into a model urban in modern times²².

In 1902, Yuan Shikai drew lessons from Western and Japanese political systems to implement the New Deal and established General Administration of Engineering imitating Dutong yamen (都统衙门), and this organization was mainly responsible for the road, river, bridge, wharf, house, land, electric light, street, trees and so on. In conjunction with the New Deal, Yuan Shikai first promoted local autonomy nationwide and compiled a plan for the construction of the Hebei New District in Tianjin. In 1903, Yuan Shikai approved the *Developing the Hebei New Market Constitution* (开发河北新市场章程十三条) which was drawn up by the General Administration of Engineering, and the field that east to the railway, west to north canal, south to the Jinzhong River and north to Xinkai River was delimited as the new area (Fig. 2). The new district built a grid-like road system and arranged government offices, schools, parks, factories houses, and also built an iron bridge to connect with the old city.²³

In addition to institutional imitation and learning, planning theories like Garden Cities were also spread to China through books, newspapers, and overseas returnees.²⁴ In 1919, Tang Jiyao, the governor of Yunnan Province, who graduated from Imperial Japanese Army Academy, set up Yunnan Municipal Government Office to govern the province and organize the province's municipal administration. In the spring of 1922, in order to realize the modernization of Kunming's construction intentions, Tang recalled Zhang Wei-han, who was studying in Japan, to



organize Kunming's municipal administration. In the spring of 1922, in order to realize the modernization of Kunming's construction intentions, Tang recalled Zhang Weihan, who was studying in Japan, to organize Kunming's municipal administration. In July, the Legal Affairs Committee composed of Zhang Weihan and others studied the construction of municipal facilities in Guangzhou, Beijing and Wuhan, and imitated the *Provisional Regulations of Guangzhou Municipality*(*广州市暂行条例*) in 1921 to draft the *Provisional Regulations of Kunming Municipal Government Office*(*昆明市政公所暂行条例*). In August, Kunming Municipal Government Office was established. The establishment of the office provided a platform for the western garden city theory that Zhang Weihan studied through Japan to develop in Kunming, and it has become the first planning practice of the application of garden city theory in modern China.²⁵



Fig. 2 Planning of Tianjin Hebei New Urban Road Network

Under the influence of the Sino-Japanese War, activists such as the rulers of the Qing dynasty and advocates of the Westernization Movement began to dispatch ministers to investigate abroad, send overseas students to Japan, employ foreign teachers from Japan and teach courses, etc., accelerating the process of modernization in China. In addition, after the 1909 *regulations of local autonomy in villages and towns*(*城镇乡地方自治章程颁布*) was promulgated, the urban construction activities had an institutionalized program, which also promoted the dissemination and practice of urban planning knowledge throughout the country, invisibly accelerated the modernization of the city and the transformation of urban space.

Imitating Europe and America

Due to the official young children studying in the United States policy in the late Qing Dynasty and the decision of repaying the boxer indemnity of the Qing Government in the Way of developing education in the United States, a large number of students went to the United States to learn Western technology and culture. By the 1920s, the latest achievements and practical experiences of European and American urban planning and planning education have gradually been introduced into China by students studying abroad and foreign experts, bringing modern European and American urban planning theories and systems to some degree.²⁶



After 1920, Guangzhou imitates the United States to establish a municipal system, promulgated the *Provisional Regulations of Guangzhou City* (广州市暂行条例), and became China's first modern city with an independent municipal government. In 1921, in order to improve the living environment of the Old City, the Guangzhou City Hall and the Works Bureau implemented the "municipal improvement" and guide the development of Guangzhou's early "garden city" and the eastern suburbs through the exemplary construction of new residential areas, building the eastern suburbs as a model residential area along the Baiyun Mountain. In November, 1923, the Guangzhou Municipal Administrative Committee passed the resolution *Opening up Guanyinshan Park and Residential Areas* (开辟观音山公园及住宅区办法), which become the first implementation plan of garden residential area in modern China. In 1927, Lin Yungai succeeded Sun Ke as mayor and continued to promote the planning of new residential areas, and Cheng Tiangu was appointed as the director of the Works Bureau. On March 33, 1928, the *Constitution of Building a Canton Model Residence Area* (筹建广州市模范住宅区章程) and design drawing (Figure 5) were promulgated and implemented by the *Committee of Building Canton Model Residence District* (筹建广州市模范住宅区委员会).²⁷ At the same time, in 1921, Sun Ke invited the American architect

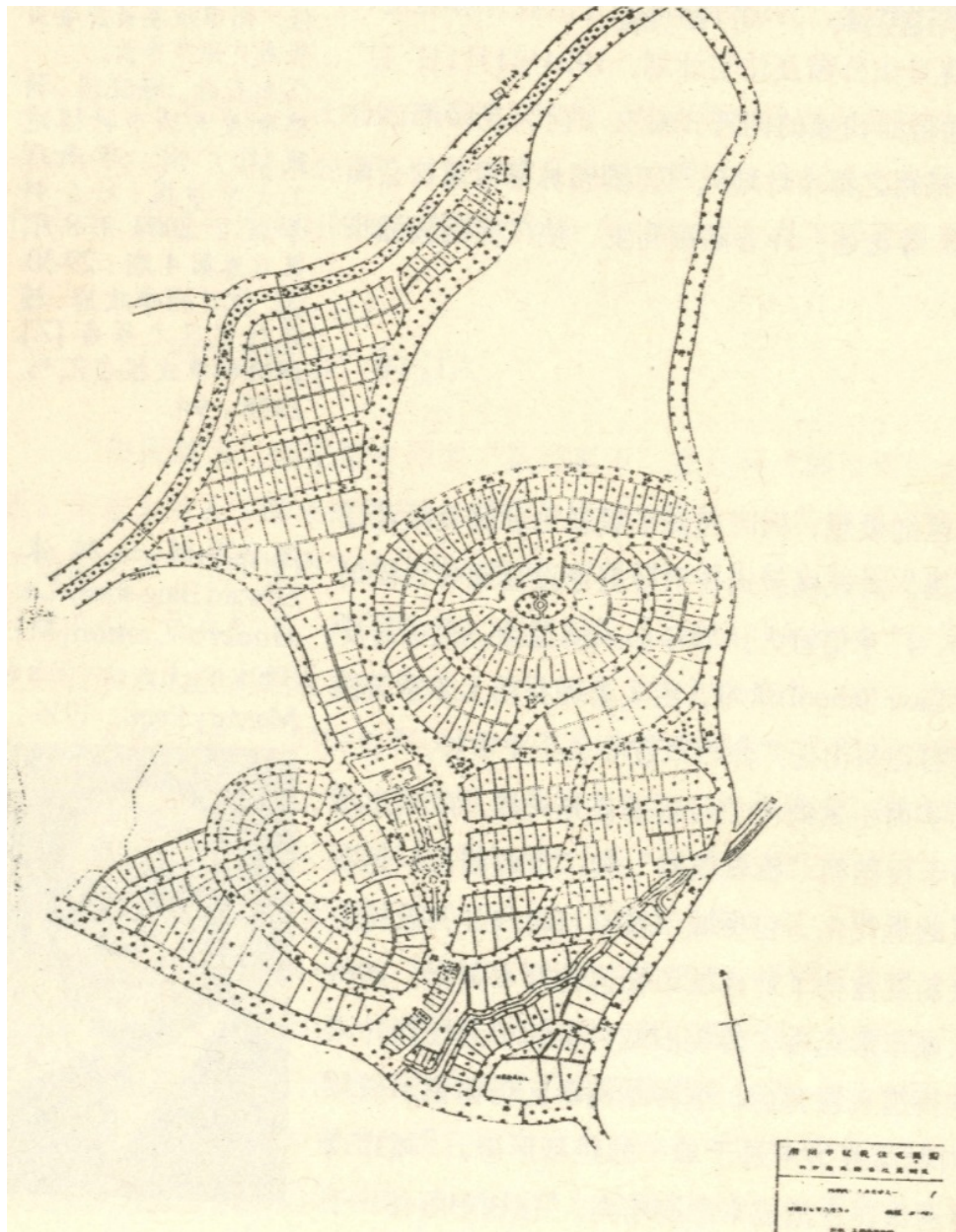


Fig. 3 Map of Guangzhou City Model Residential Area



Henry K. Murphy to design the Guangzhou municipal centre and then put forward the concept of Chinese classical renaissance²⁸.

In April 1921, with reference to the Guangzhou municipal system, Guangdong provincial government set up the Shantou city hall. There were six bureaus contains finance, engineering, education, public welfare and public security. In accordance with the conditions of the seaport, the Bureau of engineering set up three sections for construction, banning and embankment, and the modernization of Shantou was carried out. In 1922, the Shantou City Hall drafted the *the New Plan of Swatow Municipality*(*汕头市政厅改造市区计划书*) and planning drawing(Fig. 4). The plan is free from the improvement plan that was mainly characterized by building roads and demolishing of the city wall, and more shows the scientific rationality of modern urban planning and has become the earliest planning text developed by Chinese (government). In order to improve the appearance of the old city, the plan consciously uses the Garden City as a guiding ideology; the zoning plan is guided by the functional zoning plan of Europe and the United States and linked urban zoning with urban industrial and commercial development.²⁹

Before the establishment of the Nanjing National Government in 1927, the practice of modern urban planning in China for European and American imitation and learning was carried out by students studying in Europe and America and foreign experts. In particular, after the establishment of the Guangzhou municipal system in 1921, the city planning management and development agencies of the Ministry of Labor and Industry were truly separated after which modern urban planning theory and practice have actually started to develop universally in China.

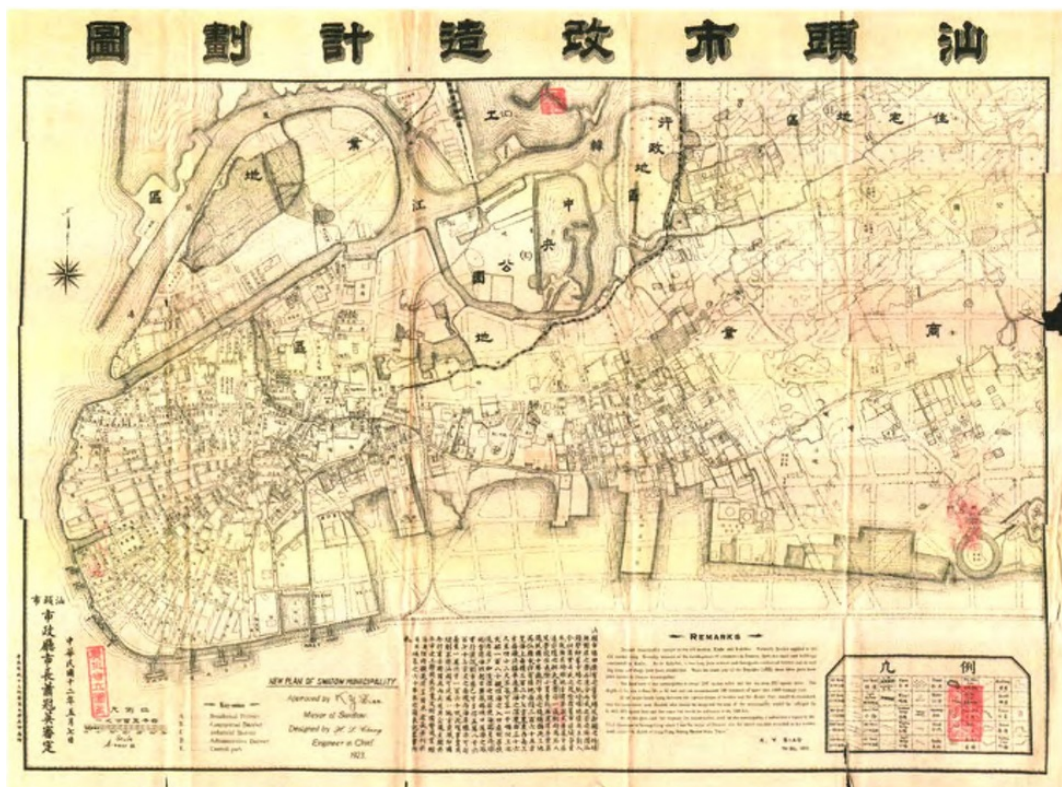


Fig. 4 New Plan of Swatow Municipality in 1923, approved by K.Y.Xiao.

Conclusions

Based on prior analysis, it can be seen that ancient Chinese cities had transformed into a form that close to a city with modern significance in terms of the nature, the concept of construction, the management system and the spatial structure after the construction of the period between 1860-1927. The traditional Chinese cities were used as a tool for political rights, and the urban system developed along with the national governance system. What's more, the urban planning and construction in the traditional period is essentially a tool for maintaining feudal governance services.³⁰ Therefore, the urban and urban planning in the traditional Chinese period was influenced by the thoughts of *Zhou Li*(周礼), *Guan Zi*(管子), *Feng Shui*(风水), etc. The characteristics of oriental traditional philosophy were reflected in the site selection, city planning and spatial layout, etc. and Formed a traditional urban



spatial structure symbolized by the city wall, Yamen Office(衙署), Chenghuang Temple(城隍庙) and Lifang(里坊).³¹ Since modern times, etiquette ideology has been greatly weakened in traditional Chinese culture. The increase of modern urban population, the expansion of the city scale, and the change of the nature all urgently require the improvement of the urban environment, especially the traffic conditions, the demolition of the city walls, the widening of the streets, the addition of new roads and the construction of residential buildings and industrial and commercial buildings different from traditional forms, etc. have become the main contents of the modernization process of Chinese cities. It can be said that the Chinese city, through the imitation and practice of the Western planning system and technology at the stage of the late Qing Dynasty and the early Republic of China, the urban nature of China has begun to transform from a traditional city centered on politics and military to an industrial and commercial city; The city's management system is transformed from urban and rural integration to the urban independent; The urban spatial structure changes from a closed urban ritual space to an open and orderly urban modern space.

In addition, along with the Chinese people's ideological changes in treating western cultural knowledge, as well as the influence of media such as newspapers and translation books, Chinese people's cognitive process towards Western science and technology knowledge have gone through the following process of rejection, recognition acceptance, learning and imitation and exploration. Urban planning practice of this period was more as a part of municipal construction, the Chinese (government) saw urban planning (municipality construction) more as a way to achieve prosperity, strength and self-improvement during Late Qing Dynasty and the Early Republic of China, combined with the actual conditions of Chinese cities, they have continued practicing and exploring the path to modernize the city that suits China itself.

Acknowledgements

The author would like to thank Professor Li Baihao for his inspiring on my research. I also thank Dr. Dinh The Anh for his comments and advice.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Ren Xiaogen is a Ph.D. candidate of the School of Architecture in Southeast University, Nanjing, China. Her major is Urban Planning and research direction is Urban Planning History & Theory and Heritage Protection.

Li Baihao is a professor of the School of Architecture in Southeast University, Nanjing, China. And his is also the Vice-chairman and Secretary-general of Academic Committee of Urban Planning History & Theory and Urban Planning Society of China. His research interests are mainly in urban planning history and theory.

Shi Diwen is a master candidate of the School of Architecture in Southeast University, Nanjing, China. Her major is Urban Planning.

Endnotes

1 Wu, "The history of modern architecture in China", 60-75.

2 Wang, *Urban planning history of China*, 16-20.

3 Hsü, Immanuel and Braj, *The rise of modern China*, 22.

4 Li and Guo, *Chinese Early-modern City Planing and Culture*, 13-15.

5 Ibid.

6 Hsü, Immanuel and Braj, *The rise of modern China*, 8.

7 Hsiao, "The Philosophical Thought of K'ang Yu-Wei", 129-193.

8 The term "concession" was first derived from the "Hankow Concession Treaty". The original article reads: "After the treaty was enacted, people would not be allowed to reconstruct their houses and sheds in the concession."

9 Li and Guo, *Chinese Early- Modern City Planning and Culture*, 14.



10 "On the construction of road engineering", 1880.

11 Zhang, "A Study on the History", 16-17.

12 Xiong, *Shanghai*, 127.

13 "Again on wanting to imitate the West", 1877.

14 Lai, Wu and Xu, *The history of modern architecture*, 446-449.

15 Fang, "Zhang Zhidong", 82-86.

16 These self-opening trade ports mainly in Yuezhou, Wusong, Sanduao, Qinhuangdao, Wuchang, Jinan, Weixian, Zhoucun, Haizhou, Pukou, Chifeng, Zhangjiakou, Duolunbeier, Guihua, Longkou, Jining, Zhengzhou, etc. See, Yang, *Port opening and social change*, 58-60.

17 Liao, "An analysis of Commercial Port", 59-60.

18 Jinan Self-opened Commercial Port Regulation (济南自开商埠章程) main content covers the following points: the location and nature of the commercial port and its sovereignty, with land management to promote the development and construction of the city, the establishment of urban construction and building rules.

19 Shen, "the thought of local autonomy", 159-182.

20 Niu, *legal culture of urban planning*, 54-55.

21 Yu, "Fourth of Historical Research Series", 140-143.

22 Zhang, *Study and exploration*, 251-266.

23 Lai, Wu and Xu, *The history of modern architecture*, 506-507.

24 Lu, *development and transfiguration*, 506-507.

25 Han and Li, "Thoughts and Practices", 111-118.

26 Lai, Wu and Xu, *The history of modern architecture*, 353-355.

27 Peng and Cai, "Guangzhou Modern "Garden City" Ideological Origins", 148-151.

28 Peng, *Modernity and Locality*, 125-126.

29 Ibid, 91-92.

30 Zheng, "Theory of knowledge and practice", 25-29.

31 Cheng, *Research Method*, 11.

Bibliography

Cao Congpo, Yang Tong. *Collected Edition of Zhang Jiang · Fourth volumes*. Nanjing: Jiangsu Ancient Book Publishing House, 1994.

Cheng Yinong. *Research Method on Chinese Ancient Urban Form*. Beijing: Social Sciences Academic Press(China), 2009.

Fang Qiumei. Zhang Zhidong and Hubei provincial government office dominated Hankou municipal reform. *Wuhan University Journal of Humanity & Social Science*, no.1(2010): 82-86.

Hsü, Immanuel Chung-yueh, and Braj B. Kachru. *The rise of modern China*. New York: Oxford University Press, 1970.

Hsiao K C. The Philosophical Thought of K'ang Yu-Wei: An Attempt at a New Synthesis[J]. *Monumenta Serica*, no.21(1962):129-193.

Han Yanjuan, Li Baihao. Thoughts and Practices of Garden City Construction of Kunming in the Early Modern Period. *Urban Planning Forum* .237, no. 5 (2017):111-118.

Lai Delin, Wu Jiang, Xu Subin. *The history of modern architecture in China (second volumes)*. Beijing: China Architecture & Building Press, 2016.



The 18th International Planning History Society Conference - Yokohama, July 2018

- Lai Delin, Wu Jiang, Xu Subin. *The history of modern architecture in China: the westernization and modernization of Chinese cities and buildings*. Beijing: China Architecture & Building Press, 2016.
- Liao Guihua. An analysis of Commercial Port Run by Qing Government in Wuchang. *Journal of Hubei Institute of Education* 22. no 6(Nov 2005): 59-60.
- Li Baihao, Guo Jian. *Chinese Early- Modern City Planning and Culture*. Wuhan: Hubei Education Press, 2008.
- Lu Jincheng. *A study on the development and transfiguration of the garden city theory in the early-modern China*. Master diss., Southeast University, 2015.
- Niu Jinhong. *Analysis of legal culture of urban planning in modern China: taking Shanghai, Beijing and Nanjing as the center*. Beijing: China Legal Publishing House, 2011.
- Peng Changxin, Cai Ling. Guangzhou Modern "Garden City" Ideological Origins. *Urban Studies*, no.1 (2008):148-151.
- Peng Changxin. *Modernity and Locality: Modern Transformation of South of the Five Ridges city and architecture*. Shanghai: Tongji University Press, 2012.
- Shen Huaiyu. The input of the thought of local autonomy in the late Qing Dynasty. *Chinese Research Institute of modern history*. No.8(1979): 159-182.
- Unknown. On the construction of road engineering. *Shun Pao*, 25 April, 1880.
- Unknown. Again on wanting to imitate the West. *Shun Pao*, 11 September, 1877.
- Wang Dehua. *Urban planning history of China*. Nanjing: Southeast university press, 2014.
- Wu Songdi. The Chinese Urban Renovation in the Early 20th Century and its Nature. *Austral Academic*, no.03(2014): 60-75.
- Xiong Yuezhi. *Shanghai: the Foreign Settlements and the Change of Social Ideology · Shanghai studies (Second Series)*. Shanghai: Shanghai Academy of Social Sciences Press, 1989.
- Yang Tianhong. *Port opening and social change: A study of modern China's self-opened commercial ports*. Beijing: Zhong Hua Book Company, 2002.
- Yu Haiyi. Fourth of Historical Research Series on Modern Urban Planning and Construction in Nantong: Zhang Qian and His Plan Thought of City. *Huazhong Architecture* 23.no. 4 (2005):140-143.
- Zheng Guo. Theory of knowledge and practice and urban planning: enlightenment from traditional Chinese philosophy. *City Planning Review* 42, no.03(2018): 25-29.
- Zhang Tingxi. *Study and exploration :Zhang Jian research papers*. Su Zhou: Soochow University Press, 2015.
- Zhang Wanli. *A Study on the History of Urban Planning Education in Modern China*. Master diss., Southeast University, 2017.

Image sources

- Figure 1: Wuhan Historical Atlas Compilation Committee. *Wuhan Historical Atlas*. Beijing: China Map Press, 1998:50.
- Figure 2: Tianjin Urban Planning Compilation Committee. *Local Histories of Tianjin Urban Planning*. Tianjin: Tianjin Science and Technology Press, 1994:47.
- Figure 3: Peng Changxin. *Modernity and Locality: Modern Transformation of South of the Five Ridges city and architecture*. Shanghai: Tongji University Press, 2012:125-126.
- Figure 4: Zheng Li. The Two Swatow Urban Planning Efforts in the City Hall Era of the Republic of China. *Urban Planning Forum*, no. 4 (2014):100.



Heritage value attribution: the case of Sítio Alagadiço Novo – Fortaleza, Ceará

Marina de Castro Teixeira Maia*, Inês Martina Lersch**

* Master student, Federal University of Rio Grande do Sul, Postgraduate Program in Urban and Regional Planning, marinactmaia@gmail.com

** PhD, Professor, Federal University of Rio Grande do Sul, Postgraduate Program in Urban and Regional Planning, martina.lersch@ufrgs.br

This work aims at retrieving the historical trajectory of *Sítio Alagadiço Novo* – Fortaleza, Ceará – birthplace of the romantic writer, José de Alencar. Having never before been considered under the yoke of a scientific investigation, *Sítio Alagadiço* is currently suffering from the lack of attention and use by the surrounding community. By assuming that the relation between cultural heritage and community is a matter of value attribution, it is essential to understand the paths which led to this conflicting situation. Therefore, we seek to retrieve the property's history since the arrival of the Alencar family up to the time it was heritage-listed by the National Historic and Artistic Heritage Institute (IPHAN). Some of the questions raised throughout the process include: is the importance of the place due to the figure of José de Alencar and his literary heritage? What are the values assigned to it? Has the idea of upgrading the property as a historical asset come from the community? These questions guide the content of this paper. We intend to pursue the valuation process within its historical context and therefore reflect upon the inconsistency perceived between such valuation and the treatment currently given to the property.

Keywords: Sítio Alagadiço Novo, Fortaleza/CE, Value Attribution, Social Imaginary, Cultural Heritage.

Introduction

This work aims at retrieving the historical trajectory of *Sítio Alagadiço Novo* (the references “ranch” and “*Sítio Alagadiço*” will be henceforth used) in Fortaleza, Ceará, Brazil. The *Sítio* was the birthplace of the romantic writer José de Alencar (1829 - 1877). Having barely been considered under the yoke of scientific investigations, *Sítio Alagadiço* is currently suffering from the lack of attention and use by a portion of the surrounding community. By assuming that the relation between cultural heritage and community is a matter of value attribution, it's essential to understand the paths, which led to this conflicting situation. Therefore, we seek to retrieve the property's history since the arrival of the Alencar family up to the time it was listed by the National Historic and Artistic Heritage Institute (IPHAN).

Concerning the organization of this work, it is divided into six sections: (I) approach to the evolution of Fortaleza as a city in order to insert the *Sítio Alagadiço* in a broader historical framework; (II) about the site; (IV) the property and its relation with the Alencar family; (V) discussion on the value attribution to assets (V) a reflection upon the *Sítio Alagadiço* embracing all these matters is proposed. It's important to say that studies about heritage value attribution on the *Alagadiço Novo* Historical Site do not exist until now. So that is knowledge gap to which this paper is addressed to.

Fortaleza: general overview of a historical evolution

The importance of going through the historical evolution of Fortaleza is justified by the inconsistency perceived between the ascension of José de Alencar as Patron of the city and the late cultural development of the community. The city history is marked by the neglect from the European settlers at first – the city did not seem to have much to offer neither visually nor financially as nothing was planted or extracted. As stated by Andrade,



until the middle of the nineteenth century, [Fortaleza] was only a small cluster, unlike Recife and Salvador, which, since the colonial period, were important urban centers, due to the economy of sugarcane. Fortaleza only became the main urban center of Ceará in the second half of the nineteenth century, thanks to its role in the commercialization of export products, especially cotton, whose appreciation in the international market rose during the War of the Secession in the United States.¹

In this way, the city has a recent history as it is conspicuous that the captaincy of Ceará was abandoned after the discovery, not having plans or considerable purposes addressed to it by the Portuguese crown. The dry climate, the hostile indigenous population, resistant to the acculturation, and the absence of ores and other natural resources delayed the urbanization of Ceará, which started only in the 1700s through the cattle breeding practice. The tracks of the cattle crossed the outback and the first urban settlements² emerged from the conjunction between these paths and watercourses. The livestock production in Ceará lasted until the late 18th century.

The 19th century was marked by great political changes at the national level – the arrival of the Portuguese crown and the independency were two of them, and for Ceará, especially for Fortaleza, they determined the beginning of a new economic cycle: the cotton production cycle. *Vila do Forte*, as Fortaleza was first known, became the capital of the province in 1810 and its port assumed the role of shipping point of the product to the international market. Nevertheless, until the mid-19th century, the city wasn't more than an incipient cluster of houses³ (Figure 1). The cotton gets to be the most exported product from 1850 to 1885⁴ but the passage to the 20th century, however, marks the decline in the exportation of the product.

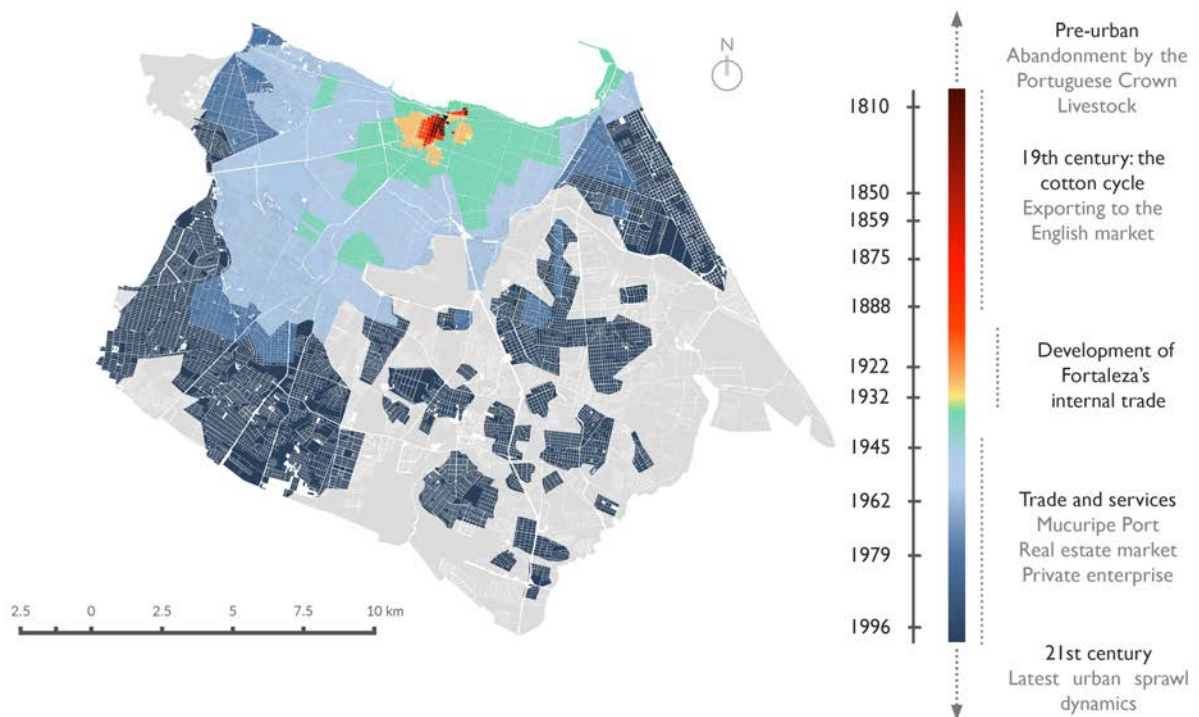


Figure 1: Map of the progressive urban occupation within the time and economic cycles. Source: Designed for the course of Geoprocessing and Urban and Regional Issues by the authors.

In the 20th century, since the 1930s, there was a faster occupation growth of the areas that today constitute the modern city, driven by private initiative. The construction of the Mucuripe port, in 1938 by decree of President Getúlio Vargas, broadens the importation processes, developing the commercial network and creating a economic cycle, which aimed at new growth vectors and the creation of centralities. The last of these processes was the occupation of the southeast sector of Fortaleza, consolidated only by the end of the 1990s, the exact location of *Sítio Alagadiço*.



Nowadays⁵ Fortaleza is considered an imposing capital, known for its tourism and having been financially developed through the commerce. But, as seen, it was not until the first decades of the 20th century that the situation started to change. Thereby, we shall ask: how would a society whose population was not higher than 80.000 inhabitants in 1920⁶ and which had always presented one of the highest illiteracy rates of the country⁷, adopt a hero of the literature such as José de Alencar?

From the facts exposed, we can already extract and emphasize that Fortaleza gets to the 20th century in need of elements which work as social cohesion connections in the community and which promote the creation of a strong identity for the city; it is possible that José de Alencar could have been chosen as one of these connections⁸, disposing his own name and characters to the toponymy of the city, taking roots in the lives of the people from Ceará; this assumption might explain the metamorphosis of *Sítio Alagadiço Novo* into the envelope of a memory created by the representative discourse of a cultural elite, what ensured its preservation. In order to better understand this process, the history of the place and its relation with Alencar - is investigated.

About the site

The *Sítio Alagadiço*, one of the last green areas open to public use of the region, has approximately seven hectares of land and is completely surrounded by urban infrastructure. It's located in the José de Alencar District – in the southeast of Fortaleza, the last region of the city to have its urbanization consolidated. The Washington Soares Avenue, an important line of urban structuring through the southeast region, surrounds the place. The distance between the property and the city growth epicenter is of approximately 12 kilometres (Figure 2 and 3).

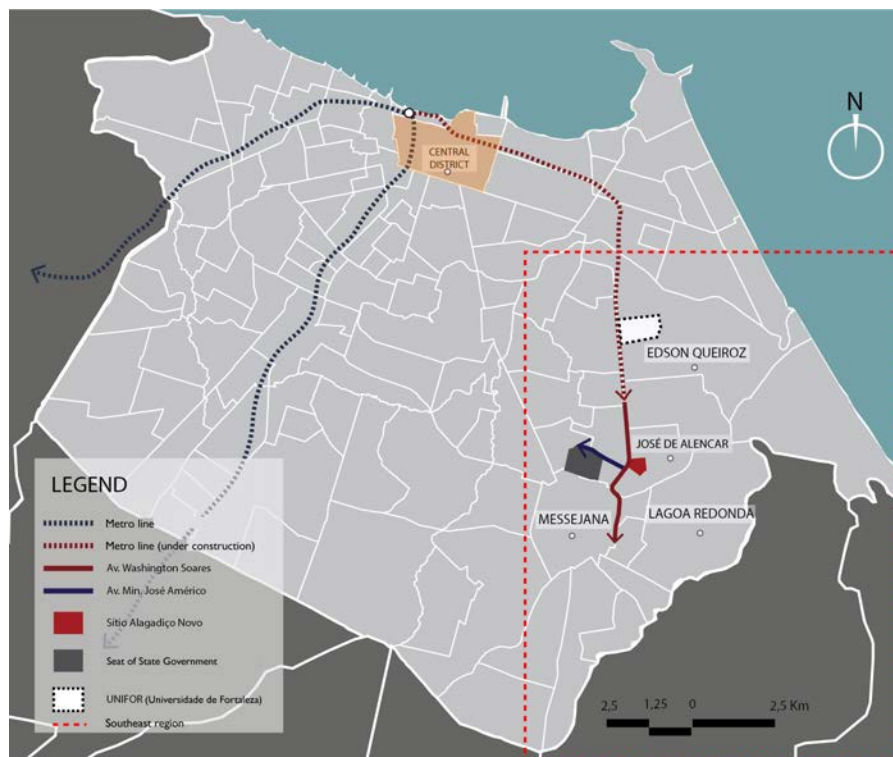


Figure 2: Location of the *Sítio Alagadiço Novo* and surrounding infrastructure [own elaboration].



Figure 3: Preserved elements from the ranch [SOURCE: Google Earth]

The set of elements marked by the Alencar family trajectory present nowadays at the location are: a small construction where the writer would have been born; the ruins of the first steam engine of Ceará State (Figure 4).



Figure 4: The historical house (left) and the ruins of the mill (right)

Besides that, there are on the site an administrative pavilion built by the Federal University of Ceará, UFC, built in 1965. The space is shared with a public school which had its lands provided by the UFC in the 1970s.

Sítio Alagadiço Novo: from the Alencar's to the heritage listing

The lands of *Sítio Alagadiço* are what remains from a larger area, acquired by José Martiniano de Alencar, priest and politician, one of the five sons of the groundbreaking Bárbara de Alencar and the José de Alencar's father⁹. Martiniano arrived in Fortaleza years after turbulent political upheavals in the city of Crato – south of the state of Ceará – three of which were spent imprisoned along with his siblings and mother – the family was part of the Alliance of Ecuador, a secession movement of republican nature. Released in 1825 by the official regime, Martiniano married Ana Josefina de Alencar. The couple established in the lands of *Sítio Alagadiço*, located at that time, in Messejana, approximately twelve kilometres away from Fortaleza.



At the time of the acquisition of the property, Messejana was called *Vila Nova Real de Messejana*¹⁰. The village, which is nowadays a district of Fortaleza, originated from the indigenous community called *São Sebastião de Paupina*, controlled by the Portuguese crown and created in 1607 with the arrival of the Jesuit priests Francisco Pinto and Luis Pernambuco¹¹. The community was led to the category of village in 1760, through Royal Letter, when it started to be called *Vila Nova Real de Messejana*. The history of *Sítio Alagadiço* is, therefore, deeply connected to the development of this region. Besides the bucolic scenery of the ranch, there are the ecosystems composed by flooded and swampy areas. This fact led the priest to name the place as *Sítio Alagadiço Novo*¹². After the family was settled, the priest began the sugar cane production within the ranch and its surroundings. Despite the short-term longevity, the product guaranteed periods of substantial wealth and allowed the construction of the first steam engine of Ceará state¹³.

On May 1st, 1829, the firstborn and heir of Alencar's family intended to fame is born: José de Alencar lived at the ranch as far as he was nine years old, when he travelled to Rio de Janeiro. At that moment, José Martiniano, the father, resumes his political career as a senator while his son commits to his studies. Meanwhile, the ranch remains under the possession of the family until the last heir of Martiniano (his daughter Joaquina Carolina). The city evolved and the urban mesh advanced. Even though the southeast region was the last one to consolidate its growth within the physical transformation process of the city, the dismemberment process of the ranch occurred long before. The *Sítio Alagadiço*, as well as other great properties of the region originated the current districts of this area of the city¹⁴.

The first initiative considering the ranch's protection is found in the exchanging of official letters between the architect José Liberal de Castro and Rodrigo Melo Franco de Andrade, in 1962, as head of the SPHAN (*Serviço de Patrimônio Histórico e Artístico Nacional*), now called IPHAN. In those letters, they discuss the possibility of making a plea on behalf of the property protection¹⁵. However, only two years after that the heritage listing process is suddenly established, that is to say, in 1964, same year in which by then President of Brazil, Humberto de Alencar Castello Branco, intermediates the expropriation of the remaining lands in the ranch by granting them to the UFC, episode described by the rector Martins Filho¹⁶. On behalf of the protection of such relic from the state of Ceará, the president proposed to the rector Martins Filho to foster it. In 1965, once the land expropriation of eight hectares was sealed, the construction of an administrative pavilion of the UFC started. The place was opened, precisely on the occasion of the centenary of the book "Iracema"¹⁷, written by José de Alencar, along with the celebration of the ten years of the Federal University.

It's possible to notice that in 1964, the heritage listing process only accepted José de Alencar's house, apart from the rest of the property, and only in 2012, in order to protect the ranch from the damages caused by the time and the lack of specialized care, the IPHAN, through process number 01458.002242/2008-98 expanded the "heritage listing process from the house to the remaining areas of the ranch where José de Alencar was born, Messejana, a municipal area of Fortaleza, state of Ceará" (OFFICIAL GAZETTE of April 20th, 2012). Therefore, the legal protection imposed by the IPHAN embraces, nowadays, the elements previously mentioned, described as it follows: the historical house, the ruins of the mill, the pavilion of the UFC and the whole area of the ranch.

Value attribution under the creation of an urban mythology

The values theory, by Alois Riegl, applied to the monuments was one of the great turning points on the refinement of the cultural heritage concept at the beginning of the 20th century. By dissociating the notions of Art and History, the author of *The Modern cult of Monuments 1903*³⁶ observed the art object not only under its aesthetic aspect or its design technique, but also under its production historical context. Riegl innovated by classifying and – in the sense of the discussion previously presented – attributing values to the monuments (he proposes the interpretation of the monuments under the following values: seniority, historical, commemorative, usefulness, artistic, innovation and the art relative value).

The *Sítio Alagadiço Novo*, based on the monuments classification proposed by Riegl, is an unintended monument: the subjective values which are assigned to it do not originate on only one author's work (e.g. the artistic values deliberately engrained on a paint by its painter) as in the case of the intended monuments. Considering the unintended ones, the values are conferred by us, individuals from today who analyze the property in the present days.³⁷

According to Castricola¹⁸, the value attribution is fundamental for the identification and preservation of the cultural heritage. Therefore, we ask: what were the values attributed to *Sítio Alagadiço* at the time of its heritage listing process? Who granted them? Going back further: What is a value? How does the value attribution process work and what is its integration within the culture based on?

The search for the essential meanings begins in the semantic sphere of "value", according to Houaiss dictionary, the word is related to quality, merit, importance, legality or legitimacy¹⁹. It's an abstraction that



qualifies an object, whether it's concrete or ideal. In the field of Philosophy, the discussion engendered by Comte-Sponville dissociates two categories: the economic values and the spiritual values which "are out of any market – with no equivalents, price or possible change"²⁰.

To Comte-Sponville, the values are created by human desire and within those, the moral and spiritual values cannot be found in the market. They are irreplaceable. The author states that evaluate "[...] is not measuring a value that existed before the evaluation; it's measuring the value that is given to what is evaluated, or to create value as we measure it"²¹. In this same terms, on his values theory, Reale also points out the creation of a "should be" by the man, that is to say an ideal quality that we assign (create) to the natural or ideal objects²². This characteristic of the "should be", as Reale's theory analyzed by Martins (2008), comes from the search for the perfectibility essential to human life, what directly involves cultural issues, namely the aspects from the scope of expressions and productions of the man, area where we find the world heritage. For Reale: "[...] the values, deeply accomplished, irradiate as they evolve through the historical cultural world."²³

It would appear, then, that there is an intimate connection between the value attribution process and the range of expressions of the man – the universe of culture. Within this process, the objects are evaluated according to the "essence" or "qualities" inferred by us, the individuals of today. At this point, according to Martins, it's important to emphasize Reale's statement, that the major experiences for the value process of a society can't be narrowed to the "prime daily experiences of this or that specific individual, but to the different understandings about the reality that ruled each historic stage or era, which will be named as 'civilizations' with its related 'axiological constellations' "²⁴. It means that there is a set of values specific to a certain age and/or society. This "axiological constellation", which is a social and historical construction, when added to the system of ideas, image representation, beliefs and symbolisms representative of this society, composes what Pesavento understand as imaginary. According to the author, the imaginary may be something more real than the actual conditions of existence and may also "organize the actions of individuals, prompt social practices and legitimate situations."²⁵

Pesavento points out that the imaginary "[...] is part of a representational area and, as an expression of thought, arises through images and discourses that intend to give the reality a definition."²⁶ As a result, it's vital for the present work, to discuss the problem of the manipulation of what becomes a value and, consequently, of what becomes imaginary for the civilizations. For Baczkó²⁷, according to Pesavento, not least because there are no doubts whatsoever in terms of the possibility of control and management over the imaginary to different extents, within this manipulation process. This is the essence of her observation:

We would be, therefore, in the face of a new ingredient: the manipulation which would play with the collective dreams and the strengths of tradition inherited from a timeless routine, recreating myths, beliefs and symbols [...]. Nonetheless, it's unquestionably important to have in mind that specific expressions and interests interfere on the creation process of the collective imaginary. It must not be forgotten that the social imaginary is one of the regulatory powers of the collective life, standardizing behaviors and guiding profiles suitable for the system.²⁸

At this point, we get to a crucial question for the study: might the creation of a mythical atmosphere within the social imaginary be able of legitimating the value creation within a given community? Can these values, on the other hand, drive the local public policies? Following this reasoning, it's important to elucidate that the term myth will be used within its historiographical meaning, scope in which, according to Cirne Lima, indicates "[...] a discourse of definition and justification" meaning to pursuit the multiplicity of the events in order to better understand them within a unit, as a history²⁹.

In his lecture of *La ville et les Mythes* (The city and the myths)³⁰ Alain Cabantous talks about the progressive creation of the image of the corsair Jean Bart as a kind of founding character for the city of Dunquerque, a hero. Cabantous declares:

If we consider that the myth is an imaginary construction (narrative, representation, ideas) related to the cosmic or social phenomena" elaborated according to the fundamental values of a community that pursues its cohesion, it's possible to quickly understand the necessity of first investigating the reasons for which the attachment process of this phenomenon was conducted.³¹

Cabantous also states that the urban mythologies are real "offspring of the crises", in the sense of being a result, most of the times, of the contexts in which there is the need of creating social cohesion bonds, they are caused by the breakdown or weakness of the local identities. The mythology would arise, thus, as a pursuit for affirmation of the city which, in this regard, draws upon "characters essential to its state and protection", that is to say, of the "heroes".



With that in mind, would it be possible to state that the figure of José de Alencar could be classified as a cohesion bond, as well as the heroic figure of Jean Bart for Dunquerque? This work draws upon to the historical context to search for principles to the value attribution to the property. It's pondered, as it follows, on the possibility of a mythic construction in the city of Fortaleza, which is believed to have become a "symbolic political appeal"³².

The myth of José de Alencar under the preservation of *Sítio Alagadiço Novo*

In the case of *Sítio Alagadiço*, it can be inferred by the contents of the historical process that led to the occasion of its heritage listing, that it's not unreasonable to say that it was especially due to the value attribution of memorial, historical and cultural nature to the property. The ranch is registered on the books of Historical and Archaeological Heritage Listing, Ethnographic and Scenic.

Therefore, it is undeniable that the instituted protection was fundamentally supported on its historical importance connected to José de Alencar. Another point that deserves attention is that, due to its odd nature, the protection claiming process of *Sítio Alagadiço* wasn't – as far as it's known – subject of popular mobilization. Hence, our hypothesis is: the protection under discussion was related to the glorification of the writer by a small part of the local elite.

Alencar, an unquestionably strong and formal character, would have been a defining element of urban identity of a community which didn't have considerable social bonds. Therefore, a collective imaginary was established and the protection of *Sítio Alagadiço* was legitimized under the designation of "José de Alencar's house". It's important to say it's not a "witch hunt" or an ideological disruption. The great importance of the character under discussion is understood, however, it's important to enquire about the paths that led to the establishment of what is today understood as collective memory and cultural heritage. For this reason, as Pesavento says:

Under no circumstances is it intended to reduce the social imaginary to ideology, nor to oppose to this set of intentions and socializations of deliberated ideas the rescuer and rebel potential of the utopia. There is no space for manicheistic positions which reduce the complexity of the social context and the diversity of representations possible that it embraces.³³

With that being said, it's important to list some facts about his insertion in the collective imaginary of Ceará, which contributed to evoke this consideration (Figure 5):

- (I) The José de Alencar theater, architectural icon of the capital, was built and named by the municipal administration in 1910;
- (II) The José de Alencar square, former Marquês de Herval square, received in 1929 a bronze statue of José de Alencar, followed by the name modification of the address years later;
- (III) Praia de Iracema district: formerly named Praia do Peixe, had its name changed in the 1930s.
- (IV) The most famous statues of Iracema in the Capital are from 1965 (statue of Mucuripe); 1996 (Iracema beach) and 2004 (Messejana lagoon);
- (V) José de Alencar district, where *Sítio Alagadiço* is located, was known as *Alagadiço Novo* up to 2007. The change occurred through a law project by the councilor Fátima Leite on December, 26th, 2007.

It's possible to notice two aspects from the facts presented: the initiative to perpetuate the writer's image as a figure intrinsically from Ceará, came from the public administration of the city and the most famous toponymy, instituted until the 1930s, contrasts with the facts presented before about the city: Until the 1930s, Fortaleza, entering less than one kilometer from the waterfront and was composed by a population, in general, of illiterates.



Figura 5: Map of Fortaleza's toponymy inspired in José de Alencar and his work. [own elaboration].

The following hypothesis is stated, thus: Fortaleza had the need, until the mid-20th century, of the creation of an identity that reinforced the bonds, created a more cohesive social unit and made its economic and administrative sedimentation possible as a city. The famous figure of Alencar would have worked perfectly as a stimulating element for the process, since both the writer and his work were emblematic enough to raise as myths in a fragile recent society. That was how the protection of *Sítio Alagadiço*, ground zero of the author's life, was legitimized.

Conclusion

This paper sought to understand the historical trajectory of *Sítio Alagadiço Novo* – Fortaleza, Ceará and to answer three important questions. Answering the first question that guided the content of this paper, it is possible to understand that the importance of the place is due to the figure of José de Alencar and his literary heritage. In light of the foregoing, the hypothesis defended proposes that the process was part of a real construction of a discourse guided by the figure of a hero, meaning that a mythic atmosphere was erected around the figure of José de Alencar, which was communicated through the creation of monuments, public tools and toponymy insertion - which was relevant to Fortaleza and connected to the name and the work of the writer. Despite of that, it was observed that his father, José Martiniano de Alencar, was also so important for the city as the writer. But the traditional history seems to have forgotten of that as Martiniano isn't even reminded in the site value attribution process.

About the second question, it can be stated that the values assigned to it are the historical and the memorial ones. The importance of José de Alencar for the literature and for the national culture is not in denial here, the present work does not aim at raising doubts on its credit and dimension. The conclusion reached here is that there is a fact inoculated on Fortaleza's imaginary, which is: José de Alencar is son of the land, hero and the great patron of Ceará state, despite the few times he actually went to his homeland.

Finally, it is verified that the idea of upgrading the property as a historical asset didn't come from the community. On the contrary, it was first a cultural interest about the small house by the institution SPHAN in 1962 and then a political interest as seen by the role played by the President Castello Branco, in 1964. It was only between 2008 and 2012 that the whole site was protected with regard to its archaeological, symbolic, touristic, architectural and landscape values through the IPHAN recognition.



In view of the foregoing, the production of this work was, hence, justified by the omission, up to the present, of the recovery of the history of *Sítio Alagadiço Novo*. For the institutions linked to its maintenance, such as UFC and IPHAN, it is believed that this work can provide knowledge to facilitate the management of the site and the exaltation of the values contained in it that has been essentially forgotten by Fortaleza's population.

Particularly to the urban planning, a field to which the knowledge of city's transformation is, or should be imperative, this work is also justified insofar as it can illuminate future interventional measures in the peculiar territory of Alagadiço Novo, territory in which forces as different as the real estate market and the safeguarding of the city's cultural heritage coexist.

Acknowledgements

As the work for this paper first began with the realization of first author's Undergraduate thesis at the Federal University of Ceará, we thank PhD José Almir Farias Filho for his work in its orientation. We also thank Alessandra Marasini for translating the content of this article.

Disclosure Statement

No potential conflict of interest was reported by the author.

Endnotes

¹ ANDRADE, Margarida Júlia Farias de Salles. Fortaleza em Perspectiva Histórica: Poder Público e Iniciativa Privada na Apropriação e Produção Material da Cidade (1810-1933). Doctoral thesis. Universidade de São Paulo – USP. 2012,19.

² JUCÁ NETO, Clóvis Ramiro. *The urbanization of Ceará from the 17th century: the Villages of Nossa Senhora da Expectação do Icó and of Santa Cruz do Aracati*. (Salvador, BA. Universidade Federal da Bahia, 2007), 230-231

³ ANDRADE, Margarida Júlia Farias de Salles. Fortaleza em Perspectiva Histórica: Poder Público e Iniciativa Privada na Apropriação e Produção Material da Cidade (1810-1933). Doctoral thesis. Universidade de São Paulo – USP. 2012, 36.

⁴ *Ibid.*, 112.

⁵ In 2012, there were approximately 2,5 million inhabitants in Fortaleza, distributed within 314.930 km². Fortaleza 2040. (Fortaleza today) *Fortaleza Hoje*. Iplanfor. N. 4. Ano II. (City hall of Fortaleza, 2015).

⁶ CASTRO, Liberal. *Factors of location and expansion of the city of Fortaleza*. (Fortaleza: CREA/Ce, 1977), 35.

⁷ CASTRO, Liberal. Introductory Text. In: JUCÁ, Gisafran Nazareno Mota. *Verso e Reverso do Perfil Urbano de Fortaleza*. (São Paulo: Annablume Editora). 2003, 17.

⁸ It's relevant to comment that the reputation of José de Alencar in the political and cultural environment of Rio de Janeiro/São Paulo was already notorious in the mid-19th century. Known by his literary creations published in newspapers from Rio as *O Correio e Diário do Rio*, Alencar goes back to Fortaleza in 1847 for only just two months in order to endeavor his application as deputy. At the time, the writer stayed at Sítio Alagadiço, visit about which he writes on his biography entitled "How and why I am a novelist".

⁹ Bárbara de Alencar took part, along with her family of the Alliance of the Ecuador, a revolutionary, republican and separatist movement, led by her son Tristão Gonçalves Alencar Araripe. (MENEZES, Raimundo. *José de Alencar Literate and Politician*. (Rio de Janeiro: Ed.Livros Técnicos e Científicos,1977), 18.

¹⁰ *Ibid.*, 25.

¹⁰ PEREIRA, Katiane Maciel. *Messejana of education: the educational action of the Catholic church on the spacial production*. (Master's dissertation. Fortaleza: UECE, 2010), 29.

¹² There are registers on the book of parish lands of Fortaleza. Number 25-A from the public files of Ceará, references to another ranch located in the west region of Fortaleza (limited by the old road of Soure, nowadays known as Bezerra de Menezes Avenue) called *Alagadisso-Grande*This would have been the probable reason for which the Priest and senator Martiniano chose the qualification Novo.

¹³ Menezes, 1977, 26.

¹⁴ FUCK JR., Sérgio Cesar de França. *Historical aspects of Fortaleza's southeast urban spread* (Fortaleza: Caminhos de Geografia, 2004), 152.

¹⁵ Those letters can be found in the collection of the 4thSR/IPHAN

¹⁶ MARTINS FILHO, Antônio. Summarized story of the UFC (Fortaleza: House of José de Alencar, 1996), 175-176.

¹⁷ *Iracema* tells the story of the origins of Ceará. In a poetic way, Alencar narrates the romantic encounter between Iracema, a native indigenous young woman and Martin, the white colonizer.

¹⁸ CASTRIÓTA, Leonardo Barci. *Cultural Heritage Concepts, Policies, Instruments*. (Belo Horizonte: Annablume, 2009), 93.

¹⁹ HOUAISS, Antônio; VILLAR, Mauro de Salles; FRANCO, Francisco Manoel de Mello. *Mini HOUAISS Dictionary of Portuguese*. 3rd ed. (Rio de Janeiro: Objetiva, 2009).

²⁰ COMTE-SPONVILLE, André. *Philosophical Dictionary* (São Paulo: Martins Fontes, 2003), 617-618.

²¹ *Ibid.*, 619.

²² About the different kinds of objects, according to Reale's theory, Martins discusses: "[natural objects] are prone to experimental validation, in agreement with no theological methodological postulates, as the final processes would make it impossible for physics and psychology to be seen as positive sciences" (REALE, 2002, 179). Unlike the natural objects, there are those which don't make any reference to space or time. They are ideal objects. They are abstract ideas which exist while thought by the man".

²³ MARTINS, Alexandre Marques da Silva. *The values in Miguel Reale*. (Brasília:Legislative Information Magazine, 2008), 266.

²⁴ *Ibid.*, 267.



- ²⁵ PESAVENTO, Sandra Jatahy. Unraveling the fetishized order: Walter Benjamin and the social imaginary. (Cultura Vozes), 35-36.
- ²⁶ PESAVENTO, Sandra. Imagining the imaginary. (São Paulo: ANPHU Magazine. São Paulo, 1997), 15.
- ²⁷ BACZKO, Bronislaw. Social Imagination. (Einaudi Enciclopedy). 1985.
- ²⁸ PESAVENTO, 1997, 26.
- ²⁹ CIRNE LIMA, Carlos R.V. Mythology and History In SCHÜLER, Donaldo e GOETTEMS, Miriam Barcellos. (Org.). Myth: yesterday and today (Mito ontem e hoje). (Porto Alegre:Universidade Federal do Rio Grande do Sul, 1990), 210.
- ³⁰ Part of the seminar Urban Mythologies (*Mythologies Urbaines*) held in Dunquerque, France, in 2002. The conferences and debates were assembled (CABANTOUS, A. (Org.) Mythologies Urbaines. Les Villes entre Histoire et Imaginaire. In *Mythologies Urbaines*. Dunquerque. 2002).
- ³¹ Ibid., 10.
- ³² Ibid., 11.
- ³³ PESAVENTO, 1997, 23.

Bibliography

- ANDRADE, Margarida Júlia Farias de Salles. *Fortaleza under social perspective: public authority and private initiative in the appropriation and the material production of the city* (Fortaleza em perspectiva histórica: Poder Público e Iniciativa Privada na Apropriação e Produção Material da Cidade) (1810-1933). Doctoral thesis. Universidade de São Paulo - USP. 2012
- BACZKO, Bronislaw. *Social Imagination* (Imaginação social). Enciclopédia einaudi, v. 5, p. 296-332, 1985.
- BEZERRA, Maria do Carmo de Lima e RIBAS, Otto. T. Policies of preservation and urban development in Brazil: dichotomies and conceptual similarities. (Políticas de preservação e desenvolvimento urbano no Brasil: dicotomias e similaridades conceituais). 2012.
- CASTRIOTA, Leonardo Barci. Cultural Heritage Concepts, Policies, Instruments (Patrimônio Cultural Conceitos, Políticas, Instrumentos). Belo Horizonte: AnnaBlume. 2009
- CASTRO, Liberal. *Factors of location and expansion of the city of Fortaleza*. (Fatores de Localização e de Expansão da Cidade da Fortaleza). Fortaleza: CREA/Ce. 1977
- CASTRO, Liberal. Introductory Text (Texto de apresentação). In: JUCÁ, Gisafran Nazareno Mota. *Verso e Reverso do Perfil Urbano de Fortaleza*. São Paulo: Annablume Publishing house. 2003
- CIRNE LIMA, Carlos R.V. Mythology and History (Mitologia e História) In SCHÜLER, Donaldo e GOETTEMS, Miriam Barcellos. (Org.). Myth: yesterday and today (Mito ontem e hoje). Porto Alegre. University Publishing House. Universidade Federal do Rio Grande do Sul, 1990. P. 210
- COMTE-SPONVILLE, André. *Philosophical Dictionary* (Dicionário Filosófico). São Paulo: Martins Fontes, 2003
- DELPHIM, Carlos Fernando de Moura. Report on the proposal of edification at Sítio Alagadiço Novo – the house of José de Alencar (Parecer sobre proposta de edificação no Sítio Alagadiço Novo – Casa de José de Alencar). Fortaleza. 2008. Acervo 4ª 2R/IPHAN
- FUCK JR., Sérgio Cesar de França. *Historical aspects of Fortaleza's southeast urban spread* (Aspectos históricos da expansão urbana no sudeste do município de Fortaleza, Ceará – Brasil). In: Caminhos de Geografia - revista online. Fortaleza, 2004
- HOUAISS, Antônio; VILLAR, Mauro de Salles; FRANCO, Francisco Manoel de Mello. *Míni HOUAISS Dicionário da língua portuguesa*. 3ª edição. Rio de Janeiro: Objetiva, 976 fls, 2009
- JUCÁ NETO, Clóvis Ramiro. *The urbanization of Ceará from the 17th century: the Villages of Nossa Senhora da Expectação do Icó and of Santa Cruz do Aracati*. (A Urbanização do Ceará Setecentista: As Vilas de Nossa Senhora da Expectação do Icó e de Santa Cruz do Aracati). Salvador, BA, 531 p. Doctoral thesis. Universidade Federal da Bahia, 2007
- MARTINS, Alexandre Marques da Silva. *The values in Miguel Reale* (Os Valores em Miguel Reale). Legislative Information Magazine. Brasília a. 45 n. 180 out./dez, 2008
- MARTINS FILHO, Antônio. *Summarized story of the UFC* (História abreviada da UFC). Fortaleza: Casa de José de Alencar, 1996, pp. 175-176
- MEIRA, Ana Lúcia Goelzer. *The historic and artistic national heritage in Rio Grande do Sul in the 20th century: value attribution and intervention criteria* (O patrimônio histórico e artístico nacional no Rio Grande do



Sul no século XX: atribuição de valores e critérios de intervenção). Doctoral thesis. Universidade Federal do Rio Grande do Sul - UFRGS, 2008

MENEZES, Raimundo. *José de Alencar Literate and Politician* (José de Alencar Literato e Político). (1903) 1ª Ed. Technical and scientific books: Rio de Janeiro, 1977

PESAVENTO, Sandra Jatahy. *Unraveling the fetishized order: Walter Benjamin and the social imaginary (O desfazer da ordem fetichizada: Walter Benjamin e o imaginário social)*. Cultura Vozes, v. 89, n. 5, p. 34-44, 1995

PESAVENTO, Sandra. *Imagining the imaginary (Imaginando o Imaginário)*. São Paulo: ANPHU Magazine, 1997

RIBEIRO, R.W. *Cultural scenery and heritage (Paisagem Cultural e Patrimônio)*. Rio de Janeiro: Research and Documentation of IPHAN, 2007

RIEGL, Alöis. *Le Culte Moderne des Monuments*. Or. Der Moderne Denkmalkultus (1903). Trad Jacques Boulet. 1ª ed Paris: Harmattan, 2003

RIEGL, Alöis. *The Modern Cult of Monuments: their essence and origin* (O Culto Moderno dos Monumentos: a sua essência e a sua origem). Or. Der Moderne Denkmalkultus (1903). Trad Werner Rothschild Davidsohn, Anar Falbel. 1ª ed São Paulo: Perspectiva, 2014

RUTTE, Reinout et al. *Atlas of the Dutch Urban Landscape: A Millennium of Spatial Development*. Thoth Publishers, 2016

SILVA, Sérgio Roberto Rocha da. *Heroes monuments in the city of Rio Grande* (Monumentos de Heróis na Cidade de Rio Grande). In: CLEMENTE, Elvo (Org.) *Integration, story, culture and science 2004*. Porto Alegre.: EDIPUCRS, 2006

VIDESOTT, Luisa. *Brasília: the creation of a myth* (Brasília: a construção de um mito). In: CAMPOS, Cristina; ATIQUÊ, Fernando; DANTAS, Alexandre Ferreira (Org.) *Professionals, practices and representations of the city and territory construction* (Profissionais, práticas e representações da construção da cidade e do território). São Paulo: Alameda, 2013. Pp. 337-353

Image sources

Figure 1: Own elaboration.

Figure 2: Google Earth Image and own caption.

Figure 3: Collection of the 4th Superintendence of the National Historic and Artistic Heritage Institute (IPHAN), Ceará.

Figure 4: Author's creation based on the work of The Atlas of Dutch Urban Landscape, by Rutte et al., 2016



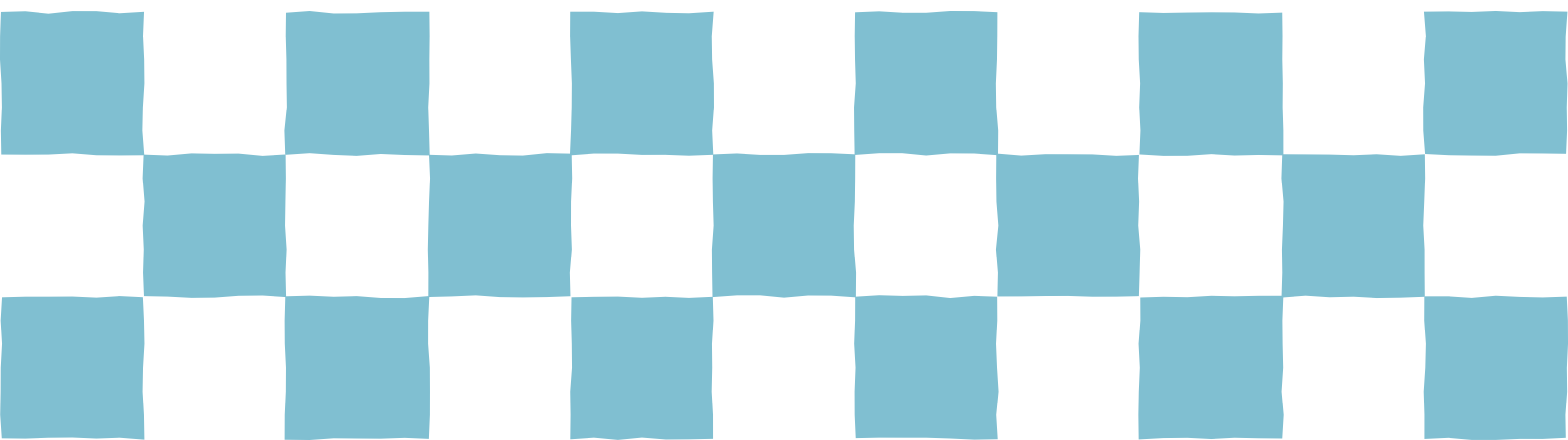
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

57 **Western Planning in Asian Treaty Ports / GUHP***



Western Modernity Interwoven with Chinese Traditions: Lives and Identities of an Emerging Cosmopolitan Society in Late Nineteenth Century Shanghai

Hang Lin (Hangzhou Normal University)

Decreed by the Treaty of Nanjing, which in 1842 brought the First Opium War (1839-1842) to an end, Shanghai was designated one of the five Chinese ports to be opened to Western trade. Thanks to its position at the mouth of the Yangzi River that served a huge surrounding basin right at the center of China, Shanghai became the preferred place of residence for foreign merchants and entrepreneurs and rose to a major economic and financial center in East Asia in the mid 19th century. Shanghai's economy thrived and the people made this development possible came from various provinces of China, from the principal nations of Europe, the United States, Japan, and other Asian countries already colonized by the West. The relative importance of these communities varied from one period to another, but the barriers that separated them - languages, customs, and interests - all contributed to the fragmentation of the local society. Different practices came to be grafted onto traditional systems, modifying the way that these functioned and themselves being changed by this transplantation. Despite such fragmentation, Shanghai provided many opportunities for intercultural contacts between groups of people from vastly different backgrounds. The local society's reception of foreign novelties and the foreigners' adaption to their new place of work and living progressed more smoothly than might have been expected. This paper delves into archival documents and existing histories to examine how the unique multifaceted cultural landscape in Shanghai came into being and how daily lives of various peoples in different parts of the city - foreign concessions and the Chinese city - were shaped by this kaleidoscope. I shall demonstrate that a new cosmopolitan society, largely modeled upon the Western modernity but interwoven with traditions from various parts of China, was rapidly emerging in Shanghai in the late nineteenth century. At the same time, a distinctive Shanghai identity also began to arise in the last years of the nineteenth century. On the side of the foreigners, the pioneers of society established on the margins of the Western world gave way to longer-term expatriates who welcomed a much-improved urban environment. On the Chinese side, there were detectable signs of nascent patriotism that to a certain extent transcended them.

From Entrepot to Treaty Port: Nagasaki's Networks of Transnational Exchange and the Nineteenth Century Global Order, 1859-1899

Jessa Dahl (University of Chicago)

What happens to an international trading city when the structure of the world changes? In the mid-nineteenth century, when Japan became a semi-willing participant in the treaty port trading system expanding throughout East Asia, the city of Nagasaki went from being the central hub of international exchange in a Japan-centered international system to one of several Japanese treaty port cities in a Euro-American-centered network of exchange. While this change brought an influx of new foreign residents with a multiplicity of motivations, it also destabilized the extant systems of international exchange that had been operation for nearly two hundred years. How did Nagasaki residents, foreign and Japanese, men and women, navigate the dramatically expanding scale of international exchange during this period, and how was this transition written into the physical geography of Nagasaki itself?

This paper explores both the physical and social development of Nagasaki, and how these developments interacted with and influenced each other. Nagasaki's transition into a treaty port included the building of new foreign settlements on reclaimed land, the construction of new infrastructures throughout the city to facilitate trade, and the sometimes halting introduction of new manufacturing, communication and transportation technologies. Some of the same physical characteristics that made Nagasaki an ideal site of international exchange before the mid-nineteenth century ended up limiting its development as a modern treaty port. By combining an analysis of these physical changes with a study of contemporary social networks and transnational relationships, I will demonstrate that the changes that swept throughout the physical geography of Nagasaki had social consequences, and that the demands of transnational social mobilization on the part of Nagasaki residents in turn shaped further development of the physical space of the city. The reciprocal interplay between social and geographic space, as well as the adaption of old systems alongside the new, defined Nagasaki's identity as an international city and its engagement with a new global system well beyond its life as a treaty port.

Historical Analysis of Urban Public Transportation Development in Modern Tianjin (1902-1949)

Yili Zhao (School of Architecture, Tianjin University), Lin Feng (School of Architecture, Tianjin University), Yanchen Sun (School of Architecture, Tianjin University) and Kun Song (School of Architecture, Tianjin University)

Tianjin was the earliest city opening urban public transport lines in China. Urban public transportation had profound impacts on urban construction and on the formation of urban structure in Tianjin from 1902 to 1949. Based on the background of urban development, this paper firstly divides the evolution process of public transportation represented by tramways and buses into three periods from the perspectives of the distribution, quantity and operation status of public transportation lines. It then analyses the strong influence of public transportation on urban roads construction from the view of the increased municipal income, road widening, improvement of pavement quality, and bridges construction and maintenance. Finally, by using qualitative and quantitative analysis and superposing the related statistical data with the historical map, it analyses the relationship among public transportation line density, land value partition and basic urban structure, and certifies they were highly relative. In conclusion, the paper argues that Tianjin urban public transport network was based on trams and supplemented by buses, and not only planning ideas but also advanced municipal technologies from the West like public transportation system were also indispensable supports in the process of urban modernization in Chinese modern treaty ports.

Planning Modern Cities in China: Urban Construction Regulations of Concessions in Tianjin (1860-1945)

Yanchen Sun (Tianjin University), Carola Hein (Delft University of Technology), Kun Song (Tianjin University) and Lin Feng (Tianjin University)

Tianjin, one of the so-called Treaty Ports that opened to foreign trade under the unequal treaties was home to nine foreign concessions. In each concession, the foreign powers created urban forms and functions that mirrored practices in their respective home countries. This article explores the consecutive establishment and implementation of regulations in eight out of nine foreign concessions in Tianjin between 1860 and 1945. It firstly provides an overview of regulation types and legislative systems of the concessions. Secondly, it compares these regulations and bylaws with the ones in their home countries. Thirdly, it compares the specific cases of Tianjin concessions with each other. Finally, it places the Tianjin case in the context of other Chinese port city concessions. In conclusion, it argues that the regulations of concessions in Tianjin not only showed a strong influence from their home countries in a top-down setting, but also interacted with each other in a peer-to-peer setting. The circulation of these regulations, within Tianjin and among treaty ports in China, was promoted by governments' central control, municipal councils' intervention and individuals' movements from one place to another.



Western Modernity Interwoven with Chinese Traditions: Lives and Identities of an Emerging Cosmopolitan Society in Late Nineteenth Century Shanghai

Hang Lin*

* *PhD, College of Humanities / Institute for Hangzhou Internationalization, Hangzhou Normal University, e-mail: hang.lin@hznu.edu.cn*

As one of the first Chinese cities opened to Western trade in mid 19th century, Shanghai soon became the preferred place of residence for foreign merchants and entrepreneurs in East Asia. Shanghai's economy thrived and the people made this development possible came from various provinces of China, from the principal nations of Europe, the United States, Japan, and other Asian countries already colonised by the West. The relative importance of these communities varied from one period to another, but the barriers that separated them - languages, customs, and interests - all contributed to the fragmentation of the local society. This paper examines how different practices came to be grafted onto traditional systems and how Shanghai provided many opportunities for intercultural contacts between groups of people from vastly different backgrounds. I shall demonstrate that a new cosmopolitan society, largely modeled upon the Western modernity but interwoven with traditions from various parts of China, was rapidly emerging in Shanghai in the late nineteenth century, together with a distinctive "Shanghai identity" that shaped both Chinese and foreigners.

Keywords: Shanghai, foreign concession, urban structure, Sino-Western exchange, national identity

Introduction

When the Treaty of Nanjing designated Shanghai one of the five Chinese ports to be opened up to Western trade in 1842, the destiny of the city was sealed. Among the five ports, Shanghai rapidly affirmed its preeminence because of its position at the mouth of the Yangzi River that served a huge surrounding basin right at the center of China.¹ Within a few decades, Shanghai became the preferred place of residence for the foreign entrepreneurs who, with the aid of Chinese merchants, set up their business there. Thanks to the privileges granted by the treaty and the autonomy that the concessions acquired, the foreign residents, together with the Chinese who now settled alongside them, found themselves protected from the troubles that beset the last imperial dynasty and the fraught birth of the Republic after the 1911 Revolution.

In the late nineteenth century, almost three-quarters of Shanghai's inhabitants were not natives of the town. They had come there from the Chinese provinces, Europe, the US, and Japan. The population was fragmented into communities that had virtually no communication with each other. Provincial dialects created as many barriers between the Chinese as national languages between the Europeans. Many would describe Shanghai at this time as a patchwork or a mosaic, for the different communities and their identities changed as the economic and political circumstances did.² In the absence of a strong and unified local government, authority in such a society of largely temporary residents resided principally with organisations that represented specific regional or professional interests, chambers of commerce, clubs, guilds, secret societies, and gangs, all of which led largely autonomous lives.

This paper examines how the urban structure and multifaceted cultural landscape in Shanghai came into being and how daily lives of various peoples in different parts of the city—the Chinese city and foreign concessions—were shaped by the unique nature of the cosmopolitan society. Different practices came to be grafted onto traditional systems and the new city provided many opportunities for intercultural contacts between groups of people from vastly different backgrounds. In the mean time, a Shanghai identity also began to emerge in the last years of the nineteenth century. On the side of the foreigners, the pioneers of a society established on the margins of the Western world gave way to long-term expatriates who welcomed a much-improved urban environment. On the Chinese side, there were detectable signs of a nascent patriotism that to a certain extent transcended them.

A Town with Two Faces: The Chinese City and Concessions

Prior to the nineteenth century, Shanghai was not just "a fishing village", as one long-standing myth would have it.³ By the time of late eighteenth century, Shanghai boasted between 200,000 and 300,000 inhabitants, whose living and commercial quarters extended beyond the city wall to the Huangpu River. The inhabited area was covered with a maze of narrow streets, the most important of which, 3 to 4 metres wide, were paved with bricks



and lined by stalls. The network of streets interlaced with that of the canals, which often turned to beds of mud and rubbish periodically flushed out by floods. There was no sign of any town planning reflecting a political will or any ritual or ideologically preoccupations, as suggested by the regular grid pattern of many cities in northern China.⁴

The Nanjing Treaty signed in 1842 granted the right of residence of foreigners in Shanghai but did not make it clear where they should establish themselves.⁵ The circuit intendant (*daotai*) of Shanghai, Gong Mujiu (1788-1848), drew up the Land Regulations in 1845, which granted the British the right to install themselves in a zone measuring 832 *mu* (ca. 56 hectares), later extended to 2,820 *mu* (ca. 56 hectares) in 1848.⁶ The zone was located to the north of the walled town along the bank of the Huangpu. To the north and the south, the Suzhou River and the Yangjingbang delimited the area. To the west, the Zhoujingbang (also know as the Defence Creek) stood as the boundary.⁷ In fact, the concessions were the result of local agreements that, in the first instance, specified procedures for transferring the foreigners' land rights. Provided that an annual rent was paid to the Chinese proprietors, the foreigners could obtain perpetual rights. Thus in the course of time, those ad hoc arrangements served as the basis upon which to develop veritable colonial enclaves.

The Land Regulations explicitly expressed that no Chinese could claim ownership of land or buildings in the settlement, but they did not specify what if the buyers were Westerner but not British. The ambiguity was discovered by the French and the Americans and it soon resulted in the creation of new concessions. On April 6, 1849, a proclamation established the boundaries of the French concession: in the south it reached to the wall of the old town, in the east to the Huangpu banks, in the north the Yangjingbang, and in the west to roughly as far as the British concession. The Americans protested the creation of the French concession and they settled in large numbers in the Hongkou quarter north of the Suzhou River, which became the de facto American concession. In 1863, the American concession finally gained official recognition and a few months later it merged with the British counterpart to form the International Settlement.⁸

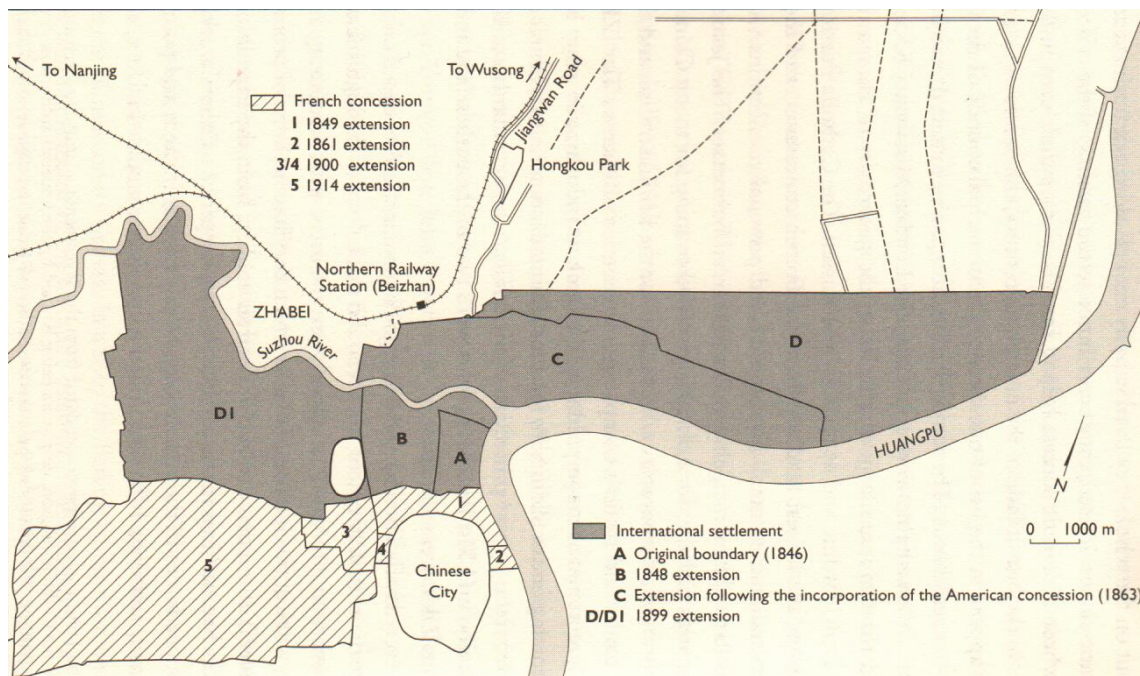


Figure 1: The foreign concession in Shanghai and their further extensions. From: Marie-Claire Bergère, *Shanghai: China's Gateway to Modernity* (Stanford: Stanford University, 2009), 90.

The quadrangular network of streets in the new quarters did not suggest any deliberate aspirations to colonial grandeur. It followed the pattern of existing waterways and paths and “reflected the preoccupations of the merchants and aimed to answer their needs.”⁹ The new quarters developed at an uneven speed, as the French and American concessions lacked far behind in infrastructure construction in the years following the opening up of the port, this land soon possessed a new looking different to the old Chinese town. The streets running from west to the east and south to north presented a stark contrast to the maze of tiny alleys in the walled town. The vast European-style residences, set in their flower-filled gardens, were erected nit far away from the cramped buildings in the old town.



Figure 2: Street plan of the British Concession (marked as “English Settlement”), published in 1864-1866. Courtesy of the British Library [collection id: C019/6103]. Available at: <http://www.sciencephoto.com/media/570208/view/english-settlement-at-shanghai> [19 March, 2018]



Figure 3: Street plan of the French Concession, published in 1882. Courtesy of the Bibliothèque nationale de France [collection id: 138]. Available at: <http://gallica.bnf.fr/ark:/12148/btv1b530211173> [March 21, 2018]



Emergence of a Multicultural Community

Despite the exclusive right of foreigners to reside in the concessions, the misfortunes of the 1850s and 1860s, in particular the secret society of Small Sword (*Xiaodaohui*) and the Taiping uprising, which brought to Shanghai an unremitting series of violent disorders, looting, and repression.¹⁰ The turbulence of these days encouraged many Chinese to take refuge in the foreign concessions and soon the massive wave of immigration changed the life of foreign residents. Mansions and gardens were demolished and the concessions now mushroomed with “lane communities” (*lilong*) intended for Chinese tenants: terraced houses of one or two stories, arranged in parallel rows, with continuous built-up facade giving onto the street.¹¹ Despite the influx of Chinese residents, the concessions remained outside the imperial jurisdiction. The British, French, and American consuls shouldered the task of inventing institutions to cater to the needs of the new Sino-foreign community. From 1854 to 1864, the concessions witnessed the creation of the Shanghai Municipal Council, which later became the official governing body of all concessions, the establishment of a General Inspectorate of Maritime Customs, the merge of the American concession with the British, and the Mixed Court that adjudicated cases involving Chinese residents. A multicultural community emerged.¹²

Within this fragmented society, the major division that separated Chinese and Westerners remained. Westerners were now more numerous: about 15,000 in 1910, compared to only 250 in 1855, but they represented barely 1% of the 1.3 million inhabitants who now made up Shanghai. But their presence acted as a catalyst upon a number of social and institutional changes that would make Shanghai the first modern Chinese city. The foreign community, however, was divided by deep national, professional, and religious rifts. Although the relative importance of the British had declined, in 1910 they still made up the largest group (4,500) and also the most influential as its members still had the de facto control over the municipal institutions. Around the British establishments was an Indian community of about 1,300 individuals, most of who were employed as policemen together with some merchants from the region of Bombay.¹³ The Japanese, who began to flock in around 1900, numbered about 3,400 and they lived in isolation in the Hongkou quarter to the north of the international settlement. Next to the British, the American group was almost the same size as the French. Germans were slightly fewer, and the Russians, even fewer. The 1,500 Portuguese, mostly from Macao, formed a group apart.¹⁴ Each of these groups stressed its own cultural and religious individuality, however, the British, who were at the top of the tree and put their mark upon social relations both within the international community and with the neighboring Chinese society, set the tone. The British influence was manifest also in the daily activities, the organisation of the living environment, the development of leisure activities and sport, and the use of English as the lingua franca in the foreign communities.

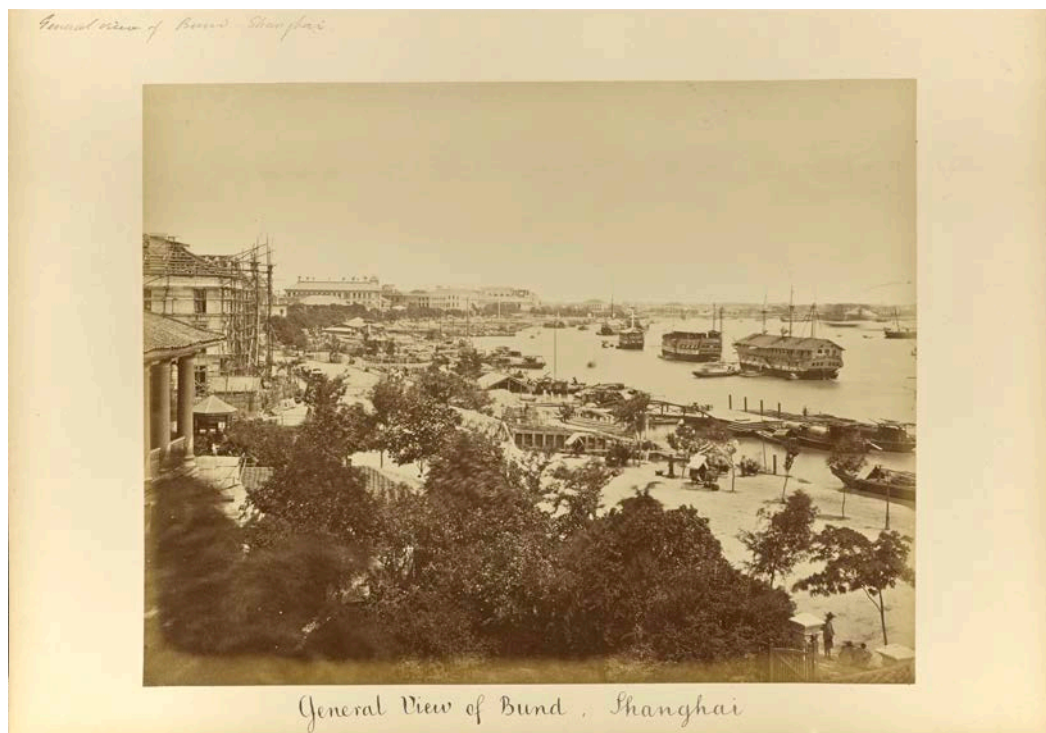


Figure 4: General view of Bund, ca. 1870. Courtesy of the Getty Museum in Los Angeles [object no.: 84.XO.1356.17]. Available at: <http://www.getty.edu/art/collection/objects/208307/unknown-maker-general-view-of-bund-shanghai-about-1870/> [20 March, 2018]



The professional hierarchy reflected the national one. The most highly respected notables were the merchants and the bankers, many of them were either English or Scottish. These British businessmen had arrived as youths in Shanghai and worked as griffins before becoming bosses. The most important of them represents companies based in London or New York.¹⁵ Diplomatic staff represented a different circle of influence. Each of the fifteen or so great powers covered by the treaty system maintained a consulate-general or a representative office in Shanghai. In the last years of the empire, three consulates-general were remarkable for their competence and influence: those of Britain, France, and Russia. The small circle of professional men sometimes intersected with that of local foreign officials and, more often, with that of the missionaries. All Catholic orders and every Protestant denomination were represented in Shanghai, which was the principal center for missionaries in China. They ran many educational institutions, hospitals, printing works, and publishing houses that produced not only bibles but also translations of Western scientific works. The everyday functioning of the foreign community also depended on the presence of other Westerners, ones who did not belong to the high society of the concessions. For instance, many Portuguese were entrusted with accounting and copying work in foreign companies. Finally, the foreign community could also count on the services of several dozen prostitutes of Western origin.¹⁶

Cosmopolitan Life in the New Society

Since the mid-nineteenth century, living conditions in the foreign concessions had greatly improved. By the end of the century, the quality of the infrastructure of Shanghai equaled those of large European and American cities. The Bund was no longer a stinking towpath bordering the river but a well-constructed wharf, which now adorned banks, trading houses, and official buildings. Also cars and telephones were not rare. The British gathered in the Shanghai Club on the Bund, while the French, the German, the Irish all had their own preferred clubs.¹⁷ The British were keen on horse racing, so that a 30-hectare racecourse was built in 1861, where now is the People's Square. Theaters and balls were always celebrated by Western inhabitants.¹⁸ Those interested in literary and historical research organized themselves around the North China Branch of the Royal Asiatic Society that was set up in Shanghai in 1858.



Figure 5: The Shanghai Club in 1872. Courtesy of the Getty Museum in Los Angeles [object no.: 84.XA.614.8]. Available at: <http://www.getty.edu/art/collection/objects/141320/john-thomson-the-club-shanghai-scottish-1862-1872/> [22 March, 2018].

However, it remains a question as could it be said that the various national groups thrown together in the concessions made up a real community? For a long time, the standoffishness of the French and the national and religious particularities of other groups blocked the emergence of a wider sense of community membership and the development of a spirit of local citizenship. The Shanghai of the foreigners was from the start defined by its opposition to its Chinese environment, and this conferred upon it a negative identity. On Nov. 17 and 18, 1893, the International Settlement celebrated the fiftieth anniversary of the opening of the port. On the Bund, a streamer proclaimed “in what region of the world is Shanghai not known?”¹⁹ However, the collective memory often functioned in a somewhat patchy way. Each national group celebrated the history of Shanghai by



commemorating the part that its most distinguished nationals had played. Given the large number and the dominant position of the British, foreign Shanghai was essentially British in the general collective memory. In such circumstances, it was hard for the foreign residents of Shanghai to entertain the notion of a shared identity. The various communities continued to gear their lives to the rhythms of their respective mother countries. The French celebrated July 14; the Americans July 4. The British got together to celebrate Queen Victoria's diamond jubilee in 1897 and King Edward VII's coronation in 1901; the Germans celebrated the visit of Prince Henry of Prussia in 1898.²⁰

Closeness and complicity among the foreigners in Shanghai were forged elsewhere, in a shared sense of belonging to a pioneer community and coping with difficulties much different from in their mother countries; in the shared pleasure of freely flowing alcohol, banquets, and grand receptions. They were not ideologists, but their attachment to Shanghai and identification with it grew ever stronger as they rose to the challenges of difficult environment and created conditions for a privileged life.

The Chinese society alongside the foreign communities, on the other hand, showed another image. In the second half of the nineteenth century, Chinese population in Shanghai grew from 700,000 in 1865 to 1.3 million in 1910.²¹ The merchants from the neighboring Jiangsu and Zhejiang provinces succeeded their forerunners from Guangdong and Fujian. Landowners and scholars from Suzhou and Wuxi, bankers from Ningbo, and peasant laborers from northern Jiangsu moved into Shanghai. Most of these newcomers settled in the concessions or on their peripheries. People with the same provincial origin liked to cluster together in particular quarters and streets. In the international settlement, natives of Jiangsu made up the largest group (180,000), followed by those of Zhejiang (170,000).²² Each group was distinguished from the local population and other immigrant groups by its own dialect, its food, its rituals, and, in many cases, by its professional activities. Except for elite literate groups, very little communication took place between residents from different backgrounds. They spoke mainly, in many cases only, with their fellow countrymen from the same province or even the same district. Restaurants were classified not in terms of quality or price but according to their regional character. Regional solidarities were constructed around the native-place associations (*huiguan*). These *huiguan* protected the interests of their community, opened schools, and helped their members to find work or obtain capital.²³

“Shanghai Identity”: Combining Chinese and Western

While these multiple local cultures constituted a formidable obstacle to the formation of a Shanghai identity, a new identity was indeed emerging. At the end of the Taiping turbulence in the early 1860s, many landowners, distinguished scholars, retired officials, and powerful clan leaders arrived in Shanghai for shelter. The arrival of these elite groups, which Western historians of China often label as the gentry, tempered the dominance of the merchants, because they brought with them the prestige of their academic titles and connections, their experience as local managers, and their Confucian value. The merchants and the gentry soon found a measure of agreement, for they all indented to make the most of the economic conditions and to assume unprecedented social and political responsibilities.²⁴ Many wealthy merchants who were more exposed to contacts with the foreigners, adopted a partially Westernised lifestyle. Their horizons widened beyond China itself to encompass the outside world. Although they continued to respect Confucian precepts, they rejected some long-standing customs, such as not schooling girls and binding feet. Their culture was hybrid, as were their wardrobes, where long silk robes hang beside European-style suits.

The prestige of wealth now tended to eclipse that of education and official titles, and the pursuit of profit became more important than the practice of virtue. Major entrepreneurs gave up the idea of transforming their sons into scholars; instead, they had them educated in missionary schools or abroad to turn them into modern businessmen. Many scholars, on the other hand, combined their official tasks with entrepreneurial activities and some even abandoned public careers to devote themselves to business. The most famous case was that of Zhang Jian (1853-1926), the first in the civil service examination in 1894 who became the founder of one of the major textile factories in Shanghai.²⁵ According to the Confucian orthodoxy, scholars stood at the top of the social hierarchy and merchants at the bottom, but the two groups gradually merged together and formed a class of “gentry-merchants” (*shenshang*).²⁶ Such an integration of elite groups was not a new phenomenon, but in Shanghai this integration came about not so much on the basis of the Confucian values but on the values that merchants recognised, namely, pragmatism and modernism.

Concluding Remarks

In Shanghai, the meeting of Chinese civilisation and Western modernity took a pragmatic form. The local society's reception of foreign novelties and the foreigners' adaption to their new place of work and living progressed relatively smoothly. The adaptability and flexibility of these men injected an extraordinary dynamism



into Shanghai society. That dynamism influenced the aspirations of Chinese both inside and beyond the concessions. The existence of enclaves that eluded imperial authority offered Chinese residents the possibility of being Chinese in a new different way. It broke the monopoly over power and thought upon which Confucian orthodoxy was based and established the theoretical possibility of a dialogue between civilisations. But in reality, the communities in Shanghai were rather fragmented, in particular that of the foreigners and the Chinese. The arrogance of the foreigners and the privileges they enjoyed gave rise to the emergence of a modern Chinese nationalism that aimed to take up the Western challenge on its own terms: it aspired to economic modernisation, material prosperity, and social progress. Out of these twofold aspirations, at once modernising and nationalistic, came the initially reformist, then revolutionary movement that would eventually pull down the imperial regime in 1911.

Acknowledgements

Initial part of the paper was presented at the Third Borders & Identity Conference (BIC) held between 16th and 19th March 2015 at Humboldt University, Germany. I am grateful to Florian Riedler, Nora Lafi, and Jeanine Dagyeli for their inspiring inputs and invaluable comments on the draft of this paper. A grant from the Institute for Hangzhou Internationalization of Hangzhou Normal University (grant no.: 2017JD22) greatly facilitated the research and the writing of this paper.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Hang Lin is currently an associate professor at Hangzhou Normal University, China. He has received his MA and PhD in Chinese history from University of Wuerzburg, Germany, and he has completed a post-doc project on cultural expression and urban society in early modern China at University of Hamburg, Germany. His research interests focus on urban history of East Asia, socio-cultural transformations of East Asian cities, and ethnicity and ethnographic representation in urban contexts.

Endnotes

¹ On Shanghai's strategic location and geographic advantages as a treaty port, see Robert Nield, *China's Foreign Places: The Foreign Presence in China in the Treaty Port Era, 1840-1943* (Hong Kong: Hong Kong University Press, 2015), 97, 174.

² See, in particular, Frederic Wakeman, Jr. and Wen-hsin Yeh, eds., *Shanghai Sojourners* (Berkeley: Institute of East Asian Studies, University of California, 1992), 5.

³ Linda C. Johnson, *Shanghai: From Market Town to Treaty Port, 1074-1858* (Stanford: Stanford University Press, 1995), 8-10.

⁴ The most famous examples are probably Chang'an of the Tang dynasty and Beijing of the Ming and Qing dynasties. For a study of the city structure of Chang'an, see Chye Kiang Heng, *Cities of Aristocrats and Bureaucrats: The Development of Medieval Chinese Cityscapes* (Honolulu: University of Hawai'i Press, 1999). On Beijing, see Victor F. S. Sit, *Beijing: The Nature and Planning of a Chinese Capital City* (New York: John Wiley and Sons, 1995); 1999. Nancy Shatzman Steinhardt, *Chinese Imperial City Planning* (Honolulu: University of Hawaii Press, 1999).

⁵ For detailed articles of the treaty, see Jonathan D. Spence, *The Search for Modern China* (New York: Norton, 1990), 158-160.

⁶ On Gong Mujiu and his tenure in Shanghai, see Yuansheng Liang, *The Shanghai Taotai: Linkage Man in a Changing Society, 1843-90* (Singapore: National University of Singapore Press, 1990), 46-49.

⁷ Ernest O. Heuser, *Shanghai: City for Sale* (New York: Harcourt, Brace & Co., 1940), 10.

⁸ F.L. Hawks Pott, *A Short History of Shanghai: Being an Account of the Growth and Development of the International Settlement* (Shanghai: Kelly & Walsh, 1928), 63.

⁹ Marie-Claire Bergère, transl. Janet Lloyd, *Shanghai: China's Gateway to Modernity* (Stanford: Stanford University, 2009), 35.

¹⁰ In 1853, the Xiaodaohui occupied the Chinese town, forcing the circuit intendant to flee, see Cooke, *Shanghai*, 267-291; Takeshi Hamashita, "Tribute and Treaties: East Asian Treaty Ports Networks in the Era of Negotiation, 1834-1894," *European Journal of East Asian Studies* 1, no. 1 (2002): 59-87. On Shanghai's situation during the era of the Taiping rebellion, see Immanuel C.Y. Hsü, *The Rise of Modern China* (Oxford: Oxford University Press, 1970), 145-146.

¹¹ Jeffery Wassertrom, *Shanghai: A History in Fragments* (New York: Routledge, 2008), 10-12.

¹² Spence, *The Search for Modern China*, 179.



¹³ Claude Markovits, "Indian Communities in China, ca. 1842-1949," in *New Frontiers: Imperialism's New Communities in East Asia, 1842-1953*, edited by Robert Bickers and Christian Henriot (Manchester: Manchester University Press, 2000), 55-74.

¹⁴ On the presence of the German in Shanghai, see Chiara Betta, "Marginal Westerners in Shanghai: The Baghdadi Community, 1845-1931," in *New Frontiers*, 38-54.

¹⁵ Albert Feuerwerker, *The Foreign Establishment in China in the Early Twentieth Century*. Michigan Papers in Chinese Studies 29 (Ann Arbor: University of Michigan, 1976), 17-18.

¹⁶ Christian Henriot, *Prostitution and Sexuality in Shanghai: A Social History, 1849-1949* (Cambridge: Cambridge University Press, 2001); Gail Hershatter, *Dangerous Pleasures: Prostitution and Modernity in Twentieth-Century Shanghai* (Berkeley: University of California Press, 1997), 18-22.

¹⁷ On the various clubs, see C.E. Darwent, *Shanghai: A Handbook for Travellers and Residents* (Shanghai: Kelly & Walsh, 1920), 7, 80; Guy Brossolet, *Les Français de Shanghai, 1849-1949* (New York: Vantage Press, 1967), 245-248.

¹⁸ As early as the 1870s, the Caledonian Ball, organised by the Saint Andrew's Society, was one of the key events of the social season. The Amateur Dramatic Club, created in 1867 by some English residents, regularly put on theatre shows. On these issues, see Charles M. Dyce, *Personal Reminiscences of Thirty Years' Residence in the Model Settlement: Shanghai, 1870-1900* (Shanghai: Chapman and Hall, 1906), 200-221; Darwent, *Shanghai*, 196.

¹⁹ Cited in Bergère, *Shanghai*, 97.

²⁰ Ling Pan, *Shanghai: A Century of Changes in Photographs 1843-1949* (Hong Kong: Haigeng Publishing, 1993), 28-29, 31.

²¹ Yiren Zou, *Jiu Shanghai renkou bianqian de yanjiu* [A Study on the Demographic Development in Old Shanghai] (Shanghai: Shanghai renmin chubanshe, 1980), 90.

²² James C. Sanford, "Chinese Commercial Organization and Behaviour in Shanghai of the Late Nineteenth and Early Twentieth Century," PhD dissertation (Harvard University, 1976), 183.

²³ For a detailed study of *huiguan* in Shanghai, see Bryna Goodman, *Native Place, City, and Nation: Regional Networks and Identities in Shanghai, 1853-1937* (Berkeley: University of California Press, 1995).

²⁴ Hanchao Lu, *Beyond the Neon Lights: Everyday Shanghai in the Early Twentieth Century* (Berkeley: University of California Press, 1999), 97.

²⁵ On Zhang's life and his modernist path in developing industry, see Kathy Le Mons Walker, *Chinese Modernity and the Peasant Path: Semicolonialism in the Northern Yangzi Delta* (Stanford: Stanford University Press, 1999), 101-129.

²⁶ See Zhongping Chen, *Modern China's Network Revolution: Chambers of Commerce and Sociopolitical Change in the Early Twentieth Century* (Stanford: Stanford University Press, 2011), 245-248.

Bibliography

Bergère, Marie-Claire, translated by Janet Lloyd, *Shanghai: China's Gateway to Modernity*. Stanford: Stanford University, 2009.

Betta, Chiara. "Marginal Westerners in Shanghai: The Baghdadi Community, 1845-1931," in *New Frontiers*, 38-54.

Bickers, Robert, and Christian Henriot, eds., *New Frontiers: Imperialism's New Communities in East Asia, 1842-1953*. Manchester: Manchester University Press, 2000.

Brossolet, Guy. *Les Français de Shanghai, 1849-1949*. New York: Vantage Press, 1967.

Chen, Zhongping. *Modern China's Network Revolution: Chambers of Commerce and Sociopolitical Change in the Early Twentieth Century*. Stanford: Stanford University Press, 2011.

Darwent, C.E. *Shanghai: A Handbook for Travellers and Residents*. Shanghai: Kelly & Walsh, 1920.

Dyce, Charles M. *Personal Reminiscences of Thirty Years' Residence in the Model Settlement: Shanghai, 1870-1900*. Shanghai: Chapman and Hall, 1906.

Feuerwerker, Albert. *The Foreign Establishment in China in the Early Twentieth Century*. Michigan Papers in Chinese Studies 29. Ann Arbor: University of Michigan, 1976.

Goodman, Bryna. *Native Place, City, and Nation: Regional Networks and Identities in Shanghai, 1853-1937*. Berkeley: University of California Press, 1995.

Hamashita, Takeshi. "Tribute and Treaties: East Asian Treaty Ports Networks in the Era of Negotiation, 1834-1894." *European Journal of East Asian Studies* 1, no. 1 (2002): 59-87

Heng, Chye Kiang. *Cities of Aristocrats and Bureaucrats: The Development of Medieval Chinese Cityscapes*. Honolulu: University of Hawai'i Press, 1999.



- Henriot, Christian. *Prostitution and Sexuality in Shanghai: A Social History, 1849-1949*. Cambridge: Cambridge University Press, 2001.
- Hershatter, Gail. *Dangerous Pleasures: Prostitution and Modernity in Twentieth-Century Shanghai*. Berkeley: University of California Press, 1997.
- Heuser, Ernest O. *Shanghai: City for Sale*. New York: Harcourt, Brace & Co., 1940.
- Hsü, Immanuel C.Y. *The Rise of Modern China*. Oxford: Oxford University Press, 1970.
- Johnson, Linda C. *Shanghai: From Market Town to Treaty Port, 1074-1858*. Stanford: Stanford University Press, 1995.
- Liang, Yuansheng. *The Shanghai Taotai: Linkage Man in a Changing Society, 1843-90*. Singapore: National University of Singapore Press, 1990.
- Lu, Hanchao. *Beyond the Neon Lights: Everyday Shanghai in the Early Twentieth Century*. Berkeley: University of California Press, 1999.
- Markovits, Claude. "Indian Communities in China, ca. 1842-1949." in *New Frontiers*, 55-74.
- Nield, Robert. *China's Foreign Places: The Foreign Presence in China in the Treaty Port Era, 1840-1943*. Hong Kong: Hong Kong University Press, 2015.
- Pan, Ling. *Shanghai: A Century of Changes in Photographs 1843-1949*. Hong Kong: Haigeng Publishing, 1993.
- Pott, F.L. Hawks. *A Short History of Shanghai: Being an Account of the Growth and Development of the International Settlement*. Shanghai: Kelly & Walsh, 1928.
- Sanford, James C. "Chinese Commercial Organization and Behaviour in Shanghai of the Late Nineteenth and Early Twentieth Century." PhD dissertation, Harvard University, 1976.
- Sit, Victor F. S. *Beijing: The Nature and Planning of a Chinese Capital City*. New York: John Wiley and Sons, 1995.
- Spence, Jonathan D. *The Search for Modern China*. New York: Norton, 1990.
- Steinhardt, Nancy Shatzman. *Chinese Imperial City Planning*. Honolulu: University of Hawaii Press, 1999.
- Wassertrom, Jeffery. *Shanghai: A History in Fragments*. New York: Routledge, 2008.
- Wakeman, Frederic, Jr. and Wen-hsin Yeh, eds., *Shanghai Sojourners*. Berkeley: Institute of East Asian Studies, University of California, 1992.
- Walker, Kathy Le Mons. *Chinese Modernity and the Peasant Path: Semicolonialism in the Northern Yangzi Delta*. Stanford: Stanford University Press, 1999.
- Zou, Yiren. *Jiu Shanghai renkou bianqian de yanjiu* [A Study on the Demographic Development in Old Shanghai]. Shanghai: Shanghai renmin chubanshe, 1980.



Historical Analysis of Urban Public Transportation Development in Modern Tianjin (1902-1949)

Yili Zhao*, Lin Feng**, Yanchen Sun***, Kun Song***

* PhD, Tianjin University, 974046546@qq.com

** Lecture, Tianjin University, 41941932@qq.com

*** PhD, Tianjin University, SunYanchen8910@gmail.com

**** Professor, Tianjin University, 344255920@qq.com

Tianjin was the earliest city opening urban public transport lines in China. Urban public transportation had profound impacts on urban construction and on the formation of urban structure in Tianjin from 1902 to 1949. Based on the background of urban development, this paper firstly divides the evolution process of public transportation represented by tramways and buses into three periods from the perspectives of the distribution, quantity and operation status of public transportation lines. It then analyses the strong influence of public transportation on urban roads construction from the view of the increased municipal income, road widening, improvement of pavement quality, and bridges construction and maintenance. Finally, by using qualitative and quantitative analysis and superposing the related statistical data with the historical map, it analyses the relationship among public transportation line density, land value partition and basic urban structure, and certifies they were highly relative. In conclusion, the paper argues that Tianjin urban public transport network was based on trams and supplemented by buses, and not only planning ideas but also advanced municipal technologies from the West like public transportation system were also indispensable supports in the process of urban modernization in Chinese modern treaty ports.

Key words: Urban Public Transportation, Modern Tianjin, Tram, Roads Construction, Urban Structure

Introduction

The transformation of Chinese modern treaty ports was closely related to western planning ideas of the time. Western advanced technologies, including public transportation, also had profound impacts on urban construction. Tramcar and bus, as novel means of transportation, were introduced into China's metropolises including Tianjin successively in the early 20th century, which greatly promoted urban modernization. Tianjin was the first city opening urban public transport lines in China (Table 1). As the biggest treaty port in North China, Tianjin stepped into modern orbit with the establishment, planning and construction of concessions. To meet the expanding need on urban modernization and seek potential benefits from business, European merchants introduced tram to Tianjin. The paper explores the introduction, development and influence of public transportation represented by trams and buses in modern Tianjin (1902-1949).

First, it divides the development process of public transportation into three periods from the perspectives of the distribution, quantity and operation status of public transportation lines. The 1st period (1902-1924) started with the establishment of "Compagnie de Tramways et d'Eclairage de Tientsin" (CTDT) mainly invested by Belgian consortium (Oriental International Corporation, Overseas Bank, Second Railway Corporation, China Railway and Tram Corporation, etc.) in 1902¹. The opening of bus line set up by Chinese merchants in 1925 implied the beginning of the 2nd period (1925-1936)². And the 3rd period (1937-1949) came with Japanese takeover of tram and bus companies³. It argues that tramlines formed the basic skeleton of urban public transport network and bus lines supplemented it. Second, the article shows how public transportation promoted the development of urban road system from its contribution to municipal income, roads widening, transformation of pavement material. The foremost round of road widening in concessions was induced by the planning of tram lines and the paving of asphalt pavement also started from the road along tram route. Third, by using quantitative and qualitative analysis and superposing the related statistical data with the historical map, the paper analyses the relationship among public transportation line density, land value partition and urban spatial structure. It could be found that public transport lines greatly promoted the formation of land value partition and shift of urban centre, and the influence of trams was much deeper than that of buses.

In conclusion, the paper argues that not only planning ideas but also advanced municipal technologies from western countries like public transportation system were also indispensable supports in the process of urban modernization in Chinese modern treaty ports. The description and accurate quantitative analysis of Tianjin urban public transport demonstrates the strong influence of public transportation systems on urban construction.



City	TIAN JIN	NANJING	SHEN YANG	SHANG HAI	GUANG ZHOU	DA LIAN	HA' ERBIN	BEI JING
Transport	Tram	Short-distance Train	Carriage Railway	Tram	Tram	Tram	Bus	Tram
Start Year	1906	1907	1907	1908	1908	1909	1917	1924

Table 1: *The Start Year of Urban Public Transport Lines of Different City.*

Sources: compiled by the author based on “The First Opening of the Tram,” *Ta Kung Pao*(大公报), February 17, 1906; *Nanjing Chronicles Compilation Commission, Nanjing Chronicles* (Nanjing: Nanjing Chronicles Press, 1995), 288; Huangjin Sun, “Urban Development and Social Change of Shenyang In Modern Times” (Phd Diss., Northeast Normal University, 2012), 96; Song Zhang, “Historical Analysis on Public Transportation Development in Shanghai Concession,” *City Planning Review* 38, no. 1 (January 2014): 50; Dong Zou, “On Guangzhou’s Urban Planning and Construction in the Nationalist Era of China, 1911-1949” (Phd Diss., South China University, 2012), 222; Li Liu, “The Correlation between Traffic and Urban Development in Northeast Region of China from 1860 to 1931” (Phd Diss., Jilin University, 2012), 45; Zhong Zhang, “The early modernization study of Ha’erbin municipal(1898-1931)” (Phd Diss., Jilin University, 2011), 162; Zhihong Li, “On the Development of Buses in Beijing in the Nationalist Era of China” (Master Diss., Capital Normal University, 2008), 11;

The Initial Period of Public Transportation in Tianjin (1902-1924)

Tianjin was opened as a treaty port with the signing of the *Beijing Treaty*, and nine concessions were set up by western authorities successively in Tianjin. The establishment, planning and construction of concessions led to the outward expansion of urban area, the substantial increase in the quantity and length of roads, and the continuous growth of population. By 1900, the downtown area expanded by 4km², nearly equal to half of the city area in 1860, the number of roads added by 54, equal to that built during the 450 years from Ming Dynasty to 1860, the length of roads increased by 115km (measured by CAD drawings drawn by author’s team), equal to three-quarters of the city area in 1860, and the population rose more than 300,000, all of which made traditional transportation methods no longer met the needs of citizens and inspired the emerging and flourish of public transport in Tianjin⁴.

In the end of the 20th century, European and Japanese merchants tried to introduce short-distance steam railway and carriage railway into Tianjin, but both failed⁵. After seven of the members of the Eight-Nation Alliance established the Provisional Government that first used modern urban management and construction concept to manage Chinese areas (the areas governed by Chinese authorities) in 1900, European and Japanese competed to apply for the franchise of tram. “The Tramway and Electric Lightning Company” operated by Belgian Shichang Foreign Firm acquired the franchise in 1901, and then CTDI was founded one year later and inherited the business of the original company, which implied the prelude of modern public transport was officially opened⁶.

CTDI began to renegotiate with the Qing Government after the Government represented by Shikai Yuan (袁世凯) took over Tianjin in 1902, and reacquired 50-year franchise of trams and designed tramrails in Chinese areas with the signing of *Agreement for the Electric Tramways and Lighting of Tientsin* (ATLT) in 1904⁷. CTDI signed agreements with the authorities of Austria-Hungary, Italian and Russian concessions in 1905, of the French concession in 1906, and of the Japanese concession in 1907, to acquire the franchise of trams and specify tramlines in the concessions.⁸ The first tramline, “White Line”, which started from Beidaguan (北大关) and circled around the Old City (老城厢) in a clockwise direction after reaching Beiman (北门), was opened to traffic in 1906 (Figure 1)⁹. Subsequently, “Red Line”, “Blue Line”, “Yellow Line”, and “Green Line” were opened successively¹⁰.



Figure 1: *The first tram line-white line in Tianjin began in 1906.*



By 1921, there had been five tram lines (17.6km long) in Tianjin, covering the periphery of the Old City, the Japanese, French, Austria-Hungary, Italian, and part of the Russian Concessions, with four passing through the Old City and three of them passing through the French Concession, initially forming the basic structure of public transportation centering on the Old City and the French Concession (Figure 2).

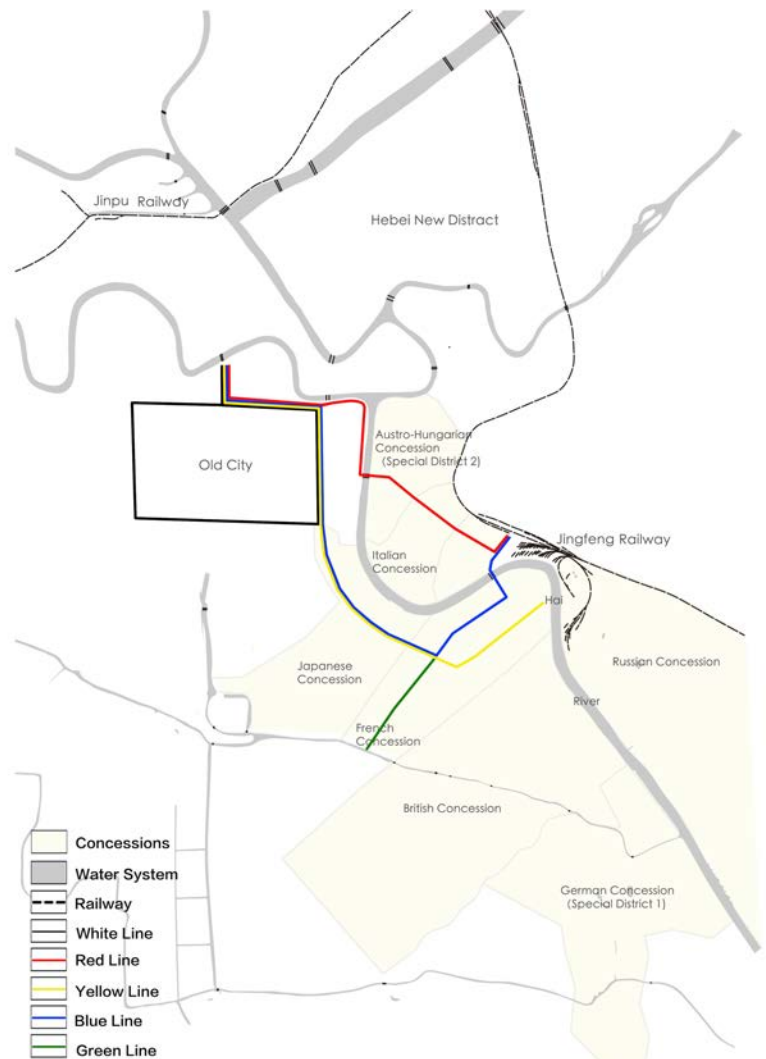


Figure 2: The distribution of tram lines in Tianjin in 1921: “White Line” (5.16km) was from Beidaguan (北大关) to Beimen (北门); “Red Line” (3.541km) was from Beidaguan to the Jintang Bridge (金汤桥), and then to East Railway Station (东站); “Yellow Line” (4.156km) was from Beidaguan to Tianjin Custom (天津海关); “Blue Line” (5.135km) was from Beidaguan to the Old Longtou Bridge (老龙头桥), and then to the East Railway Station; “Green Line” (0.969km) was from the French Church to Quanyechang. The first tram line was opened in 1906, all of the middle three lines were opened in 1908 and the last one was opened in 1921.

The Rapid Development Period of Public Transportation in Tianjin (1925-1936)

After 1925, Tianjin entered the era with two means of transportation – tramcar and bus. According to the “ATLT”, “The local authorities may buy back the whole plant after 20 years from the running of the electric tramways”. Chinese began to formally collect funds to recover CTDT from 1922 and negotiate with CTDT in 1927¹¹. Japanese growing influence on North China (华北) also made CTDT be afraid of investing in the construction of new rails (The “Flower Line” opened in 1927 was on old rails). Therefore, the most noticeable development of trams during this period (1925-1936) was the large-scale rail renovation, which began in 1927¹². The use of the new material of the track, cadmium-nickel, led to a considerable reduction in the tramcars damage rate and energy consumption, which demonstrated that tramway, as a novel kind of advanced municipal facility and technology, became more mature¹³.

The continuous expansion of the downtown and the growth of employment population made tram lines no longer meet citizen’s demand on public transportation. In the spring of 1925, the first bus line from the Old Longtou



Bridge to Dazhigu (大直沽) was opened to traffic by Tongxing Motor Company (同兴汽车公司), which was established by Chinese merchants Shutang Li and Renpu Liu, and then the second line was opened in 1929¹⁴. Afterwards, Passenger Bus Company (公共客座汽车公司), Urban Bus Company (市营公共汽车公司) and Yunlong Bus Company (云龙公共汽车公司) were founded successively¹⁵. The most influential company was Passenger Bus Company, established by Japanese businessmen, which operated three bus lines strengthening the connection between the French Concession and the British Concession.

By 1936, urban public transportation network had extended to the entire downtown area with six tram and bus lines each¹⁶. There were up to seven lines in the French Concession, which marked the formation of the urban public transportation network system centering on the French Concession. Two points can be seen from Figure 3: three of the bus lines start from tram stops and three intersect with tramlines, which implied bus lines were the extension of tramlines; and the trend of bus routes diverging from the city center to the surrounding area along the river was highly consistent with that of urban expansion, which proved that the development of bus line network was closely related to urban expansion.

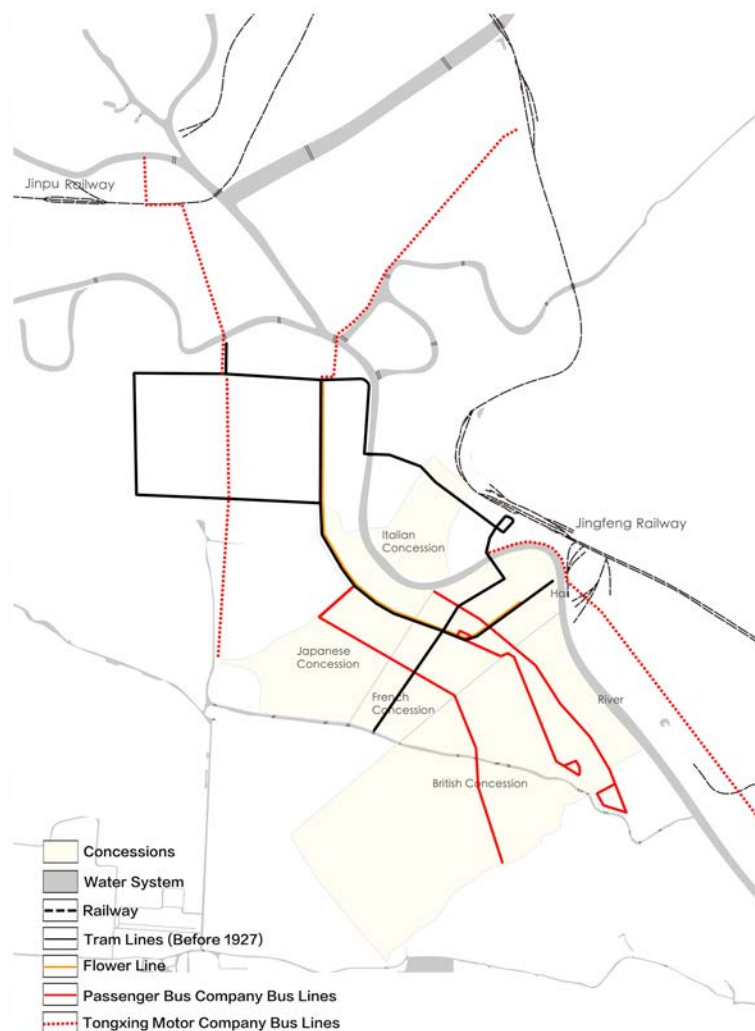


Figure 3: Distribution of public transportation lines in Tianjin in 1936: Bus lines of Tongxing Company from left to right are from Dahong Bridge (大红桥) to Haiguang Temple (海光寺), from the Northeast Corner (东北角) to the North Railway Station, and from the Old Longtou Bridge to Dazhigu; Bus lines of Passenger Bus Company from left to right are from Zhongyuan Corporation (中原公司) to Taoyuan (陶园), from National Hotel (国民饭店) to Dayingmen (大营门), and from Majiakou (马家口) to Dayingmen.

The Stagnation Period of Modern Public Transportation in Tianjin (1937-1949)

After occupying Tianjin in 1937, Japanese troops gradually took over CTDT and all bus companies. Tianjin tram business had no longer developed since Belgian businessmen lost its operation rights of tramways. By Japan's surrender (1945), almost all trams paralyzed¹⁷. Tianjin Public Bureau Tram and Bus Temporary Management



Office(天津市公用局电、汽车临时管理处) took over tram business in 1945. The Office established “Purple Line” in 1947, but tram business was still in depression and the Office suffered serious losses.¹⁸

In order to implement unified management of bus business, Japanese authorities bought all bus companies, established the Tianjin Bus Branch of the North China Automobile Company and planned 13 lines in 1938¹⁹. However, it was recorded there had been only 11 bus lines in operation at its maximum, which quickly reduced to 3 lines in 1944 due to lack of fuel and fittings, concessions blockade and serious losses, etc.²⁰ After Public Bureau Tram and Bus Temporary Management Office took over bus business, the bus operation was also poor. There were 5 lines being normally operated in May 1946²¹. Bus routes were once increased to 14 in March 1948, but most routes were quickly stopped due to gasoline deficiency and vehicles aging. On July 9 of the same year, only 5 routes were barely maintained, and 7 at its maximum after that²².

During this period, the number of public transportation lines was highly volatile for the turbulent political situation. Although occasionally increased, the duration of most lines was very short. Therefore, Tianjin urban public transport development had been almost stagnant during this period. The bus routes planned by Japanese in 1938 shows all the 13 bus lines started from tram stops (East Station Stop, Zhongyuan Corporation Stop, and French Church Stop) to urban edge areas, which proved the feature that bus lines planning was based on tramlines had become more prominent (Figure 5).

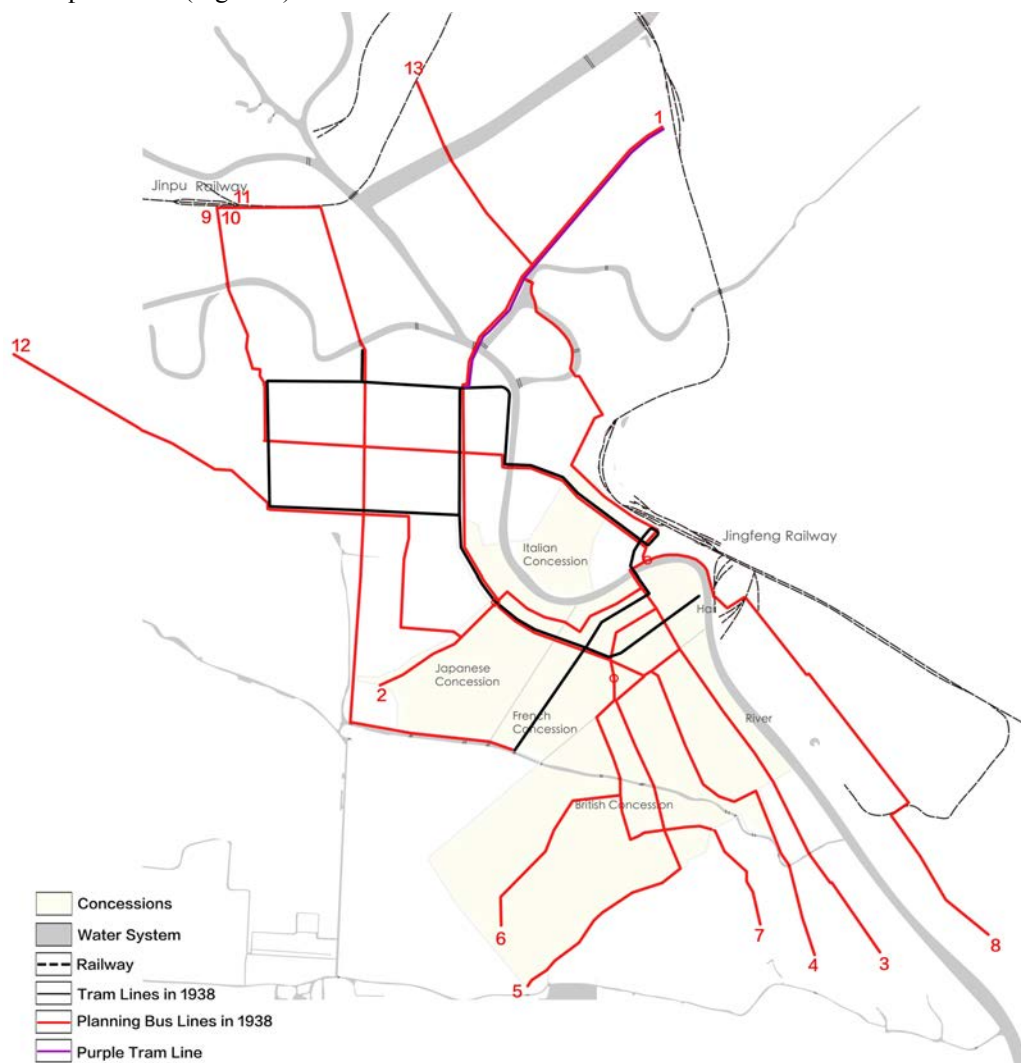


Figure 4: The distribution of tram lines in Tianjin in 1947 and the Planning Bus Lines in 1938: “Purple Line” (3.541km) was from the Northeast Corner to the North Railway Station(北站); Bus Line 1 was from the East Railway Station to the North Railway Station; Line 2 was from the East Railway Station to Haiguang Temple Street (海光寺街); Line 3 was from the East Railway Station to Xiaoliuzhuang (小刘庄); Line 4 was from Zhongyuan Corporation to Tonghuali (同华里); Line 5 was from the East Railway Station to Machangli (马场里); Line 6 was from the East Railway Station to Xiaosunzhuang (小孙庄); Line 7 was from Zhongyuan Corporation to Family Li Garden (李家花园); Line 8 was from the East Railway Station to Malu Street (马路街); Line 9 was from the East Railway Station to the West Railway Station; Line 10 was from Zhongyuan Corporation to the West Railway Station;



Line 11 was the same as above; Line 12 was from the French Church to the Hebei Third Prison (河北第三监狱); Line 13 was from the East Railway Station to Xiaoguozaung (小郭庄).



Figure 5: Quantity of public transportation lines at all phases (1902-1949): at the 1st phase there were only trams in Tianjin; at the 2nd phase bus was introduced. The number of lines continued to grow at both phases, but at the 3rd phase the number was up and down, which implied the development of public transportation was unstable.

Public Transport and Municipal Income

CTDT had paid tram tax to the Chinese and concession authorities since the tram started running. According to ATLT, “The company shall pay every year to the Local Authorities a sum equal to three and a half percent (3.5%) of the gross earnings of the undertaking before payment of working expenses, salaries or any other disbursements whatsoever”²³. Also, the concession authorities sent personnel to audit the gross earnings of CTDT every year in order to acquire the tax. It was reported that the “passing fee” paid by CTDT to the French Concession was as high as CNY 170,000 per year²⁴. Similarly, the authorities also charged the bus companies for route operation rights and taxes. For example, Passenger Bus Company paid taxes, CNY 15 every three months, to the French Concession Municipal Council in 1930²⁵. Similar to other taxes, most of tram and bus taxes were used for the maintenance and construction of roads, bridges, sewers and other public facilities.

Public Transport Development and Urban Roads Construction

The impact of public transportation on urban construction was far more than taxes. New types of vehicles had different requirements on roads because of their difference in operation method, speed and size²⁶. Therefore, the development of public transportation propelled the implementation of roads widening and improvement.

The foremost round of road widening in modern Tianjin was induced by the planning of tram lines. As the headmost roads equipped with tram in the French Concession, the original planned width of Rue du Chaylard (now Heping Road 和平路) and Rue Paron Gros (now Binjiang Road 滨江道) (the section between Rue du Chaylard and Quai Auguste Boppe) was insufficient for the implementation of the tram program. For laying rails, the French Municipal Council ordered the owners of the roadside buildings to demolish and transform the buildings to widen the roads to 16 meters in width in 1906²⁷. Rue de France (now Jiefang North Road 解放北路) and Rue de L'Amirauté (now Chifeng Road 赤峰道) were widened due to the laying of tram rails almost at the same time, but other roads without tramway laying plan had not been widened until much later. The Tianjin Map in 1912 showed that roads equipped with tram were obviously wider than others in all concessions (Figure 6). The passage of trams had also promoted the implementation of roads widening in Chinese area. The Chinese authority believed that the reason why the number of accidents increased significantly after trams were opened was the varying road width, which led to the decision of “widening the besieged roads appropriately” in 1924²⁸. Therefore, the operation of trams promoted roads widening in both the Chinese area and the Concessions.

The construction of the asphalt road started from the Italian concession, Da Ma Road along the “Red Line” in 1914, followed by Rue de France and Rue de L'Amirauté both in the French concession in 1916 and Asahi Streets (now Heping Road) in the Japanese Concession in 1919 all along tramways²⁹. The initial paving of asphalt pavement was too slow to be only paved on the roads along tramways, but the obvious advantages of asphalt pavement of low degree of wear and cost of repairs prompted Frenchmen to introduce asphalt mixing road construction technology after 1920s, which had greatly speeded up the construction of asphalt roads and further stimulated the refurbishment of other roads in the French Concession and other concessions³⁰. The construction of asphalt roads in the Chinese areas started from the East Road, where the density of public transport lines was the highest³¹. In addition, electric lights were installed leadingly on roads equipped with tram³². Therefore, the construction of trams promoted the modernization of pavement and road facilities.



Furthermore, the operation of trams was closely related to the construction and maintenance of bridges. As “Blue Line” was planned to pass through Old Longtong Bridge, CTDT took on the daily operation and maintenance costs of the bridge in exchange for its right of way and management. To lay tram tracks, Jintang Bridge was converted to a steel-beam iron bridge by CTDT, Tianjin Custom, and the Austrian Concession and the Italian Concession³³.



Figure 6: Tianjin Central District Road Network in 1912

Public Transport and Land Value Partition

The density of public transport network was closely related to land value partition. In the early 20th century, when tramlines in the French Concession was just opened to traffic, the highest price of land in the British concession was approximately 1.75 times that of the French Concession. But the highest price of land in the British Concession and the French Concession was almost the same in 1938 when tramlines had been opened for 30 years. Table 2 shows the density of public transport line in the French Concession increased much more greatly than that in the British Concession during the 30 years: the density in the French Concession was five times more than that in the British Concession by 1938. Therefore, the growth of public transport line density had positive impacts on land price. Figure 7 shows a gradually decreasing trend of urban land value from the French and British concessions to the periphery in 1938: the land price of the areas around Rue du Chaylard, Rue Paron Gros, Rue de France and Rue de L'Amirauté in the French concession, Asahi Street in the Japanese Concession, and Taku Road (now Dagu North Road 大沽北路) and Recreatin Road (now Xinhua Road 新华路) in the British Concession was the highest, followed by Nanshi Area and East Railway Station Area. According to statistical calculations, the density of public transport network was 9.2km/km² in areas, where average land price was over 1,200 yuan/acre, while the density was only 0.6149km/km² in areas where average land price was below 200 yuan/acre. It is visible that public transport network density was highly consistent with land price--the higher the density of public transport lines, the higher the land price was.

Table 3 and Figure 7 also show that the land price of areas equipped with tramlines was quite high. In contrast, the land price of areas along bus lines but without tramline (except British Concession) was relatively lower, which was led to by the differences in the introduction time, passenger flow and line stability between them: tramway was introduced at the early stage of urban development and all lines had high stability and large passenger flow under the unified operation of CTDT; differently, bus lines were opened to traffic when the urban form was almost formed and had poor stability because several bus companies were operated independently and competed intensely before Japanese occupation.



		Early 20th Century	1938
British Concession	Public Transport Line Density	0 km/km ² (in 1908)	1.07 km/km ²
	The Highest price of Land	7000 Liang/Acre	1904.28 Yuan/Acre
French concession	Public Transport Line Density	1.66 km/km ² (in 1908)	5.49 km/km ²
	The Highest price of Land	4000 Liang/Acre	2057.15 Yuan/Acre

Table 2: *Public Transport Line Density and The Highest price of Land Comparison Between the British Concession and the French Concession: Public Transportation Line Density = The Length of the Road Center Line with Public Transport / Area (Unit: km/km²).*

Source of Land Value: *Tianjin Real Estate Administration, Tianjin Real Estate Chronicles, (Tianjin: Tianjin Academy of Social Sciences Press, 1999) , 523-556.*

Land price (Yuan/Acre)	Public Transportation Line Density (km/km ²)	Tram Line Destiny (km/km ²)	Bus Line Destiny (km/km ²)
>1200	9.25	4.71	4.54
1000-1200	6.41	4.61	1.80
800-1000	5.32	3.37	1.95
600-800	1.87	0.56	1.31
400-600	1.86	0.56	1.30
200-400	1.32	0.31	1.01
0-200	0.61	0	0.61

Table 3: *Relationship Between Land Value and Public Transportation Line Density in 1938.*

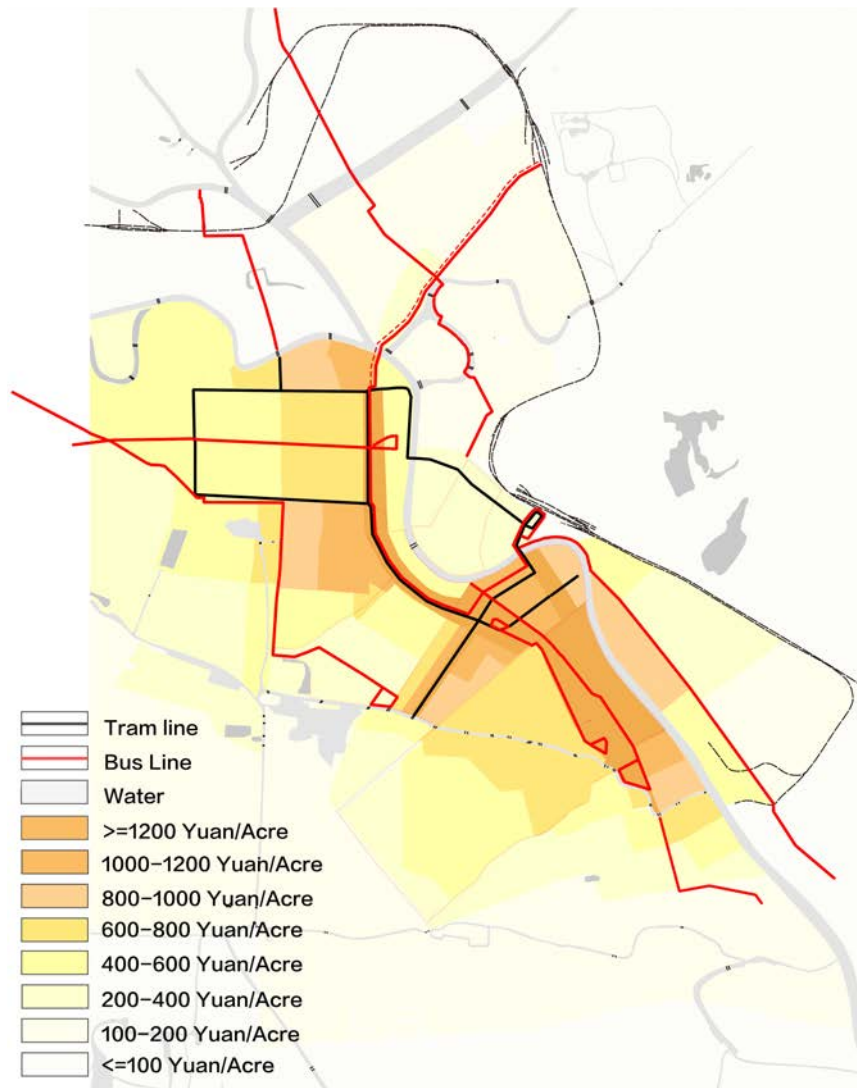


Figure 7: *Relationship Between Land Value and Public Transportation Line Density in 1938.*

Source of Land Value Partition: *Tianjin Real Estate Administration, Tianjin Real Estate Chronicles, (Tianjin: Tianjin Academy of Social Sciences Press, 1999), 556.*



Public Transport and Urban Structure Evolution

The development of urban public transport had changed urban spatial structure. “The development of Tianjin was initially revolved around the old city, followed along the river, railways and then tramways from the emergence of electrical business”³⁴. Both urban population and business had tendency to flow and develop along tram routes after trams were opened. The fastest-growing piece along the tram line was the area along Asahi Street and Rue du Chaylard to Lizhan (梨棧) area equipped with the “Yellow Line”, “Blue Line”, “Flower Line” and “Green Line”³⁵. Geographically located in the center of the city, together with the intention of Japanese and French concession authorities to develop economy by taking advantages of tram lines to propel population mobility, this area became a new commercial center with 4 major shopping malls, Tianxiang (天祥), Taikang (泰康) and QuanYe (劝业) in Lizhan area and Zhongyuan Corporation in Asahi Street in the late 1920s³⁶. Statistically, there were nearly 60 theatres, restaurants and ballrooms coexisting surrounding Quanye. Rue de France also boomed and became a pivotal financial street with banks, money shops, credit companies, insurance companies, security companies and pawn companies, nearly 300, according to the statistics pre-1949³⁷. The transfer of commercial and financial centers propelled the French Concession to gradually replace the Old City and become the new economic center of Tianjin.

The soaring of land prices in the downtown area caused some residents who had to work here during daytime to move out due to their inability to afford high rents, but the development of public transport provided convenience for the daily movement of out-migrant residents. For example, as a direct link between the Old City and the concessions, Nanshi (南市) area was surrounded by many tram and bus lines, attracting a large number of real estate developers and citizens, which thus led to the development and construction of Nanshi Area and further resulted in the formation of commercial streets and residential areas here in the 1920s and 1930s³⁸.

From the above analysis, it could be found that public transportation line was highly related to land value partition and urban functional division: advanced municipal facilities represented by public transport could promote urban development, construction and economic prosperity. At that time, CTDI had recognized this view from the development process of Western cities to mediate with government to increase tram lines. Since 1911, CTDI submitted plan for the construction of tramline from the northeast corner to the West Station to Zhili Foreign Affairs Bureau (直隶交涉公署) repeatedly by using modern urban construction ideas to clarify the benefits of the line, “If convenient transportation lines could be established from the area around West Railway Station where is not well-built now to the Old City, buildings will be built one after another, which is true for foreign metropolises ... People working in the Old City or its surrounding areas could live in the good and new places, which is good for health, and also avoids row upon row of buildings in limited place. Tramlines in metropolises throughout the world were all from the distant to the downtown, so the remote areas developed for its low land and housing prices and the business of downtown boomed because residents could work in downtown during daytime and go home in the evening, which could bring about the increase of shop number and the growth of land and housing prices”³⁹. Although new line was not built due to the opposition of local businessmen, the case proved that people at that time had the idea of using the action of improving municipal facilities to promote land and housing prices, thereby facilitate urban construction and economic development⁴⁰.



Figure 8: *Bustling Lizhan Street and Tramways*

Conclusion

The outward expansion of downtown area and roads, the sharp growth of population, and the increasing production and living needs of modern metropolis stimulated the introduction and boom of urban public transport. Both



tramcars and buses were introduced to Tianjin when existing facilities could not satisfy the demands of urban development. Moreover, taking tramlines as the basic skeleton coupled with bus lines as the tool of network expansion, Tianjin formed a unique set of urban public transport network based on trams and supplemented by buses.

On the other hand, while meeting the needs of urban development, advanced municipal facilities and technologies from the West, represented by urban public transport, reacted to the city with promoting the modernization of urban social-spatial morphology and creating a nice public environment for citizens. The rapid development of the urban public transportation not only improved the municipal revenues of the authorities, but also promoted the modernization of the infrastructures and propelled the transformation of urban spatial structure. The advancing influence of modern Tianjin urban public transport development on the construction of roads and bridges and the form of urban resource development taking tramlines as the axis proved it absolutely. Public transport was the indispensable technical support in the process of modern Tianjin urban transformation and modernization. It can be said that it was precisely because of the convenient public transportation lines that Tianjin modern urban space was formed so quickly.

Acknowledgements

The author would like to thank Haifeng Shi, whose advices have contributed to improving this paper.

Disclosure Statement

No potential conflict of interest was reported by the author.

Funding

The author would like to acknowledge support from the National Natural Science Foundation of China [grant number 51578365 and 51608356] in carrying out this work.

Endnotes

¹ State Archives of Belgium, [Archives D'entreprises Bedrijfsarchieven: Compagnie de Tramways et D'eclairage de Tientsin S.A.2].

² Tianjin Chronicles Compilation Commission, *Tianjin Concession Chronicles* (Tianjin: Tianjin Academy of Social Sciences Press, 1996), 320.

³ "Evolution of Urban Public Transport," in *Tianjin -- The Rise of a City*, ed. Zhongguo ren min zheng zhi xie shang hui yi. Tianjin Shi wei yuan hui. Wen shi zi liao yan jiu wei yuan hui (中国人民政治协商会议天津市委员会文史资料研究委员会) (Tianjin: Tianjin People's Press, 1990), 264-207.

⁴ Hong Qiao, *Tianjin Urban Construction Chronicles*, (Beijing: Science and technology of China press, 1994), 84.

Yanlin Gao, *Tianjin Population Research* (Tianjin: Tianjin People's Press, 2002), 90.

Jingneng Li, Qiang Wang and Ziqiang He, *Chinese Population, Tianjin Vol.* (Beijing: China Financial and Economic Press, 1987), 48.

⁵ Haiyan Liu, "Tram, Public Transportation and Modern Tianjin Urban Development," *Shilin*, no.2 (June 2006): 20.

⁶ Shousong Wang, Kelu Hao, and Peili Wang, *The Record of the Eight-Power Allied Forces: Minutes of the Provisional Government Sessions of Tientsin* (Tianjin: Tianjin Academy of Social Sciences Press, 2004), 8.

⁷ The Viceroy Shikai Yuan grants to Company the monopoly for the building and working of tramways and electric lighting in Tientsin, within a circle having a radius of six li measured from the Drum Tower (鼓楼) in the center of the walled city, for a term of fifty years, see Tianjin Municipal Archive, [401206800-J0001-3-003329].

⁸ National Archives of Japan, [B10074726200 (May 24, 1907)].

State Archives of Belgium, [Archives D'entreprises Bedrijfsarchieven: Compagnie de Tramways et D'eclairage de Tientsin S.A.271].

State Archives of Belgium, [Archives D'entreprises Bedrijfsarchieven: Compagnie de Tramways et D'eclairage de Tientsin S.A.269].

⁹ "The First Opening of the Tram," *Ta Kung Pao*(大公报), February 17, 1906.

¹⁰ See note 2 above.

¹¹ "Prepare to Recover Compagnie de Tramways & D'eclairage de Tientsin," *Social Welfare* (天津益世报), January 1, 1921.

"Start to Negotiate to Take back the Tram," *Social Welfare* (天津益世报), May 28, 1927.

¹² The whole tracks were renovated from 1927 to 1936, exclude track between the French Church and Quanyechang, and track between the Northeast and Jiantang Bridge, see State Archives of Belgium, [Archives D'entreprises Bedrijfsarchieven: Compagnie de Tramways et D'eclairage de Tientsin S.A.448].

¹³ State Archives of Belgium, [Archives D'entreprises Bedrijfsarchieven: Compagnie de Tramways et D'eclairage de Tientsin S.A.438].

¹⁴ See note 2 above.

¹⁵ "Today in History," Tianjin Municipal Archive, accessed December 3, 2010, <http://www.tjdag.gov.cn/tjdag/jgsl/lssdjt/5955179/index.html>.

"Buses of Passenger Bus Company are opened to traffic," *Ta Kung Pao*(大公报), January 21, 1930.

"Notice of Passenger Bus Company," *Ta Kung Pao*(大公报), March 4, 1931.

¹⁶ Bus line from the Northeast to the North Railway Station established by Urban Bus Company was bought by Tongxing Motor Company, and bus line from National Hotel to Xiaoliuzhuang established by Yunlong Bus Company was bought by Passenger Bus Company in 1935, see note 2 and 3.

¹⁷ Ibid.

¹⁸ Tianjin Municipal Archive, [401206800-J0002-3-002938-009].



- ¹⁹ Tianjin Municipal Archive, [401206800-J0001-3-000690-010].
- ²⁰ Line 1 was from the North Railway Station to the East Railway Station, Line 4 was from Zhongyuan Corporation to Xiaoliuzhuang, and Line 8 was from Zhongyuan Corporation to Xiaosunzhuang, see Tianjin Municipal Archive, [401206800-J0001-3-007088-012].
- ²¹ Line 1 was from the Northeast Corner to the North Railway Station, Line 3 was from Zhangzizhong Road (张自忠路) to Fenghua Road (奉化道), Line 4 was from the National Hotel to Xiaoliuzhuang, Line 7 was from Zhongyuan Corporation to Qiandezhuang (谦德庄), and Line 8 was from International Bridge to Xiaoliuzhuang, see Tianjin Municipal Archive, [401206800-J0002-2-000833-015].
- ²² Line 3 (from the Victory Bridge to the East Door), Line 4 (from National Hotel to Xiaoliuzhuang), Line 6 (from Beidaguan to Dahong Bridge), Line 10 (from the Southeast to Qiandezhuang), and Line 12 (from the Northwest to the Worldbuilding), see “Gas shortage in the city,” *Ta Kung Pao*(大公报), July 9, 1948.
- “All Buses Were Resumed to Traffic,” *Ta Kung Pao*(大公报), July 17, 1948.
- ²³ Tianjin Municipal Archive, [401206800-J0001-3-003329].
- ²⁴ Yuanyuan Gao, “Research on the Surge of Increasing Tram Fare in Tianjin in 1932” (Master diss., Central China Normal University, 2012), 12.
- ²⁵ See note 2 above.
- ²⁶ Ji Yang, “Introduction of Asphalt Road,” *Ta Kung Pao* (大公报), June 23, 1947.
- ²⁷ Tian Li, “Study on the History of Urban Development of the French Concession in Tianjin (1861-1943)” (PhD diss., Tianjin University, 2015), 42.
- ²⁸ “Local News: Renovate the Street and Lay the Tramway,” *Social Welfare* (天津益世报), January 1, 1924.
- ²⁹ O. D. Rasmussen, *Tianjin Concession History* (Illustrated), trans. Yifan Xu, Diyi Zhao (Tianjin: Tianjin People’s Press, 2009), 307.
- ³⁰ See note 27 above.
- ³¹ “Secretary Xue for Public Works Talks about Road Construction,” *Ta Kung Pao* (大公报), November 23, 1929.
- ³² Chinese Stationed Army Commander, *Tianjin Chronicles: Tianjin's Overview of the Early 20th Century*, trans. Hou Zhentong (Tianjin: Tianjin Chronicles Compilation Commission, 1989), 23.
- ³³ Tianjin Hedong CPPCC Cultural, Sports, Literature and History Committee, and Tianjin Hedong CPPCC Cultural, Sports, Literature and History Committee, *The Old Longtou Bridge - The Railway Station of the Earliest Treaty Port in China* (Tianjin: Tianjin Ancient Books Press, 2016), 83.
- Yuyang Shan, “Research of Bridge Construction with Urban Development in Tianjin Early-modern” (Master diss., Tianjin University, 2017), 23.
- ³⁴ Aichen Wu, *International Five Issues in North China* (Shanghai: Commercial Press, 1929), 33.
- ³⁵ Lizhan Area was the area around Quanyechang, see Ruwei Tan, “Tianjin Old Placename – Lizhan,” Sina, April 7, 2007, http://blog.sina.com.cn/s/blog_4b6668a101008uh9.html
- ³⁶ Gaofeng Zhang, “Changes around Quanyechang,” in *Tianjin Literature and History Information Collection* (no.16), ed. Zhongguo ren min zheng zhi xie shang hui yi. Tianjin Shi wei yuan hui. Wen shi zi liao yan jiu wei yuan hui (Tianjin: Tianjin People’s Press, 1981), 264-85.
- ³⁷ The Geographic Society of China, *Beautiful Tianjin* (Beijing: Beijing Blue Sky Press, 2014), 126.
- ³⁸ Yanchen Sun, Wechat message to author, December 12, 2017.
- ³⁹ Tianjin Municipal Archive, [401206800-J0128-2-002193-019].
- “Tram Company Expansion Plan,” *Social Welfare* (天津益世报), September 5, 1921.
- Tianjin Municipal Archive, [401206800-J0002-3-002938-009].
- ⁴⁰ “Expansion of Trams Has Been Stopped,” *Social Welfare* (天津益世报), January 17, 1918

Bibliography

- “All Buses Were Resumed to Traffic.” *Ta Kung Pao*(大公报), July 17, 1948.
- “Buses of Passenger Bus Company are opened to traffic.” *Ta Kung Pao*(大公报), January 21, 1930.
- Chinese Stationed Army Commander, *Tianjin Chronicles: Tianjin's Overview of the Early 20th Century*. Translated by Hou Zhentong, Tianjin: Tianjin Chronicles Compilation Commission, 1989.
- “Expansion of Trams Has Been Stopped.” *Social Welfare* (天津益世报), January 17, 1918
- Gao, Yanlin. *Tianjin Population Research*. Tianjin: Tianjin People’s Press, 2002.
- Gao, Yuanyuan, “Research on the Surge of Increasing Tram Fare in Tianjin in 1932” Master diss., Central China Normal University, 2012.
- “Gas shortage in the city.” *Ta Kung Pao*(大公报), July 9, 1948.
- Li, Jingneng, Qiang Wang and Ziqiang He. *Chinese Population, Tianjin Vol.* Beijing: China Financial and Economic Press, 1987.
- Li, Zhihong, “On the Development of Buses in Beijing in the Nationalist Era of China” Master Diss., Capital Normal University, 2008.
- Liu, Haiyan. “Tram, Public Transportation and Modern Tianjin Urban Development,” *Shilin*, no.2 (June 2006): 20-25.
- Liu, Li, “The Correlation between Traffic and Urban Development in Northeast Region of China from 1860 to 1931” Phd Diss., Jilin University, 2012.
- Li, Tian, “Study on the History of Urban Development of the French Concession in Tianjin (1861-1943)” PhD diss., Tianjin University, 2015.
- “Local News: Renovate the Street and Lay the Tramway.” *Social Welfare* (天津益世报), January 1, 1924.
- Nanjing Chronicles Compilation Commission, *Nanjing Chronicles*. Nanjing: Nanjing Chronicles Press, 1995.
- “Notice of Passenger Bus Company.” *Ta Kung Pao*(大公报), March 4, 1931.
- O. D. Rasmussen, *Tianjin Concession History* (Illustrated). Translated by Yifan Xu, Diyi Zhao. Tianjin: Tianjin People’s Press, 2009.



- “Prepare to Recover Compagnie de Tramways & D’eclairage de Tientsin.” *Social Welfare* (天津益世报), January 1, 1921.
- Qiao, Hong. *Tianjin Urban Construction Chronicles*. Beijing: Science and technology of China press, 1994.
- Shan, Yuyang, “Research of Bridge Construction with Urban Development in Tianjin Early-modern” Master diss., Tianjin University, 2017.
- “Secretary Xue for Public Works Talks about Road Construction.” *Ta Kung Pao* (大公报), November 23, 1929.
- “Start to Negotiate to Take back the Tram.” *Social Welfare* (天津益世报), May 28, 1927.
- Sun, Huangjin, “Urban Development and Social Change of Shenyang In Modern Times” Phd Diss., Northeast Normal University, 2012.
- Tan, Ruwei, “Tianjin Old Placename – Lizhan.” Sina Blog, April 7, 2007, http://blog.sina.com.cn/s/blog_4b6668a101008uh9.html
- “The First Opening of the Tram.” *Ta Kung Pao*(大公报), February 17, 1906.
- The Geographic Society of China, *Beautiful Tianjin*. Beijing: Beijing Blue Sky Press, 2014.
- Tianjin Academy of Social Sciences. *History of Tianjin*. Tianjin: Tianjin People’s Press, 1987.
- Tianjin Concession Chronicles Compilation Commission. *Tianjin Concession Chronicles*. Tianjin: Tianjin Academy of Social Sciences Press, 1996.
- “Tianjin-20040618.jpg.”, Wikimedia Commons, September 25, 2013, <https://commons.wikimedia.org/wiki/File:Tianjin-20040618.jpg>.
- Tianjin Happy Tumbler, “Old Photo.” Sina Weibo, April 7, 2007, <https://m.weibo.cn/status/4092359849090754>.
- Tianjin Hedong CPPCC Cultural, Sports, Literature and History Committee, Tianjin Hedong CPPCC Cultural, Sports, Literature and History Committee, *The Old Longtou Bridge - The Railway Station of the Earliest Treaty Port in China*. Tianjin: Tianjin Ancient Books Press, 2016.
- “Tram Company Expansion Plan.” *Social Welfare* (天津益世报), September 5, 1921.
- Yang, Ji, “Introduction of Asphalt Road.” *Ta Kung Pao* (大公报), June 23, 1947.
- Wang, Ruiyang, *The Modern Traffic in Modern China*. Beijing: People's Literature Publishing Press, 2006.
- Wang, Shousong, Kelu Hao and Peili Wang, *The Record of the Eight-Power Allied Forces: Minutes of the Provisional Government Sessions of Tientsin*. Tianjin: Tianjin Academy of Social Sciences Press, 2004.
- Wu, Aichen, *International Five Issues in North China*. Shanghai: Commercial Press, 1929.
- Zhang, Gaofeng, “Changes around Quanyechang,” in *Tianjin Literature and History Information Collection* (no.16), edited by Zhongguo ren min zheng zhi xie shang hui yi. Tianjin Shi wei yuan hui. Wen shi zi liao yan jiu wei yuan hui, 264-85. Tianjin: Tianjin People’s Press, 1981.
- Zhang, Song. “Historical Analysis on Public Transportation Development in Shanghai Concession.” *City Planning Review* 38, no. 1 (January 2014): 50–56.
- Zhang, Zhong, “The Early Modernization Study Of Ha’erbin Municipal(1898-1931)” Phd Diss., Jilin University, 2011.
- Zhu, Jianbin, “Evolution of Urban Public Transport,” in *Tianjin -- The Rise of a City*, edited by Zhongguo ren min zheng zhi xie shang hui yi. Tianjin Shi wei yuan hui. Wen shi zi liao yan jiu wei yuan hui, 264-207. Tianjin: Tianjin People’s Press, 1990.
- Zou, Dong, “On Guangzhou’s Urban Planning and Construction in the Nationalist Era of China, 1911-1949” Phd Diss., South China University, 2012.

Image sources

- Figure 1: Wikimedia Commons, Tianjin-20040618.jpg, <https://commons.wikimedia.org/wiki/File:Tianjin-20040618.jpg> (Accessed September 25, 2013.)
- Figure 2: Diagrams by authors based on State Archives of Belgium [Archives D’entreprises Bedrijfsarchieven: Compagnie de Tramways et D’eclairage de Tientsin S.A.365].
- Figure 3: Diagrams by authors based on State Archives of Belgium [Archives D’entreprises Bedrijfsarchieven: Compagnie de Tramways et D’eclairage de Tientsin S.A.365] and *Tianjin Concession Chronicles*.
- Figure 4: Diagrams by authors based on State Archives of Belgium [Archives D’entreprises Bedrijfsarchieven: Compagnie de Tramways et D’eclairage de Tientsin S.A.365], Tianjin Municipal Archives [401206800-J0001-3-000690-010] and [401206800-J0002-3-002938-009].
- Figure 5: Diagrams by authors based on *Tianjin Concession Chronicles*.
- Figure 6: Diagrams by authors based on Map of Tianjin. *Map of Tianjin*, (Beijing: Chung-Tang Litho Works, 1912).
- Figure 7: Diagrams by authors based on *Tianjin Real Estate Record* and State Archives of Belgium [Archives D’entreprises Bedrijfsarchieven: Compagnie de Tramways et D’eclairage de Tientsin S.A.365].
- Figure 8: Weibo, <https://m.weibo.cn/1986884193/4092359849090754>.



Planning Modern Cities in China: Urban Construction Regulations of Concessions in Tianjin (1860-1945)

Yanchen Sun*, Carola Hein**, Kun Song***, Lin Feng****

* School of Architecture, Tianjin University/ Faculty of Architecture and the Built Environment, Delft University of Technology, sunyanchen8910@gmail.com.

** Faculty of Architecture and the Built Environment, Delft University of Technology, c.m.hein@tudelft.nl.

*** School of Architecture, Tianjin University, imsongkun@126.com.

**** School of Architecture, Tianjin University, fenglin_tju@163.com.

Tianjin, one of the so-called Treaty Ports that opened to foreign trade under the unequal treaties was home to nine foreign concessions. In each concession, the foreign powers created urban forms and functions that mirrored practices in their respective home countries. This article explores the consecutive establishment and implementation of regulations in eight out of nine foreign concessions in Tianjin between 1860 and 1945. It firstly provides an overview of regulation types and legislative systems of the concessions. Secondly, it compares these regulations and bylaws with the ones in their home countries. Thirdly, it compares the specific cases of Tianjin concessions with each other. Finally, it places the Tianjin case in the context of other Chinese port city concessions. In conclusion, it argues that the regulations of concessions in Tianjin not only showed a strong influence from their home countries in a top-down setting, but also interacted with each other in a peer-to-peer setting. The circulation of these regulations, within Tianjin and among treaty ports in China, was promoted by governments' central control, municipal councils' intervention and individuals' movements from one place to another.

Keywords: Treaty Port, Concessions, Modern Tianjin, Regulations.

Introduction

From the mid-19th century to the mid-20th century, Western powers and Japan had owned numerous concessions in the treaty ports of China. Located close to the capital, Beijing, Tianjin was particularly attractive to foreign nations, more politically than economically.¹ Mr. Reed, the American Ambassador, claimed in 1858 that if Tianjin opened, "it would be a nest of intrigue, besides affording European powers a position from which they could overawe the capital".² Tianjin was opened as a treaty port in 1860. From 1860 to 1902, nine foreign concessions (British, French, American, German, Japanese, Russian, Italian, Austro-Hungarian, and Belgian) settled in Tianjin (Figure 1, Table 1), the highest number in all of China. Ambitious countries such as Britain, France, Japan, Germany, and Russia also owned self-contained concessions in other treaty ports of China.

Table 1. Foreign concessions in Tianjin and their respective establishment and recovery year.

Concession	Year of establishment	Year of actual recovery ³
British Concession	The Concession	1945
	The Extension	
	The Southern Extension	
	The Extra Mural Extension	
French Concession	The Concession	1945
	The Extension	
American Concession	After 1862	Included in the Southern Extension of the British Concession in 1902
German Concession	The Concession	1917
	The Extension	
Japanese Concession	The Concession	1945
	The Extension	
Russian Concession	1901	1924
Belgium Concession	1902	1931
Italian Concession	1902	1945
Austro-Hungarian Concession	1902	1919

Source: Compiled by authors based on Shang and Liu. *Research on the Society of Tianjin Concessions* (Tianjin: Tianjin People's Press, 1996), 5-35.

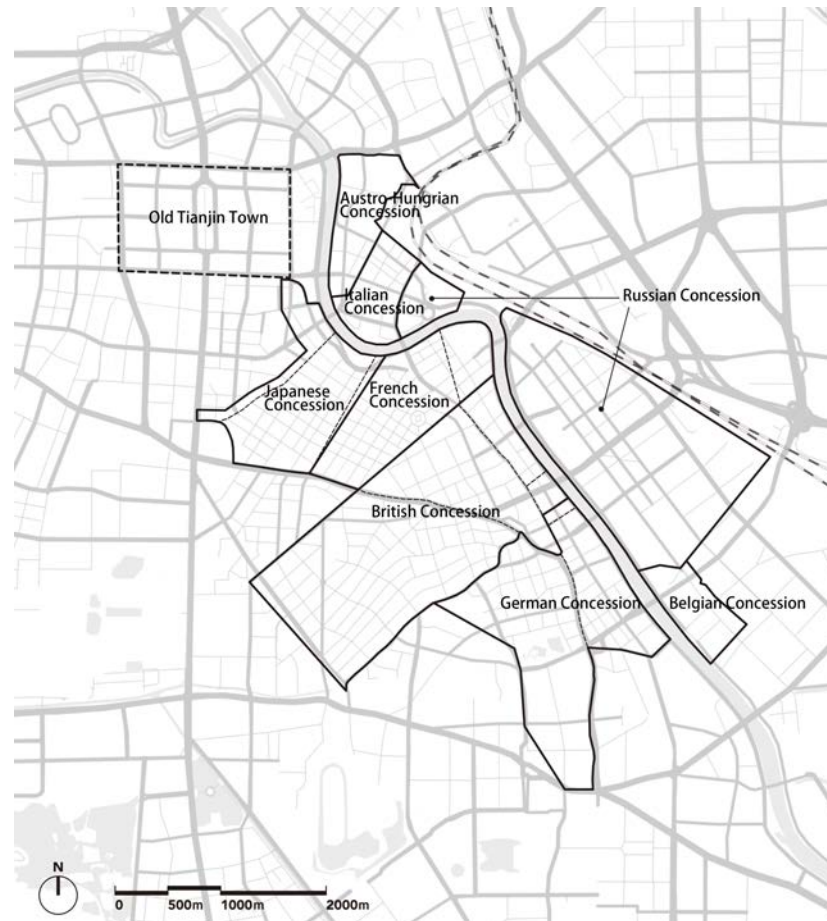


Figure 1. The old Tianjin town and nine foreign concessions on map of Tianjin. The concessions were all located outside the old Tianjin city, along Hai-Ho river (海河).

The nine foreign concessions in Tianjin were all located near the Hai-Ho river, convenient for trade and transport. Almost all of the concession areas were undeveloped at the beginning of their establishment. In the words of the editor of the *Chinese Times*, Alexander Michie, the beginning of the first two concessions, the British and the French, were “foul and noxious swamps, around them, on the dryer grounds, were the numerous graves of many generations of people”.⁴

Enjoying administrative, judicial, policing and taxation rights in the concessions, foreign powers brought new planning ideas, building forms and urban forms. According to their home countries’ experience, each of the nations planned its concession, made regulations, gradually built roads, houses, warehouses, stores, churches, hospitals, cemeteries, parks, and set up modern municipal facilities such as street lights, tramways and sewers. As it was stated in the pamphlet *Tientsin, North China* published by the Tianjin Rotary Club in 1934: “the foreign areas look for all the world like modern Western cities, with great modern Temples of Finance, massive business premises, and well-built residences”.⁵ Born in Tianjin in 1914, the American writer and journalist, John Hersey, represented the multi-layered identity of the city: “For three or four Chinese coppers, I could ride in a rickshaw from my home, in England, to Italy, Germany, Japan, or Belgium. I walked to France for violin lessons; I had to cross the river to get to Russia, and often did, because the Russians had a beautiful wooded park with a lake in it.”⁶

With each concession having its own national characters, Tianjin was thus an important hub for the import and exchange of planning ideas, and a singular case to study transnational urbanism in a single city. Despite abundant historical research on foreign concessions of Tianjin, the urban construction regulations of these concessions, which played an essential role in the transmission of Western modern planning ideas, has not been fully explored. Focusing on the regulations of foreign concessions in Tianjin, this paper provides a new perspective to interpret the transmission mechanisms of these new planning ideas among treaty ports and within Tianjin.

First, the paper illustrates different types of concession regulations, and actors involved in the legislative process. It shows how the respective ministers, consuls, municipal councillors and professionals participated in different layers of regulation formulation. Second, it shows how the foreign powers introduced their home countries planning ideas into the concession regulations, including provisions not only on land management, municipal infrastructures and urban planning, but also on private construction from design aesthetics to building technology.



Third, it explores the circulation mechanism of regulations among concessions, positioning it in a larger framework of transnational urbanism. It suggests that this peer-to-peer interaction existed among different concessions in Tianjin and between concessions belonging to a same country in different treaty ports. This circulation had various driving forces, from governmental level to professional individuals.

Making Regulations: creating new orders in concessions

Before the opening of the city and the establishment of foreign concessions, there was no modern planning nor municipal management system in Tianjin. Like many other traditional Chinese cities, the old Tianjin city was rectangular in shape surrounded by lofty walls. Public works such as road cleaning, bridge construction, fire protection was assumed by local charities and society organizations, and the local government was in charge of tax collection and security management. When the foreign powers came to Tianjin and started to construct their own areas, they also brought modern regulations.

In the book *The History of Chinese Concession* (中国租界史), Chengkang Fei highlights three types of regulations: decrees on the setting up of the concessions, basic regulations of the concessions, and municipal regulations.⁷ This classification can be mainly applied to the foreign concessions in Tianjin. Some of the concessions in Tianjin were created through agreements signed between China and respective foreign country. Others were set up according to diplomatic notes or official notices issued by both or one of the two sides.⁸ These agreements, notes and notices provided basic principles for early development of the concessions, generally clarifying boundaries of the concessions, and modes of acquiring lands and paying rents. Some of them classified land and regulated road and house construction. After the establishment of the concessions, a series of regulations emerged to meet the needs of their development (Table 2). In some concessions which were established earlier and had a relatively higher degree of construction and complete legal systems, such as the British, the French, the German and the Japanese, basic regulations and municipal regulations were promulgated separately. Regulations of the other concessions in Tianjin usually combined basic regulations and municipal regulations in one regulation document. Whatever the regulation system, in terms of urban construction, these regulations generally related to land system, land use, infrastructures (electricity, water, drainage, etc.), private construction procedure, construction details and building style.

Table 2. Partial List of Regulations of Concessions in Tianjin

Concession	Publishing Year	Regulations
British Concession	1863	Local Regulations for Tientsin
	1864	Supplementary Regulations
	1866	Tientsin Local Land Regulations and General Regulations
	1878	Provisional Rules for Voting at Land Renters' Meetings at Tientsin
	1878	Approved Bye-laws
	1898	Land Regulations of the British Municipal Extension, Tientsin
	1901	Tientsin Local Land Regulations and General Regulations Amendment
	1902	Draft Scheme for Amalgamation of the Four British Municipal Areas
	1907	Amendment to the Tientsin British Concession Local Land Regulations
	1911	Amendment and Extension of "The Land Regulations of the British Municipal Extension, Tientsin, 1898"
	1913	Hand Book of Byelaws and Municipal Information
	1918	The Tientsin Municipal Regulations
	1919	British Municipal Area Municipal Byelaws
	1922	British Municipal Council Tientsin, Handbook of Municipal Information
	1925	British Municipal Council Building & Sanitary By-laws
	1930	The Tientsin Municipal Regulations 1918 with Amendments to December 31, 1930
	1930	Zoning Regulation of the Extra Mural Area
1936	British Municipal Council Building & Sanitary By-laws	
French Concession	1877	Règlement de Police et de voirie de la Concession Française de Tientsin
	1881	Règlement sur la Construction des Maisons Chinoises à Élever Ultérieurement sur la Concession
	1893	Règlement Provisoire d'Organisation Municipale
	1894	Règlements Municipaux Concession Française de Tienn-tsinn
	1908	Règlement Municipal de la Concession Française de Tientsin
	1912	Conseil d'Administration Municipale de la Concession Française de Tientsin, Règlement Administratif
	1912	Conseil d'Administration Municipale de la Concession Française de Tientsin, Recueil des Règlements Municipaux
	1916	Conseil d'Administration Municipale de la Concession Française de Tientsin, Recueil des Règlements Municipaux
	1921	Conseil d'Administration Municipale de la Concession Française de Tientsin, Règlement Administratif



	1921	Conseil d'Administration Municipale de la Concession Française de Tientsin, Règlement Général de la Concession Française
	1926	Règlement Municipal Organique de la Concession Française de Tientsin
	1928	Conseil d'Administration Municipale de la Concession Française de Tientsin, Règlement Administratif
	1930	Conseil d'Administration Municipale de la Concession Française de Tientsin, Règlement Général de la Concession Française
	1931	Règlement Municipal Organique de la Concession Française de Tientsin
Japanese Concession	1901	工事請負規則
	1902	天津帝國專管居留地內永借權登錄規程
	1902	天津帝國專管居留地土地建物屆出規則
	1902	天津日本專管居留地假規則
	1905	居留民團法
	1906	居留民團法施行規則
	1907	天津居留民團法施行細則
	1919	下水道條例
	1922	電氣供給規程
	1923	建築取締規則
German Concession	1899	Outlines of Regulations for the German Concession
	1899	Baupolizeiordnung für das Gebiet der Deutschen Niederlassung in Tientsin
	1899	Polizeiordnung für das Gebiet der Deutschen Niederlassung in Tientsin
	1902	Baupolizeiordnung für das Gebiet der Deutschen Niederlassung in Tientsin
	1905	Gemeindeordnung für Die deutsche Niederlassung in Tientsin
	1908	Polizeiordnung für das Gebiet der Deutschen Niederlassung in Tientsin
	1911	Polizeiordnung für das Gebiet der Deutschen Niederlassung in Tientsin
	1912	Polizeiordnung für das Gebiet der Deutschen Niederlassung in Tientsin
	1915	Polizeiordnung für das Gebiet der Deutschen Niederlassung in Tientsin
Russian Concession	1903	Regulations of the Russian Concession at Tientsin
	1912	Russian Municipal Council Municipal Regulations and Byelaws
	1915	Byelaws for the Russian Concession
	1920	Russian Municipal Council Municipal Regulations and Byelaws
Austro-Hungarian Concession	1908	Reglement Enthaltend die Hauptsächlichsten Grundsätze und Bestimmungen für die Verwaltung der Österreichisch-Ungarischen Niederlassung in Tientsin
Italian Concession	1908	Royal Italian Concession in Tientsin, Local Land Regulations and General Rules
	1913	Regulations and Byelaws of the Italian Concession
	1923	Statuto Municipale e Regolamento per la sua applicazione
	1924	Municipio Della Concessione Italiana Tientsin Regolamenti
Belgian Concession	1923	Conseil Provisoire de la Concession Belge de Tientsin Recueil des Règlements Municipaux

Source: Compiled by authors.

An investigation into legislative system of the concessions will help us understand how different actors got involved in the formulation of the concessions. The legislative systems of the concessions in Tianjin can be basically divided into three types. Represented by the British Concession, the first type refers to concessions that enjoyed higher degree of autonomy, in which the land-renters' meeting held certain legislative power. In the early years of the British Concession, Land Regulations were made by the British Minister to China or consul in Tianjin. From the late 19th century, the annual general meeting of land-renters had authority to appoint a committee to report on the amendment of and/or addition to Land Regulations, which had to be approved in a general meeting, and sanctioned by the British Minister to China before implementation.⁹ The municipal council, elected by annual general meeting of land-renters, had power and authority to make various bye-laws to enable them to carry out the objects of Land Regulations.¹⁰ The Russian, the German and the Austro-Hungarian Concessions had similar legislative systems. The second type refers to concessions in which the respective consul held absolute legislative powers, such as the French Concession and the Italian Concession. In these concessions, the municipal council was under the effective direction of the consul, and the land-renters meeting had no legislative power. The third type refers to the Japanese Concession, which experienced from consular managing to semi-autonomous. From 1898 to 1907, the Japanese Concession was managed by the Japanese consul in Tianjin, and the regulations were usually issued by the consul under the Ministry of Foreign Affairs. In 1907, the Residents' Association (居留民会) —not unlike the land-renters' meeting in other foreign concessions—was established in Tianjin under the Residents' Corporation Law (居留民團法) and its implementing rules issued by Japanese government.¹¹ It acted as a legislative body, but its legislative actions were under the consular orders.¹²

Professional planners have played important roles in the realms of transnational and cross-cultural urbanism and migration including in the concessions.¹³ In the case of Tianjin, professionals were also involved in the formulation



and revision of concession regulations. In 1915, the Russian Municipal Council set up a special committee to revise the existing regulations of the Russian Concession.¹⁴ Its members included representatives from the municipal council, companies in the concessions, and professionals. They are Th. de Krzywoszewski (Councillor), W. Sutton (Councillor), J. Holmberg (constructing and civil engineer, associated member of the Institute of Civil Engineers, Denmark), R. H. Maclay (merchant, previous U.S. assessor of the mixed court in Shanghai), and C. F. Kleye (clerk of the Russo-Chinese Bank).¹⁵ It is even more obvious in the formulation of building bye-laws in the British Concession. In 1917, A. Loup, architect from Loup & Young, Architects, Engineers, Land, House and Real Estate Agents, and H. McClure Anderson, architect from Cook & Anderson, Architects, Surveyors and Valuators, took on the revision work of building bye-laws.¹⁶ Similarly, five years later, the Works Committee of the British Municipal Council appointed two members of the Architects' Association, H. McClure Anderson and E. C. Young to assist the council in drafting new building regulations and generally in the improvement of street architecture.¹⁷ Trained in Western countries and opening their own business in Tianjin, these foreign professionals had experience in applying their Western planning and building knowledge into local projects. Their engagement in formulation and revision of the regulations had undoubtedly promoted the exporting of Western planning ideas in Tianjin.

Exportation of Planning Ideas from Home Countries

Foreign powers in Tianjin brought modern planning and municipal systems which had already been developed in their home countries. To develop living quarters that they were familiar with and to show the power of their countries, they used their respective home country's experience in making regulations of the concessions. This investigation excludes the Japanese Concession, because urban planning in Japan was also affected by Western ideas during the same period, the planning and construction of its concession in Tianjin was a reflection of Japan's learning from the West.

In the early years of the concessions in Tianjin, the first and most important problem that the foreign powers faced was land. We can always find in the early concession regulations that the concession authorities referenced their respective home country's regulations when dealing with land issues. For instance, feu,¹⁸ a form of land tenure originally from Scotland, was adopted by the British Municipal Council during the 1870s and 1880s, and admitted in *Land Regulations of the British Municipal Extension, Tientsin 1898*.¹⁹ Moreover, in *Règlements Municipale de la Concession Française de Tientsin 1908*, it was written that all acts of sale or any acts relating to the ownership of land situated within the French concession in Tianjin must be written in the form prescribed by French law.²⁰ Similarly, it was stipulated in *Regulations and Byelaws of the Italian Concession 1913* that all disputes arising between adjoining proprietors should be judged in accordance to Italian Law.²¹

With the development of the concessions, foreign authorities also introduced modern municipal infrastructures to the concessions in Tianjin, the planning and construction of which were confirmed in regulations and byelaws. Taking the British Concession as an example, in *Land Regulations of the British Municipal Extension, Tientsin 1898*, the British Municipal Council was empowered "to install gas, water, and electric supply; tramways, or other means of facilitating transit of wayfarers or goods, or to grant concessions to others to do so".²² In the *Draft Scheme for Amalgamation of the Four British Municipal Areas 1902*, there was a separate article, Article XXX-Drains, specifying the power of the British municipal council in constructing, improving, and demolishing sewers and drains in the concession.²³ Related provisions were continuously refined and detailed in later revised regulations and byelaws, based on which municipal infrastructures were constructed and improved in the British Concession (Figure 2). Similar provisions can also be found in regulations of other concessions. The French Concession formulated regulations on sewage system and tramways in 1912, and on electronic installations in 1930.²⁴ The German Municipal Council issued regulations on electricity supply in 1916, covering application for electricity supply, type of power supply, design and maintenance of the installation, and electricity price.²⁵ In the Russian Concession, regulations on drainage system and water supply were published in 1920.²⁶ Moreover, the Italian Concession published byelaws on sanitary installations and sewer connections in 1924.

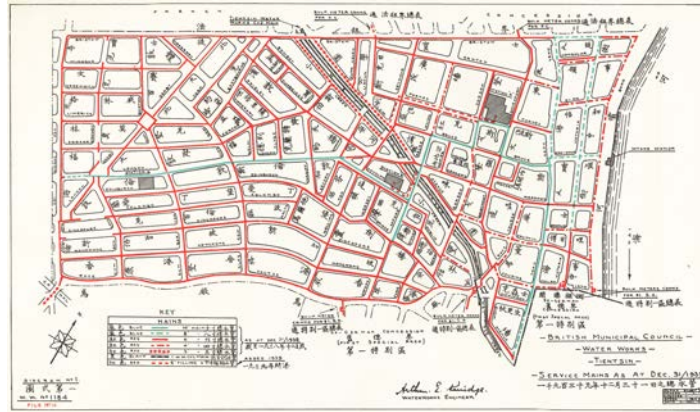


Figure 2. Drainage system of the British Concession in Tianjin, 1939.

Apart from modern municipal infrastructures, buildings with foreign styles were constructed in the concessions. Today, the former concession area of Tianjin is honoured as “International Architecture Exhibition”, which reflect its diversity in building styles, from first Romanesque to gothic, from eclecticism to postmodernism. In fact, the control of architectural style was an important part in regulations of concessions, and the European style from their motherlands was always admired and imposed in the main areas of the concessions. The British municipal council was empowered in its regulations to require the outward design of new buildings to conform the council’s standard of attractiveness.²⁷ The French Concession, the German Concession, and the Italian Concession all had stipulated in their regulations certain areas where only European style houses could be erected.²⁸ Similarly, in the byelaws of Russian Concession issued in 1915, a “Park Residential Area” was reserved as a strictly residential area for foreigners and better class Chinese. Only detached and semidetached houses of modern design shall be admitted for construction within the area.²⁹

Detailed building rules were enacted to guarantee the construction of European style or modern design buildings, which were related to building materials, height, distance, highlighting ventilation, fire protection, stability, and attractiveness. Some of these provisions could be traced back to their motherlands’ regulations. For instance, in *Règlement du Service des Travaux 1912* published in French Concession, it was specified that when dealing with protrusions such as bollards, steps and balconies which encroached the public roads, tolerance would be admitted under the conditions and bases generally adopted by Paris.³⁰ It is also worth noted that the German Concession and the British Concession both had provisions on reinforce concrete and structural steel, which were new building materials and technology to Tianjin (Figure 3).

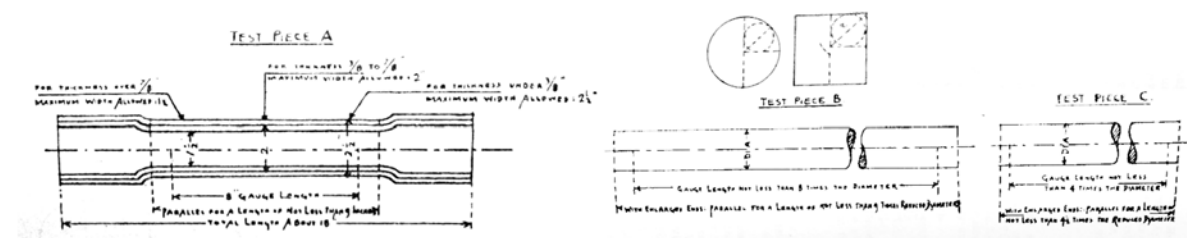


Figure 3. Illustrations on structural steel from *British Municipal Council Building & Sanitary By-laws 1925*.

Interaction among Concessions in Tianjin

The concessions in Tianjin were established at different times from 1860 to 1902, and they had different degrees of development. The earlier established concessions, such as the British Concession, the French Concession, and the German Concession, held the leading positions in development among all the concessions in the city. Comparing the regulations of different concessions in Tianjin, it can be inferred that other foreign powers had learned from their French, British and German neighbours when making their own regulations. People who worked in a couple of different concessions, especially as municipal councillors, also promoted this process.

Using French as the official language, regulations of the Belgian Concession showed a strong influence from ones of the French Concession. A main reason was that some councillors of the Belgian Provisional Council, which was established in 1912, had close relations with the French Concession. One of the councillors was Jean O’Neill, who came to Tianjin in 1900 as a French naval officer. He was a member of the French Municipal Council in Tianjin from 1906 to 1908, and also the manager of the most important real estate company in the French Concession, *Crédit Foncier d’Extrême-Orient*.³¹ Another one was E. Rousseau, who worked in the French Municipal Council during 1908-1911 and 1919-1925.³² The work experience in the French Concession contributed



to their work in the Belgian Provisional Municipal Council. The provisional council published a handbook of municipal regulations in 1923. Most of its regulations were similar to the French ones. For instance, almost all the articles from *Règlement du Service des Travaux* in this handbook were copied from the *Recueil des Règlements Municipaux* of the French Concession published in 1916.³³

Apart from simply copying, there existed more sophisticated influence mechanism in the regulation circulation in Tianjin. Usually, the foreign powers would revise the provisions they had learned from their neighbours according to their own needs. Taking building regulations for example, the German Concession published a detailed building byelaws in 1899, which set up a model for later issued building regulations in Tianjin.³⁴ When the Italians made regulations for the Italian Concession in 1913, they improved the German provisions in their own regulations. The building regulations in the German Concession stipulated that:

The distance between separate buildings on a plot must be at least 3 meters; In the Chinese quarters, if the buildings have courtyards and do not occupy an area greater than one-third of a *mou*, the distance must be at least 1.5 meter.³⁵

In the regulations of the Italian Concession, this provision was revised as:

Adjoining houses, belonging to different owners, shall, if it is not intended to build a boundary wall between them, be erected at a distance of at least 3 meters from the common boundary line. In the Chinese quarters this distance shall not be less than 2 meters.

Houses, belonging to the same owner, shall be kept at a distance of at least 3 meters from each other. In the Chinese quarters, however, whenever buildings do not occupy more than 1/2 of a *mou* (300 m²) of land, including the back yard, this distance may be reduced to a minimum of 1.5 meters.³⁶

The relationship between concessions in Tianjin was complicated. On one hand, the foreign powers from different countries locally worked together as a body when dealing with Chinese authorities;³⁷ On the other hand, they competed in developing their concessions to attract merchants and residents, and benefit their own nationals. The regulation circulation among these concessions can be understood as a result of the sense of both cooperation and competition.

Circulation among Treaty Ports in China

Britain, France, Germany, Russia and Japan had owned more than one individual concessions in different treaty ports in China, and planning ideas in concession regulations also circulated among these concessions belonging to one same country. Leading examples were the British and French Concessions. When these two countries established concessions in Tianjin in 1860, the British Settlement (united with the American Concession to create the Shanghai International Settlement in 1863) and the French Concession in Shanghai had already been developed for more than 10 years, and they were regarded as models for other British and French concessions in China. The interaction between the British and French concessions in Shanghai and Tianjin, which can be told from their regulations, has multiple driving forces.

The interaction of regulations between the French concessions had a lot to do with the movement of the consuls between the treaty ports. As we have discussed earlier, the French consul had supreme power in the French concession. In the early days of the French concession in Tianjin, the regulations of the concession showed a strong influence of the ones in Shanghai. The *Règlements de Police et de Voirie 1894* published in the French Concession of Tianjin had similar articles with the *Règlement Municipal de Police et de Voirie Pour la Concession Française 1869* issued in Shanghai on keeping public roads clean and clear.³⁸ This influence continued under P. Claudel, who was the Consul of France in Tianjin from 1906 to 1909. During his career in the French diplomatic corps, P. Claudel was the French consul in Shanghai in 1895, where he became familiar with the regulations of the French Concession in Shanghai. This experience played an important role when P. Claudel led the revising of *Règlement Municipal de la Concession Française de Tientsin* in 1908.³⁹ In 1909, Camille Gaston Kahn, who used to work in the French Concession of Canton (1904-1906), took over as French consul in Tianjin. In this position, he participated in making *Recueil des Règlements Municipaux 1912*, in which *Règlement du Service des Travaux* was influenced by *Règlement Concernant les Voies Publiques et Constructions 1910* issued in the Shanghai French Concession in many aspects, including building application system and management of special construction projects, and based on this regulation in Shanghai, the Tianjin one added more detailed stipulations on protrusions, downpipes, smoke ducts, and measures against fire.⁴⁰ After Camille Gaston Kahn moved to Shanghai and became the new French consul of Shanghai in 1913, similar detailed regulations on eaves, protrusions, smoke ducts and firewalls were issued in the Shanghai French Concession.⁴¹ Camille Gaston Kahn had introduced his working experience in Tianjin to Shanghai, and promoted regulations there.⁴²

Different from the French Concession, the British Concessions had a higher degree of autonomy, and the respective British consul only played a supervisory role in concession affairs. Based on available sources, the circulation of regulations between the British concessions can be understood from two aspects.



First, since the regulations of all the British concessions should be made or approved by the British Minister in China according to the British government requirement,⁴³ the Minister might have a central control in this process.⁴⁴ The consistency of certain articles in *Local Land Regulations of the British Concession at Tientsin 1866* and *Land Regulations and Bye-laws for the Foreign Settlement of Shanghai, north of the Yang-king-pang 1869* was the result of central control of Sir Rutherford Alcock, the British Minister to China. The municipal council in Shanghai revised its land regulations during 1865-1866 and submitted the amendments to Sir Rutherford Alcock, who gave a reply on November 15th, 1866 with some suggestions.⁴⁵ Eleven days later, on November 26th, Sir Rutherford Alcock issued *Local Land Regulations of the British Concession at Tientsin*. These two regulations had similar articles on land management and organization of municipal council.⁴⁶

Second, the British Municipal Council of one treaty port would actively reference existing regulations of other British Concessions. With the gradual improvement of the municipal administration system of the British concession in Tianjin, the British Municipal Council took over the legislative work, in which the council always followed the model of Shanghai. In 1898, a committee was appointed by the Municipal Council of Tianjin to make new regulations for British Municipal Extension in Tianjin. As the chairman of the Municipal Council of the British Concession in Tianjin, W. W. Dickinson, reported to the consul in Tianjin, these regulations were “based on those which obtain in Shanghai and in the British Concession, and the committee made modifications and additions as past experience and present exigency seem to justify”.⁴⁷ Similarly, it was pointed out in the report of British Municipal Council in Tianjin in 1917 that the modification of building bye-laws would base on the building code in Shanghai.⁴⁸ Moreover, more than half of the articles in *Municipal Building & Sanitary By-laws 1925* enacted in the British Concession of Tianjin were borrowed from the building regulation of Shanghai International Settlement issued in 1916.⁴⁹ This building regulation in Shanghai had a combined impact of *London Building Act*, *The Building Code of the City of New York 1901*, and *The Public Health and Buildings Ordinance 1903* issued in Hong Kong.⁵⁰

From the above, a wide range of actors were involved in this transnational urbanism practice. Ministers to China, consuls in the treaty ports, municipal councillors of the concessions, representatives from important companies and professionals all participated in the formulation of regulations to a certain degree. Besides, governments’ central control, municipal councils’ active learning from each other, and political leaders’ and professionals’ movement from one concession/treaty port to another had all promoted the circulation of regulations among Chinese treaty ports and within Tianjin. This circulation furthered modern urban development of Chinese treaty ports.

Conclusion

In the late 19th century and early 20th century, foreign powers export Western planning ideas to concessions in Tianjin mainly through a series of urban construction regulations, which had strong influence from their respective home country. Stephen V. Ward has proposed a typology of international diffusion of planning ideas, which depends on a “power relationship” between importing and exporting countries.⁵¹ According to this typology, the exportation of planning ideas in foreign concessions of Tianjin can be understood as an example of the “authoritarian imposition”, characteristic of which is externally imposed planning proposals and methods of enforcement with few indigenous interests. Although, in the late periods of the concessions, it had some characteristics of the “contested imposition”, as Chinese were allowed to join the municipal councils and local circumstance got more attention by foreign authorities. Besides, Planning ideas in these regulations circulated among concessions belonging to one same country in different treaty ports in China and among different concessions within Tianjin. The “power” of the two sides in this relationship was relatively equal, and the transmission of regulations from one concession to another was selective and always accompanied by modifications according to local needs. Thus, this circulation is similar to “selective borrowing” in Ward’s typology. Thus, in the case of Tianjin, there existed both “imposition” and “borrowing” relationships in the diffusion of planning ideas.

Disclosure Statement

No potential conflict of interest was reported by the author.

Funding

The work was supported by National Natural Science Foundation of China [grant number 51578365], [grant number 51608356].

Notes on contributor(s)



The 18th International Planning History Society Conference - Yokohama, July 2018

Yanchen Sun is a Ph.D. candidate at the School of Architecture, Tianjin University (China). She has worked as a guest researcher in the Delft University of Technology in the Netherlands from 2015 to 2016. Her research interests are the land development of foreign concessions in Tianjin and the transmission of planning ideas from Western to modern China.

Carola Hein is Professor and Head of the History of Architecture and Urban Planning Chair at Delft University of Technology. Her book publications include the Routledge Handbook of Planning History, *The Capital of Europe*, *Rebuilding Urban Japan after 1945*, and *Port Cities*. She currently works on the transmission of planning ideas among port cities and within landscapes of oil.

Kun Song is a full professor of Architecture at the School of Architecture, Tianjin University (China), where he is now the vice dean of the faculty. His research interests are the Chinese modern architectural heritage, living environment and inhabitant form, and architectural education.

Lin Feng is a lecturer at the School of Architecture, Tianjin University. She has worked as a member of the Urban Knowledge Network Asia (UKNA) at the Faculty of Architecture and the Built Environment in TU Delft. Her main research fields include Modern Chinese Architectural History, Architecture and Phenomenology, Architectural Education.

¹ Shuwei Luo, *Jindai Tianjin Chengshi Shi* (Beijing: China Social Science Press, 1993), 12.

² Otto Durham Rasmussen, *Tientsin: an illustrated outline history* (Tianjin: the Tientsin Press, 1925), 17.

³ Year of actual recovery here refers to the year that the Chinese government actually take the power of the concessions, other than the signing of recovery agreements.

⁴ Otto Durham Rasmussen, *Tientsin: an illustrated outline history* (Tianjin: the Tientsin Press, 1925), 37.

⁵ Pennell, *Tientsin, North China*, 24. Tianjin was formerly known as Tientsin in older Chinese postal romanization system.

⁶ J.R. Hersey, "A reporter at large: homecoming. I: the house on New China Road", *New Yorker*, 10 May 1982, 54, cited in Maurizio Marinelli, "Making Concessions in Tianjin: Heterotopia and Italian Colonialism in Mainland China." *Urban History* 36, no. 3 (2009): 404.

⁷ Chengkang Fei, *中国租界史 [The History of Chinese Concession]* (Shanghai: Shanghai Academy of Social Sciences, 1991), 115.

⁸ The concessions established through diplomatic notes or official notices were the original British Concession, the British Extension, the British Southern Extension, the British Extra Mural Extension, the American Concession, the French Extension, the Russian Concession.

⁹ *Land Regulations of the British Municipal Extension, Tientsin*. (Tientsin: The Tientsin Press, 1898), 23. National Archives, FO 228/1286.

¹⁰ *The Tientsin Municipal Regulation, 1918*. (Tientsin: The Tientsin Press, 1918), 8. Nantes Diplomatic Archives Centre, 961PO/1-45.

¹¹ Mark R. Peattie, "Japanese Treaty-Port Settlements in China, 1895–1937," *The Japanese Informal Empire in China, 1895–1937* (Princeton, N.J.: Princeton University Press, 1989), 190.

¹² Keqiang Shang and Haiyan Liu. *Research on the Society of Tianjin Concessions*. (Tianjin: Tianjin People's Press, 1996), 129.

¹³ Carola Hein, "Crossing Boundaries: The Global Exchange of Planning Ideas: The Transnational Turn in Urban History." Chap. 5 in Kwak, N. And Sandoval, A. (eds.) *Transnational Cities: Past into Present*, Philadelphia, (PA: UPenn Press, 2016), 114-129.

¹⁴ Russian Municipal Council, *Report of the Council for the Year Ending December 31st, 1915 and Budget for the Year Ending December 31st, 1916*. (Tientsin: The North China Printing & Publishing Co., Ltd., 1916), 2.

¹⁵ J. Holmberg was a native of Denmark, who, after qualifying as a constructing and civil engineer, received a first-class certificate in 1902. He came to Tientsin in 1903. During his stay in Tianjin, he used to be Consul for Denmark, and Engineer in Chief and Secretary, Tientsin City Water Works Co., Ltd. Lunt, C.P. *The China Who's Who 1922, A Bibliographical Dictionary*. (Shanghai: Kelley & Walsh, limited, 1922), 136; Wright, A., and H.A. Cartwright. *Twentieth Century Impressions of Hongkong, Shanghai, and Other Treaty Ports of China: Their History, People, Commerce, Industries, and Resources*. (London: Lloyds Greater Britain Publishing Company, Ltd., 1908), 740; *The Directory & Chronicle for China, Japan, Corea, Indo-China, Straits Settlements, Malay States, Siam, Netherlands India, Borneo, the Philippines, & C. With Which Are Incorporated "the China Directory" and "the Hong Kong List for the Far East"*. (Hongkong: Hongkong daily Press office, 1910), 773.

¹⁶ British Municipal Council Tientsin. "Report of the Council for year ended 31st December, 1917 and Budget for the year ending 31st December, 1918." Tianjin Municipal Archives ed. *Concessions in Tientsin: The Archives of British Concession*. (Tianjin: Nankai University Press, 2015), 1388.

¹⁷ British Municipal Council Tientsin. "Report of the Council for year ended 31st December, 1922 and Budget for the year ending 31st December, 1923." Tianjin Municipal Archives (eds.) *Concessions in Tientsin: The Archives of British Concession*. (Tianjin: Nankai University Press, 2015), 3084.

¹⁸ Feu was previously a form of land tenure in Scotland. In feu holding there is a substantial annual payment in money or in kind in return for the enjoyment of the land. The crown is the first overlord or superior, and land is held of it by crown vassals, but they in their turn may feu their land, as it is called, to others who become their vassals, whilst they themselves are mediate overlords or superiors. In the 1870s and 1880s, the British Municipal Council bought land from locals outside the British Concession and feued the land to foreign individuals.

Haiyan Liu, "天津租界市政章程法规选[Selection of Municipal Regulations of Concessions in Tianjin]". *近代史资料[Modern Historical Materials]*. (Beijing: China Social Science Press, 1998), 118.



The 18th International Planning History Society Conference - Yokohama, July 2018

- ¹⁹ *Land Regulations of the British Municipal Extension, Tientsin*. (Tientsin: The Tientsin Press, 1898), 1. National Archives, FO 228/1286.
- ²⁰ *Règlements Municipale de la Concession Française de Tientsin*. (Tientsin: Imprimerie E. LEE, 1908), 2. Federal Archives, R901-30928a.
- ²¹ *Regulations and Byelaws of the Italian Concession*. (Tientsin: Tientsin Press, Limited, 1913). Nantes Diplomatic Archives Centre, 691PO/44.
- ²² *Land Regulations of the British Municipal Extension, Tientsin*. (Tientsin: The Tientsin Press, 1898). National Archives, FO 228/1286.
- ²³ *Draft Scheme for Amalgamation of the Four British Municipal Areas 1902*. National Archives, FO 674/350.
- ²⁴ Conseil d'Administration Municipale de la Concession Française de Tientsin, *Recueil des Règlements Municipaux 1912*. (Tientsin: Imprimerie Hsie-Ho, 1912); Conseil d'Administration Municipale de la Concession Française de Tientsin, *Recueil General de la Concession Française 1930*. (Tientsin: Peiyang Press, 1930). Nantes Diplomatic Archives Centre, 691PO/6.
- ²⁵ *Baupolizeiordnung für das Gebiet der Deutschen Niederlassung in Tientsin 1916*. (Tientsin: Tageblatt für Nord-China, A.-G., 1916). Federal Foreign Office Political Archive, 1051.
- ²⁶ Russian Municipal Council, *Municipal Regulations and Byelaws 1920*. (Tientsin: North China Daily Mail, 1920). Nantes Diplomatic Archives Centre, 691PO/1-45.
- ²⁷ *Draft Scheme for Amalgamation of the Four British Municipal Areas 1902*. National Archives, FO 674/350.
- ²⁸ *Règlements de Police et de Voirie 1894*. Japanese Center for Asian Historical Records, 在支那專管居留地行政權取調一件第一卷; *Baupolizeiordnung für das Gebiet der Deutschen Niederlassung in Tientsin 1916*. (Tientsin: Tageblatt für Nord-China, A.-G., 1916). Federal Foreign Office Political Archive, 1051; *Regulations and Byelaws of the Italian Concession*. (Tientsin: Tientsin Press, Limited, 1913). Nantes Diplomatic Archives Centre, 691PO/44.
- ²⁹ Russian Municipal Council, *Municipal Regulations and Byelaws 1920*. (Tientsin: North China Daily Mail, 1920). Nantes Diplomatic Archives Centre, 691PO/1-45.
- ³⁰ Conseil d'Administration Municipale de la Concession Française de Tientsin, *Recueil des Règlements Municipaux 1912*. (Tientsin: Imprimerie Hsie-Ho, 1912).
- ³¹ Shuwei Luo (eds.), *天津通志附志 租界 [Tianjin Annals, Attached Records, Concessions]*. (Tianjin: Tianjin Academy of Social Science Press, 1996), 86; Tian Li, "Study on the History of Urban Development of the French Concession in Tianjin (1861-1943)." PhD diss., Tianjin University, 2015: 253.
- ³² *Proces-verbal de la reunion convoquer par monsieur le minister avec les dirigeants des principaux entreprises Belges en Chine*. National Archives of Belgium.
- ³³ Conseil Provisoire de la Concession Belge de Tientsin. *Recueil des Règlements Municipaux 1923*. (Tientsin: Tientsin Press, LTD, 1923). Nantes Diplomatic Archives Centre, 691PO/1-7; Conseil d'Administration Municipale de la Concession Française de Tientsin, *Recueil des Règlements Municipaux 1916*. (Tientsin: North China Daily Mail, 1916). Nantes Diplomatic Archives Centre, 691PO/6.
- ³⁴ *Land Regulations of the British Municipal Extension, Tientsin*. (Tientsin: The Tientsin Press, 1898), 1. National Archives, FO 228/1286; *Baupolizeiordnung für das Gebiet der Deutschen Niederlassung in Tientsin 1899*, Federal Archives, R901-30907.
- ³⁵ *Baupolizeiordnung für das Gebiet der Deutschen Niederlassung in Tientsin 1899*, Federal Archives, R901-30907.
- ³⁶ *Regulations and Byelaws of the Italian Concession*. (Tientsin: Tientsin Press, Limited, 1913). Nantes Diplomatic Archives Centre, 691PO/44.
- ³⁷ Robert Bickers and I. Jackson, *Treaty Ports in Modern China: Law, Land and Power*. (Taylor & Francis, 2016), 21.
- ³⁸ *Règlements de Police et de Voirie 1894*. Japanese Center for Asian Historical Records, 在支那專管居留地行政權取調一件第一卷; *Reglement Municipal de Police et de Voirie Pour la Concession Française*. Shanghai Municipal Archives, U38-1-2068.
- ³⁹ *Reglement Municipal de la Concession Française de Tientsin*. Nantes Diplomatic Archives Centre, 691PO/6.
- ⁴⁰ Conseil d'Administration Municipale de la Concession Française de Tientsin, *Recueil des Règlements Municipaux 1912*. (Tientsin: Imprimerie Hsie-Ho, 1912). Nantes Diplomatic Archives Centre, 691PO/6.
- ⁴¹ Qiaoyao Wu, "Development Overview of Shanghai French Concession's Building Codes." *Huazhong Architecture* 3(2013): 6.
- ⁴² Tian Li. "Study on the History of Urban Development of the French Concession in Tianjin (1861-1943)." PhD diss., Tianjin University, 2015: 84.
- ⁴³ *China and Japan Order in Council 1865*, recorded in the preamble of *Tianjin Local Land Regulations and General Regulations 1866*.
- ⁴⁴ Guodong Chen, "Spatial Evolution and Heritage Evaluation of British Concessions and Settlements in Modern East Asia, 1843-1945: Focusing on British Concessions in China." Paper presented at the East Asian Architectural Culture 2017, Tianjin, October 13-17, 2017.
- ⁴⁵ Shanghai Municipal Archives ed., *The Minutes of Shanghai Municipal Council*, vol.2 & vol.3. (Shanghai: Shanghai Ancient Book Press, 2001).
- ⁴⁶ *Tientsin Local Land Regulations and General Regulations*. (Hongkong: D. Noronha, 1867).
- ⁴⁷ *Land Regulations of the British Municipal Extension, Tientsin 1898*. National Archives, FO 228/1286.
- ⁴⁸ British Municipal Council Tientsin. "Report of the Council for year ended 31st December, 1917 and Budget for the year ending 31st December, 1918." Tianjin Municipal Archives ed. *Concessions in Tientsin: The Archives of British Concession*. (Tianjin: Nankai University Press, 2015), 1388.
- ⁴⁹ Tianjin Municipal Archives ed., *Concession in Tientsin: The Archives of British Concession*. (Tianjin: Nankai University Press, 2015),



3485-3777; Chen, *Compendium of Shanghai Real Estate*, 718-885.

⁵⁰ Tang, "Urban Building Control", 219.

⁵¹ Stephen V. Ward, "Re-examining the international diffusion of planning", in Robert Freestone (ed.) *Urban Planning in a Changing World: the Twentieth Century Experience*, (London: Spon, 2000), 40-60.

Bibliography

- Bickers, R., and I. Jackson. *Treaty Ports in Modern China: Law, Land and Power*. Taylor & Francis, 2016.
- British Municipal Council. *Land Regulations of the British Municipal Extension, Tientsin*. Tientsin: The Tientsin Press, 1899.
- British Municipal Council Tientsin. "Report of the Council for year ended 31st December, 1917 and Budget for the year ending 31st December, 1918." Tianjin Municipal Archives ed. *Concessions in Tientsin: The Archives of British Concession*. Tianjin: Nankai University Press, 2015.
- Baupolizeiordnung für das Gebiet der Deutschen Niederlassung in Tientsin 1916*. Tientsin: Tageblatt für Nord-China, A.-G., 1916.
- Chen, Guodong. "Spatial Evolution and Heritage Evaluation of British Concessions and Settlements in Modern East Asia, 1843-1945: Focusing on British Concessions in China." Paper presented at the East Asian Architectural Culture 2017, Tianjin, October 13-17, 2017.
- Chen, Yanlin. *上海地产大全 [Compendium of Shanghai Real Estate]*. Shanghai: Shanghai Real Estate Institute, 1933.
- Conseil d'Administration Municipale de la Concession Française de Tientsin, *Recueil des Règlements Municipaux 1912*. Tientsin: Imprimerie Hsie-Ho, 1912.
- Conseil d'Administration Municipale de la Concession Française de Tientsin, *Recueil General de la Concession Française 1930*. Tientsin: Peiyang Press, 1930.
- Conseil Provisoire de la Concession Belge de Tientsin. *Recueil des Règlements Municipaux 1923*. Tientsin: Tientsin Press, LTD, 1923.
- Conseil d'Administration Municipale de la Concession Française de Tientsin, *Recueil des Règlements Municipaux 1916*. Tientsin: North China Daily Mail, 1916.
- Fei, Chengkang. *中国租界史 [The History of Chinese Concession]*. Shanghai: Shanghai Academy of Social Sciences, 1991.
- Hein, Carola. "Crossing Boundaries: The Global Exchange of Planning Ideas: The Transnational Turn in Urban History." Chap. 5 in Kwak, N. And Sandoval, A. (eds.) *Transnational Cities: Past into Present*, Philadelphia, PA: UPenn Press, 2016: 114-129.
- Land Regulations of the British Municipal Extension, Tientsin*. Tientsin: The Tientsin Press, 1898.
- Li, Tian. "Study on the History of Urban Development of the French Concession in Tianjin (1861-1943)." PhD diss., Tianjin University, 2015.
- Liu, Haiyan. "天津租界市政章程法规选 [Selection of Municipal Regulations of Concessions in Tianjin]". *近代史资料 [Modern Historical Materials]*. Beijing: China Social Science Press, 1998: 116-166.
- Lunt, C.P. *The China Who's Who 1922, A Bibliographical Dictionary*. Shanghai: Kelley & Walsh, limited, 1922.
- Luo, Shuwei. *近代天津城市史 [Urban History of Modern Tianjin]*. Beijing: China Social Science Press, 1993.
- Luo Shuwei (eds.), *天津通志 附志 租界 [Tianjin Annals, Attached Records, Concessions]*. Tianjin: Tianjin Academy of Social Science Press, 1996.
- Marinelli, Maurizio. "Making Concessions in Tianjin: Heterotopia and Italian Colonialism in Mainland China." *Urban History* 36, no. 3 (2009): 399-425. doi:10.1017/S0963926809990150.
- Mark R. Peattie, "Japanese Treaty-Port Settlements in China, 1895- 1937," *The Japanese Informal Empire in China, 1895-1937*. Princeton, N.J.: Princeton University Press, 1989: 166-209.
- Municipal Council, Shanghai. *Report for the Year Ended 31st December 1898 and Budget for the Year Ending 31st December 1899*. Shanghai: Printed by Kelly & Walsh, Limited, Nanking Road, 1899.



- Pennell, W. V. *Tientsin, North China*. Tianjin: The Rotary Club of Tianjin, 1934.
- Rasmussen, Otto Durham. *Tientsin: An Illustrated Outline History*. Tianjin: the Tientsin Press, 1925.
- Regulations and Byelaws of the Italian Concession. (Tientsin: Tientsin Press, Limited, 1913).*
- Règlements Municipal de la Concession Française de Tientsin*. Tientsin: Imprimerie E. LEE, 1908.
- Russian Municipal Council. *Report of the Council for the Year Ending December 31st, 1915 and Budget for the Year Ending December 31st, 1916*. Tientsin: The North China Printing & Publishing Co., Ltd. 1916.
- Russian Municipal Council, *Municipal Regulations and Byelaws 1920*. Tientsin: North China Daily Mail, 1920.
- Shang, Keqiang, and Haiyan Liu. *Research on the Society of Tianjin Concessions*. Tianjin: Tianjin People's Press, 1996.
- Shanghai Municipal Archives ed., *The Minutes of Shanghai Municipal Council*, vol.2 & vol.3. Shanghai: Shanghai Ancient Book Press, 2001.
- Tang, Fang. "Urban Building Control - A Study on the Building Regulations of Modern Shanghai." PhD diss., Tongji University, 2006.
- The Directory & Chronicle for China, Japan, Corea, Indo-China, Straits Settlements, Malay States, Siam, Netherlands India, Borneo, the Philippines, &C: With Which Are Incorporated "the China Directory" and "the Hong Kong List for the Far East"*. Hongkong: Hongkong daily Press office, 1910.
- Tianjin Municipal Archives ed. *Concession in Tientsin: The Archives of British Concession*. Tianjin: Nankai University Press, 2015.
- Tientsin Local Land Regulations and General Regulations*. Hongkong: D. Noronha, 1867.
- Ward, Stephen. "Re-examining the international diffusion of planning", in Robert Freestone (ed.) *Urban Planing in a Changing Word: the Twentieth Century Experience*. London: Spon, 2000: 40-60.
- Wright, A., and H.A. Cartwright. *Twentieth Century Impressions of Hongkong, Shanghai, and Other Treaty Ports of China: Their History, People, Commerce, Industries, and Resources*. London: Lloyds Greater Britain Publishing Company, Ltd., 1908.
- Wu, Qiaoyao. "Development Overview of Shanghai French Concession's Building Codes." *Huazhong Architecture* 3(2013): 5-7.

Image sources

Figure 1: Drawn by authors.

Figure 2: British Municipal Council Tientsin. *Report of the Council for the Year Ended 31st December, 1939 and Budget for the Year Ending 31st December, 1940*. Tientsin: Tientsin Press, Limited, 1940.

Figure 3: British Municipal Council. *Building & Sanitary By-laws 1925*. Tientsin: The Tientsin Press, Ltd, 1925: 145-146.



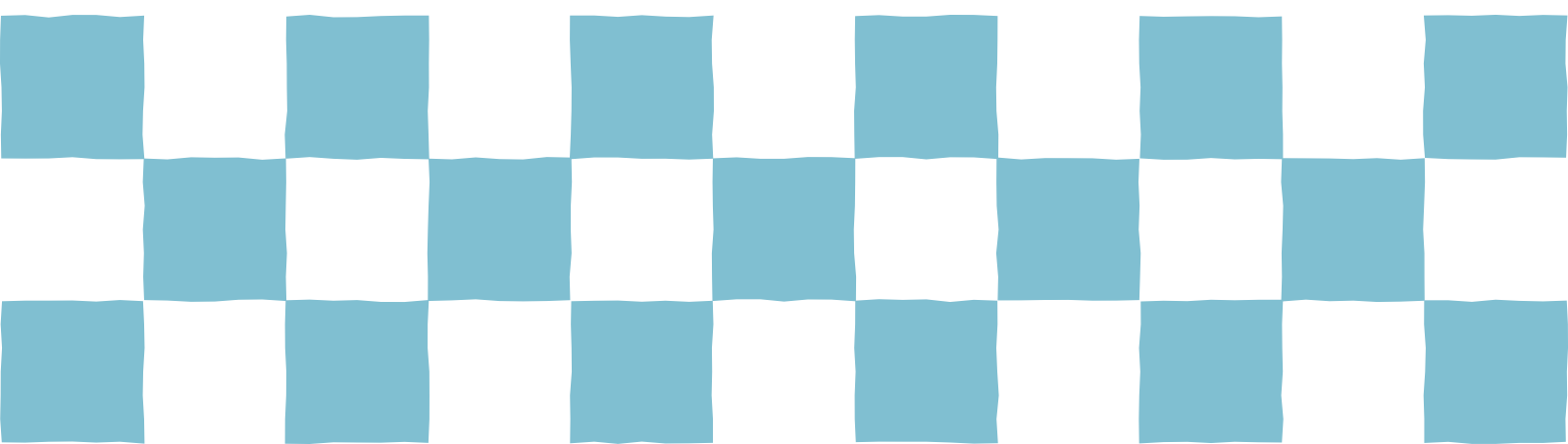
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

58 Planning History and Megaevents: Part 1, Planning, Design and Event Spaces / GUHP*



How Urban Spaces Remember: Memory and Transformation at Two Expo Sites.

Jennifer Minner (Cornell University) and Martin Abbott (Cornell University)

Heritage conservation can be a force of resistance to the entrepreneurial ambitions of urban growth coalitions in the restructuring of urban space. Alternatively, it can aid in revalorisation of urban real estate. Heritage conservation consists of an array of acts of urban memory and design with varying intentions and outcomes. Applications of heritage conservation are understudied aspects in the design and evolution of mega-event sites. This paper provides case studies at two former expo sites in the US and Australia into the complex and in some cases, Janus-faced nature of heritage conservation.

The first case study is at the site of Hemisfair '68 in San Antonio, Texas, USA. In preparation for the 1968 world's fair, preservationists were able to save 22 historic structures out of hundreds demolished with urban renewal funds. Thus, historic preservation challenged modernism, but also represented a precedent for incorporating preservation as an element of modernist urban design. Since then, the fair site has evolved and is subject to plans for mixed use redevelopment. Ironically, contemporary calls to preserve pavilions built in modern architectural forms for Hemisfair '68, now challenge New Urbanist visions for the future of the mega-event site.

Twenty years after Hemisfair '68, a working class neighbourhood and industrial area was cleared for Expo '88, in Brisbane, Queensland, Australia. Expo '88 was a defining moment for the city and was seen as opportunity to elevate its stature internationally. The site was later redeveloped into the South Bank Parklands. Over time, South Bank has evolved through redevelopment and master planning, public outcry, and instances of heritage conservation in and around the expo site.

Common to both cases is the conservation of parks, heritage, and artwork, outcomes of individual and collective actions to shape urban landscapes. Both sites contain important elements of collective memory and heritage as forces of transformation in urban development initiatives. This paper is illustrative of multiple heritage logics involving the retention of objects and landscapes. These may be useful in analysing a wider set of former mega-event sites, and even more broadly, in the study of urban places and public spaces over time.

Pestilence, toxicity and all the fun of the fair: brownfield sites and mega-event spaces

John Gold (Oxford Brookes University) and Margaret Gold (London Metropolitan University)

The Summer Olympic Games and the World's Fairs – the two festivals that truly deserve the title 'mega events' – share two important characteristics. First, as ambulant festivals, they need to find sizable spaces, preferably close to the city centre, for an event that is unlikely to be repeated within several generations. Secondly, the spaces of temporary congregation thus produced need to be converted for post-event use. Increasingly, in the current era, that has means redeveloping event spaces in a manner that produces positive outcomes, especially to achieve a measure of regeneration as compensation for the expense incurred in staging the event.

After briefly outlining the various options open to festival organisers when finding spaces for Exposition showgrounds or Olympic Parks, we focus on one category: the use of primarily brownfield land that is so heavily polluted that it has been shunned previously due to the costs of conversion, but where the prospect of large-scale mega-event investment opens up the possibility of rehabilitation. In this context, discussion focuses on three examples, all in potentially attractive locations for development but with significant barriers to construction due to the nature of previous land use: the showground for New York's World's Fair (1939-40) at Flushing Meadow; Homebush Bay, which provided the Olympic Park for Sydney 2000; and the Lower Lea Valley, the location for the Olympic Park for London 2012.

The first of these case studies in Queens New York, was known as the Corona Ash Dump after 1909 when the Brooklyn Ash Removal Company started depositing ashes from furnaces across New York in what had been a tidal salt marsh. The resultant landscape of ash hills and standing water immortalised by Scott Fitzgerald in the Great Gatsby as the Valley of Ashes – an eyesore and source of pollution and mosquitoes to surrounding communities. The contracts to dump ash were finally revoked in 1934 and two years later work started to reclaim the area for a parkland setting for the 1939 New York World's Fair.

In the case of Homebush Bay west of Sydney industrial change had created a brownfield site which had once housed heavy industry, brickworks, an abattoir, an armaments depot for the Navy and landfill sites for hazardous materials. The bid for the 2000 Olympic Games envisaged an Olympic Park with the main sports venues, Olympic Village and metropolitan parkland containing creating and preserving important wetland and woodland habitats.

In the case of Stratford in East London the land along the River Lea had developed into a transport and industrial corridor by the 20th century, home to railway marshalling yards and warehouses, factories, and foundries. By the 1990s a significant proportion of the railway land was derelict and many of the industrial sites redundant. The Olympic bid involved the removal of hazardous material and the decontamination of soil to allow the construction of Olympic venues, an athletes' village and parkland rich in biodiversity.

Tourism in the slums of Rio de Janeiro: An analysis of the urban impacts in informal areas caused by recent public interventions for the big sports events hosted by the city .

Sergio Fagerlande (FAU UFRJ)

The slums of Rio de Janeiro have been the stage of recent urban changes related to tourism-related activities, chiefly those linked to the large sports events such as 2014 FIFA World Cup, and the 2016 Olympic and Paralympic Games. The visiting by Brazilian and foreign people was always significant in the city, and the increase of the flow in the slums is a relevant fact, both from the perspective of accommodation for the visitors. This article seeks to put the changes in the recent urban dynamics of those areas into perspective, as caused by popular settlements in which tourism has been bringing changes about, initially related to urban mobility, in the case of the large works done by the government such as cable car systems, and lifts, as well as internal paths. These interventions brought reflexes embodied in private and community-related investments, with the opening of hostels, bars and restaurants, along with the creation of new open spaces, such as parks and ecological trails. The work has been going on, with the mapping of these activities in the slums of Rio's South Side, especially in the slum of Babilônia-Chapéu Mangueira, seeking data on their locations, and on who the entrepreneurs behind the trend are, and on how they are inserted in the tourism-in-slums' activity, and on the importance of community participation, and the relevance of public policies in the process at hand. The study also shows the relation that exists between the start of operation for the hostels and the installation of mobility equipment and the setting up of the UPPs (Peace Police Corp Units) that saw its height between 2008 and 2017, a moment in which tourism-related activities started to take roots in Rio's slums, in line with public policies aimed at creating a new image for the city, with an emphasis on tourism and the large events that soaked the city in that time frame. The tourism in slums activity had year 1992 as its starting moment, as pointed by Freire-Medeiros (2009), and its activities are found in many countries around the world, as mentioned by Frenzel, Koens, and Steinbrink (2012). The research used the references produced by Urry (2001), Judd and Fainstein (1999), and Fainstein (2007), in their studies on the city and tourism, and of other authors that study tourism in slums, such as Freire-Medeiros (2009), Morais (2010, 2013), Carvalho (2013, 2016), Frenzel, Koens and Steinbrink (2012), and Pearlman (2016). The work of research aims at the work on tourism at the basis of the community, as studied by Bartholo, Sansolo and Burzstyn (2009), apart from accounts on community participation as found in the books of Rodrigues (2014) and Silva, and of Pinto and Loureiro (2012). The study on the hostels and on mobility in the slums has been presented by Fagerlande (2016, 2017), and by Izaga and Pereira (2014) and shows how the relationship is formed between mobility, visiting, and the supply of accommodation in tourist slums.

Porous boundaries in Rio de Janeiro's favelas: Community based initiatives, urban mobility infrastructure, tourism and environmental issues in the urbanization of fringes as a socio-spatial means to reconcile the favela with the city

Fabiana Izaga (Federal University of Rio de Janeiro - Graduate Program on Urbanism), Sérgio Fagerlande (Federal University of Rio de Janeiro - Graduate Program on Urbanism) and Rachel Coutinho Marques Da Silva (Federal University of Rio de Janeiro - Graduate Program on Urbanism)

Favelas in Rio de Janeiro, Brazil, would be going through a third era of development, as a result of changes and accumulation of investments made in urban improvements. From alternative places of residence for the poor, where organized crime settled in the late twentieth century, today the slums of the South Side are places that are home to a new urban dynamics, with the rise of real estate prices, informal economy growth and increase of tourist and cultural activities. Community based initiatives have been an important way of social and spatial transformation. For the preparation of major sports events hosted by the city of Rio de Janeiro (FIFA World Cup 2014 and the 2016 Olympics) there were implemented new urban and public security projects in various slums. Our research presents the case study of the "Favela da Babilônia". This slum presents an interesting process in its borders, having on one side a large forest area and on the other a formal middle-class neighborhood. The possibilities that community processes related to environmental issues, such as reforestation and tourism – structured on government built urban mobility infrastructure – have revealed Rio de Janeiro as a city in which diversity stands out.



How Urban Spaces Remember: Memory and Transformation at Two Expo Sites

Jennifer Minner*, Martin Abbott**

* *PhD, Department of City and Regional Planning, Cornell University, j.minner@cornell.edu*

** *PhD Student, Department of City and Regional Planning, Cornell University, mja273@cornell.edu*

International Expos can leave long-lasting imprints on host cities. The production and evolution of legacy public spaces from these events deserve scholarly attention. Case studies were conducted at two former expo sites in the US and Australia, focusing on the role of retention, reuse, heritage, and parks conservation in the evolution of public spaces. In preparation for Hemisfair '68, in San Antonio, Texas, conservationists saved 22 historic buildings out of hundreds demolished. Although only a small proportion of buildings were preserved, preservationists challenged a modernist urban renewal plan and the design became a precedent for incorporating heritage conservation in modern urban design. Today, the Hemisfair site is subject to new redevelopment plans. Calls to preserve remaining modernist pavilions challenge New Urbanist visions for the site. In a second case study, an industrial district was cleared and a working-class neighbourhood transformed for Expo '88, in Brisbane, Queensland. The site was later redeveloped into the South Bank Parklands. Over time, South Bank evolved through redevelopment and master planning, public outcry, and instances of conservation in and around the expo site. Common to both cases is the conservation of parks, heritage, and artwork, outcomes of individual and collective actions to shape urban landscapes.

Keywords: Expos, Mega-events, World's fairs, Heritage Conservation, Parkland, San Antonio, Brisbane, Historic Preservation, Collective Memory

Introduction

International expos, or world's fairs, have restructured and transformed urban spaces in host cities around the world. Former expo sites' large urban footprints, which include parks, waterfronts, civic centres, and urban precincts, represent revolutionary innovations in planning, design, and urban development. Former expo sites are also reservoirs of social memory.¹ For those who have experienced an expo first hand, there can be a deep personal connection remaining from the experience. For others, who visit a former expo site only after the event is over, meanings are crafted in interaction with what remains and how it is interpreted, as well as with the spaces that have been remade.² The leftover civic centres, precincts, and parks are often the site of shifting coalitions of public, private, and non-profit actors who seek to shape the meanings and uses of these places over time. In addition, many of these sites experience the ebbs and flows of attention and investment.

In this paper, sites in San Antonio, Texas in the USA and Brisbane, Queensland in Australia are examined as case studies of urban transformation at former mega-event sites. A focus of this research is on the role of retention, reuse, and conservation in their evolution. At Hemisfair '68 in San Antonio and Expo '88 in Brisbane, event organisers aimed to generate revenue; tout the benefits of their city as a place to live, visit, and invest; and to restructure urban space. The stages for these events were urban neighbourhoods deemed aged and blighted, on the edge of central business districts and prominent waterfronts. In both cities, on roughly equivalent areas of urban land, hundreds of buildings were levelled, and residents and businesses expelled, to make way for the expos. At both sites, a limited number of older buildings remained and were incorporated into expo site designs. Decades later, reverberations of redevelopment continue to ferment at the parklands and convention centres of each city.

While there has been historical scholarship into both expo sites, previous studies do not specifically address the conservation of buildings, structures, and artwork as aspects of the continuing evolution of the site. A main premise of this paper is that scholarship about mega-event sites should pay attention to acts of reinvestment and retention, which are often overlooked as elements of urban management. Furthermore, vignettes reveal the roles of individual actors, as well as organizations and political coalitions operating with a range of 'conservation logics,' and their mixed success.

Expo Sites and the Evolution of Urban Space

Expos often leave lasting physical imprints on host cities, but they are not static imprints. They evolve over time. The longer historical phenomenon of continuous evolution is examined only to a limited extent in existing literature.³ Historical scholarship has most often focused on the planning for and execution of the events and on



their social and cultural history. This scholarship most often concentrates on a window of time tightly bound to the origins of expositions and their immediate after effects.

Roche (2017) includes among the built legacies of mega-events not only iconic architecture, but also the site design, infrastructure, ordinary buildings, and landscape architecture from the events. He notes that mega-events leave not only a “space-filling” legacy, but also one that is “space creating.”⁴ Mega-events often result in new parklands, plazas, waterfront promenades, and civic centres. Gold and Gold (2005) write of the use of mega-events in ‘place promotion,’ and “strategies to rebrand and regenerate blighted areas.”⁵ They connect this to “urban entrepreneurialism in which the interests of the municipality and the private sector, particularly the business community converge in the act of ‘selling’ the city.”⁶ This entrepreneurial reshaping of urban space does not end immediately after the creation of a mega-event site, nor is it only new construction that plays an important role.

The retention of buildings, artwork, and parklands after a mega-event can also be indicative of collective action in the production of urban spaces. The aims of these acts of conservation can vary from entrepreneurial, market-based attempts to spur reinvestment and revalorisation of places to grassroots efforts that use conservation to resist redevelopment and commercialisation. Koziol (2003) has developed a framework for understanding preservation discourse. On one axis, the motives of an actor to preserve an object are oriented toward social associations versus the specific physical attributes of the object. On another axis, preservation is associated to a greater or lesser degree toward the market.⁷ While this framework is limited, it shows promise in articulating conservation logics. Thus the careful study of acts of conservation and their underlying logics can provide valuable information about how places are materially constructed and constituted over time and economic and social forces and power relations.

Case Study Sites

Hemisfair and South Bank are two former expo sites near to or within the central business district of each respective city. As described in Table 1, the original expo sites were roughly the same size, at 39 and 40 hectares respectively. They are both examples of restructuring older neighbourhoods into event space. Today, both sites include a mix of public parklands, convention centres, and commercial, civic, cultural and nongovernmental uses.⁸

[Table 1 about here.]

Hemisfair: Heritage and Destruction in Construction of the 1968 World’s fair

Hemisfair ‘68 was the first international expo held in the U.S. South. Its theme celebrated the confluence of North and South American cultures, which was an expression of Pan-Americanism and a local identities rooted in Spanish Colonial and Mexican cultural heritage re-packaged to appeal to tourists.⁹ By the 1950s, local business leaders had begun to dream of a world’s fair that would create a new civic centre, while elevating San Antonio’s reputation. When federal urban renewal funds were slated to demolish the Germantown neighbourhood in the mid-1960s for the fair, architect O’Neil Ford and the San Antonio Conservation Society, a local heritage organisation, rallied to protect trees and what were deemed the most historic of buildings from the neighbourhood.¹⁰ The Conservation Society embarked on an effort to save 200 structures identified as historic. Ultimately, only 22 buildings were preserved. Demolition of the neighbourhood would remove 2,239 residences and 686 businesses, forcing 1,600 people to move (see figure 1).¹¹ Twenty-four streets would be removed or realigned to create a consolidated site to stage the world’s fair.¹² Figure 2 below shows the Hemisfair site under construction. The extent of demolition can be seen along with trees and buildings that were preserved on site. Most of the preserved buildings housed restaurants in the concessions area of the world’s fair. In addition, fair plans preserved a portion of the Acequia Madre, a channel constructed in the 1720s to convey water to a nearby mission. The incorporation of these historic buildings and landscapes were praised among architectural critics; although architectural critic Ada Louise Huxtable, also lamented that more had not been preserved.¹³

[Figures 1 and 2 about here.]

New pavilions and plazas were constructed for Hemisfair ‘68 in modern architectural styles. Some of these survive to this day. The Tower of the Americas is a 190 meter (622 foot) structure and it remains a primary tourist destination in downtown San Antonio.¹⁴ A \$7.5 million United States Pavilion was constructed comprised of two buildings - Confluence Theatre and the Exhibit Pavilion. The Migration Plaza linked the two buildings and was intended to express a celebratory message about the cultural heritage of Texas emerging from the confluence of people of different races, ethnicities, and cultures. The entire complex was repurposed as a federal courthouse and judicial training centre a few years after the fair. The Institute of Texan Cultures was also designed to be a permanent structure and museum about Texas’ ethnic, racial and cultural groups and it was retained after the fair. A Woman’s Pavilion is also a fair era survivor on site.¹⁵ The ensemble of modern architectural buildings – some of them still used and others neglected and in near ruin, reflect ambivalence about how to best remember and utilize the built legacy of Hemisfair.



Questions of Preservation and Erasure Post Event

Not long after Hemisfair '68, several factors led to a state of dormancy on the former world's fair grounds.¹⁶ There were many subsequent schemes to revive what was largely perceived as a dead zone adjacent to San Antonio's most vibrant tourist area. According to one count there were more than 12 plans conceived.¹⁷ In 1988, the site was renamed HemisFair Park. While the site included a convention centre, and there were important governmental agencies, cultural institutions and nongovernmental organisations that operated on the site, city officials have often bemoaned its lack of vitality.

In 2009, the San Antonio City Council established the Hemisfair Park Area Redevelopment Corporation (HPARC), a non-profit local government corporation to manage redevelopment of the site.¹⁸ HPARC undertook a major master planning effort in 2011. The plan involved reopening streets and the creation of three new or substantially changed parks on the site.¹⁹ The Plan allocated the land under the U.S. Pavilion complex and Institute of Texas Cultures, as places for New Urbanism-inspired redevelopment with new mixed use development.

News of the Master Plan's quiet elimination of the former US Pavilion buildings and the Institute of Texas Cultures on future land use maps began to circulate among preservation advocates. The Mid Tex Mod chapter of Docomomo US, an organisation dedicated to the documentation and conservation of the modern movement, organized a local tour highlighting the modern architecture and artwork of Hemisfair.²⁰ In 2016, the Confluence Theatre was listed by the state-wide nongovernmental organisation Preservation Texas, as one of the 14 most endangered buildings in the state. That same year, the Texas Historical Commission, a state agency, determined that a portion of the Hemisfair site was eligible for listing as an historic district on the National Register of Historic Places.²¹ Eligibility or designation on the National Register of Historic Places is largely honorary, only triggering review of potential impacts if federal funds are used. In the U.S., it is up to local governments to adopt landmark designations that protect heritage properties from demolition.

Despite the local historic designation of the aforementioned Hemisfair '68 pavilions and a local historic district (see figure 3), there remains talk of the demolition of former fair pavilions by HPARC and city officials, who do not view the buildings as immediately adaptable or having uses that will generate sufficient revenue. The University of Texas at San Antonio, which still owns the Institute of Texas Cultures has issued a request for proposals for mixed use development to be built at the site of this building.²²

[figure 3 about here.]

The future of the Woman's Pavilion also remains unsettled. On its exterior are the names and handprints of the 80 woman who were involved in organizing the pavilion.²³ Over the years, the Woman's Pavilion has been neglected. A nongovernmental organisation, the Women's Pavilion at Hemisfair Park, Inc. was founded in 2007 to advocate for its rehabilitation and reuse. The organisation worked with an architect to produce plans for the pavilion and even took the plans to San Antonio's historical commission for approval. However, adaptive reuse plans have yet to be implemented.²⁴ Neither the City of San Antonio nor HPARC has committed to reuse, nor has the Hemisfair Conservancy, a non-profit organisation established to raise money for the site, committed to fundraising for rehabilitation or stabilization of this or any of the other fair structures.²⁵

While many of the 19th century and early 20th century buildings remain empty, awaiting new commercial tenants, they are still fully embraced within HPARC's master plans. Meanwhile, the modern architecture on site, even with status as either designated or eligible historic resources, are largely invisible. In this case, preservation groups advocate for their retention in shaping the future of this site. Officials from HPARC, some elected officials, and developers involved in new mixed use projects see conservation of the modern architectural legacy as an impediment to progress toward greater private sector investment on site.

Origins of Expo '88 and South Bank Parklands

Expo '88 was planned on lands along the South Brisbane River that had been transformed in the 19th century from a place of gathering for the Aboriginal Turrbal and Yuggera peoples to a precinct of wharfs and maritime businesses, commercial investment and boarding houses.²⁶ It was home and workplace to many working-class people, both of Aboriginal and European descent. By the 1970s, on the western portion of what would become the Expo '88 site, a cultural precinct was developed as part of redevelopment plans. Accomplished Australian architect Robin Gibson designed the Queensland Museum, Queensland Performing Arts Centre, and Queensland Art Gallery, which formed a complex called the Queensland Cultural Centre. A few of the 19th and early 20th century remnants of the previous neighbourhood, as well as the brutalist complex designed by Gibson, would become strongholds in the conservation of the past in South Brisbane.

In the years prior to the Expo '88, private land was resumed and consolidated with public lands. This resulted in displacement of businesses and residents through both direct demolition of buildings and increases in rents.²⁷ Many



properties were demolished to make way for the Expo development (figure 4) and rents in the area skyrocketed. The concerned citizens of the surrounding communities of South Brisbane protested that, “The rich get Expo, the poor get homeless.”²⁸ It is estimated that 600 residents were forced to leave their homes during the expo due to increasing housing costs.²⁹ According to Donna Lee Brian plans were met with “sustained campaigns of opposition from local residents and urban conservation action groups.”³⁰ Even with the strife and resistance, the Expo was overwhelmingly reported a success in the press and is widely credited for transforming Brisbane into an international destination. The event has been called “a social and cultural epiphany that put the city on the world map and brought the place to life like never before.”³¹

[Figure 4 about here.]

After Expo '88, the Queensland State Government planned to sell Expo lands for commercial development, including a casino, after the event ended. In 1987, the River City Consortium was selected as developer and a substantial amount of commercial development was planned including: “an international hotel and a second hotel; a 50-storey World Trade centre; commercial offices, retail and residential accommodation; an exhibition and convention centre; an Orbisphere science centre; the Endeavour island; a casino; and public open space.”³² In opposition to this plan, the Lord Mayor Sally Atkinson championed the retention of lands for ‘a people’s park.’³³ Atkinson convinced the state government to retain ownership for parkland as there was significant public outcry to save the site for public use. Later Brisbane City Council began to make annual payments to support the management of the parklands by the South Bank Corporation, a body of the Queensland State Government.

Post Expo '88: Objects Cherished, Moved, Hoisted, and Protected

A legacy of Expo '88 was the mobilization of support in favour of retaining of the site in public hands, as well as the retention of buildings and artwork. An example is the Nepalese Peace Pagoda. It was constructed in the Kathmandu valley by 300 carvers and artisans from 160 Nepalese families. It was the sole example of a peace pagoda outside of Nepal other than one located in Munich, Germany. In capturing the hearts and minds of the Australian public, it garnered more than 70,000 signatures of support [in a visitor’s book] during Expo 88. It was described by then Brisbane City Councillor, David Hinchliffe, in correspondence to the Australian Department of Foreign Affairs at a formative stage of the pavilion’s retention, as “one of the half dozen most popular displays” at Expo 88.³⁴

There was, however, much uncertainty as to whether the pavilion would remain in Australia. Plans were set in motion to sell the pagoda to a Japanese buyer at the close of 1988. The Friends of the Pagoda’s public fundraising appeal was initially managed by a loose group of volunteers. Early in the public campaign, the committee enlisted the support of Sir Edmund Hillary as Patron-in-Chief of the Pagoda. Hillary ventured that the pavilion was “beautifully constructed and well worth preserving,” and his acceptance of this role was viewed as the climax of the campaign to save the pagoda.³⁵ Although federal, state and local governments made financial pledges, these contributions were tied to strong public support, which they insisted be demonstrated with fifty-thousand dollars raised entirely from the general public. The task almost proved insurmountable and it was not until the campaign’s final day that a thirty-thousand-dollar donation from Frank and Myra Pitt was secured. During the evening news which had brought the campaign’s disappointing end to the attention of the public, the Pitt’s, watching from home, decided to make the donation.³⁶ Thus, the couple’s fond memories of Expo '88, or perhaps their mutual appreciation for an object so “unusual and an icon,” became tethered in place.³⁷

Less personal or emotive motives emerge in the more recent conservation of Collins Place. The Little Big House pub resides in a heritage-listed building labelled “Collins Place” in the Queensland Heritage Register.³⁸ Collins Place is one of the last remaining residential structures in the vicinity and dates back to a period of residential and commercial growth in South Brisbane that began in the 1860s.³⁹ In the 19th century it served as a boarding house and private residence. During preparations for Expo, Collins Place was resumed, despite protests by its owner, and spared demolition to become one of the few buildings retained and integrated into Expo grounds.

In 2014, the 330 tonne building was lifted via crane onto pilotis to rest nine metres in the air.⁴⁰ The building now sits atop steel and glass wrapped space housing a burger restaurant, wedged between and dwarfed by two 14 storey contemporary towers. The towers are part of the recently constructed \$600 million dollar (AU) Southpoint development. Southpoint is described in marketing literature as a “stunning mixed-use, transit-oriented development comprising commercial, residential, retail and the new flagship Emporium Hotel.”⁴¹

Collins Place and the land in proximity to it was owned by the South Bank Corporation, which sought in 2006 to invite a developer to construct a transit-oriented development in accordance with a district master plan. Conservation of the building is enforced through heritage legislation. However, its value in the valorisation of real estate seemed to have come naturally. A YouTube video shows the way it was lifted into the air, a spectacle that added to the development’s marketing campaign.⁴² In this way, the heritage building became a sculptural element



to a large development, serving the function of hosting a burger place and bar, a landmark providing wayfinding at the development's entrance, and the occasion to issue a press release celebrating the heritage prowess of its developer.

[Figure 5 about here.]

Similarly, the SkyNeedle is an object that has been saved, designed, moved and is now being incorporated into another mixed use development.⁴³ The SkyNeedle was designed to be a landmark for Expo '88. It was a popular meeting place, and at 88 meters it towered over the site. Designed by Australian artist Robert Owen, it was originally titled the "Night Companion." True to its original name it sported a "60-km radius xenon-beam laser-eye that surveilled the Expo and Brisbane horizon night skies."⁴⁴ At the time of the expo it was the "largest single art commission in Australia."⁴⁵ After the Expo, the SkyNeedle was to be sold to Disneyland Tokyo. At the last minute it was purchased by the Australian entrepreneur Stefan Ackerie and moved 600 metres away from its original location. The SkyNeedle now has a little less largesse as it becomes incorporated into a mixed use development and is surrounded in all directions by ever larger buildings. The artwork is now the centrepiece of the SkyNeedle Apartments, which promotes this transformation: "Once home to boot makers, fizzy drink factories and timber mills, the area now houses leading academies of learning, world-class cultural institutions, cool cafés, cocktail lounges and hip boutiques. Old and new sit shoulder-to-shoulder in intriguing layers of history and excitement."⁴⁶

While Collins Place and the SkyNeedle are heritage objects commodified for real estate branding purposes, the Nepalese Pagoda reifies expo memories. The Queensland Cultural Centre reflects yet another value and a different coalition of actors. The Queensland Cultural Centre was a complex of buildings built prior to Expo '88 and is situated on the edge of the South Bank Parklands. Despite the fact that it sits outside the bounds of the parklands, the complex of cultural institutions represents the force of heritage as a means of reigning in what some viewed as the potential for overdevelopment and commercialization of a cultural district. In 2014, the Australian Institute of Architects applied to list the building on the Queensland Heritage register in response to a cultural precinct plan that allowed for a 30-story commercial building to be built over the top of the performing arts centre.⁴⁷ According to the Queensland Heritage Council Chair Peter Coaldrake, there was "overwhelming community support for the application with the nomination receiving the most number of public submissions in the history of the Heritage Act—1254 in total."⁴⁸ Conservation of the brutalist complex was yet another expression of public outcry to make certain urban spaces sacrosanct from real estate pressures.

Conclusions

Both of the expo sites represent a tabula rasa form of redevelopment, in which urban land is restructured; and residents and businesses are expelled in the production of new urban spaces. These spaces were designed to facilitate the functioning and success of a mega-event. Even as sites were scraped, actors in both San Antonio and Brisbane protested and advocated for change. The impact of this advocacy was limited, but important in both cases. In San Antonio, the retention of older structures and trees was recognized as an innovation in modern design. The scattering of buildings, such as Collins Place that were retained for Expo '88 are still appreciated in a rapidly changing South Bank precinct as historical markers that tie the present urban fabric to the site's past incarnations. Meanwhile, there has been very little recognition of the Aboriginal history at these sites until very recently as resurrected in a place name at Hemisfair and an art installation and a new cultural centre planned at South Bank.⁴⁹

After the expos opened, the attending public created new memories and attachments that for some inspired great personal investment and advocacy. As people imprint onto these landscapes over time, that creates a sense of, and attachment to, place. However, what and how things are remembered at the former expo sites is not a simple function of nostalgia to a moment in time. Once cultural values become inscribed into heritage laws or animated by capitalist interests, the calculus may change. This includes the use of heritage objects in the revalorisation and reinvention of spaces. Heritage objects can also become talismans used by neighbourhood groups to invoke heritage laws that slow the rate or nature of change in a precinct.

Heritage buildings and objects also become symbols of particular development regimes. The modern pavilions that date from Hemisfair '68 are viewed as obstacles, or even made invisible, by the Hemisfair Area Redevelopment Corporation. HPARC along with other supportive developers and public agencies, seek to eliminate barriers to a New Urbanist vision of redevelopment. Meanwhile, preservation advocates seek to render these buildings visible as cultural assets. Such conflicts expound how objects attract constituencies who seek alternative visions of the future through their orientation to the past. In Brisbane, the embrace of the brutalist Queensland Cultural Centre complex speaks not only to the receptiveness of the public to appreciation for modern architecture, but a coalition between Brisbane residents who seek to protect their neighbourhoods from 'overdevelopment' and the architects who wish to preserve Robin Gibson's legacy.



Stewart Brand has eloquently written about the ways in which buildings learn through adaptation.⁵⁰ One could apply many of these scales of adaptation to former expo sites. However, it is not only in adaptation and transformation, but also in the ways in which urban spaces are made to “remember” through the retention of buildings and landscapes from the past. In exposing human attachments and means of valuing objects and spaces, we can learn more about both the built and social legacies of mega-events and their power to transform and conserve urban space.

Tables and Figures

Table 1: Comparison of sites

	Hemisfair (San Antonio)	South Bank (Brisbane)
Physical site during expo	39 hectares (96 acres)	40 hectares (99 acres)
Physical size of site at present	Dedicated parkland 19.2 acres Total site is equivalent to South Bank Parklands – Approximately 38.85 ha or 96 acres. Some sources indicate 92 acres (including parkland)	Parklands only: 17.5 hectares (43.24 acres) Parklands figure does not include the Convention Centre site or lands that have been redeveloped for mixed use development.



Figure 1: *Land area covered by HemisFair 1968*. Courtesy of University of Texas San Antonio Libraries Special Collections. [San Antonio: 1962]





Figure 2: *Aerial view of the HemisFair construction site.* Courtesy of University of Texas San Antonio Libraries Special Collections. [San Antonio: c. 1967]



Figure 3: Left panel is aerial of HemisFair. Right panel is map of local historic designations using City of San Antonio GIS data. 2018.



Figure 4: *Title: Brisbane River front to be beautified for Expo 88.* Courtesy of Queensland State Archives. [Brisbane: 16 April 1986]

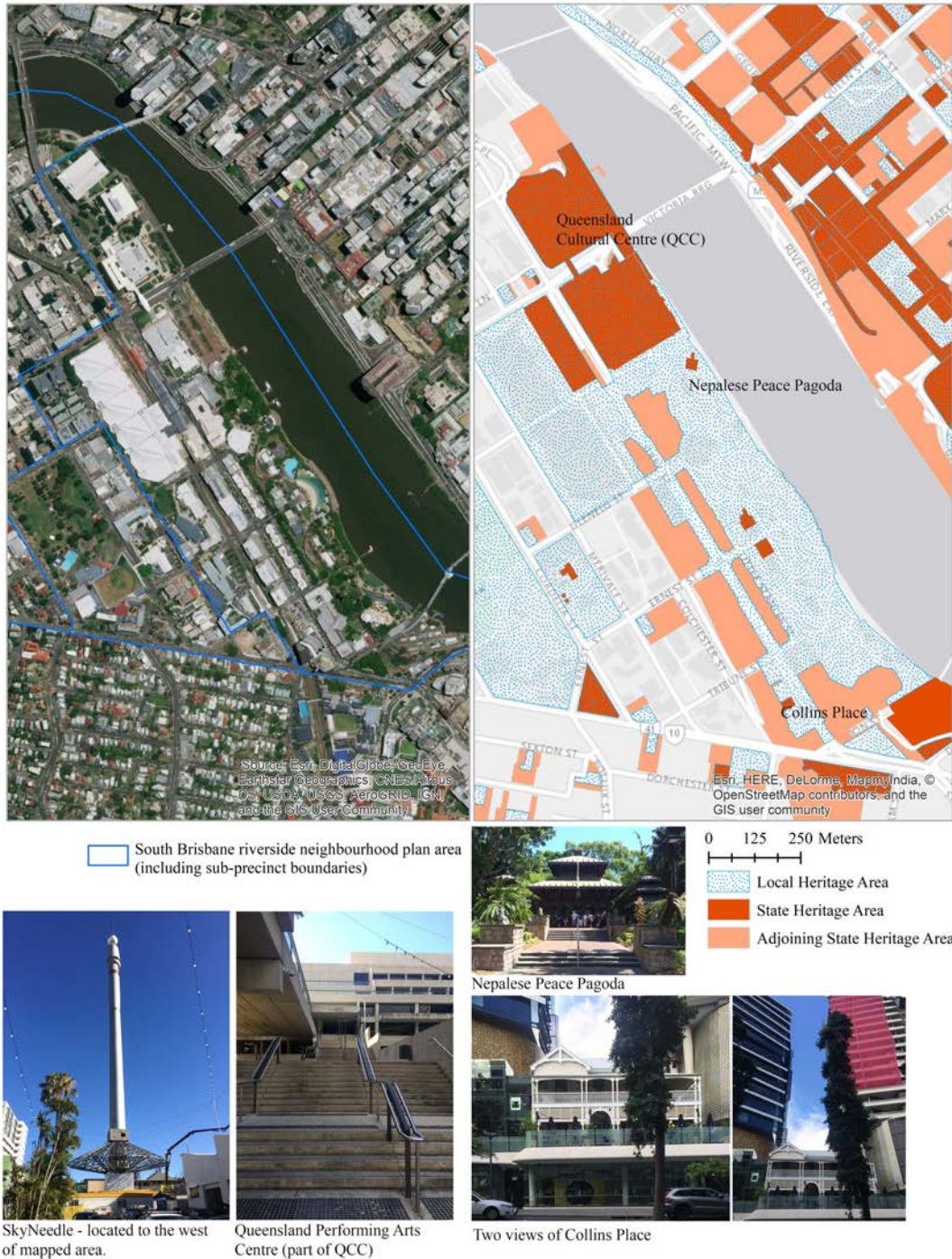


Figure 5: Left panel is aerial of South Bank. ESRI base map aerial, circa 2018. Right panel shows state and local heritage designations in and around South Bank. Bottom photos feature retained artwork, fair pavilion, and buildings constructed prior to the fair.

Acknowledgements

Many thanks to the people who generously gave their time to be interviewed or otherwise assist with the research project, including Andres Andujar, Sallyanne Atkinson, Bonnie Ayer, Jennifer Clark, Anne Krause, John McGregor, Peter Rasey, Rudi Rodriguez, Sherry Wagner, among unnamed, but still appreciated, others. Many thanks to the research assistance of Nathan Revor, Corey Mann, Lucas Bulger, and Ingrid Yingge Shen.

This research was supported with an Engaged Cornell Advancement Grant, a grant from the President’s Council of Cornell Women, and support from Cornell University’s City and Regional Planning Department.



Disclosure Statement

No potential conflict of interest was reported by the authors.

Notes on contributor(s)

Jennifer Minner is an Assistant Professor in City and Regional Planning at Cornell University. She is a past president and a founding board member of the Mid Tex Mod chapter of Docomomo U.S., a non-profit dedicated to documentation and conservation of the Modern Movement in Central Texas. She holds a PhD in Community and Regional Planning from University of Texas at Austin.

Martin Abbott is a PhD student in City and Regional Planning at Cornell University. His studies are supported generously by the John Crampton Travelling Scholarship.

Endnotes

¹ David Anderson, "Visitors' Long-term Memories of World Expositions," *Curator: The Museum Journal* 46, No 4. (October, 2003): 401.

² Jennifer Minner, "Framing Lost Utopias: The Place of International Expositions in Time." In Dосkow, Jade, Pare, Richard & Minner, Jennifer. *Lost Utopias: Photographs of Jade Dосkow*. (London: Black Dog Publishing, 2016) 14-15.

³ Gaia Caramellino, Alessandro De Magistris & Federico Deambrosio. "Reconceptualizing Mega Events and urban transformations in the twentieth century," *Planning Perspectives* 26:4 (2011): 617.

⁴ Maurice Roche, *Mega-events and Social Change: Spectacle, Legacy, and Public Culture*. Manchester MI, UK, Manchester University Press, (2017): 200.

⁵ John R. Gold and Margaret Gold. *Cities of Culture: Staging International Festivals and the Urban Agenda, 1851-2000*. (Aldershot, Hants and Burlington, VT: Ashgate, 2005), 10.

⁶ *Ibid.*, 11.

⁷ Christopher Koziol. *Valorizing Heritage: Discourse and Regime in the Historic Preservation Policy Subsystem of Colorado*. Thesis. University of Colorado at Denver (2003): 15.

⁸ Research methods at both sites included archival research; analysis of news, planning documents and online medial visual observation and photo documentation and interviews. In San Antonio, the first author was involved in participant observation in the leadership of Mid Tex Mod, the central Texas chapter of Docomomo-US, a nongovernmental organization that is dedicated to the Documentation and Conservation of the Modern Movement. In addition, this author led a 2014 graduate planning workshop *Sustainable Adaptation of Large Modern Footprints* that investigated four world's fair sites from the 1960s, including Hemisfair. Partners for that workshop included the CEO of the Hemisfair Park Area Redevelopment Corporation and a representative of the San Antonio River Foundation. Subsequently interviews and archival research were conducted in San Antonio in 2016 and 2017. Interviews conducted in 2016 and 2017 included that of Andres Andujar, the CEO of the Hemisfair Park Area Redevelopment Corporation; Anne Krause, the director of the Hemisfair Conservancy; Rudi Rodriguez, a local entrepreneur and advocate for Tejano History; Sherry Wagner, one of the primary organizers for the Woman's Pavilion at Hemisfair '68; and Bonnie Ayer, the former President of the non-profit the Women's Pavilion at HemisFair Park, Inc. Archival research was conducted using UTSA's Hemisfair collections. In Brisbane, the authors conducted two site visits in 2017. The site visits included interviews and a focus group; a recorded walking tour with a volunteer Brisbane greeter attended expo 88; and archival research.

⁹ Robert Alexander González. *Designing Pan-America: U.S. Architectural Visions for the Western Hemisphere* (Austin, Texas: University of Texas Press), p. 151.

¹⁰ Mary Carolyn Hollers George. *O'Neil Ford, Architect*. (College, Station: A&M University Press, 1992), 180.

¹¹ "The Transformation Begins," HemisFair '68: A Confluence of Photographs, San Antonio Conservation Society Foundation. Accessed April 12, 2018. <https://www.saconservation.org/VirtualExhibits/hemisfair/64F4F95B-353D-44B5-8BA1-331468995560.htm>

¹² Frank Duane. "Hemisfair '68," Texas Historical Association. Last modified Modified on January 28, 2018. <https://tshaonline.org/handbook/online/articles/lkh01>.

¹³ Ada Louise Huxtable, "Remember the Alamo," *The New York Times*, April 14, 1968, 50. Lewis F. Fisher, *Saving San Antonio: The Preservation of a Heritage*. (San Antonio, Texas: Maverick Press, 2016.).

¹⁴ That is 190 meters if one does not count the antenna at the top of the structure. The Tower is also described as 750 feet tall or 229 meters when the antenna is included in the calculation.

¹⁵ There were many other temporary structures constructed for the fair. Most of those have since been demolished. A few ruins remain on the site today, including the pavilions for Kodak and Gulf Insurance. In addition, Hemisfair sported an elevated mini-monorail system and water features that offered respite from the Texas heat. Most of these features are gone. Like many other expo sites, the fairgrounds were designed as a closed pedestrian area, with streets that were closed internally, the perimeter secured, and the site surrounded by a moat of parking lots. Recent master plans seek to reopen some of the closed historic streets.

¹⁶ Some had seen the post Hemisfair event site as a logical location for the location of University of Texas at San Antonio. However, the campus was actually sited far north of the city. This was only one aspect of the rapid suburbanisation that affected downtown plans and vitality. Construction of additional federal buildings near the federal courthouse added office buildings on the south-eastern portion of the site that drew little if any tourist activity for Hemisfair. The mini-monorail system that had offered an option for internal circulation was removed and made the site seem difficult to traverse in the hot Texas sun. The small 19th and early 20th century buildings that had housed concessions lost tenants, either through circumstances or mismanagement, sapping further energy from the site.

¹⁷ Anne Krause. Personal interview by Jennifer Minner. June 2017.

¹⁸ The Hemisfair Conservancy was established a few years later to channel philanthropic funds to improve the area, which had been renamed yet again as 'Hemisfair,' with 'Park' removed from its official name.

¹⁹ The creation of 'Civic Park' involved demolition of most of the Convention Centre, which had been built for the fair and rebuilding convention centre space on the north-eastern portion of the site.

²⁰ Jenni Minner. "HemisFair '68 Tour: Modern Design, Cultural History" Mid Tex Mod Docomomo_US, posted September 3, 2011, <http://midtexasmod.blogspot.com/2011/09/hemisfair-68-modern-design-and-cultural.html>.

²¹ Correspondence from Mark Wolfe, State Historic Preservation Officer, Texas Historical Commission to Amy E. Dase, Prewitt & Associates. Dated September 13, 2013. The letter specifically pointed out the "exceptional significance" of the Institute of Texan Cultures;



Confluence Theatre, Exhibit Hall and Migration Plaza, which were elements of the U.S. Pavilion; the Woman's Pavilion, and the Tower of the Americas. Eligibility for an historic district is an important step for preservation, but it is not complete protection. In the United States, it is not a federal or state heritage designation that has the most strength.

²² Richard Webner, "Institute of Texan Cultures plans to move for mixed-use development" MySA, June 15, 2017, <https://www.mysanantonio.com/real-estate/article/Institute-of-Texan-Cultures-plans-to-move-for-11223800.php>

²³ In Hemisfair '68 era publicity materials, it was described as: "a blending of the old and new of this historic area." Bennett, Arthur S. Mrs. Woman's Pavilion – Hemisfair '68. Fact Sheet produced by the Publicity Office. Despite the reputation for modern architects of the period to disregard historical context, this is an indication of yet another aspect of Hemisfair '68 that was designed to be sensitive a sense of history on the site.

²⁴ When the Women's Pavilion at Hemisfair, Inc. began leasing another building on site for its office, the added expense of monthly rent began to sap the organisation of its resources. A death in the family of the organization's president and a lack of leadership to step in, meant that momentum was lost.

²⁵ Anne Krause. Personal interview by Jennifer Minner. June 2017.

²⁶ Mary Ganis, John Minner, and Derlie Mateo-Babiano, "The Evolution of a Masterplan: Brisbane's South Bank, 1991–2012." *Urban Policy and Research* 32 No. 4 (2014): 501-502.

²⁷ C. M. Hall and J. Hodges. "The party's great, but what about the hangover? The housing and social impacts of mega-events with special reference to the 2000 Sydney Olympics." *Festival Management and Event Tourism*, 4 (1996), 13-20.

²⁸ Mary Ganis, John Minner, and Derlie Mateo-Babiano, "The Evolution of a Masterplan: Brisbane's South Bank, 1991–2012." *Urban Policy and Research* 32 No. 4 (2014): 503. Foundation Expo 88, Quotable Quotes!, Viewed 5 November 2012, Available at www.foundationexpo88.org/quotablequotes.html.

²⁹ Hall 1994.

³⁰ Donna Lee Brien. Celebration or Manufacturing Nostalgia? Constructing Histories of World Expo '88, 16, Issue 2, *Queensland Review*, (2009): 75. In addition, a local newspaper reported that aboriginal protesters led a march along city streets to Musgrave Park at the opening of Expo '88 demonstrating for land rights. <https://www.upi.com/Archives/1988/04/30/Queen-Elizabeth-opens-Expo-88-in-Brisbane/6669578376000/>

³¹ Mary Ganis, John Minner, and Derlie Mateo-Babiano, "The Evolution of a Masterplan: Brisbane's South Bank, 1991–2012." *Urban Policy and Research* 32 No. 4 (2014): 503.

³² Mary Ganis, John Minner, and Derlie Mateo-Babiano, "The Evolution of a Masterplan: Brisbane's South Bank, 1991–2012." *Urban Policy and Research* 32 No. 4 (2014): 504.

³³ Denver Beanland, *Brisbane: Australia's New World City*. Moorooka, Australia: Boolarong Press, (2016): 111.

³⁴ Alderman David Hinchliffe. Re: Peace Pagoda, Nepal Pavilion, Expo, South Brisbane. Memo to: Ian Lincoln, Department of Foreign Affairs, Dated 25 October 1988. Memo from State Library of Queensland.

³⁵ David Hinchliffe, Re: Nepalese Pagoda and Sir Edmund Hillary. Letter. Dated September 1989. Letter from State Library of Queensland.

³⁶ According to Frank Pitt: "When you've got something that is unusual and an icon, you grab it with both hands. You hang onto it... So we did that... And I said, to Myra - she doesn't always agree with me - I said, "did you hear that on the TV?" She says, "yeah." I said, "why don't we put the money in?" And she said, "yes," just like that (laughing and smiling). It shocked me!" from Foundation Expo 88. Short David Hinchliffe statement of thanks to Frank and Myra Pitt, short, sharp and meaningful, YouTube. <https://www.youtube.com/watch?v=J8Y3rjklGUM>, Published on Sep 27, 2012.

³⁷ Ibid.

³⁸ The two-story brick building was built c. 1889 in a Federation Filigree style and wrapped with verandas.

³⁹ There are also two other heritage listed buildings in the South Bank area verandahs that serve a similar function as pub -- Ship Inn and Plough Inn. Collins Place is the only one of the three that has been so wholly subsumed within a larger, mixed use development today.

⁴⁰ Jessica Hinchliffe and Terri Begley. Up in the air: Historic Queensland building goes sky-high for new development, *ABC News*, Last updated Updated 10 Dec 2014, <http://www.abc.net.au/news/2014-12-10/up-in-the-air-a-queensland-historical-building-goes-sky-high/5956954>

⁴¹ Anthony John Group, About, Southpoint South Bank, <https://www.southpointsouthbank.com.au/about/> Accessed April 13, 2018.

⁴² Anthony John Group, Southpoint - Historic Collins Place reaches new heights, YouTube. Published January 13, 2015, https://www.youtube.com/watch?v=gQh_33ZibxY.

⁴³ Rooney, Kieran. Stefan's Expo 88 Sky Needle incorporated in new apartment development, *The Courier Mail*, Published April 11, 2015, <http://www.couriermail.com.au/news/queensland/stefans-expo-88-sky-needle-incorporated-in-new-apartment-development/news-story/63e58483ac05ae3fe1abf70ee4cb2887>

⁴⁴ Foundation Expo '88. Night Companion Notes, Foundation Expo '88, Last accessed April 13, 2018, <http://www.celebrate88.com/nightcompanionnotes.html>

⁴⁵ In the Brisbane City Council heritage register it is described as: "one of the surviving sculptures that were commissioned specifically for Expo '88 in Brisbane... this particular sculpture, by its very size, became an identifiable symbol of Expo '88. It also remembered for its integral part in the Expo fireworks spectacular, where the Skyneedle dominated the night sky over Brisbane. Brisbane City Council, Expo '88 'Skyneedle', sculpture, Heritage Register. Last updated 14 March 2016, https://heritage.brisbane.qld.gov.au/heritage_register/placeDetail.do?action=read&placeId=1525&fullDetail=true&navParam=startBasic

⁴⁶ Pradella, Where Life Shines, Pradella, Last accessed April 13, 2018, <http://skyneedle.com.au/>.

⁴⁷ Brisbane Development, Vision for Brisbane to be Nation's Cultural Hub, Brisbane Development.com, May 5, 2014, <https://brisbanedevelopment.com/queensland-cultural-precinct/>. Bochenski, Natalie, Cultural precinct to get new theatre, hotel under proposed master plan, Last updated 5 May 2014, <https://www.brisbanetimes.com.au/national/queensland/cultural-precinct-to-get-new-theatre-hotel-under-proposed-master-plan-20140505-zr4z1.html>

⁴⁸ Queensland Heritage Council, State heritage listing for Brisbane's cultural precinct, Queensland Government, Last updated 12 June 2015, <https://www.qld.gov.au/environment/land/heritage/council/media-releases/cultural-precinct>

⁴⁹ A children's playground was named the "Yanaguana Garden," invoking an indigenous word meaning river. At South Bank there are plans for an landscape installation or marker that follows an Aboriginal songline and for an Aboriginal Cultural Centre.

⁵⁰ Brand, Stewart. *How Buildings Learn: What Happens After They're Built*. New York, New York: Penguin Books, 1994.

Bibliography

Anderson, David. "Visitors' Long-term Memories of World Expositions," *Curator: The Museum Journal* 46, No. 4. (October, 2003): 401-420.



- Anthony John Group, Southpoint - Historic Collins Place reaches new heights, YouTube. Published January 13, 2015, https://www.youtube.com/watch?v=gQh_33ZibxY.
- Anthony John Group, About, Southpoint South Bank, <https://www.southpointssouthbank.com.au/about/> Accessed April 13, 2018.
- Australian Bureau of Statistics. Chapter 6, Demography, Australian Bureau of Statistics. Accessed 8 April 2018, [http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/D3F5EDD2DF0502E5CA257AFA0010CC45/\\$File/13010_1990_chapter6.pdf](http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/D3F5EDD2DF0502E5CA257AFA0010CC45/$File/13010_1990_chapter6.pdf).
- Beanland, Denver. *Brisbane: Australia's New World City*. Moorooka, Australia: Boolarong Press, 2016.
- Bochenski, Natalie, Cultural precinct to get new theatre, hotel under proposed master plan, Last updated 5 May 2014, <https://www.brisbanetimes.com.au/national/queensland/cultural-precinct-to-get-new-theatre-hotel-under-proposed-master-plan-20140505-zr4z1.html>.
- Brand, Stewart. *How Buildings Learn: What Happens After They're Built*. New York, New York: Penguin Books, 1994.
- Brien, Donna Lee Celebration or Manufacturing Nostalgia? Constructing Histories of World Expo '88, 16, Issue 2, *Queensland Review*, (2009): pp. 73-87.
- Brisbane Development, Vision for Brisbane to be Nation's Cultural Hub, Brisbane Development.com, May 5, 2014, <https://brisbanedevelopment.com/queensland-cultural-precinct/>.
- Brisbane City Council, Expo '88 'Skyneedle', sculpture, Heritage Register. Last updated 14 March 2016, https://heritage.brisbane.qld.gov.au/heritage_register/placeDetail.do?action=read&placeId=1525&fullDetail=true&navParam=startBasic
- Caramellino, Gaia, De Magistris, Alessandro & Deambrosis, Federico. "Reconceptualizing Mega Events and urban transformations in the twentieth century," *Planning Perspectives* 26, No. 4 (2011): 617-620, DOI: 10.1080/02665433.2011.599930
- Duane, Frank, "Hemisfair '68," Texas Historical Association. Last modified on January 28, 2018. <https://tshaonline.org/handbook/online/articles/lkh01>.
- Foundation Expo 88, Quotable Quotes!, Viewed 5 November 2012, Available at www.foundationexpo88.org/quotablequotes.html.
- Foundation Expo '88. Night Companion Notes, Foundation Expo '88, Last accessed April 13, 2018, <http://www.celebrate88.com/nightcompanionnotes.html>
- Foundation Expo 88. Short David Hinchliffe statement of thanks to Frank and Myra Pitt, short, sharp and meaningful, YouTube, <https://www.youtube.com/watch?v=J8Y3rjkLgUM>, Published on Sep 27, 2012.
- Ganis, Mary, Minnery, John, and Mateo-Babiano, Derlie. "The Evolution of a Masterplan: Brisbane's South Bank, 1991-2012," *Urban Policy and Research* 32, No. 4: 499-518. DOI: 10.1080/08111146.2013.877390.
- George, Mary Carolyn Hollers. O'Neil Ford, Architect. College, Station: A&M University Press, 1992.
- Gold, John R. and Gold, Margaret. *Cities of Culture: Staging International Festivals and the Urban Agenda, 1851-2000*. Aldershot, Hants and Burlington, VT: Ashgate, 2005.
- González, Robert Alexander. *Designing Pan-America: U.S. Architectural Visions for the Western Hemisphere*. 1st ed. Roger Fullington Series in Architecture. Austin, Texas: University of Texas Press, 2011.
- Huxtable, Ada Louise "Remember the Alamo," The New York Times, April 14, 1968.
- Hall, C. M. and Hodges, J. "The party's great, but what about the hangover? The housing and social impacts of mega-events with special reference to the 2000 Sydney Olympics." *Festival Management and Event Tourism*, 4 (1996), 13-20.
- Hinchliffe, Alderman David. Re: Peace Pagoda, Nepal Pavilion, Expo, South Brisbane. Memo to: Ian Lincoln, Department of Foreign Affairs, Dated 25 October 1988. Memo from State Library of Queensland.
- Hinchliffe, David, Re: Nepalese Pagoda and Sir Edmund Hillary. Letter. Dated September 1989. Letter from State Library of Queensland.
- Hinchliffe, Jessica and Begley, Terri. Up in the air: Historic Queensland building goes sky-high for new development, *ABC News*, Last updated 10 Dec 2014, <http://www.abc.net.au/news/2014-12-10/up-in-the-air-a-queensland-historical-building-goes-sky-high/5956954>



Koziol, Christopher. *Valorizing Heritage: Discourse and Regime in the Historic Preservation Policy Subsystem of Colorado*. Thesis. University of Colorado at Denver, 2003.

Krause, Anne. Personal interview by Jennifer Minner. June 2017.

Minner, Jenni. "HemisFair '68 Tour: Modern Design, Cultural History" Mid Tex Mod Docomomo US, posted September 3, 2011, <http://midtexasmod.blogspot.com/2011/09/hemisfair-68-modern-design-and-cultural.html>.

Minner, Jennifer "Framing Lost Utopias: The Place of International Expositions in Time." In Doskow, Jade, Pare, Richard & Minner, Jennifer. *Lost Utopias: Photographs of Jade Doskow*. London: Black Dog Publishing, 2016: 10-15.

Pradella, Where Life Shines, Pradella, Last accessed April 13, 2018, <http://skyneedle.com.au/>.

Queensland Heritage Council, State heritage listing for Brisbane's cultural precinct, Queensland Government, Last updated 12 June 2015, <https://www.qld.gov.au/environment/land/heritage/council/media-releases/cultural-precinct>.

Roche, Maurice. *Mega-events and Social Change: Spectacle, Legacy, and Public Culture*. Manchester MI, UK, Manchester University Press, 2017.

Rooney, Kieran. Stefan's Expo 88 Sky Needle incorporated in new apartment development, *The Courier Mail*, Published April 11, 2015, <http://www.couriermail.com.au/news/queensland/stefans-expo-88-sky-needle-incorporated-in-new-apartment-development/news-story/63e58483ac05ae3fe1abf70ee4cb2887>

San Antonio, Community Development Office. A Report on Population: San Antonio and Bexar County, report, May 1973; San Antonio, Texas. (texashistory.unt.edu/ark:/67531/metaph611795/: accessed March 25, 2018), University of North Texas Libraries, The Portal to Texas History, texashistory.unt.edu; crediting UNT Libraries Government Documents Department.

San Antonio Conservation Society Foundation. "The Transformation Begins," HemisFair '68: A Confluence of Photographs, Accessed April 12, 2018. <https://www.saconservation.org/VirtualExhibits/hemisfair/64F4F95B-353D-44B5-8BA1-331468995560.htm>.

Webner, Richard. "Institute of Texan Cultures plans to move for mixed-use development" MySA, June 15, 2017, <https://www.mysanantonio.com/real-estate/article/Institute-of-Texan-Cultures-plans-to-move-for-11223800.php>

Wolfe, Mark. Correspondence from State Historic Preservation Officer, Texas Historical Commission to Amy E. Dase, Prewitt & Associates. Dated September 13, 2013.

Image sources

Figure 1: Original creator(s) unknown. *Land area covered by HemisFair 1968*, photograph, texashistory.unt.edu/ark:/67531/metaph66176/, University of North Texas Libraries, The Portal to Texas History, texashistory.unt.edu; crediting UT San Antonio Libraries Special Collections. (Accessed April 12, 2018.)

Figure 2: Original creator(s) unknown. *Aerial view of the HemisFair construction site*, photograph, Date Unknown; (texashistory.unt.edu/ark:/67531/metaph65971/), University of North Texas Libraries, The Portal to Texas History, texashistory.unt.edu; crediting UT San Antonio Libraries Special Collections. (Accessed April 1, 2018.)

Figure 3: Left panel: Esri base map aerial, circa 2018. Right panel: City of San Antonio GIS data. 2018. Figure created by Jennifer Minner.

Figure 4: Agency ID: 2027. Premier's Department, Office of State Affairs, Public Relations Branch, Photographic Unit. *Title: Brisbane River front to be beautified for Expo 88*. Queensland State Archives, Digital Image ID 4526. <http://www.archivessearch.qld.gov.au/Image/DigitalImageDetails.aspx?ImageId=4526>. (Accessed April 12, 2018.)

Figure 5: Left panel is aerial of South Bank. Esri base map aerial, circa 2018. Right panel shows state and local heritage designations in and around South Bank. Figure created by Jennifer Minner. Photos by Martin Abbott.



Tourism in the slums of Rio de Janeiro: An analysis of the urban impacts in informal areas caused by recent public interventions for the big sports events hosted by the city

Sergio Moraes Rego Fagerlande*

* *PhD, Adjunct Professor Rio de Janeiro Federal University, sfagerlande@gmail.com*

The slums of Rio de Janeiro have been the stage of recent urban changes related to tourism-related activities, chiefly those linked to the large sports events such as 2014 FIFA World Cup, and the 2016 Olympic. The visiting by Brazilian and foreign people was always significant in the city, and the increase of the flow in the slums is a relevant fact. This article seeks to put the changes in the recent urban dynamics of those areas into perspective, as caused by popular settlements in which tourism has been bringing changes about, initially related to urban mobility, in the case of the large works done by the government. These interventions brought reflexes embodied in private and community-related investments, with the opening of hostels, bars and restaurants, along with the creation of new open spaces, such as parks and ecological trails. The work has been going on, with the mapping of these activities in the slums of Rio's South Zone, especially in the slum of Babilônia-Chapéu Mangureira, seeking data on their locations, and on the importance of community participation, and the relevance of public policies in the process at hand.

keyword 1, Tourism in slums **2**, Rio de Janeiro **3**, urban mobility works.

Introduction

Rio de Janeiro is one of the largest Brazilian cities, with a population of 6,520,000 (IBGE, 2010). From the start of the 20th century it has been considered as one of the world's most important tourist destinations (Perrotta, 2015), with a strong part in the imagination of tourism in the world, on account of its beaches, celebrations such as the Carnival and New Year's Eve and its image of a wonderful, joyful, and festive city. Its attractions are generally found in its South Zone, in a scenario where the ocean meets the hills, in boroughs such as Copacabana, Ipanema and Leblon.

It is a city fraught with contradictions, significant social disparities, a portrait of a Brazil divided and unfair, where the wealth is distributed in an extremely unequal way, something that is shown in the cities and in the way the urbanisation work has been taking place.

At the same time that this tourist-activity area concentrates its many attractions, there are many poor communities, the slums, where a large number of people dwell. The city has around 23% of its population living in these poor areas (IBGE, 2010), in many types of slums scattered throughout the whole metropolitan area.

For many years these areas were kept outside of the urban processes, with only a handful of interventions made in them that could bring any improvements for their dwellers. From the 1990s on urban projects such as Favela Bairro¹ started to treat the public areas of the favelas (slums) with urbanisation projects that did not manage to reach all the communities (Sakata, 2011). This has been a continuous process, in spite of its lack of efficiency for transformation, as it was initially desired.

The city also experienced a process of degradation of its safety conditions, with the increase in drug trafficking that, from the 1980s, started to use the city as a path for that, with the exporting of drugs to consumers in Europe and in the US (Coutinho Marques da Silva, 2015). The slums moved on to be the territory used as a base for those heavily-armed groups, generating a continuous growth of the violence and lack of security in the city.

One of the moments in which there was an expectation of change to this panorama was when Brazil was chosen to host the 2014 World Football Cup, followed by the 2009 announcement of Rio as a host of the 2016 Olympic Games. These two mega sports events should produce sizeable investments in urban infrastructure and also in security for the city, a requirement of the organisers after the selection of the venue. Wilhelm (2014), when mentioning the demands made by the organisers, points to the need to increase the number of rooms, along with

¹ Slum as a Borough.



improvements to public transport as some of their main items. This way, the growth of the tourist and urban infrastructure were basic requirements to enable the hosting of those events and an undertaken was then expressed by the Governments in Brazil, central, state and city-wise, to expand the transport networks and also improve the areas of public security, which saw the implementation in 2008 of a public security policy based on the occupation of the favelas, the Police Peace Corps, or UPPs.

The slums located near the tourist areas or along the routes leading to airports were the first to receive the major infrastructure work such as cable cars, inclined platform passenger lifts, and lifts, apart from inner way and housing projects, all part of the effort to change the image of the city, an attempt to create an image of safe city, a Wonderful City, an image that had been fading away in time. The initiative linked the notion of public security to the occupation of the warring territories, usually on the hills to sizeable construction work that would truly change the face of the areas. The idea that changes to the urban domain would produce changes in the society goes after what was said by Vainer (2013), when commenting on the big urban changes made to several global cities, as related to the ideas of marketing such cities, which has been the case since the 1970s, and which Ribeiro and Olinger (2012) claim included the slums, as shown in their relation with tourism and the changes to the image of the favelas, in line with the formal city scenario.

This work shows some of these effects, as related to tourism, in the slums of Rio's South end. Due to their location near the tourist areas, an impact was found on the enterprises related to those activities such as hostels, bars, and restaurants, apart from an increase in tourist visitation, boosted by the creation of routes, ecological trails and parks, usually associated to a participation of the communities, with the so-called community-based tourism that could flower in those areas, with the possibilities of having a less invasive tourism that could really bring about change and the generation of income for these populations, along with a greater integration with the so-called formal city.

The tourism in slums activity got structured from 1992 onwards (Freire-Medeiros, 2009) and became a subject of study in Brazil and abroad, as an activity found in many countries of the Global South (Frenzel Koens, Steinbrink, 2012). In Brazil, authors such as Freire-Medeiros (2013, 2009, 2017, 2016), Moraes (2016, 2014, 2013), Fagerlande (2017a, 2017b, 2017c, 2017d, 2016a, 2016, 2015), Carvalho (Carvalho, T. L. G, 2016) and Carvalho (Carvalho, F.C., 2013a, 2013b, 2016), and Menezes (2012) have shown how tourism has affected the slums in so many aspects. The community-based tourism, as shown by Bartholo, Sansolo and Burzstyn (2009) and by Mielke and Pegas (2013) has played a relevant role to see tourism relate to the communities, which is shown by authors such as Rodrigues (2014) when talking about the Favela de Santa Marta and by Pinto, Silva and Loureiro (2012) who deal with the experience of the Museu da Favela in the Cantagalo Pavão-Pavãozinho slum. The participation of the CoopBabilônia NGO, located on the hill that goes by the same name and the Sitiê Park in Vidigal, as shown by Seldin (2017) show community-based initiatives of importance.

This article stems from a research effort that has been mapping the hostels, bars, restaurants, routes, parks, and trails, through the visitation of the sites, with interviews, photographing, and also with the research of tourism sites and social networks such as Booking (2017), Trip Advisor (2017), Brazilian Hostel World (2017), and Facebook (2017). The mapping of the hostels that has been going on since 2010 show a very significant picture of the changes, from the moment the public policies were implemented until now, at a post-Olympic time, in which the failure of the state brought the UPPs project to an end, along with a moment of change and apprehension for those involved with tourism in slum activities².

Tourism in slums: New possibilities for the poor areas

The tourism in poor areas started in England in the 19th century when the wealthier visited the more degraded areas of London in humanitarian missions, aimed at learning about these areas (Steinbrink, Frenzel, Koens, 2012). In the 20th century the poverty in the larger areas of the world saw the rise of an interest in the visitation of places such as the communities in South Africa and in Rio de Janeiro (Freire-Medeiros, 2009). There already was visitation in the 1970s of communities in Johannesburg and in Cape Town (Steinbrink, Frenzel, Koens, 2012) and the 1990s saw the tourism in slums take its present form (Freire-Medeiros, 2009). From the big meeting held in the city, namely Rio 92, the United Nations Conference on the Environment and Development (UNCED), there was great interest from its participants to visit Brazil' largest favela, Rocinha (Freire-Medeiros, 2009; Steinbrink, Frenzel, Koens, 2012). In the beginning the visits were called 'jeep-tours', taken on board

² The government announced the closure of many UPP² units in 2018, as the violence increased and they understand this program is not correspondin to the demands of society for security.



vehicles that would take the visitors up the hills, on roads that would go through the slums, with no contact with the locals. This kind of 'urban safari' was shown to be quite degrading and, although it still exists and has many people interested in it, especially foreign visitors, it is seen as offensive by the dwellers, as they feel like animals in a zoo.

Steinbrink, Frenzel e Koens (2012) state that the importance given by tourism in slums provides empowerment, income, and that it should be done with an ethical attitude, with respect for the communities and their dwellers. In that sense, the community-based tourism, as shown in the work of Bartholo, Sansolo and Burzstyn (2009), brings elements to support the notion that these activities can relate to local organisations. Public support to these policies comes from the launching in 2006 of a finance line from the Department of Tourism for actions in communities and, albeit their being aimed at the rural areas and small former slave enclaves and fishing colonies, it was soon perceived they were a path to the slums of Rio de Janeiro, being used to support action such as the *Morrinho na Favela do Pereirão* in 2008³ and the *Solidarity Tourism Weaving Hammocks Project*⁴ at the Cantagalo Slum in 2009 (Rodrigues, 2014).

The majority of the changes to these activities related to tourism in slums and to the participation of dwellers in the process, something that grew from the projects related to the big events, with new public policies aimed at construction work and security-related work in the communities. The work aimed at accessibility improved the access through inclined platform passenger lifts, lifts, cable cars and new inner ways, along with the security policies that led to the installation of the Police Peace Corps Units – UPPs - from 2008.



Figure 1: Group of visitors on Cantagalo, with Ipanema and Leblon in the background, 2014.

The first community to receive these improvement projects was the Santa Marta in 2008. Along with the first UPP the Rio Top Tour project was created in 2010 to stimulate community-based tourism, with the training of local guides, all bringing new expectations for income generation and integration of the slum with the city (Rodrigues, 2014). Other slums had urban mobility projects related to tourism such as those that introduced

³This is a community art project that reproduces the Pereirão slum, and has been exposed in many countries since 2004,

⁴ A community handicraft project, held on Cantagalo Slum, as a Community Based Project, in 2009.



cable car services to the Alemão Complex and to the Providencia Hill, apart from the Panoramic Lift System at the Cantagalo (Izaga and Pereira, 2014; Fagerlande, 2015, 2016).

The communities were already organising themselves in other slums, though co-operatives, associations or local community work organisations, and tourism appeared as an option for the generation of income such as the case of the Babilônia Co-op (Moraes, 2016, 2013), of the Museu da Favela - MUF (Pinto, Silva and Loureiro, 2012) and of the Parque Sitiê (Seldin, Vaz, 2017), in enterprises related to tourism and the environment. As regards tourism, the visitation and the accommodation have been very important elements, showing urban transformations and a greater relation with the city, with the visiting activities relying on trails and parks, and with tourist accommodation, apart from the possibility of a greater integration with the availability of bars, restaurants and party events hosted in communities where tourism reached some level of development, as in the communities of Vidigal, Cantagalo, and Babilônia Chapéu-Mangueira (Moraes, 2016; Fagerlande, 2016, 2017a, 2017b, 2017c, 2017d). The case of Rocinha, a pioneer in the work with tourism, more related to the 'Jeep Tour' visitation, shows that even amidst the severe crisis with public security the city has been going through after the bankruptcy of the security project of the UPPs, the visitation persists, attracting a great deal of interest, especially from foreign tourists.

Hostels in slums

When researching tourism in Rio's slums from 2010, it was found that, next to guided tours, enterprises were appearing, related to tourism, especially hostels. The appearance of a large number of hostels in the years prior to the big sports events seem to have a direct relation with them and with the work done in the slums to improve their urbanism features and mobility conditions.

In the slums studied in the North and central areas of the city, the Alemão Complex and the Providência Slum were shown to have no hostels, despite the fact that those slums were the object of improvement work such as cable car installation (Fagerlande, 2015), the slums located in the South End had a large number of such accommodation enterprises and, with no data available for consultation, and with only a handful of guides starting to mention the slums and some of the hostels, albeit not in a systematic way (Fagerlande, 2017a).

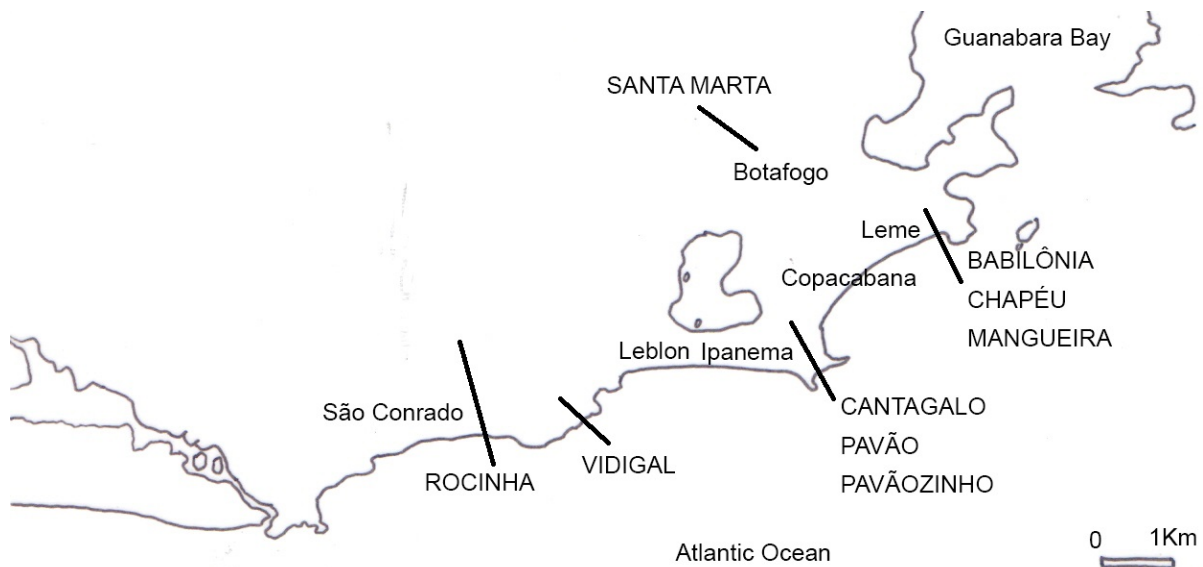


Figure 2: Location of the slums studied in Rio's South End

This way, a mapping effort was started for 5 slums in Rio's South Zone, which are close to the most tourist-friendly boroughs of the city, where, it would later be found, there was a substantial number of hostels. All of them are communities that received UPPs, and infrastructure work, usually related to the sports events the city



would host. As a result the communities in the slums of Santa Marta in the borough of Botafogo, Babilônia Chapéu-Mangueira in Leme, Cantagalo Pavão-Pavãozinho, sitting between Copacabana and Ipanema, Vidigal between Leblon and São Conrado, and Rocinha in São Conrado.

These are slums that have a panoramic view of the city and the sea below them, apart from being close to areas that have a big tourist and transport infrastructure. The access to these slums is made through streets and uphill streets of the formal city⁵, and the location of the hostels uses either the streets and the inner portion of the urban street grid around the slums themselves. When considering the areas surrounding them, the researchers saw these are considered by many as slum areas, despite their legal and formal differences.

An analysis of the graph below⁶ shows in its time line that the growth of the number of hostels in the slums occurred from 2013, possibly as a result of the imminent 2014 and 2016 sports events. The dates for the installation of the UPPs and the execution of the urban mobility works in these slums happened just before the hostels opened, showing that without these public projects there probably would have been no conditions for these enterprises to come to life. It was also possible to see that the slums have different scenarios, as regards the number of enterprises, with the Vidigal one having the highest number of hostels.

On the other hand, Santa Marta, despite being the first slum to receive an UPP and being the stage for a Government project aimed at stimulating community-based tourism, namely Rio Top Tour, conceived as a prototype of what should have been a larger project for other slums, despite the fact that it encouraged the appearance of local guides and a growth in visitation numbers, it did not boost the number of hostels, with only three until 2016, with only one in existence at this moment.

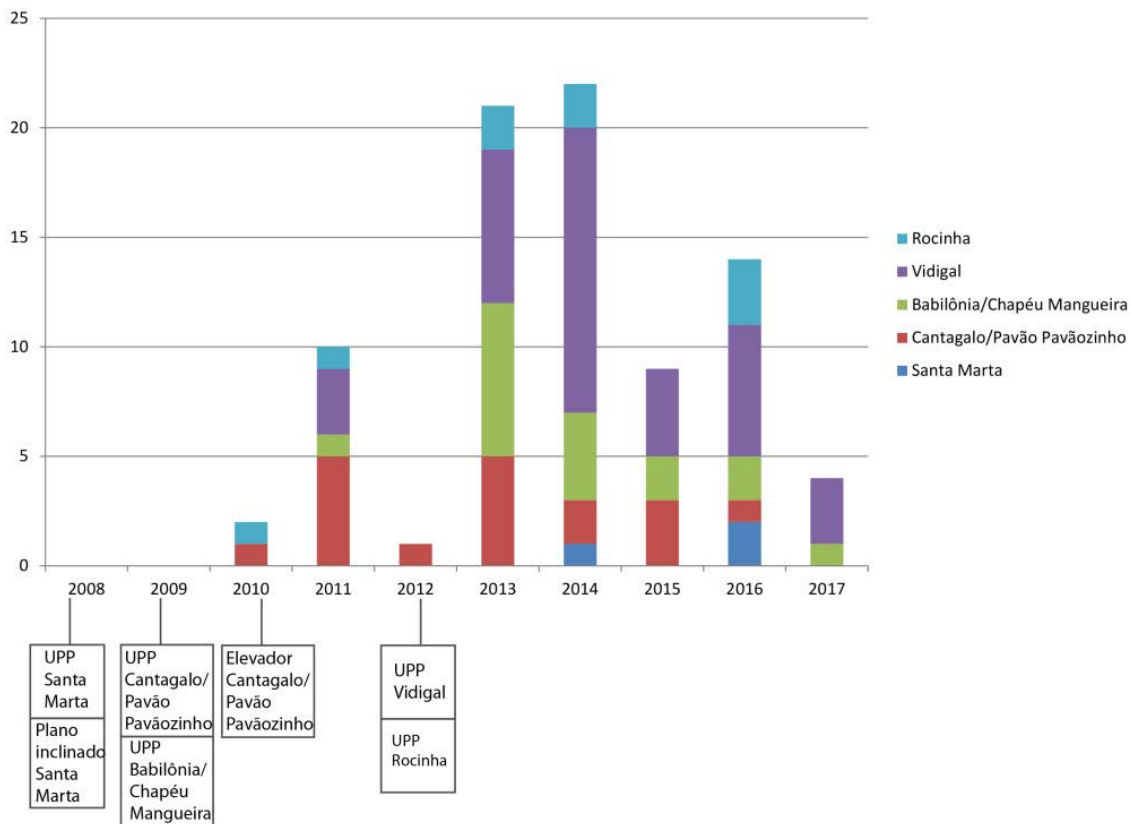


Figure 3: Relation between public works, UPPs and hostels in the slums surveyed between 2008-2017.

⁵ In this case formal city means the traditional areas of the city, in opposition of the slum areas, usually built as informal construction, without observing the legislation.

⁶ The graph shown in Figure 3 was created before 2018 when there was a reduction in the number of hostels, as shown in the Figure 4 table for 2018.



Slums	Number of hostels								
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Santa Marta	-	-	-	1	1	3	3	3	2
Babilônia Chapéu- Mangueira	-	1	1	7	11	13	14	16	8
Cantagalo Pavão- Pavãozinho	1	6	7	12	14	17	18	18	15
Vidigal	-	3	3	10	23	27	33	36	27
Rocinha	1	2	2	4	6	6	9	9	8
TOTAL	2	12	13	34	55	66	77	82	60

Figure 4: Hostels surveyed between 2010-2018

The location of hostels in these slums, partly inside them and partly on their fringes, brought new urban dynamics to play, where the relationship of the slum with its surroundings becomes simultaneously an example of an urban conflict whilst displaying the dynamics related to tourist-related activities as new possibilities to mitigate these very conflicts. The occupation of these areas by hostels caused a valuation of the areas surrounding the slums and allowed the occupation of buildings previously degraded and with little use, bringing a new movement of tourists and visitors, with changes that bring an improvement to the image of those areas, previously seen as very dangerous (Fagerlande, 2017d). If on one hand it is possible to see the possibility of gains and of income for the dwellers of the slums and of the areas affected by these changes, the possibility of gentrification cannot be overruled, as pointed by Pearlman (2016).



Figure 5: Casa Babilônia Hostel, Ladeira Ari Barroso, access to slum, 2016



Figure 6: Cariquinha Hostel, Morro da Babilônia Hill, inside the slum, 2016

The survey shows that the start of the installation of the hostels in these slums started from 2010 and had a peak in growth from 2013, when Rio hosted the Confederations Football Cup, a preview of the World Football Cup that would use Rio as one of its main stages and the scenario of the final match. The direct relationship of these events with a growth of the interest in hostelling in slums was found in the survey as it entailed a public consisting of foreign visitors that saw hostelling in slums as an opportunity to cut costs and also as something that many times is considered as an authentic place to stay in the city. One of the catchphrases to market these hostels was the notion of 'becoming a local', that is, a true 'carioca', as one took up accommodation in a slum. The globalisation trend brought aspects such as the standardisation of places and attractions (Urry, 1990) and the possibility of being in that which is different, local and authentic becomes appreciated.

The ease in locomotion, brought to some slums by urban mobility works such as the panoramic lift on Cantagalo[Hill], the new internal ways implemented in the Chapéu- Mangureira Babilônia Hill and the incline platform lifts installed in the Santa Marta slum, along with the aspects of acknowledgement of interest in Rocinha, a pioneer in this aspect, where the circulation of vehicles facilitates the transport of visitors, and the landscape observed from the vantage point of Vidigal, definitely the place with the closest relation with the ocean, make these slums and their hostels places of immense attraction to tourists.

There is no doubt that the feeling of security brought about by the UPPs from 2010 led the tourism-related activities in the slums to prosper, through the hands of local agencies or not, accommodation included, or just in visitation tours. Gastronomy is yet another important aspect in the tourism activity in slums. The creation of a guide specialising in popular gastronomy was published in 2012 by the Rio de Janeiro City Administration, showing the interest that tourism in the slums had in the consolidation of public policies that focused on the image of the city, as regards the big events (Bloch, 2012), and the initiatives of SEBRAE⁷ (2015) aimed at mapping the tourist slum.

⁷ Brazilian Office for the Support of Small and mid-Sized Companies, a public body set up to boost entrepreneurship.



Figure 7: Bar do David, Favela Chapéu-Mangueira [Slum], 2016

The domain of gastronomy is well represented in the Chapéu-Mangueira slum, in places such as Bar do David, which won numerous Brazilian awards and attracts a large number of patrons. Located near the main access to the slum, it is another case of success, and is easy to get to by car, which offsets the feeling one might have of being in the middle of the slum (Fagerlande, 2017d).

Conclusion

As it was chosen to host large sports events such as the 2014 World Football Cup and the 2016 Olympic and Paralympic Games, Rio de Janeiro started to prepare, as it underwent major infrastructure work and the installation of a sizeable public security project, namely the UPPs, or Peace Police Corps Units.

In the slums, the interest to bring security to those areas included a project aimed at changing their image, with policies geared for tourism, focused on income generation and the improvement of the living conditions in the communities, based on the Community-Based Tourism project of the Federal Government, and with the implementation of projects such as the Rio Top Tour, initially in the Santa Marta Slum, the first one to get an UPP in 2008. The works for urban mobility such as the lift installed in the Cantagalo community also had tourism as one of its inspirations, as the panoramic observation terrace that was built there would eventually show.

One of the results of these actions was the appearance of numerous enterprises in many of the slums, presented in this article as examples for the five communities that, from 2010 to 2017 saw the installation and growth of the hostels. The location of these hostels in the slums is also an important point for a reflection on the effects of the policies aimed stimulating tourism in slums. As one discovers that the new hostels are placed not only inside those areas, but also on the ways that give access to them and that sit on the fringes of the slums, a new dynamic was set in motion for the urban scenario, with the re-use of old buildings that no longer had any use, to produce urban vitality and income in those areas, along with a higher sense of security, as it boosted the number of visitors in areas that were previously regarded as of difficult access to those who did not live there. The possibility of a greater integration of the slum with the cities areas that are considered as formal by the travel trade is a huge advance, but one that requires more investments in security as the failure of the UPP project after the 2016 Olympic Games has led to a reduction in the number of hostels in those slums, as shown by the research data. The interest of those who live in those communities and the involvement of their associations in the communities, as they saw the visitation by tourist as a real perspective of empowerment and income generation should be an important factor to see this process continue on, even with the changes that will come about.



Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on the contributor(s)

Architect and urbanist / Federal University of Rio de Janeiro. Specialisation degree in Brazilian History of Art and Architecture / Pontifical Catholic University of Rio de Janeiro. MSc and DSc degrees in Urbanism from the Postgraduate Programme on Urbanism - PROURB-FAU-UFRJ. Post-doctorate degree in Urbanism - PROURB-FAU-UFRJ. Full Professor / FAU-UFRJ. Head of the Urban Planning and Environment Programme / FAU-UFRJ. Currently lecturing on History of the Cities and Urban and Landscape Architecture Project / FAU-UFRJ. Researcher / Postgraduate Programme on Urbanism PROURB- FAU-UFRJ, involved in the work on tourism in slums.

Bibliography

artholo, Roberto; Sansolo, Davis Gruber; Bursztyn, Ivan (Orgs.). *Turismo de Base Comunitária: diversidade de olhares e experiências brasileiras*. Rio de Janeiro: Letra e Imagem, 2009. <http://www.ivt-rj.net/ivt/bibli/Livro%20TBC.pdf>. Accessed June 30 2009.

Bloch, Sérgio. *Guia gastronômico das favelas / Rio's Favelas's Gastronomy Guide*. Rio de Janeiro: Arte e Ensaio, 2012.

Booking. 2017. <http://www.booking.com>. Accessed January 16 2017.

Brazilian Hostel World. 2017. <http://www.brazilian.hostelworld.com>. Accessed June 16 2017.

Carvalho, Thays Lima Gottfroy de. *O turismo no Morro da Babilônia (RJ): do reflorestamento ao Ecoturismo*. In Revista Brasileira de Ecoturismo. São Paulo, v.9, n.1, Feb/Apr 2016, pp.11-28.

Carvalho, Fernanda Caixeta. *O turismo de base comunitária como prática de empoderamento e o caso da favela Santa Marta sessão temática: turismo em favelas: novas possibilidades de relações urbanas, sociais e ambientais*. Anais do IV Encontro da Associação Nacional de pesquisa e Pós-graduação em Arquitetura e Urbanismo ENANPARQ, Porto Alegre: ENANPARQ, 2016.

_____. *A produção da favela turística e o turismo de base comunitária: possibilidades para o fortalecimento da participação social e o caso da favela Santa Marta*. MSc thesis, PROURB FAU UFRJ, Rio de Janeiro, 2013a.

_____. *O turismo comunitário na favela Santa Marta: perspectivas sobre o programa Rio Top Tour no contexto eufórico do Rio de Janeiro pacificado*. Proceedings: Encontros Nacionais da ANPUR, 2013b. www.unuhospedagem.com.br. Accessed June 08 2016.

Coutinho Marques da Silva, Rachel. (2015). *A Radical Strategy to Deal with Slum Upgrading in the City of Rio de Janeiro*. In Vincent-Geslin, Stephanie; Pedrazzini, Yves; Adly, Hossam. e Zorro, Yafiza (Eds.). *Translating the City: Interdisciplinarity in urban studies*. Lausanne: EPFL Press.

Facebook. 2017. <http://www.facebook.com>. Accessed January 16 2017

Fagerlande, Sergio Moraes Rego. *A favela é um cenário: tematização e cenarização nas favelas cariocas*. In Revista de Arquitectura, vol19, n.1 (2017). Universidad Católica de Colombia, Bogota, 2017a.

New economic, social and cultural possibilities in a city's informal areas: *The growth of tourism in Rio de Janeiro slums between 2008 and 2016*. Proceedings, IV Seminário Internacional da Academia de Escolas de Arquitetura e Urbanismo de Língua Portuguesa AEAULP A Língua que habitamos. Belo Horizonte: AEAULP, UFMG, 2017b.

_____. *Turismo e albergues nas favelas cariocas: novas possibilidades urbanas*. II Seminário Nacional de Turismo e Cultura. Fundação Casa de Rui Barbosa, Rio de Janeiro, 2017c.

_____. *Slum Tourism: Communitarian participation in the Morro da Babilônia (Hill) Proceedings - I CILITUR Recife: UFPE, 2017d. <http://cilitur.com.br/cilitur2017/arquivos/tematica4/FAGERLANDE-S-M-R-F.pdf>. Accessed June 04 2018.*



The 18th International Planning History Society Conference - Yokohama, July 2018

_____. *Turismo no Cantagalo-Pavão-Pavãozinho: albergues e mobilidade na favela*. Rio de Janeiro: Proceedings - 1º Seminário Nacional de Turismo e Cultura. Fundação Casa de Rui Barbosa, 2016.

_____. *Mobilidade e turismo em favelas cariocas*. Caderno Virtual de Turismo, v. 15, n. 3. Rio de Janeiro: COPPE UFRJ, 2015. www.ivt.coppe.ufrj.br/caderno. Accessed June 20 2016.

Freire-Medeiros, Bianca. *Touring Poverty*. Agawan: Routledge, 2013.

_____. *Gringo na laje: produção, circulação e consumo da favela turística*. Rio de Janeiro: Editora FGV, 2009.

_____. *A favela que se vê e que se vende*. In Revista Brasileira de Ciências Sociais Vol. 22 nº. 65 October 2007. http://disciplinas.stoa.usp.br/pluginfile.php/363263/mod_resource/content/0/TextoApoio%207-Freire-TurismoFavela.pdf. Accessed June 01 2016.

_____. *A Construção da Favela Carioca como Destino Turístico*. Conference on CPDOC FGV RJ, 2006. <http://bibliotecadigital.fgv.br/dspace/bitstream/handle/10438/4138/TurismoFavelaCarioca.pdf?sequence=1&isAllowed=y>. Accessed June 01 2016.

Frenzel, Fabian, Koens, Ko, Steinbrink, Malte. (eds.) (2012). *Slum Tourism: poverty, power and ethics*. Abingdon: Routledge.

IBGE (2010), <https://censo2010.ibge.gov.br/>

Izaga, Fabiana, Pereira, Margareth Silva. *A mobilidade urbana na urbanização das favelas no Rio de Janeiro*. Cadernos do Desenvolvimento Fluminense n. 4, 2014, pp. 88-115.

Menezes, Palloma. *A forgotten place to remember: reflections on the attempt to turn a favela into a museum*. In FRENZEL, Fabian; KOENS, Ko; STEINBRINK, Malte (eds.). *Slum Tourism: poverty, power and ethics*. Abingdon: Routledge, 2012.

Mielke, Eduardo Jorge Costa; Pegas, Fernanda Vasconcellos. *Turismo de Base Comunitária no Brasil. Insustentabilidade é uma Questão de Gestão*. In Turismo em Análise, vol.24, n.1, April 2013, pp. 170-189.

Moraes, Camila Maria dos Santos. *Um tour pela expansão das fronteiras da favela turística*. II Seminário URBFAVELAS 2016, Rio de Janeiro. www.sisgeenco.com.br/.../urbfavelas/anais2016. Accessed June 14 2017.

_____. *A elaboração da Favela Ecológica: Interseções entre Turismo e Meio em Ambiente em Favelas Cariocas*. Proceedings - XI Seminário da Associação Nacional Pesquisa e Pós-Graduação em Turismo. Universidade do Estado do Ceará – UECE, 2014. www.anptur.org.br. Accessed June 08 2016.

_____. *A invenção da favela ecológica: um olhar sobre turismo e meio ambiente no Morro Babilônia*. [Programa de Pós-Graduação em Ciências Sociais da Faculdade de Ciências e Letras de Araraquara - Universidade Estadual Paulista Júlio de Mesquita Filho](http://Programa%20de%20P%C3%B3s-Gradua%C3%A7%C3%A3o%20em%20Ci%C3%AAncias%20Sociais%20da%20Faculdade%20de%20Ci%C3%AAncias%20e%20Letras%20de%20Araraquara%20-%20Universidade%20Estadual%20Paulista%20J%C3%B9lio%20de%20Mesquita%20Filho). *Revista Estudos de Sociologia*, v. 18, n. 35, 2013. www.piwik.seer.fclar.unesp.br. Accessed June 01 2016.

Pearlman, Janice E. *The formalization of informal real estate transactions in Rio's favelas*. In Birch, Eugenie L., Hattaraj Shahana, Waetcher, Susan M. (eds.). *Slums: how informal real estate markets work*. Philadelphia: University of Pennsylvania Press, 20160, pp. 58-82.

Perrotta, Isabella. *Promenades do Rio: A turistificação da cidade pelos guias de viagem de 1873 a 1939*. Rio de Janeiro: Hybris Design, 2015.

Image sources

Figure 1: Photograph by the author, 2014.

Figure 2: Author's drawing using Google Maps image, 2017.

Figure 3: Author's research, 2018.

Figure 4: Author's research, 2018.

Figure 5: Photograph by the author, 2016.

Figure 6: Photograph by the author, 2016.

Figure 7: Photograph by the author, 2016.



Porous boundaries in Rio de Janeiro's favelas: community based initiatives, urban mobility infrastructure, tourism and environmental issues in the urbanisation of fringe areas as a socio-spatial means to reconcile the favela with the city

Fabiana Generoso de Izaga *

Sergio Moraes Rego Fagerlande **

Rachel Coutinho Marques da Silva ***

* *PhD, Associate Professor Rio de Janeiro Federal University; fabizaga@gmail.com*

** *PhD, Associate Professor Rio de Janeiro Federal University; sfagerlande@gmail.com*

*** *PhD, Full Professor Rio de Janeiro Federal University; rachelcc@acd.ufrj.br*

Favelas in Rio de Janeiro, Brazil, would be going through a third era of development, as a result of changes and accumulation of investments made in urban improvements. From alternative places of residence for the poor, where organized crime settled in the late twentieth century, today the slums of the South Side are places that are home to a new urban dynamics, with the rise of real estate prices, informal economy growth and increase of tourist and cultural activities. Community based initiatives have been an important way of social and spatial transformation. For the preparation of major sports events hosted by the city of Rio de Janeiro (FIFA World Cup 2014 and the 2016 Olympics) there were implemented new urban and public security projects in various slums. Our research presents the case study of the "Favela da Babilônia". This slum presents an interesting process in its borders, having on one side a large forest area and on the other a formal middle-class neighborhood. The possibilities that community processes related to environmental issues, such as reforestation and tourism – structured on government built urban mobility infrastructure – have revealed Rio de Janeiro as a city in which diversity stands out.

Keywords: community based initiatives, urban mobility infrastructure, environmental issues, tourism, Rio de Janeiro.

Introduction

Rio de Janeiro is a city with 11,945,532 people, consisting of 21 municipalities, where 6,520,000 (IBGE, 2010) live in the core municipality, the City of Rio de Janeiro, where 23% of its population live in precarious settlements. Amongst these are the favelas, scattered by its entire urban area (IBGE, 2010). Rio de Janeiro, along with the city of São Paulo, concentrates the two highest GNP figures of the country, adding to 25.9% of the total for the country, 8.0% of that in Rio de Janeiro. This concentration of wealth, however, leaves a significant part of the population out of it. In 2010, Rio de Janeiro had 16.41% (1,066,459 people) in a situation of vulnerability as regards poverty, with 97,000 of them exposed to extreme poverty (1.25%) (IBGE, 2017). In the slums, and despite the efforts and advances made in the last 20 years, first in urbanisation work and more recently in changes to the general guidelines adopted by Central Government to improve income distribution and public services, a scenario of social inequality persists, where urban issues are apparent, especially as regards a social and economic vulnerability, all of this enhanced by the problems with security.

The aim of this article is to discuss the various dimensions of this process, where new urban mobility infrastructure, the urbanisation of the fringe areas, environmental issues, and tourism would altogether build porous boundaries as a means to reconcile the favelas located in the city's South Side with the city as a whole. Our ongoing research has been mapping significant data on these processes that could provide input for a new urban agenda that could streamline the relations between the informal and the formal aspects of the city of Rio de Janeiro. The idea of the 'porous boundaries' of the favelas seeks to give a new dimension of integration of



these settlements with the formal city, one that is a response to the proposal made almost one decade ago, of building concrete walls to contain and arrest the growth of informality. We seek to probe some of the dynamics identified as relevant in the definition of these boundaries. Amongst them, we place special focus on those related to: (i) the connectivity of the urban grid of the favelas to the urban grid of the formal city and that of public transport; (ii) the activities that relate to tourism; and (iii) the valuation and preservation of the environment. The intent is to find out what uses and dynamics we identified as determining factors in the structure of such fringe areas which, when acted upon with efficiency, could enable the reconciliation of the formal city with the informal one. The study brings a study to the fore, on the Babilônia Chapéu Mangueira favela, where a Peace Police Corps Unit - UPP - was set up in 2009.

The results shown in this article were achieved with visits to the slums, supported by photographs and contacts with local associations and interviews we conducted. As regards the connectivity of the favelas with the formal city, we resorted to the data produced by the SABREN - Lower-Income Settlement System - of the City of Rio de Janeiro Administration and Google's Street View, a tool found in the Google Maps application. Usually, Google's Street View ends its mapping effort near the portals that give access to the favelas, operating as a marker for the transition area between the domain of the favela and that of the formal city. On the tourism perspective, and apart from the bibliographical survey, we studied tourism-related sites such as Booking (2017), Trip Advisor (2017) and social networks such as Facebook (2017).

The relation between the transport infrastructure and that of urban development has been described as complex to gauge by several authors (Izaga, 2009) where transport should support the demands of the activities produced by the diversity of the urban contexts; and the use of the land relates to the existence of certain activities in a given place, and its level of spatial accumulation (Herce, 2013; Rodrigue, 2006). In the case of mobility of the poor, authors such as Kaufman (2014), Ureta (2016), and Lindau et. al (2011) seem to agree that the analysis on mobility can help to understand the composition and the changes experienced by our society and how social exclusion interferes in the patterns of daily mobility. Other studies such as those from Motte-Beaumvol & Nassi (2012) contribute to this reflection as they warn about the aspects of unemployment and informal work as determining factors for the levels of mobility the less privileged are faced with in Rio de Janeiro. Izaga and Pereira (2014) discuss the relation that exists between the action to improve urban mobility and the investments made in the two big slum urbanisation programmes, namely the Favela-Bairro (1993) and the PAC (2007) - in Rio de Janeiro.

Based on the work of authors that study the element of tourism and the city such as Urry (1990), the research on tourism in the favelas has authors such as Freire-Medeiros (2009), Fagerlande (2017a; 2017b; 2017c; 2017d; 2016; 2015), Moraes (2016, 2014, 2013), Carvalho (Carvalho, T. L. G, 2016) and Steinbrink, Frenzel and Koens (2012). Community-based tourism has the work of Bartholo, Sansolo and Burzstyn (2009) and that of Mielke and Pegas (2013) as references. Authors such as Rodrigues (2014), Pinto, Silva and Loureiro (2012), and Carvalho (Carvalho F. C., 2006, 2013) have studied the slums of Rio and their examples of community-based action.

The City of Rio de Janeiro and the favelas

The expansion of the urban domain in Rio de Janeiro has taken place on the flat areas found between the sea and the hills, along the shoreline and the main transport lines. The favelas, on their turn, grew up by climbing the hills that separate the formal urban fabric and the hill and mountain complex, taking advantage of a prohibition set in urban occupation rules regarding the 100-level and a lack of oversight of their irregular patterns of occupation. This way, and from the mid-20th century, the slopes in Rio's South Side, the wealthiest part of the city and main tourist destination, is occupied by a series of precarious settlements that have now become boroughs with a population that can range from 7,000 to 10,000 dwellers; mid-sized ones can have from 10,000 to 1 million people; small ones have from 1,000 to 30,000 people.

Planning Area 2 (AP2) is one of the 5 set up in Rio de Janeiro Urban Plan, that which has the boroughs in what is known as the South Side, an area lying along the shore line and the beaches, the one that attracts the most tourists and where the higher-income population of the city is found. Despite its having the best laid out infrastructure and being the most affluent area, AP2 has 47 of the 635 scattered in Rio with 56,718 households formally registered, with an approximate population of 180,000 or 12% of the city's total (IBGE; SABREN, 2010) (Fig. 1). AP2 also has the largest share of isolated [stand-alone] slums, those that did not overlap others in



their growth process. Amongst the 12 largest favelas in AP2, 4 lie along the city's shoreline, that with the highest tourist appeal. All of them have UPPs and over 500 households.

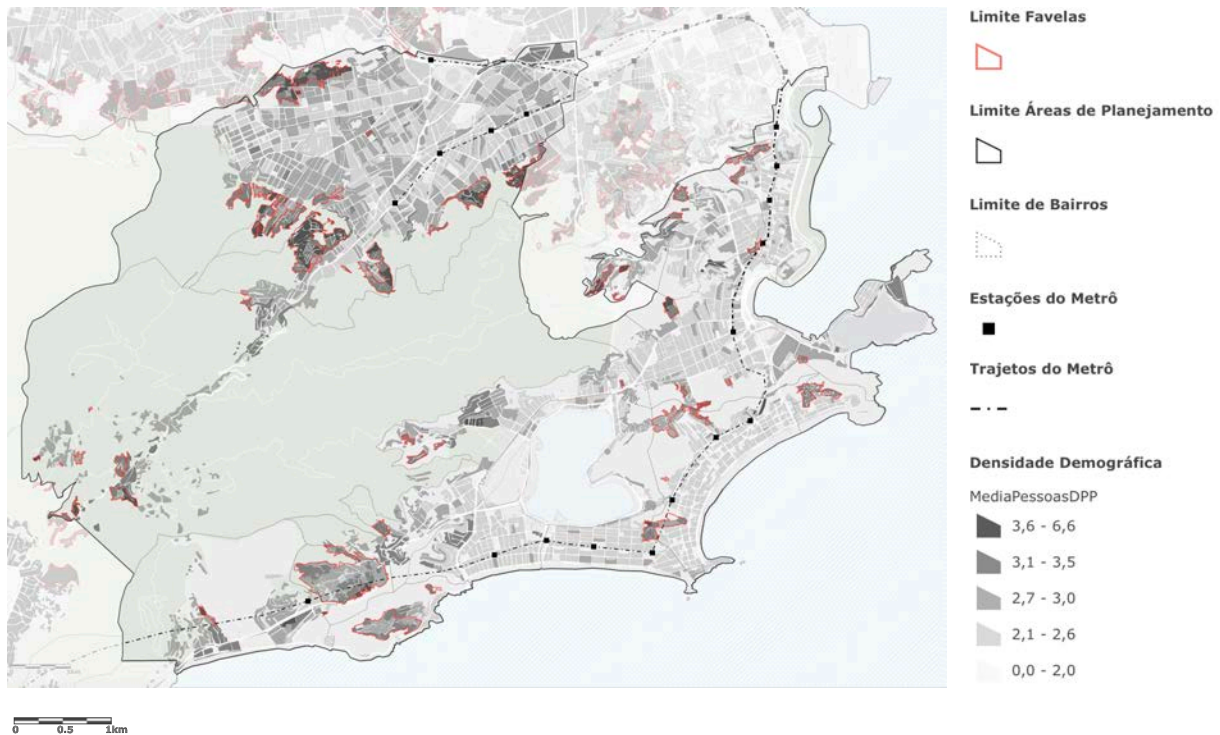


Figure 1 – Slums in Rio de Janeiro's Planning Area 2.

The city is a global tourist destination with attraction usually related to nature and to its landscape. Some boroughs concentrate these activities, usually those in the city's South Side, near the shoreline. Beaches such as Copacabana, Ipanema and Leblon are known the world over and hold the bulk of the hotel chain of the city.

Tourism has always been associated to the image of a city known as "Wonderful City", but the increase of problems related especially to violence and the growth of international drug trafficking in the 1990s when it started to use the city as a stage for its operations, contributed to the deterioration of the living conditions in the city (Coutinho Marques da Silva, 2015). The drug trafficking business is a relevant aspect in the slums, to which were added the clandestine commerce of public services, such as that for transport, communication, and of electricity, whose control gains rising value. More recently, with the appearance of armed militia, the offering of services moved on to include that of security (Izaga & Magalhães, 2013).

The decision to run for host of big world sports events in 1997 that would lead to the 2014 World Football Cup and after that the 2016 Olympic and Paralympic Games triggered a flow of large investments in the city, both as regards sports installations, directly related to sport events themselves, but also in the areas of urban mobility and public security. Along with work done in the underground train system, the implementation of the LRT (light rail train) system and other urban way work, cable car systems were built, along with incline plane lifts, and lift systems in slums, with many of the favelas also having UPPs - Peace Police Corps Units - an important part of the project for public security, implemented from 2008 onwards.

The favelas have seen a number of projects implemented, aimed at making urban interventions, such as the "Favela Bairro" one from 1993 (Sakata, 2011) on and, from 2007, the PAC - Growth Acceleration Programme - which was an important element in the group of initiatives related to the big events the city would eventually come to host.

Tourism in the slums of Rio de Janeiro

The present way for tourism in slums came to be in South Africa in the 1970s when the apartheid regime then in force there gave rise to tours, organized by NGOs, of the 'non-white' areas, with Government support (Steinbrink



Frenzel e Koens, 2012; Frenzel, 2012). At the same time these activities were being carried out in the African continent, tourism in slums also started in Brazil, when in 1992 Rio de Janeiro was the host city of a large global climate event, the United Nations Conference on Environment and Development (UNCED), when the visiting of favelas by groups of visitors started, with participants who were interested in seeing the places of exclusion of Brazilian society, starting with Rio's largest slum, Rocinha (Freire-Medeiros, 2009).

Studies on the recent development of tourism in Rio de Janeiro's favelas found a strong relation between that and the recent sports events the city hosted. The main ones were the 2014 World Football Cup and the 2016 Olympic and Paralympic Games. From the moment Brazil was chosen in 1997 to host the World Football Cup, in which Rio de Janeiro would be stage for the big final match, the city started to prepare itself, with large infrastructure work done, especially in the area of urban mobility (Izaga and Pereira, 2014; Fagerlande, 2016).

Public security issues should also be addressed and to that end the UPPs - Peace Police Corps Units - were created from 2008 onwards, in the main slums of the city, often located in Rio's South End, where the routes to the installations where the events would be held in were. The effect of the UPPs in the life of the communities was significant and, as regards the tourism activity, we were able to see its growth in several of the favelas they were implemented in.

In parallel with that work, some projects were created to stimulate tourism in those slums, such as the Rio Top Tour, set up in the first favela to have a Peace Police Corps Unit, namely the Santa Marta slum (Rodrigues, 2014). This project was related to an initiative of the Brazilian Department of Tourism that, back in 2006, had launched the TBC - Community-Based Tourism Project, aimed at boosting tourism-related activities in less privileged communities, hinged on the dwellers of such settlements, in a process to stimulate income generation linked to their local uses and customs (Rodrigues, 2014; Bartholo, Sansolo and Busztyn, 2009; Mielkas & Pegas, 2011)

One of the more apparent urban effects of the flow of tourists was the appearance of the hostels in the slums, especially those located in the South Side of the city (Fagerlande, 2017b). A study done has been mapping the activities related to tourism in five of slums, focusing especially on the hostels they now have: Santa Marta, Babilônia-Chapéu Mangueira, Cantagalo Pavão-Pavãozinho, Vidigal, and Rocinha.

The Babilônia and Chapéu Mangueira Favela

This is a slum located in Leme, a borough that is an extension of Copacabana, in Rio's South Side. It is located up on a hill that separates two boroughs, Leme and Botafogo. It overlook the ocean, with a panoramic view of Copacabana Beach that is one of its main assets.

This small favela has an intense tourist flow, and a NGO, CoopBabilônia, that works to organise the visits to the area, using an ecological path as its main attraction, which relies on the presence of some hostels. CoopBabilônia has been the main agent in the setting up of new relations between the locals with their neighbours, which includes new partnerships to do reforestation work on the woods that encircle the entire borough of Copacabana, in an important example of how the porous boundaries of the slums can contain green and developed, built-up areas.

The struggle to see the slum remaining in that area hinges especially on the organisation of the local dwellers who have gathered in associations such as CoopBabilônia. The 1980s saw the rise of environmental risks such as landslides and fires in the favela that led the locals to ask the city government to start the work of re-forestation of the woods on the upper part of the hill. At that point the highest part of the Morro da Babilônia was covered with grass, and prone to frequent fires, and the need for re-forestation was at hand (Carvalho, T.L.G., 2016). The lack of will on the part of the government authorities led the locals to organise themselves and seek a solution to the problem, which eventually happened in the shape of agreements executed with the formal neighbouring areas, through the Lauro Muller Street Dwellers Association - ALMA - and the Rio Sul Shopping Centre, both located on the other side of the hill, who were also affected by the fires. As a result the Fight for Reforestation Association was created in 1989, which gave rise to the Pro-Citizenship Front movement (Moraes, 2013).

From these events, in 1996 an APE - Environmental Protection Area - was created for the Morro da Babilônia (Moraes, 2014; Carvalho, T. L. G., 2016) which in 1997 would see the local participation be strengthened with the creation of the CoopBabilônia, Babilonia Hill Re-Forestation and General Services Workers' Cooperative LLC. With official support, and with funding that came after a legal agreement with the Rio Sul Shopping



Centre on account of issues with city legislation, the re-forestation work finally got under way, done by the dwellers, members of the Cooperative (Carvalho, T. L. G., 2016). The positive outcome would produce the continuation and expansion of the work done by the re-forestation team, under the guidance of a forestry engineer, even after the end of the effect of the legal agreement (Fagerlande, 2017d).

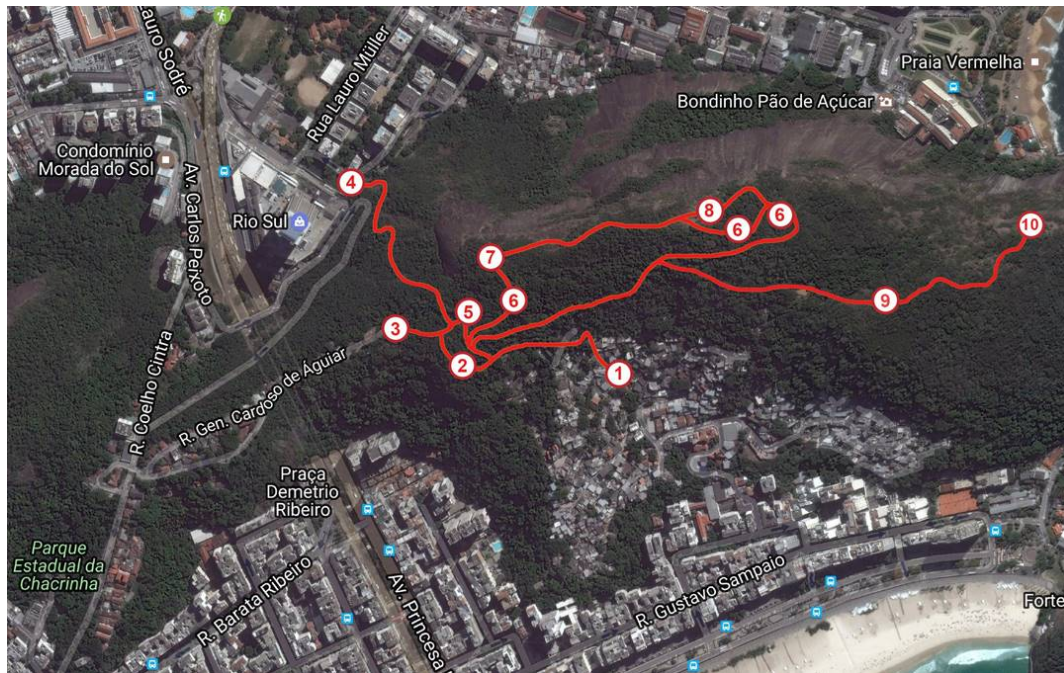


Figure 2: Map of the Babilônia ecological path, Chapéu Mangureira favela

Key:

1 Access to Babilônia Hill; 2 Copacabana Observation Deck; 3 Access to the Military Housing Compound; 4 Access to the Rio Sul Shopping Centre; 5 Former Explosive Stores; 6 Fortifications; 7 Rio Sul Observation Deck; 8 Telegrapher's Observation Deck; 9 Vulture Rock [Pedra do Urubu]; 10 Praia Vermelha Observation Point

The tourist use of the re-planted forest area was another positive effect in the fringe area of the favela, its visitation being organised by CoopBabilônia themselves. The acknowledgement of the area a Rio Landscape City Park in 2014 by the local Government only added recognition to the work done by the locals, producing empowerment and a sense of pride (Carvalho, T. L. G., 2016).

Apart from this area, which is located on the top part of the slum, another fringe that deserves studying is that which borders the borough of Leme. When surveying the access to the favela, only one way allows the access by car, namely the Ladeira Ari Barroso, as the second access is made through a narrow flight of steps off the Gustavo Sampaio Street.

Portals and Access Points – Connections with public transport

The Babilônia Chapéu Mangureira slum allows access to it by car and on foot, via a single way open for vehicle traffic, from the formal area, the Ladeira Ari Barroso, defining what we chose to call the 'portal' to the favela. We have used the word 'portal' as the threshold and transition from the formal city to the favela, where usually one can find the informal transport providers, along with small bars and rubbish containers. These spaces are important transition areas as it is from them, even if they come to go through formal areas, that a dominance of the favela environment is established, and where the presence of public services starts to fade. Another access point to the favela from the formal area, albeit exclusive to pedestrians, can be used via the Beco do Zé, a narrow



passageway that connects Gustavo Sampaio Street with Dr. Mauricio Bandeira Street, but that allows access only to the eastern part of the slum.

It is from the portal located in the Ladeira Ari Barroso that the main connection of the main slum area in Babilônia Chapéu Mangueira takes place with the formal city and where the informal transport providers are located, such as vans and motorcycle taxis. On the other hand, the connection with the bus service is very good, and locals can get on a transport after a nearly 400-metre walk. The entire shoreline of Rio's South End has a cycle lane that lies some 550 metres away from the portal.

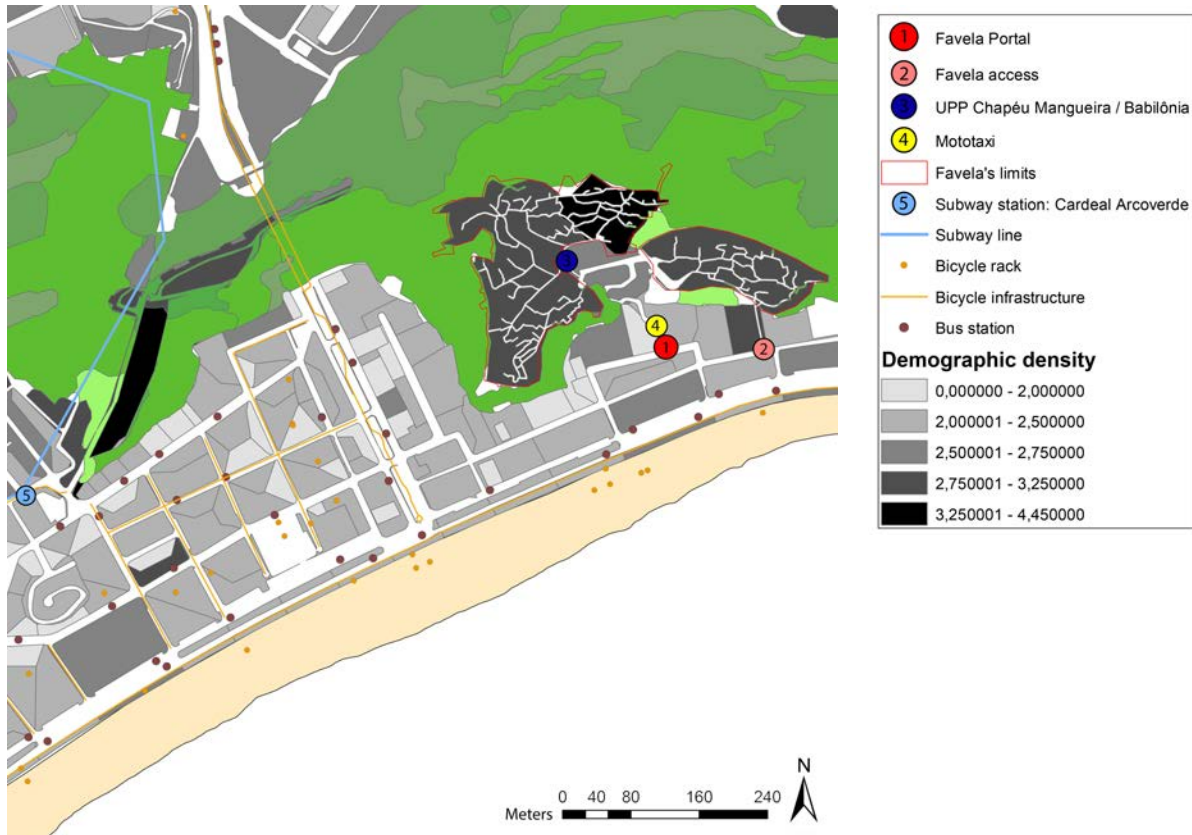


Figure 3 – Connectivity with public transport and access points of the Favela Babilônia Chapéu Mangueira.

Going up the ascent to the favela can be done in vans that leave the borough of Leme and get to the top of the slum, or on motorcycle taxis. This way, although there is no mobility equipment in the favela, such as the ones found in other slums that were given work on account of the large events hosted by the city, the mobility in the slum, especially in the areas near the inner ways that were included in recent urban work projects, have a direct relation with the appearance of hostels. Even the importance of tourist visitation places, as the exiting observation deck, is part of these projects.

The Babilônia Chapéu Mangueira slum therefore has reasonable connections with the public transport system, given that the bus is the predominant means of transport in Rio de Janeiro, covering accounting for nearly 70% of all trips. The biggest issue is no doubt the ease of access via the Ladeira Ari Barroso which has a steep gradient for some 850 metres until it reaches the slum itself and levels up, and from which the locals can get to their homes via passageways and steps. The climb, which is a trying affair, can be made on foot and that led to the appearance of the motorcycle taxis, an informal service that gained popularity in all the favelas that face the same accessibility problems.



Hostels and Lodges

The location of the hostels shows a clear divide, with some 50% of such enterprises located in the urban way structure of the favela and the other half placed on the access path, namely the Ladeira Ari Barroso. Because they are located on the ascent, the hostels took up old houses and plots of land that were previously empty, in a clear process of urban change that the tourism activity brought to these areas, previously regarded as dangerous, used only by the locals. The use of the fringe of the favela by new activities and enterprises, not only accommodation-related, but also by businesses such as Bar do David has attracted a lot of attention and many visitors to the area. Gastronomy is one of the aspects taken very much into account by visitors in the favelas, and this is a success case, acknowledged as it has been in several domestic gastronomy contests (Fagerlande, 2017).

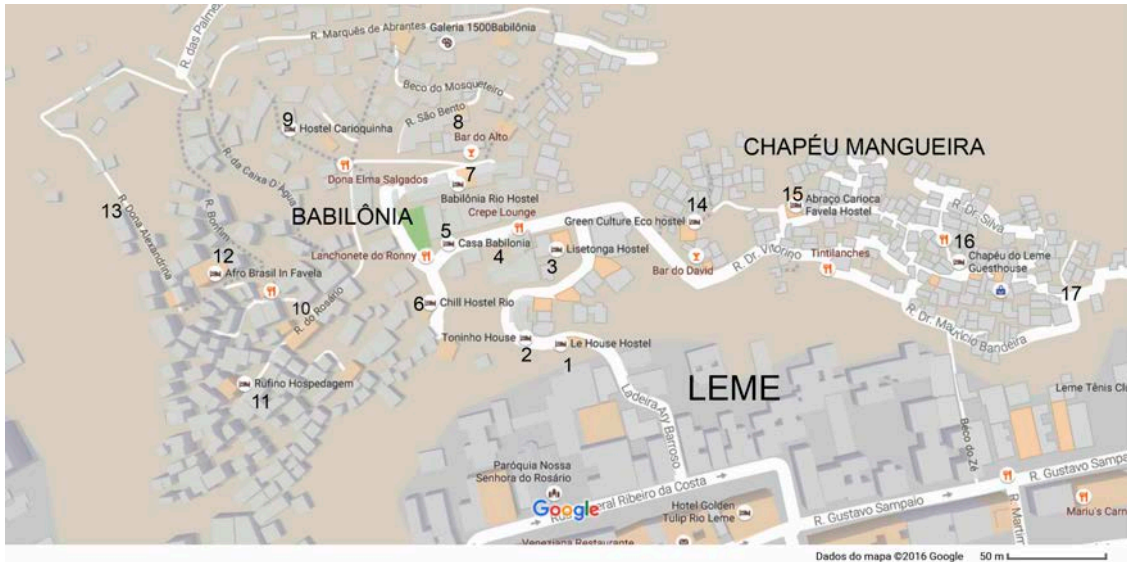


Figure 4: Map of the group of Babilônia Chapéu Mangueira favelas, with the location of the hostels

Key:

1 - Le House; 2 - Toninho's House; 3 - Lisetonga Hostel; 4 - Aquarela do Leme Hostel; 5 - Casa Babilônia; 6 - Chill Hostel Rio; 7 - Babilônia Rio Hostel; 8 - Mar da Babilônia; 9 - Carioquinha Hostel; 10 - Jardim da Babilônia; 11 - Vera Rufino/ Rufino Lodge; 12 - Brasil Afro in Favela Hostel; 13 - Estrelas da Babilônia Lodge; 14 - Green Culture Eco Hostel; 15 - Abraço Carioca Favela Hostel; 16 - Chapéu do Leme Guesthouse; 17 - Favela Inn Hostel¹

Final considerations

The relations that exist between the favela and the formal city produce what we chose to call in this article as 'porous boundaries' in which it is possible to see new relations between less privileged areas and their neighbouring areas, in processes that came to be after PAC interventions, with an emphasis on urban mobility, in results linked to the implementation of the UPPs, with a temporary perception of safety that enabled the setting up of new tourism-related activities in these communities, with an important element of community participation that strengthens the relations between local associations, the public authorities and the private enterprise, in actions that can be alternatives for changes in the relations between these areas, and the transformations in the so-called boundaries of these areas of the city.

Through the study of aspects related to the connectivity of the elements of urban mobility between the formal areas of the city and some of its slums, it is possible to see how these relations affect the behaviour of its

¹ Some of the hostels mapped were closed in May 2017, after the end of the mapping work used in the article.



dwellers, and the importance the ways of access have to such informal areas, and how these accesses produce new fringe areas, with vital intersections for the communities, that bring new possibilities of relations about in the direction of their neighbouring areas.



Figure 5:- Bar do David, Favela Chapéu-Mangueira [Slum], 2016

Apart from providing access to the communities and to the mobility equipment they have, the location of the elements related to tourism, such as hostels and bars reinforces the relevance of the boundaries, and how this porosity brings about hues of this new relation amongst such different places which finds possibilities to connect, and of shared uses, and of dynamic in these areas that reinforce community action, bringing the visitor from outside to experience life with the dweller on the inside, as is the case in the Babilônia Chapéu Mangueira favela. The scenario found there, as with the hostels, in which this connectivity is found, shows that even with one of its boundaries being porous, that is the space for the meeting to occur and for new uses for the city to be found.

A third aspect is the relation that exists between the built-up environment and the natural realm which, in one same favela will allow the environmental recuperation of the vegetation, with clear gains both for the formal city as for the slum, and one that still relates with community-based tourism, in a case where the Babilonia Hill example brings an important example of the joint work of the local community, of the private enterprise, and of the public authority to change the city.

Based on the cases found in this community, it is possible to see the importance of a more in-depth study of new possibilities towards the construction of a new relation between the favela and its neighbours, where the 'porous boundaries' gain significant importance, showing that, rather than building up walls, we should seek connections and a wider exchange between areas that, albeit being so close to one another not always get to meet one another and live in harmony.

Disclosure Statement

No potential conflict of interest was reported by the authors.

Notes on contributor(s)

Fabiana Generoso de Izaga. Associate Professor at Federal University of Rio de Janeiro (2006), and at the Graduate Program on Urbanism Prourb/FAU-UFRJ. Architect and Urbanist (1991), Master (2001), PhD in Urbanism (2009) UFRJ.



Sergio Moraes Rego Fagerlande. Associate Professor at Federal University of Rio de Janeiro (2014), researcher at the graduate Program on Urbanism /FAU-UFRJ. Architect and Urbanist (1987). Master (2007) PhD in Urbanism (2012) UFRJ.

Rachel Coutinho. Full Professor at Federal University of Rio de Janeiro (1992), and at the Graduate Program on Urbanism /FAU-UFRJ. Architect and Urbanist (1977). Master (1984) and a Ph.D Urbanism (1988) Cornell University, USA.

Bibliography

Bartholo, Roberto; Sansolo, Davis Gruber; Bursztyn, Ivan (Orgs.). *Turismo de Base Comunitária: diversidade de olhares e experiências brasileiras*. Rio de Janeiro: Letra e Imagem, 2009. <http://www.ivt-rj.net/ivt/bibli/Livro%20TBC.pdf>. Accessed June 30 2009.

Booking. 2017. <http://www.booking.com>. Accessed January 16 de janeiro 2017.

Carvalho, Thays Lima Gottfroy de. *O turismo no Morro da Babilônia (RJ): do reflorestamento ao Ecoturismo*. In Revista Brasileira de Ecoturismo. São Paulo, v.9, n.1, fev/abr2016, pp.11-28.

Carvalho, Fernanda Caixeta. *O turismo de base comunitária como prática de empoderamento e o caso da favela Santa Marta sessão temática: turismo em favelas: novas possibilidades de relações urbanas, sociais e ambientais*. Anais do IV Encontro da Associação Nacional de pesquisa e Pós-graduação em Arquitetura e Urbanismo ENANPARQ, Porto Alegre: ENANPARQ, 2016.

_____. *A produção da favela turística e o turismo de base comunitária: possibilidades para o fortalecimento da participação social e o caso da favela Santa Marta*. Masters dissertation, PROURB FAU UFRJ, Rio de Janeiro, 2013a.

Coutinho Marques da Silva, Rachel. (2015). *A Radical Strategy to Deal with Slum Upgrading in the City of Rio de Janeiro*. In Vincent-Geslin, Stephanie; Pedrazzini, Yves; Adly, Hossam. e Zorro, Yafiza (Eds.). *Translating the City: Interdisciplinarity in urban studies*. Lausanne: EPFL Press.

Facebook. 2017. <http://www.facebook.com>. Accessed January 16 2017

Fagerlande, Sergio Moraes Rego. *A favela é um cenário: tematização e cenarização nas favelas cariocas*. In Revista de Arquitectura, vol19, n.1 (2017). Universidad Católica de Colombia, Bogota, 2017a.

_____. *Novas possibilidades econômicas, sociais e culturais em áreas informais das cidades: O desenvolvimento do turismo em favelas cariocas entre 2008 e 2016*. Anais do IV Seminário Internacional da Academia de Escolas de Arquitetura e Urbanismo de Língua Portuguesa AEAULP A Língua que habitamos. Belo Horizonte: AEAULP, UFMG, 2017b.

_____. *Turismo e albergues nas favelas cariocas: novas possibilidades urbanas*. II Seminário Nacional de Turismo e Cultura. Fundação Casa de Rui Barbosa, Rio de Janeiro, 2017c.

_____. *Turismo em favelas: participação comunitária no Morro da Babilônia*. Anais I CILITUR Recife: UFPE, 2017d. <http://cilitur.com.br/cilitur2017/arquivos/tematica4/FAGERLANDE-S-M-R-F.pdf>. Accessed March 04 2018.

_____. *Turismo no Cantagalo-Pavão-Pavãozinho: albergues e mobilidade na favela*. Rio de Janeiro: Anais do 1º Seminário Nacional de Turismo e Cultura. Fundação Casa de Rui Barbosa, 2016.

_____. *Mobilidade e turismo em favelas cariocas*. Caderno Virtual de Turismo, v. 15, n. 3. Rio de Janeiro: COPPE UFRJ, 2015. www.ivt.coppe.ufrj.br/caderno. Accessed January 20 2016.

Freire-Medeiros, Bianca. *Gringo na laje: produção, circulação e consumo da favela turística*. Rio de Janeiro: Editora FGV, 2009.

Frenzel, Fabian, Koens, Ko, Steinbrink, Malte. (eds.) (2012). *Slum Tourism: poverty, power and ethics*. Abingdon: Routledge.

[Herce, Manuel. El negocio del territorio – Evaluación y perspectivas de la ciudad moderna. Madrid: Alianza Editorial, 2013.](#)



- ; Miró, Juan F. *El soporte infraestructural de la ciudad*. Barcelona: Ediciones UPC, 2002.
- IBGE (2010), <https://censo2010.ibge.gov.br/>
- Kaufman, Vincent. *Mobility as a tool for sociology*. II Mulino, Rivista web, fascicolo 1, 2014. https://infoscience.epfl.ch/record/202077/files/Sociologica_10.2383-77046.pdf
- Lindau, Luis Antonio; Vargas, Paulo Cesar; Santos, Paula Manoela, et alli. *Desafios para o transporte sustentável em assentamentos urbanos informais precários*. Mimeo. <http://redpgv.coppe.ufrj.br/index.php/es/produccion/articulos-cientificos/2011-1/534-desafios-para-o-transporte-sustentavel-em-assentamentos-urbanos-informais-precarios/file>. Accessed January 2018.
- Izaga, Fabiana, Pereira, Margareth Silva. *A mobilidade urbana na urbanização das favelas no Rio de Janeiro*. Cadernos do Desenvolvimento Fluminense n. 4, 2014, pp. 88-115.
- Izaga, Fabiana. *Mobilidade e Centralidade no Rio de Janeiro*. Tese de Doutorado, Programa de Pós-graduação em urbanismo – Prourb, Universidade Federal do Rio de Janeiro, 2009.
- Izaga, Fabiana; Magalhães, Sérgio. *Close yet far*. In: BURDETT, Ricky (org.). *Urban Age City Transformations*. Conference Rio de Janeiro, 24/25 october 2013. <https://lsecities.net/media/objects/articles/close-yet-far/en-gb/>. Accessed January 2018
- Mielke, Eduardo Jorge Costa; Pegas, Fernanda Vasconcellos. *Turismo de Base Comunitária no Brasil. Insustentabilidade é uma Questão de Gestão*. In *Turismo em Análise*, vol.24, n.1, abril 2013, pp. 170-189.
- Moraes, Camila Maria dos Santos. *Um tour pela expansão das fronteiras da favela turística*. II Seminário URBFAVELAS 2016, Rio de Janeiro. www.sisgeenco.com.br/.../urbfavelas/anais2016. Accessed June 14 2017.
- _____. *A elaboração da Favela Ecológica: Interseções entre Turismo e Meio em Ambiente em Favelas Cariocas*. Anais do XI Seminário da Associação Nacional Pesquisa e Pós-Graduação em Turismo. Universidade do Estado do Ceará – UECE, 2014. www.anptur.org.br. Accessed June 08 2016.
- _____. *A invenção da favela ecológica: um olhar sobre turismo e meio ambiente no Morro Babilônia*. Programa de Pós-Graduação em Ciências Sociais da Faculdade de Ciências e Letras de Araraquara - Universidade Estadual Paulista Júlio de Mesquita Filho. *Revista Estudos de Sociologia*, v. 18, n. 35, 2013. www.piwik.seer.fclar.unesp.br. Accessed June 01 2016.
- Motte- Bauvol, Benjamim; Nassi, Carlos. *Immobility in Rio de Janeiro, beyond poverty*. *Journal of Transport Geography* 24 (2012) p 67-76.
- Pinto, Rita de Cássia. S.; Silva, Carlos Esquivel. G. da; Loureiro, Kátia A. S. (org). *Circuito das Casas-Tela: Caminhos de vida no Museu de Favela*. 1.ed. Rio de Janeiro: Museu de Favela, 2012.
- Rodrigues, Mônica. *Tudo junto e misturado: o almanaque da favela: turismo na Santa Marta*. Rio de Janeiro: Mar de ideias, 2014.
- Rodrigue, Jean-Paul; et. al. *The Geography of Transport Systems*. New York: Routledge, 2006.
- Sistema de Assentamentos de Baixa Renda (SABREN) da Prefeitura da Cidade do Rio de Janeiro. <http://www.rio.rj.gov.br/web/ipp/exibeconteudo?id=4782931>. Accessed January 2018.
- Sakata, Francine Gramacho. *Paisagismo Urbano: Requalificação e Criação de Imagens*. São Paulo: Editora da Universidade de São Paulo, 2011..
- Seldin, Cláudia., Vaz, Lilian Fessler. *O Parque Sitiê na Favela do Vidigal*. In Constatino, Norma Regina Truppel; Rosin, Jeane Aparecida Rombi de Godoy, Benini, Sandra Medina (orgs.). *Paisagem: natureza, cultura e o imaginário*. Tupã: ANAP, 2017, pp. 47 – 58.
- SEBRAE. *Guia de Favelas*. Rio de Janeiro: SEBRAE, 2015.
- Steinbrink, Malte; Frenzel, Fabian; Koens, Ko. *Development and globalization of a new trend in tourism*. In Frenzel, Frenzel.; Koens, Ko.; Steinbrink, Malte. (eds.). *Slum Tourism: poverty, power and ethics*. Abingdon: Routledge, 2012, p.1-18.



Tripadvisor. 2017. <http://www.tripadvisor.com>. Accessed January 16 2017

Ureta, Sebastian. To Move or Not to Move? Social Exclusion, Accessibility and Daily Mobility among the Low income Population in Santiago, Chile, *Mobilities*, 3:2, 269-289, DOI: 10.1080/17450100802095338, 2008.

Urry, John. *O olhar do turista. Lazer e viagens nas sociedades contemporâneas*. 3.ed. São Paulo: Editora Studio Nobel, 2001 [1990].

Image sources

Figura 1 – Favelas na Área de Planejamento 2 do Rio de Janeiro. Izaga, Fabiana, 2017

Figure 2: Ecological trail, Babilônia Hill. LAURBAM, over Google Maps, 2016.

Figure 3 – Conectividade ao transporte público e acessos da Favela Babilônia Chapéu Mangueira

Figura 4: Mapa do conjunto de favelas Babilônia Chapéu Mangueira, com localização dos albergues

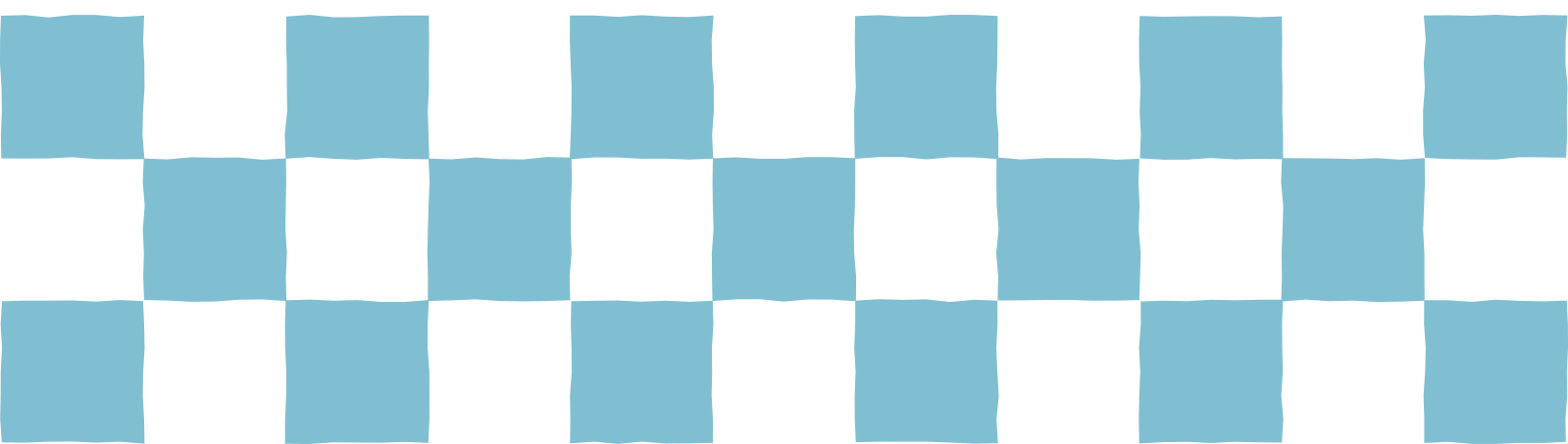
Figure 5: Davi's Bar, Chapéu Mangueira, autor's photograph, 2016.



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

59 **Planning History and
Megaevents: Part 2, Olympic
Legacy / GUHP***



The Tokyo Olympics 2020 Sport Stadium Controversy: Exploring the Role of Star Architects and Global Brands

Tomoko Tamari (Goldsmiths, University of London)

Landmark architecture has often been discussed in terms of reflecting national identity and symbolizing historical narratives and memories. Architecture therefore plays an important role in realizing such complex notions in the very materiality of the building design. Hence, star architects could not just be seen as imposing their 'a global brand', but also identifying themselves as interpreters of national narratives as well. This type of architect has often been encouraged to produce 'signature' buildings for global mega events – such as the Olympics. Yet, transnational urban elites who enjoy financial and political power are now the dominant force to influence the design and concept of iconic buildings in contemporary architectural practices. This paper investigates this trend to argue that there have been significant changes in the role of iconic architects and spectacular buildings. In order to better understand such shifts, the paper focuses on the Olympic stadium as an ideal site. Rather than focusing on various critical issues such as the massive budgets for Olympic stadium that become seen as 'white elephants' and related civilian political issues, which have been extensively discussed, the paper in particular investigates the emergence of iconic Olympic stadia designed by star architects. Taking Zaha Hadid's controversial architectural design for the main Olympic stadium for the 2020 Tokyo Olympics, the paper unpacks the relationship between the material and symbolic infrastructure of iconic architecture, which involves political interests, economic capital and site-specific memories. By doing so, the paper conceptualises 'branding' as an economic and cultural system, which helps to better understand the significance of 'a new set of symbolic value' in iconic brand buildings and architecture. The paper also examines the commodification of star architects and 'personalization' of iconic architecture. The paper concludes that national grand architectural projects, such as the construction of Olympic sport stadia, cannot operate outside the regime of global and local politics, and beyond the logic of neoliberal transnational capitalism.

Extraterritoriality in the Olympic City of Exception: The Case of Rio de Janeiro 2014-2016

Anne-Marie Broudehoux (School of Design, University of Quebec at Montreal)

This paper investigates the role of sporting mega-events in the legal and spatial reconfiguration of the urban landscape. Based on Eyal Weizman's notion of "extraterritoriality" (Weizman 2005) and Giorgio Agamben's concept of the "state of exception" (Agamben 2005), the paper explores the effect of sporting mega-events on the production of a new urban territoriality, marked by the creation of spaces of exception, which are both spatially and legally located outside the "normal" urban order. It posits that the artificial crisis engineered by the urgency of the mega-sporting events' fixed deadline, the magnitude of demands made by private sporting institutions such as the Fédération Internationale de Football Association (FIFA) and the International Olympic Committee, and the scope of infrastructure projects to be undertaken for the event has given the city the license to suspend the pre-existing juridical order, to impose new rules and sanctions, and to take exceptional measures in order to reshape the city for the needs of the event and its sponsors. The paper is based on more than two decades of empirical research on the urban implications of sporting mega-events, especially in China and Brazil. It centers upon the transformation of Rio de Janeiro in the years leading to the hosting of two of the world's greatest events: the 2014 World Cup and the 2016 Olympics. The paper argues that in spite of their reputation as great social unifiers and celebrations of togetherness, mega-events spectacles are powerful instruments in concealing the growing fragmentation of the urban territory into pockets of privatized enclaves that increasingly escape local legal and spatial norms. The paper concludes that in Rio de Janeiro, the hosting of mega-events has exacerbated the pre-existing urban fragmentation by creating new territories of exception, and further isolating prior spaces of exclusion, while promoting the privatization of vast urban sectors.

Obsolescence and Transformability in London's 2012 Olympic Site

Juliet Davis (Cardiff University)

Obsolescence has been a major issue within the history of Olympic Games developments, producing 'white elephants' and waste in the wake of fleeting spectacle in cities from Sarajevo to Athens to Rio. Images of these have haunted claims of the social and economic value of mega-events for cities, bringing the very idea of legacy close to ruin. Seeking to address the threat of obsolescence, considerations of the post-Games usage of the venues and wider site of the 2012 Olympic Games formed an important aspect of planning for legacy from the time of London's bid in 2003-4. These involved designing infrastructure, venues and parklands to not only work for the Games but facilitate the evolution of the mega-event landscape into an everyday piece of mixed-use London afterwards.

Designing an Olympic Park that could undergo a substantial transformation without complete redevelopment concentrated attention, as London legacy masterplanner Bob Allies has often put it, on designing "processes" rather than just "products". Products, in these terms, are object buildings and landscapes that may reflect a given context or situation, but pay insufficient attention to how change may affect their utility. An emphasis on processes, on the other hand, involves attending to how buildings and urban fabrics exist in time —emerging, materialising and transforming— and how they might be shaped. It implies the integration of such anticipatory thinking into the design and making of buildings, through ideas of relative durability, dismantlability, temporary use, adaptability, flexibility, and the like. In the context of planning for London's legacy, such ideas informed the design of individual venues and the masterplan framework as a whole. As such, they could be seen to indicate possible new ways of evaluating the social and economic outcomes of Olympic Games, and of spectacularising urban landscapes generally. But, do they?

Five years after the Games, there is an opportunity to consider not only how legacy-focussed transformation was anticipated through the design and development of the Olympic Park, but also how it has been unfolding since. Through a history of planning for the future use of the Olympic Park since 2005 —focussing particularly on the fabric of the Games— this paper will explore relationships between transformation as anticipated and as actually realised through adaptation and reuse. The paper will show how, though London has not produced the ruins of Athens or Sarajevo, obsolescence can still be detected in the context of planning processes and adaptability has proved a challenge in many ways. This has implications not only for transformable design and architecture in the context of the Olympics, but for the sustainability of event-led urban change more broadly.

The Tokyo Olympics 2020 Sport Stadium Controversy: Exploring the Role of Star Architects and Global Brands

Tomoko Tamari

Goldsmiths, University of London t.tamari@gold.ac.uk

The Olympics is a contested site of sovereignty in terms of power balancing between the political (government), economic (global capitalism), cultural (iconic architects) entities and citizens. The paper focuses on iconic Olympic stadia designed by star architects in the era of global capitalism and explores the shifting and multifaceted identities of the iconic architects in global cultural industries. Taking the 2020 Tokyo Olympic stadium as a case study, the paper unpacks the relationship between the material and symbolic infrastructure of iconic architecture, which involves political interests, economic capitals and site-specific memories. The paper argues that the Olympic stadium is an ideal site to examine the strategically constructed images and values of iconic architects and spectacular architecture, and that reveals the narrativisation and commodification of star architects and iconic buildings necessarily make themselves into 'a global brand'. In this context, the paper concludes that national grand architectural projects, such as the construction of Olympic sport stadia, cannot operate outside the regime of global and local politics, and beyond the logic of neoliberal transnational capitalism.

Keywords: Iconic architects, Olympics Sport Stadium, Global brand, Global capitalism

Introduction

It is generally accepted that the Olympics are an assemblage comprised of a human-made spectacle, national branding, and city planning at one and the same time. It is also a contested field of sovereignty in terms of the power balance between political (government), economic (global capitalism), cultural (iconic architects) entities and citizens. The paper particularly focuses on iconic architecture and architects in the context of Olympic culture in the era of global capitalism. The Olympic stadium could be seen as one of the most noticeable Olympic facilities, since it draws a good deal of attention as an iconic building designed by star architects. Taking the 2020 Tokyo Olympic stadium as a case study, the paper unpacks the relationship between the material and symbolical infrastructure of iconic architecture, which involves political interests, economic capitals and site-specific memories.

Rather than focusing on various critical issues: such as the massive budgets for a 'white elephants' Olympic stadia; analysing architecture designs; criticising the process of the design competition; or problematising related political issues in the Japanese architectural industry, all of which has already been extensively discussed, the paper investigates the socio-cultural implications of the iconic Olympic stadium designed by globally branded star architects. By doing so, the paper conceptualises 'branding' as an economic and cultural system, which works to incorporate 'a new set of symbolic values' into iconic buildings and star architects. Although the branding system institutes a new pragmatism for star architects, the immanent

nature of brand of 'iterability and seriality' makes brand a contingent entity that swings between exclusiveness and banality. The paper concludes with an examination of Kengo Kuma's architecture language of his 2020 Tokyo Olympics stadium design.

Architects in the era of the global capitalism

Today we find that iconic architecture not only provides representations of national identity and traditional narratives, but also becomes a contested political site involving state, global capitalists, iconic architects and citizens. The expanding field of global capitalism with its flow of financial power increases the political and economic influence of iconic architecture as '*a heteronomous practice*'¹. This means that architectural practices become driven by multi-layered powerful agents and actors. Such a contested situation, therefore makes it difficult for established architects to maintain their autonomous freedom to design every detail of their buildings. Furthermore, they have to negotiate and adopt to a given local context, and at the same time cooperate with transnational economic and financial powers in the era of the global capitalism.

Hence, iconic architecture cannot be understood just as a nation-led-political device or architectural signature, but also as a site for the investment, promotion and legitimation of the social status of 'transnational urban elites'². These are, what Sklair calls, the 'Transnational Capitalist Class'. Sklair explains that 'in the pre-global era, iconic architecture tended to be driven by the state and/or religion'³, while in the era of capitalist globalization, the 'transnational capitalist class' has increasingly become the central power to 'define the times, places and audiences that make buildings, space and architecture iconic'⁴. In such circumstances, unlike many modernist giants, such as F. L. Wright or Le Corbusier, who could enjoy their relatively freedom to realize their innovative architecture design, contemporary architects have to engage in self-promotion to become favourable ones for the global financial power.

Branding iconic architects

If we accept the idea of 'the values of currency of the "famous" dominate architectural culture, and the production and *marketing* of architectural iconic buildings and signature architecture'⁵(emphasis added) come to be a central factor in contemporary architectural production, then it is important for successful architects, to not only become star architects, but to make themselves into a powerful brand. As cultural theorist and architect, Daniel Libeskind, argues this provides an interesting social recognition of 'Starchitects': First, 'they are identifiable individuals', second, '(their buildings) are often associated with striking shapes or concepts' and third, 'they have a strong capacity for self-promotion'⁶. To further the

¹ McNeill, Donald. *The Global Architect Firms, Fame and Urban Form*. (London: Routledge, 2009), 3.

² Those who 'tend not to associate themselves with any specific city or locale have no particular interest in urban social and political life' (Kaika 2011:975).

³ Sklair, Leslie. *Iconic Architecture and Capitalist Globalization* (City 10(1): 21-47, 2006), 21.

⁴ *Ibid*, 138.

⁵ Larson, 1994: 470 cited in Horn, John. *Architects, Stadia and Sport Spectacles: Notes on the Role of Architects in the Building of Sport Stadia and Making of World-Class Cities* (*International Review for the Sociology of Sport* 46(2): 205-227, 2011), 208.

⁶ See McNeill, Donald. *The Global Architect Firms, Fame and Urban Form*. (London: Routledge, 2009), 62.

analytical understanding of 'self-promotion', McNeill further discusses '(The Hollywood) star system' which become the major apparatus to create charismatic stars for the screens. He remarked on the similarities with the production of architectural celebrity in terms of its 'systematic, industrialized process of promoting individuals with a particular uniqueness or distinctiveness,'⁷. This suggests that iconic architects are socially constructed products. They strategically commodified themselves to become 'iconic brands'. In 1990s Frank Gehry and, his masterpiece Guggenheim Museum in Bilbao and its 'Bilbao effect' can be seen as a classic example⁸.

Zaha Hadid and a multifaceted identity

Hadid was also categorized as on the "A" list of name brand architects. She was the first female winner of the Pritzker Architecture Prize (2004) and was acknowledged as one of the 'World's Most Powerful Women' by *Forbes* and *TIME* magazine who included her in the '100 Most Influential People in the World'⁹. Her architecture has often been described as 'the utopian visions of Suprematism and Constructivism into the promised land of actual building'¹⁰. Like Frank Gehry's works, her architecture stands for striking contemporary urban spectacles. As her architectural projects caught public imagination across the globe, her own presence becomes more visible to the public.

This is not only because increasing her appearance in the media, but also understood as a result of the prominence of art museums which started to involve in making connections between art and architecture. In this trend, like other starchitects, Hadid's architectural projects have been exhibited by many leading art museums and featured as a contemporary art form. Her company Zaha Hadid Architects's projects appeared at New York's Solomon R. Guggenheim Museum in 2006, London's Design Museum in 2007 Saint Petersburg's State Hermitage Museum in 2015 and London's Serpentine Galleries in 2016¹¹. Hence, her public recognition and identity become multifaceted: architect, designer, and artist. She extended her fields to art and design which is a significant part of cultural production, as her company, Zaha Hadid Architects proclaims '[w]e are in the business of cultural production'¹².

Zaha Hadid as a successful global brand

Being recognised as an avant-garde contemporary architect, she developed her hybrid talents to contribute to collaboration between architecture, art and commerce in the contemporary cultural industries. This is because her philosophy was based on a challenge to conventional concepts and ideas of architecture and to

⁷ Ibid, 64.

⁸ An architecture critic Hal Foster, speaking about Frank Gehry in Sydney Pollack's film *Sketches of Frank Gehry*, "he's given his clients too much of what they want, a sublime space that overwhelms the viewer, a spectacular image that can circulate through the media and around the world as brand" (Rowan Moore). <https://www.theguardian.com/artanddesign/2017/oct/01/bilbao-effect-frank-gehry-guggenheim-global-craze> (accessed 29 March 2018).

⁹ <http://www.zaha-hadid.com/people/zaha-hadid/> (Accessed 3 April 2018).

¹⁰ Foster, Hal. *The Art-Architecture Complex* (New York: Verso, 2013), 85.

¹¹ <http://www.zaha-hadid.com/people/zaha-hadid/> (accessed 3 April 2018).

¹² 'about us movies' in the official site of Zaha Hadid Architects <http://www.zaha-hadid.com/videos> (accessed 4 April 2018).

provide new ‘design at all scales’ from city planning, architecture, interior, artefact, even fashion in order to propose new ways of life¹³. But this could also be seen as an important marketing strategy of self-promotion to become a new global brand. The brand provides not only various types of products and design, more importantly it creates a set of meanings, new value and narratives to integrate into images of a product, a company or a person. Hence, as the manifesto of Zaha Hadid Architects (‘[w]e are in the business of cultural production’) indicates, it is significant for contemporary architects to create not just material, but also provide immaterial values, that is ‘images’ with ‘a hermeneutic sensibility’¹⁴ - creating a set of new ideas, meanings and sensibility in the cultural industries. This is formation process of the brand. This process can also be applied to Hadid herself and the way which she became a successful brand. She had to promote herself as a brand *producer* as well as ‘as a *product* within a brand-name structure of cultural marketing’¹⁵.

Zaha Hadid and the Tokyo Olympic stadium

In order to become an ‘ideologically’ constructed global brand¹⁶, one of the most beneficial ways is to acquire a complex and ambitious grand architectural project, such as the Olympic stadium. Since it is one of the few occasions, in which architecture (therefore architects) become a matter of public interests. Particularly the issue of design of the Olympic stadium often draws a good deal of media attention. Zaha Hadid won the 2020 Tokyo Olympic Stadium competition. Her design was for an 80,000-seat and 75-meter height stadium. But the plan faced widespread criticism and intensive debate. It was oversized (8 times bigger than the Yoyogi National Stadium built in 1964). The budget (252bn yen (£1.3bn, \$2bn) was also doubled the original plan. More importantly, the plan showed little concern with the site-specific historical meanings of the memories of the Meiji Emperor. After viewing the revised stadium design, the budget was scaled down - 40% reduction in budget [from 300bn yen (1.8 bn pound) to 169bn yen (970m pounds)]. Yet, it still could not gain a satisfactory reaction from Japanese architects and the public.

One of the leading Japanese architects, Fumihiko Maki published his article on the design of the new national stadium and protested against the plan in *JIA Magazine* in 2013. This led to organizing symposiums and workshops which discussed the new national stadium; symposium, ‘reconsidering the design of new national stadium in the site-specific historical context’ with Fumihiko Maki et. al. in November 2013; public workshop ‘let’s learn about how the national stadium should be’ with Mayumi Mori et. al. in January 2014; symposium, ‘another possibility for the new national stadium’ with Toyo Ito et. al. in May 2014; international symposium ‘Aesthetics for the city and architecture: case of the new national stadium’ with Fumihiko Maki et. al. in July 2014.

¹³ Zaha Hadid Architects, video clip in <http://www.zaha-hadid.com/videos/#about-us> (accessed 4 April 2018).

¹⁴ Lash, Scott and Urry, John. *Economics Sings and Space* (London: Sage, 1994), 123.

¹⁵ Frow, John. *Signature and Brand* in J. Collins (Ed.), *High-Pop: Making Culture into Public Entertainment*: 56-74, 2002, 63.

¹⁶ See *Ibid*, 70-71.

Public voices in the new media

The criticism of Zaha Hadid's design for the Tokyo Olympic stadium was found in various public events and print media, but also in Internet dialogues. The dialogues are created by those who are concerned with the political conflicts of ideologies, interests from various competing groups. Such public platforms are the so-called 'blogsphere'¹⁷. An architectural critic, Takashi Moriyama started his blog 'about the debates of the new national stadium competition' in November 2013¹⁸; The custodians of the national stadium, Tokyo has started their blog in October, 2013¹⁹; a writer, broadcaster and neuroscientist, Kenichiro Mogi tweeted to support Maki's proposal in June 2015²⁰. There were also articles posted by not-well-known or unknown bloggers: such as 'Is the new national stadium Hadid's curse? Comparison of its cost with that of the other Olympics'²¹; 'Zaha Hadid "is it really true that the new national stadium will be constructed?"'²². In this movement, their negative narratives against Hadid's Olympic stadium design increasingly gained a good deal of the public attention. The collective and shared critical views of Hadid's architectural plan was gaining a strong influential impetus on the government decision process and it was cancelled in the end. This social phenomenon is what Cass Sunstein calls 'cybercascades'. He depicts '[w]ith respect to the Internet, the implication is that groups of like-minded people, engaged in discussion with one another, will end up thinking the same thing that they thought before – but in more extreme form'²³.

Even after the governmental formal cancellation had been made, Hadid's office announced their design's promotion video which obviously deliberately sought to appeal to Japanese citizens to legitimate the appropriateness of their design in August 2015. But it was too late to subvert negative public opinion and to establish proper legitimacy between Zaha Hadid Architects, the government, and citizens. Hence, we can see that the Olympic stadium is a space, which is produced by wider social-political contexts (e.g. star-architects, bureaucracy, and capitalism), but also a space mediated by public spaces, which can be reconstructed and influenced by the unprecedented degree of audience participation through broader dialogues between internet users.

The nature of brand

Yet the failure of Hadid's project cannot be understood without further considering the nature of brand, as discussed above. Frow emphasizes two aspects of brand identity. The first element is that brands have 'personalities'²⁴. The personalization of brand can be found its evidence in the way in which many celebrities ('brand characters') endorsed products. Their 'personal imaginary significance' transfers to

¹⁷ Kang, Jaeho and Traganou, Jilly. The Beijing National Stadium as Media-space. (*Design and Culture*) 3(2): 145-163, 2011,155.

¹⁸ <https://ameblo.jp/mori-arch-econo/entry-11646600598.html> accessed 28 June 2018.

¹⁹ 2020-tokyo.sakura.ne.jp accessed 28 June 2018.

²⁰ <https://twitter.com/kenichiomogi/status/615657064275161088> accessed 28 June 2018.

²¹ https://www.huffingtonpost.jp/2014/06/23/how-much-new-national-stadium_n_5520920.html accessed 28 June 2018.

²² <http://burusoku-vip.com/archives/1757469.html> accessed 28 June 2018.

²³ http://www.worldw.net/classes/Information_Ethics/Sunstein_on_Group_Polarization_and_Cyber-Cascades.pdf

²⁴ Haigh 1998:8 cited in Frow, John. *Signature and Brand* (in J. Collins (Ed.), *High-Pop: Making Culture into Public Entertainment*: 56-74, 2002), 68.

commodities so as to create ‘a semiotic surplus value’²⁵. The second is that brands reveals symbolic value ‘as a reflection of the buyer’s self-image’²⁶. This is a process of imaginary identification²⁷. If we follow this logic, Hadid’s super futuristic avant-garde Tokyo Olympic stadium could reflect an image of Japanese citizens themselves. This is because the Olympic stadium can play as a national symbol. It is designed to be an architectural icon so that the stadium is a showcase of Japan for the world (nation branding) as well as helping to create a positive self-image for Japanese citizens (self-esteem). Following this theory, it could be useful to explore representations of the stadium in the internet in order to illuminate associations between image of the stadium and people’s self-esteem. There are many articles on the ways which the stadium could be likened to everyday ‘objects’: ‘Could it become the Olympic stadium? *Cyclist helmet* shape of the new national stadium’ in 2012 November²⁸; ‘*Go-kart, helmet, potty?* Alternative uses for Zaha Hadid’s Olympic stadium’ in July 2015²⁹. All these negative complains can be understood as revealing the general unease with identifying the stadium as a national symbol in the public domain.



Figure 1 Zaha Hadid’s revised design of the Tokyo Olympic Stadium

Interestingly, the words, ‘shame and embarrassment’ can be also often used to evaluate the stadium design in media text: Fumihiko Maki depicted ‘(the new stadium) will be sneered at and will be an *embarrassing* construction.’³⁰; emeritus professor of Tokyo Institute of Technology, Sachihiko Harashina stated, ‘(the plan of the new national stadium) is *embarrassing*’³¹; a critic and anthropologist, Shinichi Nakazawa also mentioned ‘ (I) feel *embarrassed* with the new plan which ignored the history of Jingu resion’³². The Hadid’s design image has been described using ‘disgraceful’ metaphors (helmet, go-cart, potty) and explained as ‘something shameful or embarrassing’ in statements.

²⁵ Ibid, 66 .

²⁶ Kapfere 1992:2 cited in Ibid, 86.

²⁷ see Laplanche and Pontalis’s 1973:210 cited in Ibid, 86.

²⁸ http://www.afpbb.com/articles/-/2912192?cx_position=9 accessed 28 June 2018.

²⁹ <https://www.theguardian.com/artanddesign/2015/jul/17/go-kart-helmet-potty-alternative-uses-for-zaha-hadids-olympic-stadium> accessed 28 June 2018.

³⁰ <http://world-architects.blogspot.com/2014/10/nationalstadium-symposium.html> accessed 28 June 2018.

³¹ <https://iwj.co.jp/wj/open/archives/255542> accessed 28 June 2018.

³² <https://logmi.jp/63841> accessed 28 June 2018.

It is argued that what is common to ‘shame and embarrassment’³³ is that both are regarded as self-awareness and as revealing the painful states in which ‘the individual believes she or he has failed to meet appropriate standards or conduct, and is seen to have done so in the eyes of others’³⁴. At this point, we can see psychological reflections in usage of the words. This suggests that Japanese people felt ‘shame’, because Hadid’s design failed to meet the appropriate goal. People are also ‘embarrassed’, because such failure has been seen by foreign countries. Such psychological reflections can be understood as threatening Japanese people’s self-esteem. Hence the Hadid’s new national stadium can be seen as a painful and unacceptable image of Japan. This suggests that the power of global architectural brands don’t always succeed in changing conventional values and propose something ‘different’ and the desire to create new lifestyles in transformed urban landscapes. In other words, the Hadid’s aesthetic icon which was explicitly designed for a distinctive moment in a city project, part of the 2020 Tokyo Olympics, in order to create a new socially, culturally and politically meaningful form, did failed.

Banalization of global iconic architecture

The attempt to mobilize of new aesthetics can also cause a weakening in the power of a brand. For Kaika³⁵, contemporary architects have lost their ability to pursue totalizing design ideas and ideals, and started ‘the repetition of successful architectural design forms across the world’³⁶. The point Kaika made is that star architects repeatedly reproduce their successful design forms and apply ‘the same design code to express a multiplicity of meanings in different social and geographical context’³⁷. Hence, there are always contradictions between the global brand’s transnational form and value, and the site-specific history, memory and meanings. The paradox of distinctiveness lead to ‘unspectacular spectacles’³⁸ and the gap between the various narratives, imaginaries and themes of ‘the spectacular global’, and ‘vernacular local’³⁹.

To turn to Hadid’s Tokyo Olympic stadium plan, we can consider how far her ‘signature architecture’ could encapsulate various problematic issues. As a global brand, her Tokyo Stadium designed noticeably applied her signature form in using sweeping curvy streamlines and a computer graphic rendered dynamic shape. A similar form and design code can be easily found in her many other architectural projects⁴⁰, which lead

³³ Crozier 2014:273. Crozier explains, ‘shame’ is caused by negative self-evaluation or failure to meet ideal self-goals, and ‘embarrassment’ involves a matter of social evaluation, rather than self-evaluation (Crozier 2014:270).

³⁴ W. Ray Crozier *Walter Raymond Crozier* (2014) Differentiating Shame from Embarrassment, *emotion review* Vol6 (3): 273.

³⁵ Kaika, Maria, Autistic Architecture: the Fall of the Icon and the Rise of Serial Object of Architecture (Society and Space 29:968-922, 2011), 980.

³⁶ Ibid, 980.

³⁷ Ibid, in the figure caption 980.

³⁸ Horne, John. Architects, Stadia and Sport Spectacles: Notes on the Role of Architects in the Building of Sport Stadia and Making of World-Class Cities. (*International Review for the Sociology of Sport* 46(2): 205-227, 2011), 218.

³⁹ Ibid, 218.

⁴⁰ For examples, London Aquatic Centre and Al Wakrah Stadium (Scheduled inauguration: 2018)

to lose features of distinctiveness, and can therefore become ‘unspectacular spectacles’. An oft found criticism of iconic buildings in general and Hadid’s Olympic stadium in particular is that it can be seen as a product of the architect’s over-self consciousness and is less concerned with the local context.



Figure 2 London Aquatic Centre designed by Zaha Hadid Architects



Figure 3 Al Wakrah Stadium designed by Zaha Hadid Architects

Furthermore, the more her signature can be found on various vernacular everyday objects; including furniture, handbags, shoes, fashion accessories, flower vases, and chandeliers, the more Hadid’s brand exclusiveness and scarcity value became weakened.



Figure 4 Melissa + Zaha Hadid = Cool Plastic Footwear

Yet this can be the immanent nature of brands, since the process of the ‘iterability and seriality’⁴¹ of appearance in brands only enable a particular product or producer to make it/he/she become ‘a brand’. In this sense, the broadly distributed Hadid’s signature and image of branded products (‘objects’ as well as ‘herself’) were always already implied in the very nature of the brand – its powerful, but inherited contingency and ephemerality. Hence, the Tokyo Olympic stadium as one of the most powerful Hadid’s signature products can be identified as the very existential archetypal case of the signature architecture, since it was the ‘branded’ stadium (therefore it can be ‘exclusive’), but it has to be accessible to everyone (therefore it can be ‘vernacular’). The stadium was promoted to blur the boundary between the value of ‘brand’ and that of mass-production. Therefore, Hadid’s global brand was not able to sustain its symbolic matrix of brand power in the context of the construction of the 2020 Tokyo Olympic stadium.

Conclusion

As discussed so far, Hadid’s Tokyo Olympic stadium plan and its trajectory was a good example to understand the shifting role and identity of iconic architects and ‘branded’ architecture in the era of global capitalism. The Olympic sport stadium as a contested juxtaposition of political power, economic interests and symbolic capital, the paper attempts to analyse branding as a concept, which helps to understand reciprocated hermeneutic relationship between material (architects and architecture) and immaterial (a set of new symbolic value and narratives). Branding architecture and creating star architects are a newly found pragmatism for surviving in competitive architectural industry. Narrativization and commodification of star architects and iconic buildings are necessitated to promote their higher public profile and making themselves as a global brand. Hadid was a star architect and the most manufactured icon. Her failure, however, suggests that the power of brand can be subject to contingency. Declining the power of brand can also be discussed in terms of its immanence nature. Brands reveal symbolic value ‘as a reflection of the buyer’s self-image’. In this logic, there was a discrepancy between the symbolic value of Hadid’s architecture and the imaginaries of Japanese self-identity. Also, the repetitive design as artistic signature of iconic building can always generate contradiction: ‘unspectacular spectacles’⁴². Furthermore, the wide diffusion of her signature in consumer goods leads to the weakening of the distinctiveness and exclusiveness of her brand image.

After Hadid’s design was cancelled, a Japanese architect Kengo Kuma took over the Tokyo Olympic stadium project.⁴³ He is not seeking to create spectacular buildings, but to ‘naturally merges with its cultural and environmental surroundings, proposing gentle, human scaled buildings --- constantly in search

⁴¹ Frow, John. *Signature and Brand* (in J. Collins (Ed.), *High-Pop: Making Culture into Public Entertainment*: 56-74, 2002), 71.

⁴² Horn, John. *Architects, Stadia and Sport Spectacles: Notes on the Role of Architects in the Building of Sport Stadia and Making of World-Class Cities. (International Review for the Sociology of Sport 46(2): 205-227, 2011), 218.*

⁴³ There are many critical views about his victory, since Japanese construction industry has been dominated by a few giant construction companies who have capacity to complete mega architectural projects. The second competition required short construction time and cost-down. This only makes it possible to deploy design-built systems in which an architect and construction company work together as a team. Architects have to negotiate and compromise with strong construction companies which retain advanced architectural technologies and rich resources.

of new materials to replace concrete and steel, and seeks a new approach for architecture in a post-industrial society'.⁴⁴ Wood is his preferred material. Concrete and steel can be seen as a symbol of 20th century modernity, but he uses natural wood instead. For him, wood could be the best material to reunite people and nature by creating nearly-forgotten-natural aesthetic sensitivities. Kuma's challenge as an architect in 21st century contemporary society seems to subvert the logic of modernity which is seeking alternative idea of the mass production and banality of 'distinctiveness'. The Tokyo Olympic stadium should be a singular and original entity. However, it can be very hard to avoid to be driven by the rationality of local politics and global capitalism. In hope, his architecture language for the 2020 Tokyo Olympic stadium should be accepted by sight-specific environments and could send to those outside Japan a national message about our legacy for the next generation. But this still leaves a question.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on Contributor

Dr. Tomoko Tamari is a lecturer in the Institute for Creative and Cultural Entrepreneurship and member of the Centre for Urban and Community Research, Goldsmiths, University of London. She is managing editor of *Body & Society* (SAGE). She has recently published 'Metabolism: Utopian Urbanism and the Japanese Modern Architecture Movement' in *Theory Culture & Society*, (2016) Vol.31 (7-8). 'Body Image and Prosthetic Aesthetics' in *Body & Society* (2017) Vol.23 (1).

Bibliography

- Crozier, Walter Raymond. Differentiating Shame from Embarrassment, *emotion review* Vol6 (3): 273, 2014.
- Foster, Hal. *The Art-Architecture Complex*. New York: Verso, 2013.
- Frow, John. *Signature and Brand* in J. Collins (Ed.), *High-Pop: Making Culture into Public Entertainment*: 56-74, 2002.
- Horn, John. Architects, Stadia and Sport Spectacles: Notes on the Role of Architects in the Building of Sport Stadia and Making of World-Class Cities. *International Review for the Sociology of Sport* 46(2): 205-227, 2011.
- Kaika, Maria. Autistic Architecture: the Fall of the Icon and the Rise of the Serial Object of Architecture. *Society and Space* (29): 968-992, 2011.
- Kang, Jaeho and Traganou, Jilly. The Beijing National Stadium as Media-space. *Design and Culture* 3(2): 145-163, 2011.
- Lash, Scott and Urry, John. *Economics Sings and Space*. London: Sage, 1994.
- McNeill, Donald. *The Global Architect Firms, Fame and Urban Form*. London: Routledge, 2009.

⁴⁴ Kengo Kuma and associates <http://kkaa.co.jp/about/kengokuma/> (Accessed 15 April 2018).

Miah, Andy et. al. 'We Are The Media: Non-Accredited Media & Citizen Journalists at the Olympic Games'. in Price, M. & Dayan, D. (Ed.), *Owning the Olympics: Narratives of the New China*, Michigan: University of Michigan Press. 2008.

Sklair, Leslie. Iconic Architecture and Capitalist Globalization. *City* 10(1):21-47, 2006.

Image sources

Figure 1: Zaha Hadid's revised design of the Tokyo Olympic Stadium

<https://skyrisecities.com/news/2015/12/kengo-kuma-and-toyo-ito-reveal-tokyo-olympic-stadium-designs>
(accessed 29 July 2018).

Figure 2 London Aquatic Centre designed by Zaha Hadid Architects

<https://nickrileyarchitect.com/tag/the-aquatics-centre/> (accessed 29 July 2018).

Figure 3 Al Wakrah Stadium designed by Zaha Hadid Architects

<http://www.stadiumguide.com/al-wakrah-stadium/> (accessed 29 June 2018).

Figure 4 Melissa + Zaha Hadid = Cool Plastic Footwear

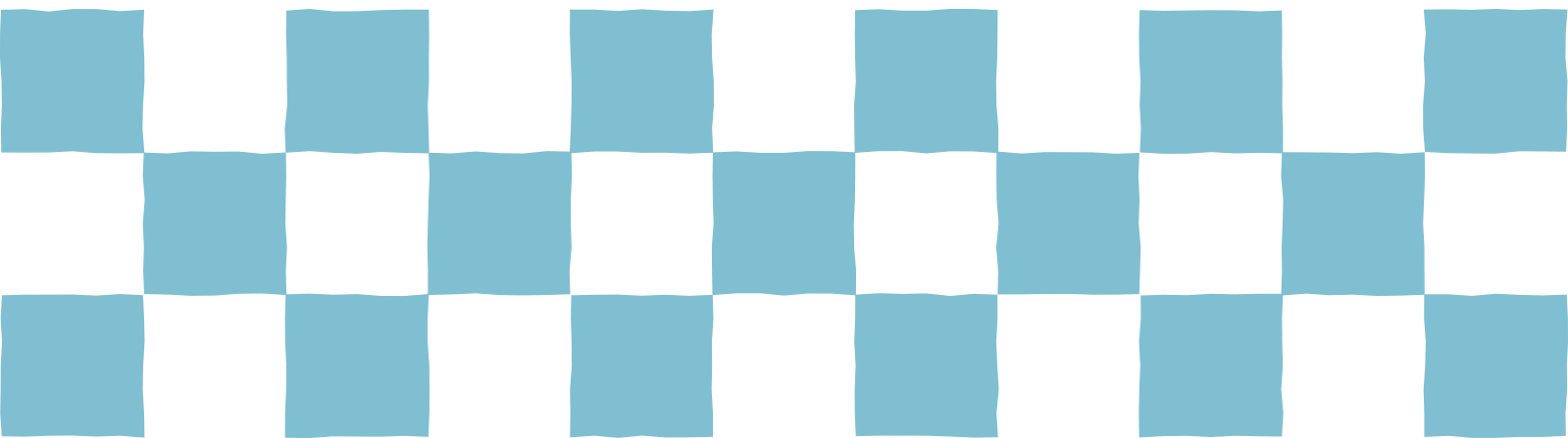
<https://design-milk.com/melissa-zaha-hadid-really-cool-plastic-footwear/> (accessed 29 June 2018).



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

60 **Sites of Exchange: The
Confluence of Global
Networks and Local Interests
in the Planning of Financial
Centres / GUHP***



The use of high rise buildings in financial centers as real estate companies' massive weapons – the case of Mitsubishi Jisho's strategy through times

Raphael Languillon (University of Geneva)

Paper for the following panel: "Sites of Exchange: The Confluence of Global Networks and Local Interests in the Planning of Financial Centers"
Traditionally, although modern Japanese planners adopted Western urban models and standards, Japanese cities remained low until the 1980s, even regarding the planning of financial centers such as Marunouchi, in the capital. The irruption of high-rise buildings was late in comparison with American, European, or even Latin American cities. Then, two waves of fast verticalization changed the urban profile of Japanese cities, especially Tokyo: the 1980s and the Bubble period, under the government of Yasuhiro Nakasone; the 2000s and the urban renaissance policy period, under the government of Jun'ichiro Koizumi. Those two decades changed the planning of financial centers and sub-centers of Japanese cities, partially realigning it on the Western globalized model of vertical urbanism.

Nevertheless, towers and high-rise buildings are not just symbols of a globalized and a-cultural way to produce urban spaces and to mark centrality in global cities. Using the term of "massive weapon" when speaking about towers allows to put in light the geopolitical dimensions behind it. Based on the idea that towers and high-rise buildings are not only due to a globalized accumulation of capital nor a global circulation of urban models of financial centers' planning, the paper discusses the hypothesis that urban developers use towers as geopolitical investments within competitive real estate markets at local and regional scales.

Through the historical analysis of the urban strategy of Mitsubishi Jisho, the paper explores in a political economy perspective the evolution of financial centers' planning, and how does the company use high-rise building as a privileged asset to secure its dominant position in few but strategic and selective spaces. As a leader company, Mitsubishi Jisho started a strategy, which inspired other Japanese companies, such as Mitsui Fudosan.

World Trade Architecture. The Twin Towers and Global Financial Centers

Uta Leconte (Technical University of Munich)

Currently, over 300 World Trade Center's exist worldwide in more than 80 countries, functioning as nodes within a global infrastructure, dedicated to promoting global business development. However, almost fifty years since the inception of the World Trade Center Association, the denomination 'World Trade Center' remains almost exclusively designated to the World Trade Center Complex in New York, with its iconic Twin Towers functioning as representation of capital, power and global trade far beyond their destruction in 2001. The starting point of the proposed paper is the timely coincidence of the completion of the World Trade Center Complex in New York in the early 1970s and the implementation of a new interdependent global currency system, marked by the end of the Gold Standard in 1973 and the initiation of fiat money. Arguing that the specific identity and symbolism of the Twin Towers and the New York World Trade Center has since helped to stabilize an unstable global financial system, this paper asks: what are the effects of the New York Twin Towers on the planning of Financial Centers worldwide? It seeks to examine, how the specific identity of the New York World Trade Center was created, what it served, how it has been maintained over time, and what its effects are on urban planning on a local and global scale. The paper will first describe the relation between finance, architecture and the built environment as well as its sociocultural impact, taking as an example the New York Twin Towers and the concurrent implementation of a new global financial system in the early nineteen seventies. It will then focus on local effects of the Twin Towers and the World Trade Center by looking at its planning history and the urban transformation of Lower Manhattan from port and radio district to World Financial Center, including both stakeholders involved in the project as well as the cultural, political and economic urban context of Manhattan at the time. Finally, it will explore the global effects of the Twin Towers on the planning of financial centres and its urban impacts. By looking at the planning history, effect and impact of the Twin Towers on global financial centers, this paper aims to shed light on the specific agency of architecture as a symbolic object for urban planning, world trade and global connectivity.

Imperial Sediments: Planning the Urban Land Development of Hong Kong's Exchange Square (1980-84)

Sben Korsh (The University of Hong Kong)

In the heart of Central, Hong Kong stands a massive mixed-use development, the history of which reveals latent imperial planning apparatuses in the last years of British-sovereignty. As its name suggests, Exchange Square houses the Hong Kong Stock Exchange, as well as three office towers, shopping arcades, five restaurants, and a public plaza—all elevated above the Central Bus Depot. The present site originates from the early '80s, when British civil servants dominated the leadership of Hong Kong's executive, financial and legislative government bodies. In conjunction with local stock traders in 1980, the government passed regulation requiring the colony's four separate stock exchanges to merge. To accommodate the new unified exchange, in 1982 the Crown Land and Survey Office tendered a 13,000 square meter waterfront site previously reclaimed from Victoria Harbour. The site's Crown Land Lease came with terms requiring the construction of the exchange's trading floor. Hongkong Land—the largest property owner in Central and a subsidiary of one of the wealthiest and oldest colonial corporations, Jardine Matheson & Co.—bought the lease for \$800 million USD, the highest ever for the island. These early developments of the complex occurred during the colony's vast expansion in financial services, and just before the New Territories' impending lease expiration led to the Sino-British reunification agreement in 1984. Drawing on records from the Hong Kong government and stock exchange archives, this paper examines the imperial formations of power (Stoler 2013) in Exchange Square's urban land development. This entails a focus on the waning bureaucratic forms of British free-trade imperialism: from financial macro-economics to land usage and rights. By tracing such relationships in the planning of Exchange Square, this paper shows how imperial legacies shape the recent history of Hong Kong as a global financial centre.

Spatial Operations of Finance in 17th century Batavia and Amsterdam

Robert Cowherd (Wentworth Institute of Technology)

An examination of the 17th century architectural and urban expansion of Batavia (Jakarta, Indonesia) and Amsterdam suggest similarities and differences that reveal important insights into the powerful forces driving the far flung exchange practices that continue to the present. Specifically, the innovative formal-spatial-institutional arrangements of new urban forms speak to the instrumental purposes at the heart of global exchange. Beyond the exigencies of safe harbors and fortifications, the logic of minimizing the distance between boat and shophouse gave us fractal geometries of canal urbanism that expanded in both Batavia and Amsterdam. The simultaneity of explosive growth suggests that the two cities were in certain ways two unequal halves of the same urban agglomeration separated by a 20,000 kilometer trade route. Throughout, there is a dynamic interplay of forces working across purposes, at times opening opportunities to a wider (European) population, while elsewhere operating to exclude participation and establish monopoly controls on trade and the use of force.

The architecture and urban form of key infrastructures and institutions essential to the smooth operation of the Dutch East India Company included the adjacency of the quays, the Weigh House, the city-guaranteed exchange bank, and the position and formal arrangement of the Amsterdam Exchange. Of particular interest is the role played by sumptuary codes on both sides of the sea journey. The spatial conditions at the heart of Amsterdam were entwined with strictly enforced norms of decorum instrumental in producing the conditions of the "open market" price dynamics, and high levels of trust — the essential prerequisites for widespread paper-based trading practices. In Batavia, another set of sumptuary codes announced the identity and status of every person to the guards posted at every urban threshold. Batavia's strictly enforced apartheid system proved essential to securing the port city with a relatively small number of Dutch overseers. Throughout, the paper examines the question: To what extent can the urban and institutional arrangements of the first and arguably greatest multinational corporation said to be co-produced?



World Trade Architecture. The Twin Towers and Global Financial Centers.

Uta Leconte

Doctoral Candidate, Technical University of Munich, Department of Architecture, uta.leconte@tum.de

Currently, over 300 World Trade Center's exist worldwide in more than 80 countries, functioning as nodes within a global infrastructure, dedicated to promoting global business development. However, almost fifty years since the inception of the World Trade Center Association, the denomination 'World Trade Center' remains almost exclusively designated to the World Trade Center Complex in New York, with its iconic Twin Towers functioning as representation of capital, power and global trade far beyond their destruction in 2001. The starting point of the proposed paper is the timely coincidence of the completion of the World Trade Center Complex in New York in the early 1970s and the implementation of a new interdependent global currency system, marked by the end of the Gold Standard in 1973 and the initiation of fiat money. Arguing that the specific identity and symbolism of the Twin Towers and the New York World Trade Center has since helped to stabilize an unstable global financial system, this paper asks: what are the effects of the New York Twin Towers on the planning of Financial Centers worldwide? It seeks to examine, how the specific identity of the New York World Trade Center was created, what it served, how it has been maintained over time, and what its effects are on urban planning on a local and global scale. The paper will first describe the relation between finance, architecture and the built environment as well as its sociocultural impact, taking as an example the New York Twin Towers and the concurrent implementation of a new global financial system in the early nineteen seventies. It will then focus on local effects of the Twin Towers and the World Trade Center by looking at its planning history and the urban transformation of Lower Manhattan from port and radio district to World Financial Center, including both stakeholders involved in the project as well as the cultural, political and economic urban context of Manhattan at the time. Finally, it will explore the global effects of the Twin Towers on the planning of financial centres and its urban impacts. By looking at the planning history, effect and impact of the Twin Towers on global financial centers, this paper aims to shed light on the specific agency of architecture as a symbolic object for urban planning, world trade and global connectivity.

Keywords: Globalization, World Trade Center, Global Finance, Twin Towers, Representation

1. Introduction

This paper describes the Twin Towers as representation of finance and global trade and thus as an integral part of the interrelation between built and economic transformations in finance capitalism. It utilizes the case of the Twin Towers based on the following dispositions: First, their realization coincides with the shift from one global currency system to another. Second, the time of their realization marks the onset of the current globalization and its respective global trade system, and third, being the flagship buildings of the first globally visible World Trade Center, they served and still serve, after their destruction, as a symbolic object of global trade. The existence of the Twin Towers can be read along the development of a at the time newly emerging global infrastructure, one that was connected primarily by air traffic, telecommunication and data connectivity. The Twin Towers' life span can also be seen in parallel with the era of the supersonic passenger jet airliner *Concorde*, which Rem Koolhaas describes together with the Twin Towers as "modernism's apotheosis and its letdown at the same time".¹

Today, after their destruction during the terror attacks on 09/11, the Memorial on *Ground Zero* consists of two void spaces on the footprints of the former physical Twin Towers. Their symbolic presence within the global sign system beyond their destruction shows, that they are "both a physical, architectural object and a symbolic object of financial power and global economic liberalism (...) The architectural object was destroyed, but it was a symbolic object which was targeted and which it was intended to demolish".² The immense global impact of the violent destruction of the Twin Towers and the World Trade Center Complex in New York during the events of 09/11 has since been subject to extensive research and public discourse. This paper, however, intends to exclude the effects caused by the destruction, the absence or the replacement of the former Twin Towers in 2001. Instead, it will focus on the immediate local effect at the time of their realisation by looking at its planning history and the urban transformation from Lower Manhattan as port and radio district to World Financial Center as well as on the long term global effect of Minoru Yamasaki's Twin Towers. It aims to investigate, how and to what extend the



Twin Towers as a symbolic object helped establish global 'World Trade Centerness' and give some examples of their impact on the further development of global Financial Centres.



Figure 1: Stephen Brown. Concorde, The Golden Years.

2. The Twin Towers as representation of global finance

Two years prior to the Twin Towers' official opening in 1973, the end of the monetary system, referred to as 'Bretton Woods System', marked a paradigm shift in global finance with far reaching sociocultural and economic impacts. Based on fixed exchange rates and a Dollar tight to the gold standard, it has been named after the conference that took place in Bretton Woods in 1944, during which the victorious powers under the leadership of the United States had implemented the system to secure a stable post-war economic world order. In 1971, members of the *Group of 10*³ terminated the Bretton Woods System, in favour of a floating exchange rate, with the underlying intention to increase global lending ability. The new system of interdependent global currency system meant fluctuating exchange rates, hence increased instability, uncertainty, risk and speculation. Money was no longer a real asset and bound to real value (gold), but rather the promise of value exchange. The economic underlying this condition was in favour of increasing market liberalisation, privatization, competition and commodification, opposed to the economic concept of Keynesianism, the global system shaping the post-war world order. Today, one is able to analyse the global development and its economic, political and sociocultural impact over a time span of more than forty years. The global financial currency system is closely intertwined with the establishment of a global infrastructure that relies on data connectivity and the expansion of the internet. It also is strongly related to a political shift from national hegemony towards global governance and a transformation of territorial borders and boundaries on all levels. Money, as currency, and with-it business development, has been accelerated in its global spread and flow in an unimagined range over the past forty years, becoming data flow.⁴

In architecture and urban planning, this meant an increasing commodification of architecture and the emergence of real estate development⁵, an ever-growing global business sector, which had discovered architecture, once again, as a product that can be traded and speculated upon, as a financial instrument. In its ability to represent both value and meaning, architecture and the built environment could both be money (e.g. as REITs) and represent money at the same time, enabled by its ability to function as a placeholder for meaning and value and by its iconicity with effects reaching from local to a global scale. For local businesses, developers and architectural firms, the economic and strategic effects have resulted in a need to expand globally and to make themselves visible and recognizable within the global trade system. With global business opportunities growing due to increased connectivity and visibility, at the same time, the need to master contingency and to deal with uncertainty, complexity, speculation and crises, has risen over time. The effect of global financial crises since the early nineteen seventies on global business as well as on architecture and the built environment have been analysed in particular since the aftermath



of the last global crisis in 2008.⁶ In economic theory, crises in their disruptive character have shown to be systemically imminent and serve as both destructor and creator.⁷ In architecture and the built environment, this can be seen, for example, in the relation of global real estate price indexes, stock market indexes and monetary policy. Another imminent disruptor of the global system is its vulnerability to global terrorism. An icon that symbolizes the global system in its totality as did the original Twin Towers, is proven to be a desired subject of destruction. With the attack on the Twin Towers, it was not only buildings, a city or a country that were targeted, but also the global financial system.⁸

In cultural theory, effects of the global financial shift were absorbed almost immediately, starting in the late 1970s⁹: First, by postmodern Marxist theory, which explains cultural phenomena by economic conditions. Second, in postmodern theory in the semiotic tradition of poststructuralist thinking, which is concerned about the creation of signs, meaning and representation. Third, by the emergence of the latter towards a difference theory, which focuses even more on the performance character and interplay of signs; and finally, to today's predominant sociocultural approach of looking at the conditions of architecture and the built environment as a reciprocal process within actors and networks.¹⁰ How do the Twin Towers as the iconic landmark of the New York World Trade Center Complex reflect the described financial system, how do they represent global trade? What do they 'mark', as a landmark of global trade, and with what purpose? Within the sign system that helps establish, maintain and transform our knowledge and perception of the global system, the Twin Towers function as stabilizing elements within an unstable system, representing the grounded within an unstable, volatile globalism that appears intangible and abstract. In their morphology, they are solid, they are concrete; as a monolith they symbolise power and mark territory. In their twinness, a self-stabilizing morphology, they are symbolising the totality of the global: a self-referential and self-regulating system that symbolizes completeness; that dismisses diversity and difference by absorbing otherness into the unity of the global.¹¹ In its context of being the landmark of the World Financial Center, the Twin Towers can well be read in the Marxist context of Fredric Jameson or David Harvey by seeing them as the representation of finance and capital.¹² In a territorial convexity, the Twin Towers represent the World Trade Center as their urban context, they represent 'Manhattanism'¹³, they represent New York, the United States and the global system.

At the same time as the Twin Towers represent the local, they also represent the global, and hence something that is replicable, multipliable despite its singularity, or exactly because of its singularity as an icon. Towering sky-high, on airplane-level, over the city, it is, from far, visible and recognizable as a node within the global infrastructure, performing as a transmitter of meaning. The creation of meaning as building performance has been played with in many ways: The spectacle of the legendary restaurant "Windows on the World", on the top floor of the North Tower can be seen as such event (Fig. 2), another example is the legendary tightrope performance by the French high-wire artist Philippe Petit, who performed a high wire walk between the two Twin Towers in 1974.¹⁴



Figure 2: The Restaurant "Windows on the World" on the 107th floor of the North Tower. Photo: Ezra Stoller



Today, 17 years after the destruction of the 'original' Twin Towers, the two buildings are considered to be 'the' World Trade Center, despite the fact that they are two buildings of a World Trade Center complex consisting of seven buildings in total, despite the fact that they have not been the first World Trade Center since the establishment of the World Trade Center Association in 1968, despite the fact that they are currently more than 300 World Trade Centers worldwide, and despite the fact that they physically ceased to exist. Little is known about the World Trade Center Association, a not-for-profit and non-governmental organization, representing over 300 members in 91 countries,¹⁵ and which claims as a mission to "stimulates trade and investment opportunities for commercial property developers, economic development agencies, and international businesses looking to connect globally and prosper locally", and to "serve as an 'international ecosystem' of global connections."¹⁶

3. Urban transformation and local effects of the Twin Towers

Historically, global trade cities, such as New York City, have developed a significant share of their economic, political and cultural power and identity based on their ports. Being port cities, they were able to participate and profit from world trade, not only economically, but also culturally, given the vital exchange of people, ideas and goods. With global sea trade changing during the first half of the twentieth century, the formerly thriving port areas declined and urban planners needed to envision a redevelopment for their cities to remain or become visible and powerful actors within a future global trade infrastructure. In New York, efforts to redevelop the former port area and in between 'Radio Row' in Lower Manhattan in order to transform the city into a node within a global trade network, which relied on the connectivity of airplanes rather than vessels, had been underway since the 1950s. Stakeholders involved in the planning were the state governments of New York and New Jersey, the New York Mayoral Office, the City Council and the Port Authority of New York and New Jersey, which would later become the commissioner and owner of the Twin Towers.

Discussions for the urban renewal of Lower Manhattan and the planning of a new World Financial Center date back to the first half of the twentieth century. New York City with Wall Street and the Federal Reserve Bank had developed as the first major non-European financial centre and was considered the world leading financial centre by the middle of the twentieth century. Today, New York City is still taking the lead in the Global Financial Centre Index¹⁷. Looking back at the immediate era after the second world war, New York City experienced an economic boom, Wall Street was the symbol of the global economic leadership of the US, the United Nations moved its headquarter back to Manhattan and the urban development of Midtown and its international style skyscrapers strengthened the existing the identity of New York City as an international and powerful, financial hub. During this time, New York City was transforming itself from an industry-driven port city towards a city whose economy thrived mostly on finance, media, communication, tourism and the cultural industry. As a result, corporations and industries left Lower Manhattan either north towards Midtown, or left Manhattan entirely. Hence, Lower Manhattan, increasingly declined compared to its thriving Midtown neighbour.

David Rockefeller, the then chairman of the Chase Manhattan Bank, took the initiative in 1958 to establish the Downtown Lower Manhattan Association, intended to redevelop Lower Manhattan and to implement a World Financial Center in order to attract business and revitalize the neighbourhood. Mostly, he and his allies intended to create a visible symbol to the world that would substantiate New York City and the US as the global economic superpower.¹⁸ As the chairman of Chase Manhattan, one of the largest Banks in the United States with strong ties to its shareholders in the oil industry, an alliance, that derived from the corporate history of the Rockefeller dynasty, David Rockefeller's downtown agenda was not short of bias:¹⁹ Chase Manhattan had completed a new headquarter in the financial district in 1961, speculating on the urban renewal of lower Manhattan. Worrying about the success of this large real estate project, a group of developers, among them Robert Moses, suggested that a massive project such as an iconic World Trade Center would stop the decline and flight of businesses from lower Manhattan.²⁰ David Rockefeller found allies in his brother Nelson Rockefeller, then governor of New York, and the Port Authority of New York and New Jersey, the local transport agency, who would later become the commissioner and owner of the World Trade Center and would shift its business portfolio from transport infrastructure to real estate.

From there, the development of the World Trade Center and the Twin Towers becomes a complex case study of public private partnerships within global cities – including multiple stakeholders and interest groups, providing an example of the complex relation between public interest and funding on the one side and market-oriented private businesses on the other side.²¹ Another significant stakeholder in this process is public engagement and urban activism. The social climate in nineteen seventies New York City had been tense, considering the city was at the verge of bankruptcy, suffered a high crime rate and social tension such as racial riots. Even though the tendering process for the commissioning of the Twin Towers carried out by the Port Authority had as a first criterion, that the architect needed to have "great creative talent that would produce a World Trade Center of historical significance",²² and, as second criteria, that the architect needed to be "consistent in producing outstanding architectural work",²³ urban activists and architectural critics had a different opinion on the design that was



eventually presented. Louis Mumford compared the towers to a “gigantic filing cabinet”²⁴, while Ada Louise Huxtable from the *New York Times* called the Twin Towers “big, but not so bold”.²⁵ Criticism concerning design, public investment, functionalism and symbolism of the Twin Towers are numerous, the strongest critique was part of the wider debate surrounding the broad planning initiative by Robert Moses, lead famously by Jane Jacobs and others.²⁶ Measuring the Twin Towers according to their urban performance, one must note that they did not reach their goal of attracting new business tenants at least in their buildings. Struggling with high vacancy rates, the Towers were eventually mostly occupied by employees of the Port Authority and the City of New York. It can be concluded, that the Twin Towers had been built mostly for global visibility as a symbol of financial power and global trade. In addition, the development had been strongly motivated by political and corporate interests in real estate interests on an urban and state level.



Figure 3: New York Harbour, Lower Manhattan, around 1930.

4. Global effects of the Twin Towers

This paper seeks to identify selected criteria of ‘World Trade Centerness’, which, it argues, have been created as codes by the iconic Twin Towers, which globally spread as “traveling concepts”.²⁷ In this context, it is of interest, how these codes of ‘World Trade Centerness’ have worked over time and space, and to what extent they have adapted to be still valid today. These findings intend to offer explanations about the decision-making criteria of urban planners and developers, when commissioning financial districts with a global visibility and accessibility. It can be widely assumed, that the motivation behind the development of financial districts is, in general, based on criteria such as economic growth, real estate development, an increase in tourism, meeting the needs of business advocates and lobbyists, etc.

In the current globalization, ‘global cities’ are regarded as hubs within a global infrastructure, providing places of financialization as one category, that intersects with various other categories defining global cities.²⁸ It is becoming obvious that over time, places of global Financial Centres might become increasingly relevant beyond global cities, such as off-shore or as part of hinterland or infrastructure space²⁹. When asking about the global sign system and the interrelation of architecture and the built environment within the global trade infrastructure, one needs to ask: What is global trade today, how has it transformed over time since the nineteen seventies? What products are being traded, on which channels, with which currency? Looking at the entire process of the social production of space,



we need to ask: how do urban space and global trade relate to each other? Does global trade take place in financial districts, or designated World Trade Centers, or elsewhere? Are the landmarks representing global trade the same places, where trade is taking place? Do they present what they represent? After all, the tenants of the Twin Towers were mostly employees from the city as well as the local Port Authority. Minoru Yamasaki, the Architect of the New York Twin Towers, has been quoted saying: “World trade means world peace, and consequently the World Trade Center buildings in New York... had a bigger purpose than just to provide room for tenants. The Trade Center is a living symbol of man’s dedication to world peace.”³⁰ Yamasaki’s statement implies that the global significance had been prioritized over the local.

Financial Centers in global cities feature iconic buildings with the intention to make themselves visible, acting like lighthouses, nodes within the global infrastructure.³¹ As morphological objects, they are creators of meaning, image producers and city components, and at the same time, they represent meaning, they function as transmitters of global meaning into the urban space. Financial Centers lacking these signifying buildings, however, might mark their position within global finance by affiliation, such as the World Trade Center Organization. In the following, some strategies will be given as examples, of how ‘World Trade Centerness’ as a specific code, that allows financial centres as architectural objects to be recognized and understood within the global sign system, is being created. Financial districts in global cities, this paper argues, tend to being related in its signage and meaning to the Twin Towers of the New York World Trade Center, making them a World Trade Center prototype. Twinness is certainly one of the more ostensible categories of ‘World Trade Centerness’.³² It is not only represented by many of the member buildings of the World Trade Association, but also in architecture using the World Trade Center’s signage, as for example the Twin Towers of Deutsche Bank in Frankfurt’s Financial District³³, or the Casablanca Twin Center by Ricardo Bofill³⁴, which served as a landmark building for a newly developed commercial and financial district in Casablanca. Strategies of reproduction, meaning either a highly identical morphology compared to the New York Twin Towers, as for example displayed with the Dalian Dingsen Towers in China (Fig.4), or the use of a global designer and planning office, is a strategy applied with the purpose of creating ‘sameness’. An example here is the perpetual commissioning of the New York-based, globally working architectural practice Skidmore Owings and Merrill, which designed One World Trade Center in New York, the successor to the New York Towers, but also several others worldwide.³⁵



Figure 4: WTC Dalian Dingsen Towers, China, 2016. Figure 5: World Trade Center Belgrade, Serbia, 2012.

‘World Trade Centerness’ can also take the shape of refusal, for various reasons being anything but World Trade Center-like (Fig. 5). However, due to the signage and association “World Trade Center”, it represents the symbolism of the World Trade Center, without needing to display it itself.

Another example, that has emerged in particular in the aftermath of the last global financial crisis in 2008, is the strategy of symbolizing finance in architecture, without being finance. The buildings referred to here, for example the residential tower by Raphael Viñoly in New York from 2016, have been designed and planned as globally traded financial asset and seek to be visible as such.³⁶ The category of the lighthouse effect, the building as landmark and skyline, that is being seen in the world and from which the world can be seen, is exemplified with the Cosmo Tower in Osaka (Fig. 5).³⁷ Part of this World Trade Center characteristic is also the use of top floors as



public panorama platforms, bars, retail areas and restaurants. These spaces are created for performance: Seeing the world and being seen from this lighthouse position, is the symbolic marking of nodes within the global infrastructure, that help to make the abstract of the global sizeable.



Figure 5: Osaka World Trade Center Building (Cosmo Tower), Japan, 1995.

5. Conclusion

By looking at the planning history, effect and impact of the Twin Towers on global financial centers throughout and beyond its life cycle, this paper described the Twin Towers as a representation of finance and global trade and hence as an integral part of the relationship between built and economic transformations in finance capitalism. It discussed the specific agency of architecture as symbolic object for urban planning, world trade and global connectivity. It argued, that financial districts in global cities tended to being related in its signage and meaning to the Twin Towers of the New York World Trade Center. The given examples of global World Trade Architectures were designed to demonstrate, how the code of 'World Trade Centerness' is constructed and transmitted within the global system, and how it can be read and transformed despite is varying morphologies.

It can be concluded, that, in their iconicity, The Twin Towers as symbolic object exceed power, prominence and significance of the organization they represent. Moreover, none of the other World Trade Center's display a similarly strong iconicity with a similar global reach. Some of the over 300 buildings aim to represent the Twin Towers in their morphology, for example in their Twinness, while most of them cannot be distinguished from other functional office complexes, would they not be labelled 'World Trade Center'. In sharp contrast to its strong global iconicity, transporting an overall positive image, the New York Twin Towers as a part of the downtown redevelopment of the 1970s had not been a success in its sociocultural transformation of the neighbourhood. It did not fit in by its scale, it did not improve urban quality, business, infrastructure or public space. In this perspective, New York City in the 1970s provides a rich example of the intentions and effects caused by urban globalization. To provide in-depth evidence of the global effects of the Twin Towers on the planning of financial centres, a wider comparative study of the specific urban effects need to be examined over time and space.

In further research, a quantitative analysis of the development of World Trade Centers and financial centers in relation to economic, financial and socio-cultural indices, cycles and crises would provide more detailed information about the phenomenon of 'World Trade Centerness' and its global spread. A subsequent evaluation of various local effects of global 'World Trade Centerness' on the urban environment would complement this investigation. Additional further research is going to be done on the specific role of planning and development in the spread of 'World Trade Centerness', including the roles of urban planners, businesses, developers, investors and users. A study of role, impact and stakeholders involved in the World Trade Center Association will be



undertaken in order to gain a deeper understanding of function and impact of the organization behind one of the most iconic buildings for global finance.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Uta Leconte is a doctoral candidate and research associate at the Technical University of Munich, Germany. She is currently working on her doctoral thesis in Architecture and Cultural Theory. Prior to her research activities at TU Munich, she has been working as an architectural journalist and editor. She holds a Magister Artium (M.A.) in Literature Studies, Comparative Studies and Theatre Studies from Ludwig-Maximilians-Universität in Munich.

Endnotes³⁸

¹ Koolhaas, Rem. *Content. Triumph of Realization* (Köln: Taschen, 2004), 237.

² Baudrillard, Jean. *The Spirit of Terrorism*. (London: Verso Books, 2012), 33.

³ The *Group of Ten* refers to the group of countries that agreed to participate in the General Arrangements to Borrow (GAB), an agreement to provide the International Monetary Fund with additional funds to increase its lending ability. See: Chand, S.N. *Dictionary of Economics*.

⁴ See the work of Steve Graham and Simon Marvin: Marvin, Simon. Graham, Steve. *Telecommunications and the City: Electronic Spaces, Urban Places*. (London: Routledge, 1996), and: Graham, Stephen. *Splintering Urbanism*. (New York: Routledge, 2001).

⁵ See Susan Fainstein's work on the growth of the property sectors in London and New York: Fainstein, Susan S., *The City Builders. Property Development in New York and London, 1980 -2000* (Kansas: University Press of Kansas, 1994, 2001).

⁶ Kaminer, Tahl. *Architecture, Crisis and Resuscitation: The Reproduction of Post-Fordism in Late Twentieth-Century Architecture*. (London: Routledge 2011).

⁷ See Minsky, Hyman P. *The financial instability hypothesis, capitalist processes and the behaviour of economy* (Boston: Cambridge University Press, 1982).

⁸ Baudrillard, Jean. *The Violence of the Global*. In: Baudrillard, Jean. *The Spirit of Terrorism*. (London: Verso Books, 2012 (2002)).

⁹ See for example the theoretical works by Rem Koolhaas, Bernhard Tschumi and Peter Eisenman in the context of the Institute of Architecture and Urban Studies in New York, in particular Koolhaas, Rem. *Delirious New York. A Retroactive Manifesto for New York* (New York: Oxford Press, 1978). Today, since the aftermaths of the last global financial crisis, there is an increased interest in architecture and economic conditions, many of them relating to re-reading Marxist cultural theory. See for example the works of architecture theoreticians Peggy Deamer, Keller Easterling, Felicity D. Scott, Reinhold Martin, Jack Self or Douglas Spencer.

¹⁰ In sociocultural studies, architecture and economic conditions are viewed as actors within a complex interrelated processual system, the social. Architecture is seen as the production of space. See for example Farias, Ignacio (ed.). *Urban Assemblages. How Actor-Network Theory Changes Urban Studies*. Abingdon: Routledge, 2010.

¹¹ Baudrillard, Jean. *The Violence of the Global*. In: Baudrillard, Jean. *The Spirit of Terrorism*. (London: Verso Books, 2012 (2002)), 65.

¹² Jameson, Fredric. *Postmodernism, or, The Cultural Logic of Late Capitalism* (Durham: Duke University Press, 1991). Harvey, David. *The Condition of Postmodernity* (Cambridge, Mass./Oxford: Blackwell, 1990).

¹³ Koolhaas, Rem. *Delirious New York* (New York: The Monacelli Press, 1994 (1978)), 10.

¹⁴ <https://www.theguardian.com/culture/gallery/2015/oct/01/philippe-petit-walk-between-twin-towers> (Accessed March 17, 2018.)

¹⁵ <https://www.wtca.org/about> (Accessed March 17, 2018.)

¹⁶ Ibid.

¹⁷ <http://www.longfinance.net/Publications/GFCI23.pdf>. (Accessed on June 9, 2018.)

¹⁸ See here the history of the Downtown Lower Manhattan Association, <http://www.d-lma.com/history/>. (Accessed March 17, 2018.)

¹⁹ <http://www.pbs.org/wgbh/nova/tech/twin-towers-of-innovation.html>. (Accessed March 17, 2018.)

²⁰ <https://archive.nytimes.com/www.nytimes.com/ref/magazine/08wtc-timeline.html>. (Accessed March 17, 2018.)

²¹ In a continuation of this research, the development of One World Trade Center in New York, or the development of Hudson Yards in New York would be interesting to compare.

²² May, Kyle (Ed.) *CLOG: World Trade Center*. CLOG, 2014, 14.

²³ Ibid.



²⁴ Wainwright, Oliver. *New York's twin towers – the 'filing cabinets' that became icons of America: a history of cities in 50 buildings, day 40*. In: *The Guardian* March 15, 2015. <https://www.theguardian.com/cities/2015/may/20/world-trade-center-twin-towers-new-york-911-history-cities-day-40>. (Accessed March 17, 2018.)

²⁵ Ibid.

²⁶ Further reading: Glanz, James; Lipton, Eric. *City in the Sky. The Rise and fall of the World Trade Center* (New York: Times Books, 2003) p.66.

²⁷ Neumann, Birgit; Nünning, Ansgar. *Traveling Concepts in the Study of Culture*, Band 2 (Berlin/Boston: Walter de Gruyter, 2016 (2012)).

²⁸ The connotation of a 'global city' has particularly been shaped by Saskia Sassen throughout her research during past decades. For Sassen, Global Cities are hubs within a global infrastructure, embedded within the political, economic and financial global system: Sassen, Saskia. *The Global City: New York, London, Tokyo*, Princeton: Princeton University Press, 2001 (1991) Other authors such as Immanuel Wallerstein, Robert Friedman or Manuel Castells use the term 'world city', all stating the linkage of global finance with the world system.

²⁹ See: Easterling, Keller. *Extrastatecraft: The Power of Infrastructure Space*. London/New York: Verso, 2014

³⁰ <http://www.pbs.org/wgbh/nova/tech/twin-towers-of-innovation.html>. (Accessed March 17, 2018.)

³¹ Further reading regarding the role of the tower: Ferguson, Niall. *The Square and the Tower. Networks, Hierarchies and the Struggle for Global Power* (Milton Keynes: Penguin Random House, 2017); Koolhaas, Rem. *Delirious New York* (New York: The Monacelli Press, 1994, 1978), 33.

³² Examples of Twin Towers, that are part of the World Trade center Association: World Trade Center Abu Dhabi (2014), World Trade Center Buenos Aires (2011), World Trade Center Zaragoza (2007), World Trade Center Colombo (1995), World Trade Center Denver (1979), World Trade Center Bahrain (2008), World Trade Center Shiraz (2011), World Trade Center Brussels (1973), World Trade Center Sarajevo (1980), and others.

³³ The Deutsche Bank Twin Towers have been built between 1978 and 1984 and designed by German architects Walter Hanig, Heinz Scheid and Johannes Schmidt.

³⁴ The Casablanca Twin Towers, built in 1999, have been designed by Ricardo Bofill.

³⁵ In addition to One World Trade Center in New York, SOM designed for example the Guiyang World Trade Center (China) and the Korea World Trade Center. <http://www.som.com/projects>. (Accessed March 17, 2018.)

³⁶ The term „billionaire’s row” has been established for a particular type of „super-tall, super-slim“ residential skyscrapers in Manhattan since the past decade. 432 Park Avenue by Raphael Vignoly (2016) became a prominent example for certain morphology and building program, that is designed and planned based on economies of scale, this representing finance rather than dwelling. <https://ny.curbed.com/maps/billionaires-row-57th-street-nyc-construction>. (Accessed on March 17, 2018.)

³⁷ The Cosmo Tower, formerly known as Osaka World Trade Center Building or WTC Cosmo Tower, is the second largest building in Osaka. Designed by Nikken Sekkei in collaboration with New York-based Mancini Duffi (1995). <https://www.ibpcosaka.or.jp>. (Accessed March 17, 2018.)

Bibliography

Baudrillard, Jean. *The Spirit of Terrorism*. London: Verso Books, 2012 (2002).

Baudrillard, Jean. *Simulacra and Simulation*. Michigan: The University of Michigan Press, 1994.

Deamer, Peggy. *Architecture and Capitalism. 1845 to the present*. London et al.: Routledge, 2014.

Dovey, Kim. *Framing Places: Mediating Power in Built Form*. London: Routledge, 1999.

Easterling, Keller. *Enduring Innocence: Global Architecture and its Political Masquerades*, Cambridge: MIT Press, 2005.

Easterling, Keller. *Extrastatecraft: The Power of Infrastructure Space*. London/New York: Verso Books, 2014.

Fainstein, Susan S., *The City Builders. Property Development in New York and London, 1980 -2000*. Kansas: University Press of Kansas, 2001(1994).

Farias, Ignacio (ed.). *Urban Assemblages. How Actor-Network Theory Changes Urban Studies*. Abingdon: Routledge, 2010.

Fulcrum (Self, Jack, and Shumi Bose) (ed.). *Real Estates. Life without Debt*. London: Bedford Press, 2014.

Glanz, James; Lipton, Eric. *City in the Sky. The Rise and fall of the World Trade Center*. New York: Times Books, 2003.

Graham, Stephen. *Splintering Urbanism*. New York: Routledge, 2001

Harvey, David. *The Condition of Postmodernity*. Cambridge, Mass./Oxford: Blackwell, 1990.



- Jameson, Fredric. *Postmodernism, or, The Cultural Logic of Late Capitalism*. Durham: Duke University Press, 1991.
- Jameson, Fredric. *Representing Capital. A reading of Volume One*. London: Verso Books, 2014.
- Kaminer, Tahl. *Architecture, Crisis and Resuscitation: The Reproduction of Post-Fordism in Late Twentieth-Century Architecture*. London: Routledge 2011.
- Koolhaas, Rem. *Delirious New York*. New York: The Monacelli Press, 1994 (1978).
- Koolhaas, Rem. *Content. Triumph of Realization*. Köln: Taschen, 2004.
- King, Anthony D. *Spaces of Global Cultures: Architecture, Urbanism, Identity*. New York: Routledge, 2004.
- Martin, Reinhold. *Utopia's Ghost: Architecture and Postmodernism, Again*. Minneapolis: University of Minnesota, 2010.
- Marvin, Simon. Graham, Steve. *Telecommunications and the City: Electronic Spaces, Urban Places*. London: Routledge, 1996.
- May, Kyle (Ed.) CLOG: World Trade Center. CLOG, 2014
- Minsky, Hyman P. *The financial instability hypothesis, capitalist processes and the behaviour of economy*. Boston: Cambridge University Press, 1982.
- Neumann, Birgit; Nünning, Ansgar. *Traveling Concepts in the Study of Culture, Band 2*, Berlin/Boston: Walter de Gruyter, 2016 (2012).
- Sassen, Saskia. *The Global City: New York, London, Tokyo*. Princeton: Princeton University Press, 1991.
- Scott, Felicity D. *Architecture or Techno-utopia. Politics after Modernism*, Cambridge: MIT Press, 2007.
- Spencer, Douglas. *The Architecture of Neoliberalism. How contemporary architecture became an instrument of control and compliance*. London, New York: Bloomsbury Publishing, 2016.
- Trüby, Stephan. *Geldkulturen. In: Trüby, Stephan. Absolute Architektur Beginner. Schriften 2004 – 2014*. Munich: Fink, 2017.

Image sources

- Figure 1: Stephen Brown. Concorde, The Golden Years, http://www.swafineart.com/pages/signatures_Concorde_The_Golden_Years.htm. (Accessed March 16, 2018.)
- Figure 2: The Restaurant “Windows on the World” on the 107th floor of the North Tower. Photo: Ezra Stoller. <http://nymag.com/news/9-11/10th-anniversary/windows-on-the-world> (Accessed March 16, 2018.)
- Figure 3: Figure 3: New York Harbor, Lower Manhattan, around 1930. <https://www.pinterest.de/pin/521010250627974066/>. (Accessed March 17, 2018.)
- Figure 4: Figure 4: Visualization of Dalian Dingsen Towers, China, 2016.
- Figure 5: Figure 5: World Trade Center Belgrade, Serbia, 2012. <http://mapio.net/pic/p-46644035/>. (Accessed March 27, 2018.)
- Figure 6: Osaka World Trade Center Building (Cosmo Tower), Japan, 1995. Architects: Nikken Sekkei, Mancini Duffi (1995). <https://ext.yakei.jp/spot.php?i=wtc>. (Accessed March 27, 2018.)



INTERNATIONAL PLANNING HISTORY SOCIETY

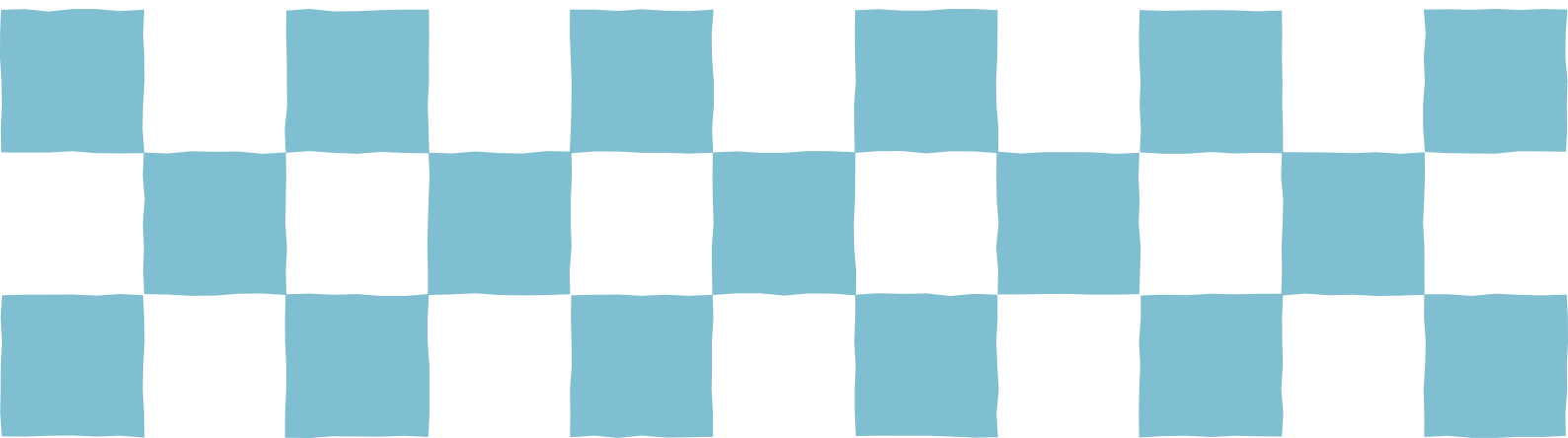
YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

61

Creative Port Cities: Transnational Spatial Practices and Cultural Exchange / Round Table



Wed. July 18, 2018

Session 7 (9:15AM-11:00AM)

Room 7, Yokohama Port Opening Hall

Moderator:

Stephen J. Ramos, Associate Professor, University of Georgia, U.S.A.

Participants:

Dirk Schubert, Professor, HafenCity University, Germany

Michael Kress, Artist, Hamburg, Germany.

Yoshie Ota, Curator, Spiral/Wacoal Art Center, Yokohama, Japan.

Jan Derk Diekema, Director, HaVik; Artist, Groningen, the Netherlands.

James A. Enos, Artist, Assistant Professor of Art, University of Georgia, U.S.A.

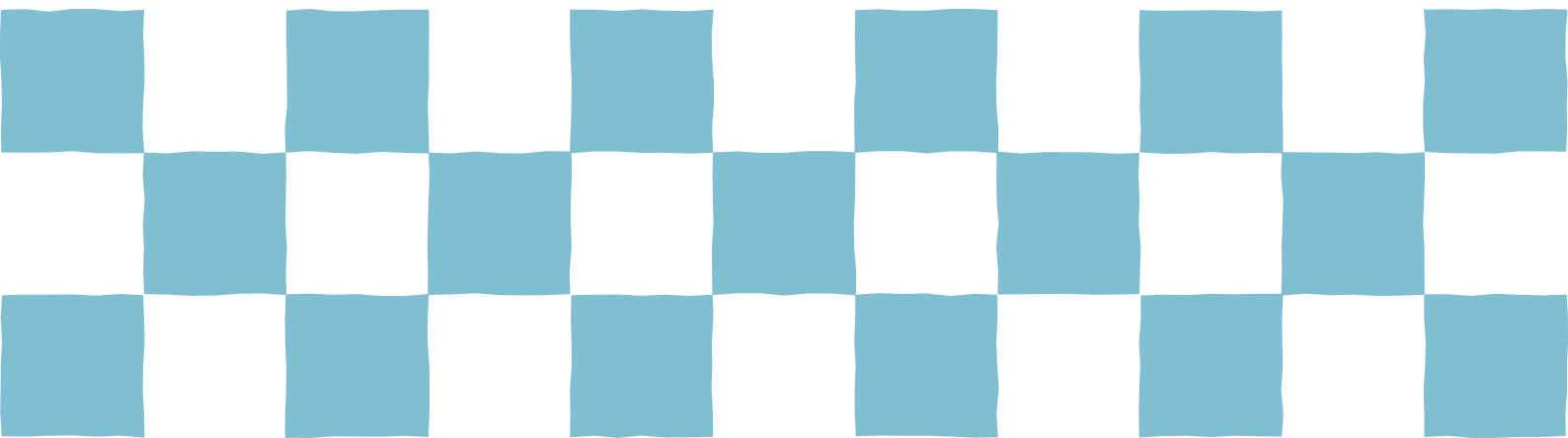
Port city research is a specific methodological and historiographical approach that is “multidimensional, interdisciplinary, and a networked analysis of nodes in larger networks.” The roundtable will emphasize transdisciplinary nature of port cities to explore themes of planning, the public sphere, and cross-cultural exchange among port municipalities from around the world. ZOU-NO-HANA TERRACE, the site of the port ‘s first historic quayside, now promotes multi-dimensional and sustainable mutual exchange among international artists, municipal administrators, and cultural facility staff. After an introductory discussion of contemporary challenges in port re-imagination, the panel of artists and planning historians will consider ZOU-NO-HANA TERRACE to engage in a discussion of how profound, meaningful cultural exchange can reactivate waterfronts and open broader civic engagement among global publics.



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

62 **Surveys and Plans for Japan's
Changing Cities: Kon Wajiro,
Nishiyama Uzo and Eika
Takayama**



Uzo Nishiyama's planning methodology based on investigations of common people's lives

Hiroshi Nakabayashi (Kobe Shoin Women's University)

Uzo Nishiyama was born in 1911 in Osaka. He is known as a founder of dwelling science in Japan. Nishiyama is also called the inventor of the dining kitchen, and he argued for establishing dining rooms separated from sleeping rooms, even in small houses. This theory, derived from substantial investigations of ordinary houses in the 1930s, led to Japan's post-war housing policy known as the nLDK system.

Nishiyama was one generation younger than the great researcher Wajiro Kon, whom he resembled in the way he enthusiastically recorded details of the lifestyle of commoners. Nishiyama considered Kon as his forerunner until his later years. Accustomed to drawing cartoons in his boyhood days, Nishiyama habitually drew sketches to record people's physical lives. He has important accomplishments not only in the field of dwelling science but also in town planning. Uzo Nishiyama holds a unique position in Japanese urban planning.

Viewpoints on urban planning that emphasize his actual life situation are as follows:

Nishiyama established methodology to analyse urban situations from compound viewpoints on social phenomena, including domestic and overseas socioeconomic conditions, infrastructure development, local government administration, community mechanisms, and the history of Japanese culture. Through inductive methodology, Nishiyama proved his rule of dwelling types. However, the theory relating to urban situations could not be derived from the inductive method alone.

In the case of urban problems, epistemology and policy theory are inseparable. Nishiyama saw that it was important to improve the planning ability of citizens to break through negative conditions in Japanese cities; therefore, it was necessary to create 'Image Planning' to serve as a platform for this. He had started to believe 'Image Planning' was the only way to establish sustainable development. Patrick Geddes (1884-1932)—called the father of town planning—put much value on the observational technique, and believed that urban areas should be planned in accordance to local lives and needs. Nishiyama's Image Planning method is very similar to Geddes's thought.

Although Nishiyama had shifted from a top-down planning approach to a more bottom-up one in the late 1960s, he continued to believe that the order of living space was brought about by the accumulation of the lives of the common people.

In particular, he had a strong interest in the development of recreation and the control of vehicular traffic. It is no exaggeration to say that today's frontline urban planning researchers have developed theories under the influence of Nishiyama's ideas, since his emphasis on the quality of life has gained a high reputation.

Nishiyama Uzō: Leading Japanese Planner and Theorist

Carola Hein (Delft University of Technology)

Japanese planning emerged in the mid-19th century, at almost the same time as planning in Europe and America and in response to similar challenges. Yet the different groups of planners did not enter into a balanced exchange. Japanese practitioners and scholars observed foreign practices, commenting on them and occasionally integrating some aspects of them into their own work, while also carefully building on long-standing Japanese traditions of urban form, and testing their knowledge in colonial and post-colonial settings. In contrast, only a few foreign practitioners observed Japanese urban planning efforts, and most of them did so with the goal of proposing their own ideas for improvement - at least until after the Second World War. During the reconstruction period in the early 1950s, foreigners paid little attention to Japanese planning, whereas European and American modernists included some Japanese architects as part of the modernist global architectural scene. Some major figures of Japanese urban planning, particularly those who had made their marks through writing, remained all but unknown outside the island nation. Among them is the architect-planner, historian-theorist, humanist and avowed Marxist Nishiyama Uzō (1911-1994)

Though his writings and projects have only barely been studied either in Japan or outside of it, Nishiyama's reading and interpretation of planning practices - historical and contemporary, in Japan and internationally - influenced Japanese urban planning theory and practice. Notably through his writings, he connected Japanese practitioners to global debates, and his analysis of traditional Japanese urban structures and housing as well as his design proposals helped shape post-World War II Japanese planning. Nishiyama was also a keen observer of the changing Japanese built environment, making an enormous number of sketches, drawings, and photos. This paper focuses on Nishiyama's urban ideas through the lens of the three articles on urban, regional and national planning. These articles document Nishiyama's particular approach to analysing planning history, international examples, and the specifics of the Japanese geography, topography, and urban form. The three texts are only a tiny section of one of the four thematic volumes, each of which was more than 600 pages long and included texts from the 1930s and several decades after. But, they are evidence of transnational and cross-cultural exchanges in conjunction with local practices and the potential role of an individual in such dialogues. They demonstrate how ideas can cross a border and stay there, even if conditions in its original home change. The presentation invites the audience to engage with a major figure in planning who is largely unknown outside Japan; to reconsider Japanese planning history; and to work towards a truly global planning history.

Urban Psychological Studies by Kon Wajiro and other architects in the early 20th century Japan

Izumi Kuroishi (Aoyama Gakuin University)

In Japan, the demographic shift from rural areas to cities has continued consistently from the end of the 19th century to the end of World War II and even to the present. The precise number of migrants changed and so did the reasons for this migration, but the population shift influenced political dynamics of regional, urban and national land planning and challenged cultural sustainability among people while they moved between these areas. Ishida Yorifusa pointed out that Japanese institutions and scholars have been unable to recognize the totality of urban planning, national land planning and regional planning, and as a result, scholars have failed to fully understand the impact of this migration onto urban form throughout the nation. In other words, scholars of Japanese urban planning were (toshi keikaku) divided from rural studies (noson keikaku) categorically, and the placement of migrant population planners have reacted by employing various theories, but the study of the problem of social and cultural change of the living conditions of rural to urban immigrants remained insufficient. Also, the insufficient implication of social studies in the engineering oriented urban and architectural studies and the absence of the field survey in these field of studies have been pointed out after the 1970s. In the light of Japan's current crisis of a rapidly aging population, extending economic and cultural gaps between rural and urban and particularly of the huge numbers of people forced to be relocated from Fukushima after 2011, it is important to reexamine the issues of demographic shift, as well as the social, cultural and psychological problems of migrants.

Based on such a consciousness, this study examines the works of urban space and planning by Okada Shinichiro, Sato Koichi and Kon Wajiro, as the earliest modern examples of Japan to clarify how they situated the migrant's social and psychological issues in urban studies by utilizing field survey methods.

Okada Shinichiro and Sato Koichi proposed the necessity to examine the social impact of urbanization from psychological aspects beyond architectural discipline. Following them, Kon Wajiro has published "The Primal Principles to remodel urban space" and "Psychological Foundation of Urban Psychology" in 1917 to construct the idea of urban study. Their works were related to the slum surveys and urban environmental studies conducted by sociologists in collaboration with the Ministry of the Interior. Along with this study, Kon conducted rural survey from 1910s, and after the disaster in 1923, studied the transformation of people's ways of life, in the name of Modernologio. From 1929, he conducted a research of a wide range of urban transformation Shinpan Dai-Tokyo Annai (New Guide book of Great Tokyo) from critical viewpoint. This study will explain how their ideas and methods prioritized the disparity and psychological issues in urban space, and what insight they propose to our current examination of urban study.

Urban planning for the Yamashiro hot spring by Eika Takayama: The history of urban planning for a tourist destination in Japan

Ryo Nishikawa (Rikkyo University)

Historically "urban planning" was developed in order to build a city in which people can safely and comfortably live. Therefore, urban planning for large cities or suburban cities are the main issues both for the academic topic or actual political works. The City Planning Act of Japan reflects these issues and divides national land into two parts: land which is controlled under the Act, and land which is not controlled under the Act. This means that city planning does not literally exist for the latter areas. Rural areas with tourist destinations (such as beach resorts, hot spring resorts and mountain resorts) are one type of area that the City Planning Act does not always cover but the necessity of it is mentioned. These tourist destinations exist for tourists to rest or play. This means that they differ from general cities both in terms of users and purposes. However, the necessity of urban planning for tourist destinations in Japan has been acknowledged by some of the professors. In order to contemplate the urban planning of tourist destinations for the future, it is necessary to review the history of planning for tourist destinations. It is also important to clarify how urban planners in Japan previously engaged with tourist destinations. Therefore, this research focuses on Eika Takayama, one of the greatest urban planners of Japan, and explores his works on tourist destinations. He was engaged with the Japan Spa Association and did three types of activities: 1) participation in the discussions held in hot spring areas; 2) a tour to hot spring resorts in Europe with members of the committee and; 3) the actual urban planning of hot spring areas. This paper mentions his relationship with the plans for the Yamashiro hot spring town. He proposed to create a new town and the detailed planning drawings were prepared. He planned a town for tourists to stay comfortably through the planning of walkways, green areas, tourist facilities and so on. The new town was built in the 1960s but the street pattern was totally modified in actual and his idea to create a new town was partly realised through the building of tourism facilities and parks. However, in terms of his contribution to the Yamashiro hot spring it was his idea to conserve the old town by creating a new town that was most important. Takayama's proposal made it possible for Yamashiro town to conserve its uniqueness, the spatial feature and the old town. Its uniqueness is a special tourist attraction today. It was the hidden and unique planning theory of Yamashiro by Takayama to meet the needs of development and to conserve the uniqueness of the town at the same time.



Uzo Nishiyama's planning methodology based on investigations of common people's lives

Hiroshi Nakabayashi*

* PhD, Kobe Shoin Women's University, baya@js6.so-net.ne.jp

Uzo Nishiyama is known as a founder of dwelling science in Japan. He argued for establishment of dining rooms separate from sleeping rooms. This theory was derived from substantial investigation of ordinary houses in the 1930s. Nishiyama also made important accomplishments in town planning, and holds a unique position in Japanese urban planning. He established methodology to analyse urban situations from compound viewpoints on social phenomena, including domestic and overseas socioeconomic conditions, infrastructure development, and local government administration. In the case of urban problems, epistemology and policy theory are inseparable. Nishiyama saw that it was important to improve the planning ability of citizens to overcome negative conditions in Japanese cities; to this end, it was necessary to create a platform of 'Image Planning'. Although Nishiyama shifted to a more bottom-up approach in the late 1960s, he continued to believe that the order of living space was brought about by the accumulation of the lives of common people. Today's frontline urban planning researchers have developed theories under the influence of Nishiyama's ideas, as his emphasis on quality of life has gained a high reputation.

Keywords: Uzo Nishiyama, Japanese Planning, Image Planning, Common People's Lives

Introduction

Uzo Nishiyama is known as the founder of dwelling science in Japan. Nishiyama is also called the inventor of the dining kitchen, and he argued for establishment of dining rooms separate from sleeping rooms, even in small houses. This theory, derived from substantial investigation of ordinary houses in the 1930s, led to Japan's post-war housing policy, known as the nLDK system (several sleeping rooms + living/dining kitchen).

Uzo Nishiyama also made important accomplishments not only in the field of dwelling science, but also in town planning. He holds a unique position in Japanese urban planning. In the 1960s, Nishiyama issued four books that consolidated his findings thus far. One of these was *Reflections on Urban, Regional and National Space (Chiiki kukan ron)*. Chapter 1, 'The Structure of the Base of Life' (1942), Chapter 9, 'An Essay on the National Structure' (1946) and Chapter 10, 'Mountain Cities' (1946) were translated into English by Professor Corolla Hain of Delft University of Technology and published in 2017. It is interesting that these three articles on planning theories still draw attention after 70 years. Calora Hain(2017) claims Nishiyama should be reviewed from a global perspective, comparable to Patrick Geddes, called the father of urban planning, and Lewis Mumford, famous for civilization criticism. However 'other major figures of Japanese urban planning, particularly those who had made their marks through writing, remained all but unknown outside the island nation. Among them is the architect-planner, historian-theorist, humanist and avowed Marxist Nishiyama Uzo (1911-1994), who had collaborated with Tange on the master plan for the 1970 Osaka World Expo. Nishiyama made his contribution mainly through his teaching and his many writings rather than his few works'.

This paper aims to summarize the history of formation of urban planning theory from a unique



viewpoint based on analysis of the lives of ordinary people.

Nishiyama's research background

The Edo era in Japan was such a peaceful era that natural and social sciences developed greatly, not only in the capital of Edo but also in local cities. Japan closed its doors to the outside world, but the world's newest scientific knowledge came to Nagasaki from the Netherlands and China. Thus, even though its industrial revolution was 100 years behind Europe's, development of natural and social sciences accelerated rapidly during the Meiji Restoration. During the stage when academic fields were undifferentiated, great intellectual figures emerged, like biologist, naturalist and ethnologist Kumagusu Minakata (1867-1941), who tried to record the entire phenomenon of nature and society; Kunio Yanagita (1875-1962); and Wajiro Kon (1888-1973). Uzo Nishiyama is a descendant of these figures in that he recorded human life in detail.

By the time Nishiyama entered the old-system high school, it had been decades since the establishment of the University of Tokyo, and differentiated academic fields were progressing in their development. The department of architecture in Kyoto University was established in 1920.

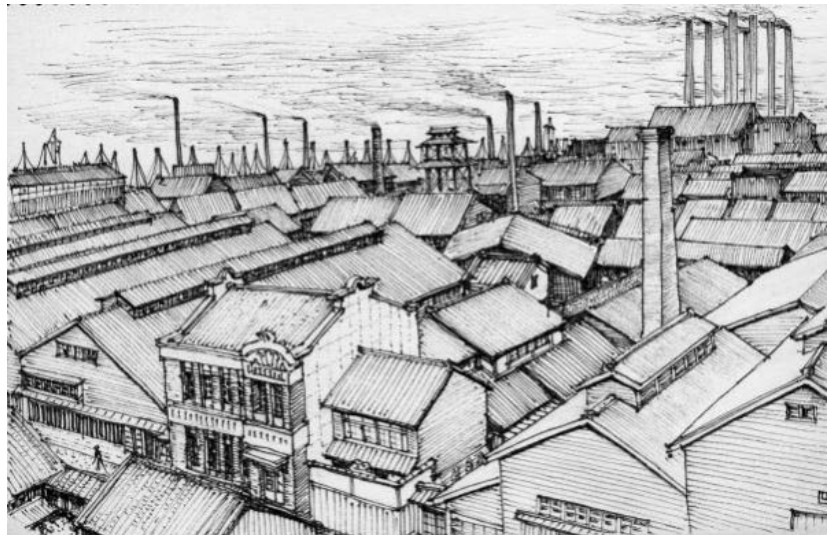


Figure 1. Nishiyama's sketch of Osaka in 1919. *His father's iron work factory extended in 1919; the European-style house at the front was their residence.*

Nishiyama was one generation younger than Wajiro Kon, whom he resembled in his enthusiastic recording of the details of commoners' lifestyle. Nishiyama considered Kon his forerunner until his later years. Having become accustomed to drawing cartoons in his boyhood days, Nishiyama habitually drew sketches to record people's physical lives.

Nishiyama (1971), in his commentary at the end of Kon's book, states the following: 'We cannot find the field of academic subjects such as "life" or "lifestyle" among the existing specialized departments. However, there is a researcher who continues to do one unique activity. Right now it is said that Kon Wajiro's "science of lifestyle" is an academic discipline to take up such a problem'.

Addressing housing problems and urban problems

Students of the Japanese old-system high school in the 1930s knew Marxism on an intimate level. Nishiyama organized an independent study group called 'DEZAM' among his high school classmates.



They studied theories associated with social progress based on historical materialism, and examined the actual situation, the survey of real issues, the solution plan proposal and the production system concept. Through such activities, Nishiyama strengthened his interest in housing problems and urban problems.

During Nishiyama's school days, the department of architecture in university had few systematic lectures on housing. However, he was influenced by two professors who were interested in housing problems at the time. These were Goichi Takeda (1872-1938), a founder of the Department of Architecture of Kyoto University who had a strong interest in housing, and Koji Fujii (1888-1938), who pioneered residential research from the viewpoint of environmental engineering.

Nishiyama began his investigation of housing in 1935. His survey was to copy the premises and housing plans stated in the housing construction notification submitted for enforcement of City Building Law. This mass survey of common households, approximately 3000 units in total in Osaka, Kyoto, and Nagoya, took two years. It was the first full-fledged research on urban housing in times when nationwide housing investigations had not yet been conducted. After his obligatory military service, Nishiyama engaged in research on wartime housing policy as a research engineer in the newly founded Housing Association's research department for about three years, from June 1941 to March 1944 (Nishiyama 1983).

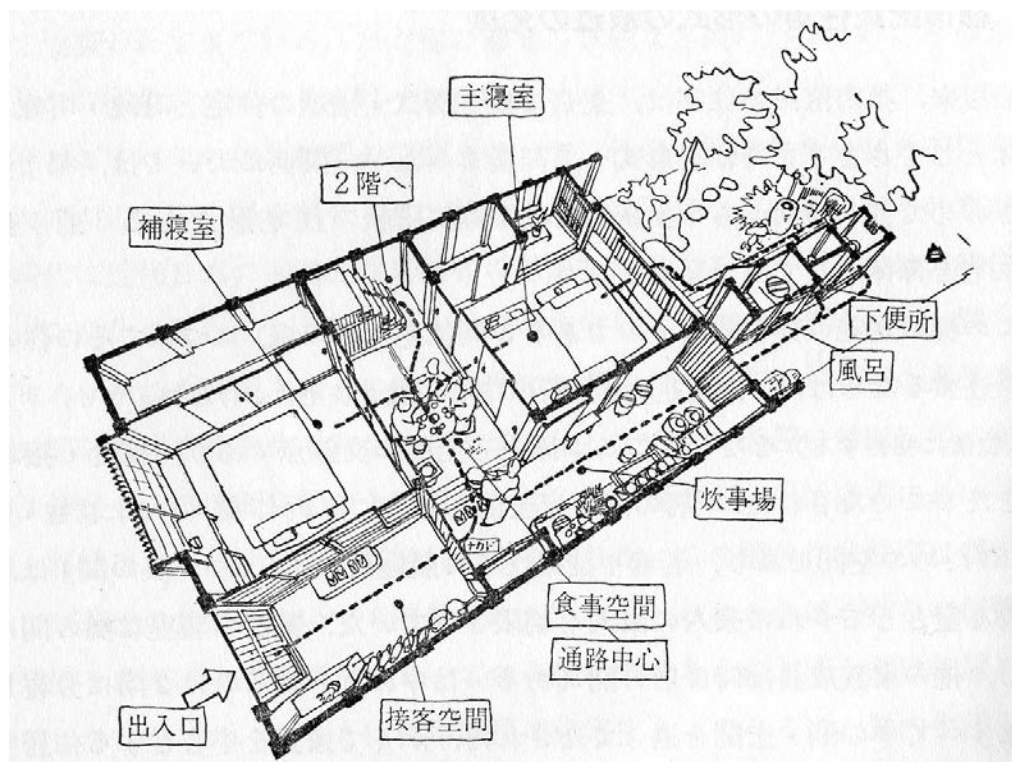


Figure 2. How to live in traditional wooden houses. *This figure is important as it shows Nishiyama's discovery that most families used the middle room as a dining room, and that it was reasonable to use the dining room as a passageway.*

Shoji Sumita (2008) and Moriaki Hirohara (2006) emphasize that the centre of Osaka, a high-density residential area of the Taisho Period, bred Nishiyama's ideological soul. Affecting the habitus nurtured by Nishikujo of Osaka, Nishiyama developed his analytical theory and created the novel methodology of the



‘survey on how to live’.

In 1938, the Ministry of Health and Welfare was separated from Ministry of Home Affairs. The Ministry established a Housing Association to stabilize people’s lives in wartime through social policy. Kazuo Okochi (1905-1984), a famous proponent of wartime social policy, was involved in this initiative. The housing policy was an important aspect of the ‘1940 regime’ that determined Japan’s post-war social structure. According to Hirohara (2006), Nishiyama had a close relationship with Okochi.

Proposal of ‘Image Planning’

Through inductive methodology, Nishiyama proved his rule of dwelling types in the area of housing. However, the theory relating to urban situations could not be derived from induction alone.

Nishiyama thus established a methodology to analyse urban situations from compound viewpoints on social phenomena, including domestic and overseas socioeconomic conditions, infrastructure development, local government administration, community mechanisms, and the history of Japanese culture.

With respect to urban problems, epistemology and policy theory are inseparable. Nishiyama saw that it was important to improve the planning ability of citizens to overcome negative conditions in Japanese cities; therefore, it was necessary to create a platform of ‘Image Planning’. He began to believe that ‘Image Planning’ was the only method by which to establish good development. But even as Nishiyama became a great scholar in the theory of housing planning, he was trying to think about the system of living space in the national land and the city. Before World War II, he studied in depth the urban planning theory of foreign countries, and developed a new urban and national theory. The typical argument was an idea that districts as small as elementary school districts each have their own characteristics and become divisional, and that large cities are organically united by these small districts. Immediately after the end of the war, Nishiyama announced the ‘mountain city’ concept of slopes for effective use of Japan’s land. He consistently defended the high-density living supported by Japan’s unique lifestyle, and in the 1960s he announced the idea of ‘Ieporis’, huge apartment houses.

The modern architectural movement in Japan has been influenced mainly by CIAM through Le Corbusier and Gropius. Hirohara (2006) emphasizes that Nishiyama may have learned the most of CIAM

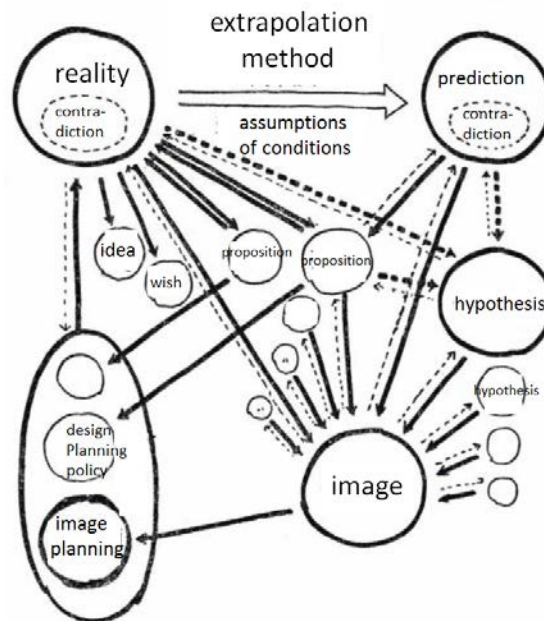
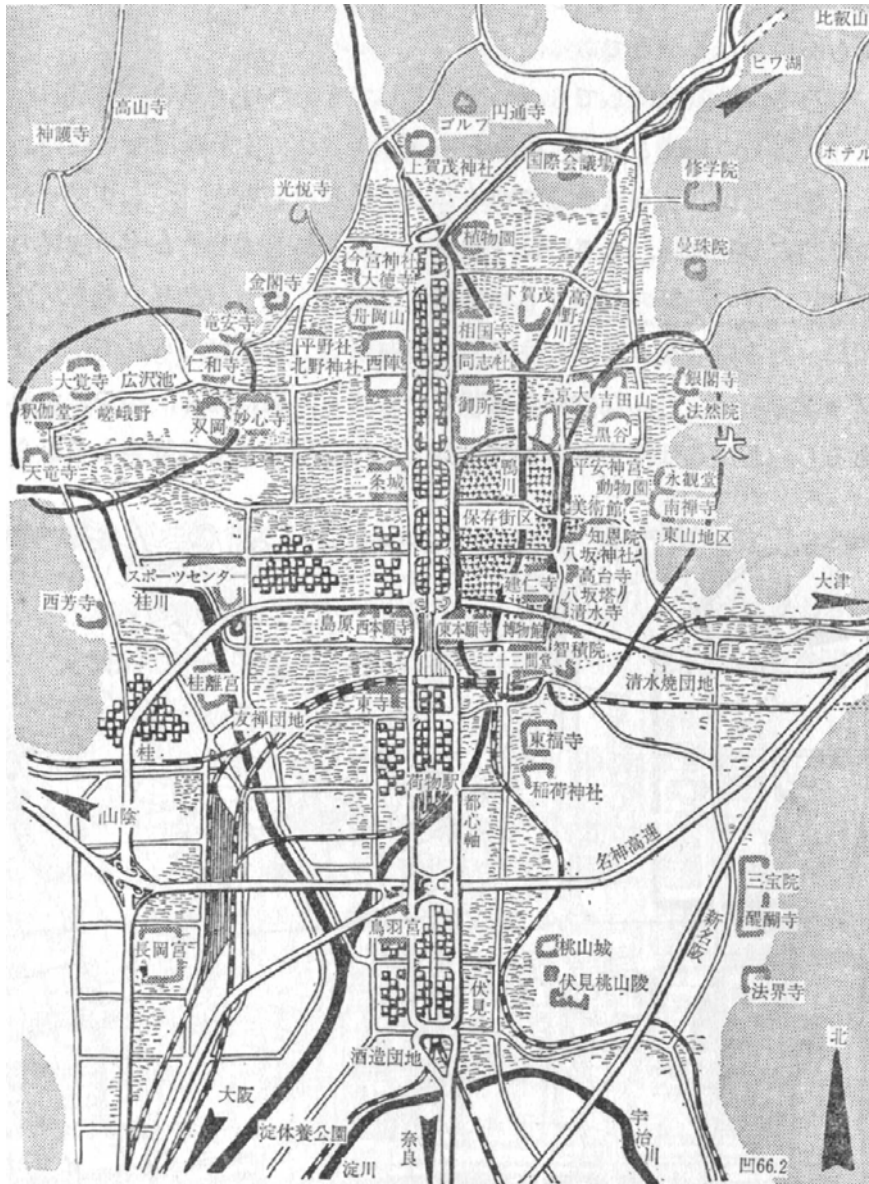


Figure 3. Relationship between prediction and planning.



through the theories of Ernst May (1886-1970), a German architect and city planner who worked on many Ziedrungs in Frankfurt am Main during the Weimar period. Nishiyama's theory was similar to his in that May consistently tried to consider housing and city planning jointly to physically express the life of a new era, and continuously pursued the ideals of the metropolitan area. Regional space consists of various elements, making it difficult to draw a simplified ideal figure for such space. Nishiyama proposed Image Planning as a method for discovering contradictions in living spaces and revealing the visual perceptions of a space. Image Planning, as used by Nishiyama, was a starting point for synthesizing the actual conditions and demands of people, and for presenting a concrete plan that visualizes the future. This



method enriches the plan and can extract further contradictions. In addition, Nishiyama believed that it was important to determine what kind of difficulty was present to paint the 'inferno', which indicates the damage caused to the environment as the development plan progresses.

Figure 4. Kyoto Plan 64.



A particularly famous work of Image Planning by Nishiyama is 'Kyoto Plan 64', which rearranges the centre axis of high-rise housing in downtown Kyoto. This proposal aimed to avoid the destruction of the cultural assets of other districts and to build a non-cluttered urban structure, independent of motorization. Various scholars and town planners have evaluated this plan. Nishiyama described it as a way to protect the mountain skyline and maintain the appearance of a historic city. Furthermore, he argued it to be half the meaning of 'inferno'. Sumita (2008) note that Nishiyama's affinity for high-density living was a result of empathy for Osaka's traditional terraced house districts, which he had seen in his childhood.

Patrick Geddes (1884-1932), called the father of town planning, placed great value on observational technique, and believed that urban areas should be planned in accordance with local lives and needs. Nishiyama's Image Planning methodology is very similar to Geddes's thought.

Criticism of motorization and emphasis on recreation and tourism

An analysis of human life is at the centre of Nishiyama's methodology when dealing with the city and region. In particular, he had a strong interest in control of vehicular traffic and development of recreation. These two points were foresights of Nishiyama's, and can be considered outstanding insights into human life.

Nishiyama was the first to develop criticism of motorization. He insisted that a lifestyle relying too heavily on the car disturbs the order of the region, resulting in poor living space. In the mid-1960s, the number of vehicles owned was less than ten percent of the current number. The concept plan 'Kyoto Plan 64', announced in 1964, shows a solution that would be like this if car traffic were kept out of a large city. In the 1970s, Nishiyama presented the idea that the street car system, which was meant to hinder automobile traffic and was abolished in various cities, was a very human form of public transit. He also headed the campaign to protect Kyoto's street car system, which would be abolished in 1978.

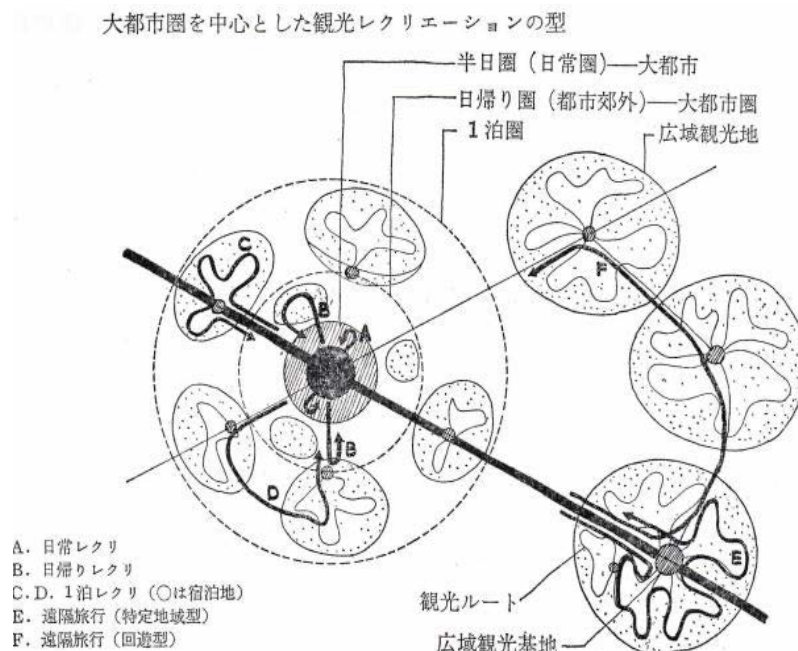


Figure 5. Types of tourism for metropolitan area residents. A --- daily recreation; B --- single day recreation; C/D --- overnight trip; E --- remote trip (particular district); F --- remote trip (migration route).



Another outstanding insight of Nishiyama's was how to capture human recreation. Recreation is time for self-realization in modern society. Nishiyama argued that both the region and human beings themselves would make healthy developments through recreation and sightseeing. In housing planning, evolution from the nDK to the nLDK plan --- that is, addition of a living room --- insisted on incorporating awareness of enjoying life. Likewise, Nishiyama believed that regional order was created in free time separate from controlled labour. As recreation evolved, he saw the potential for arts, research activities and volunteer activities to blossom greatly. The year following the Great Hanshin Awaji earthquake in 1995 was called 'the first year of volunteers' in Japan, but this was the year after Nishiyama's death. As early as the 1960s, Nishiyama already had the idea that volunteer activities would be incorporated into a new social structure. Nishiyama considered sightseeing a high-dimensional form of recreation and considered preservation measures for scenic sites and cultural properties with great interest. At an interdisciplinary meeting, he proposed that sightseeing was important to the future of Japan, and lamented that other researchers did not sufficiently understand its significance. Based on that idea, he criticized the fact that tourism development, which damages an area's good resources during periods of high growth, was inconsistent.

The perspective of considering development of an area based on human life was handed down to Nishiyama's disciples, such as Hiroshi Mimura, his successor at Kyoto University. They contributed in creating the foundation of tourism studies to clarify tourism methods supporting regional development, not biased toward management theory for the tourism industry.

Bottom-up planning theory

From the end of the war to the high growth period, the nation-led plan did not proceed as smoothly as Nishiyama predicted. During this time, the townscapes of historical cities such as Kyoto and Nara were damaged, and a number of pollution problems occurred across the country. Obvious wrongs emerged in various places in Japan. By 1970, Nishiyama shifted his thinking significantly to a bottom-up planning approach. But despite this shift away from a top-down planning approach in the late 1960s, he continued to believe that the order of living space was created by the accumulated lives of common people. To investigate these issues, he proposed a new course at Kyoto University. The Department of Architecture established the Regional Living Space Plan Course in 1965, the year following the Tokyo Olympic Games.

Nishiyama was constantly conscious of Kenzo Tange from the University of Tokyo. At the Osaka World Expo in 1970, he worked as a comprehensive producer with Tange, but proposed a completely different approach to the region. In a nutshell, Tange championed regional development of the large-scale, expansive type after the period of high growth, while Nishiyama aimed to enhance daily life spaces, occupational proximity, and suppression of car traffic. He sought a sustainable and compact city in the true sense.

Nishiyama demonstrated an outstanding ability to build a theory for living space, but to facilitate good regional development, steady support for the concept that residents and experts need to cooperate was required. Following the 1970s, the prospects of urban planning were seen in the grassroots movement. Nishiyama also tackled real regional problems. In his later years, his activity focused on townscape issues, such as high-rise condominium problems in large cities such as Kyoto and preservation movements concerning traditional townscapes in various places. He asserted that traditional-style houses were cultural assets with the accumulated wisdom of life and should not be destroyed.

Nishiyama was busy in the years after his retirement from Kyoto University in 1974. He completed three volumes of the great book '*Nihon no Sumai*', a full-length study of all kinds of houses in Japan in



1985. In addition, he published five books on his own history. Finally, he wrote a novel modelled after his father, a story with '*Ajigawa Monogatari*', a kind of an urban development history of the Meiji and Taisho eras in Osaka.

As an important trigger for the preservation movement concerning the townscape of Ise Kawasaki in 1979, Nishiyama participated in surveying historic townscapes of various places, such as Okayama Ashimori, Kagawa Sadamitsu, and so on. He stated that 'the local residents' movement itself is a real city plan'. He was beginning to shift his thinking toward the bottom-up approach at this time. Nishiyama ultimately made a great contribution to the preservation of traditional townscapes in various districts and the rise in popularity of tourism to such places in Japan.



Figure 6. Nishiyama's sketch of Ise Kawasaki. *The traditional townscapes on one side were removed for river improvement.*

It is noteworthy that Nishiyama took a global perspective to the issue of townscape preservation. Because the Japanese government did not readily ratify the UNESCO World Heritage Convention established in 1972, the 'Santo Shimin Forum'-a solidarity organization in Nara, Kyoto and Kamakura with Nishiyama as a representative-urged the government to ratify it and to call for direct contact with UNESCO (Nakabayashi 2008).

Nishiyama was involved in the formation of several movement organizations, and he was active as a social movement researcher. Such organizations included 'Shin Kenchikuka Gijutsusha Shudan', which focused on architectural design and urban planning for social progress; 'Santo Shimin Forum', an association of efforts to preserve the landscape of the ancient capitals of Nara, Kyoto and Kamakura; and 'Kyoto Machidukuri Shimin Kaigi', a liaison organization for the movement against destructive development in Kyoto. Furthermore, Nishiyama stood at the forefront of peaceful and democratic movements beyond the areas of housing and planning; for example, he was the first chairman of the labour union at Kyoto University.

Conclusion

With a view toward the realities of contemporary Japan, on the one hand, the traditional townscape has been eliminated from the centres of large cities, which have become non-residential areas. On the other hand, metropolitan areas have spread and suburbs are filled with empty houses in this era of population decline. Nishiyama foresaw this disaster. Although he confronted the modern situation after wartime, his



ideas are relevant even today.

To summarize, policies emphasizing large-scale development have been implemented consistently in Japan. National land and urban planning are both very immature in terms of accumulating the wisdom and creativity of the people. As mentioned above, through the experience of the 1960s, Nishiyama's urban planning attitude changed from a top-down theory, such as the proposal of Image Planning, to a bottom-up theory. His method also moved from a priori approach to an inductive approach. However, Nishiyama consistently adopted the attitude that space should be organized through the accumulation of residents' lives, both when planning a new vision and when preserving historical streets.

Nishiyama knew that the resident movements in the 1970s and 1980s had tried to protect the traditional townscapes and to create districts that controlled for car traffic. He was particularly interested in the development of recreation activities and allowances for motorization. Therefore, he reconstructed the theory of urban planning in terms of residents' movements.

The ideas of Nishiyama, which insist that residents' movements and even oppositional movements are a clue to positively creating new space, have an important meaning even today. It is no exaggeration to say that today's frontline urban planning researchers have developed theories under the influence of Nishiyama's ideas, since his emphasis on quality of life has gained a high reputation. It is necessary to re-evaluate the method presented by Nishiyama in order to create a new urban planning system built on the demands of and knowledge regarding residents' daily lives.

Bibliography

- Hein, Crola (2018) "Introduction" *Chiiki Kukan Ron (Reflections on Urban, Regional and National Space)*.
- Hirohara, Moriaki (2006) "Note about Uzo Nishiyama."
- Katagata, Shinya (2008) "Ch. 3: Kosokeikaku: Kukan No Ronri to Yosoku" in Shoji Sumita and Nishiyama Uzo Kinen Sumai Machidukuri Bunko, *Nishiyama Uzo No Jutaku, Toshiron* (Nihon Keizai Hyoronsha).
- Nakabayashi, Hiroshi (2008) "Ch. 4: Chiiki Seikatsu Kukan Keikaku-Ron to Keikan Keikaku-Ron" in Shoji Sumita and Nishiyama Uzo Kinen Sumai Machidukuri Bunko, *Nishiyama Uzo No Jutaku, Toshiron* (Nihon Keizai Hyoronsha).
- Nishiyama, Uzo (original 1946) "Sangaku toshi" in Nishiyama, Uzo, *Chiiki kukan ron* (Keiso Shobo, 1968).
- Nishiyama, Uzo (original 1960) "Recreation to Kukan," in Nishiyama, Uzo, *Chiiki Kukan Ron*, (Keiso Shobo, 1968).
- Nishiyama, Uzo (original 1966) "Koto Hozon Keikaku" in Nishiyama, Uzo, *Chiiki kukan ron*, (Keiso Shobo, 1968).
- Nishiyama, Uzo (1968) "Vision Ron" in: Nishiyama, Uzo, *Chiiki kukan ron*, (Keiso Shobo, 1968).
- Nishiyama, Uzo (1971) "Commentary" in: Kon, Wajiro, *Seikatugaku (Domesu Shuppan)*, 1971).
- Nishiyama, Uzo (1983) *Seikatukukann No Tankyu*, (Keiso Shobo).
- Sumita, Shoji (2008) "Ch. 1: Nishiyama Jutaku-Gaku Ronko." In: Shoji Sumita and Nishiyama Uzo Kinen Sumai Machidukuri Bunko, *Nishiyama Uzo No Jutaku, Toshiron* (Nihon Keizai Hyoronsha).

Image sources

Figure 1: Nishiyama, Uzo, *Ajigawa monogatari* (Nihon Keizai Hyoronsha).

Figure 2: Nishiyama, Uzo, *Jutaku keikaku* (Keiso Shobo, 1967).



Figure 3: Nishiyama, Uzo, *Chiiki kukan ron* (Keiso Shobo, 1968).

Figure 4: Nishiyama, Uzo, *Chiiki kukan ron* (Keiso Shobo, 1968).

Figure 5: Nishiyama, Uzo, *Chiiki kukan ron* (Keiso Shobo, 1968).

Figure 6: Kanko sigen chosa houkoku Vol.8, *Ise Kawasaki no machinami* (Kanko Shigen Hogozaidan, 1980)



Urban planning for the Yamashiro hot spring by Eika Takayama: The history of urban planning for a tourist destination in Japan

Ryo Nishikawa*

* *PhD, Assistant Professor, College of Tourism, Rikkyo University, r.nishikawa@rikkyo.ac.jp*

Though the necessity of urban planning for tourist destinations in Japan has been acknowledged by some of the professors, little progress has been made so far. In order to contemplate the urban planning of tourist destinations for the future, it is necessary to review the history of planning for tourist destinations. It is also important to clarify how urban planners in Japan previously engaged with tourist destinations. Therefore, this research focuses on Eika Takayama, one of the greatest urban planners of Japan. It explores his works on tourist destinations. He was engaged with the Japan Spa Association and did three types of activities: 1) participation in the discussions held in hot spring areas; 2) a tour to hot spring resorts in Europe with members of the committee and; 3) the actual urban planning of hot spring areas. This paper mentions his relationship with the plans for the Yamashiro hot spring town. With strong demand for the development of tourism during the 1950s, he proposed to create a new town for development while conserving the historical and unique centre of Yamashiro. His idea contributes to the uniqueness of Yamashiro today.

Keywords: tourism planning, hot spring, Eika Takayama, resort

Chapter 1. Introduction

Historically “urban planning” was developed in order to build a city in which people can safely and comfortably live. Therefore, urban planning for large cities or suburban cities are the main issues both for the academic topic or actual political works. The City Planning Act of Japan reflects these issues and divides national land into two parts: land which is controlled under the Act, and land which is not controlled under the Act. This means that city planning does not literally exist for the latter areas. Examples of the latter areas include natural environments and small villages in rural areas. These areas have no city planning regulations. This character of the City Planning Act of Japan is totally different from those in Great Britain and Germany, which cover all national land. Rural areas with tourist destinations (such as beach resorts, hot spring resorts and mountain resorts) are one type of area that the City Planning Act does not always cover but the necessity of it is mentioned^{1,2}. These tourist destinations exist for tourists to rest or play. This means that they differ from general cities both in terms of users and purposes. The reason why city planning for tourist destinations is necessary is because, in Japan, most of the tourist destinations including hot spring resorts were rapidly developed by developers in the 1950s to the 1960s. As a result, special environments (such as areas of natural beauty and historical landscape) were lost, and tall and large buildings occupied tourist destinations. The problem is that the buildings developed still exist, and the landscape of the tourist destinations in Japan is not of high quality, as in Europe.

Recently, the number of foreign tourists to Japan has been growing, and redevelopment has taken place in some of the tourist destinations. There is a possibility that tourist destinations will be rapidly redeveloped in the near future, as they were in the 1960s. Therefore, it is important to discuss the city planning of tourist destinations now. It is also important for city planners to know how they should or can relate to tourist destinations. But, before discussing it, it is more important to understand the history of city planning for tourist destinations in Japan, and how city planners have previously related to tourist destinations. Indeed, history tells us the future. In this context, this paper focuses on Eika Takayama (1910-1999), historically one of the greatest city planners of Japan³. The purposes of this paper are as follows: first, it clarifies his thoughts about, and relationships with, tourist destinations through an analysis of his contribution to the Japan Spa Association. Second, it clarifies his contribution to a tourist destination by focusing on the actual planning he completed.

Previous works of research that are related to this paper include some papers on the history of city planning for tourist destinations in Japan, and some papers on the works of Takayama. The former research⁴ mainly focuses on city planning before World War II and did not pay much attention to city planning for tourist destinations after World War II. The latter research looks at his character and works for national big projects⁵, and city planning theory that he created⁶. His relationships with tourist destinations are still unclear. Document investigation is the methodology used for this research. The author found a planning document by Takayama at the Takayama archives (Takayama bunko) at the University of Tokyo.



Chapter 2. Takayama and his relationship with the Japan Spa Association (JSA)

The JSA was established in 1929 for the purposes of the academic research of hot springs, and for the support of hot spring areas. Takayama looked back on his relationship with the JSA in 1988 and said that he had a good relationship with the JSA before World War II⁷. He became a personal acquaintance of Dr. Manabe (from the medical department of the University of Tokyo, who was a member of the academic committee of JSA) when he injured his breast while playing football⁸. In the 1930s the JSA collected the architectural design of a shed for drinking hot spring water in 1934. Takayama applied two sketches of the shed to the JSA.

Takayama had a deeper relationship with the JSA after the end of World War II. Takayama, Fumiaki Irisawa, who was the vice President of JSA, and Hideo Anzai, who was the executive editor, all graduated from the same junior high school and, thanks to this common background, they gradually got to know each other⁹. From 1954, Takayama worked as a member of the academic committee of JSA and, from 1960 until he died in 1999, he worked as an executive member.

Three types of activities undertaken by Takayama can be analysed through the magazine *Onsen* (by the JSA), and his statements: 1) participation in the discussions held in hot spring areas¹⁰; 2) a tour to hot spring resorts in Europe with members of the committee¹¹; and 3) the actual urban planning of hot spring areas. Takayama was engaged in the actual planning of hot spring areas through the works of the JSA, including Asama in 1954 and Yamashiro in 1955. The planning of Asama ended in failure because the local government could not cooperate with the citizens¹². On the other hand, the planning of Yamashiro was partly achieved, and Takayama's contribution was quite considerable. Therefore, the development of the Yamashiro hot spring and Takayama's contribution will be discussed in the following chapter.

Chapter 3. The development of Yamashiro town and Takayama's plans

3.1 History of the Yamashiro hot spring town

The Yamashiro hot spring is located in the Hokuriku region in Japan. It is said that the Yamashiro hot spring was found about 1,300 years ago. A central bath called "Soyu" (総湯) and its surrounding plaza were developed, and they formed the centre of the town. A picture drawn around the 1880s shows that hotels surround the plaza. The plaza was also used as a theatre.

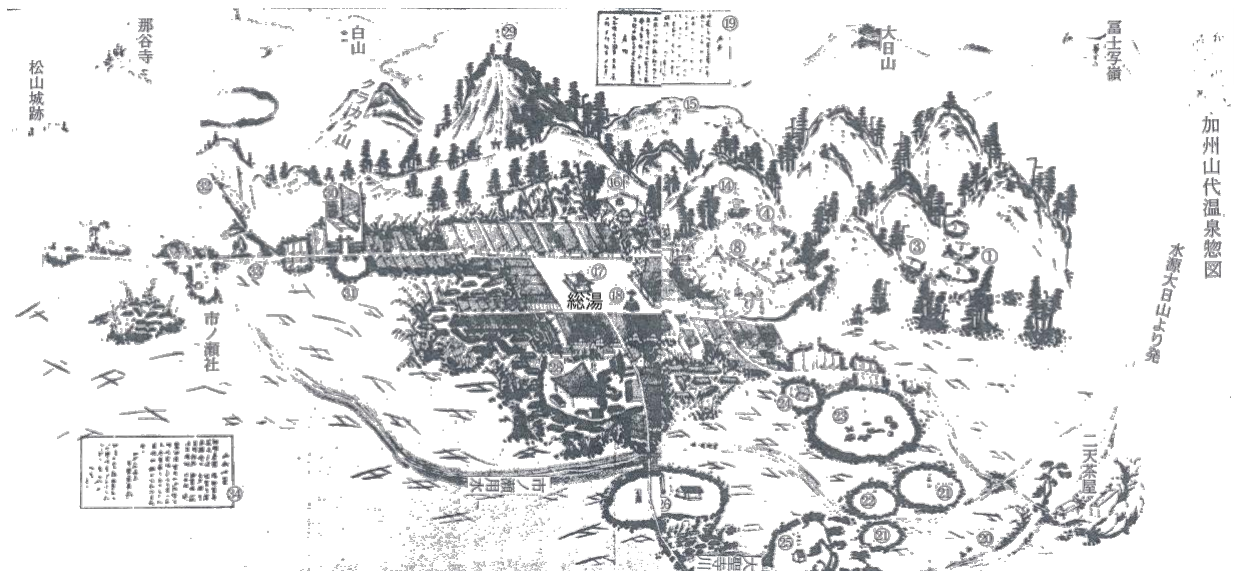


Figure 1: Old painting of the Yamashiro hot spring (around 1876 to 1883)¹³

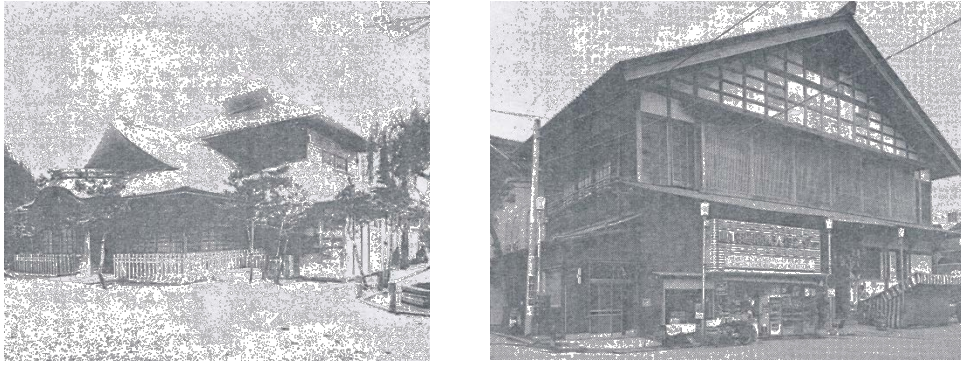


Figure 2: Architecture of the Soyu¹⁴ (Left: at the end of the Meiji era; Right: at the beginning of the Showa era)

In Yamashiro town only the 18 hotels that surrounded the central bath historically had the right to use and control the hot spring water. The group of 18 hotels were called “aza jyuhachi” (字十八). Many troubles took place between aza jyuhachi and the other stakeholders, such as the local authority and the local citizens, in relation to the hot spring water. These stakeholders wanted to use the hot spring water, but aza jyuhachi denied them use of it. In the 1930s the aza jyuhachi even resisted the Japanese army, who wanted to use the hot spring water to cure injured soldiers. It can be said that the aza jyuhachi conserved their established historic interest, but this could be a shackle on town development.

However, after World War II, with the need to develop the town, the local government tried to overcome the situation. On July 1st 1953, a general assembly of the JSA was held in Kanazawa, close to Yamashiro town. In the meeting, a chairman of the Yamashiro town parliament was in attendance and requested discussing plans for Yamashiro hot spring. This was passed unanimously. It was the first time that the JSA agreed to cooperate for one hot spring area. Just two days after the general assembly, four specialists visited Yamashiro town. On July 22nd, Takayama visited Yamashiro town for the first time. He was commissioned as a specialist of urban planning from JSA through the introduction of a tourism association called “Zen Nihon Kanko Renmei” (全日本観光連盟). The field study record is found at the archives of Takayama. According to the memo, Takayama walked around the town in the afternoon and talked with the local people, including citizens and parliament. In the memo Takayama wrote: ‘It is important to fix the characteristics of this town’ and ‘relations between the new town and the old town are important’. This means that the creation of a new town was already in his mind.

Discussions in parliament had also started. On March 4th, 1954, a meeting for the development was held and in 1956 a committee for the development was launched, and Takayama was commissioned to be a member as a specialist of urban planning. On March 2nd, 1956, the town mayor Kadoya said that, in Yamashiro town, there had been many conflicts between many stakeholders which had interrupted the development of the town since before World War II. Nonetheless, the importance of development was gradually getting noticed by the citizens. Therefore, it was urgent that scientific planning by authoritative professionals was undertaken for the future development of Yamashiro.

Regarding a matter of hot spring water, with the progress of technical development, new hot spring sources were found. It was an important factor for Yamashiro to develop.

3.2 A plan by Takayama

Takayama visited Yamashiro three times and made a plan. A planning document was found at the archives of Takayama. The title of it was as follows; ‘Yamashiro model hot spring planning, October 1956, Takayama laboratory, Architecture Department, Faculty of Engineering, the University of Tokyo’ and was 60 pages long. In the introduction of the report, it says that Takayama laboratory was commissioned to make a plan and Takayama and his assistant professor Shigetugu Kojima (both from the University of Tokyo) and Kazushige Deguchi and Susumu Takahashi (both from Zen Nihon Kanko Renmei) was in charge of the report. An index of the report is as follows.

Chapter 1 Current state of Yamashiro town

1. Geographical and natural aspects



2. Social and economic aspects

- a) Increasing rate of population
- b) Industry
- c) Areal composition and residential condition
- d) City planning
- e) Current state of the development area

Chapter 2 Background of the development

1. Direction of the development of Yamashiro town
2. Characteristics of the development area in relation to the old town

Chapter 3 Planning

1. Area composition
2. Traffic planning
3. Process and land use planning
4. Facility location planning

Chapter 4 How to realise the plan

1. Establishment of Yamashiro town politics
2. Survey and statistics
3. Funding
4. Source of hot spring
5. Contact with city planning department
6. Finance and methodological issues
7. Building

Chapter 5 Conclusion

Chapter 1 is an analysis of the current state of Yamashiro. 1) Accessibility, 2) the amount of hot spring, 3) weather, 4) increase rate of population, 5) industry, 6) employment rate and number of employees, 7) labour force population, 8) area composition and residential condition, 9) city planning in the past, and 10) land owners of the development area are reported. Items one to eight were compared with towns around Yamashiro, such as Yamanaka town and Katayamazu town – both of which were also famous for hot spring resorts. Chapter 2 shows the direction of the planning based on the analysis shown in Chapter 1 and discussions with stakeholders. Yamashiro town could choose to develop as a farming town or a commercial town. Further, the report mentioned that Yamashiro town should be commercially developed by using the hot spring water more effectively. Indeed, because there is enough hot spring water, the citizens wished Yamashiro town to be a commercial town, and companies outside Yamashiro town wanted to invest for development. Yamashiro town was surrounded by famous hot spring resorts, but the report said that it was not wise to compete with them. Rather, they must make clear the differences between them, and avoid competition. Chapter 3 contains the plans. The report mentioned that the old houses around the Soyu were built by wooden architecture and needed improvements but lacked funding. Therefore, it was chosen to create a new town. The characteristics of the new town should be a recreational district with modern facilities to meet the needs of the citizens living around Yamashiro town and the west side of Japan. Chapter 4 summarises the points to realise the planning. It includes financial aspects. Chapter 5 is the conclusion.

3.3 Details of the plan

The plan is composed of four detail plans: areal planning, traffic planning, land use planning, and facility location planning.

(1) Areal planning



In the Yamashiro old town, only along with roads from the central bath to the two stations had a hot spring atmosphere in the old town and the other areas were densely built-up by wooden architecture. Thus, he planned to create a new town with a hot spring atmosphere, and to connect the old and new town by commercial zones. Furthermore, circulating commercial zones were planned for walkways. The residential areas and commercial areas were separated by a pedestrian path, which means to separate zones for residents and tourists.

(2) Traffic planning

Traffic planning was composed of regional roads and inner-city streets. The latter included streets that connect between the old city and the new city; the old city and the natural scenic area; the new city and the natural scenic area; and commercial areas and a silent pedestrian pathway.

(3) Process and land use planning

It shows a gradual process of realising the plans. It was proposed to create a park after a land readjustment project. It was planned that the new town and the park close to it would be realised during the first stage, and the residential areas during the second stage.

(4) Facility location planning

It was planned that every building would be built with uniformity. An auditorium with 1,000-2,000 seats and a recreational facility with enough public space were planned to conserve the landscape and for use as parking lots. The recreational facility had a hot spring pool and a gym. It was planned that a two or three-story building (with a library, exhibition hall or hot spring research centre) would be a community centre. They planned to have fruit farms in some areas of the new town, which intended to use the hot spring water to grow fruits. It was planned that a total of 20 accommodation facilities with 80 beds on average would gather along the river. It was planned to have 30 commercial shops, some of which were with accommodation.

From the drawing, accommodation facilities, commercial facilities, community centre, and a public bath were located along one straight road from the station to the auditorium. It was planned that the auditorium would be a symbolic building.

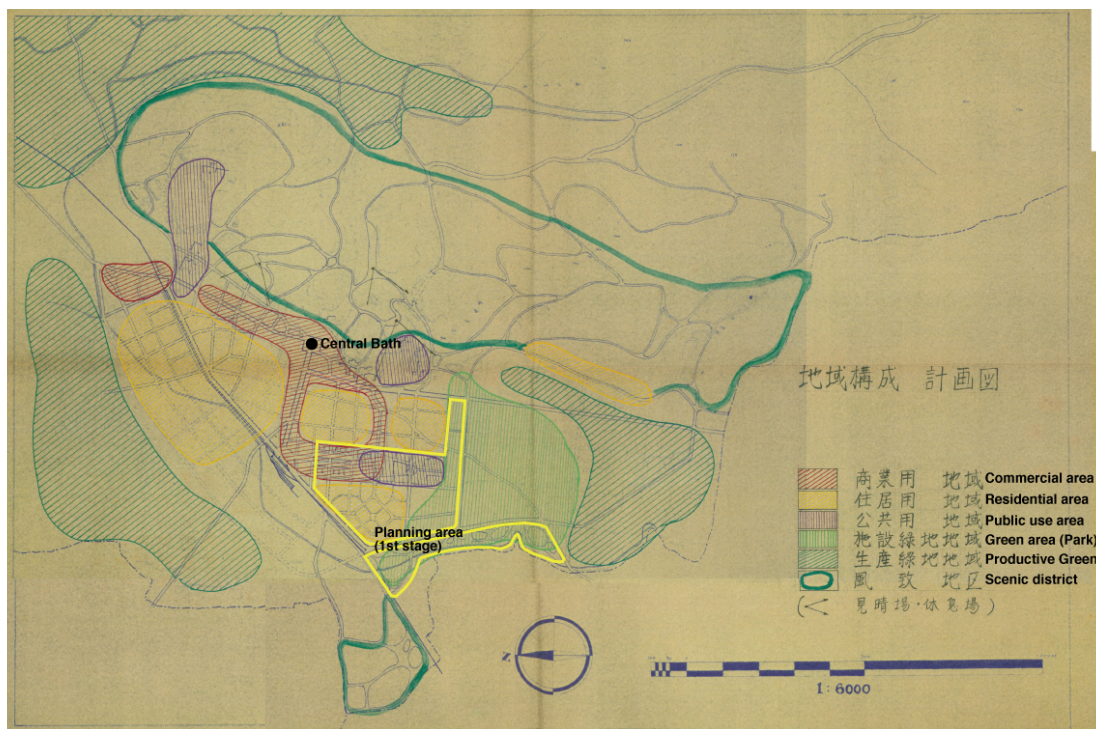


Figure 3: Areal planning

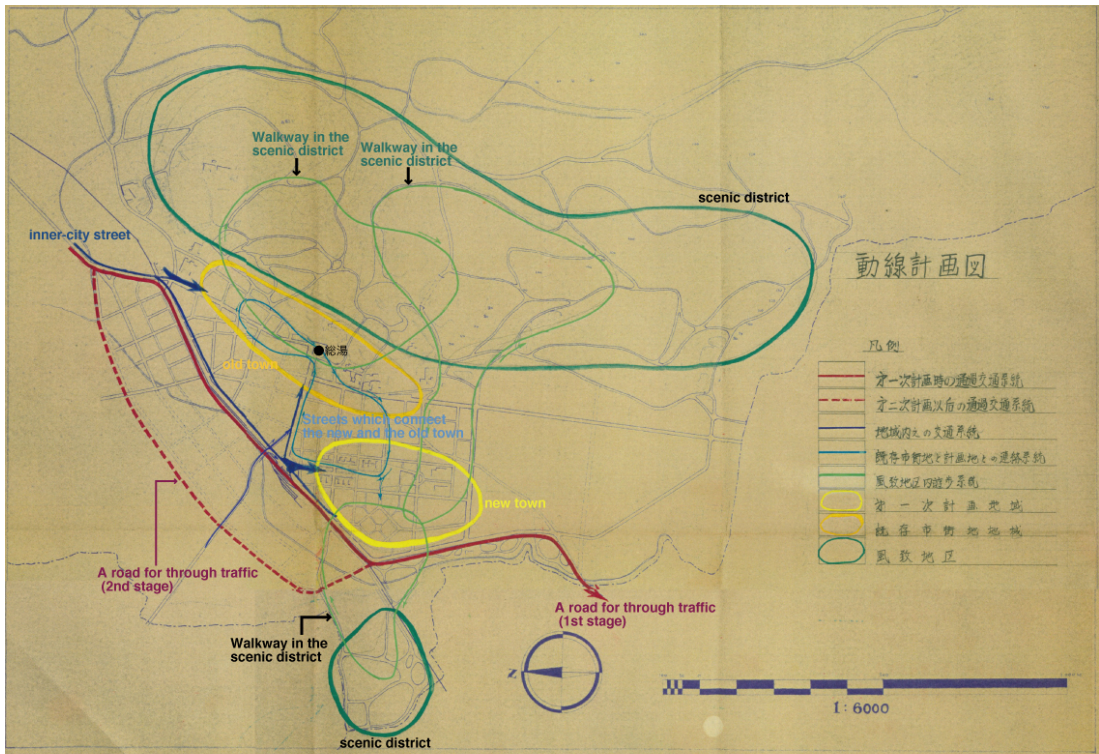


Figure 4: Traffic planning

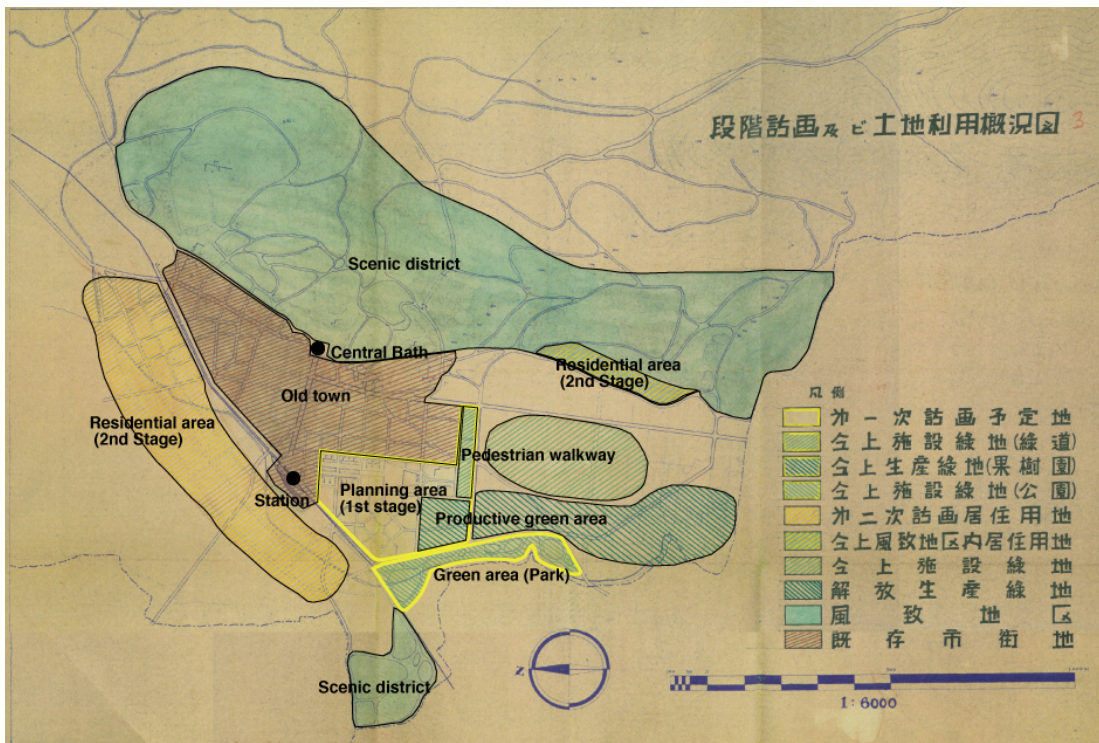


Figure 5: Land use planning

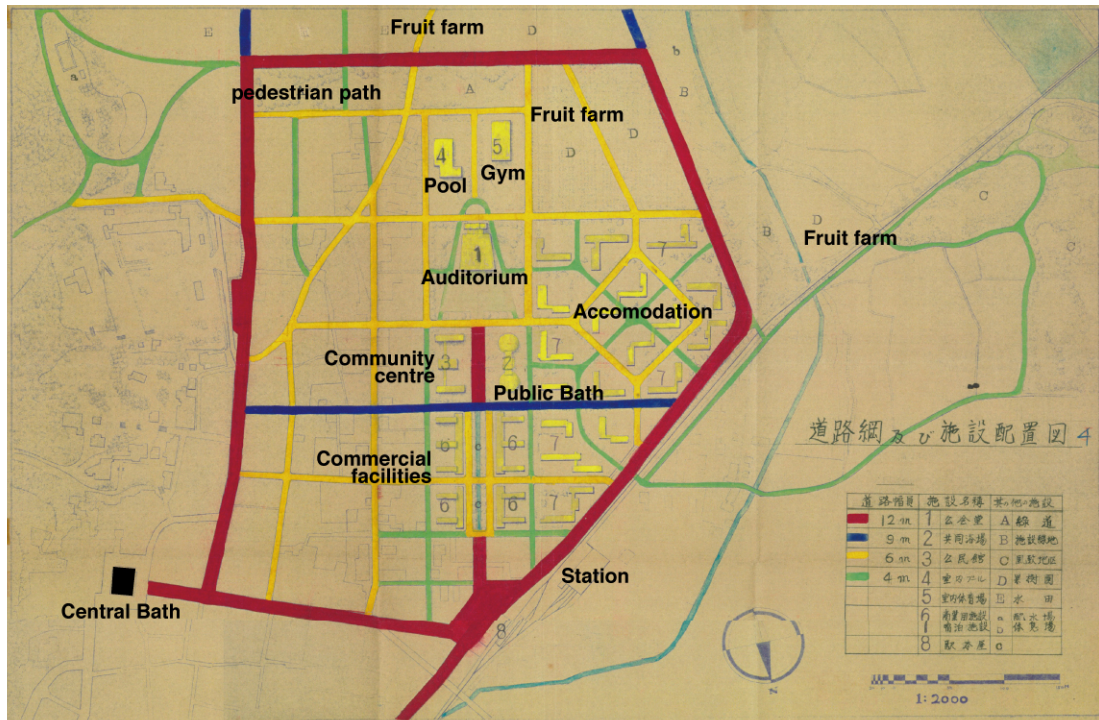


Figure 6: Facility location planning

3.4 Why was it proposed to build a new town?

As seen above, creating a new town was the core proposal in Takayama's plans. Why did Takayama propose to create a new town? In the report it was said that the old town was full of wooden architecture and needed improvement, but the lack of funding made it difficult to do so. Therefore, it was proposed to create a new and safe town.

However, from the words of Takayama himself, there seemed another reason a new town was proposed. In later years, Takayama looked back on the Yamashiro plan and said as follows¹⁵:

The old town of Yamashiro is a good town like Kyoto. When I engaged in the planning, local people wanted to modernise the town by building a dance hall and so on. I advised them that this modernised town should be located outside the old town and keep the old town as it was. As in Yamashiro, it is important to listen to the needs of younger citizens and at the same time harmonise the old and the new.

From this statement, it seems that it was Takayama's will that intended to conserve the historical old town by creating a new town. It can also be analysed that Takayama played an important role in the core idea of the plan, though there were other specialists related to the report. Other documents such as the magazine *Onsen* published by the JSA in 1953 introduced the Yamashiro plans as follows¹⁶:

The Yamashiro hot spring has a historical atmosphere and is famous for the olders, but local citizens are anxious about delaying the development when comparing with close hot spring resort as Yamanaka and Katayamaz, which were modernised. Therefore, a study of planning to balance the new and old has started.

From these facts, it can be said that the plan for the new town did not just intend to create a new town but inducing tourism development to outside the city and conserving the old town.

3.5 Implementation of plans and their influence

The land readjustment project decided to create a new town in 1957. However, the plan of the land readjustment project did not reflect Takayama's plans and the local government modified the plan to a simple grid pattern. The exact reason for that is not clear due to a lack of documents. Some facilities were implemented along with Takayama's plans. A tourism centre with pools and gyms was built in 1960, and a children's park was created in 1963, which is analysed as the implementation of the recreational facility planned by Takayama. But the front



façade of the tourism centre was different from Takayama's plan. His idea to locate a symbolic building along the street from the station was not realised.

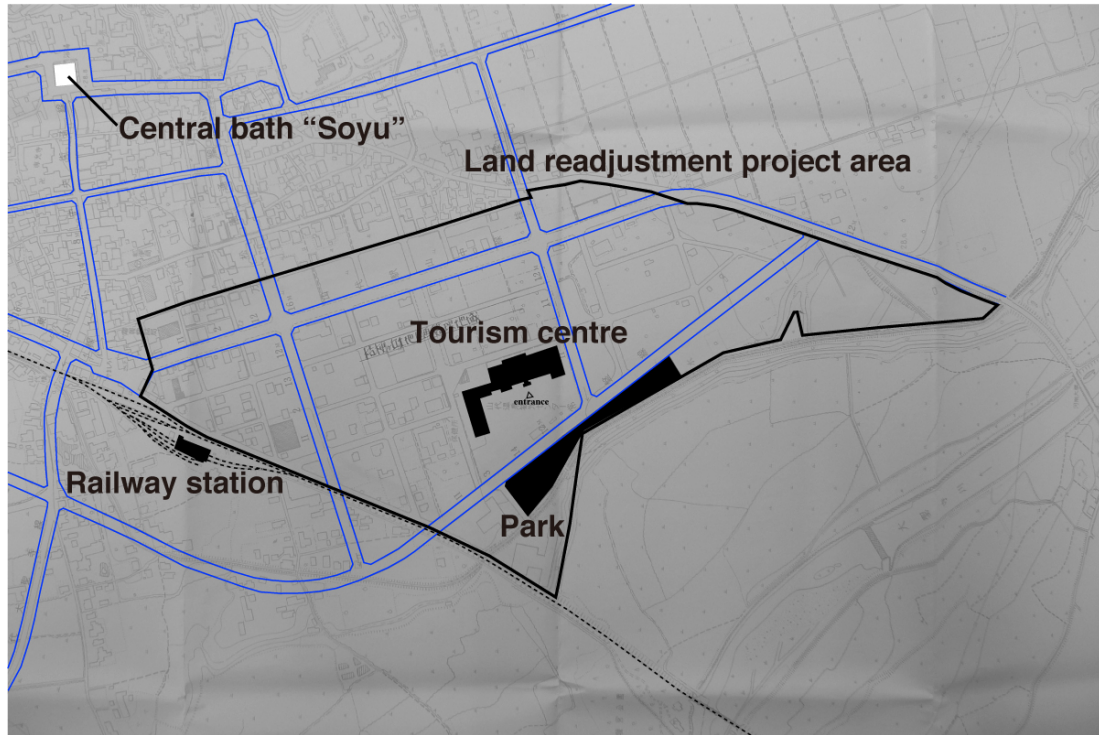


Figure 7: Land readjustment project area and practical location of facilities¹⁷

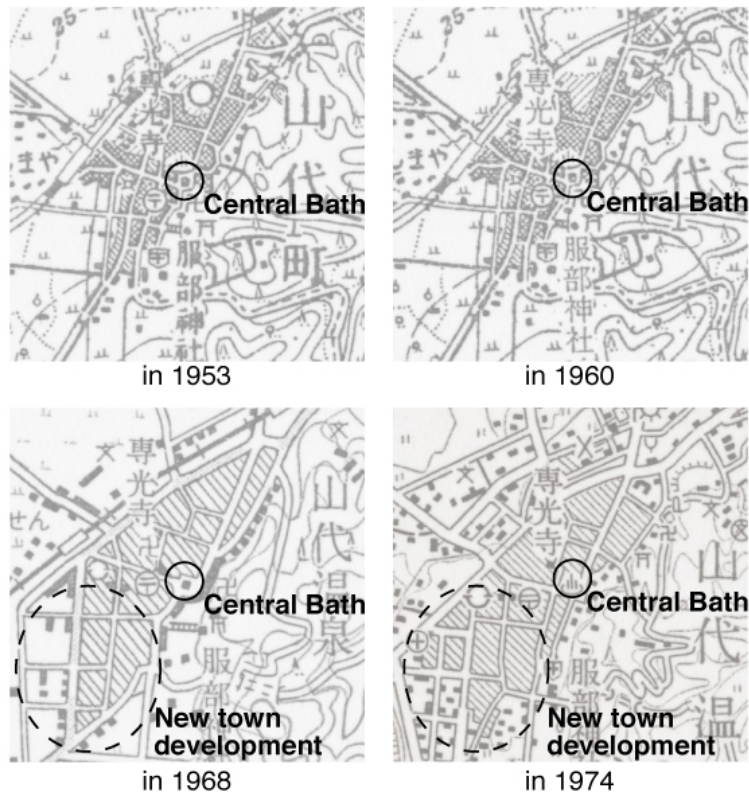


Figure 8: The process of creating the new town



Some hotels moved from the old town to the new town by the owner's option and were enlarged by the 1970s¹⁸. It means that the hotels that intended to modernise searched for new land, as Takayama advised to do. By preparing new land for development, though the old historical town and the Soyu were not declared as historical town or monument, developing the old historical town was avoided. Topographic maps show the process of the development of the new town (Figure 8).

Chapter 4. Effect and influence of the plans in the long term

What did the plans leave for Yamashiro town? This chapter analyses the effects and influences of the plans.

4.1 Development of Yamashiro town after the 1960s

A travel guidebook published in 1961 wrote that many hot spring resorts had been modernised but Yamashiro town still had a historical atmosphere¹⁹. A hot spring specialist Koji Sato wrote in 1964 that Yamashiro got a new centre, in addition to Soyu, the historical centre²⁰. A tourism research report in 1962 wrote that the plans were of great value as the tourism centre got a new attraction in Yamashiro²¹. That is to say, both the old and the new town were highly recognised and evaluated just after the development.

On the other hand, about 20 years after the development, Yamamura, who is a specialist in hot spring resorts, reported that tourists can enjoy the historical atmosphere in the old town but not so many tourists visit there²². It means most tourists went to the new town to enjoy the modernised facilities and the old town was left unvisited.

When we compare the development of Yamashiro with the surrounding hot spring resorts, the number of tourists in Yamanaka was the largest until the middle of the 1960s. There were not many tourists in Yamashiro until the 1960s, but they gradually increased, and in 1979 Yamashiro had the most tourists. This was because hotels were able to expand their businesses by using enough land, as Tsuikita pointed out²³. That is to say, Takayama's proposal to prepare new land for development to conserve the historical centre made hotels possible to expand as much as they wanted.

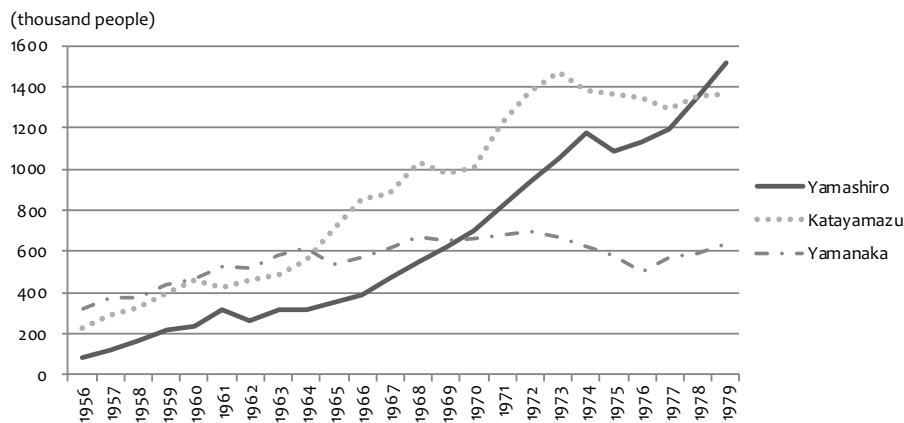


Figure 9: The number of tourists in Yamashiro town and the surrounding hot spring towns²⁴

4.2 Yamashiro town at present

The tourism centre finished the operation owing to changes to the tourist needs, and the site is used as a parking lot. A large hotel that was built in the new town in the 1960s closed due to worsening business conditions. In general, the new town area is of low density and the hot spring atmosphere has not remained. On the contrary, in the old town around Soyu (総湯), many improvement projects have been implemented recently, proposed by the local government and funded by the national government. From 2005 to 2009, a new central bath called "Shin-Soyu" (新総湯) was built, power lines were laid underground, a park was created, and façade of buildings along the street to Soyu were improved. In 2010, an architect Hiroshi Naito reconstructed the central bath "Soyu". Many tourists visit the old town to enjoy the historical atmosphere of Yamashiro. A group of these projects received a high evaluation and got a good design award in 2012.



Figure 10: Improved central bath (Soyu, 総湯)

Chapter 5. Conclusion

Eika Takayama, one of the famous urban planners of Japan, worked for tourist destinations through the activities of the JSA. His accomplishment as a planner of urban areas are already clarified in previous works of research; this paper clarified his work for rural tourist areas. One of his practical works for tourist destinations was the planning of the Yamashiro hot spring area. He proposed to create a new town and the detailed planning drawings were prepared. He planned a town for tourists to stay comfortably through the planning of walkways, green areas, tourist facilities and so on. Planning theories such as connecting the old and new town by commercial zones, circulating commercial zones as walkways and so on were seen in his plan. The new town was built in the 1960s but the street pattern was totally modified in actual and his idea to create a new town was partly realised through the building of tourism facilities and parks. By creating a new town, it was possible to meet the needs of business demands in the 1970s and has contributed to increase the number of tourists.

However, in terms of his contribution to the Yamashiro hot spring it was his idea to conserve the old town by creating a new town that was most important. In most of the hot spring towns in Japan, the uniqueness of the town such as natural scenic beauties and historical buildings were lost by lack of urban planning and hotel developments around the 1960s in general. But Takayama's proposal made it possible for Yamashiro town to conserve its uniqueness, the spatial feature of Soyu and the old town. Its uniqueness is a special tourist attraction today. In Japan the movement to conserve historical towns started around the beginning of the 1970s. Nevertheless, the example of the Yamashiro hot spring plan indicates that, already in the 1950s, the desire to conserve historical towns was already in the mind of a famous Japanese urban planner, Eika Takayama.

It was the hidden and unique planning theory of Yamashiro by Takayama to meet the needs of tourism development and to conserve the uniqueness of the town at the same time.

Disclosure statement

No potential conflicts of interest are reported by the author.



Notes on contributor

Ryo Nishikawa is an assistant professor at the College of Tourism, Rikkyo University. He writes papers on the history of urban planning for tourist destinations. His doctoral dissertation thesis was entitled “History of urban planning in tourist destinations in Japan from the 1920s to the 1960s”

Bibliography

- Akio Shimomura, *Studies on the Space Composition on the Hot Spring Resort in Japan 2* (Bulletin of The University of Tokyo Forests, 1994)
- Anonymous, *Europe no Onsenchi wo mite 1* (Onsen, 1975), 7-11
- Anonymous, *Europe no Onsenchi wo mite 2* (Onsen, 1975), 7-14
- Anonymous, *Gakujutsubuiin no sensei ni ukagau* (Onsen: 1988), 15
- Anonymous, *Kaga city city planning park decision document in 1961* archived in the national archives
- Anonymous, *Kanko Shindan* (Nihon Kanko Kyokai, 1962)
- Anonymous, *Nihon onsen kyokai to zasshi onsen*, (Onsen, 1996), 6-7
- Anonymous, *Onsenchi news*, (Onsen, 1953), 27
- Anonymous, *Zadankai Yumeippai Minakami/Mikuni Onsenkyo* (Onsen, 1970), 18-23
- Anonymous, *Unzen/Kohama no Toshikeikaku* (Onsen, 1974), 14-20
- Anonymous, *Zadankai Kamisu onsen meguri* (Onsen, 1971), 30-37
- Eika Takayama, *Kanko to Machizukuri* (Chiikikaihatsu, 1977), 20-23
- Hideki Azuma, *Tokyo no Toshikeikakuka* (Kajima Institute Publishing, 2011)
- Junji Yamamura, *Nihon no Onsenchi no Shosou 6* (Onsen, 1981), 22-25
- Koji Sato, *Yamashiro onsen bekken* (Onsen, 1964), 42-43
- Masaki Tsukita, *Kaga onsenkyo no hatten jokyo to kongo no kadai* (Hokuriku Economic Research Institute, 1990), 18-37
- Naoto Nakajima, *Study on Eika Takayama's Academic Approach for City Planning* (CPIJ, 2008), 169-174
- Ryo Nishikawa, *Study on the planning of the Unzen garden city in the early Showa era* (CPIJ, 2016), 1160-1167
- Takeo Funami, *Kasyu Yamashiro Onsen Souzu* (Enunokuni, 2004), 91-95
- Tatsusaburo Shinbo, *Noto hanto* (Blue guidebooks 7, 1961), 155
- Yukio Nishimura, *Kanko seisaku kara mita toshikeikaku* (Shintoshi, 2011), 98-101

Image sources

- Figure 1: Takeo Funami, *Kasyu Yamashiro Onsen Souzu* (Enunokuni, 2004), 91-95
- Figure 2: Takeo Funami, *Kasyu Yamashiro Onsen Souzu* (Enunokuni, 2004), 91-95
- Figure 3: Yamasiro hot spring planning documents (Takayama Archives)
- Figure 4: Yamasiro hot spring planning documents (Takayama Archives)
- Figure 5: Yamasiro hot spring planning documents (Takayama Archives)
- Figure 6: Yamasiro hot spring planning documents (Takayama Archives)
- Figure 7: Kaga city city planning park decision document in 1961 archived in the national archives
- Figure 8: A topographical map of Daishoji in 1953, 1960, 1968 and 1974 (published by Geospatial Information Authority of Japan)



Figure 9: Created by the author

Figure 10: Photograph by the author (in August 2015)

Endnotes

- 1 Akio Shimomura, *Studies on the Space Composition on the Hot Spring Resort in Japan 2* (Bulletin of The University of Tokyo Forests, 1994), 111
- 2 Yukio Nishimura, *Kanko seisaku kara mita toshikeikaku* (Shintosh, 2011), 98-101
- 3 Naoto Nakajima, *Study on Eika Takayama's Academic Approach for City Planning* (CPIJ, 2008), 169-174
- 4 Ryo Nishikawa, *Study on the Planning of the Unzen Garden City in the Early Showa Era* (CPIJ, 2016), 1160-1167 and so on
- 5 Hideki Azuma, *Tokyo no Toshikeikaku* (Kajima Institute Publishing, 2011)
- 6 Naoto Nakajima, *Study on Eika Takayama's Academic Approach for City Planning*, (CPIJ, 2008), 169-174
- 7 Anonymous, *Gakujutsubuiin no sensei ni ukagau* (Onsen, 1988), 15
- 8 Anonymous, *Nihon onsen kyokai to zasshi onsen* (Onsen, 1996), 6-7
- 9 Anonymous, *Nihon onsen kyokai to zasshi onsen* (Onsen, 1996), 7
- 10 Anonymous, *Zadankai Yumeippai Minakami/Mikuni Onsenkyo* (Onsen, 1970), 18-23, Anonymous, *Unzen/Kohama no Toshikeikaku* (Onsen, 1974), 14-20, and Anonymous, *Zadankai Kamisu onsen meguri* (Onsen, 1971), 30-37
- 11 Anonymous, *Europe no Onsenchi wo mite 1* (Onsen, 1975), 7-11 and Anonymous, *Europe no Onsenchi wo mite 2* (Onsen, 1975), 7-14
- 12 Anonymous, *Europe no onsenchi wo mite 2* (Onsen, 1975), 9
- 13 Takeo Funami, *Kasyu Yamashiro Onsen Souzu* (Enunokuni, 2004), 91-95
- 14 Takeo Funami, *Kasyu Yamashiro Onsen Souzu* (Enunokuni, 2004), 91-95
- 15 Eika Takayama, *Kanko to Machizukuri* (Chiikikaihatsu, 1977), 20-23
- 16 Anonymous, *Onsenchi news* (Onsen, 1953), 27
- 17 Anonymous, Kaga city city planning park decision document in 1961 archived in the national archives
- 18 Junji Yamamura, *Nihon no Onsenchi no Shosou 6* (Onsen, 1981), 22-25
- 19 Tatsusaburo Shinbo, *Noto hanto* (Blue guidebooks 7, 1961), 155
- 20 Koji Sato, *Yamashiro onsen bekken* (Onsen, 1964), 42-43
- 21 Anonymous, *Kanko Shindan* (Nihon Kanko Kyokai, 1962)
- 22 Junji Yamamura, *Nihon no Onsenchi no Shosou 6* (Onsen, 1981), 22-25
- 23 Masaki Tsukita, *Kaga onsenkyo no hatten jokyo to kongo no kadai* (Hokuriku Economic Research Institute, 1990), 18-37
- 24 Data source: Eiichi Yabutani: *The development of hot spring tourist city* (Enunokuni, 1981), 53-64



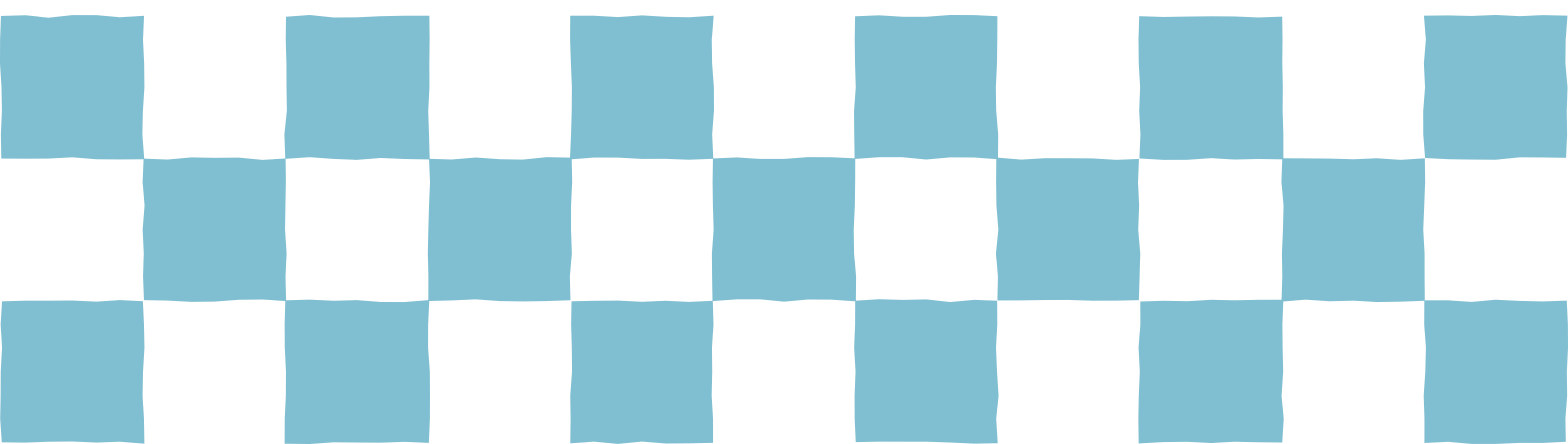
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

63 Diverse Planning Cultures and Traditions on the Way to a Flood Resilient City



Spatial planning and vulnerability to extreme weather in coastal cities: problem or solution?

Nikki Brand (Delft University of Technology) and Marcin D browski (Delft University of Technology)

The increasing frequency and severity of flood events in many cities across the world raises questions about the relation between urbanisation and vulnerability to flood risk and, critically, about the role of spatial planning in it, particularly in the context of climate change. While there is a growing awareness of the spatial dimension of flood risk, and a consensus on the need for interventions in the built environment to improve resilience to the increasing precipitation and sea level rise associated with climate change, there is no clarity on how planning decisions actually affect vulnerability to flooding - or what can be done about it. An example of the broadened scope of flood risk management that simultaneously aims for the reduction of the probability and loss caused by flooding is the Dutch Multi-Layered Safety (MLS) approach. MLS combines a first layer of prevention (by flood defences) with a second layer of (2) spatial adaptation of the built environment by water-robust spatial planning, and a third layer of (3) crisis management (evacuation and early warning systems). Although MLS is increasingly recognised as a promising approach to increasing urban flood risk globally, its second layer of 'spatial adaptation' remains ill-defined and ambiguous. In fact, its interpretation and operationalisation in different planning contexts across the world remains unclear. The goal of this paper is therefore to clarify the role of spatial planning in promoting resilience through spatial adaptation globally. The paper, first, takes stock and compares the different approaches to dealing with flood risk in practice in three coastal cities that represent very differentiated planning systems: Houston (Texas); Rotterdam (the Netherlands); and Guangzhou (China). Second, starting from an observation of the historical patterns in spatial planning decisions that contributed to the vulnerability of the built environment in those cities, and drawing on a range of interviews with the key experts conducted in Houston, Rotterdam and Guangzhou, the paper identifies the barriers for developing and mainstreaming spatial adaptation in differentiated planning cultures. Through the study of planning goals, tools and actors in the three cities in the current practice, the paper investigates how to unlock the potential of spatial planning to promote spatial adaptation to the growing flood risk.

Understanding the Urban Water Infrastructure as an historically hybrid construction

Fernande Hooimeijer (University of Technology Delft), Taneha Kuzniecowa Bacchin (Delft University of Technology) and Maki Ryu (University of Technology Delft)

The technosphere of the city should be considered heritage. This underground engine room that houses technical heritage has been taken for granted since technology is supposed to make every human intervention possible. The subsurface accommodates numerous vital functions in infrastructure, soil conditions and water. Current trends in urbanisation and climate change urge for another approach. This paper makes clear the relation between dealing with technical and natural water systems in the subsurface of large urban areas by tackling the question: In what way can the hybrid urban water system, being defined as the symbioses between the artificial (technosphere) and the natural water system (hydrosphere) be understood in historical context to be approached more intelligently in making it resilient?

In order to do so the paper first clarifies the historical context of the relation between the natural and artificial water system. Next, co-operation between landscape design and technology is sought for renewal of biophysical processes and water resilience in three case study cities Tokyo, Japan, Rotterdam, the Netherlands and San Paolo in Brazil. Reciprocities and trade-offs between the existing technical heritage and the new resilient approaches are assessed, and their implications and comparison discussed in this paper.

(please note that this abstract is submitted in relation to the panel proposal by Meng Meng and Marcin D browski entitled 'Diverse Planning Cultures and Traditions on the Way to a Flood Resilient City')

Exploring current constraints of land-use planning practices for governing flood risk in Taipei

Yu-Tzu Lin (Department of Urbanism, Delft University of Technology)

Recognizing that climate variety is challenging the hard measures to reduce flood consequences, the reorientation of land-use planning associated with institutional arrangement is regarded as an important instrument toward adapting to the multiple stressors of rapid urbanization, hydro-meteorological hazards and future climate events. Although climate adaptation strategies have been initiated in many Asian cities, urban flooding disasters have also increased. Based on literature review and documentary analyses, this paper uses a case study approach to explore the challenges impeding planning practices for flood adaptation, especially the causing factors: the planning culture and institutional fabric. Been characterized by floodplain and low-lying topography in a coastal zone, Taipei basin is surrounded by levees with total length of 109 kilometres constructed date traced back to around 100 years ago during the Japanese colonial period. From early 1960s, the new central government has started planning the flood control projects for Greater Taipei by hydraulic engineering approach, but could not implement the whole projects due to the enormous budget. Until 1999, the construction of the Taipei Area Flood Control Project, with item like floodway and river levees, land acquisition and improving storm water drainage system, was completed through three phases by adopting the 200-year-flood frequency as protection criteria based on safety threshold defined by past experience. In Taiwan, the flood risk management is administered by top-down process, however, the incorporation of flood control into land use planning is the responsibility of local government. Since that flood-prone areas are targeted by several types government initiatives to minimize flooding vulnerability, an effective integration into the land use planning becomes the advantage of spatial planning practice. But, as evidenced by the Taipei's flooding events, the institutional barriers embedded in planning culture are difficult to overcome. Linked with the historical transition of planning culture in Taipei's case, this paper concludes with the inflexibility of institutions as well as the unclear responsibility and minimal coordination in central and local governments gradually shape its urban planning into current limited role.

Between inertia and transition in spatial planning in the face of flood risk: a path dependence perspective

Meng Meng (TU-Delft), Marcin Dąbrowski (TU-Delft) and Dominic Stead (TU-Delft) and Faith Chain

For planning researcher and practitioners, the contribution of spatial planning to reducing flood risk in climate change is increasingly recognised. A major challenge, however, still confronts inexperienced planning systems, that is, to incorporate flood concerns in the conventional planning routines. Operating such innovations normally face the obstacles rooted in the long-established planning traditions. Based on the idea of path creation theory, this paper aims to clarify in what external context do the initiatives of an agency can contribute to the emergence of a path creation and reach a wide promotion, in the face of barriers from the established path-dependent way. It does this by tracing the history of the city's struggle against the water in a Chinese case, the city of Guangzhou, after the 1920s.

The paper distinguishes, in most cases, the conventional structural options, like dikes and pipe system, are the major claimed approaches to deal with floods yet they take effect in flood risk management; by contrast, non-structural options (useful in spatial planning) have not been fully explored, resulting in a lack of validating options for urban planners. This tradition was formulated in the 1930s and strengthened afterwards. Even though alternations, non-structural solutions, emerged during the 1950s-70s and reappeared in the early 2000s, local spatial planning system saw no big differences and a stick to structural measures. This tradition has shaped a barrier for the promotion of the latest national Sponge city Program, which claims a preference to use non-structural options to enhance urban flood resilience in spatial planning.

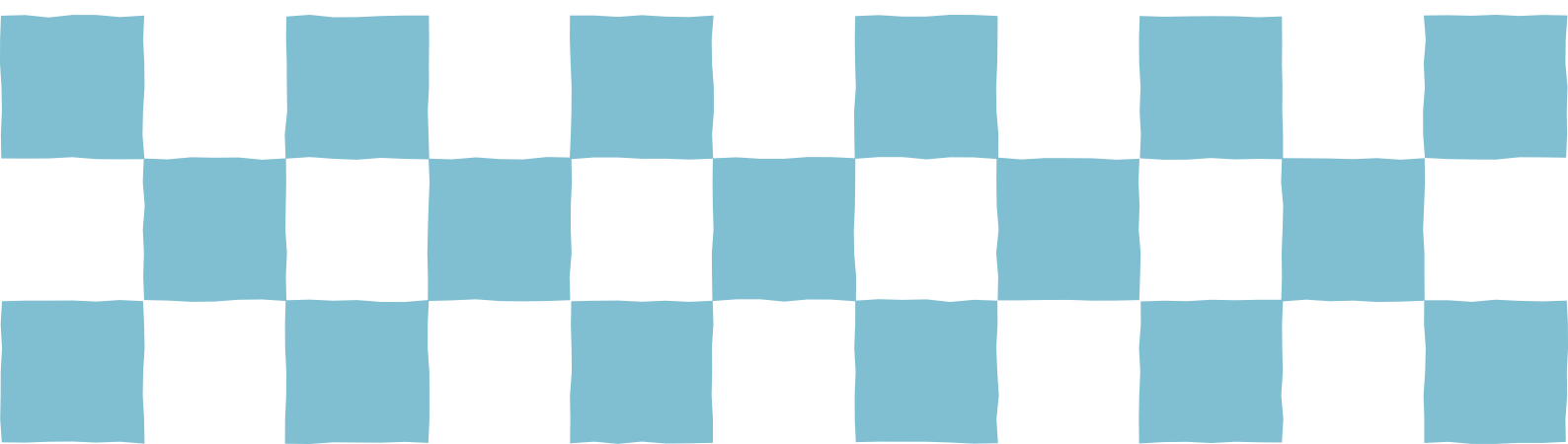
The empirical findings indicate social-economic environment and institutional environment factoring in creating new alternatives and deviating from original planning traditions. By contrast, natural environment, for a short-term, seemed to be a weak correlation to the innovations of flood resolving strategies in spatial planning discourse. It provides experience for policy makers and urban planners to enact a new policy to enhance urban resilience in spatial planning and reveal how old planning traditions might hinder the innovations.



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

64 **Looking Back to Chinese Cities in Old Dynasties**



An Analysis of the spatial coupling of handicraft workshops in Chinese capitals before Qin and Han dynasties

Yidan Zhang (Northwest University)

The ancient capital of China is an important materialized carrier for ancient civilizations. Nowadays, the ancient Chinese capital lacks attention to the secularized space in the capital, especially the space related to the handicraft production. This research targets different types of handicraft workshops in 18 ancient capitals from Three Dynasties (i.e. Xia, Shang and Zhou Dynasties) to Qin and Han Dynasties in China. The properties, scales, and location distribution of the workshops (including suspected relics) are carried on the statistics and integrated application of multi-analysis methods, such as architectural spatial analysis and archeological database quantitative analysis. It also explores characteristics of handicraft workshops in different industries, including the spatial composition, distribution sites, spatial coupling and spatial evolution. Meanwhile, it extracts the space land composition and attribute features, structural elements, distribution locus and the interaction process. By the covariation analysis, the relationship between the evolution of inner space structure and civilization in the ancient capitals of China is put forward. The study has found:(1) The handicraft workshops in the early Chinese capitals contain not only production space, but many other functions, such as for living, tombs, and sacrifice. With the development of the early kingdom to the empire, the coupling nature of this multidimensional space was gradually decreased with the reduction of the number of sites and tombs in the workshops and the vanishing of the sacrifice space, resulting in the number decrease of coupled space workshops.(2) The spatial coupling degrees of various industries in the workshops are different, and directly related to the importance of the workshop industries. As the “state machine” of the early capitals, the bronze casting workshops have the highest spatial coupling degree, followed by bone-making, iron smelting, and pottery workshops.(3) The unity of the “work, residence, and burial” space reflected in the capital handicraft workshops of Yin and Zhou Dynasties may be related to the patriarchal system and is one external manifestation of social governance measure.

In general, from Three Dynasties to Qin and Han Dynasties, both the means of space division and the social hierarchies of land use in the capitals are changed, which shows the evolution of the root factors, like the cosmology, religious consciousness, the state power strength, and the social governance system. In terms of research significance, a spatial quantitative analysis is based on archaeological data, and a special study on secular space in the ancient capitals is done. It is an important supplement to the current research on the space planning of the ancient capitals in China, and it has a certain enlightening significance for the issues of current urban industrial space and social spatial stratification. It can also provide the complete systematic evidence for protecting the urban heritage.

New Perspectives on the Planning of Yuan Dadu: The Yuan Measurement System, Residential Space and Nomadic Life

Zhao Chunxiao (School of Architecture, Southeast University)

Recent studies on Dadu, one of the capital cities of the Mongol Yuan dynasty, often adopt a holistic approach suited in a Eurasian background. These studies shed new light on the influence of nomadic traditions in the city planning, in addition to using Chinese urban models. Whereas most previous studies chose physical remains as their point of departure, this paper aims to understand the nomadic characteristics of Yuan Dadu by elucidating its two fundamental yet insufficiently studied planning principles. The first one is to confirm the planning of the city in accordance with the unique measurement system of Yuan, not Song Dynasty. The measurement system of the Yuan Dynasty with the length of chi(尺) in the range of 0.395 ~ 0.412 meters/chi(尺) textual was researched by historians of Metrology. The absolute length is significantly longer than the Song Dynasty's in the range of 0.308 ~ 0.315 meters/chi(尺) used in the past study of Yuan Dadu. And the measurement also significantly differs from those used by Chinese dynasties that ruled from the Central Plains. The length of chi(尺) in the range of 0.395 ~ 0.412 meters/chi(尺) is more effective in studying of Yuan Dadu. It could convert 28600 meters the date of perimeter of Dadu city obtained from an archaeological site to 57.85 ~ 60.34 li(里) which was more in accordance with the value of 60 li recorded in the Farming in Nan Village [Nan Cun Chuo Geng Lu(南村辍耕录)] (1366) than the result converted with 0.395 ~ 0.412 meters/chi(尺). Secondly, the prescribed eight-mu plot for each household in the History of the Yuan Dynasty [Yuan Shi(元史)](1370), which through the land measurement of ancient China that 15 bu(步) by 16 bu is 240 bu²(步²) equal to 1 mu(亩) – took the shape of a 32-by-60-bu(步) rectangle based on the space model of nomadic families different from the shape of a 44-by-44-bu(步) square, whose area is not 8 mu(亩) but 8.07 mu(亩), deduced in past study from the concept of land division based on the Central Plains Dynasty. I argue that the above two points can provide new perspectives on the systematic influence of nomadic way of life as seen in the planning of the Yuan Dadu as well as in the planning principle established by the Mongol regime.

The Status Change of Culture and Education in the Traditional Chinese City Landscape after the Song and Yuan Dynasty

Lumin Wang (School of Architecture and Urban Planning, Shenzhen University), Yuan Pan (Zhejiang Province Institute of Architectural Design and Research), Yiming Yuan (China Reconstruct Institute of Architectural & Urban Design co. LTD), Liang Liang (School of Architecture and Urban Planning, Shenzhen University) and Xiaoge Zhang (School of Architecture and Urban Planning, Shenzhen University)

After the Song and Yuan Dynasties, the Neo-Confucianism of the Song and Ming Dynasties was fully developed along with the institutionalization of the imperial examination system and the utilitarian expectations of the local officials. This contributed a lot to the local support for imperial examinations, culture and education. During this period, cultural and educational buildings related to imperial examination and social education have flourished in urban construction. This has resulted in a significant increase in the status of the culture and education architecture in the urban landscape. In some local cities, the urban landscape order pattern has even been dominated by cultural and educational buildings. A different urban landscape structure other than that of the Song and Yuan Dynasties came along. We attributed this change to the "The status change of culture and education". Studies revealed that during the Ming and Qing dynasties, there was a phenomenon of "The status change of culture and education" in spite of the obvious differences conditionally, including the southern Jiangxi Province, where Confucianism prevailed in the south, and Nanyang Prefecture, Henan Province, the war-suffered area in the north, and Changsha Prefecture, Hunan Province, located in the north-south direction of the Central Plains, as well as the socio-economically and culturally prosperous Jiangsu region along the rivers and sea.

Yangzhou Prefecture in the Ming and Qing Dynasties developed into a national economic and cultural center at the time. In today's Yangzhou, the old city is basically retained with the ancient city pattern dominated during the Ming and Qing Dynasties where urban historical relics are abundant. This provides a more solid spatial framework and more specific environmental details for the study. Therefore, this work takes the city of Yangzhou Prefecture as the case analysis object from the Ming and Qing dynasties, starting from the background of the development of culture and education. With an emphasis on the concrete expression of the "The status change of culture and education", the regional performance in the urban landscape of Yangzhou Prefecture is discussed.

This work finds that during the Ming and Qing Dynasties, the cultural and educational orientation of the urban landscape in the city of Yangzhou Prefecture is manifested clearly. The cultural and education architecture as a whole is widely distributed in a tendency of diversification. Cultural and educational building systems have greatly improved their position in the city and even in the regional landscape. As a strong addition, "The status change of culture and education" presents a lot of regional characteristics in Yangzhou City. For example, folk bookshops with important significance in cultural communication and mass education have been widely set up in the city; official and private library buildings have expanded their "public" function, and gradually become one of the most important ways for local culture and education to spread. The gathering of a large number of intellectual scholars and the holding of literati collection have made private garden houses an important carrier for cities to enrich social culture, leading to formation of a regional type of cultural and educational facilities.

Historical Mapping of the Urban Form and the Spatial Power Distribution in Capital Jiankang in East Jin Dynasty

Chenwei Zheng (Southeast University)

The Aristocratic Families, which had both political and economic privileges in early Imperial Ages of China with multiple generations working as government officials, had collectively become a core group of East Jin regime. As an important part of the etiquette system under central governance, the capital Jiankang served to display the legitimacy of the regime and to maintain the operational functions of both the nation's apparatus and the city itself. By using Urban Historical Mapping and Geographic Information System as the methods of the spatial power distribution analysis, this paper focuses on the distribution of core capital facilities including worship, administration, military and residence, and also the social status of their users. To conclude, the usage of capital space is a representation of the complex relationship and co-dependence among royalty, aristocratic and plebeians. The area inside the capital city wall is an outstanding space for the privileged class as well as the important representation that the aristocratic class joins the core of national powers. And the aristocrats were spatially distributed spread surrounding outside the capital city rather than congregated in one particular area, which made it easier to form their own power centers, leading to threats to the authority centralization.



Analysis of the spatial coupling of handicraft workshops in Chinese capitals before Qin and Han dynasties

Zhang Yidan

PhD, Lecturer, Department of Cultural Heritage Management, Northwest University, Xi'an, China
E-mail: dedan@126.com

The ancient capital of China is an important materialized carrier for ancient civilizations. Nowadays, the ancient Chinese capital lacks attention to the secularized space in the capital, especially the space related to the handicraft production. In addition, whether or not the space division method of the ancient urban planning land use can be measured by the spatial division theory of modern urban planning is an issue worthy of discussion. This research is based on archeological reports and the latest progress in archaeology. It targets different types of handicraft workshops in 18 ancient capitals from Three Dynasties (i.e. Xia, Shang and Zhou Dynasties) to Qin and Han Dynasties in China. The properties, scales, and location distribution of the workshops (including suspected relics) and other types of space are carried on the statistics and integrated application of multi-analysis methods, such as architectural spatial analysis and archeological database quantitative analysis. It also explores characteristics of handicraft workshops in different industries, including the spatial composition, distribution sites, spatial coupling and long-term spatial evolution. Meanwhile, it extracts the space land composition and attribute features, structural elements, distribution locus, planning methods, and the interaction process with other spaces. By the covariation analysis, the relationship between the evolution of inner space structure and civilization in the ancient capitals of China is put forward. The study has found:

(1) The handicraft workshops in the early Chinese capitals contain not only production space, but many other functions, such as for living, tombs, and sacrifice. With the development of the early kingdom to the empire, the coupling nature of this multidimensional space was gradually decreased with the reduction of the number of sites and tombs in the workshops and the vanishing of the sacrifice space, resulting in the number decrease of coupled space workshops. Along the continuous merger between workshops and markets after Qin and Han Dynasties, new spatial changes took place.

(2) The spatial coupling degrees of various industries in the workshops are different, and directly related to the importance of the workshop industries. The bronze casting workshops have the highest spatial coupling degree, followed by bone-making, iron smelting, and pottery workshops. As the "state machine" of the early capitals, the bronze casting workshop has an upper rank for a long term, which embodies that the higher spatial coupling is greatly controlled by the state power.

(3) The unity of the "work, residence, and burial" space reflected in the capital handicraft workshops of Yin and Zhou Dynasties may be related to the patriarchal system and is one external manifestation of social governance measure.

In general, from Three Dynasties to Qin and Han Dynasties, both the means of space division and the social hierarchies of land use in the capitals are changed, which shows the evolution of the root factors, like the cosmology, religious consciousness, the state power strength, and the social governance system.

In terms of research significance, a spatial quantitative analysis is based on archaeological data, and a special study on secular space in the ancient capitals is done. It is an important supplement to the current research on the space planning of the ancient capitals in China, and it has a certain enlightening significance for the issues of current urban industrial space and social spatial stratification. It can also provide the complete systematic evidence for protecting the urban heritage.



Keywords: Capital; Handicraft Workshops; Spatial Coupling

1. Introduction

Since the formation of archeology in China in the late 19th century and the early 20th century, the research on palaces and ancestral temples in ancient capital cities has been the focus. Such research tendency also influences the study of architecture and urban planning, which leads to the result that the study of handicraft production space has not received wide attention. Actually, the shape, structure, characteristics, evolution laws and planning ideology of the handicraft production space system can reflect the change of the state form and the political governance system in ancient times, and confirm the planning ideology of spaces relevant to “power”, such as palaces and ancestral temples, from another perspective.

For a long time, there is a reliance on the theory of functional districts in urban planning, and it seems that the understanding of urban spatial pattern tends to stick to the clear-out division of functional districts. In addition, due to limited archaeological data and literature, there tends to be narrow and single interpretation of the internal properties of spaces of specific types in ancient capitals. It is generally believed that the spatial division ideology of ancient capitals was beyond the common ideas of “ju” (gathering). With clear spatial boundaries and functional zones showing hierarchical differences, the spatial pattern reflected the social hierarchy and there existed a direct or indirect interaction between different types of spaces. In the Pre-Qin period, the space in capitals was divided into several types, including administration, sacrifice, production, living and market trading. In the past, the space associated with handicraft workshops was often defined as “productive space”, but currently such classification appears to be limited. In this research, based on statistics on the location, shape, structure and internal relics of handicraft workshops in capitals before Qin and Han Dynasties, it is discovered that the space in handicraft workshops in early capitals was not for the single purpose of production. Rather, inside a large number of workshops or “handicraft parks”, there were types of spaces for other purposes such as living, cemetery and sacrifice. Especially in the state-owned handicraft areas, there were usually clear and strict borders, and some areas were highly professionalized settlements consisting of workshops, houses and cemeteries. Such spatial coupling endured for a long time and the degree of coupling varied in different periods.

The study of urban spatial pattern and land use requires quantitative research. Originated from the field of natural science, the theory of “coupling” originally refers to two or more electronic components that coordinate closely and influence each other. Currently, the coupling theory is not only applied in physics, geography and economics, but also involved in the research of regional economic space, urban traffic space, urban land and open space. For the concept of coupling space, there are indicators such as the shape and pattern of the space. This research aims at investigating the phenomenon, attributes and dynamic characteristics of spatial coupling of handicraft workshops in ancient capitals. Due to the difficulty in obtaining data of land types in ancient capitals, this paper will adopt both quantitative and qualitative analyses.

2. Basic Information and Characteristics of Handicraft Workshops in Capital Cities before Qin and Han Dynasties

Through the investigation of 18 capital cities in the period from the Xia Dynasty to the Western Han Dynasty with relatively adequate archaeological data, all handicraft workshops and relics of suspected handicraft workshops are counted and the numbers of different types of handicraft workshops in each city are figured out. Statistics show that there were 50 handicraft workshops in total in capitals of the Xia and Shang dynasties, 65 in those of the Western Zhou Dynasty, 173 in those of the Spring and Autumn Period and 37 in those of the Qin and Han Dynasties. With the unbalance of archaeological data in different period of time taken into account, “a certain type of handicraft workshop in a certain area” mentioned in the archaeological reports as well as uncertain information such as “relics of a suspected handicraft workshop” is included in the statistics of this research. According to the statistics, there were 57 bronze-casting workshops, 54 bone-processing workshops, 39 iron-smelting workshops, 143 pottery workshops, 8 stone-processing workshops and 12 jade-processing workshops.

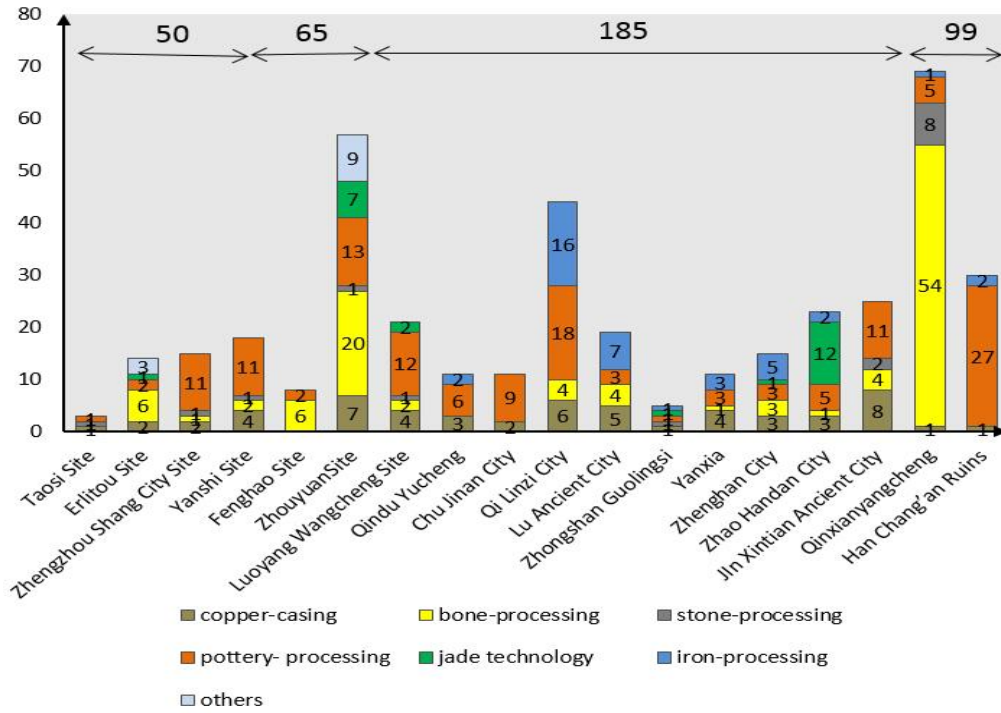


Fig. 1 Quantity statistics of handicraft workshops in the main capitals from Xia-Shang-Zhou Dynasties to Qin and Han Dynasties

Tab. 1 List of handicraft workshops containing dwellings, tombs and sacrifice space in the capitals before Qin and Han Dynasties

Cities	Handicraft Workshop	Scale (m ²)	Site Remains	Others(Tombs/Judaes)	Attributes
Taosi Site	Southwestern Stone Industry Zone YJ5	200,000 m ²	living sites and cave dwellings ; Handicraft Construction Department IIIIFJT2	Industry Zone with Trench Wall, Division Control	State-run
	Ceramic Kiln in the northeast	Two Kilns	4 Huikengs		
Erlitou Site	Kallaitite and copper-casting located on the key axis.		Partitions and closed sites as well		State-run
	Others (unknown attribute)			There are burials nearby.	
Zhengzhou Shang City Site	C5&C9workshops in the southern of the inner city	1,000 m ²		Bones and big-mouthed flat-bottom vat were the main tools for sacrifice. There may exist human skull pits.	State-run
	Ming Gong Road Pottery Workshop (the largest ceramic pottery in the city)	1,400 m ²		Six tombs were found in C11F102 and F12, as the laying foundation of ground.	
AnyangCopper Casting Workshop	There were workshops in the palace area.		There were common sites near C.		State-run
	Xiaomintun Copper-casting Workshop (No. 1-4)	50,000 m ²	Semi-Geosite Site Artisan Cemetery	Coppers' pits, sacrifice pit on the edge of the workshop	State-run
	Miaopu Northland Copper-casting Workshop (No. 1-4)	10,000 m ²	There were more premises in the west district.	There were sacrifice relics.	Royal family



The 18th International Planning History Society Conference - Yokohama, July 2018

	Dasikong Bone-processing Workshop(attached to the comprehensive workshop area)		3 pits	There were over 900 Brigade cemetery and tombs.	Tribe-run
	Beixinzhuang Bone-processing Workshop	1,380 m ²		Cattles for sacrifice	Tribe-run
Yanshi Site	Palace Inner Relics.		Annex buildings were found in west and east of the town.		State-run
	Dacheng Inner Pottery Workshop Area	45,000 m ²	Small-scale ground construction and semi-pitched architecture	Note: Most of the 160 tombs were used on the road, the rest are in the workshop.	
ZhouyuaSite	Li Copper	Thousands of m ²	Pits, premise sites, well relics		
	Qijiabei Stone-processing Workshop (Qijia Integrated Workshop Area)	20,000 m ²	Full-time craftsman	Cemeteries (M1/M5/M19) were found in Qi and Li Workshops.	Royal Family
	He, Li, Qi, Yun and Zhuang			Many tombs, premises and pits were mixed with each other. Most of tombs were small and medium-sized..	
Fenggao Site	Zhangjiapo Bones Workshop		H143、H160deep-ditch Kiln-style houses, craftsmen's houses		Tribe-run
	Fengcun Bones Workshops		A large number of tiles were the sites for production, found at 2013SFCH1		Maybe Tribe-run
	Bronze ware cellar near the residential area of Xinwang Nobility	9,000 m ²	The workmen maybe live in this area.	There were likely residences for the height class.	
Luoyang Wangcheng Site	Wangcheng XIbeiyu Pottery Kiln(in the middle and late Warring States Period)	18	Workshops, workshop gathering place with stoves	tombs	State-run
	Yijiatuan Shangyang Huaifu Pottery(in the Warring States Period)	1		tombs	State-run
	No.1 Ganxiu Pottery	2		Tombs	State-run
	Wenhenan Stone-processing	1		tombs	
Qindu Yucheng	Tofu Village Pottery Workshop(Yaojiagang Handicraft Zone)	35,000 m ²	There were rammed, separate walls. The southern district B is for craftsmen.		State-run
Lu Ancient City	Yaopu Copper-casting Site(the Western Zhou Dynasty to Late Spring and Autumn Period)	14,000 m ²	Sites	Tombs	State-run
	Linqian Village Bone-processing Workshop(the Warring States Period)	15,000 m ²	The south were residence sites.		State-run
Zhongshan Guolingsi	No.5 Copper and Iron Casting Workshop	Large-scale	Workshop management building/ residential area		State-run
Jin Xintian Ancient City	Copper-casting II & X & XII Workshop	50,000 m ²	Pottery for life uses	37 tombs	State-run
	Shigui Workshop (near copper-castingII&X&XII) The sacrificial pits XXI are in the south.	5,000 m ²	11 sites and pits	Tombs	Minister-run
	Farmers' Market Pottery Workshop	20,000 m ²	The west were pits.		



Yanxia	No.23 Copper and Iron Casting (Weapons)Workshop (the Warring States Period)		The north seemed to be residence sites	No.21& No.18 were the key concentrated distributions. The west were for the palace areas and the east are for the burial areas.	State-run
Qinlin City	Dacheng Iron-processing Workshop	40,000-400,000 m ²	Workshops, residence sites and pits are crossed distributed.		State-run
Zhao Handan City	City Museum of Copper-casting Site			tombs	
Zhengnan City	State Zheng-Wu Copper-casting Site(the Spring and Autumn to the Warring State Period) Sacrificial Vessel, Weapons and Coin.	100,000 m ²	75 pits(the Spring and Autumn)	These workshops for weapons-making and sacrificial vessels are less for Cang city, yet pits with enclosure technology are more.	
	State Zheng-Cang City Iron-processing Workshop(iron clothes)	160,000 m ²	8 pits		
	State Zheng-Dongcheng Bone-processing Workshop((the Spring and Autumn to the Warring State Period)	7,000m ²	59 pits		
	State Han-Nengren Road Pottery-processing Workshop(late Warring State Period-the Western Han Dynasty)	50,000 m ²	Sites for life use		State-run
	Dawulou Pottery-processing Workshop		Sites for life use		
	Han built a cast copper iron workshop on the basis of Zheng.(in the small town)				
Qinxianyangcheng	State-run workshops were near the palace area, yet pottery workshops were near the market.		Unknown	It may intersect with the residential area.	
Han Chang'an Ruins	State-run workshops mainly located inside the city, yet private ones are outside the market.		There was no site in the workshop, while it did as document recorded.	No record	

Notes: All the information above are collated from the latest excavation information and related archaeological reports.

The majority of the house foundations discovered near handicraft workshops were habitation sites with ash pits, and some were office buildings for governance. According to Liu Qingzhu, "around and near the palace-city in the capital of a kingdom, there were state-run handicraft workshops of bronze-casting and jade-processing". Based on statistics on handicraft workshops in capitals of kingdoms, the author found that during many periods of time, handicraft workshops existed not only around and near the palace-city, but also inside it where workshops for bronze-casting, bone-processing, jade-processing, pottery and so on appeared. The purpose of locating workshops in the palace-city was to maintain control over handicraft production as well as constraining the mobility of craftsmen.

Information about habitation sites of craftsmen is now discovered in a small number of workshops inside the place-city. For example, in Erlitou bronze and turquoise workshops, there were spaces separated by walls. Beside the bronze-casting sites in the palace-city of Yinxi and Shangcheng, there existed attached buildings or small towns. In state-run weapon workshops in the palace-city of Xiadu in the Yan State, craftsmen might have lived inside the workshops, but no low-ranking cemetery is discovered in the palace-city.

From the attached buildings found in the palace areas in the late Shang Dynasty, it can be speculated that in early capital cities, for important state-run handicraft workshops (such as bronze-casting workshops), the settlements of craftsmen often located in the palace areas. This results from the monopoly on handicraft production technology in the Bronze Age. Although there is no clear information about craftsmen's habitation sites in other types of handicraft workshops in the palace area due to the lack of archeological data, it can be speculated that there should also be craftsmen's living sites inside high-ranking workshops for bone-processing or jade-processing.



As for workshops outside the palace-city, separation of space also appeared in different kinds of workshops during different periods of time. For instance, stone-processing and pottery workshops in the Taosi period and the Yaojiagang handicraft industry area in Yongcheng, the capital of the Qin state, were surrounded with walls. Such spaces showed closure of various degrees.

3. Spatial Coupling of Handicraft Workshops and its Characteristics

(1) Characteristics of spatial evolution over a long period

As is shown in the figure, workshops with both habitation sites and cemeteries were usually of larger size. Except for the stone “gui” (an elongated pointed tablet used on ceremonial occasions) workshop of the Jin state that was 5,000 square meters, other workshops were over 10,000 square meters, and some even reached over 100,000 square meters. The size of the officially-run workshop in Lingshou of the Zhongshan State reached 600,000 square meters. Most of those workshops were run by the state and some belonged to the clans.

From a diachronic point of view, from the Xia Dynasty to the Western Han Dynasty, in the 18 capital cities there were totally 28 handicraft workshops with residence sites, 20 with cemeteries and 5 with sacrifice space. The proportion of residence sites was higher than that of cemeteries. Meanwhile, the proportion of workshops with residence, cemetery and sacrifice spaces gradually decreased. Despite the lack of archaeological data of workshops in the Qin and Han Dynasties, the proportion of workshops containing residence sites decreased from 16% in the Xia and Shang dynasties to 8.6% in the Eastern Zhou Dynasty. The proportion of workshops containing tombs reached 6% in the Xia and Shang Dynasties, peaked at 13.8% in the Western Zhou Dynasty and later decreased to 4.6% in the Eastern Zhou Dynasty. Sacrificial relics were discovered in workshops in all capitals of the Shang Dynasty, but they were not found in capitals of the Eastern Zhou Dynasty, except in Yongcheng of the Qin State. Sacrificial activities might continued in other forms, but exclusive space for them in workshops gradually disappeared.

However, it should be noted that statistics on the Zhouyuan site of the Western Zhou Dynasty are impact by limited data. Archeological reports show that residences and cemeteries in many settlements in the Zhouyuan site overlapped each other. There existed handicraft workshops in most of those settlements, for example, Licun, Qijia, Yuntang and Zhuangbai. In Fenghao, the capital of the Western Zhou Dynasty, there were many settlements that were located close to workshops. Therefore, it is speculated that in fact the combination of residence and cemetery in handicraft workshops in the Western Zhou Dynasty should be more common than what is indicated by statistics, and the proportion of workshops with residence in the Western Zhou Dynasty might approach or even exceed that in the Xia and Shang dynasties. In the archaeological reports on Xianyang of the Qin Dynasty and Chang'an of the Han Dynasty, residence sites or cemeteries inside handicraft workshops were not mentioned in detail, nor were the sacrificial relics. Although the report on residence in the market of Chang'an appeared in historical literature, the relationship between the residence and handicraft workshops was not clear. Thus, such residence is not included in the statistics of this research.

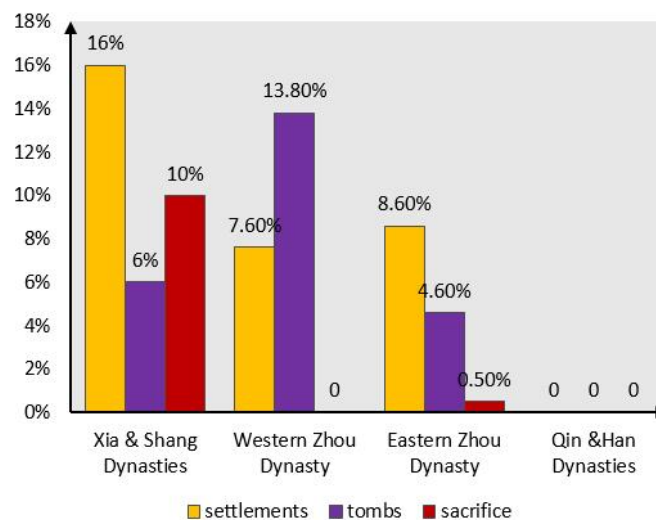




Fig 2 Ratios between workshops containing dwellings, tombs and sacrifice space and the total workshops from Xia-Shang-Zhou Dynasties to Qin and Han Dynasties

From the Xia Dynasty to the Shang Dynasty, handicraft workshops, especially those important ones run by the government, showed a high degree of spatial coupling. The space inside the workshops included production space, government office, residence sites for craftsmen, tombs for craftsmen and exclusive space for sacrifice, which was related to the institution of building officers in the early kingdoms. With the implementation of the “kin-ordered settlement system”, a population management system in the late Western Zhou Dynasty, the spatial coupling inside workshops reached its peak.

Since the Spring and Autumn period, the liveliness of the economy in capitals of the Eastern Zhou Dynasty led to obvious changes in the spatial pattern of capital cities. The living space and public space such as the tombs in handicraft workshops began to shrink gradually, and the number of workshops with a variety of space types dropped sharply. In other words, the degree of spatial coupling of the workshops decreased.

The ideas of division of urban space according to its functions issued by Guanzhong might have a great impact on the space for handicraft producers. Residence space was divided in accordance with different identities of people. For example, craftsmen lived near the government office and merchants lived near the market. Guanzhong divided Linzi, the capital of the Qi State, into 21 areas, of which 6 specialized in handicraft and business and were managed by the "three clans". This resulted from the fact that the handicraft industry was usually inherited by families from generation to generation. In the Qi State, business people and craftsmen could not easily change their career. According to the records in “Zizhang”, a chapter in The Analects of Confucius, Zixia said that craftsmen lived in their workshops next to the streets and did their business. In the late Spring and Autumn Period, the class of craftsmen (called “Baigong” in Chinese) gradually became the populace, and the originally self-enclosed workshops gradually overlapped with the market.

During the Qin and Han Dynasties, with the space of handicraft workshops gradually merging with the market, no trace of cemeteries could be found in the east and west markets of Chang'an. However, the living space still existed, attaching to the space of market trading.

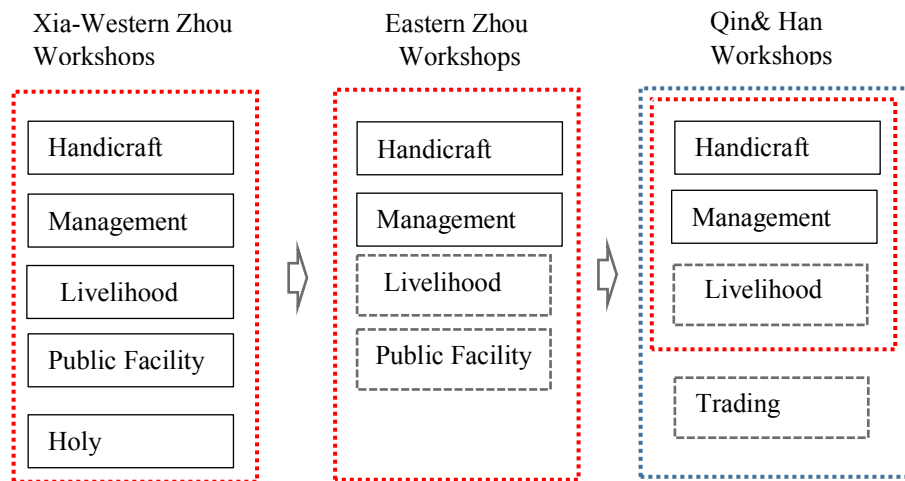


Fig. 3 Schematic diagram of evolution of space composition of handicraft workshops from Xia-Shang-Zhou Dynasties to Qin and Han Dynasties

(2) Spatial coupling of workshops in different handicraft industries

In terms of different handicraft industries, the degree of spatial coupling varied among different types of workshops, which is illustrated in the following figure.

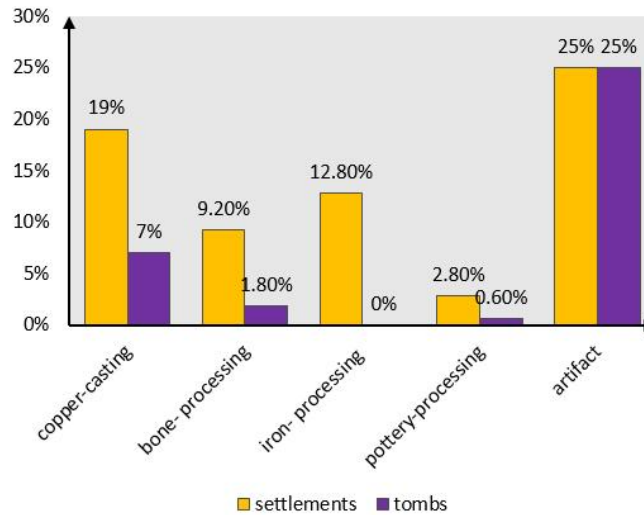


Fig. 4 Evolution of the space composition of handicraft workshops from Xia-Shang-Zhou Dynasties to Qin and Han Dynasties

According to the figure, 25% stone artifact workshops contained residence sites and another 25% contained cemeteries. The proportions were the highest, followed by those of the bronze-casting, bone-processing, iron-casting and pottery workshops. No residence was found in jade processing workshops, which might result from their higher rank and their location in the palace area.

It should be noted that there is something special about the data of stone artifact workshops. In the 18 capital cities, only 8 stone artifact workshops were found, and 2 of them, the Taosi site and the ancient capital of the Zheng and Han States, contained residential or burial space. In the Taosi site, the stone-processing workshop was located in a relatively closed stone-processing industrial park. The mid-term relics in the Taosi site showed that high-ranking residence, together with stone artifact and pottery workshops, was built on the high and smooth land in the city. Stone-processing workshops no longer appeared in the Erlitou site, which might be related to the fact that stone processing had been transferred to other professional settlements. Different families or clans had their own workshops. The stone-processing workshops in the ancient capital of the Zheng and Han State specialized in the production of stone artifacts used on ceremonial occasions.

Besides, the proportion of residential or burial sites contained in bronze-casting workshops was much higher than that of other types of handicraft workshops. In some bronze-casting workshops, there were both residence and cemeteries. Some scholars found that bone-processing workshops and bronze-casting workshops often appeared in pairs, so the proportion of bone-processing workshops with residential and burial space ranked the third. It also reflected the spatial closure of such workshops. With the advent of ironware in the Spring and Autumn Period, iron was widely used in the manufacture of weapons and production tools (but currently no sacrificial vessels made of iron was found). Because the raw material of iron was easier to obtain than bronze, the extensive production of iron required a large number of craftsmen. However, the proportion of iron-casting workshops with residence was not the highest. For example, both the Dawulou bronze-casting workshop and the Cangcheng iron-casting workshop in the capital of the Zheng and Han States existed in the same period of time and covered over 100 thousand square meters respectively. There were 75 residence sites in the Dawulou bronze-casting workshop, much more than those in the Cangcheng iron-casting workshop. The reason might lie in the fact that Dawulou produced sacrificial vessels, weapons and coins, while the Cangcheng workshop produced iron farm implements. The Dawulou workshop, with an obvious higher rank than Cangcheng workshop, satisfied the needs of the nation and guaranteed national security and governance by making a larger number of craftsmen live inside the workshop.

4. Factors Affecting the Spatial Coupling of Handicraft Workshops in the Capitals before Qin and Han Dynasties



(1) the long-term high status of bronze-casting workshops as the "state apparatus" in the early capitals

The degree of management and control over different types of workshops differed. The sacrifice and military affairs were the most important issues of a country. In the early kingdoms period, bronze ware was the symbol of the state power. Thus the authority took absolute possession of the copper mines, production technology and casting space. Bronze-casting workshops could be regarded as a part of the "state apparatus". The location of bronze workshops in the capital city was also very important. There was "exclusive" space for bronze workshops, a "space of power" like the palace and the ancestral temple. Because of the monopoly of handicraft technology in ancient China, high-tech handicraft industries such as bronze-casting were often tightly controlled. Such control was reflected not only in the location of workshops, hereditary system of technology and closure of workshop space, but also restrictions on the living place of craftsmen.

We can not regard bronze-casting workshops as a mere "productive space". The spatial coupling phenomenon where production, management, craftsmen's living space, craftsmen's cemeteries and sacrificial space were strictly controlled in a closed unit reflected the enormous power of the early kingdoms.

(2) The kin-ordered settlement system influencing the coupling of handicraft space in capitals in the Shang and Zhou Dynasties

The combination of "production, residence and cemeteries" in the handicraft workshop space was likely to be relevant to the land ownership system and the population management system, which was evident in the Shang and Zhou Dynasties. In Yinxu, the clan and settlement management system was "mixing together in general and living in compact communities in specific regions". People lived together as a clan but at the same time the population was also decentralized. With the hereditary system, the technology was controlled by professionals from one generation to the next, and was prevented from being lost. Craftsmen of the same workshop as well as some managers might live together as a clan, and with the clan there were both agricultural production and a variety of handicraft industries. Different clans formed independent units with comprehensive functions, guarding the central area of the palace. Moreover, not all the craftsmen were slaves. Based on the funeral objects discovered in the west part of Yinxu, it could be speculated that one-tenth of the tomb occupants were craftsmen. They were professional handicraft workers who fell into the class of freeman. These freemen worked and lived within the clan for a long period of time and were buried in the same area after death.

In the early Western Zhou Dynasty, the clan management system was very similar to that of the Shang Dynasty. At that time, the industry, commerce, their organization and the system of ownership were all with the characteristics of rural commune ownership. The rural commune system is a kind of political governance which can control all the relations of production. Marx and Engels argued that the organization of industry and its corresponding ownership in the ancient society were with the nature of land ownership.

In ancient times "guoren" (literally meaning "capital people") referred to people living in the capitals. Only when the conqueror thought that the conquered shared the same status and common interests with themselves, would they permit the conquered to live in the capitals. The Zhou Dynasty's governance over people of the Shang Dynasty was like that. The Zhou authority made the Shang people moved to Shaanxi in order to develop the economy. The Shang people were allowed to live and produce handicrafts in Zhouyuan, a settlement of aristocracies with family names different from that of the rulers of the Zhou Dynasty. Craftsmen coming to Zhouyuan in early times were probably professional handicraft workers rather than slaves. According to the Japanese scholar Taketoshi Sato, bronze craftsmen in the Shang and Zhou Dynasties formed professional groups with the structure of clans. These professional craftsmen were arranged in a relatively small area of handicraft workshops. They did not own land in the vicinity of Zhouyuan and could only be buried in the handicraft workshops. Through the analysis of the "pottery tube", a tool for bronze-casting, some scholars believed that in the Western Zhou Dynasty the tombs of craftsmen were inside the workshops.

The combination of spaces with different functions, influenced by the clan management system, gradually formed an "integrated space unit". The "handicraft space" could not be simply classified as "space of production" or "space of power". Production (workshops), life (residence), power (management buildings), sacred space (sacrifice) and space for public facilities (cemeteries) were coupled together. Under the clan management, the coupled space was an "integrated space for the branch of power", and its handicraft production was closely related to the state form and the state governance mechanism. The integrated space can even be considered as the



earliest "public space for the clan members " with economic attributes, a production space where clan members worked together.

(3) The changes in cosmological ideas and religious beliefs influencing the spatial demand of sacrificial activities in the workshops

The earliest relics of sacrifice in the handicraft workshops was dated back to the Yangshao period. Sacrificial activities were common in the Shang and Zhou Dynasties, and handicraft production, especially that of the ceremonial vessels, was given a mythological flavor. At present, sacrificial sites can be found in all the ancient Shang capitals unearthed. In the bronze-casting and pottery workshops in the Shang and Zhou Dynasties, there were remains of people, animals and artifacts found in pits. Such distribution of space was likely to be specially planned. The existence of the sacred space in the Shang and Zhou Dynasties indicated that the planning of such a sacrifice space could be dated back to the time of the lower layer of the Erligang site or to the Xia Dynasty.

With the changes of the objects of sacrifice and the simplification of sacrificial activities, the sacrifice space shrunk correspondingly. Although sacrificial space was found in the handicraft workshops in Yongcheng of the Qin State, it was not common in the Eastern Zhou Dynasty, and it was not yet possible to determine whether this type of space existed in workshops in other capital cities at that time. Since the Song and Yuan Dynasties, the worship of gods of different industries has become a general folk belief in the handicraft industry. However, it was difficult to distinguish the buildings for those gods from ordinary house foundations, and the god for some industry might be just a stone.

The sacrificial space in workshops in the early capital once took a very important spatial position, but as the time passed by, the original sacrificial space shrunk and disappeared. This was related to the gradual standardization of sacrificial places by the state. Although sacrificial activities and the worship of gods might have already occurred, the sacrificial space itself might be gradually reduced or disappeared in terms of size.

In general, from the Xia-Shang-Zhou Dynasties to the Qin and Han Dynasties, there was a downward trend in the degree of spatial coupling of the handicraft workshops in the capital cities, which reflected the evolution of various factors such as the state form, power intensity, social governance system, religion and so on.

Acknowledgements

I would like to express my gratitude to Professor Wang Xingping, the supervisor of my master's study, for his enlightenment about this research topic, and to Professor Li Baihao of Southeast University and Professor Tan Zongbo of Tsinghua University for their guidance.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Zhang Yidan, born in Xianyang, China, in 1986, lecturer in College of Cultural Heritage, Northwest University. The research field involves urban planning history, archaeological site management, and historical urban development. She received a bachelor's degree from Xi'an University Of Architecture And Technology in 2010, master's degree in urban and rural planning from Southeast University in 2013, a doctorate in Archaeology from Northwest University in 2017, she visited to University of Cergy Pontoise in France during 2014 to 2015. Representative academic thesis: A probe into the characteristics of the industrial spatial pattern and the influence mechanism of the ancient capital of China[J].Urban Planning Forum.2014(03): 112-119/ Vol:216

Bibliography

- [1] Anyang Team, Archaeological Research Institute(CASS). Sites with Yangshao Cultural in Baojatang Anyang [J]. Journal of Archaeology, 1988(2), 171-173.
- [2] Archaeological research institute (CASS). Preliminary exploration and excavation of Yanshi Shang city [J]. Yanshi Shang City (Volume one), Science Press, 2013:725.
- [3] Archaeological research institute (CASS). Preliminary exploration and excavation of Yanshi Shang city [J]. Yanshi Shang City (Volume one), Science Press, 2013:725.



- [4] Archaeological research institute (CASS). The Recovery and Research of Yin Dynasty Ruins [M]. Science Press, 1994.
- [5] Caiming. On the microwear of stone implement and economic forms of Taosi culture [D]. Xi'an: Northwest University, 2008:41.
- [6] Cai Quanfa, Liu Haiwang, Ma Juncai. Sites of the City Site of Zheng and Han States [M]. Chinese Archaeological Almanac, 1990: 251-252.
- [7] Cai Quanfa. Main Results of the Archaeology in the City Site of Zheng and Han States and the Culture of Zheng [G]. Elephant Press, 2003(4): 208.
- [8] Caorui. Research on Eastern Zhou Dynasty handicraft sites[D]. Shenyang: Liaoning Normal University. 2015:22.
- [9] Chang'an Archaeological Team. Sites Eastern Market and Western Market in Chang'an City of the Han Dynasty [Z]. Chinese Archaeological Almanac, 1987.
- [10] Chenli. Analysis on the Property of Metal Hoard in Xianyang- the Capital City of Qin Dynasty [J]. Archaeology and Cultural Relics, 1998(5): 94-96
- [11] Cheng Pingshan. On stages and attributes in pottery cities [J] Journal of Jiangnan Archaeology, 2005(3):48-54.
- [12] Fengxi Excavation Team(CASS). Report on tamped earth in Xi'an [J]. Archaeology, 1987(08).
- [13] Fu Zhongyang. Bone-making remains and handicraft in Feng and Hao Sites [J]. Archeology, 2015(09):92-100.
- [14] Fu Zhongyang. The reflection of archeology in Western Zhou City [J]. Three Generations (II), 2006(05): 518.
- [15] Fu Zhongyang. The reflection of archeology in Western Zhou City [J]. Archaeology (II), 2006(05): 518.
- [16] Guo Shengqiang. Restudy on the Layout of Chinese Ancient Cities [J].Journal of Sanmenxia Polytechnic, 2014(06):1-5.
- [17] Han Lisen, Duan Hongzhen. Archaeology Discovery of the site of Zhao State Capital at Handan [J]. Handan Polytechnic College, 2008(4).
- [18] Handan Cultural Relic Administration. Briefing on ancient sites investment in Handan, Hebei province [J]. Archaeology, 1980(2): 142-146.
- [19] Han Xianghua. The ages of pottery workshops in Shangcheng[J]. Cultural Relics of Central China, 2009(06): 39-45.
- [20] He Nu. Theory and Practice Harvest in the archaeology of Taosi Sites in 2010. 2013,11,29
<http://www.kaogu.net.cn/html/cn/xueshuyanjiu/yanjijuxinlun/juluoyuchengshikaog/2013/1025/33670.html>
- [21] He Yuling. Analysis of Manufacturing Management Patterns of Yin Dynasty Ruins [J]. Three Generations Archaeology, 2011(12):280-291
- [22] Hebei Cultural Relics Bureau. Investment Report on the site of Zhao State capital at Handan [A], Archaeology Collection (4) [C]. Beijing: Science Press, 1984: 162-195.
- [23] Hebei Institute of Archaeology. Briefing on Zhongshan Scope No.4 &5 sites [J]. Stories of Relics, 1989: 52-69.
- [24] Hebei Institute of Archaeology. Report on Archaeological Excavation in Guoling City from 1975 to 1993 [M]. Beijing: Cultural Relics Press, 2005.
- [25] Hebei Institute of Archaeology. Report on Guoling city in Warring States from 1975 to 1993 [R]. Beijing Wenwu Publishing House, 2005.
- [26] Hebei Institute of Archaeology. Research on Guoling City [D]. Zhengzhou: Zhengzhou University, 2010.
- [27] Hebei Institute of Archaeology. Xiadu [M]. Cultural Relics Press, 1996.
- [28] Henan Institute of Archaeology. Briefing on Pottery-processing of the City Site of Zheng and Han States [J]. Huaxai Archaeology, 1991(3).
- [29] Houma Team of Shanxi Archaeology Research Institute. Xintian in Jin Dynasty [M]. Shanxi Renmin Press, 1996:65-79.
- [30] Huang Zhanyue. The Sacrifice in Ancient China [M]. Beijing: Cultural Relics Press, 1990.
- [31] Laiqiong. The Market Layout and Management of Chang'an City in the Han Dynasty [J]. Journal of Shaanxi Normal University (Natural Science), 2004(1): 38-42.
- [32] Lei Xingshan. Living and Burying of the Manufacture in the Sites of Zhou Dynasty- the Role of Cultural Artifacts of Chinese in Settlement Mix [J]. Huaxia Archaeology, 2009(04): 95-102.
- [33] Lei Xingshan. On Western Zhou Handicraftsmen's Dwellings and Tombs on the Zhouyuan Site: Also on the Role of Particular Objects in the Study of Settlement Structure [J]. Huaxia Archaeology, 2009(04):95-102.
- [34] Lei Xingshan. On Western Zhou Handicraftsmen's Dwellings and Tombs on the Zhouyuan Site: Also on the Role of Particular Objects in the Study of Settlement Structure [J]. Huaxia Archaeology, 2009(04):95-102.



- [35] Lei Xingshan. On Western Zhou Handicraftsmen's Dwellings and Tombs on the Zhouyuan Site: Also on the Role of Particular Objects in the Study of Settlement Structure [J]. *Huaxia Archaeology*, 2009(04):95-102.
- [36] Li Jiuchang. On the Spatial Structure and Feature of the Capital of Erlitou Site in Yanshi [J]. 2007(10): 49-60.
- [37] Li Lingfu. The origin of Chinese ancient cities and the layout of the cities in Xia and Shang dynasties [J]. *Journal of Taiyuan University*, 2001(08):53-60.
- [38] Li Lingfu. The origin of Chinese ancient cities and the layout of the cities in Xia and Shang dynasties [J]. *Journal of Taiyuan University*, 2001(08):53-60.
- [39] Li Xiaodong. Survey and Excavation of Yanxia [J]. *Archaeology*, 1965(01).
- [40] Li Yipei. The layout change research of the capital of Yin[D]. Zhengzhou: Zhengzhou University, 2006.
- [41] Li Yufang. Manufacture Sites in Chang'an of the Han Dynasty [J]. *Relics and Museology*, 1996(8): 44-49.
- [42] Lian Haiping, Tan Derui, Zheng Guang. The research and exploration to the bronze casting techniques of Erlitou Site [J]. 2011(4):561-563
- [43] Liu Guoliang. Preliminary settlement pattern research of Yanshi Shang city [J]. *Three Generations Archaeology* (VI): 164-191.
- [44] Liu Qingzhu. On the Layout and Other Issues of Xianyang- the Capital City of Qin Dynasty [J]. *Relics and Museology*, 1990(5).
- [45] Liu Yanfeng, Wu Qian, Xue Bing. A new investigation of the city layout and the trend of the outline wall of Zhengzhou on Shang Dynasty [J]. *Journal of Zhengzhou University (Philosophy and Social Science)*, 2010(05): 164-169.
- [46] Luoyang Cultural Relic Team. Briefing on ACTS cemetery in the Spring and Autumn Period [J]. *Cultural Relics of Central China*, 1998(3).
- [47] Luoyang Cultural Relic Team. Excavation of the warring states period kiln in the royal capital of the Eastern Zhou Dynasty in Luoyang [J]. *Journal of Archaeology*, 2003(4).
- [48] Luoyang Cultural Relic Team. The discovery of Luoyang Archaeology(2007) [R]. Zhengzhou: Zhongzhou Ancient Books Publishing House, 2009.
- [49] Marx. Critique of Political Economy [M]. Renmin Press, 1972: 109-110.
- [50] Wang Hao. The Research for the City Planning and Layout in Xia and Shang Dynasties [D]. Zhengzhou: Zhengzhou University. 2014.
- [51] Wang Xueli. Xianyang- Capital City of the Qin Dynasty [M]. Xi'an : Shaanxi People's Publishing, 1985.
- [52] Wangyuan. Reinterpretation of Yaojiagang of Yong in Qin state [J]. *Archaeology and Cultural Relics*, 2013(06):69-75.
- [53] Wang Yuan. Study on the Overall Arrangement Of Yin Dynasty Ruins [D]. Shijiazhuang: Hebei Normal University, 2007: 34-44.
- [54] Meng Xianwu, Li Guichang, Liyang. State-run handicraft workshops in Yin Dynasty ruins [J]. *Journal of Yindu*, 2004(12): 13-20.
- [55] Niu Shishan. Preliminary Study on the Layout and Planning of Pottery sites [M]. Beijing: Science Press. 2014.
- [56] Sato Wu min. Ancient China& Bronze Industry [J].Hiroshi yoshikawa, 1962: 309-310.
- [57] Shanxi Team, Archaeological Research Institute(CASS). Briefing on Taosi from 1978 to 1980 in Xiangfen [J]. *Archaeology*. 1983(01);Proceedings of Gao Wei. Etiquette in Longshan Period and 55 Years Anniversary of Su Bingqi [C]. *Cultural Relics Press*, 1989: 235-244
- [58] Shandong Cultural Relics Bureau. Briefing on the Ancient city of Shandong- Linzi [J]. *Archaeology*, 1961(6); Qunli. Summary on the Excavation of Linzi [J]. *Relics*, 1972(5).
- [59] Shanxi Archaeological Research Institute. Briefing on pottery excavation in pottery sites [J]. *The Antique Quarterly*, 1999(06): 3-11.
- [60] Shanxi Archaeological Research Institute. Briefing on pottery excavation in pottery sites [J]. *The Antique Quarterly*, 1999(06): 3-11.
- [61] Sunmiing. On productivity and circulation of bronze sacrificial utensils in Zhou Dynasty [J]. *Puyang Vocational and Technical College Journal*, 2012(02): 51-55.
- [62] The settlement distribution and social characteristics of Zhouyuan site- taking Poly (Chengdu) [N]. *Guangming Daily*, 2014(007).
- [63] Wang Di. Study on the Pottery-processing of the Northern China in the Shang and Zhou Dynasties [D]. Jinan: Shangdong University, 2014: 190-195.
- [64] Wang Kai. The Archaeology Research of Remained Manufacture in the City Site of Zheng and Han States [D]. Zhengzhou: Zhengzhou University, 2010(8)



- [65] Wang Zhenzhong. Shang Dynasty settlement structure and the mode of rule of Shang King [J]. Chinese Academy of Social Science, 2007(04):184-208.
- [66] Wang Zhenzhong. Mix of Tiny Cities and the Regime of Kings in Shang Dynasty [J]. Chinese Academy of Social Science, 2007(04): 184-208.
- [67] Wei Feng. The study of pattern of city space in previous Qin Period [D]. Zhengzhou, Zhengzhou University, 2002.
- [68] Xu Hong. Archaeological Research on Cities in the Pre-Qin Period [M]. Beijing: Yanshan Press, 2000:100.
- [69] Xu Hong. The Investigation on the Construction of Yanxia [J]. Archaeology, 1999(4):60-65.
- [70] Xu Hong. The Investigation on the Construction of Yanxia [J]. Archaeology, 1999(04):60-65.
- [71] Xuhong. Restudy on the Ancient City-Qufu [J]. Three Generations of Archaeology, 2004(9): 286-289.
- [72] Yue Zhanwei, Liu Yu. Review on the copper-casting in Yin dynasty ruins [J]. Three Generations of Archaeology, 2006(05): 359-374.
- [73] Zhang Guoshuo. Study on Yucheng system of Xia and Shang dynasties [D]. Zhengzhou: Zhengzhou University, 2000.
- [74] Zhang Xuehai. On the Basic Configuration and Development of Qufu in Shandong Province [J]. Relics, 1982(12): 13-16.
- [75] Zhang Yongshan. The development of pottery handicraft industry in western Zhou period [J]. Journal of Chinese Historical Studies, 1997(3):43-53.
- [76] Zhen Pengsheng. Study on the commercial economy Zhongshan Scope in the early Warring States period [D]. Hebei Normal University. 2007:20.
- [77] Zhenghan. Research on Dawu Copper-casting in Xinzheng County of the Eastern Zhou Dynasty [M]. Chinese Archaeological Almanac, 1993: 185-186.
- [78] Zhouyuan Archeological Team. Briefing on sites of bone-making workshops in Fufeng Yuntang in western Zhou dynasty [J]. Cultural Relic, 1980(04):27-38.
- [79] Zhouyuan Archeological Team. Briefing on 2014 Excavation Report of Foundation No. 3 at Fengchu [J]. National Museum Journal, 2015(7):6-25.
- [80] Zhu Junxiao, Li Qinglin, Wang Changsui, Xu Hong. A Preliminary Study on the Provenance of Potteries from Erlitou Site [J]. Journal of Fudan University. 2004(8): 581-603
- [81] Zhu Guanghua. Yuanbei cities and Yin dynasty ruins [J]. Archaeology and Literature, 2006(02): 31-35.
- [82] Zhu Honglin. Restudy on the Regime Manufacturer-Merchant-Power-holders in Zhou Dynasty [J]. The Journal of Humanities, 2004(01): 139-145.
- [83] Zuo Biwen. A space analysis Erlishan Relics in Zhengzhou Shang City [D]. Zhengzhou: Zhengzhou University, 2013:48.

New Perspectives on the Planning of Yuan Dadu: The Yuan Measurement System, Residential Space and Nomadic Life

Zhao Chunxiao*

*PhD student, School of architecture, Southeast University, zhaochunxiao1919@hotmail.com

Abstract:

Recent studies on Dadu, one of the capital cities of the Mongol Yuan dynasty, were increasingly situated in a holistic Eurasian background, shedding new light on the influence of nomadic traditions in its city planning in addition to using Chinese urban models. Whereas most of the previous studies took physical remains as their point of departure, this paper aims to understand the nomadic characteristics of Yuan Dadu through elucidating its two fundamental yet under-studied planning features: Firstly, the planning of the city in accordance with the unique measurement system of Yuan chi, whose length is significantly different from the Chinese dynasties that ruled from the Central Plains; Secondly, the prescribed eight-mu plot for each household in the History of the Yuan Dynasty, which took the shape of a 32-by-60-step rectangle based on the space model of nomadic families. I argue that the above two points can provide new perspectives on the systematic influence of nomadic way of life seen in the planning of the Yuan Dadu as well as the planning principle established by the Mongol regime.

Keywords: Yuan Dadu, Nomadic tradition, Yuan *chi* (尺), Homestead area

Introduction

Yuan Dadu was an international capital city of the Mongol Yuan dynasty. Its construction was ordered by the ruler of Mongolia, Kublai, in the 1267 at the location of today's Beijing. This is where the northern border of the Central Plains Dynasty separated the farming civilization from the nomadic civilization. The city was also referred to as "Khanbaliq" by the Western Europeans during the Middle Ages. From the day when the Dadu was established, the urban structure of Beijing in the Ming and Qing Dynasties had been laid, and even the capital of the People's Republic of China, Beijing, 700 years later. Therefore, whether we study Yuan Dadu or Beijing city of Ming and Qing Dynasties, and even contemporary Beijing, we cannot ignore Mongolian rulers' planning ideas for this capital because of their nomadic way of life. In the early twentieth century study of Yuan Dadu, most Chinese scholars in the history of planning were influenced by the ideas of a western modern nation-state or bound by the orthodox values of the Central Plains Dynasty, believed the culture of the nomadic people, who were not fixed in a city without a unified State Administration and migrating on the steppe and Gobi, did not play a decisive role in planning and construction of Dadu. Most of their studies did not reasonably and effectively evaluate the role of the Mongolian Yuan nomadic life in the planning of Dadu. They tried to interpret the image of Dadu's urban spatial form by using the planning concept of the traditional Central Plains Dynasty. The concept assumed that the regime and the culture of the Yuan dynasty was greatly influenced by the civilization of the Central Plains Dynasty. From that perspective, the analysis of materials and the research results will lead to a wrong direction. They will not be able to explore the planning ideas and methods of the Dadu comprehensively.

The “Great Mongol Empire” (Yeke Mongghul Ulus) in the period of the first four Khans, was a huge empire that spanned across the Eurasian continent. Contemporary historians have pointed out that based on its nomadic civilization, the Mongol Empire had its own political and cultural tradition instead of completely following the Han tradition. After conquering the Central Plains, the imperial power in the Yuan Dynasty had the dual rulership of the “emperor and the great Khan.” The nations of Mongolia and Han symbolize the legitimacy of the Mongol Empire ruling rights.¹ As Mr. Sugiyama Masaaki pointed out after analyzing the elements of Kublai’s construction of the great empire in *Kublai’s challenge* (2013), the Han’s (Han Zu 汉族) culture is only a “coat” required by Kublai to build an unprecedented empire. Its characteristics are obvious only in the middle and lower level administrative organizations in Han’s (Han Zu 汉族) land.² However, there is no such understanding in the research of Yuan Dadu planning as historical records about Dadu’s planning principle are unclear. Studies usually focus on surface phenomena and their symbolic meanings. They inadvertently tend to ignore specific planning methods. With regard to the study of Yuan Dadu planning, the earliest understanding of the city in the view of the nomadic life of Mongolia was Murata Jiro’s, a Japanese scholar from 1934. His paper titled “Argument of Yuan Dadu’s Plan [LuanYuan Dadu De Ping Mian Gui Hua (论元大都的城市规划)]” put forward that the practice of the palace in Dadu, which was built nearby Taiye Pond [Tai Ye chi(太液池)], was an imitation of Batu Khan’s palace, which is located in the Volga River as recorded in missionary notes³, in order to remind the successor of the rising place with plenty of water and grasslands. But the judgment made in the missionary notes has not been recognized by the academic community. In the late 90s of the past century, Pan Guxi, a Chinese scholar, made amendments to the understanding of the former Yuan Dadu’s planning research in the text of “Yuan Dadu’s Planning Not to Return to the Ancients: Re Understanding of the Construction Model of the Yuan Dadu [元大都规划并非复古之作——对元大都建城模式的再认识]”. The reason why the palace is located in the southern part of Dadu is not to conform to the statement that “palace should behind the court, in front of the market” which was the requirement of the capital layout in *Kao Gong Ji* (考工记). Just because Kublai and others were very fond of this pond [Tai Ye chi(太液池)].⁴ In recent years, Chinese scholars have explored the planning of Dadu from the perspective of nomadic life in works such as Bao Muping, “Reexplored the planning of Dadu from the Perspective of Nomadic Life: From Karakorum to the Yuan Dadu”; and Mr. Li Dongnan, “The Nomadic Ethnic Characteristics of the Capital of the Mongol Regime: Focus on the Yuan Dadu.” The exploration of the planning of Yuan Dadu from the perspective of nomadic life has become an important perspective nowadays.

However, it is not sufficient that researches simply focus on certain specific phenomena after the completion of Yuan Dadu by speculating on cultural considerations, or mutual proof among three capitals of the Yuan Dynasty. Such a study may be enlightening and in a reasonable interpretation range of the nomadic life characteristics on Dadu planing. But on the other hand, we cannot discuss the systematic influence of nomadic life on the planning of Yuan Dadu without fully understanding the fundamental principles of the absolute length of *chi* and division mothed of homestead. Therefore, based on the extant historical record, this article will explore the basic elements in planning – such as the unit length of construction and land use index – to reveal the nomadic life elements in the planning principles of Yuan Dadu.

1. Re-recognition of the *chi* used in planning of Dadu from the nomadic civilization

Before discussing the planning of Yuan Dadu, we must point out that in ancient China, the absolute value of the length units — *chi* (尺) — of urban planning and architectural design were changing throughout history. Therefore, determining the absolute length of the research object's *chi* is a necessary step for the conversion of the length dates obtained from archaeological investigation and recorded in ancient documents.

Early studies suggested that the Yuan Dynasty measurement system was inherited from the Song Dynasty.⁵ Thus in the study of the planning of Yuan Dadu, the length of one *chi* as 0.308 meters to 0.315 meters has been commonly used by researchers. However, an obvious problem here is that this length range of *chi* to convert 28600 meters perimeter of Dadu obtained by archaeology⁶ with 1 *bu* (步) = 5 *chi* (尺)⁷, 1 *li* (里) = 240 *bu* (步)⁸, to the measurement of Yuan Dynasty is 75.66 *li* (里) to 77.38 *li* (里) cannot meet the “60 *li* (里)”⁹ the perimeter of Dadu city recorded in *Jinshi Dadian* [《经世大典》] (1330) an official ordinance of Yuan dynasty excerpted in *Farming in Nan Village* [《南村辍耕录》] (1366). Most studies adhere to the correctness of the length range of *chi* (尺) and assume that the document records were incorrect. But if the difference of created background and used measure objects between nomadic and farming life is seriously considered, then studying Yuan Dadu with the *chi* (尺) of the Song Dynasty has to be reexamined.

After the 1990s, new progress has been made on the length of the Yuan Dynasty *chi* in the study of the history of Chinese metrology. Guo Zhengzhong and Qiu Guangming have shown that the length of *chi*'s daily use in the Yuan Dynasty was significantly longer than the Song's. These studies show that the length of *chi*'s daily use of the Yuan Dynasty was 0.395 meters / *chi* (尺) to 0.412 meters / *chi* (尺).¹⁰ By the converting method described above with the Yuan Dynasty's lengths of *chi* (尺), the perimeter of Dadu can be achieved at 57.85 *li* (里) to 60.34 *li* (里). This is more in accordance with the value recorded in *Jinshi Dadian* [《经世大典》] (1330) than the length of *chi* (尺) in the range of 0.308 meters/*chi* to 0.315 meters/*chi* used in previous research, for instance, Zhao Zhengzhi's use of 0.308 meters/*chi*¹¹, and Fu Xinian's use of 0.315 meters/*chi*¹². In addition to this argument, it is possible to verify the validity of this length range of *chi* on the planning of Dadu from converting the date of the ruins of Dadu like wall and road into the measurement system of Yuan Dynasty, and contrast the conversion results with the value recorded in *Rules for Construction* [《营造法式》] (1103) and *Recorder on Xijing* [《析津志》] (1360s). Data on the size of walls and roads had been obtained from archaeological findings. The dates of wall ruins include their foundation depth at 2 meters¹³ and width at 24 meters.¹⁴ Converting these two measurements with 0.395 meters / *chi* (尺) to 0.412 meters/*chi* (尺) can show the foundation depth at about 5 *chi* (尺) and width at about 58 *chi* (尺) to 60 *chi* (尺). Both of these measures are in accordance with the construction standards recorded in *Rules for Construction* [《营造法式》] (1103)¹⁵ a book about the rules and regulations for construction published in North-Song Dynasty. The archaeological data of one of the road's width is 25 meters. It can be converted to about 12 *bu* with 0.395 meters/*chi* (尺) to 0.412 meters / *chi* (尺) and 5 *chi* (尺)/*bu* (步). The numerical value of 12 *bu* (步) is in accordance with the width of one of Dadu's four kinds of roads recorded in *Recorder on Xijing* [《析津志》] (1360s) and named “Xiao Jie (小街).”¹⁶

It must be noted that the length range of the *chi* (尺) belonging to the Yuan Dynasty is much longer than in any other Chinese dynasties.¹⁷ What is the cause of that? I conjecture that this must be related to different lives with regard to their nomadic ways and farming. In *Measurement of China from Three Century to Fourteenth*

Century [三至十四世纪中国的权衡度量](1993) the author pointed out that there was a close relationship among the Yuan, Jin, and Liao Dynasty on the length of *chi* (尺). The Yuan Dynasty inherited the measurement of the Jin Dynasty by comparing the length of the daily usage of *chi* in the Jin and Yuan Dynasty.¹⁸ This can be supported by the fact that the calendar of Jin Dynasty had been adopted during the early Yuan Dynasty¹⁹. These three dynasties had a mutual origin by being established by nomadic people in the north of the Central Plains. In the long nomadic life, it is possible according to the daily needs of nomadic life to form a measurement that is different from the one used in farming. Although there is no clear evidence for the origin and development of the nomadic civilization's measures, the manner of nomadic production and life reveals that they did not need to divide the cultivated land as agricultural production. Therefore, judging from the influence of the measuring object on producing objective value, the measurement standard of nomadic life is likely to have two different systems from the Central Plains Dynasty. From this point of view, it is easy to understand that the length of *chi* (尺) used in the planning of Dadu is much longer than the one used by other dynasties.

2. Redefining the flat form of eight-mu plot for each household

The *History of the Yuan Dynasty [Yuan Shi (元史)]* (1370) recorded that the residents who moved from the old city to Dadu would be privileged and given a land at an area of 8 *mu* (亩) used to make homestead.²⁰ The area of "8 *mu* (亩)" was the basic land index used in the planning of Dadu. It determined the whole spatial pattern and road organization. But unfortunately, the area of the homestead is pointed out in the *History of the Yuan Dynasty [Yuan Shi (元史)]* (1370) without its flat form. Scholars could only imagine the space it left. The first idea of the flat form for "8 *mu* (亩)" plot of homestead was put forward in 1960s as a 44 *bu* (步)-by-44 *bu* (步) square by Zhao Zhengzhi. The author converted the distance of 67.67 meters between two extant Hutons (胡同) of the Yuan Dynasty with 0.308 meters/*chi* (尺) belonging to the Song Dynasty into 44 *bu* (步) as the north-south length of a homestead. He then supposed the east-west length of the homestead is also 44 *bu* (步) long (see fig. 1).²¹ It is worth noting that the length of east-west side was only an assumption. In this way, the homestead formed a square shape of about 8.07 *mu* (亩) through converting 1936 *bu*² (步²) with 240 *bu*² (步²)/*mu* (亩), which is the traditional Chinese conversion method. During the next half century, many Chinese and foreign scholars adopted that size and shape. But it must be pointed out that the flat mode as a square was an *a priori* hypothesis based on the traditional Chinese space model that was made up of different sizes of squares in various grades²² (see fig. 2), just like the homestead's flat mode with the flat of Dadu. The triple-walled flat mode of Dadu is most noticeable whose concentric boundaries each had a perfect or near perfect geometric form followed Chinese tradition.²³ (see fig. 3) The flat mode was such a fiction that made people forget that 1) the east-west length of the flat mode is only the product of the author's imagination; 2) The flat of Dadu is never a square but a rectangle at 14 *li* (里) x 16 *li* (里)²⁴; 3) The area of "44 *bu* (步) x 44 *bu* (步)" square is never 8 *mu* (亩) but about 8.07 *mu* (亩).

Yao Dali in *The Yuan Dynasty's imperial power*[蒙元制度与政治文化] (2011) pointed out that when Kublai “Mongolia’s political center moved to the south and Khan did not have the ability to direct control of Mongolia throughout the country. However, using the traditional Chinese political resources does not mean that the Mongolian regime will give up the symbol of political tradition originated in Mongolia.”²⁵ Dadu as the capital of the empire shows the symbolic meaning of Kublai’s adherence to the legitimacy of the Mongolian tradition. Therefore, considering that the replacement of the capital has been opposed by the Mongol nobility, in planning of Dadu, Kublai had to use the measures to construct the new capital with nomadic culture in order to win the support of the Mongolian people. In the nomadic Mongolian life, family was the most basic social organization unit. A family had formed a certain spatial organization mode to allocate yurt position according to

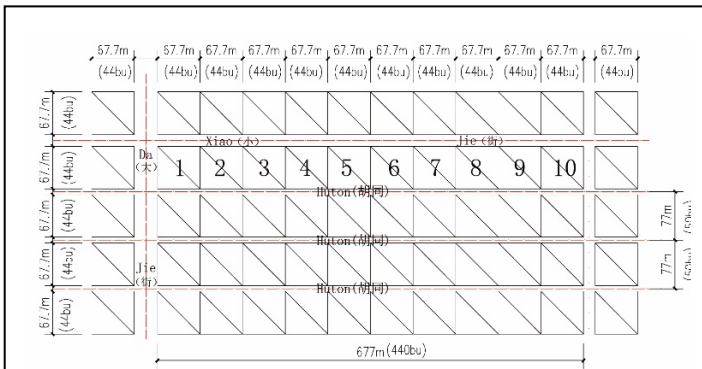


Figure 1. Diagram of the homesteads in Dadu.

Drawn by author based on Zhao Zhengzhi. 1979, 14-27.

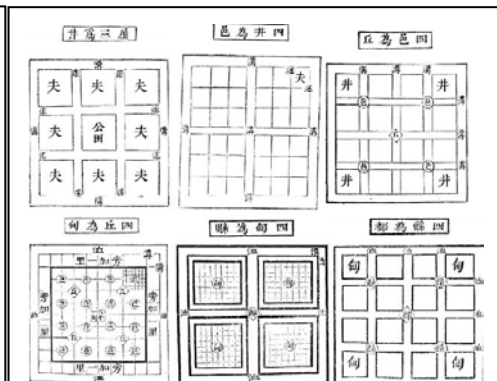


Figure 2. Land division system under the “Jing Tian Zhi (井田制)”.

Source: Xu Guangqi, 1981,87.

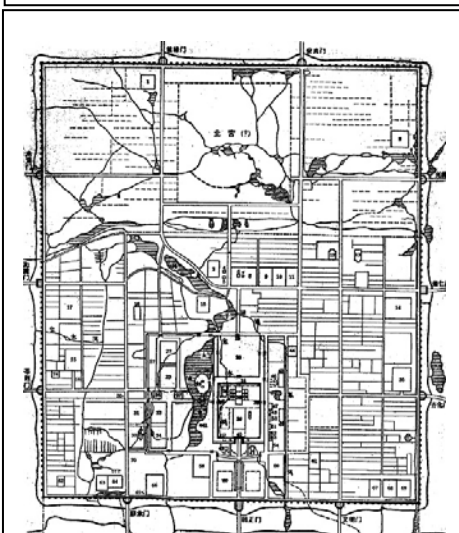


Figure 3. Restoration drawing of Dadu.

Source: Zhao Zhengzhi. 1979, 14-27.

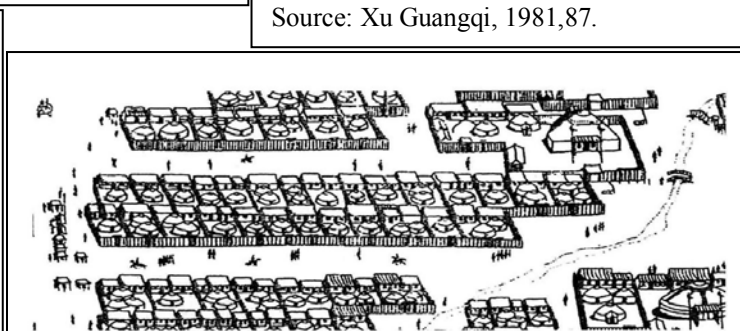


Figure 4. Part of the bird's-eye view of the Great-Khorum (1912). Great-Khorum is the predecessor of Mongolian capital of Ulaanbaatar.

Source: Bao Muping, 2014, 319-344. Line drawing based on polychrome painting in the collection of Mongolia Baogda Khan Winter Palace Museum.

the camping family members. Analyzing family spatial organization of the herdsmen in Mongolia, Victhorova in “The national cultural characteristics of residential sites and houses in Mongolia [蒙古的居民点和住宅的民族文化特点]” pointed out that according to the traditional customs of the Mongolian camp, the position in the first row of the West (South) is left for yurt of the oldest and most respected member of the collective. The other Mongolia yurt of the members are orderly arranged in the back of the first. Their entrance is always toward the south. The neighborhoods of each residential unit are not surrounded by walls, and they are rectangular in flat.²⁶ (see fig. 4). It can be seen that the traditional residence organization model of the Mongolian family forms a block space model with short distance of North-South side, and long distance of East-West side. Through the nomadic family space organization mode in Mongolia, a new understanding of the “8 mu (亩)” homestead plane mode should be taken, and a new plat form will be made based on the ancient land area calculation method.

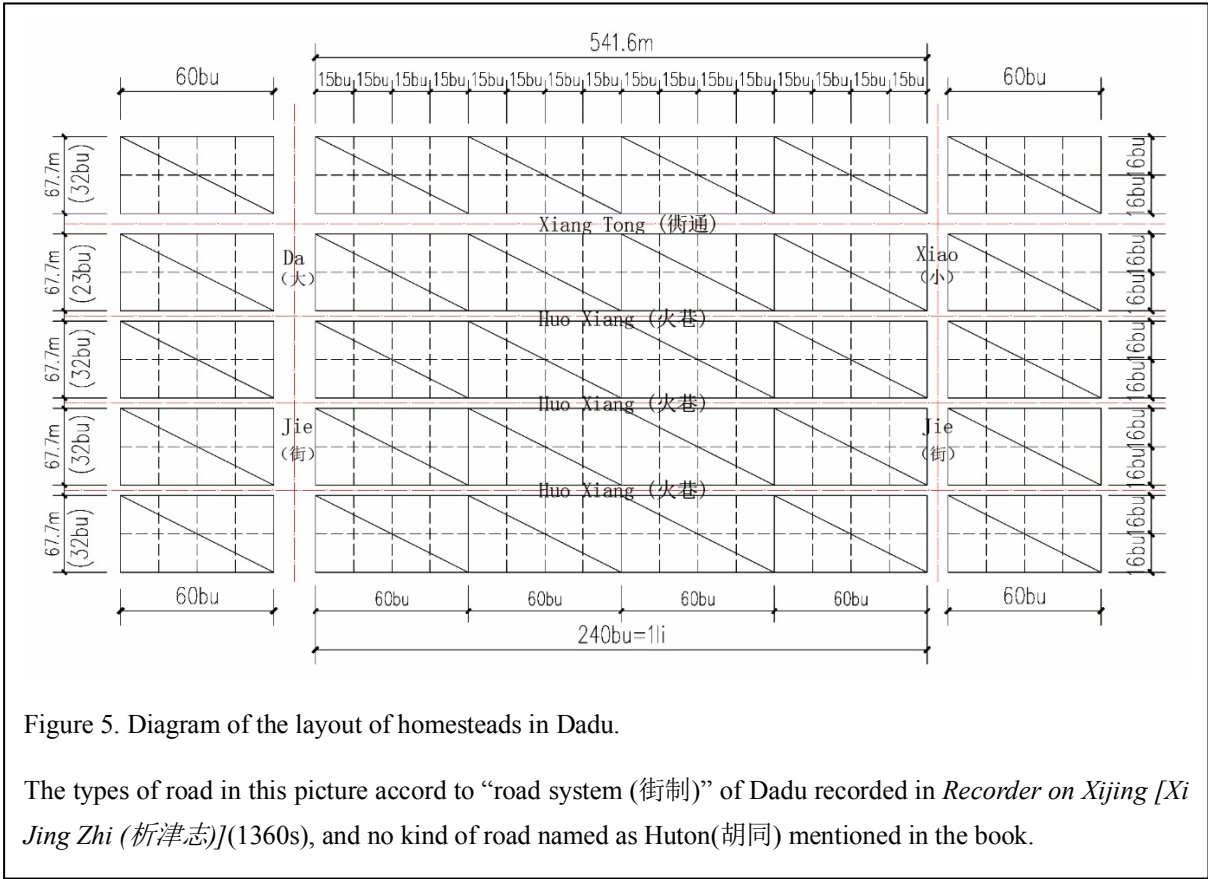


Figure 5. Diagram of the layout of homesteads in Dadu.

The types of road in this picture accord to “road system (街制)” of Dadu recorded in *Recorder on Xijing [Xi Jing Zhi (析津志)]*(1360s), and no kind of road named as Huton(胡同) mentioned in the book.

In *Nine Chapters of Arithmetic [Jiu Zhang Suan Shu (九章算术)]*(263 AD.), a book for mathematics originated in the Chinese Western Han Dynasty, the amount of 1 mu of land was $16 bu (步) \times 15 bu (步) = 240 bu^2 (步^2)$.²⁷ This practice has been used so far and the folk have retained the proverb: “long sixteen, fifteen wide, neither more nor less than one mu (亩).” It is a method for taking a plot of area of 1 mu (亩) near a square with the length and width as integers. Therefore, the area of 8 mu (亩) can be obtained by the product of a side length of $2 \times 16 bu (步)$ and another length of $4 \times 15 bu (步)$, as a rectangle of a $32 bu (步) \times 60 bu (步)$. Moreover, with the length of $0.395 \sim 0.412$ meters / chi (尺), had been verified above. the length of 67.76 meters the distance between extant tow Hutons(胡同) of Yuan dynasty, the north-South width of the homestead could be restored to about $32 \sim 34 bu (步)$, which is very close to the length value $32 bu (步)$ of one side of a flat in 2

mu (亩) as above. Without the error caused by the sampling, measurement and conversion of the Huton (胡同), the north-south length of the planned homestead can be assumed based on 32 *bu* (步), and then another side length of the homestead on the 60 *bu* (步). It is a the homestead as a rectangular of 32 *bu* (步) long in north-south and 60 *bu* (步) long in east-west (see fig. 5). From this flat we cannot only obtain an integer value area of the homestead conforming to the record in the *History of the Yuan Dynasty [Yuan Shi (元史)]*(1370), but we can also divide it into two parts : North and South, each one with the area of 4 *mu* (亩), or eight units in eight integers acres of 1 *mu*(亩). Every unit could be utilized by family members to settle in Dadu just like the family organization spatial patterns of the Mongolian Nomadic traditions on steppe.

The above analysis indicates that as principal conditions for building structures, space form and scale of Yuan Dadu, the measure length for planning and homestead plane pattern all reflect the characteristics of nomadic life. Especially the homestead plane pattern directly reflects the mode of family space organization in nomadic life. Perhaps these were only parts of the important role of the nomadic culture in the planning of Yuan Dadu. Therefore, more cultural symbols in the planning of the Yuan Dadu have to be reviewed from a new perspective.

Conclusion

All of these aspects provide us with a historical perspective from planning principle on the idea of nomadic life of Dadu. We can observe that the capital's grid-like layout was not carried out according to the Chinese traditional idea but the way of Mongolian encampment.

The thought of “what is Asia and what is Mongol-Yuan” not only impel the historians to enrich their knowledge and exploration, but also explore the possibility of re-recognizing what “China” is, and at the same time acknowledge the possibility of re-recognizing “Asia” and “the world”.²⁸ When the space of historical language transcends the boundaries of geography and administration, the capital Dadu of the “Great Mongol Empire” across the Eurasian continent in thirteenth Century opens up the space for further research. Therefore, the influence of the nomadic life of Mongol-Yuan, which is an important part of global civilization, on urban planning and the manifestation of the Dadu should not be ignored. The key issue for people failed to fundamentally realize the essential factors of Dadu during the past fifty years is not due to a lack of knowledge about the length of *chi*. They lacked the knowledge on the perspective of life. The main problem is that people do not fully realize the value of nomadic culture. Therefore, I take the display of nomadic life characteristics on the basic elements of Yuan Dadu as an opportunity to open a gap in the understanding of the Yuan Dadu with the perspective of the Central Plains Dynasty and shine the light on nomadic life. Hopefully, the paper identifies the great role of the Mongolian nomadic life in ancient China's capital planning. It also provides useful references for the perspective of study in the planning of Yuan Dadu by pointing towards an objective understanding of the topic.

Acknowledgements

I cordially thank Prof Chen Wei for her inspiring on my research. I also thank Dr Ren Sijie for her advice, which helped me improve and finalize this article;

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Zhao Chunxiao is pursuing a Ph.D. in Southeast University, China since 2016. Zhao Chunxiao is a lecturer in the School of Design and Art of Lanzhou University of Technology.

Endnotes

- 1 Yao, 2011, 143. All quotations from the Chinese references in this paper have been translated by the author.
- 2 Sugiyama Masaaki, 2013, 131.
- 3 Hou based his argument on Tamura Jiro “*Lun Yuan Da Du De Ping Mian Gui Hua [Argument of Yuan Dadu’s Plan]*”. *Man Zhou Xue Bao [Journal of Manchuria]*, No.3 (1934): 133-142., 103-104. Cited in Hou, 2014, 103-104. The author was not able to obtain Tamura Jiro’s article.
- 4 Pan, 1997,17-21.
- 5 Wang, 1959, “*Record of the Extant Rule System*”, 945 and Wu, 1984, 62-63, 241.
- 6 Yuan, 1972, 19-28.
- 7 The general acceptance of “*chi* (尺)” and “*bu* (步)” is 5 *chi* =1 *bu* since the Tang Dynasty. See Qiu, 2002, 50-51 and Wu,1984, 95. And this conversion method be used in other conversion in this article no longer special annotations.
- 8 “The city’s circumference is sixty *li*(里), and one *li* (里) is equal to two hundred and forty *bu* (步). (城方六十里, 里二百四十步)”.See Tao, 2012, 229.
- 9 *Ibid.*
- 10 Guo,1993, 256-260 and Qiu, 2002, 471-473.
- 11 Zhao, 1979,14-12.
- 12 Fu Xinian confirmed that the value calculated by using 0.315meter/*chi* to convert Dadu’s perimeter of 28600 meters obtained by archaeology would in line with “60 *li* (里)” the perimeter of Dadu recorded in *Jing Shi Da Dian*, but he did not give the “*li*(里)”-“*bu* (步)” conversion method. It can be evidence by using 1*li*=300*bu* an earlier conversion method used before the Tang Dynasty in China. See Fu, 2008,487.
- 13 Wang,1992, “*Yuan Dadu’s wall*”, 151.
- 14 Yuan, 1972, 19-28.
- 15 “Fortification system: the wall is fourty *bu* high, sixty *bu* thick..... The foundation of the wall is 5 *bu* deep (筑城之制: 每高四十尺, 则厚加高二十尺, 其上斜收减高之半。.....城基开地深五尺)”. See Li, 2011, 21.

16 “roads system: thoroughfares [Da Jie] width of the 24 *bu*, [Xiao Jie] width of 12 *bu*, there are 384 fire lanes [Huo Xiang], and 29 alleys [Xiang Tong] (街制, 自南以至于北, 谓之经, 自东至西, 谓之纬, 大街二十四步阔, 小街十二步阔, 三百八十四火巷, 二十九街通).” It can be seen there are four kinds of road recorded in *Xi Ji Zhi*. See Xiong, 1983, 4.

17 It can be seen that from the Tang to Qing Dynasty, the longest length of *chi* is 0.320 meters / *chi* (尺), the shortest is 0.3072 meters / *chi* (尺), and the difference of length is less than 1.28 centimeters. See Wu, 1984, 65-66, “*Zhong Guo Li Dai Chi Zhi Chang Du Bian Qian Biao [The Table of Length of Chi of Chinese Dynasties]*”.

18 “With some signs another possibility can be inferred that the measures of the Liao and Jin and Yuan dynasties belongs to another system”. See Zen, 1964, 163-182.

19 “The early Yuan Dynasty was using the ‘*Daming calendar*’ in a respect way (元初承用金《大明历》).” See Song, 1998, 691.

20 “诏旧城居民之迁京城者,以货高及居职者为先,仍定制以地八亩为一分;其或地过八亩及力不能作室者,皆不得冒据,听民作室”. *Ibid.* 163.

21 Zhao, 1979, 14-12.

22 Chinese ancient life space organization mode as “JingTian Zhi (井田制) [a system of the way to organizing wells and fields]”. Generally speaking It is the “nine squares” system (of land ownership in China's slave society) with one large square divided into 9 small ones (like the Chinese character “井”), the 8 outer ones being allocated to serfs who had to cultivate the central one for the serf owner. From the perspective of space organization, it was an idea mode with a square of land in a certain area as a unit, then in a special area increasing way, the unit continues to expand to different size of squares from small to large, as figure 1. If it is considered just the way of space organization for Dadu, the flat form of homestead of Dadu must be thought as a square.

23 Nancy Shatzman Steinhardt, 1999, 154.

24 The sides length of Dadu be explored by archeologist. They are 6680 meters in north, 6730 meters in south, 7590 meters in east, 7600 meters in west. They can be converted to about 14 *li* (里) in east-west and 16 *li* (里) in south-north. See Yuan, 1972, 19-28.

25 Yao, 2011, 145.

26 Victhorova, 1993, 7-11, 48.

27 Jiu, 1990, 181.

28 Zhang, 2016, 7.

Bibliography

Bao Muping, 2014. “Yuan Dadu Cheng Shi Gui Hua Zai Kao: Huang Cheng Wei Zhi, Zhong Gu Lou, Hu Ton Zhi De Guan Lian [Re examination of Urban Planning of Dadu: The Association between Bell Tower, Drum Tower, Position of Imperial City and Huton]”. *Zhong Guo Jian Zhu Shi Lun Hui Kan [Transactions of the history of Chinese building]*, no.10: 319-344.

Fu Xinian, 2008. *Zhong Guo Ke Xue Ji Shu Shi, Jian Zhu Juan [History of Science and Technology in China, Building Volume]*. Beijing: Science Press.

-
- Guo Zhengzhong, 1993. *San Zhi Shi Si Shi Ji Zhong Guo Quan Hen Du Liang [Measurement of China from Three Century to Fourteenth Century]*. Beijing: China Social Science Press.
- Hou Renzhi, 2014. *Bei Ping Li Shi Di Li [An Historical Geography of Beiping]*. Beijing: Foreign Language Teaching and Research Press.
- Jiu Zhang Suan Shu [The Nine Chapter Arithmetic]. 263BC. Guo Shuchun, ed. 1990. *Jiu Zhang Suan Shu [The Nine Chapter Arithmetic]*. Shenyang: Liaoning Education Press.
- Li Dongnan, 2014. “Meng Yuan Zheng Quan Du Cheng De You Mu Ming Zu Te Se: Yi Yuan Da Du Wei Zhong Dian [The Nomadic Ethnic Characteristics of Capitals of The Mongol Regime: Focus on the Yuan Dadu]”. *Bei Fang Ming Zu Kao Gu [The archaeology of the northern nationalities]*, vol.1. Beijing: Science Press.
- Li Jie, 1103. *Ying Zao Fa Shi [Rules for Construction]*. Zou Qichang, ed. 2011. *Ying Zao Fa Shi [Rules for Construction]*. Beijing: People Press.
- Nancy Shatzman Steinhardt, 1999. *Chinese Imperial City Planning*. Honolulu: University of Hawai'i Press.
- Pan Guxi, 1997. “Yuan Da Du Gui Hua Bing Fei Fu Gu Zhi Zuo: Dui Yuan Da Du Jian Cheng Mo Shi De Zai Ren Shi [Yuan Dadu's Planning Not to Return to the Ancients: Re Understanding of the Construction Model of the Yuan Dadu]”. *Zhong Guo Zi Jing Cheng Xue Hui Lun Wen Ji [Paper Collection of the Forbidden City Society of China]*, vol.2. Beijing: Forbidden City Press.
- Qiu Guangming, 2002. *Ji Liang Shi [Measurement history]*. Changsha: Hunan Education Press.
- Song Lian, et al. 1370. *Yuan Shi [History of Yuan Dynasty]*. Reprinted in 1998, Changchun: Jilin People's Publishing House.
- Sugiyama Masaaki, Zhou Junyu, trans. 2013. *Hu Bi Lie De Tiao Zhan [Kublai's challenge]*. Beijing: Social Science Academic Press.
- Tao Zongyi, 1366. *Nan Cun Chuo Geng Lu [Farming in Nan Village]*. Reprinted in 2012, Shanghai: Shanghai Guji Press.
- Vichorova, Bai Yintai trans. 1993. “Meng Gu De Ju Min Dian He Zhu Zhai De Min Zu Wen Hua Te Dian [The National Culture Characteristics of Mongolia Residential]”. *Meng Gu Xue Xin Xi [Mongolia Information Science]*, no.2.
- Wang Guowei, 1959. “Xian Cun Li Dai Chi Du [Record of the Extant Rule System]”. *Guan Tang Ji Ling*, vol.4. Beijing: Zhong Hua Book Company.
- Wang Youquan, 1992. “Yuan Da Du Cheng Qiang [Yuan Dadu's wall]”. *Zhong Guo Kao Gu Xue Nian Jian [Chinese Archaeology Yearbook]*, Beijing: Cultural Relics Publishing House.
- Wu Chengluo, 1984. *Zhong Guo Du Liang Heng Shi [The History of Chinese Weights and Measures]*. Shanghai: Shanghai Book Store.
- Xiong Mengxiang, ca.1360s. *Xi Jing Zhi [Recorder on Xijing]*. Reprinted as *Xi Jing Zhi Ji Yi [The collection of Recorder on Xijing]* in 1983. Beijing: Beijing Ancient Books Publishing House.
- Xu Guangqi, ca. Ming Dynasty. *Nong Zheng Quan Shu [Summary of Agricultural Policies]*. Shi Shenghan annotated, 1981. Taipei: Civilized Bookstore.

Yao Dali, 2011. *Meng Yuan Zhi Du Yu Wen Hua [Political Institutions and Culture in Yuan China]*. Beijing: Peking University Press.

Yuan Da Du Kao Gu Dui [Yuan Dadu Archaeological Team], 1972. “Yuan Da Du De Kan Cha He Fa Jue [Exploration and Excavation of Dadu]”. *Kao Gu [Archaeology]*, no.1:19-28.

Zhang Zhiqiang ed. 2016. *Chong Xin Jiang Shu Meng Yuang Shi [Reconstructing the Historical Narratives of the Mongol-Yuan Dynasty]*. Beijing: SDX Joint Publishing Company.

Zhao Zhengzhi, 1979. “Study of The Restored Plane Project of Dadu Capital, Yuan Dynasty”. *Ke Ji Shi Wen Ji [Historical collection of science and technology]*, no.2: 14-27.

Zeng Wuxiu, 1964. Zhong Guo Li Dai Chi Du Gai Shu [Overview of Ancient Chinese Scale]. *Li Shi Yan Jiu [Historical Research]*, no.3: 163-182.

Image sources

Figure 1: Drawed by author based on Zhao Zhengzhi. 1979, 14-27.

Figure 2: Xu Guangqi, 1981,87.

Figure 3: Zhao Zhengzhi. 1979, 14-27.

Figure 4: Bao Muping, 2014, 319-344. Line drawing based on polychrome painting in the collection of Mongolia Baogda Khan Winter Palace Museum.

Figure 5: Author painted.



The Status Change of Culture and Education in the Traditional Chinese City Landscape after the Song and Yuan Dynasty

Lumin Wang*, Yuan Pan**, Yiming Yuan***, Liang Liang****, Xiaoge Zhang*****

* *Prof, School of Architecture and Urban Planning, Shenzhen University & wanglumin405@126.com*

** *Assistant Planner, Zhejiang Province Institute of Architectural Design and Research & 2509039053@qq.com*

*** *Assistant Planner, China Reconstruct Institute of Architectural & Urban Design co. LTD & 1078812687@qq.com*

**** *Postgraduate, School of Architecture and Urban Planning, Shenzhen University & 815054021@qq.com*

***** *Postgraduate, School of Architecture and Urban Planning, Shenzhen University & 88276837@qq.com*

After the Song and Yuan dynasties, the development of the imperial examination system was witnessed by the spread of the Neo-Confucianism of the Song and Ming dynasties. This was accompanied by the position of culture and education buildings in the local urban landscape system that was greatly improved, some even dominating the performance of the urban landscape. The resulted structure of the urban landscape before the Song Dynasty is described as the so-called status change of the "The Status Change of Culture and Education." Studies have shown that "The Status Change" during the Ming and Qing Dynasties could be found here and there. This work took the City of Yangzhou Prefecture in the Ming and Qing Dynasties as the research object. Starting from the background of the development of culture and education, this paper expounds the process and characteristics of such a status change during this period.

Keywords: After the Song and Yuan Dynasties, The Educational buildings, Urban landscape, The status change of culture and education, Yangzhou Prefecture

1 Introduction

Cultural and educational buildings are one of the most important building types in Chinese traditional cities. They were buildings and structures of great significance in imperial examination education, cultural communication, and social education, including the main places for imperial examinations – school, academy, and other kinds of cultural and educational facilities: such as Wenchang Pavilion, Kuixing Tower, Wenfeng Pagoda, Xizi Pagoda and the related worship temples, memorial archways and so on. In the local cities, some important carriers with universal significance in cultural communication and social education have been developed, where new cultural and educational facilities with regional characteristics have been expanded.

This paper is prepared to explore the culture and education architecture, which belongs to the study of the changes and application methods of traditional architecture type systems. It is part of the research context of China's urban construction history. At present, most scholars set their focus on the architecture of culture and education from a single architectural form, scale, and distribution, which is rarely placed under the order of the city landscape construction.

After the Song and Yuan Dynasties, the evolution of the traditional Chinese cities in terms of political systems, socio-economic development, and ideological consciousness greatly affected the development of urban culture and education, leading to the increasing recognition and attention of "culture and education". In terms of the political system, the social influence of the imperial examination system was further deepened, leading to a general and lasting study habit in the society. In addition, the imperial examinations in the Ming and Qing Dynasties combined closely with the school system, which directly stimulated the development of official studies. Ideologically, Since Song and Yuan Dynasty, Cheng-Zhu Neo-Confucianism became the official philosophies that occupied a dominant position. In this scenario, Advocating Confucianism, Emphasizing Education and Moral Education became the basic policy. In economic development, the prosperity of commodity economy formed a powerful pulling action for social culture.

Studies revealed that during the Ming and Qing dynasties, there was a phenomenon of "The status change of culture and education" in spite of the obvious conditional differences, including the southern Jiangxi Province, where Confucianism prevailed in the south, and Nanyang Prefecture, Henan Province, the war-suffered area in the north, and Changsha Prefecture, Hunan Province, located in the north-south direction of the Central Plains, as well as the socio-economically and culturally prosperous Jiangsu region along the rivers and sea.¹²³⁴ These are discussions on the change and evolution of "culture and education" in the historical development of specific cities will help further demonstrate "The Status Change of Culture and Education". It is deemed as a major event



in the history of urban construction in China that can be exact presented with its regional performance in different regions.

The high development of the Yangzhou Prefecture in the Ming and Qing dynasties in terms of economy and culture, as well as the political opportunities of the emperor's southern tour in the Qing Dynasty led to the comprehensive development of urban culture and education. At the same time, it also makes the urban landscape show a strong cultural atmosphere with local characteristics. The current situation of the old city of Yangzhou has basically preserved the ancient city pattern of the Ming and Qing Dynasties, left with the rich historical relics in the urban area. More than specific environmental details, this provides a more solid spatial framework for the study of the Status Change of Culture and Education of the urban landscape in the Ming and Qing dynasties. Therefore, this work took the Yangzhou Prefecture of Ming and Qing Dynasties as the case analysis object, with a particular focus on the "The Status Change of Culture and Education". The concrete manifestation of this event is taken as the main object of discussion, including all types of cultural and educational buildings in terms of position, quantity, and scale. Landscape elements that have undergone better and greater changes may have a significant impact on urban landscapes and thus enjoy a more prominent position in the landscape.

2 The Concrete Performance of "The Status Change of Culture and Education" in Yangzhou Prefecture

2.1 Advancement of School's Location Value and the Expansion of Its Scale

During the Ming and Qing Dynasties, the school all over the country experienced an upsurge of construction. During this process, the number of schools increased and their scales expanded. Universally, there were a number of ceremonial functions added to these schools: Wenchang Pavilion and Kuixing Tower, Chongsheng Temple; Minghuan Temples and Xiangxian Temples, Zhongxiao Temples, Jieyi Temples and Jingyi Pavilion and so on.

Take Yangzhou Prefecture as an example. Compared with the school in Song Dynasty, there were 14 main buildings in the Qing Dynasty that were added in the Ming and Qing dynasties. In terms of overall scale, it also saw a greater improvement than Song and Yuan. In quantity, from the Song Dynasty to the Ming Dynasty, the school in Yangzhou was expanded from a state level to prefecture level, including two schools in a county.

In addition, the construction of the Yangzhou School always considered from the beginning of the site choosing the selection of places where the style of literature was flourished. At the beginning of the Ming Dynasty, the Yangzhou's prefecture-level school was established on the basis of the state-level school of the Song and Yuan dynasties. The prefecture- and county- schools are close to the river channel in the city and conform to their north-south distribution. On the one hand, it can be used to explore people's expectations for the continuation of the literary tradition, the spread of the context, and the prosperity of the imperial advancement. After the Ming Dynasty, this section along the rivers was respected as a "cultural context" in the folk, which confirmed the rationality of this consideration. During the Ming and Qing Dynasties, the positions of prefecture office, county office, prefecture school, and county school remained unchanged and were distributed in close proximity to each other, which together formed the heart of the ancient city as an urban center. From the above, after the Song and Yuan dynasties, the location of the school was relatively stable, and gradually gained better location conditions in the city construction. In the subsequent Ming and Qing dynasties, the layout of the adjoining school and the prefecture office was a reflection of the relative equality of the two places.

2.2 Increase in the number and size of academies

The academy is a cultural education workshop that combines private school and official school. During the Ming and Qing Dynasties, the background of the official schooling of the academy and the tremendous impetus of the non-prefecture forces were combined to make the academies in all parts of the country achieve great development.

The Ming and Qing dynasties were the heyday of the development of Yangzhou Academy. A large number of academies were newly built. In the Ming Dynasty, four academies were added. During the Qing Dynasty, there were five academies in the city. In terms of overall scale, the scale of the academies has been continuously expanded through the expansion and reconstruction of the entire building and the additional construction of facilities. By the Qing Dynasty, the three major academies of An'ding, Meihua and Guangling in the city had developed into famous academies inside and outside the province, paralleled to Jiangning provincial capital. In targeting the site, the Qing academies were relocated to move either from outside to inside the city or from the old city to the new city, or relocated to a place close to a major road, occupying a better location in the city.



2.3 Expansion of the content of cultural and educational facilities and the generalization of settings

(1) Wenchang Pavilion and Kuixing Tower

During the Ming and Qing dynasties, localities were extensively set up as venues dedicated to worshipping Wenchang Dijun and Kuixing (Wenchang Dijun is the emperor in charge of scholars in the world. The Wenqixing and Kuixing are the two generals of Wenchang Dijun.), such as Wenchang Tower, Wenchang Pavilion, Wenchang Palace, Wenchang Temple, Kuixing Pavilion, and Kuixing Tower, etc., in hopes of opening their grand cultural fortune.

In the Ming and Qing dynasties, there were 9 places built in the Yangzhou Prefecture for the special worship of Wenchang Dijun and Kuixing. Among them, there are detailed records: One was a prefecture-school Wenchang Tower, and it was built at the 13th ruling year of Ming's Emperor Wanli on the Wenjin Bridge east across the city's river; one was Wenchang Pavilion, built by the river outside the south gate of the city in the 34th ruling year of Wanli of Ming Dynasty; still another place was the county's Kuixing Tower, which is called the Siwang Pavilion. It was built in Ming's Jiajing at his 38th ruling year. These cultural and educational buildings were built either on river bridges, or on the side of a canal, or at street intersections. After the completion in the Ming Dynasty, whether it was used as a scene in a city or as a scenic spot, the landscape value was significantly improved. Some even became a landmark in the city and a popular place for public cultural exchanges.

(2) Sacrificial Temple

As an important means for Chinese traditional countries to control local societies, rituals have gradually developed as a form of education, namely, "Education in Sacrifice". Sacrificial offerings at Confucius temple are the typical practice of this "Education in Sacrifice" strategy. During the Ming and Qing Dynasties, the cultural ritual system of "education in sacrifice" was further developed and perfected. It gradually penetrated into the grassroots of local society as a kind of educational resources.

In the City of Yangzhou Prefecture, on the one hand, the number of such ritual temples increased substantially. According to statistics, apart from the temples set up in the schools and the academies, there were another 35 special temples and joint temples, which were additionally built during the Ming and Qing dynasties. On the other hand, the ritual content has been expanded. Following the three lines of "respecting the virtuous person, retribution, and the Taoism", the township virtuous people, prestigious officials, loyal ministers, dutiful sons, high-minded men and women of chastity could all be included in the list of the rituals. For example, there are ritual temples established for famous officials, township virtuous people and sons of filial piety at prefectural school in the city. There are temples set up for famous officials, township virtuous people, and persons of loyalty, filial piety and chastity in the county-level school.

(3) Wenfeng Pagoda

The significance of the Wenfeng Pagoda was constructed to enforce the local imperial examination success by changing the landscape pattern. During the Ming and Qing Dynasties, the whole society's enthusiasm for the imperial examinations made the Wenfeng Pagoda, a product of the imperial examination system, appear in various urban and rural areas. In the prosperous areas of southern Yangtze River, the construction of the Wenfeng Pagoda was particularly welcoming.

In the 10th ruling year of Ming's Wanli period, Yangzhou Prefecture built a Wenfeng Pagoda on the east bank of the canal in the south of the city. In the 8th ruling year of Qing's Emperor Kangxi period, it was rebuilt for an increase of nearly 5 meters. Wenfeng Pagoda is a beautiful and elegant building featuring the humanistic culture in both northern and southern China. The pagoda is a loft-style, made of a brick-wood structure, seven-story and eight-sided, at a height of 44.75 meters. On the top of the tower, one can take in the view of the prefecture city to the north. It is a bustling thoroughfare on the streets with row-by-story dwellings. To the South, one can take a long view on the sky and rivers, there standing three mountains on the other side of the Yangtze River.

(4) Memorial Archway

The archway is a kind of building featured with commendation, commemorative and signage functions. During the Ming and Qing Dynasties, its contents were expanded and new uses emerged. The archways related to the imperial examination and educationism have all been incorporated into the culture and education building system, including the identification archways of the culture and education building group such as the school and the academy; the subject archway honoring the imperial examination success, such as Sanyuan Archway; the honorary archway commending the official performance or loyalty of the officials¹; the good-manner archways



honoring people who followed ethical rules or had a good morality, such as Zhenliefang, Zhenjiefang and Xiaozifang.⁵

During the Ming and Qing Dynasties, the number of archways in Yangzhou precincts increased significantly in addition to the expansion of content, and among them, the archways for the branches and the reputed officials were widely set. According to relevant statistics, more than 80% archways in the Yangzhou Prefecture in the Qing Dynasty can be summed up as archways related to culture and education. Among them, there are approximately 51 branches archways and 14 honorary archways, which were mostly built during the Ming Dynasty.

(5) Official engraving workshops and folk bookstores

One of the important aims of ancient book engraving was for the spread and development of culture. In the Ming and Qing dynasties, official and private engraving books in Yangzhou were unprecedentedly developed. There were three official engraving agencies in the Prefecture City, and the office, school, and academy also produce the official engraving books. Judging from the engraving contents, the official engraved version covered various historical and cultural classics, historical records of local chronicles, etc. On this level, the official engraving workshops were of great significance in carrying forward historical culture, inheriting cultural classics, and transmitting local literature.

In addition, there were many bookstores in the city during the Qing Dynasty. Various kinds of books were imprinted by folk bookshops. By virtue of the powerful market circulation, they had a great influence on society. The engraved books, which were mainly engraved on the contents of enlightening reading books, popular history books, and books in associated with imperial examination preparation, were of great significance in popularizing knowledge, spreading culture, and improving people's quality and conservation.

The extensive distribution and influence of these official engraving and folk engraving workshops enabled the "book-printing workshops" to become an important type of facilities for the development of culture and education in the city of Yangzhou.

(6) Official and private library

The main function of the library is to collect and store books. During the Ming and Qing Dynasties, the importance attached to the collection of books by the rulers, the development of the book engraving industry, and the atmosphere of academic development, imperial examinations, and strong academic research made the Southern Yangtze area a flourishing collection of books. The significance of official library collections and private library buildings in terms of cultural values and social functions is more prominent, mainly due to their enhanced openness. The building of this type of library has gradually become one of the carriers of local cultural and educational dissemination due to the expansion of the "publicity" function.

During the Qianlong period, Yangzhou Prefecture built the official library of Wenhui Pavilion to collect "Siku Quanshu" and Wenhui Pavilion became the symbol of Yangzhou's urban cultural status at that time. Qianlong repeatedly asked Wenhui Pavilion to open its doors to Jiangzhe (both Jiangsu and Zhejiang provinces) scholars and stressed its cultural and educational significance. In addition, there were private library buildings with prominent "public" functions in the prefecture city, such as the Brother Ma's Book Collection Building and Ruanyuan's Library Building of Selected Works in Sui Dynasty. These book collectors opened their eyes to the public, being able to circulate private books by means of borrowing and transcription. Some private library buildings were widely open to literati and even became a "borrowing station" to benefit the locals.

(7) Private Garden House

During the Ming and Qing Dynasties, Yangzhou Prefecture built a large number of gardens, especially during the prosperity of the Qing's Qianlong period. Among them, a large number of private garden houses were built to serve the needs of the owner's own life. Also, they became places for literati leisure and poetry rallies, bringing a tremendous positive impact on cultural exchanges and interactions. These garden houses gradually developed into an important carrier for enriching the society and culture at that time, expanded as a regional type of cultural and educational facilities. Many typical representatives of private garden houses in the Prefecture, which were used by literati, poets and scholars, including Xiaolinglong Mountain Pavilion, Liyuan Garden, Yihong Garden, and Jiufeng Garden.



3 Influence of "The status change of culture and education" on the Construction of Urban Landscape Space

3.1 Effect on city's internal spatial form

Since the Ming and Qing Dynasties, Yangzhou Prefecture has formed the pattern of coexistence of the adjacent old and new cities with Xiao Qin Huai River as the boundary (Figure 1).

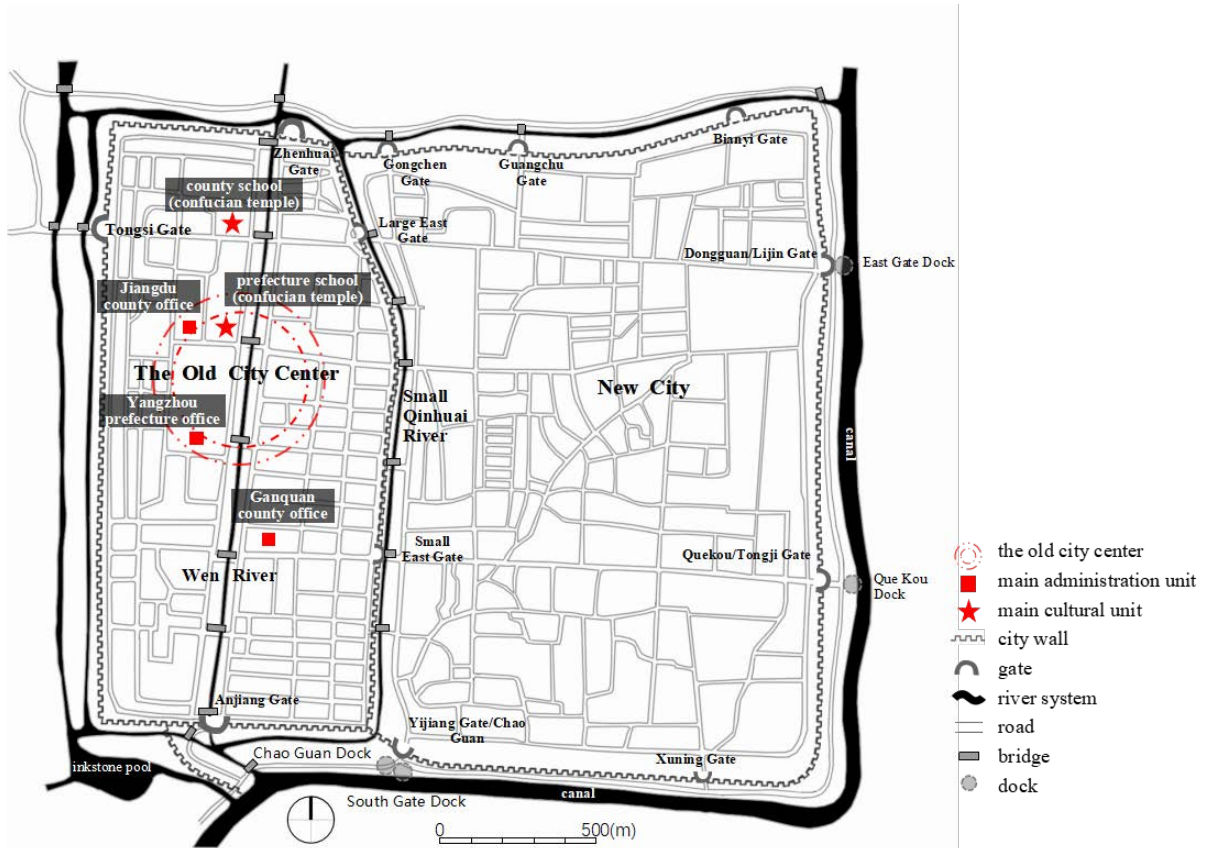


Figure 1: The distribution of the main culture and administrative units in Yangzhou Prefecture in Qing Dynasty. [painted by the author]

During this period, the rise and construction of cultural and educational buildings had an important influence on the shape and spatial pattern of urban internal space, mainly as follows:

Constructing an essential unit of urban spatial form

The cultural and educational buildings represented by the Campus (Confucian Temple), as an important functional building in ancient Chinese cities, became one of the important unit types for constructing urban spatial forms. In the Qing Dynasty, the main administrative units such as the Prefecture Office of Yangzhou City, Jiangdu County Office, and Ganquan County Office, and cultural units such as the prefecture's and the county's Confucian Temple are located near the central axis of the city formed along the Wenhe River in the old city. Cultural units and administrative units are close to each other and form the urban center together with the old city(Figure 1).

Strengthening the urban cultural landscape axis to form a cultural and educational center

Cultural and educational buildings may reinforce each other as landscape elements, echoing to form the center and axis, which enhances the cultural and educational influence of the urban landscape and shows its rise of status.

With the widening of cultural and educational buildings in the city, cultural and educational agglomerations have formed in some areas, forming cultural and educational centers in the old and new cities – the old city's collection of prefecture buildings and county campus, plus Wenchang Pavilion and Kuixing Tower, forming the cultural and educational center in the north of the city. In the west of the the new bridge, Wenchang Palace is the most solemn venue for the worship of Wenchang Dijun in the city and forms the cultural and education center in



the south of the city. The middle section of Dongguan Street in the new city is dominated by Anding Academy and Guangling Academy to form the cultural and education center in the new city. The layout of cultural and educational buildings along Wenhe River has allowed the main cultural landscape of the city to extend from the north of the city to the south of the city(Figure 2).

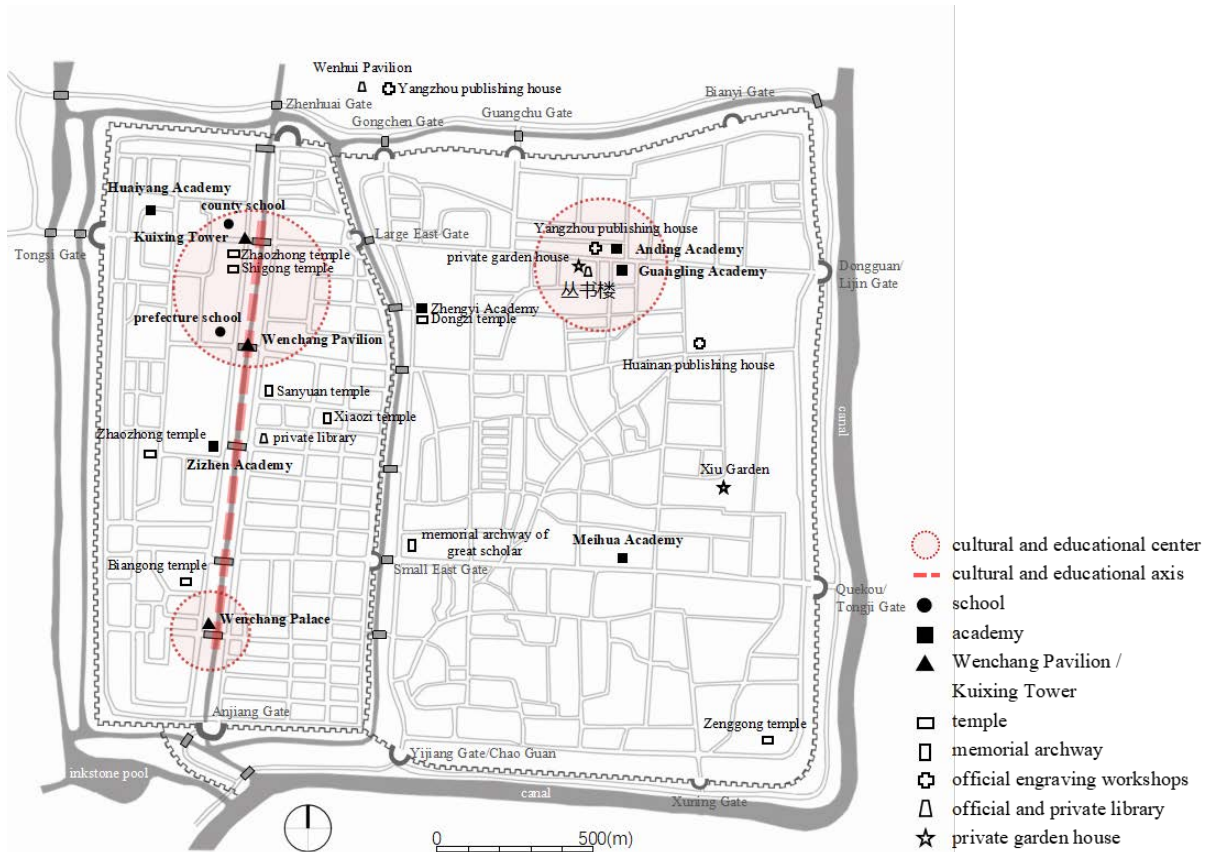


Figure 2: Distribution of main Cultural and Educational buildings and facilities in Yangzhou Prefecture in Ming and Qing dynasties. [painted by the author]

Impact of urban landmarks on the overall pattern

In the process of the extensive addition of cultural and educational buildings in Yangzhou Prefecture, many landmarks were created, affecting the layout of the city's overall nodal space. The seven major landmark building nodes within the city wall all have certain control over the spatial pattern of the city in terms of volume and height. Among them, the Wenchang Pavilion and Kuixing Tower newly built in the Ming Dynasty became the two node spaces of the old city. This, together with the large and small East Gates at the junction of the new and old cities and the three gate buildings of the new city, forms a roughly balanced distribution pattern in the central area of the city(Figure 3).

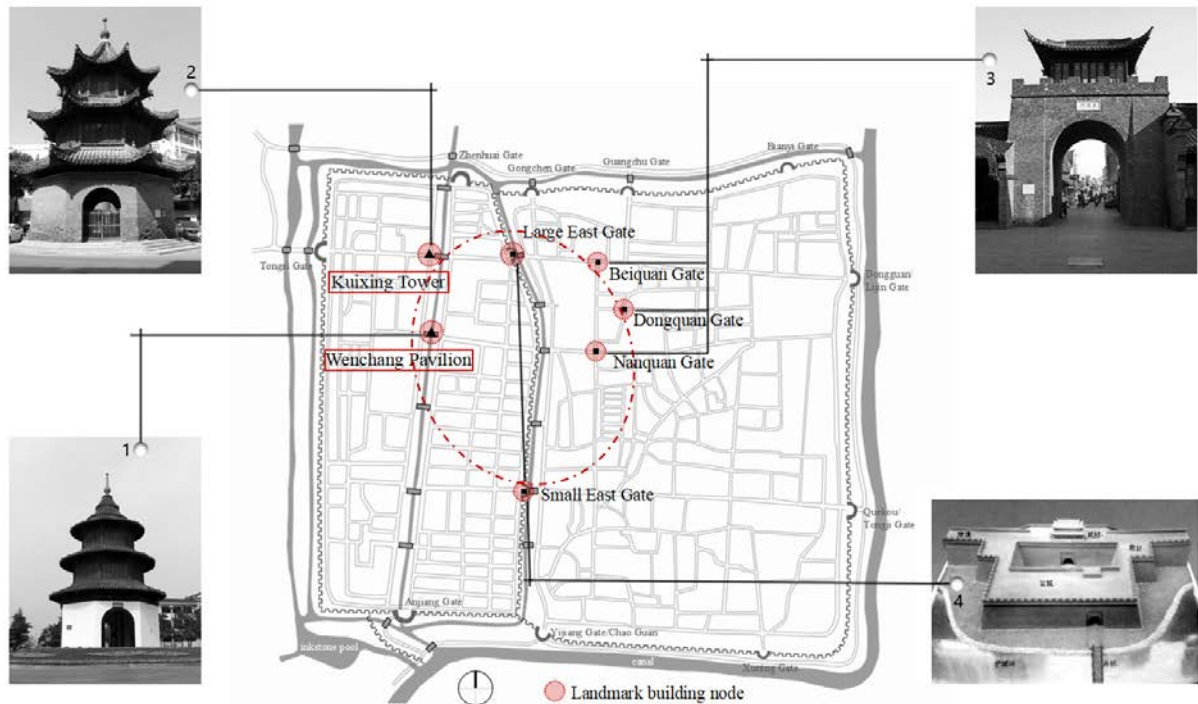


Figure 3: *Spatial distribution of the major landmark building nodes in Yangzhou Prefecture in Qing Dynasty : 1.Wenchang Pavilion. 2.Kuixing Tower. 3.Dong/Bei/Nan Quan Gate. 4.Large/Small East Gate. [painted by the author]*

3.2 Expansion of the spatial scope of the overall urban landscape pattern

The various landscape elements such as gardens, waters, and mountains in the suburbs of Yangzhou Prefecture work as a driving force to expand the overall landscape space of Prefecture to the periphery. In the landscape space that is composed of such a city and its suburbs, the ritual temple and Pingshan Hall are built on the top of the mountain in the northwest of the Lugang Mountain and the Wenfeng Pagoda is located on the east side of the south bank of the canal. Because of their location and their own height advantages, they have become elements that have a definite meaning in the landscape pattern.

In the Qing Dynasty, the landscape space of Yangzhou Prefecture and its suburbs formed a close connection under the series of water systems. The space environment distributed by culture and education buildings can be roughly divided into three regions(Figure 4):

First, in the Prefecture, the cultural and educational space is dominated by campus, academy, Wenchang Pagoda and Kuixing Tower.

Second, the suburbs of the northwestern region: cultural and educational spaces are mainly sacrificial temples and garden houses. Through the connection of water systems, the urban landscape space is expanded to the northwest. In addition, Pingshan Hall, located on the hill of Mt. Shugang, was rebuilt in the Ming's Wanli period and became an attractive spot for literati and poets. As a landscape element, it relied on the location and height of the middle peaks of Mt. Shugang, and shaped the nature of its landmarks. At the same time, it is associated with the sacrificial temple of the western peak, forming an architectural identity in the cultural and educational aspects above the level of daily life in the suburbs.

Third, Canal in the south of city: This is a cultural and educational space led by Wenfeng Pagoda and Wenchang Pavilion. The longitudinal cultural and educational landscape axis formed along the Wenhe River in the city is extended further southwards: Kuixing Tower, Wenchang Pagoda in the Prefecture City, and the Wenfeng Pagoda by the canal in the south of city, have become a visual focus of the landscape pattern in height and form, thus forming a sequence of north-south landscapes across the city walls.

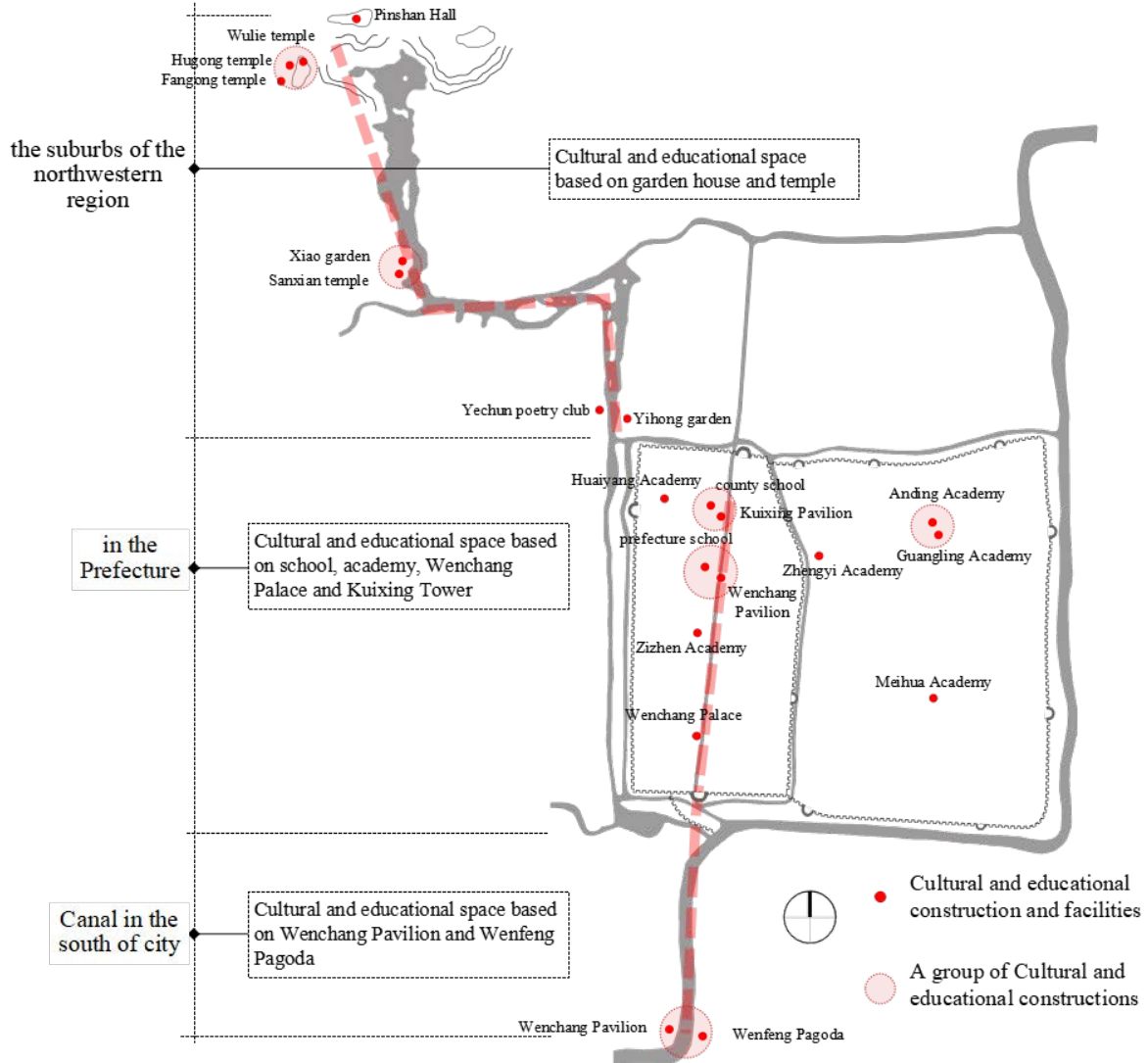


Figure 4: *Distribution of main Cultural and Educational buildings in the Yangzhou city and suburbs in Qing Dynasty.* [painted by the author]

It can be seen from the above that the cultural and educational building system has played an important role in defining the scope and the influence pattern in the construction of urban and suburban landscapes. An overall landscape structure has formed with the Prefecture as the center, extending along the water system to the surrounding suburbs.

4 Conclusion

Since the Song and Yuan Dynasties, people's recognition of emphasis on "culture and education" have continued to be intensified. Cultural and educational architecture related to imperial examination and social education was flourished in urban construction. During the Ming and Qing Dynasties, the main manifestations of the discoveries in Yangzhou prefecture: In terms of the location and its distribution, the campus occupied a superior position; and the academy was relocated to show the significance of having a better place ; other types of cultural and educational facilities were widely distributed in the city. In terms of quantity and scale: the number of campus and academies increased. This was accompanied by an expanded scale and the sacrificial content increased. There was a trend of diversification in the types and contents of cultural and educational building systems, including Wenchang Pavilion, Kuixing Tower, and Wenfeng Pagoda. In addition, new cultural and educational facilities emerged, including various types of sacrificial temple and memorial archway related to imperial examination and education; official engraving workshops and folk bookshops played an important role in the spread of culture and mass education; and some official and private bookstores exhibited more "public" functions; also, some became private garden houses that carried forward the city's rich social and cultural heritage. All these phenomena eventually led to a significant increase in the status of culture and education



buildings in urban and regional landscapes, which affected the internal spatial forms of the city and formed an extension of the spatial scope of the overall landscape. The whole city of Yangzhou presents a landscape with a strong cultural atmosphere with local characteristics.

Acknowledgements

This paper was supported by the project “A Research on the Formation, Transition and Application of the typology for the Chinese Traditional Architecture” imbursed by National Natural Science Foundation of China (NSFC).

Disclosure Statement

All the authors have no conflict of interest.

Notes on contributor(s)

Lumin Wang is professor at School of Architecture and Urban Planning, Shenzhen University. His research interests include Architectural History, City Planning History and Urban Design. And he has published 5 books and numerous articles, papers, and reports in these research areas.

Endnotes

¹ Liang Liang, *The Ming and Qing Dynasties Miaoxue in Gannan area's Status change of city landscape* (Shenzhen University, 2015).

² Xiaoge Zhang, *The Status change of Culture and Education in Nanyang Prefecture during the Ming and Qing Dynasties* (Shenzhen University, 2016).

³ Yiming Yuan, *The Status change of Culture and Education in Changsha Prefecture during the Ming and Qing Dynasties* (Shenzhen University, 2017).

⁴ Yuan Pan, *The Status change of Culture and Education in Yangzhou Prefectural City during the Ming and Qing Dynasties* (Shenzhen University, 2018).

⁵ Lumin Wang, *The Layout of Archways in Quanzhou and the Significance of Urban Landscape* (Urban Planning Journal, 2016-3).

Bibliography

Liang Liang. *The Ming and Qing Dynasties Miaoxue in Gannan area's Status change of city landscape*. Shenzhen University, 2015.

Zhang Xiaoge. *The Status change of Culture and Education in Nanyang Prefecture during the Ming and Qing Dynasties*. Shenzhen University, 2016.

Yuan Yiming. *The Status change of Culture and Education in Changsha Prefecture during the Ming and Qing Dynasties*. Shenzhen University, 2017.

Pan Yuan. *The Status change of Culture and Education in Yangzhou Prefectural City during the Ming and Qing Dynasties*. Shenzhen University, 2018.

Wang Lumin. *The Layout of Archways in Quanzhou and the Significance of Urban Landscape*. Urban Planning Journal, 2016 (3).



Historical Mapping of the Urban Form and the Spatial Power Distribution in Capital Jiankang in East Jin Dynasty

ZHENG Chenwei*

* *PhD Candidate, Southeast University, Nanjing, China, zhengvivi@msn.cn*

The Aristocratic Families, which had both political and economic privileges in early Imperial Ages of China with multiple generations working as government officials, had collectively become a core group of East Jin regime. As an important part of the etiquette system under central governance, the capital Jiankang served to display the legitimacy of the regime and to maintain the operational functions of both the nation's apparatus and the city itself. By using Urban Historical Mapping and Geographic Information System as the methods of the spatial power distribution analysis, this paper focus on the distribution of core capital facilities including worship, administration, military and residence, and also the social status of their users. To conclude, the usage of capital space is a representation of the complex relationship and co-dependence among royalty, aristocratic and plebeians. The area inside the capital city wall is an outstanding space for the privileged class as well as the important representation that the aristocratic class joins the core of national powers. And the aristocrats were spatially distributed spread surrounding outside the capital city rather than congregated in one particular area, which made it easier to form their own power centers, leading to threats to the authority centralization.

Keywords: Historical Urban Form, Ancient Capital, Jiankang of East Jin Dynasty, Spatial Power Distribution, Etiquette System.

1. Background

1.1 Etiquette, Power and Capital Space

Etiquette originates from the sacrifice culture with worship for ghosts and gods in the agrarian society, and aims at "regulating the differences and orders of objects"¹. The ancient etiquette had been established to serve feudality to public's thoughts and behaviours since Zhou Dynasty, it is a symbolisation of authority and power. The continuous reorganization and reestablishment of etiquette to adapt different regimes enable it to be implemented as the framework and foundation of Chinese ancient social estate through the history.

Refer to the discussion on capital power space under the background of Chinese historical period, the core issue should be the characterization of etiquette system on physical spatial form of ancient capital. Inquiring into the spatial power distribution in ancient Chinese capital can start from the social hierarchy represented by the users of different physical space. Both mutual agglomeration and exclusion of space represent the social relationship of users. As an important constituting part of the etiquette system, the most important duty of capital is to symbolize the legal nature of divine regime, to guarantee the political functions for the operation of state machinery and maintain the social functions for city operation.

1.2 The Origin and Emigration Distribution of Aristocrats in the Period of Eastern Jin Dynasty

Shi originates from a social class under patriarchal system in ancient Chinese feudal society in the period of Shang and Zhou Dynasties. The core of the patriarchal system is primogeniture, which is featured in complete consensus of patriarchal and political hierarchy. Under such system, the feudalism society is divided into six classes including the emperor, leud, high ministers and nobles, *Shi*, plebeian and slaves. *Shi* is the aristocratic class of the lowest level, mainly consisting of retainers of high ministers and nobles. And only aristocratic children including *Shi* had the opportunity to learn knowledge. After the end of the Spring and Autumn period, *Shi* gradually became the collective name of intellectuals in the ruling class.

By the period of the Western Han Dynasty, the emperor chose Confucianism as the monopoly and established Imperial College in capital Chang'an as the highest learning institution, aiming at cultivating and training a large batch of talents who firmly established the concept of Confucianism, nation and patriarchal clan system so as to fulfill the bureaucracy of each level. The aristocratic and bureaucratic children were able to become nobles and officials due to acceptance of the best official education or were promoted to be officials through the selection



system of talents by nobles. Meanwhile, the ancestry was maintained through forbidding marriage between Shi and plebeian and such a privileged class like aristocrats gradually formed after years.

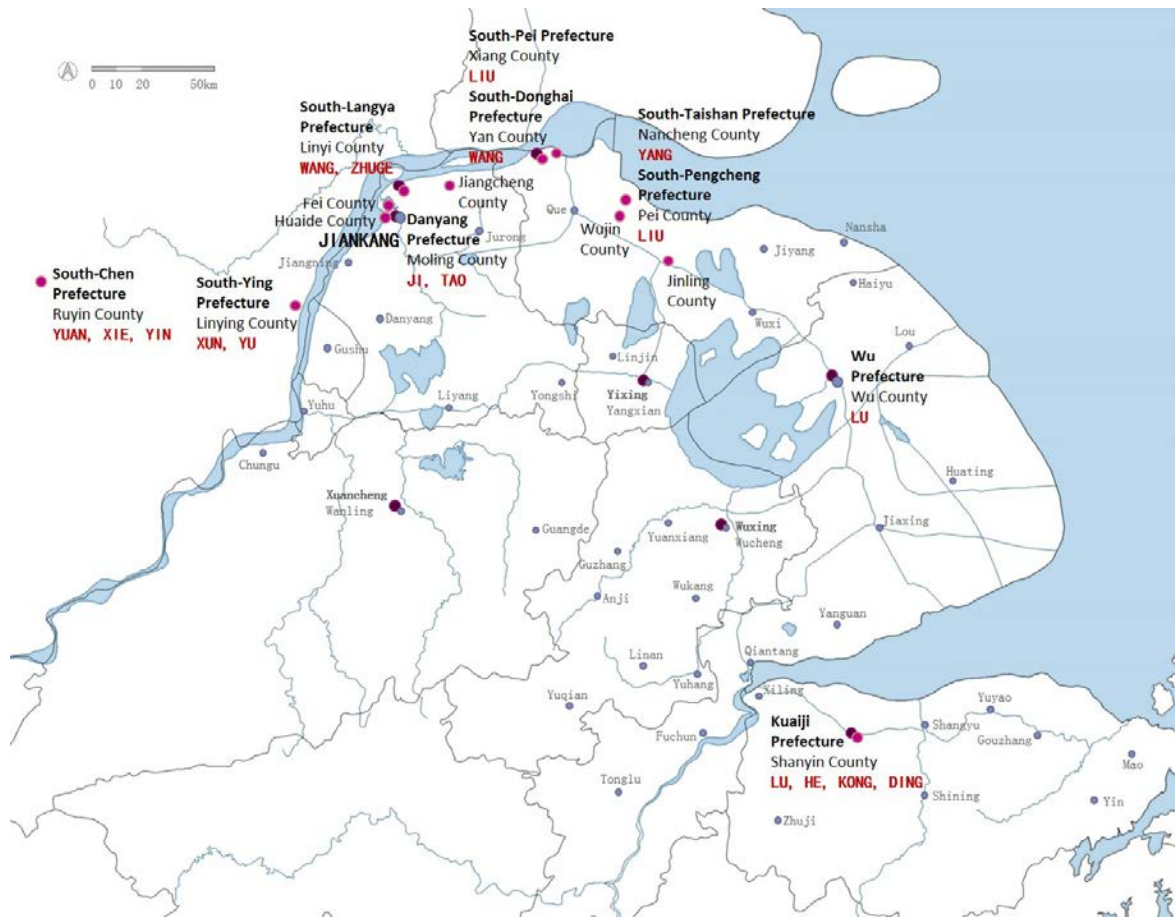


Figure 1: *Distribution of Emigration States and Counties of Aristocrats in East Jin Dynasty* [self-made]

After the imperial clan of Jin Regime gave up large part of northern territory and emigrated southward along with large amount of population, the reconstruction of central regime in Jiankang depended on the power of southward-emigrated aristocrats and local aristocrats to a great extent. Thus, the status and privileges of aristocrats reached an unprecedented height, which was represented in the dominating position in politics. There were 47 aristocratic clans with high status in East Jin Dynasty, including 9 local aristocratic clans and 38 southward-emigrated ones. And there were 84% of the southward-emigrated clans whose original households were in the area north to Mount Qingling and Huai River, majority of which is from today's Henan Province and Shandong Province. The Eastern Jin Government established Immigrant County for the immigrants' settlement. The immigrant counties of southward-emigrated aristocrats were mostly set up closer to the capital, to today's Zhenjiang and Changzhou along the Jiangnan Canal eastward and today's Hefei and Hexian areas westward. Simultaneously, the local aristocrats mainly came from Danyang, Wu and Kuaiji Commanderies. (Figure 1)

2. The Distribution of Capital Politics and Etiquette Core Area as the Representation of Divine Regime

2.1 The System and Structure of City Walls

As the southward-emigrated capital, Jiankang of East Jin Dynasty, is treated as the temporary capital in order to honor the old capital Luoyang of the West Jin Dynasty. The siting of central urban area and the construction of urban artificial water network had accomplished during the previous period of Sun Wu. In urban form, with reference to Luoyang in the Wei and Jin Dynasties, Jiankang combined the original pattern of three palaces and one garden of Sun Wu and reformed to the purer form of a single palace. In other words, the forbidden garden, the palace and the imperial street were arranged from north to south, all on the south-to-north axis of the capital. There were huge differences with the multi-palace system of northern capitals in the period of Qin and Han Dynasties,



acting as the symbolization of centralized kingship and profoundly influencing the later capital form. The axis of the capital did not apply the north-south direction required by ancient etiquette, but in the direction 25° north east, aiming at corresponding to the trends of regional mountains. The axis of the capital pointed straight through the middle line of the double peaks of Mount Niushou², which exactly represents the adaptation to local conditions of central etiquette system in Jiangnan Area.

Another important element that originated in the East Jin Dynasty was Fence Gate. Though lacking defence effects, it marked the division of outer capital city and suburbs with etiquette spatial division significance. The historical document mentioned 56 fence gates³, of which only 17 of them can be located. And these fence gates generally defined the range of capital of Jiankang into the approximate elliptical region that was longer in south-north direction and shorter in east-west direction, relatively clearly with an approximate area of 23km².

Within the range of outer capital city, with the capital city and palaces as the core, each military castle including Ye Castle, Xizhou Castle, Dongfu Castle, Danyang Commandery Castle, Yue Castle and East Ye Castle, was distributed on the either side of Qinhuai River south of the capital. Outside the outer capital city, there were Stone Castle, Baishi Fortress and Xuanwu Castle defending the nearby suburbs and Bai Castle and Jin Castle in the northeast and Xinting Fortress in the southwest in the remote suburbs, through which the defence system by multiple sub-cities of the capital was formed. (Figure 2)

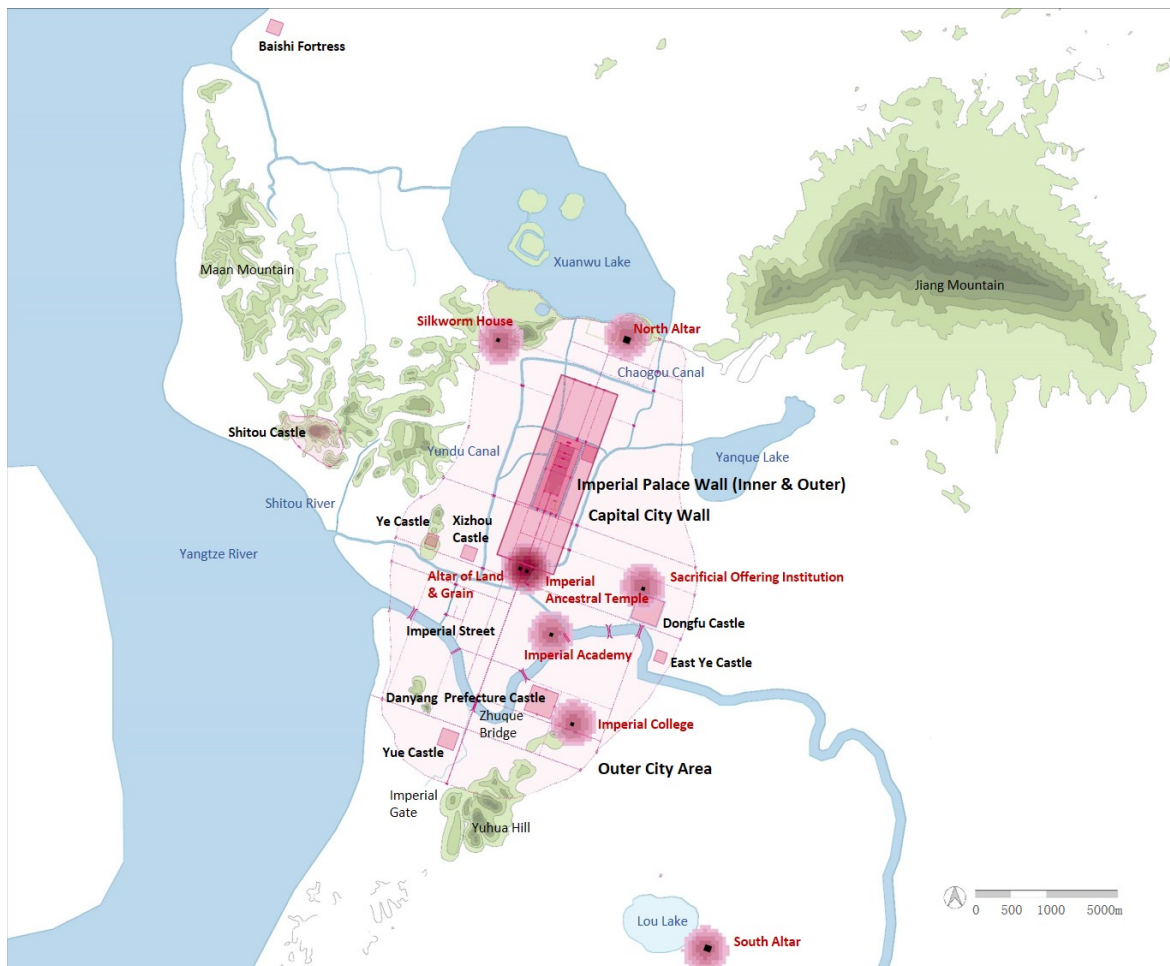


Figure 2: *Jiankang City Wall and Kernel Density of Sacrifice Facilities Distribution in East Jin Dynasty* [self-made]

2.2 National Worship Ritual



The national worship ritual originates from ancient sacrifice rituals with the nature of witchcraft. After the establishment of emperor system in Qin Dynasty and Confucianism as a ruling foundation in Han Dynasty, the worship ritual was reformed and determined to serve the purpose of stabilizing central regime⁴. It includes sacrifice to heaven and earth which represent the chief gods of traditional Chinese mythology, and ghosts sacrifice which represent the ancestor worship. The sacrifice facility symbolizes the legitimacy and divinity of the regime, serves critical etiquette functions of the capital. The main users of these facilities are the emperor and the empress.

In national sacrifice events of chief gods, the specification in West Jin Dynasty was inherited to simplify the four suburb altars (Round, Square, Heaven and Earth) into two (Southern and Northern)⁵. Such a simplified altar system exerted huge effects on the later dynasties. However, due to limited resources during East Dynasty, at first only Southern Altar was set in the southeast suburb for combined sacrifice for heaven and earth, and later Northern Altar was solely set for earth sacrifice. Secondly, The Imperial Altar and Imperial Ancestral Temple were set on east and west sides of Imperial Street outside Gate Xuanyang for land sacrifice and royal ancestor worship respectively. And according to *The Rites of Zhou*, the emperors should farm in person to honour the ancestor peasants and their empress should lead the noble women to feed silkworms in order to encourage farming and weaving. Though royal field was not implemented in East Jin Dynasty, silkworm temple was set in the south of Mount Jilong to sacrifice for the silkworm god. Besides, the Imperial College, Xuanni Temple are the symbolization of Confucianism monopoly for combination of politics and education. Additionally, Bureau of Sacrificial Offerings located in the north of Dongfu Castle.

3. The Combination of National and Urban Functions-Distribution of Capital Administrative and Military Facilities

3.1 Distribution of Administrative Facilities

(1) The Central Government Facilities and Powerful Ministers under the Pattern of Three-Department System

Since Qin Dynasty, system of Three Dukes and Nine Chamberlains was implemented in the central administrative authority. The official system based on such a basic structure developed into Three-department System in order to restrict the power of Counselor-in-chief in the period of Wei and Jin Dynasties. The Three Departments including the Department of State Affairs (*Shang-shu sheng*), Secretariat (*Chung-shu Sheng*) and Chancellery (*Men-hsia Sheng*) are established to take charge of drafting, approving and executing the imperial orders respectively. In that way, the executive and military power of the officers in Counselor-in-chief level can be decentralized by different authority structure.

According to spatial distribution, the three departments are the central political facilities with the closest connection with the main palace hall. From the perspective of specific functions, the central political facilities were divided into two parts, the inner court and the outer court through the tight combination of political discussion places of different levels and corresponding institutions of political affairs. Taiji Hall, as the absolute centre of the imperial power, is located inside the internal palace walls. Its main hall serves for grand ceremonies while its eastern and western halls serve for common audiences⁶. The Secretariat and Chancellery, the central government agencies that are the closest to the emperor, correspond to the Eastern Hall of Taiji Hall for the emperor's daily life and political discussion. These two institutions are set in the south of Taiji Hall inside the internal palace. On the other hand, the Assembly Hall as the place for officials' daily discussion is located directly inside the Department of State Affairs in the southeast part of external palace. The political affairs will firstly be discussed in outer court, and later intimate ministers go inside the internal palace to report to the emperor. Accordingly, the imperial decrees are composed with inner court and later delivered through the outer court to the subordinate departments.

The power of the original nine chamberlains have declined due to the setting of the Department of State Affairs and Chancellery. These national official institutions separately belonging to each functional department are southward distributed inside the capital city wall along the both sides of Imperial Street in front of Palace Gate Dasima⁷. Though their functional rights are weakened, their position as a central administrative facility under the Three Departments remains, which guarantees the implementation of national administrative functions of the capital.

Nevertheless, the official rank of the directors of the three departments (Palace Attendant, Minister, Director of the Secretariat) are actually as limited as the third grade and all of them occupy non-military positions. In East



Jin Dynasty, only the first grade officials are in the level of Counselor-in-chief. There were 63% officials from aristocrats and another 28% officials from the royal and noble families in the 32 first class officials. Most of these first grade officials are military officers and in the meantime hold concurrent posts of the overseers or supervisors in the Department of State Affairs and the Secretariat. Therefore, these officials are the actual powerful ministers of the highest level who hold the main powers of both military and political affairs.

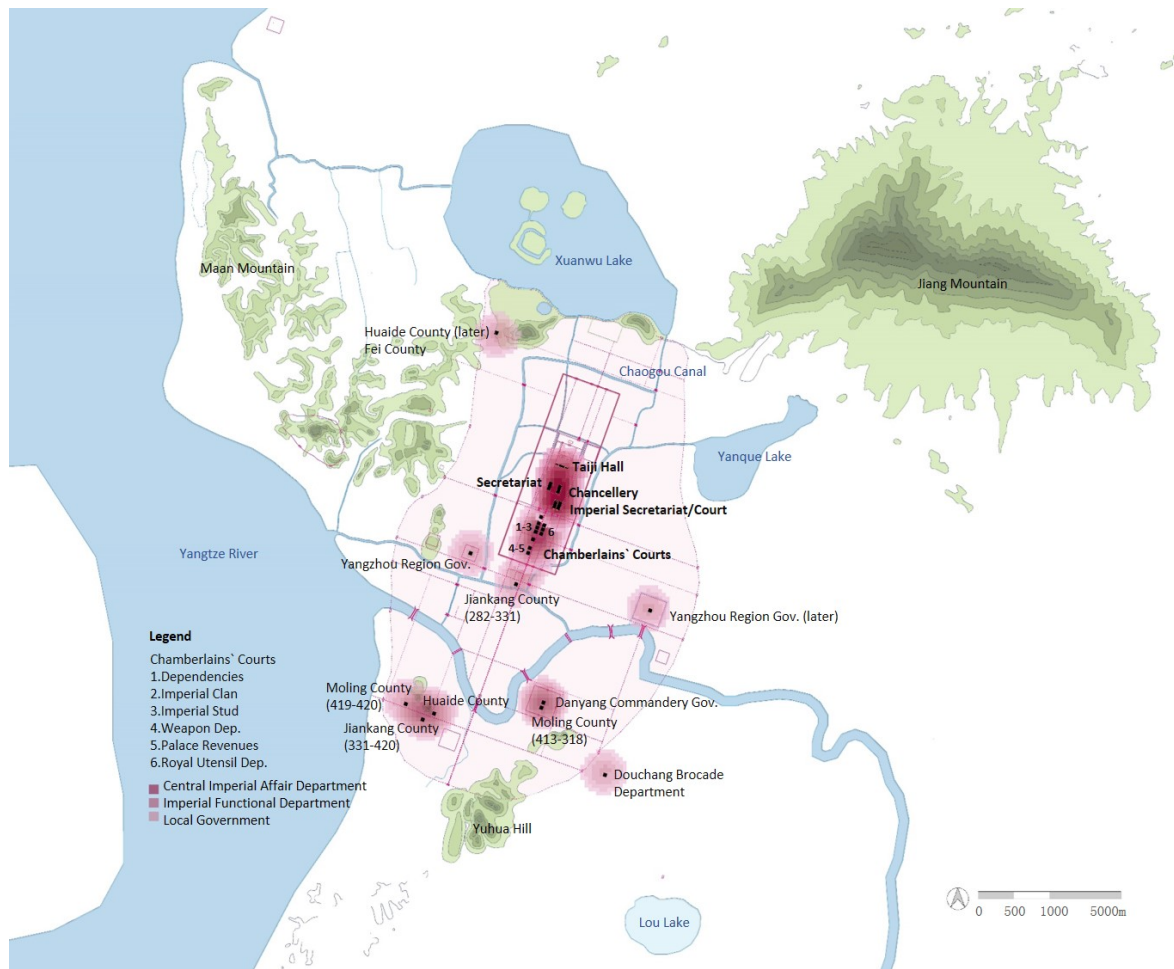


Figure 3: *Kernel Density of Administrative Facilities Distribution of Jiankang in East Jin Dynasty* [self-made]

(2) Local Official Institutions and Local Governors

The local official institutions of East Jin Dynasty mainly include regional, commandery and county government. The nature and responsibilities of capital Jiankang's local official institutions are relatively special, especially in the Regional Government of Yangzhou and Commandery Government of Danyang. Yangzhou Regional Inspector, as the first-class local official who takes charge of the function of supervision, owns the higher level than other regional inspectors. Danyang Governor, as the chief who protects the capital and its environs, takes charge of military powers, civilian politics, appointment and criminal litigation. Both lead armies and take part in the state affairs. Ministers at the level of Counselor-in-chief usually hold the concurrent position of Yangzhou Regional Inspector with longer term. There was only one who came from the royal family while the others came from aristocratic families in the 15 Yangzhou Regional Inspectors in total. Yangzhou government was firstly set in the Xizhou Castle and later transferred to Dongfu Castle. Danyang Governor led eight counties in the capital and its environs with shorter terms. There were 33 governors in one dynasty, 73% of which were from aristocratic families. The government of Danyang Commandery was set in the southeast of Qinhuai River. It can be seen that these powerful ministers who held the concurrent position of Yangzhou Regional Inspector, such as Wang Dun, Wang Dao, Xie An, lived outside the core state affair area spatially but inside the sub-city defence



system around the capital with armies. As they defended the capital, they also formed their own power centres. (Figure 3)

3.2 Military Facilities

The overall structure of armies in East Jin Dynasty can be divided into the central imperial guards and local forces. The capital took the central armies as the main military power to defend the core area with assistance from local armies to maintain public security of the capital city. From the aspects of the forms and types of military facilities, the castle and the military headquarter demonstrated the highest defence level, followed by the local army institutions while ramparts and army shelters in comparison have a lower defence level.

The Commandant General and Protector General were the supreme generals of central imperial guards in East Jin Dynasty. The armies inside the capital city, the palace and the halls were led by the Commandant General. The praetorian guards who followed the emperor occupied the most central position and were stationed in Left Guard and Right Guard in the Internal Palace. The Capital City and Palaces themselves were castles with the highest defence level, located at the central position of the city area to protect the royals and national core facilities. The Protector General led the central armies stationed outside the capital walls. The mansion for Protector General was located outside the West Fence Gate together with Stone Castle. Stone Castle is the most important castle near the capital, occupying the highland next to the Qinhuai River mouth to Yangtze River, serving as the western capital entrance and the major garrison of capital navies. Its strategic position is as important as that of the capital city, and was guarded by Protector Generals concurrently⁸. There were 51 army generals in East Jin Dynasty, including 78% from aristocratic families and 4% from the royal family. There were 29 Commandant Generals, including 86% aristocratic family members and 7% royal family members. Of the 22 Protector Generals, 68% were from aristocratic families and 32% were plebeian. It is clear that the aristocratic families were in an absolute advantageous position in both the central armies and armies defending the core area of capital city and palace.

Also, the capital was in the jurisdiction of Yangzhou Regional Commander-in-chief and Inspector-in-chief. The official of Danyang Commandery also mastered the military powers of the capital and its environs, which has been demonstrated in detail in 3.1 above. As the first county of the capital, there were seven county defenders who took charge of district security inside the capital walls and eastern suburbs in Jiankang County. Additionally, White Castle, Linyi County, Jiangcheng County, Jiangning County, Hushu County in the remote suburb all served as the defence with armies for the capital. (Figure 4)

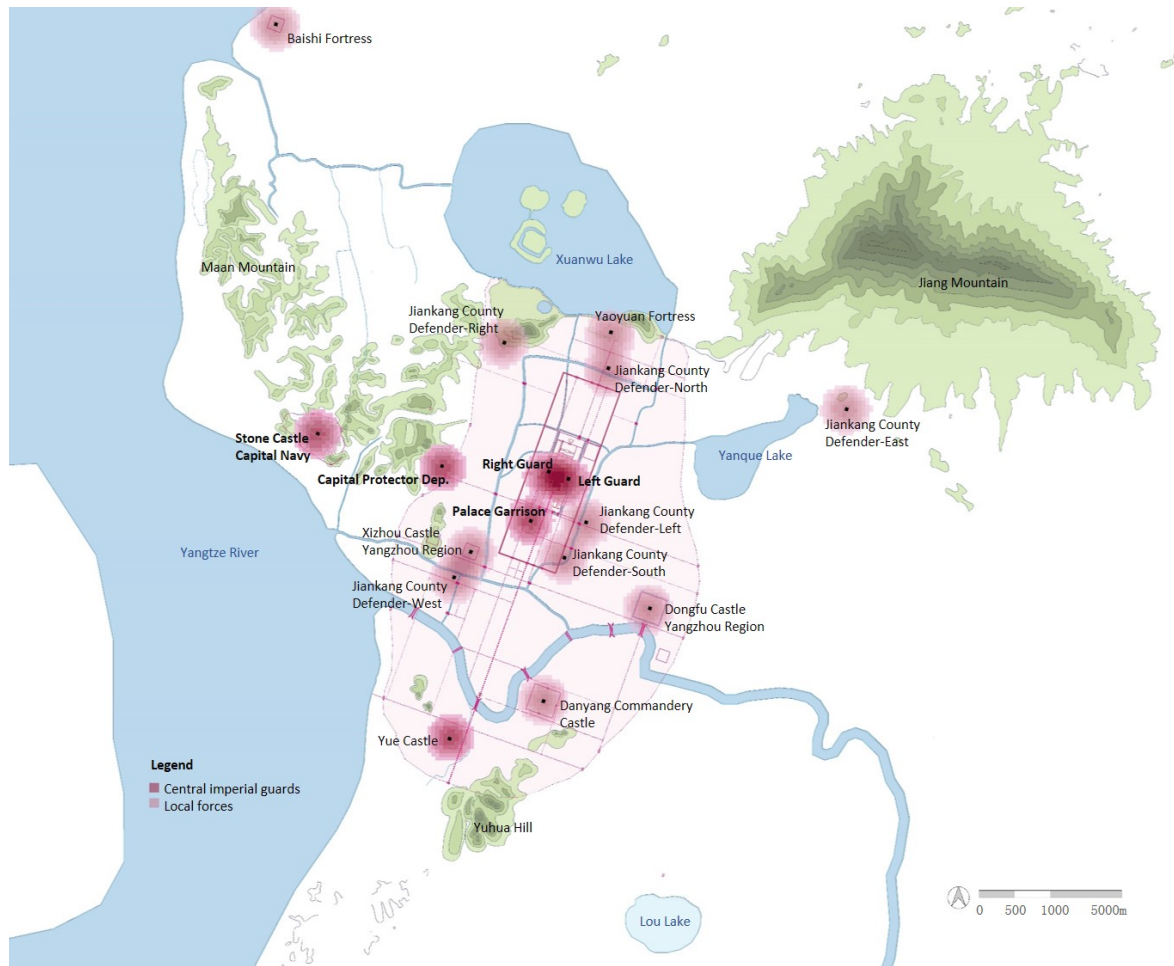


Figure 4: Kernel Density of Military Facilities Distribution of Jiankang in East Jin Dynasty [self-made]

4. Distribution of Capital Residential Neighborhoods and Celebrity Mansions

Li (Urban Neighborhood) in Jiankang is the first implementation of the *Lifang* Neighborhood System in Jiangnan Region. The majority of the residential neighborhoods of Jiankang were located inside the fence gates and showed clear tendency of dense distribution close to both banks of Qinhuai River in the southern outer-city. There is no apparent separation between the mansions for royal families and officials and the living places for plebeian in the southern outer-city. Meanwhile, there were more mansions and gardens for royal families in both east and west areas to the capital city. The only *Li* outside the fence gates was located south to Mount Jiang in the eastern suburb, serving as the proof for eastward extension of the capital. (Figure 5)

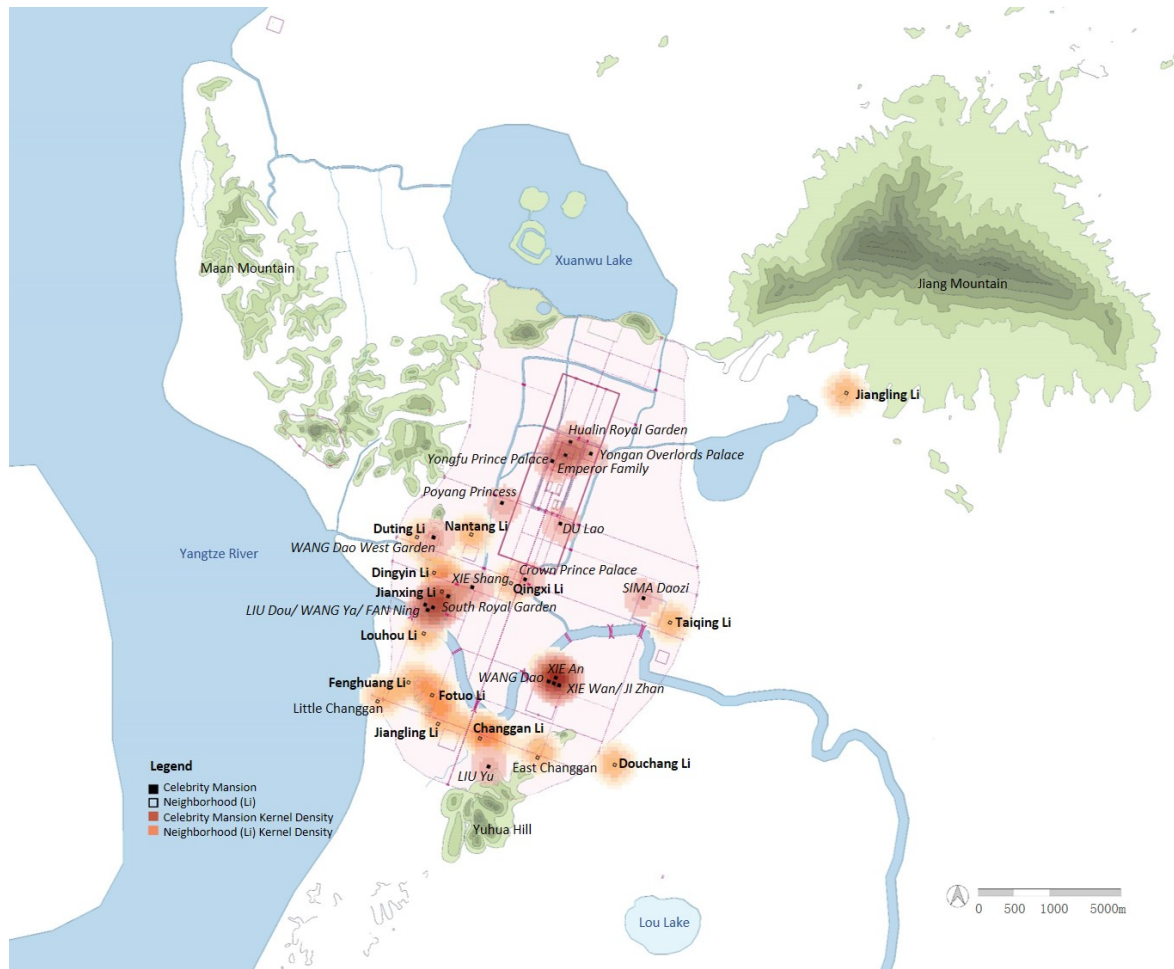


Figure 5: Kernel Density of Li (Neighborhood) and Celebrity Mansions Distribution of Jiankang in East Jin Dynasty [self-made]

5. Analysis on Power Spatial Distribution of Jiankang of East Jin Dynasty

It can be deduced from the analysis above that the aristocrats made up the majority of officials in the capital, especially on the executive level. Thus, the capital administrative facilities were regarded as the space used by the aristocrats in this paper. Each functional facility inside Jiankang of East Jin Dynasty is re-classified according to the social level of its users, from which the power space of three types including the emperor and royal members, the aristocratic officials and other plebeians, can be identified. The results of overlaying the spatial distribution kernel density analysis are as shown in Figure 6. It can be seen that the areas inside the capital walls of Jiankang of East Jin Dynasty are only for the royal family and the aristocrats. However, the palace is not the exclusive space for the royal family, except the northern living palaces in the internal palaces and royal gardens which are strictly exclusive for the emperor and his relatives. The internal palace and the southern external palace are the space for the aristocrats who serve as the close ministers for the emperor. There are differences as well as certain consistency in the distribution of use space of each class outside the capital walls and inside the range of fence gates. There is generally no facilities between north to Nanheng Street in the palace and south to Chaogou while there is space for each class distributed in the Chanlingzhu Area north to Chaogou in the southern Ye Castle and the area south to Qinhuai River. The class of plebeians were the main occupants of the southern area of Qinhuai River while more of the royal and noble families were at the royal street outside the south gate of the capital and the southern Ye Castle. The distribution of space for the aristocrat class outside the capital or even outside the range of fence gates is relatively even, scattering circularly outside the capital. (Figure 6)

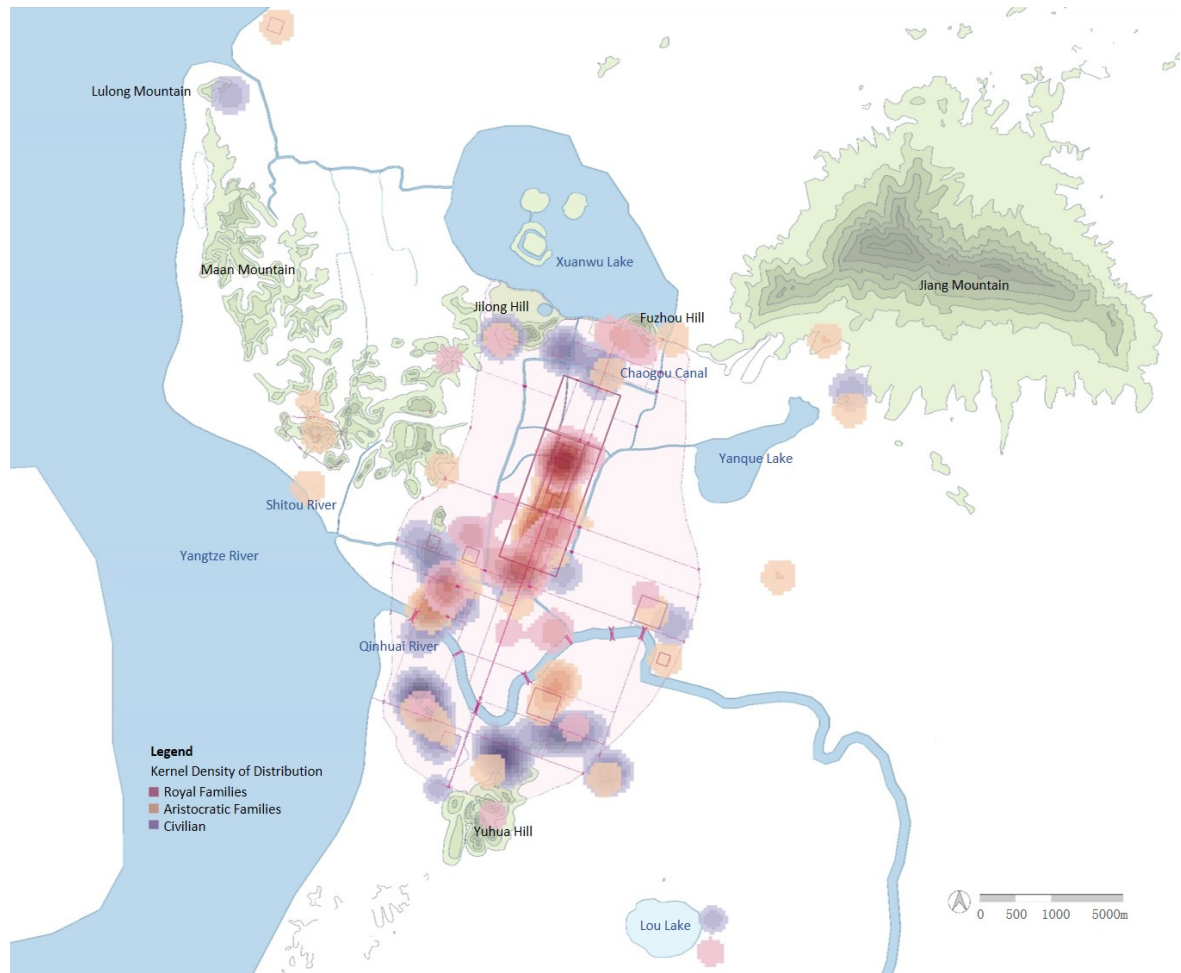


Figure 6: *Power Space Distribution of Jiankang in East Jin Dynasty* [self-made]

To conclude, the different usage of urban space by users from different social and political stratum is a representation of the complex relationship and co-dependence among the imperial family, the aristocratic families and the plebeians. The area inside the capital city wall of Jiankang stands out as the space for the privileged class as well as the important representation of the aristocratic class being part of the core national powers. As to the area outside the capital city wall, the middle axle district along Imperial Street is the space for the privileged class while there was no apparent spatial division in other areas. The class of plebeians was distributed more in the area south to Qinhuai River while the space for the aristocratic class was evenly distributed surrounding the capital, which made it easier to form their own power centers, becoming to threats to the central power.



Acknowledgements

Thanks to the supervising by Pro. Dong Wei in Southeast University, Pro. Matthew Davies in Birkbeck, University of London and Dr. Mark Merry in School of Advanced Study, University of London.

Disclosure Statement

This study is sponsored by China Scholarship Council.

Bibliography

- Fang Xuanling, *Book of Jin*, Beijing: Zhonghua Book Company, 1974
- Kaneko Shuichi, *Ancient China and Emperor Sacrifice*, Shanghai: Fudan University, 2017
- Li Fang, *Imperial Readings of the Taiping Era*, Beijing : Zhonghua Book Company, 1985
- Liu Dunzhen, *The Collected Works of Liu Dunzhen (Vol. 3)*, Beijing: China Architecture & Building, 1982
- Ma Guangzu, *Jingding Chorography of Jiankang*, Beijing: Zhonghua Book Company, 1990
- Xu Song, *Jiankang Records*, Beijing : Zhonghua Book Company, 1986
- Zhang Jie, *The Cultural Gene of Ancient Chinese Space*, Beijing: Tsinghua University, 2012

Image sources

Figure 1-6: Self-made

¹ Zhang Jie, *The Cultural Gene of Ancient Chinese Space*, (Beijing: Tsinghua University, 2012), 119

² Xu Song, *Records of Jiankang*, (Beijing: Zhonghua Book Company, 1986), 191

³ Li Fang, *Imperial Readings of the Taiping Era*, (Beijing: Zhonghua Book Company, 1985), 950

⁴ Kaneko Shuichi, *Ancient China and Emperor Sacrifice*, (Shanghai: Fudan University, 2017), 29-33

⁵ Fang Xuanling, *Book of Jin*, (Beijing: Zhonghua Book Company, 1974),55

⁶ Liu Dunzhen, *The Collected Works of Liu Dunzhen (Vol. 3)*, (Beijing: China Architecture & Building, 1982), 457

⁷ Xu Song, *Records of Jiankang*, (Beijing: Zhonghua Book Company, 1986), 767

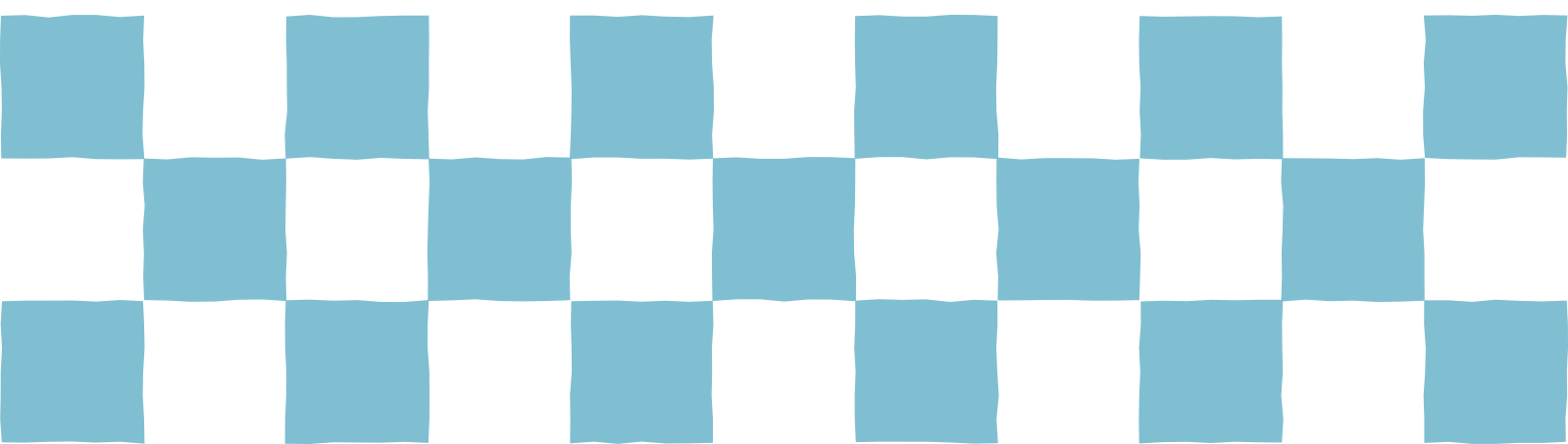
⁸ Ma Guangzu, *Jingding Chorography of Jiankang*, (Beijing: Zhonghua Book Company, 1990), 1559



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

65 **Traditional Settlement and Native Planning Wisdom**



Research on the plan forms of traditional villages located in Yangquan city of Shanxi Province in the view of mountain and river

Minghao Zhang (China University of Mining and Technology), Fang Bin Liu (China University of Mining and Technology) and Fangyu Zhang (China University of Mining and Technology)

Yangquan, a major core city is located in the east of Shanxi Province in China. Once this city had a glorious future due to the huge capacity of coal, but now it is decaying also due to the empty of coal. Recent years there were 12 villages in this city area which were ranked to the national traditional villages, that was seen as to be another opportunity for the development of this city.

Although these 12 traditional villages were located in the rural area which were very poor now, but once most of them were rich or glorious in local history. Most of them were surrounded by the mountain of Taihang and the rivers embraced the villages or be across the villages. Due to the important state of the location, some villages played an important role in local business, especially the village on the post way to outside. Meanwhile, most of villages also regenerated by itself step by step and the form of village also changed slowly with the regeneration. So the research on the village form is very important for the later development of these villages, such as the protection, reconstruction and regeneration. The author think that every one of these 12 villages was formed with its special different environment, because the ancestors of these villages would consider the whole situation of mountain and river when they built their villages in the view of traditional aspect in China. Based on the comparing the forms of these villages, this article focuses on the different characters of these forms in these villages. What's more, the author is interested in the elements which influenced the form of these village based on the whole situation of mountain and river. Finally, this article will analysis the social and economic function that change the forms of these villages.

Research on the Form of Clan-Organized Settlements in Southern China: Based on the “Space-Society” Theory

Yuanyuan Gu (Chongqing University) and Zhong Xing (Chongqing University)

The specificity, formidability and continuity of the clan-organized settlements in rural Southern China drew lots of attention from sociologists, but the research of the form study and the interaction between form and social structure haven't got acceptance from mainstream academia. The research tries to take the space-society theory as the foundation and the case study of Dongli Village and Huayao Village in Shantou City, establishes the connection between the social structure (family-clan) and the spatial form (housing-settlement): the individual dwelling of the core family → the mansion of the big family → the settlement of single clan → the co-settlement of several clans, to outline a typical path of the spatial representation of the Clan-State co-producing structure and interpret how space materializes social system. Firstly, the prototype of individual dwellings of rural Southern China shows high similarity with traditional houses of central China. However, different from the rest, the structure of the prototype extends to the level of the settlement. Next, the order embodies in the domination of ancestral hall over the settlement. Relied on the conception of ancestral worship, the community constructed a spatial hierarchy of faith → reality. Thirdly, the highly closed consanguineous bond power system results in the closeness of the space. The boundary keeps expansion both forms and functions, from wall to ditch, and supplemented by the spiritual boundary composed by a series of gods and ghosts. All the spatial representation reveals that the migration from the north always tried to emphasize the legitimacy of their identity by actively imitating the official ideology and constructing their settlement as the symbol of the state's mainstream value and keeping the members of the clan domesticated in the ideal space. Hence, the social structure and the spatial form in rural Southeastern China connected by the co-producing structure. After inducing the prototype, structure and elements of the settlements, the research keeps on inquiring into the interactive relationship between the practice of clan power and the construction of the space and the institution by virtue of power theory of Foucault, and finally, raises a hypothesis of power-time-space unity to explore the formation mechanism of clan-organized settlements and the regional reconstruction in Southern China during the dynamic procedure of state – grassroots' governance throughout a series of comparative studies.

The Cultural-Ecological Mechanism of the Urban Space Sustainable Development by the View of the Spatial Perception Logic

Yunying Ren (Xi'an University of Architecture and Technology), Xiaochen Wu (Architecture College, Xian University of Architecture and Technology) and Chao Chen (Architecture College, Xi'an University of Architecture and Technology)

With the development of globalization the conflict between with the ecological carrying capacity and growth limits, the development of urban space is in the passive circulation with the Ecological capacity -Development limit and Social technology-Decision making at present. Undoubtedly, it is the essence of the sustainable development of human settlements either to passively deal with the development or the shrewd decision of cultural self-discipline beyond reality. On the one hand, with the improvement of technology and the strengthening of control ability, human consume natural resources, break through ecological capacity or resource limit and move towards alienation, namely, the constraint mode controlled by Ecological capacity-Development limit. On the other hand, urban space adapted to different periods of cultural, institutional, spiritual and material functional needs, but also restricted by the corresponding values and cultural concepts in the process of development and Self-renewal, it shows the self-discipline mode of seeking the harmony and balance between the ecology, society and economy. Correspondingly, urban space development is under the interaction of culture and ecology, society, economy and politics, thus forming the corresponding cultural ecological system, that is, the essence of sustainable development of urban space under the culture-ecology mechanism. The investigation introduces the concept of cultural ecology based on the interdisciplinary methods of cultural ecology, system dynamics and urban-rural planning, focuses on the integration of urban space cultural elements, constructs the cultural-ecosystem of urban space, and probes into the rational decision-making mechanism under the corresponding self-discipline mode under the view of Culture-Ecosystem, which included the basic attributes of urban space, urban space value attribute, as well as the urban spatial quality attributes, according to the spatial perception logic with the spatial perceptual attribute layer based on requirement hierarchy. And then based on the characteristics of cultural-ecosystem to explore the essence of sustainable development of urban space, which is a sort of adaptive development mechanism that can be discussed with the boundary conditions, the derivative mechanism and the space-time coupling. Which can be formed the cultural-eco self-discipline system to face with the challenge of the globalization.

'Country': The Aboriginal approach to designing and living in urban Australia prior to European colonisation

Ross Wissing (Deakin University) and David Jones (Deakin University)

Mumford (1961) identifies that no single definition applies to all of a city's manifestations. Cities have been constructed in many different ways over the ages, and urban life has found a wide variety of expressions throughout history. Historically physical form has characterised a city. Today a city is more defined by its functions 'where meeting place, marketplace and traffic continue to coexist in balance, more or less'.

Until the early nineteenth century, most 'cities' were on a scale of a modern small town or village. A population of 2,000 or less was not uncommon, and one of 10,000 would be noteworthy, and cities rarely had more than 50,000 inhabitants. In 1800 up to 3% of the world's population lived in cities; the exception being in Britain and Holland where about 10% of the population lived in cities. By 1900, about 14% of the world's population lived in cities, and today, over 50% of people reside in cities.

It is widely believed that cities and civilisations emerged spontaneously some 5,500 years ago in six widely separated places around the world - Mesopotamia, India, Egypt, China, Central America and Peru. Australia is not included in this list, but studies indicate that the intensified Budj Bim landscape, home to the Gunditjmarra people in south-western Victoria, dates around 8,000 years ago and could service a population of 10,000 people. Thus, Aboriginal 'cities' are amongst the oldest and largest settlements in the non-Western world.

Indigenous intensified landscapes in Australia often hosted villages of over 500 people linked to seasonal, multi-seasonal or permanent occupancy mode and such were commonly observed by early European explorers in 1830s-1850s Victoria. Such was evident in the southwest of Victoria, in other parts of Victoria around Cape Otway, Western Port, as well as in the Murray Darling basin of New South Wales and South Australia, and in southern Western Australia. In southwest Victoria, the main exception to this pattern was the Budj Bim area that hosted over 10,000 people inhabiting an area of 20,000²km.

Geelong (Djillong = meaning 'a tongue of land' in Wadawurrung language), the second largest city in Victoria, Australia, sits on such Aboriginal villages, but it is the second least sustainable of Australia's 20 largest cities. The traditional owners of Djillong are the Wadawurrung Balug clan whom are believed to have lived in the locality for over 40,000 years. By any definition, this is sustainable. This paper explores how the concept of 'Country', the Aboriginal approach to co-habiting, designing, managing and living in urban Australia prior to European colonisation, was applied in Djillong and what teachings that has for 21st century Geelong.

The Cultural-Ecological Mechanism of the Urban Space Sustainable Development by the View of the Spatial Perception Logic

Yunying Ren*, Xiaochen Wu**, Chao Chen***

* *Prof. PhD, Department of Urban Planning, Xi'an University of Architecture and Technology, 710055, renyunying@hotmail.com*

** *Postgraduate, Department of Urban Planning, Xi'an University of Architecture and Technology, 710055, 985737792@qq.com*

*** *PhD Candidate, Department of Urban Planning, Xi'an University of Architecture and Technology, 710055, 513114738@qq.com*

With the development of globalization the conflict between with the ecological carrying capacity and growth limits, the development of urban space is in the passive circulation with the Ecological capacity -Development limit and Social technology-Decision making at present. Undoubtedly, it is the essence of the sustainable development of human settlements either to passively deal with the development or the shrewd decision of cultural self-discipline beyond reality. On the one hand, with the improvement of technology and the strengthening of control ability, human consume natural resources, break through ecological capacity or resource limit and move towards alienation, namely, the constraint mode controlled by Ecological capacity-Development limit. On the other hand, urban space adapted to different periods of cultural, institutional, spiritual and material functional needs, but also restricted by the corresponding values and cultural concepts in the process of development and Self-renewal, it shows the self-discipline mode of seeking the harmony and balance between the ecology, society and economy. Correspondingly, urban space development is under the interaction of culture and ecology, society, economy and politics, thus forming the corresponding cultural ecological system, that is, the essence of sustainable development of urban space under the culture-ecology mechanism. The investigation introduces the concept of cultural ecology based on the interdisciplinary methods of cultural ecology, system dynamics and urban-rural planning, focuses on the integration of urban space cultural elements, constructs the cultural-ecosystem of urban space, and probes into the rational decision-making mechanism under the corresponding self-discipline mode under the view of Culture-Ecosystem, which included the basic attributes of urban space, urban space value attribute, as well as the urban spatial quality attributes, according to the spatial perception logic with the spatial perceptual attribute layer based on requirement hierarchy. And then based on the characteristics of cultural-ecosystem to explore the essence of sustainable development of urban space, which is a sort of adaptive development mechanism that can be discussed with the boundary conditions, the derivative mechanism and the space-time coupling. Which can be formed the cultural-eco self-discipline system to face with the challenge of the globalization.

Key words: Cultural Ecosystem, spatiotemporal field, Cultural Self-discipline, Sustainable Development

Introduction

With the development of social economy, mankind faces the problem of globalization with two dimensions: Firstly, ecological carrying capacity and growth limit, such as the contradiction between population growth and food supply, water shortage, global climate greenhouse effect, serious pollution, traffic congestion, frequent disasters and other urban security problems; Secondly is the coping strategies based on the rationality of science, technology, empirical, such as Low-carbon cycle, smart Growth, resilience of cities. Therefore, the development of urban space is in the passive circulation with the Ecological capacity -Development limit and Social technology-Decision making at present. Undoubtedly, it is the essence of the path choice of the sustainable development of human settlements either to passively deal with the development or the shrewd decision of cultural self-discipline beyond reality.

There are two characteristics along with the urban space developed on the basis of science, technology and empirical rationality. On the one hand, with the improvement of technology and the strengthening of control ability, human consume natural resources, break through ecological capacity or resource limit and move towards alienation, namely, the constraint mode controlled by Ecological capacity-Development limit. On the other hand, urban space adapted to different periods of cultural, institutional, spiritual and material functional needs, but also restricted by the corresponding values and cultural concepts in the process of development and Self-renewal, it shows the self-discipline mode of seeking the harmony and balance between the ecology, society and economy.

However, because urban construction and development is always in the accumulation and agglomeration process of historical space, in the process of economic oriented growth, cultural elements as social innovation and sustainable development of the self-regulatory mechanism is often neglected, including the cultural resource value, capital value and industrial value and its driving role, and tend to the heterogeneous of development. Correspondingly, urban space development is under the interaction of culture and ecology, society, economy and politics, thus forming the corresponding cultural ecological system, that is, the essence of sustainable development of urban space under the culture-ecology mechanism.

The investigation introduces the concept of cultural ecology based on the interdisciplinary methods of cultural ecology, system dynamics and urban-rural planning, focuses on the integration of urban space cultural elements, constructs the cultural-ecosystem of urban space, and probes into the rational decision-making mechanism under the corresponding self-discipline mode. And then based on the characteristics of cultural-ecosystem to explore the essence of sustainable development of urban space.

1. The elements of urban space culture ecosystem

The urban space cultural ecosystem includes the urban space material structure, the social structure and the cultural structure, including the corresponding cultural psychology, the thinking mode, the social value and the environment idea as well as the interaction way and the intrinsic mechanism between them and the social economic elements, which constitute the essential attribute of the urban space cultural ecology.

1.1 Spatial perceptual attribute layer based on requirement hierarchy

The demand level theory of Gestalt reveals the level of human demand, and urban space is an extension of human nature as well. Therefore, the perception of human needs has corresponding spatial attributes which is the essence of urban form, there exists the

corresponding level of space value and its function, and it has the paralleled significance of satisfying human existence, belonging and self-realization (Fig. 2) .

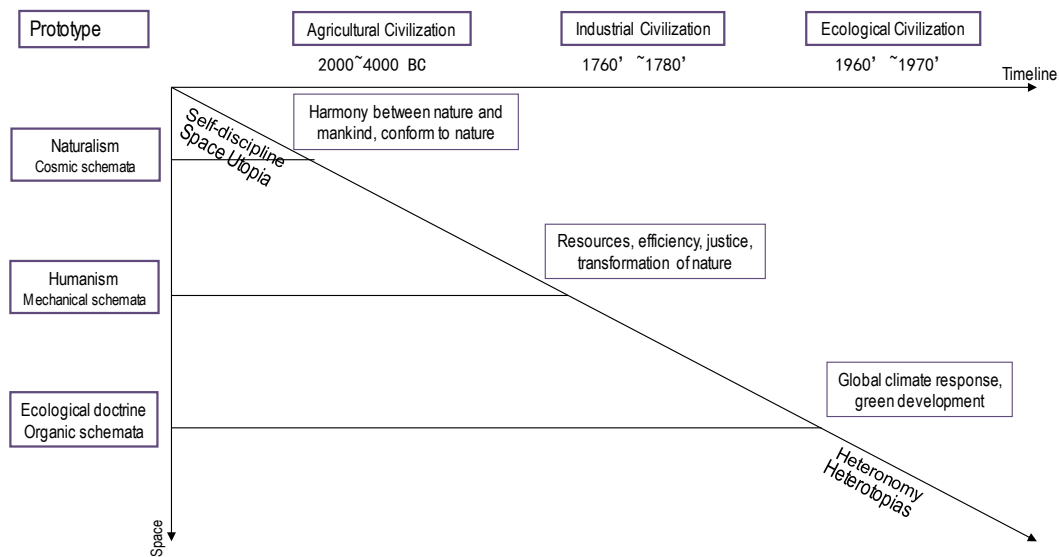


Fig. 1. Cultural-temporal-spatial coupling relationship diagram of urban civilization process. (by Author)

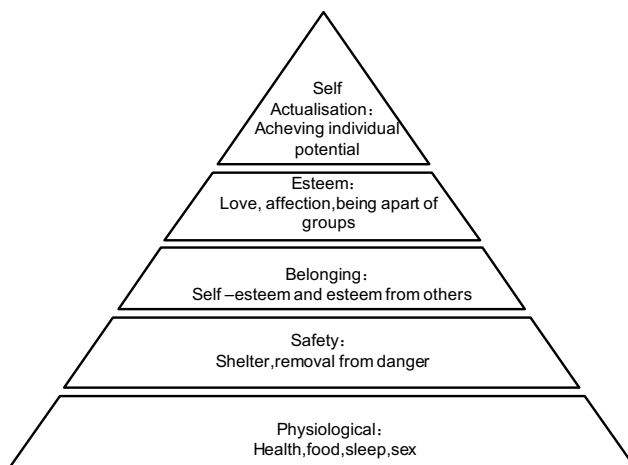


Fig. 2 the relationship between spatial attribute elements based on the requirement hierarchy.

(From https://en.wikipedia.org/wiki/Maslow%27s_hierarchy_of_needs)

Urban form means that the social system acts on the material and spirit forms of the city, it is not only the external, internal and tangible manifestation of the city, but also contains a broader cultural connotation. Urban form is the material and spiritual form that the social system acts on the city, it is not only the external, internal and tangible manifestation of the city, but also contains a broader cultural connotation.

The form is related to the hierarchy of meaning, and its specific object involves the applicable object, value object and symbolic object.

From the perspective of spatial perception, meaning is the center of understanding how the environment works. The spatial form has rich cultural connotations and embodies the spatial elements of history, gradation and perception. Therefore, the spatial perceptual level and its elements reflect the corresponding urban spatial value level.

1.2 The logical level of spatial perception

The spatial perception level should be consisted with the 5 aspects from one level to a higher one successively:

The firstly and fundamentally level is the physiological perception which was perceived from the elements of the urban form from the perspective of property rights underlying with the relationship between the factors of ecology, production and life.

The secondly and based on the first level is the psychology perception, which meets with the self-esteem, safe, comfortable, beautiful and sense of place according to the theory of

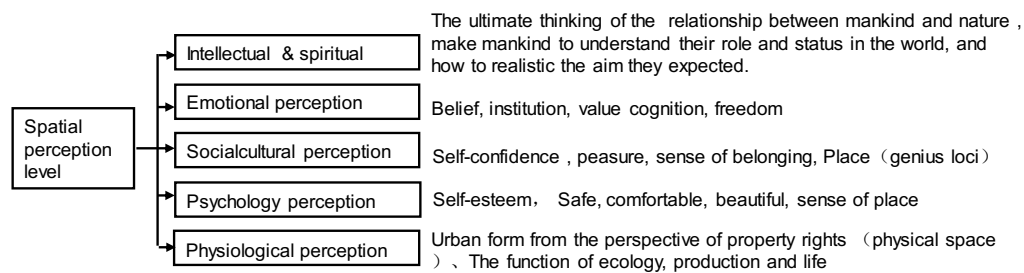


Fig. 3 schematic diagram of spatial perceptual logic. (by Author according to the Maslow's hierarchy of needs)

Maslow's hierarchy of needs.

The thirdly and homologous level is the mental perception, which match with the needs of self-confidence, pleasure, sense of belonging, as well as the place with the genius loci.

Then the fourthly and influentially level is the Cultural Perception, which make oneself to the realization or fulfilment of one's own potential or abilities with the belief, institution, value cognition and freedom.

The last and the most powerfully level is the Philosophical Perception which gathered the ultimate thinking of human-land relationship with the most powerful influence to the views of the value, universe and life of human's.

All these meanings are complex and all these meanings have composed of the net-meaning subordinated from the arrangement to the others.

1.3 Perception level, elements and their structural function

Urban space is a spatial perceptual unit composed of specific perceptual elements and perceptual boundaries, and its corresponding perceptual factors vary according to different scales of urban space, and are related to the social experience and behavior pattern of human beings. According to Gestalt psychology theory, people's perception has the threshold effect, when the space satisfies people's basic perceptual demand and the person liberates from the physiological need, it will produce a higher level of special perceptual demand, more advanced, more socialized needs, such as security needs, self-esteem and self-realization. Therefore, the space element acts on the human senses, emotion and thought can be divided into 5 perceptual levels, i.e. material environment, psychological environment, regional trait,

innovation environment and social ideal, corresponding meaning system, namely material culture, system culture, regional culture, value system, human land relation and so on.

Correspondingly, there is a mutual function between the human cultural perception and the space: cultural tradition has a defining effect on space, and space carries specific cultural information. Meanwhile, urban space is constantly updated and developed in the process of agglomeration historical information and spatial elements, and the cultural inheritance is the process and result of the game of various function elements in a particular space-time field. Therefore, the different levels of cultural information and its spatial elements in urban space are not only the basis of judging urban spatial quality, but also the basis for judging urban spatial value attribute, reflecting the cultural initiative and self-discipline of urban space.

Culture is the collection of spiritual wealth, also it is a mechanism: a self-reflective mechanism consisting of beliefs, values and scientific rationality, as well as a self-conscious and self-discipline mechanism, which is the choice of human's own cultural consciousness, make clear the demand of development and the choice of corresponding path, while pursuing high efficiency development goal, subject to the corresponding restrictions which based on cultural self-consciousness, a choice mechanism of human self-appropriate development-cultural ecological mechanism: including human behavior, value level, space mechanism in different spatial scales of the complex giant system.

2. URBAN SPACE CULTURE ECOSYSTEM

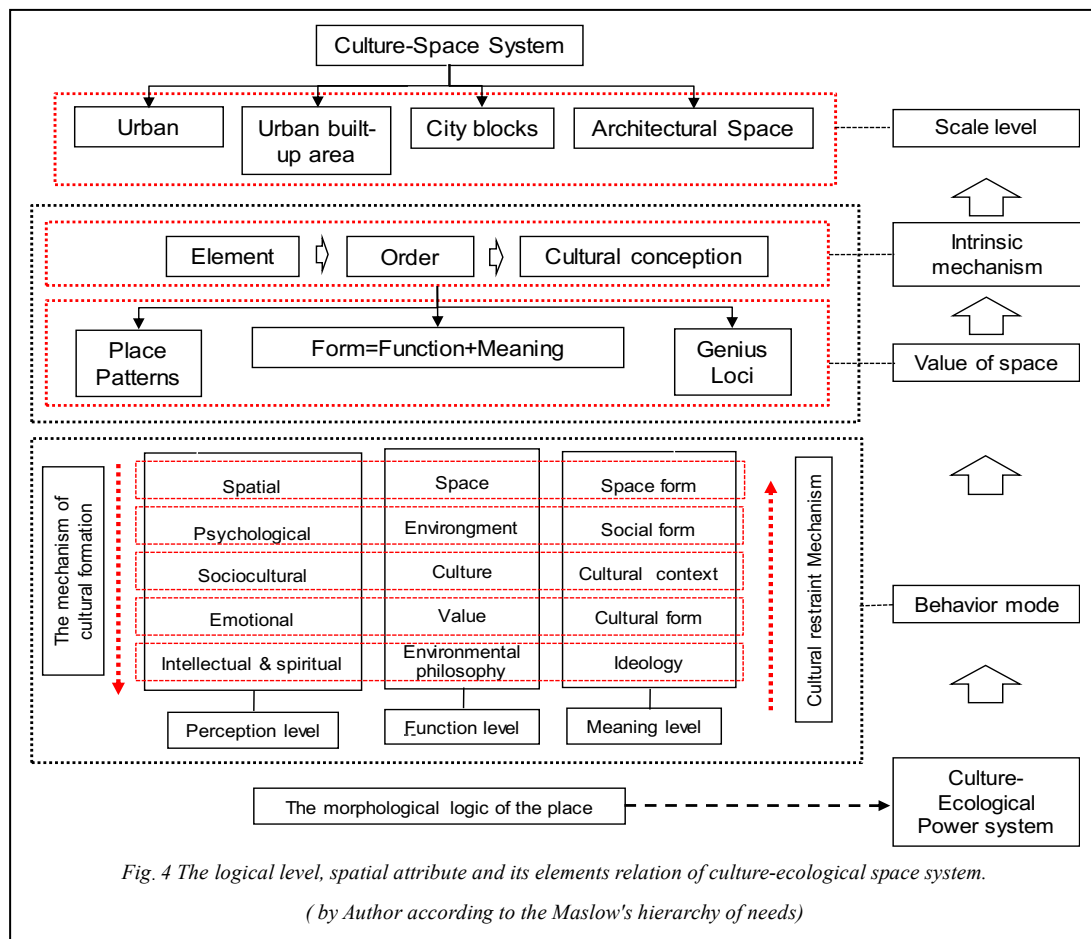


Fig. 4 The logical level, spatial attribute and its elements relation of culture-ecological space system.

(by Author according to the Maslow's hierarchy of needs)

Urban space is a form system composed of function and meaning, and it forms a specific cultural ecosystem with the process of historical agglomeration, which is a historical space field consisted by the interaction factors with ecological elements, social technology, regional culture, institutional system, value system, ideology and other factors, which including the attributes with the space, quality and value of urban, corresponding to the specific period of space elements and their perceptual level, and the formation of cultural ecological role chain. It is an important driving factor to the sustainable development of urban space, which takes the constraint and self-discipline as the feedback mechanism, which is related to the social and economic system in the evolutionary game, and forms the space-time field of the urban space culture ecosystem.

2.1 Basic attributes of urban space: spatiotemporal field, cultural ecology

The basic attributes of urban space are influenced by ecological basement, social technology, regional culture, institution system, value system and ideology, yet the above factors are based on different levels, which leads to spatial stratification.

Ecological background and social technology are the bottom line and the limit factor of urban space development, on the one hand, the bottom line of urban ecological carrying capacity is the insurmountable objective reality of sustainable development, on the other hand, the development of social technology often makes the ability of human close to the limit and become the passive control factor, therefore constitute the system of constraint elements of urban space.

Based on the limit control and the social spatial behavior, the urban spatial form is influenced by the regional culture and system, the value system and the ideology, which reflect the attribute of the quality and value of the space, and constitute the system of the cultural self-discipline elements of the urban space.

2.2 Urban Space value attribute: Bottom line factor, self-discipline system

The space quality is based on the spatial attribute, corresponding to the perceptual level of space, in which the ecological basement and social technology, determines the urban space ecological attributes and social behavior, and its social behavior and the corresponding social network, organization model, decision-making mode and self-discipline mode constitute the urban space cultural ecology and its function system. With self-feedback and self-adjustment mechanism, it forms the value attribute of urban space culture ecology.

2.3 Urban spatial quality attributes: regional characteristics, place spirit

The quality of space depends on the human needs, including five levels with the attribution of the physical, behavioral psychology, spiritual culture, innovation system and social ideal. The place intension consists of three aspects, such as place perception, place spirit and regional culture, which form organic organization, space-time coupling place, which is manifested in the space form and its cultural tradition.

The elements of the city space in Washington, for example, commemorate and symbolize the ideology of separation of powers and the values of equality for all. The capital space of

China's traditional agricultural society period is clear to the axis, symbolizing the supremacy of imperial power, orderly, the unity of man and nature, and the value of worship of nature.

In the urban renewal, the environment optimizes the urban governance (the main body pluralistic democratic process), the quality promotion (the place spirit mold and the regional culture formation), needs to realize the self-succession under the culture-ecology function system through the corresponding restraint mechanism and the self-discipline mechanism.

3. ADAPTIVE DEVELOPMENT MECHANISM

City is the carrier of civilization, because the emergence, development and evolution of the city is the process of cultural innovation and development, the city culture or remains in the cultural-ecological system with different life cycle and form. In reality, cultural protection is often regarded as a one-way process of capital investment, but in fact, because the historical and cultural pluralistic value is gradually recognized, and continuously transformed into capital, resources and urban cultural innovation industry, urban culture has become an important factor of urban space development. Therefore, when cultural development and traditional protection is not only one-way input, but cultural factors into resources, capital and industrial value, and urban space development is coupled, is redefining the history of culture, historical relics and protection and sustainable development of an important basis. The adaptive development mechanism of the cultural ecosystem involves the ecological pattern and the social technology system under the limit of the development, as well as the social order, the adaptation mode, the inheritance pattern and the conformity mode under the self-discipline of culture.

3.1 Boundary Conditions: Cultural location entropy

The agglomeration of cultural elements becomes the development of urban tourism, the development of cultural and creative industries and the concentration of cultural capital, therefore, based on the location entropy theory and the construction of cultural location entropy model, we can analyze the aggregation degree of cultural elements, related industries and their capitalization and the coupling relationship between urban space, and become an important factor affecting the urban space value. Therefore, the value of resource, industrial and capital transformation of cultural elements, its cultural inheritance and sustainable development model constitute the basis of the formation of urban spatial cultural ecosystem boundary conditions.

The cultural location entropy refers to the cultural elements in the spatial aggregation degree. It can be analyzed by the cultural location entropy model.

Location entropy is a very meaningful index in measuring the spatial distribution of a certain area factor, reflecting the specialization degree of a certain industry sector, and the position and function of a region in a high level region. In the research of industrial structure, it is mainly to analyze the situation of regional leading specialization department by using the location entropy index. The so-called entropy, is the ratio of ratio. It is a concept proposed by P. Haggett, which reflects the degree of specialization of an industry sector and the position and role of a region in a high-level region.

The calculation formula of location entropy is¹:

$$LQ_{ij} = \frac{\frac{q_{ij}}{q_j}}{\frac{q_i}{q}}$$

In this formula, LQ_{ij} is the area entropy of J Region I industry in the whole country (q_{ij} is the related indicators of I industry of J area such as output value, employment number, etc.) ; q_j is the index of all industries in J area ; q_i is the related indicators of I industry in national scope ; q it the relevant indicators for all industries in the country. the higher the value of LQ_{ij} , the higher the regional industrial agglomeration level. Generally, when $LQ_{ij} > 1$, it can be considered that the region economy of J region has the advantage in the whole country 当 $LQ_{ij} < 1$ it can be argued that the regional economy of the J region has a disadvantage in the whole country. The location entropy method is effective way which can reflect the level of industrial agglomeration at the regional level to some extent.

Therefore, we can use the location entropy theory to evaluate the spatiotemporal characteristics, including cultural industry and capital elements of urban spatial historical and cultural resources, and then construct the spatiotemporal field and its analytic model of cultural ecology combined with the coupling of urban context protection and cultural inheritance.

3.2 Derivative mechanism

Mechanism refers to the structure, function and relationship of the organism, which is the structural relationship and operation mode of each element. In sociology, its connotation can be expressed as: under the premise of facing the existence of all parts of things, coordinate the relationship between the various parts in order to play a better role of the concrete operation.

The urban cultural ecology and its spatiotemporal field are the information and energy bodies based on the spatial elements and t field function system, which are influenced by the restraint mechanism and the self-discipline mechanism. is based on the two dimensions of human technology development, that is, respect for nature or control of nature: When the goal is in line with the social value system, the self-discipline mechanism to play a role in the conscious sustainable development path; When the target deviation, across the ecological-limit bottom line, then to alienation The urban double repair and its technical regulations, is its revision mechanism, is based on the bottom line control and the self-discipline mechanism under the self-feedback behavior, is also based on the cultural self-discipline behavior.

When the target system of ideology and its value is coupled with the control of the bottom line, it is based on the control development of self-discipline, and presents the city Self-organization development under the action of complex giant system. is a measure basis for the sustainable development of urban spatial dynamics.

3.3 Space-Time coupling

¹ Location Entropy, <https://baike.baidu.com/item/%E5%8C%BA%E4%BD%8D%E5%95%86/2618883?fr=aladdin>

Urban space in the historical culture and the role of the space process, its formation of a potential order, covering six factors (Fig. 4):

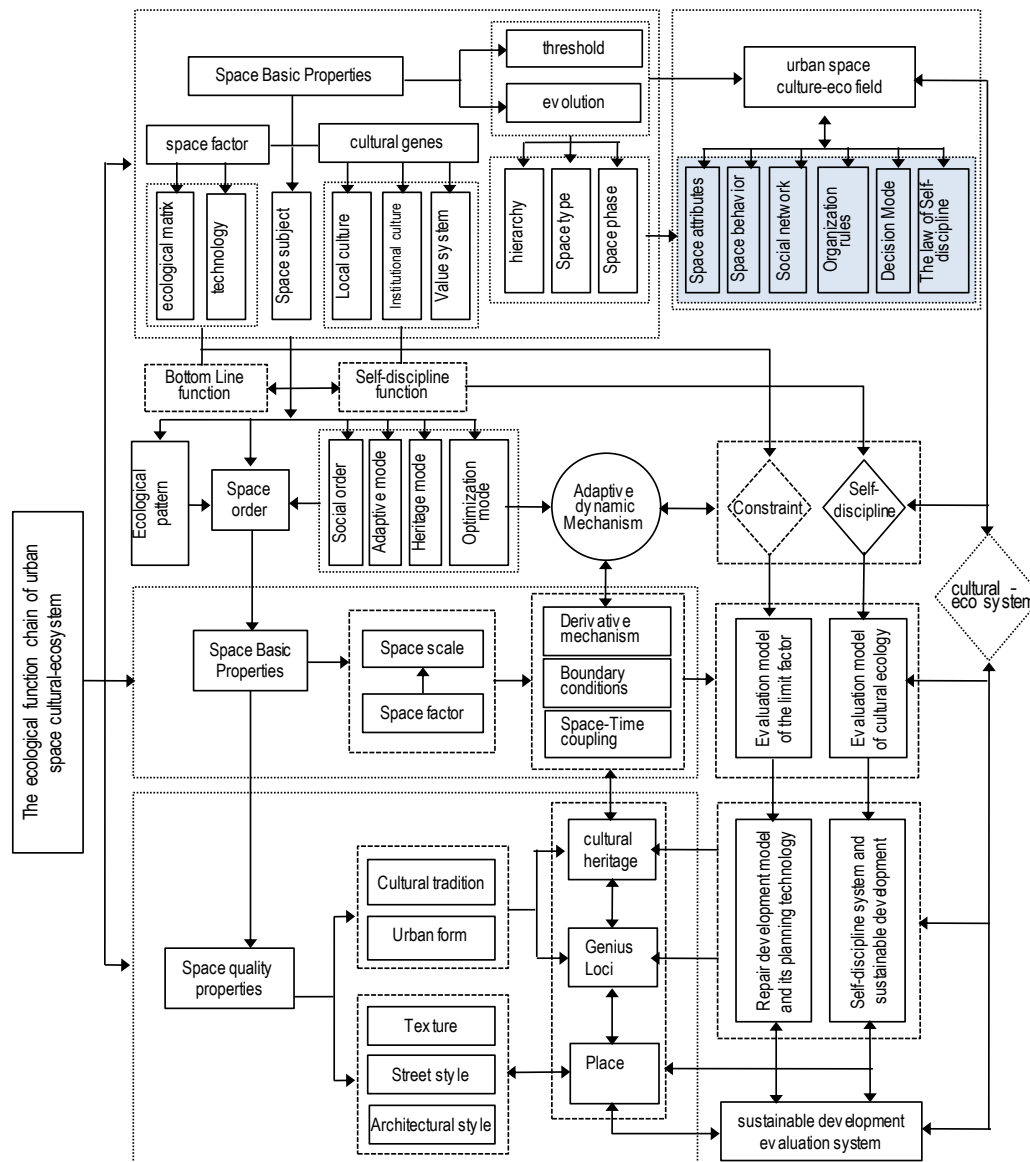


Fig. 5 relationship diagram of the ecological function chain of urban space culture (by Author)

First of all, it is the space bottom element under the condition of specific ecological basement;
 Secondly, it is the social economic life behavior mode under the support of social technology, and it is also the agent of the spatial representation of urban production and life style.

Third, the regional nature of culture originates from the historical and cultural tradition and its spatial coupling relationship. is often the basis of urban space, reflecting the multidimensional and complex relationship between people and the network;

Forth, The mode of social organization, the mode of economic operation and the market conditions under the system culture system are the dual motives of urban spatial self succession and intervention development, and have the characteristics of adapting to the

development;

Fifth, the model of social management and decision based on the function of value system and goal-oriented is the internal mechanism of cultural inheritance and innovation development.

Sixth, the self-discipline model based on ideology and survival philosophy is the ultimate mechanism of value judgment, and also the internal mechanism of urban development and spatial integration.

Generally, based on the factors such as ecological condition, social technology, regional culture, system culture, value system and ideology, the dynamic mechanism of cultural adaptability development of urban space coupled with multidimensional factors in the system is formed. This mechanism consists of its inner bottom line-limit, and the cultural self-discipline system constitutes an important influence factor of sustainable development.

It has the corresponding influence on the basic attribute, quality attribute and value attribute of urban space, and becomes the cultural ecological chain of sustainable development with dynamic balance mechanism and its space bearing system.

4. Conclusion

Firstly, The city is a complex huge system, the solution of local problem can not fundamentally solve the predicament that human development faces. Therefore, we must choose the path of development towards self-discipline. From the cultural-eco self-discipline system, find the way to live in harmony with nature, and make the city develop continuously and infinitely close to the direction we expected.

Secondly, challenge for us to strengthen the subject status, leading role and its influence of mankind on the whole world in the process of urbanization, to promote the development of the urban culture-ecological space system, to guide the cultural inheritance and innovation, and to realize the pluralistic and multi-dimensional harmonious system of human and nature.

Thirdly, In the face of the post-human era, that is, human beings must constantly reflect on and configuration, in order to make our thoughts and actions not be misled by the technology, but we ourselves through sober thinking and choose to dominate the process of technology, so as to realize the city's development with cultural wisdom: a way to meet the overall needs of people and towards self-discipline development.

Referencing

Christian Norberg-Schulz, Translated by Zhiming Shi: *Place spirit--towards architectural phenomenology*[M], Taiwan : Pastoral City Culture Enterprise Co., ltd, 1995

Ron Kaspriin: *URBAN DESIGN: the composition of complexity*, Routledge Taylor & Francis Group, London and New York,2011

Lewis Mumford,"The Skyline Bay Region Style' in Joan Ockmaned.", *Architecture Culture 1943-1968: A Documentary Anthology* (New York: Rizzoli, 1993).

Bingren Xiang : "Language, symbols and architecture" [J]. *Journal of Architecture*,1984 (08) : 56-61.

Congress Internationaux d'Architecture moderne (CIAM), "La Charte d'Athenes or The Athens Charter", 1933. Trans J.Tyrwhitt. Paris, France: The Library of the Graduate School of Design, Harvard University, 1946 : 65-70.

Kenneth Frampton, Translated by Shan Yuan et al. : *Modern architecture--a history of criticism* [M], China Construction Industry Press, 1988 : pp.10.

Kenneth Frampton, "Towards a Critical Regionalism: Six Points for an Architecture of Resistance", in Charles Jencks and Karl Kropf Karleds., *Theories and Manifestoes* (Academy Editions, 1997), pp. 97-100.

Conzen M R G. "Historical townscapes in Britain: a problem in applied geography " [A]. *The Urban Landscape: Historical Development and Management*. Academic Press, 1966.

J.W.R.Whitehand, "Urban-rent theory, time series and morphogenesis: an example of eclecticism in geographical research", *Institute of British Geographers*, 1972, vol. 4, no.4, pp.215-222.

Larkham P. J. Conservation and the Management of Historical Townscape [A]. In: T. R. Slater (eds), *The Built Form of Western Cities: Essays for M. R. G. Conzen on the Occasion of His Eightieth Birthday*, 1990.

Larkham P.J. "Urban Morphology and Typology in the United Kingdom" [A]. In Attilio Petruccioli(eds), *Typological Process and Design Theory*. Cambridge, Massachusetts: Aga Khan Program for Islamic Architecture.1998.

Conzen M R G. " Geography and Townscape Conservation " [A]. In Uhlig,H. and Lienau, G (eds.), *Anglo- German Symposium in Applied Geography*. Giessen-WUrzburg-MUnchen, 1973: 95-102.

Wei Tao, Jingwen Tang, Yinsheng Tian : "Landscape protection and management in Western historical cities and towns: Theory and practice of Conzen schools " [J]. *International urban Planning*, 2010 (05): 108-114.

Slater T R, Whitehand J W R. "Whose heritage? Conserving historical townscapes in Birmingham " [A]. In Gerrard A J and Slater T R (eds), *Managing a Conurbation: Birmingham and its Region*. Birmingham: Brewin,1996.

Laurence J C Ma. "Urban transformation in China, 1949 - 2000: a review and research agenda" [J]. *Environment and Planning A*, 2002, vol. 34, no.9, pp.1545 – 1569.

Andreas Faludi. "The Performance of Spatial Planning". *Planning Practice and Research*, 2000 vol. 15, no. 4, pp. 299-318.

E.R.Alexander, A.Faludi. "Planning and Plan Implementation: Notes on Evaluation Criteria" [J]. *Environment and Planning* , 1989 vol. 16, no. 2, pp. 127-140.

Guangfu Zheng, "Context and Modernization" [J], *Journal of Architecture*, 1988 (09) : Pp 28-29.

Song Han : "Explicit culture and implicit culture--the context of city" [J]. *Central China Building*,1988 (04) : 1-3+26.

Yang Miao : "The value evaluation and the establishment of the method framework of the traditional urban context elements in China " [J], *Journal of Urban Planning*, 2005 (04) : 40-44+27.

Liangyong Wu, "Basic idea, regional culture and times pattern" [J], *Journal of Architecture*, 2002.02 : Pp 6-8.

Shouxiang Fu. "Urban cultural ecology protection and context continuity in the age of ecological civilization" [J]. *Journal of Shenzhen University* (Humanities and Social Sciences edition) . 2010 (04) :93-98

Kunming Tian, *The effect of cultural capital on economic development in the period of transformation--theoretical framework and Chinese situation* [D], University of Finance and Economics in Southwest China, 2014

Acknowledgements

The study was funded by the National Natural Science Foundation of China (Serial Number: 51578436)



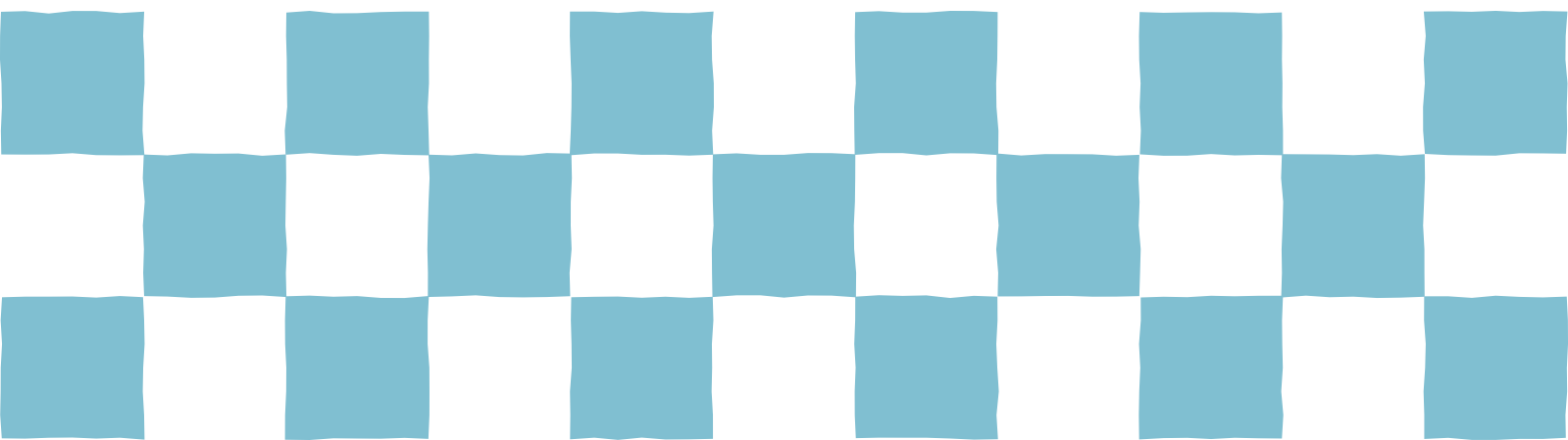
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

66 Planning Experiences in Modern China



The Making of the Pudong CBD, Shanghai: Miracle or Mirage?

Richard Hu (University of Canberra)

The Pudong CBD in Shanghai, also known as Lujiazui Financial City, was built from scratch to be a global city centre within less than three decades. The way it has been planned and developed is unique to China, and provides a useful lens to view the largest urbanisation process in human history there. It is time to investigate the uniqueness of the approach that has made the Pudong CBD as it is today. For this purpose, this study traces and documents the genesis and process of its planning and development to unpack the drivers, actors, and mechanisms behind. It uses information collected from archival documents, memoirs of and interviews with participants and informants, and the author's observations on site. Synthesising these information, this study draws insights into the making of the Pudong CBD as a national strategy with a mission of nation building. Driven by a political will, its planning and development has been government-led and design-led, targeting a global Shanghai and a modern China through building a new CBD to integrate with the world. While successful in attracting and accommodating economic activities as planned, a physical determinism embodied in the approach created problematic transport system and accessibility, and failed to pay sufficient consideration to the social and environmental dimensions of the contemporary sustainability imperative. These findings penetrate through the grandiose urban form of the Pudong CBD, which is now a familiar imagery of Shanghai and China, to shed new lights on its rapid erection as a miracle or mirage.

Re-inventing the Socialist Tradition: Changing Meanings and Everyday Spaces of Workers' New Villages in Post-Reform Shanghai

Zhiyong Liang (The University of Hong Kong)

Workers' new villages are standardised socialist housing developed to support central economic plans and industrial development in Maoist China. Since the reform under Deng Xiaoping, these estates have been gradually replaced by a market model through extensive urban redevelopment. Shanghai, where the prototype of workers' new village was first developed in the early 1950s, has witnessed major transformations of the built environment and community life within these neighbourhoods in the past thirty years. This paper examines the tensions in this shift from socialist collectivism to the "socialist market economy" in post-reform Shanghai, with a focus on the changing narratives and everyday spatial practices of the workers' new village. Firstly, the analysis of popular narratives shows subtle changes in the perceptions of local residents and the public since the onset of reform. Due to its low standard of housing quality and association with stringent urban life, the workers' new village has been perceived as a stigma of backwardness amid a growing desire for housing improvement and the vision of middle-class life. Recently, many Shanghai residents begin to consider the workers' new village a "socialist heritage" with growing concerns about Shanghai's lost identity and teething problems of market-oriented urban development. Secondly, field research in three new villages in Shanghai elucidates how market forces have changed everyday spatial practices within these neighbourhoods. The influx of migrants and middle-class residents has reshaped street activities and boundaries between mixed developments; whilst the original administrative system that relies on long-term personal connections has been adapting itself to these new circumstances. By revealing the nuanced changes of subjective perceptions and the planning of built environment in China's historic transition to market economy, the paper argues that the workers' new village planning and its socialist collectivistic tradition have persisted in the post-reform era and actively engaged in reshaping China's contemporary urbanism.

Suzhou Industrial Park: A Case Study of Town Building based on Singapore Model

Zhongjie Lin (UNC Charlotte) and Ying Hu (University of Science & Technology of Suzhou)

In 1994, the governments of China and Singapore signed agreements to create the Suzhou Industrial Park (SIP), a national demonstration project and joint venture to introduce Singapore's experience of in city building and management to China in a wholesale manner. These two new towns are theNow there isIn two decades, the SIP not only has attracted thousands of high-tech corporations and enormous investments, but also grown into a city of more than 700,000 residents from scratch. The 1994 master plan and several ensuing plans and urban designs have played an instrumental role in laying out extensive infrastructure, implementing rigorous controls of urban form, and creating a broad network of open spaces, following Singapore's system in developing an industrial estate. The residential areas in the SIP are organized according to the principles of "neighborhood unit," a concept originating in the West yet revised in the Asian context through Singapore's adaptation. These planning and development strategies have distinguished the SIP from other new towns in China, and are emulated as part of the "Suzhou model." However, SIP has also encountered several issues that impact its development as well as that of other Chinese new towns, including super-blocks, gated communities, and growing private cars.

This paper focuses on the SIP as a case study of China's model new towns and Singapore's influence in this effort through the relationship between place making and social development. It addresses questions about the urban transformation in China: what kinds of roles do the public agencies and the private sector play in the new town development? Has the growing awareness of sustainability become a driving force for innovative design, or does it remain political rhetoric for the marketing of entrepreneurial governance? To what extent is the force of globalization embedded in the process of place making under specific local conditions? What are the benefits and compromises of the Singapore model in town building? This paper will trace the development of SIP since its inauguration in 1994. Through analyzing the urban design and development strategies of this modern new town, the case study will cut a cross-section of the ongoing massive new town movement in China and examine the role of planning in urban transformation and economic development in a global era.

Losing Intangible Heritage under the Preservation Projects of Tangible Heritage - A Case Study on a Reputed Lunar New Year Paintings Town Yangliuqing, China -Diverse Planning Culture and its Commonalities-

Bingqian Cheng (Tianjin University(Postgraduate Student)), Tianjie Zhang (Tianjin University(Associate Professor)) and Yingxiang Niu (Tianjin University(Undergraduate))

The present historical and cultural preservation of Chinese urban system is made up of the National Historical Cultural City, National Historical Cultural Town and National Historical Cultural Village. The most perfect preservation standards for National Historical Cultural City were established when the system was initially set up. Therefore, some practices in protecting National Historical Cultural Town often imitate those of Cities. Compared with National Historical Cultural City, National Historical Cultural Town has relatively backward economic development and urban construction and their ecological environment is closer to nature. And they have relatively richer historical relics and cultural environments than Village. Therefore, National Historical Cultural Town shall be protected according to their own characteristics and protection plans shall be carried out with specific targets. Although the efficient declaration and selection system has been set up, there are still many difficulties and problems in the protection of Chinese National Historical Cultural Town during the stage of rapid economic development. For example, because of unreasonable construction and tourism development, traditional spatial patterns of some towns were destroyed; because the compilation and protection systems are not sound, the plan for protecting National Historical Cultural Town imitated the compilation patterns of National Historical Cultural City and it did not take the protection of intangible cultural heritage into consideration.

This paper chooses Yangliuqing town in northern China as a specific case. In Yangliuqing, there survives many tangible relics since the Ming and Qing Dynasties, and other intangible cultural heritage like Lunar New Year Paintings, Kites and Papercutting. Among them, the Yangliuqing Lunar New Year Painting is one of the four most famous "Chinese New Year Paintings", and has been enlisted as a national intangible cultural heritage. A serious of plans were put forward during 1996-2012, and the town would be built into a folkloric culture area and tourism base. Under these plans, the ancient architectures are renovated and used as museums or art galleries. Part of the primary lanes are preserved, and surroundings are coordinate with the relics. Via preliminary fieldwork, the research finds that the preservation plans pays more attention to the physical-spatial system, and they don't realize that the inheritance of the intangible cultural heritage needs the material carrier and culture space. This caused some urban construction break the Lunar New Year Paintings' s production chain, and destroyed its organic production environment. Leading to the decline of sales and popularity. The artists of the Paintings choses to do other work instead of painting, because of the low income. And this leads to the Lunar New Year Paintings much more lack vitality. Similarly, and other folk cultures are also in this situation.

Based on these problems, via interview, POI data, etc., the research reveals the intentions and desires of multiple stakeholders, including local government, tourists and indigenous residents. In general, the paper intends to make an effective evaluation on the tangible preservation plan implementation in Yangliuqing Historical Cultural Town, and put forward preservation suggestions to the intangible culture.



Losing Intangible Heritage under the Preservation Projects of Tangible Heritage

- A Case Study on a Reputed Lunar New Year Paintings Town Yangliuqing, China

Bingqian Cheng*, Tianjie Zhang**, Yingxiang Niu***

* *Postgraduate, Tianjin University, 2668047992@qq.com*

** *Associate Professor, Tianjin University, arch_tj@126.com*

*** *Undergraduate, Tianjin University, 1317997141@qq.com*

On the basis of fully understanding the connotation and characteristics of intangible cultural heritage, this paper combed the preservation work of the Yangliuqing Town which is the National Historical Cultural Town in Tianjin, China. The author finds that preservation work had always focused on the tangible culture. And under these preservation planning, some historical sites are restored properly. And some construction improves the people's living condition. But during this process, some construction destroys the human environment inadvertently, and the development of the Lunar New Year Paintings industry also hits a bottleneck, leading to the decline of the characteristic of the "New Year pictures Town". Based on this problem, this paper puts forward the suggestions such as enriching the theme of Lunar New Year Paintings and enacting preferential tax policies.

Keywords: intangible heritage, Yangliuqing Town, cultural space

Introduction

The historical and cultural preservation of Chinese urban system is made up of the National Historical Cultural City, National Historical Cultural Town and National Historical Cultural Village. Compared with the city, the economy in towns is not as much as developed, and there is not much more urban construction in towns. So the environment in towns is more close to the nature. However, the preservations of the town has always copied the conservation paradigm of Historical and Cultural Cities, and those just focused on the tangible heritage while ignoring the intangible heritage, leading to the towns lacking spiritual culture.

With the development of regional economic integration, the richness and diversity of world culture have been greatly challenged, and the uniqueness and differences of traditional culture have disappeared or weakened rapidly. In this circumstances, the United Nations Educational, Scientific and Cultural Organization put the protection and development of the diversity of the human cultural into an important situation, and it declares that the preservation of the intangible culture is the main work to develop the diversity of the human cultural. In contemporary, many countries such as Japan, Italy, Germany, France and so on begin to start the traditional colour research, the traditional clothes to set up good country images. The Japan is the earliest country that establish laws to preserve the intangible culture¹. The South Korea takes advantages of the intangible culture to attract foreigners to experience the traditional festivals or life. In Italy, there are many ecological country tourism and delicious food culture tourism to show the characteristic traditional art. From this, we can see that the preservation of the intangible cultural heritage plays a vital role to sustain the diversity human culture².

Since China resumes the situation in the UNESCO, and signed the International Convention for the Protection of the Intangible Cultural Heritage, the preservation of the intangible cultural has become the main work to the preservation of the historical and cultural. During the long evolution process, the ancient town formed a relatively



complete traditional custom, life style, etc. Intangible culture is the sole of the ancient towns, together with the material life, they reflect the value of the social life under the special historical and cultural environment.

This paper takes Yangliuqing, which is the National Historical Cultural Town as the specific case to analyse this phenomenon. There are plenty of outstanding historical sites which were built in Ming or Qing dynasty. And there are also lots of intangible cultural heritage such as Lunar New Year Paintings, Kites and Paper-cutting³. These intangible cultural heritage reached its peak in the Ming and Qing dynasties, by now, much folk-custom is still exist. Among them, the Yangliuqing Lunar New Year Paintings is one of the four most famous "Chinese New Year Paintings"⁴. Based on these problems, the paper intends to make an effective evaluation on the tangible preservation plan implementation, and analyse the effect on the intangible culture space and the inheritance which made by the implementation.

1. The introduction of Yangliuqing

Yangliuqing (Figure 1), a famous town in northern China with a long history, located in the southwest of Tianjin. And it is one of the towns of Xiqing which is an administrative unit of Tianjin. As the Grand Canal flows from the south of the township, Yangliuqing became an important wharf during the Ming and Qing dynasties. So the cultural exchange was frequent and developed unique folk culture. Therefore, there are lots of historical relics and historic sites in this town, including two National Officially Protected Sites, five City Officially Protected Sites and ten Unmovable Cultural Relics⁵. The residential compounds in the township are the outstanding representative architecture in the local area. They are very aesthetic with the exquisite brick carving and unique architectural structure. The Peiping-Tianjin Campaign Memorial Hall is another significant historical relic, and it is the Tianjin Patriotism Education Base now. In addition, there are also many other Ming and Qing dynasties relics like the Puliang Tower and the Wenchang Pavilion. Therefore, Yangliuqing was selected as the fourth batch of National Historical and Cultural in 2008, and the Liujié village in the town was selected as the fourth batch of Traditional Village.



Figure 1 The view of the Yangliuqing downtown , the Grand Canal and the residential building



Yangliuqing formed rich characteristic intangible heritage because of frequent culture exchanging. They has typical historical, literary, art and scientific value (Figure 2, 3, 4). Yangliuqing has one National Intangible Cultural Heritage- Yangliuqing Lunar New Year Paintings. Now, 50 workshops and 700 staffs are engaged in this industry⁶. Besides, there are two City Intangible Cultural Heritage of Tianjin, which are Yangliuqing fly kites and paper-cutting. And other intangible culture such as Folk Hua-hui, brick carving and Gandaying are also attractive.



Figure 2 The Yangliuqing Lunar New Year Painting made in Qing dynamic



Figure 3 The Yangliuqing Lunar New Year Painting made in the Republic of China



Figure 4 The Yangliuqing Lunar New Year Painting made in contemporary

With the rapid development of urbanization, the government put forward a series of plans to preserve the historical culture of the town. Lacking the specific preservation norms for the National Historical Cultural Town, the government copied the conservation paradigm of National Historical Cultural City, which made different impact on the tangible heritage and intangible heritage.



2. The preservation planning of Yangliuqing

Most of the historical and cultural relics of Yangliuqing located in the township, and most of them were built in Ming or Qing dynasty. These relics suffered from nature or man-made destruction during the long history. Therefore, every plan try to put forward terms to preserve them.

The earliest planning was put forward in 1996, *The Master Planning of Yangliuqing (1996-2010)*. In this planning, Yangliuqing would be constructed as a tourist town based on its historical cultural heritage, but there were no specific preservation measures.

In *The Master Planning of Xiqing (2005-2020)*, the government would like to build Yangliuqing as the “Lunar New Year Paintings Town in China” and the “Ancient town in the west of Tianjin”. To enrich the tourism projects, the government try to show all historical culture of Xiqing in Yangliuqing township. Moreover, the planning emphasizes it would preserve the traditional streets and lanes, the spatial and the landscape of the Grand Canal, and promote the economic develop by the tourism construction. Then the government put forward detailed preservation and development measures on the tangible culture in the township, including making a regulatory detailed plan. Particularly, there are no detailed preservation measures on the intangible culture but only a programmatic goal to inherit the culture.

The Preservation Planning of Yangliuqing Historical Cultural Town was put forward in 2011. Under this plan, the township was divided into the core zone, the development control zone and the buffer zone (Figure 5). And emphasis to keep the traditional scale of the street and lanes, use the traditional brick to pave the way. Moreover, different measures such as regulation and demolition to different historical architecture and monument was put forward. According to this plan, the situation of the traditional architecture, public space, and the texture of the street improved, but there also exists some deficiencies.

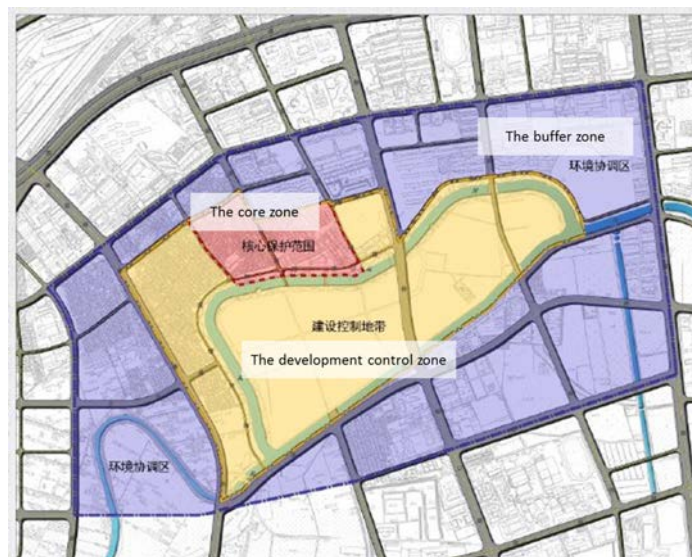


Figure 5 The different preservation scope

3. The preservation of the tangible heritage in Yangliuqing

Since every plan pays more attention on the preservation of the historical cultural heritage during the past twenty years, especially the tangible heritage. This paper will give an evaluation of the implementation on the tangible heritage.



Figure 6 The preservation consequences of the architectures and the texture in township

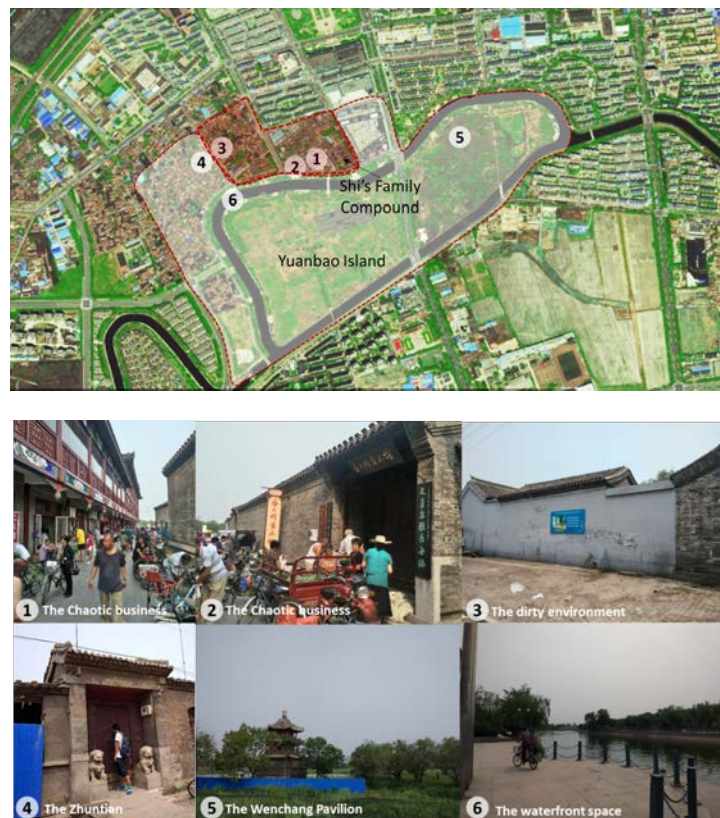


Figure 7 The deficiencies of the preservation

3.1 Positive preservation in architecture, negative coordination in surroundings

The core preservation zone is about 14.5 hectares, and there are lots of compounds in this zone, especially the outstanding Shi's Family Compound. The preservation planning stipulates that these officially protected sites must



be preserved and used according with *the Cultural Relics Protection Law of the People's Republic of China*, and maintain the integrity of the architecture and show the connotation of the culture. Now, the Shi's Family Compound is used as the Yangliuqing Museum, which has been a great scenic spot in the local area. The other compounds are transformed as the art gallery or study center, which improves the vitality of the historic architecture (Figure 6-1, 6-3).

The preservation planning emphasizes that the architectures surrounding the compounds should be coordinate with the compounds. In the investigation, we find that the architecture in the north of the Shi's Family Compound are mainly built with cyan brick and gray tiles, and these architecture are used as art museum or Lunar New Year Paintings workshops, etc. The architectural style and the business format are coordinate with the compounds. While along the Ruyi Street (Figure 6-2), which is an important street in the core zone, there are lots of street vendors selling low-end antique. Another important street, the snack street (Figure 6-5), there is still no merchants. In the west of the Shi's Family Compound, there are lots of business architecture copied those in Ming and Qing dynasties. Although the style of the architecture is coordinate with the surrounding historical, the business formats are clutter. There are lots of shops selling hardware, appliances, etc. And the formats reduced the quality of the historical space (Figure 7-1, 7-2).

According to the consequence of the PPGIS⁷, we can also find that most people think that the core zone is deserved to visit (Figure 8), and 70% think the streets and lanes have historical cultural value. And 75% interviewees think the Yangliuqing Lunar New Year Paintings has historical cultural value, and most of them are the local people.



Figure 8 The overall cognition of the interviewees on historical and cultural value

In the west of the core preservation zone, there are lots of common residential buildings. The Peiping-Tianjin Campaign Memorial Hall is located in this area, but because of lacking the obvious guides, it is hard to find this museum hall. Besides, the environment around the memorial hall is so dreadful that little tourists come to visit it. From the investigation, we find that only 46% interviewees realize the historical value of the memorial hall, which is far from the plan's primary target.

The development control zone is about 95.4 hectares. On the nearest east of the Shi's Family Compounds, there are lots of business buildings copied the style of Ming and Qing dynasties. In the process of the urbanization, to improve the efficiency of the land usage, the government merged lots of rural settlements located in the east of the town into different huge neighbourhoods. And many workshops engaged in Lunar New Year Paintings, fly kites and paper-cutting were demolished. To avoid the fading of historical cultural, the government plans a business street specially to provide place for the folklore artists to sell Lunar New Year Paintings and fly kites (Figure 6-6). In the west of the development control zone, it has not been developed because of the lack of capital. Neither does the Yuanbao Island on the south of the Shi's Family Compound (Figure 7).



There are many historical monuments and structures in the core zone and development control zone. But according to the investigation, most of these heritages are in the abandoned situation (Figure 9), though the time node is close to the deadline of the plan⁸. With little guide symbols, it is hard to find these heritage spots, so few tourists would like to visit them (Figure 7-4, 7-5).

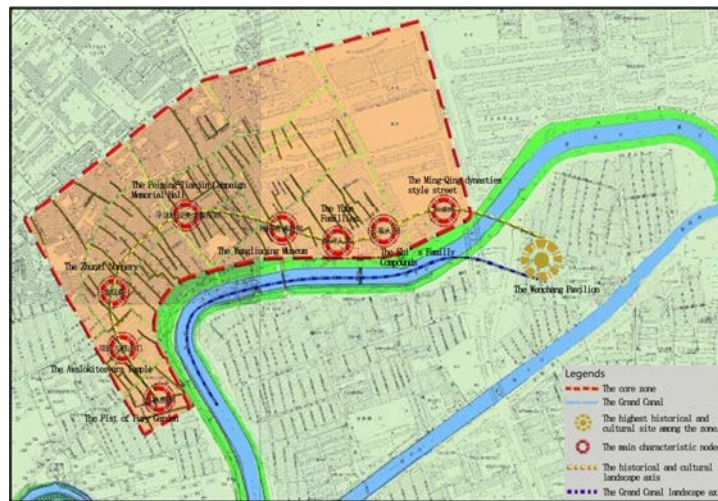


Figure 9 The tourism line and the distribution of the spots

3.2 The public space is lacking of vitality

The preservation planning of Yangliuqing put a systematically plan on the public space in the core area. According to the planning, the construction should build abundant public space, especially the folklore tourism area and the landscape space along the Grand Canal. Besides, it should improve the significant space which could show the characteristic of the town, such as the people square.

While according to the investigation, there are little public space for tourists to rest, so few tourists would like to take their spare time on the street or lanes. Moreover, the government planted plenty of willow trees along the canal to improve the walking environment and reappear the historical scene, however, it is lack of recreation facilities so there is few person staying at this place. In addition, the style of the portal space in Yangliuqing town is chaotic. Ming and Qing dynasties commercial buildings, modern residential buildings, western style pillar buildings and so on, weakened the historical and cultural characteristics of the town.

3.3 The great difference of the texture

In the preservation planning text, it is proposed to control the style in the two sides of the historic streets, and the architecture along the street should be coordinate with the northern traditional residential buildings. Moreover, it should maintain the history scale and keep the integrity of the interface. And in fact, most of the ancient texture are preserved, and they are attractive to the tourists. According to the planning, the government widen the Ruyi Street to make the space more abundant.

But the texture in the development control zone is great different from that in the core zone. It is inconceivable that there exists a 1.2 hectares park-lot next to the Shi's Family Compounds (Figure 10), which is extremely uncoordinated with the ancient texture, and the environment is unattractive because of lacking landscape design. The zone in the west of the development control zone has not been developed, there are still many common residential houses. And the interface of the street and the public space is not attractive, either.

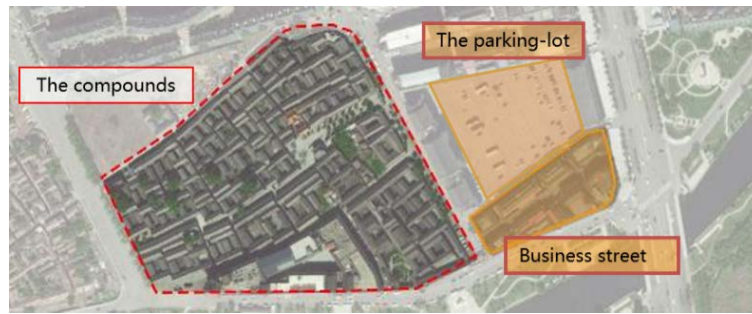


Figure 10 The incorporate texture

3.4 The weakness of the plan

According to the consequences of the PPGIS, we find that the residents think the old train station has great historical value (Figure 11, 12). Because the old train station took great convenience to the local people, and this two floors Germany building made by brick was a great grand architecture at past. This old train station occupied part of their memory, so they think this station has historical value. However, there is no preservation measures to preserve it. Moreover, another heritage the Zhunti Nunnery, which was built in Qing Dynasty, has collapsed due to the weak preservation consciousness and lacking capital, although it is one of the nodes at the tourism line planned.

According to the PPGIS interview, many interviewees put the historical and cultural signs on the Shi' Family Compound, the Peiping-Tianjin Campaign Memorial Hall, and the Yangliuqing Museum, etc. From the nuclear density analysis, we can find that the colour in this area is the deepest. This reflects that the interviewees are satisfied with the architectural relics which are repaired and took advantages of properly. But the preservation to the monuments such as the Zhunti Nunnery and the Wenchang Pavilion is need to improve. In addition, the planning should pay more attention on the local residents' memory, especially the old train station.

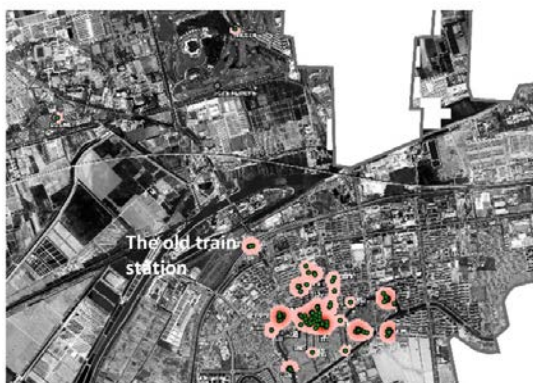


Figure 11 The local residents' cognition on the landscape value

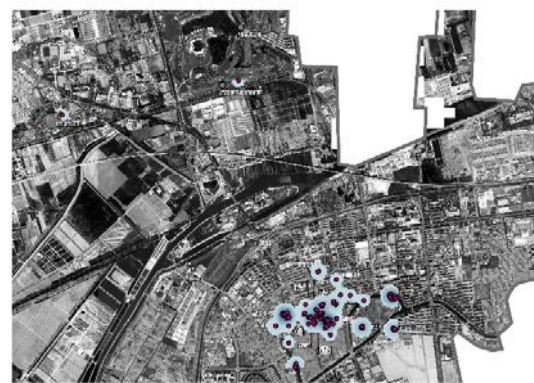


Figure 12 The tourists' cognition on the landscape value

4. The preservation of the intangible culture in Yangliuqing

Except for the tangible heritage, Yangliuqing has rich intangible heritage because of the convenient transportation. Yangliuqing is rich in the birch-leaf pear, which is the necessary material to make the wood model of the Lunar New Year Paintings. So Yangliuqing was famous for its Lunar New Year Paintings in history. And the Yangliuqing Lunar New Year Paintings was listed in the first batch of intangible cultural heritage list in 2006.



In history, some families produced Lunar New Year Paintings by themselves as their avocation, they produced and sold their own products. The others are the workshops which have abundant capital. And lots of painters, wood model carvers could create new paintings together at past. The paintings are usually printed or sold in the workshops or printshops. And the whole industry chain including the production of the pigment and drawing paper, it is also including the subbranch distributing all over the country⁹.

Yangliuqing had become an important production place of Lunar New Year Paintings in Ming and Qing dynasties, and the development of the paintings got to its peak at this time. In addition, one of the Four Great Classical Novels in China- the Story of the Stone, its illustrations adopted the drawing mode of the Yangliuqing Lunar New Year Paintings. However, as the inflow of western paintings and the interruption of the Japanese Aggressive War, lots of Lunar New Year Paintings and wood painting models were destroyed, leading the decline of Lunar New Year Pictures industry. While, after the founding of the People's Republic of China, the culture administration paid great attention on the Lunar New Year Paintings and Paper-cutting industries, and many precious masterpieces were saved. However, the "Culture Revolution" caused 60% wood painting models being fired, and the Lunar New Year Pictures industry was hit seriously. After the Reform and Opening in 1978, this bad situation was improved, and more and more people collected and research the folklore art. At this time, the century-store Yuchenghao began to produce paintings again, and after 13 years' collecting and sorting out the wood painting models as well as the paintings, this store opened for business in 1993. But because of the urban construction around 2002, this old store had to be demolished. The entire village where it was located was also be demolished. The urban construction which was to promote the urbanization broke up the industrial chain of the Lunar New Year Pictures unintentionally¹⁰.

To make up for this damage and enhance the characteristic of the town to attract more tourists, the government plans an area to develop the folklore culture. There are lots of workshops selling paper-cutting, fly kites and clay figurine, especially the Lunar New Year Paintings. However, except for the well-known workshops such as the Yuchenghao and Nianhua Zhang, there are a little tourists visiting the town which caused the dull business. The reasons are from many aspects:

4.1 The Lunar New Year Paintings' theme is lacking of innovation

After having an investigation with the shop-owners, the author got that it need to carve the wood into different patterns, then print and paint it. Therefore, it will take a long time to create a new theme, and due to being shortage of staffs and creative ideas, most of the shopkeepers are not willing to create a new one. So the themes of the Lunar New Year Paintings aren't attractive to the consumers, especially the young consumers¹¹. In fact, the young man are the main consumer group, so the number of the paintings fall down due to few people would like to buy them.

4.2 The staffs do not understand the connotation of the Lunar New Year Paintings.

Most of the staffs in the workshops are from other places. These groups cannot understand the connotation of the New Year pictures, and their works usually don't match the real style of the Yangliuqing lunar New Year Pictures. In addition, it is difficult for them to create outstanding masterpieces.

4.3 The industry chain was broken

The process of the Lunar New Year Paintings includes drafting, carving the wood, painting, coloring and mounting. It need professional persons to finish one of the produce. As it is difficult to master the whole process, so the apprentices are usually engaged in one or two specific process in the whole life. And as these process are inherited



by their families, so each family has their own advantages. In history, the folk artists, wood carvers and the handicraftsmen created abundant Lunar New Year Paintings. However, with the development of the urbanization, lots of villages are demolished and merged into the large neighborhoods. In this process, many workshops were closed down. This causes them difficult to finish one bulk order¹². According to our investigation, some workshops tried to take the bulk order over, and then assigned different workshops to produce. As a result, there are many different styles in the same batch order, which left negative effect on the Lunar New Year Paintings. Therefore, the number of the Lunar New Year Paintings' products declines this years.

4.4 The products lose culture connotation

As the number of the workshops and staffs is declining, many merchants adopt-machines to print instead of the traditional wood carving. This behavior caused the loss of culture connotation of the Lunar New Year Pictures, so fewer and fewer consumers think it deserves to buy it¹³.

4.5 Lacking of advertising

As the theme of the Lunar New Year Paintings is not attractive to the consumers, and because of less dissemination, fewer and fewer consumers know about the Paintings and would like to buy them. Moreover, the groups that buy the pictures almost are the collectors, dealers and franchiser. To buy the real artwork, these people tend to buy paintings at the workshops in Yangliuqing instead of the shops in market. This has led to fewer sales of New Year pictures and fewer stores.

5. Summary and suggestions

From the analysis above, we can find that the physical space is improved under serious of preservation plannings, especially the historical architectures and the lanes in the core zone. While the texture in the development control zone needs to be transformed to be coordinate with that in the core zone. And the public space in both zone need to be improved. In addition, to build up the Historical Cultural Town, the government paid more attention on the material. While the intangible culture is not preserved and inherited properly. The urban construction led to lots of the Lunar New Year Paintings workshops being demolished. To save the Lunar New Year Paintings industry, the government planed an area for the merchants to sell paintings and paper-cutting. However, the sales and fame are declining.

As we all know, the inheritance of the culture cannot leave from the material carrier, neither of the intangible culture. The intangible culture is the living heritage, so its material carrier also has the living features. Among them, the culture space is the indispensable material carrier to exist, inherit and create. The communities, villages, religious sites and natural environment etc. are all could be the carrier to the intangible culture¹⁴. Without these carrier, it is impossible to inherit and create the culture¹⁵. Therefore, it is very important to build the culture space to preserve the intangible culture. However, the government doesn't realize this problem, and they doesn't realize that it is important to maintain the industry chain. Besides, the planning area for selling Lunar New Year Paintings is too cramped to attractive tourists. This causes the decline of the sales, and many artists had to do other work because of the low income.

Therefore, in present, in order to improve the visibility and sales of the Lunar New Year Paintings, the government should implement the funding system for the artist, so as to encourage more people to devote themselves into creating Lunar New Year Paintings. And it is important to build culture creation space. What's more, it is important to enrich the theme of the pictures combining the era backgrounds, and let more people appreciate the Lunar New



Year Paintings and buy them. This is the key sector to improve the pictures industry. Moreover, the urban construction we mentioned above caused many workshops close down, the key reason is that the unbalance between the input and output. So lots of people choose to do other work. And that leads to the breakdown of the culture space. Therefore, with the development of our life, the paintings should be incorporated with people's new demands. It is better to register a trademark or apply for patent to maintain the characteristic of the Yangliuqing Lunar New Year Paintings. Encouraging the staffs to create more gadgets with the characteristics of the Lunar New Year Paintings to make it more popular and expand the sales channels.

Moreover, it is important to let more people be able to identify the quality of the Lunar New Year Paintings, and prevent the low quality products leave a negative impact on the Paintings. The last but not least, the merchants could cooperate with the universities, museums and the exhibition centres, and the government should better to reduce the tax. By this, it could make the Yangliuqing Lunar New Year Paintings more popular and improve its sales.

Endnotes:

¹ Fei Long. 2005. The Current Protection Situation of the Intangible Cultural Heritage outside China. *Theory and Criticism of Literature and Art*. No.5:59-66.

² Dong Jianyi. 2014. "Let the Area 'Folk Art' Into the Art Classroom." Master diss., Shenyang Normal University:6.

³ Ma Xianying. 2014. "Research on the Historical Famous Towns Protection and Development Strategy under the Background of Tourism Development ——Taking Yang Liuqing, Xi Qing District of Tian Jin for Example." Master diss., Tianjin University:19-20.

⁴ Shen Hong. 2007. *Yangliuqing Nianhua ZhiLv*. Changchun: Jilin renmin chubanshe:57-77.

⁵ See the Preservation Planning of Yangliuqing Historical Cultural Town.

⁶ Jizhu Xiangchou I. <http://tv.cntv.cn/video/VSET100216296129/417c3b2ae4764becbed5d259b5cc8a13> (accessed February 17, 2015)

⁷ It means Public Participation Geographic Information System, it makes up for the traditional GIS mainly depends on remote sensing. The interviewers put up the different value signs on the map to express their cognition to the sites. In this way, the people's subjective activities such as values, attitudes and ideas, etc could be analysed together. In this survey, we interviewed 207 samples, and asked which sites do they think have historical, aesthetic, recreational, ecological, characteristic, spiritual or economic value. In this paper, I mainly analyze the historical value.

⁸ The deadline of the Preservation Planning of Yangliuqing Historical Cultural Town is 2020.

⁹ Li Wuqing. 2009. *Yishu Shequ Xin Tansuo*. Liaoyang: Liaoning Minzu Chubanshe.

¹⁰ Shen Hong. 2007. *Yangliuqing Nianhua ZhiLv*. Changchun: Jilin renmin chubanshe:77-105.

¹¹ The shopkeeper A, interview by the author, February 8, 2018.

¹² Resident A, interview by the author, July 04, 2017.

¹³ The shopkeeper B, interview by the author, July 20, 2017.

¹⁴ Xing Li. 2006. The Substantial Layer of Oral Non-substantial heritage. *Journal of the Central University for Nationalities (Philosophy and Social Sciences Edition)* 33, no.6: 80.

¹⁵ Yang xueyin. 2007. Ecological Anthropology and the Protection of Cultural Spaces-Taking Yunnan Ethnic Culture Reserve as an Example. *Journal of the Guangxi University For Nationalities (Philosophy and Social Science Edition)* 29, no.3:43.

Bibliography

Fei Long. 2005. The Current Protection Situation of the Intangible Cultural Heritage outside China. *Theory and Criticism of Literature and Art*. No.5.

Dong Jianyi. 2014. "Let the Area 'Folk Art' Into the Art Classroom." Master diss., Shenyang Normal University.



Ma Xianyong. 2014. "Research on the Historical Famous Towns Protection and Development Strategy under the Background of Tourism Development ——Taking Yang Liuqing, Xi Qing District of Tian Jin for Example." Master diss., Tianjin University.

Jizhu Xiangchou I. <http://tv.cntv.cn/video/VSET100216296129/417c3b2ae4764becbcd5d259b5cc8a13>

(accessed February 17, 2015)

Li Wuqing. 2009. *Yishu Shequ Xin Tansuo*. Liaoyang: Liaoning Minzu Chubanshe.

Shen Hong. 2007. *Yangliuqing Nianhua ZhiLv*. Changchun: Jilin renmin chubanshe.

Xing Li. 2006. The Substantial Layer of Oral Non-substantial heritage. *Journal of the Central University for Nationalities (Philosophy and Social Sciences Edition)* 33, no.6.

Yang xueyin. 2007. Ecological Anthropology and the Protection of Cultural Spaces-Taking Yunnan Ethnic Culture Reserve as an Example. *Journal of the Guangxi University for Nationalities (Philosophy and Social Science Edition)* 29, no.3.

Image sources

Figure 1-4: Cited from the Internet.

Figure 5: Cited from *The Preservation Planning of Yangliuqing Historic Cultural Town*.

Figure 6-7: Photoed by the author.

Figure 8: Drawn by the author.

Figure 9: Cited from *The Preservation Planning of Yangliuqing Historic Cultural Town*.

Figure 10-12: Drawn by the author.

Acknowledgements

Supported by National Natural Science Foundation of China (No.51478299, 51778403), and the Training Plan to Innovation and Enterprise of National University Students (No.201710056036)

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Bingqian Cheng

Postgraduate, School of Architecture, Tianjin University, China.

Tianjie Zhang

Associate professor, School of Architecture, Tianjin University, China.

Deputy Director, Institute of Urban Heritage Preservation and Regeneration, Tianjin University, China

Visiting Scholar (2014-2015), School of Architecture, University of Virginia, USA

Awarded one-year State Scholarship Fund, Ministry of Education, China

PhD, School of Design and Environment, National University of Singapore, Singapore.

Awarded 4-year Fellowship & President's Scholarship

Yingxiang Niu

Undergraduate, School of Architecture, Tianjin University, China.



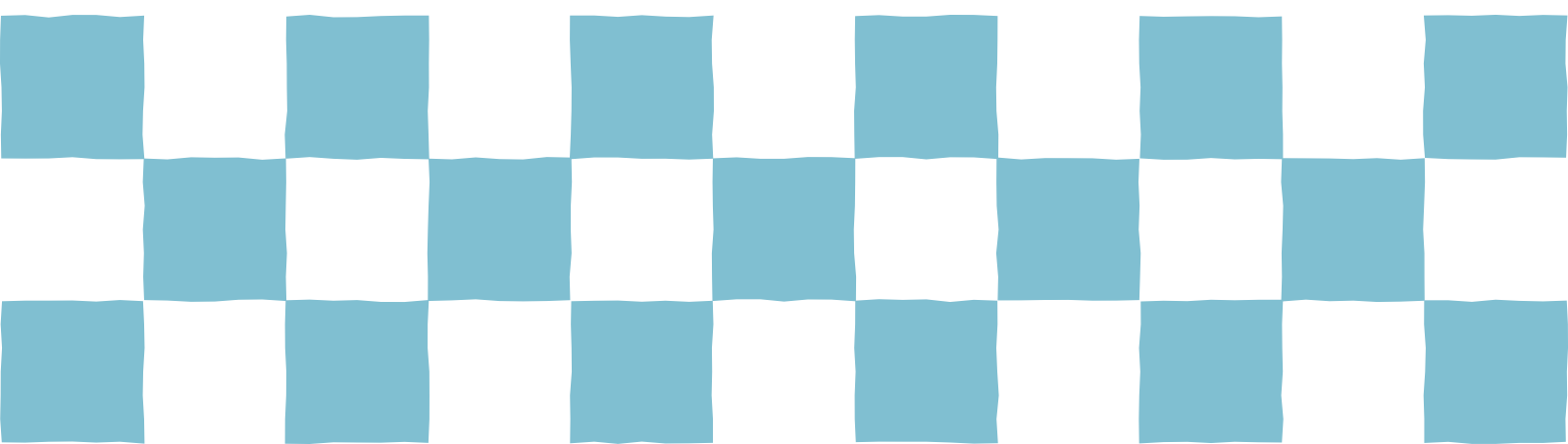
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

67 **Circulating Knowledge in the Cold War Periphery: The Architecture of Public Housing**



Framing a New Discourse on the Notion of Habitat in Transforming Societies

Mohamad Sedighi (Delft University of Technology) and Rohan Varma (Delft University of Technology)

Shortly after the Second World War, modernist design principles, originating in the West and as discussed in various CIAM congresses, became a main source of inspiration for many architects, including those in the Developing World. In Middle Eastern countries, this situation was exacerbated during the Cold War, where oil-led geopolitics facilitated an intense import of American and Soviet models of development in the form of technical and economic aid. Through the 1960s and 1970s, this led to rapid urbanisation and the construction of several large-scale housing projects by foreign agencies, which largely ignored the specific geographical and cultural features of their local contexts. As a reaction to this, a group of young-leading Iranian architects organised, in collaboration with Iran's Ministry of Housing and Urban Development, a series of architectural events to discuss issues pertaining to local culture and the role of architecture in transforming societies.

Among these events, the Second Iran International Congress of Architects (IICA), held in Persepolis-Shiraz in 1974, attracted many of the leading architects of that time such as Josep Lluís Sert, Jacob Bakema, James Stirling, Buckminster Fuller, and Georges Candilis, among others. Along with these well-known western architects, a number of emerging architects from developing countries, such as Nader Ardalan and Kamran Diba from Iran and Balkrishna Doshi and Raj Rewal from India also came to become important participants. One of the key outcomes of this congress was the 'Habitat Bill of Rights' - a CIAM-like Charter of Habitat - submitted by the Iranian government to the first UN conference on 'Human Settlements' in 1976.

This paper reveals how both the IICA and the UN conference played an instrumental role in shaping the discourse on the notion of regionalism in the design for human habitats, especially in the developing World. This is explored in two ways. Firstly, by building upon a brief analysis of the work of Ardalan, Diba, Doshi, Rewal and Charles Correa, another major figure in architecture from India who also participated in the UN conference, the paper explores the incorporation of the ideas discussed in the Habitat Bill of Rights within their private commissions for housing schemes and master plans in their respective countries. Secondly and more crucially, the paper also argues that both these events helped bring together these architects who later, in different capacities, played significant roles as members of the Aga Khan Award for Architecture, which was fundamental in fostering - and promoting - an alternative way of adapting modernism to industrializing countries.

This abstract is part of the panel named: 'Circulating Knowledge in the Cold War Periphery: The Architecture of Public Housing', organised by Mohamad Sedighi and Nikolay Erofeev

The Americanisation of Israeli Housing Practices

Gabriel Schwake (Delft University of Technology)

The UN Assembly Resolution 181 of November 27th 1947, which called for the establishment of a Jewish state in parts of Palestine, was one of the only votes backed by both the Union of Soviet Socialist Republics (USSR) and the United States (U.S), as both superpowers saw the future state as a potential ally. Though being long affiliated with the American agenda, the young state of Israel did possess several Socialist-like characteristics such as a centralized indoctrinating state led welfare system, during the early rule of the socialist Mapai Party. One of the young state's key projects was the construction of new industrial towns and residential neighborhoods. These environments corresponded with ruling socialist ideology, as they consisted of affordable, repetitive and customized public housing estates.

The growing alliance with the US in the 1960s significantly influenced the Israeli culture and economy, as it underwent a process of "Americanisation", which included the promotion of liberal values such as privatisation, entrepreneurialism and individualism. This largely affected the local built environment, when through an intense process of privatisation the former monotonic publicly built housing estates began giving way to new privately constructed projects. Ultimately, what began as a tool of self-expression was taken over by large-scale private corporations, and the early public housing estates, first turned into private houses and later into a commodity.

This paper aims to reveal how the Israeli allegiance with the US during the Cold War, affected its local culture and economy, leading to a transformation in the system of housing production, replacing the former socialist housing approach with a market driven one. This paper focuses on three adjacent settlements: Zur Natan (1966), Kochav Yair (1986) and Zur Yitzhak (2005), located beside the Green Line and the West Bank. Through the analyses of their development, this paper shows how the growing privatisation process altered the development of housing and the built environment, throughout the 1980s and 1990s.

This abstract is part of the "Circulating Knowledge in the Cold War Periphery: The Architecture of Public Housing" Panel.

Post-War Transnational Planning Practices: Victor Gruen's Proposal for Tehran's Low-Cost Housing (1966-1969)

Elmira Jafari (Delft University of Technology)

This abstract is part of the panel entitled "Circulating Knowledge in the Cold War Periphery: The Architecture of Public Housing" . While communicating architectural/planning knowledge between core and periphery countries was intensified under the auspices of the Cold War, it brought about new challenges regarding the relation of imported ideas with the architectural culture of the host countries. The first Comprehensive Master Plan of Tehran, prepared by Victor Gruen and Abdolaziz Farmanfarmaian in the late-1960s, is a novel example of such cross-cultural influences, in particular considering the architecture of housing. This paper aims to examine how the master plan introduced new low-cost housing strategy for the city of Tehran and how it affected the physical, socio-cultural and economic situation of lower social levels. After three years of research into the urban fabric of Tehran, Gruen proposed a linear arrangement of new satellite towns in an East-West direction that could openly host the city's potentially unlimited future development. In the complex process of reformulating the city's spatial structure, the master plan scrutinized Tehran's housing shortage and policies towards public housing. After the analysis of the post-war state-led low-cost housing projects locating in the fringe areas, such as Kuy-Kan (1958) and Kuy-Nohom-Aban (1963), the master plan attempted to align low-cost housing programmes with the overarching developmental decisions for Tehran metropolitan region. Moreover, it was an endeavor to release the state from financial supports through privatizing public housing projects. This paper argues how the master plan cemented the polarized structure of the city and made the poor immobile and isolated by locating them in adjacent to southern industries. As the legacy of the master plan, Tehran is still characterized by the strong social segregation

Through a profound examination of the five volumes of Tehran Comprehensive Plan, this paper seeks to unravel the complexity in the exchange of planning ideas from Western countries to Iran. In turn, the translation of Western ideas into domestic architectural vocabularies will be examined through shifting the spotlight into local realities and the role of local mediators. As a result, Tehran's transnational history of planning can shed new light on the significance of local conditions and local actors in transnational practices of the Cold War and the emergence of an individual planning culture.

Socialist Ways of Development in Mongolia: Modes of Technical Assistance and Knowledge Circulation

Nikolay Erofeev (University of Oxford)

Mongolian People's Republic adopted a 'socialist way of development' , and became one of the major for-posts of socialist cultural investments and technical assistance. Geographically, being located between the territory of China and the USSR, Mongolia experienced a bilateral influence of those countries under the geopolitics of the Cold War, setting an important outpost for architectural exchange between architects and planners working on different aid projects. Within this international cooperation, Mongolia received 'gifts' from the Soviet in the form of economic aid and of 'technical assistance' for various developmental projects. In line with the Soviet ideology for modernisation, planners particularly exported technologies for housing delivery to Mongolia; and house-buildings factories for the continuous production of standardised collective housing disseminated across the territory of the country as 'civilising devices' .

Discussing the case of Soviet house-buildings factories export, this paper offers analyses of power distribution between various agents participating in those projects – design, construction institutes and administrative boards. Aid projects were developed within different economies, involved various modes of cooperation between foreign and local agents. Analysing the command of housing projects, resulting from gifted housebuilding factories in Ulaanbaatar, this paper various modes of production of resulting architecture. Particularly, a focus on the role of Mongolian partners and stakeholders involved in this process, as well as of a role of local construction sector will demonstrate how at a local level, cultural arguments were put forward, to offer a multilateral perspective on aid projects in Mongolia.



Framing a New Discourse on the Notion of Habitat in Transforming Societies

Mohamad Sedighi* and Rohan Varma**

* TU Delft, Department of Architecture, s.m.a.sedighi@tudelft.nl

** TU Delft, Department of Architecture, r.varma@tudelft.nl

This paper reveals how the second Iran International Congress of Architects (IICA), held in Persepolis-Shiraz in 1974, and the first UN Habitat conference, held in Vancouver, Canada in 1976 played an instrumental role in shaping a discourse on the notion of regionalism in the design for human habitats, especially in developing countries. Building upon a brief analysis of the works of Nader Ardalan, Kamran Diba, Charles Correa, Balkrishna Vithaldas Doshi and Raj Rewal, this paper discussed the incorporation of the ideas published in the Habitat Bill of Rights within their private commissions for large scale housing schemes and master plans in their respective countries, Iran and India. More crucially, this paper argues that both events helped bring together these architects who later, in different capacities, played significant roles as members of the Aga Khan Award for Architecture in fostering and promoting an alternative way of adapting modernism to industrializing countries.

Keywords: Iran, India, Habitat Bills of Rights, Aga Khan Award for Architecture, Vernacular Modernism, Large-scale Housing Design

Introduction

Shortly after the Second World War, modernist design principles, originating in the West and as discussed in various CIAM congresses, became a main source of inspiration for many architects, including those in developing countries. In the Middle Eastern countries, this situation was exacerbated during the Cold War, where oil-led geopolitics facilitated an intense import of American and Soviet models of development in the form of technical and economic aid.¹ Through the 1960s and 1970s, this led to rapid urbanization and the construction of several large-scale housing projects by foreign agencies, which largely ignored the specific geographical and cultural features of their local contexts. As a reaction to this situation, a group of young-leading Iranian architects organized, in collaboration with Iran's Ministry of Housing and Urban Development, a series of architectural events to discuss issues pertaining to local culture and the role of architecture in the design of appropriate human habitats, particularly in transforming societies.

Among these events, the Second Iran International Congress of Architects (IICA) became a turning point. Financed by Empress Farah Diba, the former queen of Iran, the event was held in Persepolis-Shiraz in 1974, and attracted many of the leading architects of that time, such as Paul Rudolph, Oswald Ungers, Moshe Safdie, Paolo Soleri, Buckminster Fuller, Jacob Bakema, Georges Candilis, James Stirling, and Josep Lluís Sert, among others. Along with these well-known western architects, a number of emerging architects from developing countries, such as Nader Ardalan and Kamran Diba from Iran and Charles Correa, Balkrishna Doshi and Raj Rewal from India also came to become important participants. One of the key outcomes of this congress was the 'Habitat Bill of Rights' - a CIAM-like Charter of Habitat - submitted by the Iranian government to the first UN conference on 'Human Settlements' that took place in Vancouver, in 1976.

This paper reveals how both the IICA and the UN conference played an instrumental role in shaping the discourse on the notion of regionalism in the design for human habitats, especially in developing countries. This is explored in two ways. Building upon a brief analysis of the work of Ardalan, Diba, Correa, Doshi and Rewal, the paper, firstly, discussed the incorporation of the ideas published in the Habitat Bill of Rights within their private commissions for housing schemes and master plans in their respective countries. Secondly and more crucially, the paper argues that both these events helped bring together these architects who later, in different capacities, played significant roles as members of the Aga Khan Award for Architecture (AKAA), which has been fundamental in fostering and promoting an alternative way of adapting modernism to industrializing countries.



The Second Iran International Congress of Architects

As mentioned previously, the 1974 IICA brought together leading-international architects from both the Western and non-Western world. It also formed a platform for discussing the issues related to the themes of 'Continuity versus Change' in local culture and society, 'Appropriate Habitat' in transforming societies, 'Ecology and Man-made Environment' in urban development, and 'Materials of Expressions' in architecture.² Arguably, the first two themes formed the main body of the conference discussions.

- *Continuity versus Change*

The influential figure who leads and fosters discussions regarding the theme of local culture and society was Nader Ardalan. Building upon a distinction between the notion of spiritual and material worlds, Ardalan's contribution became a point of departure for discussing the issues related to the theme of continuity versus change. In the 1974 IICA, Ardalan questioned the western notion of linear progression, as manifested in the idea of time, and as understood in its threefold aspects of past, present and future representing a material world.³ Instead, by referring to the Persian-Islamic conception of time, taken from the Sufi-tradition, he proposed an alternative approach, where "commences with a specific beginning, the creation, and through a cyclical motion repeats the very act of the first creation in an ever ascending spiral which seeks transcendence and ultimate timeless union with the One."⁴ He connected, then, this notion with his concept of *Khalq-e Jadid* (the New Creation) where the word 'new' expressed "a cyclical manifestation of archetypical ideas"; for generating a timeless and spiritual architecture. This timelessness, he pinpointed, is developed "through time and form as simultaneous continuities."⁵

Ardalan's speech became a controversially talk within the context of the 1974 IICA. Western architects such as Buckminster Fuller and Georges Candilis criticized Ardalan's view on the notion of time and continuity, while non-western architects such as Balkrishna Doshi, and Hassan Fathy praised Ardalan's position on the concept of the New Creation. For instance, Candilis expressed that the idea of continuity is not just formal and spiritual, but also related to everyday practices. Similarly, Fuller challenged Ardalan's notion of spiral time. In Fuller's view, the concept of time and its linearity were essential for accumulating knowledge and human progress. According to Fuller, new technological innovations and findings proved that human achievements, to date, were very limited, and "99.9 [percent] of what is going on [in this world] is invisible." While he pinpointed that "[t]his invisible world is very much less psychic," he called for developing a new architecture based on integrity.⁶ In Fuller's view, this integrity can be achieved through learning from experiences of the past, and simultaneously, employing available technologies and new techniques.

As opposed to Fuller and Candilis, Doshi and Fathy supported Ardalan's concept of the New Creation. In his speech, Fathy pinpointed that technology and industrialization depleted the value of traditional techniques and architectural patterns that created a sense of participation among people for developing their settlements.⁷ He also argued that the application of new technologies should be limited to building materials production. This would ease, according to Fathy, the access of each member of community to the needed construction resources, and allow them to keep largely their design principles for the construction. Similarly, Doshi criticised the misuse of technology and called for a return to a human-scale architecture. According to Doshi, "[t]he pattern of change is due to the notion that all problems of development in the world are basically connected with economic affluence." Then, he argued that the purpose of industrialization is not only to achieve economic prosperity, but also "to give man increasing leisure so that his quality of work, through time and reflection, will improve." In line with Ardalan's proposal, Doshi suggested that "[w]ith today's technologies, it is easy to build a new world, which can link with the great past in terms of basic values, and with the future in terms of convenience for the larger number."⁸

Conspicuously, Ardalan and Doshi made a call for a study and in depth documentation of the adaptive architecture and technologies of traditional settlements as well as the analysis of the principles relevant today upon which the traditional architecture is based. Aside from the matter of local culture and society, the 1974 IICA extensively addressed the issues regarding the development of large-scale housing and human environment. In these discussions, Western and Japanese architects played a central role and the participants of the Team X group in the 1974 IICA led the debates on the theme of 'Appropriate Habitat'.

- *Appropriate Habitat*

In the 1974 IICA conference, the role of industrialization in developing human-scale habitat also became a main topic for the discussions, led by the two influential figures of Team X: Jacob Bakema and Georges Candilis. Interestingly, they described human habitat as a total environment where its structure is formed from a continuous string of identical fragments that would accommodate growth and change over time.⁹ In this model, as Bakema argued, the continuity of the spatial units plays a significant role. In his speech 'Continuity and Change', Bakema put emphasis on spatial, physical and visual relationship between individuals and the built environment. He claimed that the architectural elements could change, while the relationship they produce should remain permanent. To



reinforce his claim, he compared the vernacular architecture of Bazaar in Tehran with that of in Lijbaan in Rotterdam and argued that in both cases the structure of urban space forms a relationship between different spatial units, creating a continuity. Then, by introducing the idea of *architecturban form*, Bakema claimed that this big form, the total environment, can be taken in bit by bit, for developing human habitats.¹⁰

Georges Candilis further elaborated on Bakema's notion of bit-by-bit development of space. In his speech, 'Appropriate Habitat', Candilis gave an overview of his contribution to the famous PREVI Experimental Housing Project Competition of 1969 in Lima, Peru, where he along with 13 international architects such as Fumihiko Maki, James Sterling, Aldo van Eyck and Charles Correa, among others, were invited by the Government of Peru to propose ideas for low-income housing. Candilis described this project as a big failure, since each architect would have to build his/her proposal as an isolated entity; and he defined the 'real problem' of housing as "to find the direction, the method, not only by building houses, but [also] what house one must built, a total house with its environment: a habitat."¹¹ Candilis also pinpointed that architects should enable people to build their own houses and environment, and for so doing, the only technological means that designers could employ is local materials and construction techniques that are dependent on available resources.

These diverse and extensive discussions catered for the provision of the 1974 IICA resolution. Expectedly, the discussions regarding the theme of 'Continuity and Change', and 'Appropriate Habitat' formed the main body of this resolution. Notably, the resolution indicated that "through research studies, a code of human habitat should be developed with such procedures and strategies necessary to the achievement of principles essential to the creation of a wholesome, balanced and equitable habitat."¹² As noted earlier, Ardalan and Doshi urged the significance of documenting the patterns of inhabitation. In this view it comes as no surprise to see that the resolution explicitly pinpointed the importance of translating the conference discussions into spatial codes and design patterns to "form a working tool suitable for use by all decision makers involved in the shaping of human habitat in time and place," all around the world.¹³ Subsequently, within a year after the 1974 event, the discussions were drafted as a series of codes and patterns in a document known as the 'Habitat Bill of Rights', where Ardalan and Doshi played a crucial role in preparing the document.

First UN Habitat Conference & the Habitat Bills of Rights

Often referred to as 'Habitat I', the first-ever United Nations Conference on Human Settlements was held over 12 days in Vancouver, Canada in 1976. The largest UN meeting at that time, the conference was a global event that tackled the problems of adequate housing and urbanization, not just of the West but also of the Developing World. A major outcome of this event was the Vancouver Declaration – the founding document of what later can be to be known as the United Nations Human Settlements Programme (UN-Habitat) active even today¹⁴.

The conference was also unique as it attracted people across the board, from missionaries like Mother Theresa to architects such as Buckminster Fuller. Among these participants were also several of the architects who had come together at the 1974 IICA, such as Charles Correa who was invited as a Consultant to the Director-General of the conference. It was also during this event that the 'Habitat Bill of Rights' was presented.

As Iran's contribution to Habitat I, the document Habitat Bill of Rights aimed to define the qualitative issues connected with the design of houses and their grouping into new communities as a supplement to other codes and regulations developed for quantitative issues related to the construction of buildings.¹⁵ Drafted by 5 key participants of IICA, Nader Ardalan, Jose Luis Sert, Moshe Safdie, George Candilis, and Balkrishna Vithaldas Doshi, it was based on four main themes: 'Dwelling', 'Cluster', 'Pedestrian Precinct', and 'Urban Community'. Each theme was discussed world-widely, and started with a short introduction, substantiated with observations, and explained with additional photographs, diagrams and text. Indeed, this document was an attempt to identify common patterns of inhabitation in industrializing and industrialized societies, and describe problems which occur over and over again in our environment. Then the document provided the core of the solution to each problem. In other words, each solution is stated in such a way that it gives the essential field of relationships needed to solve the problem, but in a very general and abstract way.

To elaborate on these problem-based solutions, a few examples can be mentioned. For instance, in the category of Dwelling, the document defined a common issue among most large-scale housing schemes developed with industrialized methods in a short time as the rigidity of spatial layout; so this would not allow for the existing patterns of family life. As a solution, it referred to traditions of domestic architecture in each country that would provide valuable references for contemporary designs; and it proposed that "the interior and exterior layout of new dwellings should incorporate a contemporary reflection of the cultural values and living patterns of the prospective residents."¹⁶ At the community level, the document, as an example, described that the design of much new housing "no longer relates to the human scale or the environmental needs of individuals." As a solution, it stated that "the



number of dwelling units in a cluster may vary from ten to fifty depending on family size and structure, social customs and housing density”.¹⁷

Similarly, a series of issues and related solutions were described for the themes of Pedestrian Precinct and Urban community. Interestingly, most solutions emphasized the importance of developing a low-rise, high-dense, and car-free human settlements with optimum integration of communal facilities and income-generating activities to the structure of neighbourhoods. In all recommendation points, local patterns of inhabitation were described as the point of departure for designing human settlements and as a tool for the integration, arrangement and configuration of public and private urban spaces.

An Alternative Modernism

Arguably, these guidelines form a basis for fostering and promoting an alternative way of adapting modernism to industrializing countries. As mentioned earlier, along with the well-known western participants of the 1974 IICA, a number of emerging architects from developing countries, such as Nader Ardalan and Kamran Diba from Iran and Charles Correa, Balkrishna Doshi and Raj Rewal from India also came to become important participants. They incorporated the ideas discussed in the conference and those drafted in the Habitat Bill of Rights into their private commissions for housing schemes and master plans in their respective countries.

- *Nader Ardalan*

After his graduation from Harvard University in 1962, Ardalan experienced technological design at SOM in San Francisco. Upon his return to Iran in the mid-1960s, Ardalan received a generous state-funding support from Farah Pahlavi for conducting a research about the development of Islamic architecture under Iranian influences. While the general scope of this research was in line with the state-sponsored project of creating ‘cultural nostalgia’ that intended to romanticize Iran’s Islamic heritage, in his research Ardalan offered a new typological insight into the evolution of Persian architecture. Ardalan believed that timeless architecture could be achieved through an understanding of traditional forms and archetypes.¹⁸ Ardalan conducted an in-depth study about the relation of spirituality and materiality in architecture. In his seminal book ‘The Sense of Unity: The Sufi Tradition in Iranian Architecture’ published in 1973, Ardalan saw Islamic Sufi-tradition as the most direct manifestation of Iranian culture and he argued that these influences can be traced in geometric forms, spatial organization, orientation and place.¹⁹

Ardalan also offers a new interpretation of the concept of Iranian traditional house. Contrary to a common notion of public-private as a driving force for creating spatial organization in Iranian home life, Ardalan’s division was based on the notion of the material and the spiritual. In this view, the spatial organization of the built form and its materialization are to transcend the spiritual life of men. While Ardalan described gateway, garden, and room as three main elements of traditional Iranian houses, he emphasized that “the architectural conception of garden reflects the ‘sense of place’, the garden being viewed as a defined space encompassing within itself a total reflection of the cosmos.” He also defined walls as a prerequisite for defining and isolating garden, the sacred place’, “within which the soul can be sensed and its spiritual quest fulfilled.”²⁰

While Ardalan in his early works heavily relied on technological innovations to incorporate modernist design principles with the characteristics of traditional Iranian architecture such as his designs for Tehran’s Saman Apartment Towers (1968) and Central Office of Behshahr Industrial Group (1970), he employed the concept of the New Creation in his later works such as Iran Centre for Management Studies in Tehran (1974), Bu-Ali Sina University in Hamedan (1977), and Nutan Community Town in Isfahan (1978) [Figure 1].

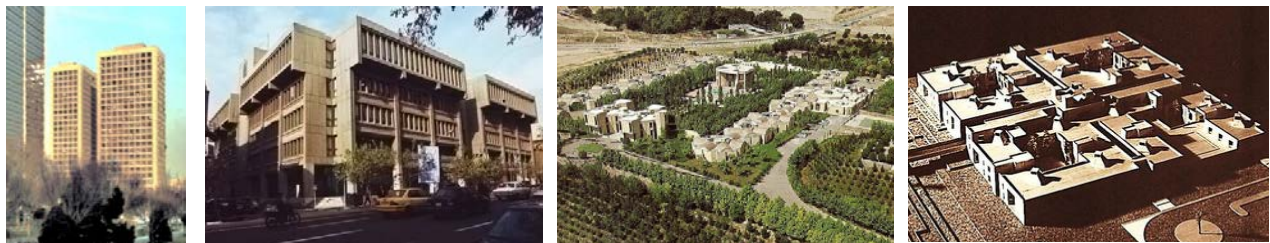


Figure 1: Ardalan’s works before and after the 1974 IICA.



- *Kamran Diba*

While trained as an architect at Howard University, Washington, in the early-1960s, Diba has a keen commitment in asserting the phenomenon of architecture as something simultaneously universal and rooted in its circumstance. Taking inspiration from the philosophical discussions provided by his closest friend, Nader Ardalan, Diba's approach might be seen as an architectural manifestation of Ardalan's 'the New Creation'. Diba believed that critically looking at the past and adapting vernacular elements to new circumstances would upgrade the current culture of architectural design and provide a condition for moving forward. This dynamic phenomenon, according to Diba, runs parallel to the life of men, so people's everyday life and habitual practices represent their culture.²¹ In this process, Diba contends, what should not be eliminated from people's everyday life is the original local culture as the root of their society, since this authentic culture creates a foundation on which new 'things', such as a new architecture, could be built. That is why Diba believed in a 'creative reinterpretation' and 'recreation' of the vernacular elements as a condition that local culture and universal civilization would synthesize.²²

The architecture of Diba took one-step beyond the concept of the New Creation, though. While taking inspiration from local archetypes such as traditional Iranian courtyard house and the Persian gardens, Diba put more emphasis on the importance of developing a community that would accommodate growth and change and form a basis for a strong collective identity.²³ Arguably, Diba's interest in developing such a community model might be related to his critical view on the traditional structure of Iranian society. According to Diba, to a large extent, "Persian culture is individualistic, family-oriented and anti-community," so in the age of globalization that social issues and demands of urban life bring people together, new neighbourhoods cannot be constructed based on ethnic segregation and religious distinctions.²⁴ In this view, it comes as no surprise to see that the 1974 IICA's debates on the theme of 'Habitat' had a substantial impact on his later works such as the housing scheme for Shushtar-Nou. In his early architectural projects such as Tehran Museum of Contemporary Art (1968) and Jondi-Shapour University (1970), Diba literally employed formal characteristics of traditional Persian architecture such as monumental appearance and took inspiration from representative architectural elements such as Badgir (wind-catcher) and enclosed courtyards. Obviously, these features can be traced in the two mentioned projects. However, the conference discussions and the Habitat document deeply influenced Diba's later works, in particular that of Shushtar-Nou, designed in 1976. For instance, as the Habitat document recommended, "the fundamental Persian sense of place [is] based upon the concept of the container and the contained [and it] should be incorporated in all urban developments at the scale of precinct, cluster, and dwelling." To clarify this point, the document provided a series of diagrams indicating a clear spatial network "defined by houses a buildings, with a clear hierarchy, from the court of the house to the court of the cluster, to the square of the precinct, and to the city as a whole."²⁵ Interestingly, this hierarchy of ever-increasing levels of privacy and the related illustrations explicitly resembles Diba's explanatory sketches about the spatial configuration of Shushtar-Nou depicted in the 1986 Aga Khan's technical report. In this configuration, the districts, neighbourhoods, sub-neighbourhoods, and individual houses were clustered around a chain of communal outdoor spaces [Figure 2].²⁶



Figure 2: Diba's works before and after the 1974 IICA.

- *Balkrishna Vithaldas Doshi*

In a career that has spanned more than sixty years, including projects across the board, from single-family houses to townships, and institutions and cultural buildings of national importance, Balkrishna Doshi (1927) has been instrumental in shaping the discourse on architecture not just in India, but globally. As Le Corbusier's assistant for close to 7 years, first at his atelier in Paris, and then later in Chandigarh and Ahmedabad, as well as Louis Kahn's assistant for the Indian Institute of Management, also in Ahmedabad, one could argue that Doshi's early works are a synthesis of what he learnt from both Corbusier and Kahn, but tempered to reflect and suit India's culture, climate and landscape.²⁷ ATIRA Housing, his first scheme for low-income housing in Ahmedabad from 1957 makes ample



references, in both form and material expression, to Corbusier's Villa Sarabhai, also in the same city. However, by the 1970s, one can notice in Doshi's works a gradual move away from the language of his masters, and a search for an 'Indian identity' in his architecture. In his designs for the Life Insurance Corporation Colony, also in Ahmedabad, from 1973, a series of stepped terraces allow for each family to colonize and extend their homes over time - an idea inextricably linked to his observation of life in India, and the housing one can find throughout the subcontinent.

This idea that architecture must allow for growth and change over time is explored to the fullest in Doshi's Aranya Low-Cost Housing project in Indore, for which he also won the prestigious Aga Khan Award for Architecture in 1995.²⁸ But more interestingly, this project also shows more clearly the translations of the ideas co-authored by Doshi in the Habitat Bill of Rights to an actual commission.

Designed in the 1980s and funded by the World Bank, Aranya is an outcome of both the Habitat Bill of Rights as well as the ideas of 'Sites & Services' championed by John Turner in the 1960s and 1970s. Planned to eventually house a population of 60,000 people in some 6500 dwellings across 85 hectares²⁹, Doshi's master plan for Aranya included a labyrinth network of roads, pathways and open spaces, and a variety in the type and size of plots available to different income groups. The poor, for example, were given just a plinth and service core that could be expanded by them into larger houses at a later time. However, apart from providing these plots in a detailed master plan, Doshi's office was also responsible for designing and building 80 demonstration houses, with the intention that future residents of this site could learn and educate themselves about the possibilities of each of their individual plots.³⁰ Here again, like in his design for the LIC Colony in Ahmedabad, there is a strong focus on establishing the relationship between dwellings and their neighbourhood, all the way from the individual unit to the scale of the community. Today, Aranya has grown to resemble those very settlements celebrated in the Habitat Bill of Rights, where an intrinsic mix of dwellings, narrow streets and open spaces create community, and not just mere compositions [Figure 3].



Figure 3: Doshi's works before and after the 1974 IICA.

- *Charles Correa*

Educated at the University of Michigan and at MIT, Charles Correa (1930-2015) played a pivotal role in shaping modern architecture in India. Widely credited as a pioneer in low-cost architecture and affordable housing, not just in India but around the world, Correa was from the very beginning of his career interested in issues of affordable housing and planning suited to India's climate and traditions³¹. Beginning with his early experiments in the 1960s with climate responsive architecture - what he referred to as "form follows climate" - we find a series of projects that dealt with creating an energy-passive architecture that through their very shape (often linear arrangements with complex sections) created the necessary environments needed to live in a hot country like India. Projects such as the Tube House (1958), PREVI Housing (1969), and of course, Kanchanjunga Apartments (1969) are all a result of this approach and showcased Correa's brilliant ability to adapt his Western education to the context of developing countries. However, by the 1970s and especially in the 1980s, we find in his work a turn towards a more vernacular approach. Rather than the linear arrangement of the earlier typologies, Correa now drew inspiration from the layouts and silhouettes found in Indian villages, focusing instead on houses clustered around courtyards and other shared community spaces.

While Correa was not one of the co-authors of the 1976 Habitat Bill of Rights, one can draw, especially in this second phase in his work, parallels between the ideas discussed in the Habitat Bill of Rights and Correa's own theories. In fact, in his seminal book *The New Landscape*, published in 1985, Correa makes his own argument for a "Bill of Rights for housing in the developing World" which advocated the following seven principles:



Incrementality, Pluralism, Participation, Income Generation, Equity, Open-to-Sky Space and Disaggregation.³² However, it is especially in his understanding of the spatial hierarchy of urban form where one can find ample similarities with the themes of ‘Dwelling’, ‘Cluster’, ‘Pedestrian Precinct’ and ‘Community’ elaborated in the Habitat Bill of Rights with those advertised in *The New Landscape*. “The room (the cell) is only one in a whole system of spaces which a family needs” Correa wrote in the essay ‘Architecture in a Warm Climate’ “The system is usually hierarchical, starting with the private family zone and moving on to the doorstep (where you greet your neighbour), thence to the water tap or village well (the community meeting place), and finally to the great *maidan* (the principal focus of the city).³³

A built, physical expression of these ideas can be found in what is possibly his most well-known plan for affordable housing: the Incremental Housing project located at Belapur in Navi Mumbai (formerly known as New Bombay). Designed in 1983, this project brings together all the principles mentioned in *The New Landscape* in a low-rise high density neighbourhood designed for a variety of income groups. At its most basic, the scheme is characterized by a cluster of 7 dwellings grouped around a courtyard measuring 8 meters by 8 meters. These dwellings, of which there are several types, range from single room huts of 16 square meters to two-storey townhouses of 75 square meters. Designed as individual free-standing units, each of these contain crucial open-to-sky space that allow for the possibility for growth and change over time. When mirrored, rotated and repeated at the scale of the urban layout, these clusters produce complex fractal patterns that together form a neighbourhood for 600 families at a density of about a 100 dwellings per hectare along with the provision of schools, open spaces and other amenities. More akin to the layout of an Indian village, the six-hectare site showcases Correa’s skills as a site-planner and manufacturer of urban patterns concerned both with the scale of the dwelling and the city [Figure 4].



Figure 4: Correa’s works before and after the 1974 IICA.

- *Raj Rewal*

The idea of designing low-income housing that is inspired by vernacular architecture has been thoroughly explored since the 1970’s by another Indian architect who participated in 1974 Congress: Raj Rewal (1934). Educated in New Delhi and London, Rewal worked in the office of Michel Ecochard in Paris, before setting up his own practice in New Delhi.³⁴ However, unlike Doshi and Correa, whose portfolio’s show at least two distinct phases (the first more Western approach, and the second, a search for more ‘Indian’ sensibilities), Rewal has managed to develop over the last three decades a consistent *oeuvre* of housing projects all based on the idea of stacking and staggering units clustered around courtyards inspired by the vernacular architecture of India.

Rewal has also been able to apply these principles in all categories of housing; from affordable housing to housing for middle and upper-middle income groups. A clear example of his design principles can be found in the Sheikh Sarai Housing project in New Delhi from 1984 that contains apartments for different sections of society. Here, a dense pattern of low-rise high density blocks are situated around a network of collective open spaces interlinked by shaded pedestrian pathways that recall the architecture of old Indian towns such as Jaisalmer and Jodhpur.³⁵

Rewal worked on several variations of this idea of clustering and stacking, often also with stepped profiles such as in the remarkable low-income housing project for the City and Industrial Development Corporation (CIDCO) built in 1988 in New Bombay (Navi Mumbai). However, it is his design for the Asian Games village in New Delhi (1982) that best exhibit Rewal’s ideas for generating habitat. Spread over 35 acres, Rewal’s master plan included almost 500 dwellings (200 townhouses and 300 apartments) in an urban pattern that uses peripheral streets and cul-de-sacs to create a central pedestrian spine of “courts and streets” of various scales³⁶. At the scale of the dwellings themselves, there is a wide variety in the sizes of units, all choreographed and clustered ingeniously to create distinct neighborhoods, with clearly defined private and collective areas. In many ways, Rewal’s housing



schemes have a continuity in form, resembling megastructures of interlinked courtyards and passageways defined by buildings two to four stories tall often framed by gateways or *darwaza*'s, that yet again, reference the vernacular architecture found throughout North India and echo the principles published in the Habitat Bill of Rights [Figure 5].



Figure 5: Rewal's works after the 1974 IICA.

The Aga Khan Award for Architecture

The conference of 1974 and the publication of the Habitat Bills of Rights also helped bring together Ardanan, Diba, Doshi, Correa and Rewal, among others, who later in different capacities, played significant roles as members of the Aga Khan Award for Architecture (AKAA). Established in 1977 by Aga Khan IV (His Highness the Aga Khan), the AKAA aims to recognize and promote excellence in the field of architecture in Islamic societies. As an agency of the Aga Khan Development Network (AKDN), the award is presented in three year cycles to a multiple of projects with a cash prize totalling 1 million US Dollars (making it the largest architecture award in the world). However, from its very inception, the award made a conscious decision to not only cover issues related to restoration and the design of public buildings, but strove to provide a platform that looked into - and celebrated - projects that dealt with issues related to squatter housing, community improvement and other forms of development. As such, the award stands out till today in being the only major architecture award that not only looks into these varied and complex issues, but does so while also promoting often unknown architects and agencies for their work.

This has been the case from the very beginning of the AKAA. For the First Cycle of the Award (1978-80), a Steering Committee comprising of some of the most well-known western and non-western architects, including Nader Ardalan, Charles Correa, Hassan Fathy, William Porter and Sir Hugh Casson, among others, held a series of meetings and discussions along with HH the Aga Khan where they formulated the agenda and scope of the award. In addition to this, a separate Master Jury that included the likes of Giancarlo de Carlo, Kenzo Tange and Muzharul Islam reviewed and judged the numerous nominations that cut across the length and breadth of the Islamic World. Recognizing their difficult task, the report of the Master Jury praised the AKAA for venturing into previously uncharted territory, and acknowledged that "The present is a period of transition - a period when traditional heritage is being rediscovered, when new experiments are being made to combine modern technology with cultural continuity in both richer and poorer countries, and when there is urgent search for socially responsive forms of architecture for the poor majority".³⁷

The awarded projects are in themselves testament to the AKDNs broad outlook, which in the First Cycle included celebrating the design for a five-star hotel, as in the case of the Mughal Sheraton Hotel in Agra, India, as well as a government-assisted self-help community planning program, such as the Kampung Improvement Program in Jakarta, Indonesia. In many ways, this across-the-board thinking has remained the blueprint for AKAA through its many cycles, leading up to the present Fourteenth Cycle of the Award (2017-19), having now awarded over a 100 projects in countries all the way from Denmark to Burkina Faso.³⁸ Most crucially, what stands out about the AKAA is that unlike other major awards in architecture (such as the Pritzker Architecture Prize or the RIBA Gold Medal), the AKAA does not celebrate an architect's *oeuvre*, but evaluates very thoroughly, through an intense technical review process, projects that confront some of the most urgent issues that face society today.



Conclusion

It is without a doubt that the 1974 IICA played a major role in aligning western and non-western trajectories of architecture at a crossroads. As a result of the debates and deliberations that took place in Iran, and the subsequent publication of the 1976 Habitat Bill of Rights, the first UN Conference on Habitat and the formulation of the AKAA, soon after, it is clear that these events together helped broaden the discourse on architecture to include previously ignored regions. By facilitating discussions on adapting modernism to the architecture of transforming societies, one could even argue that these events had a role to play in the development of theories such as 'Critical Regionalism' - a term first coined by Alexander Tzonis and Liane Lefaivre in the late 1970s as a reaction to the placelessness of the International Style dominant at that time.

Charles Correa, for instance, often referred to as one of the prominent proponents of Critical Regionalism went on to build prolifically not just in India, but also abroad. A notable project is the very last building he built: the Aga Khan Ismaili Centre in Toronto that opened in 2014. Sharing a large 6.8 hectare site along with Aga Khan Museum, designed by the Japanese Fumihiko Maki, another participant of the 1974 Congress, the building is in many ways a monument to the ideas of modernity and identity that occupied much of Correa's work and thinking throughout his five decade long career. Perhaps, without any of these events, he may have never received the exposure necessary to acquire such international commissions. Or more recently, the "architecture's highest honor", the Pritzker Architecture Prize in 2018 may not have gone to Doshi.³⁹

But of course, the impact of these events go well beyond helping private practices. The IICA, for example, also helped set the stage for forming collaborations amongst the various participants of the Congress. In 1977, Ardalan collaborated with Candilis to design the Bua-Ali Sina University in Hamedan, Iran. Whereas, Diba sought the assistance of Rewal and some other Indian architects to help work on the design for Shushtar-Nou, partly completed in 1978. In this view, it comes as no surprise to see a strong resemblance between the works of several of these architects, most notably in the similarities between the design for Shushtar-Nou and Rewal's Sheikh Sarai Housing project in New Delhi [Figure 6].

However, it is the AKDN through its many collaborations and platforms that remains even today the most important platform for recognizing - and promoting - architecture across the world. Through its extensive documentation of projects around the world (8000 at last count), and aided as well by the establishment of the Aga Khan Program for Islamic Architecture at Harvard University and the Massachusetts Institute of Technology (MIT), the AKDN has played an unparalleled role in helping widen the discussion on architecture to include previously ignored areas in the discourse on urban development. Arguably, in the absence of platforms for discussing architectural ideals such as CIAM and Team X, the AKDN remains as the leading platform for fostering debates in architectural knowledge and production, not just in developing countries, but globally.

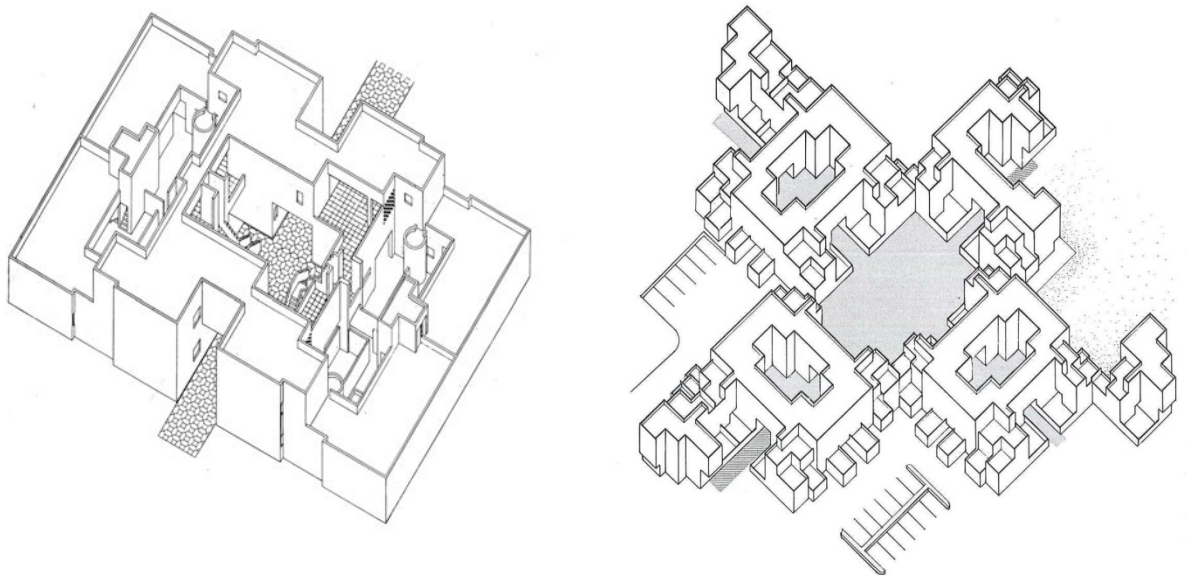


Figure 6: Shushtar-Nou (left) and Sheikh Sarai (right).



Acknowledgements

Special thanks to the anonymous reviewers for their insightful comments. We are also very grateful to Prof. Ir. Dick van Gameren and Dr. Nelson Mota, at the Chair of Dwelling at TU Delft whose supports and feedbacks helped us to finalise this work.

Disclosure Statement

No potential conflict of interest was reported by the authors.

Notes on contributor(s)

Seyed Mohamad Ali Sedighi graduated as an architect from TU Delft, in 2009. Between 2010 and 2014, he worked as guest lecturer at and was co-founder of Architectonic-Group at the Iran University of Science and Technology (IUST). In 2013, he received an honourable mention certificate from the Ministry of Housing and Urban Development for his housing design in Abrisham Town, near Tehran. Since 2014, he has been working on his PhD research related to the design of affordable housing in Iran. He also works as guest teacher at the chair of Architecture and Dwelling, TU Delft. Recently, he awarded a MIT grant (GAHTC) for his research proposal: 'the Architecture of Public Housing in the Cold War Middle East: The Example of Iran.'

Rohan Varma graduated as an architect from the KRVA, University of Mumbai. He was awarded both the Tata and Mahindra Scholarships for higher studies abroad and received his Master's in Architecture (with honourable mention) at the Delft University of Technology. Prior to coming to the Netherlands, he worked with Charles Correa for two years. In 2015 he established IND, a cross-disciplinary firm based both in Mumbai and Amsterdam. Varma combines his work as an architect with developing his PhD 'Public Housing in India' at TU Delft and is co-curator on a travelling exhibition on the housing designs of Charles Correa.

Endnotes

¹ See: Mohamad Sedighi, "Megastructure Reloaded: A New Technocratic Approach to Housing Development in Ekbatan, Tehran," *ARENA Journal of Architectural Research* 3, no. 3 (2018): 2.

² See: Laleh Bakhtiar, ed. *Towards a Quality of Life: The Role of Industrialization in the Architecture and Urban Planning of Developing Countries* (Tehran: Hamdani Foundation, 1976).

³ *Ibid.*, 35-42.

⁴ *Ibid.*, 36.

⁵ *Ibid.*, 40.

⁶ *Ibid.*, 74.

⁷ *Ibid.*, 303-05.

⁸ *Ibid.*, 346-347.

⁹ See: "2nd Iran International Congress of Architecture - Persepolis. Shiraz. September 24-30, 1974," *Honar va Memari* 25-26, (1975).

¹⁰ Bakhtiar, *Towards a Quality of Life*, 29-32.

¹¹ *Ibid.*, 237.

¹² *Ibid.*, 237-38.

¹³ The Vancouver Declaration on Human Settlements, "Habitat: United Nations Conference on Human Settlements," (Canada 1976), 5.

¹⁴ See: Lindsay Brown. *The Lost History of Vancouver's UN-Habitat Forum* (Simon Fraser University, 2012)

¹⁵ Nader Ardalan et al., *Habitat Bill of Rights* (Tehran, Iran: Hamdami Foundation, 1976).

¹⁶ Nader Ardalan et al., *Habitat Bill of Rights* (Tehran, Iran: Hamdami Foundation, 1976), 25.

¹⁷ *Ibid.*, 61.

¹⁸ Laleh Bakhtiar and Leila Farhad, eds., *The Interaction between Tradition and Technology: Report of the Proceedings of the First International Congress of Architects, Isfahan, 1970* (Tehran: Shahrvivar Press, 1970), 34-37.

¹⁹ Nader Ardalan and Laleh Bakhtiar, *The Sense of Unity: The Sufi Tradition in Persian Architecture* (Chicago: University of Chicago Press, 1973).

²⁰ *Ibid.*, 68.

²¹ See: Kamran Diba, *A Garden Between Two Streets: 4001 days of the life of Kamran Diba* (Paris: Alborz, 2010).

²² See: *Buildings and Projects* (Stuttgart: Hatje, 1981).

²³ See: *Bagh-I Miane Do Khiaban*.

²⁴ *A Garden Between Two Streets*, 11.

²⁵ Ardalan et al., *Habitat Bill of Rights*, 156.

²⁶ Diba, "Shushtar New Town on-Site Review Report," 13.

²⁷ Rohan Varma, "Doshi: A Life in Architecture", Archined, April 9, 2018, <https://www.archined.nl/2018/04/doshi-a-life-in-architecture>

²⁸ *Ibid.*

²⁹ "Aranya Community Housing", accessed April 14, 2018, <http://www.akdn.org/architecture/project/aranya-community-housing>



³⁰ Dick van Gameren, Rohan Varma "Shifting Scales: Affordable Housing in India" in *Global Housing: Affordable Dwellings for Growing Cities*, ed. Dick van Gameren, Frederique van Anandel, Pierijn van der Putt (Rotterdam: NAI 010 Publishers, 2015), 10.

³¹ *Ibid.*, 6.

³² Charles Correa, *The New Landscape* (Bombay: The Book Society of India, 1985), 53.

³³ Charles Correa "Architecture in a Warm Climate", accessed April 12, 2018, <https://archnet.org/system/publications/contents/3898/original/DPT0385.pdf?1384777193>

³⁴ Dick van Gameren, Rohan Varma "Shifting Scales: Affordable Housing in India" in *Global Housing: Affordable Dwellings for Growing Cities*, ed. Dick van Gameren, Frederique van Anandel, Pierijn van der Putt (Rotterdam: NAI 010 Publishers, 2015), 10.

³⁵ *Ibid.*, 11.

³⁶ "Asian Games Village", accessed April 14th, 2018, <http://rajrewal.in/projects/housing-asian.htm>

³⁷ "1980 Cycle Master Jury Statement", accessed April 14 2018, <http://www.akdn.org/our-agencies/aga-khan-trust-culture/aga-khan-award-architecture/1978-1980-cycle/master-jury-statement>

³⁸ "Aga Khan Award for Architecture", accessed April 14, 2018, <http://www.akdn.org/our-agencies/aga-khan-trust-culture/aga-khan-award-architecture/about>

³⁹ See: <https://www.pritzkerprize.com/laureates/balkrishna-doshi>

Bibliography

Ardalan, Nader, and Laleh Bakhtiar. *The Sense of Unity : The Sufi Tradition in Persian Architecture*. Chicago: University of Chicago Press, 1973.

Ardalan, Nader, Georges Candilis, Balkrishna Doshi, Moshe Safdie, and José Luis Sert. *Habitat Bill of Rights*. Tehran, Iran: Hamdami Foundation, 1976.

Bakhtiar, Laleh, ed. *Towards a Quality of Life: The Role of Industrialization in the Architecture and Urban Planning of Developing Countries - Report of the Proceedings of the Second International Congress of Architects, Persepolis, Iran, 1974*. Tehran: Hamdani Foundation, 1976.

Bakhtiar, Laleh, and Leila Farhad, eds. *The Interaction between Tradition and Technology: Report of the Proceedings of the First International Congress of Architects, Isfahan, 1970*. Tehran: Shahrivar Press, 1970.

Diba, Kamran. *Buildings and Projects*. Stuttgart: Hatje, 1981.

———. "Shushtar New Town on-Site Review Report." In *Aga Khan Award for Architecture*. <http://archnet.org/sites/103/publications/178>, 1986.

Eshragh, Abdolhamid. "2nd Iran International Congress of Architecture - Persepolis. Shiraz. September 24-30, 1974." *Honar va Memari* 25-26, no. Special Issue (1975): 1-74.

Sedighi, Mohamad. "Megastructure Reloaded: A New Technocratic Approach to Housing Development in Ekbatan, Tehran," *ARENA Journal of Architectural Research* 3, no. 3 (2018): 2. DOI: <http://doi.org/10.5334/ajar.56>

Image sources

Figure 1: Ardalan Associates' archives.

Figure 2: Kamran Diba's archives.

Figure 3: Courtesy of the Vastu Shilpa Foundation (VSF)

Figure 4: Courtesy of the Charles Correa Foundation (CCF)

Figure 5: Raj Rewal's archives

Figure 6: Kamran Diba's and Raj Rewal's archives.

Post-War Transnational Planning Practices: Victor Gruen's Proposal for Tehran's Low-Cost Housing (1966-1969)

Elmira Jafari*,

* PhD, Department of Architecture, TU Delft, e.jafari@tudelft.nl

Abstract

While the communication of architectural/planning knowledge between core and periphery countries was intensified during the Cold War, it brought about new challenges regarding the relationship between imported ideas and the architectural culture of the host countries. The first master plan of Tehran, prepared by Victor Gruen and Abdolaziz Farmanfarmanian in the late-1960s, is an example of such cross-cultural dialogue, in particular with reference to the design of housing. This paper aims to examine how the first master plan introduced new low-cost housing strategy for the city of Tehran and how it affected the rapid marginalisation of the urban poor in the capital. Through a short review of the emergence of low-cost housing in Tehran since the 1940s and the examination of the two phases of the master plan, this paper seeks to unravel the complexity in the exchange of planning ideas from Western countries to Iran. In turn, the translation of Western ideas into domestic architectural vocabularies is examined through the changing local situation and the role of local mediators. The paper concludes that the privatisation of housing shifted the spotlight from state-led low-cost housing into the luxuries high-rise residential complexes which changed socio-spatial structure of the city.

Keywords: Tehran's master plan, Victor Gruen, Privatisation of housing, marginalisation of the urban poor

Introduction

The social and physical structure of Tehran was extensively altered and modernised under the socio-political influences of the Cold War, particularly during the 1960s and 1970s. Iran's oil-rich reservoirs put the country at the cross-section of global influences, politically, economically and even technologically. Under such influences Tehran, the second fast growing city in the Middle East after Cairo, transformed from a small concentric Islamic town into a linear modern metropolis, and the city's population jumped from 1.7 million in 1956 to 2.7 million in the mid-1960s¹. To plan a new structure for the rapid growth of the city and to solve the acute housing shortage, many Western architects, urban planners and advisors (such as Victor Gruen and Constantinos Doxiadis) gained commission to work on the Tehran urban planning project in collaboration with Iranian joint ventures. As a result, Western architecture and urban planning initiatives, methods and techniques were exported into Tehran and were translated into local practices. In this complex process, a new physical and social structure for the future growth of the city was provided; the structure which still characterises the modern Tehran.

While during the early post-war decades, the state's endeavour was more focused on the formalisation of spontaneous settlements in the capital through the construction of several low-cost housing projects in Tehran's peripheries. There is a body of existing scholarship focusing on Tehran's state-led housing projects, including the work of Rana Habibi and Mohammad Ali Sedighi, who have analysed the emergence of early modern mass housing projects in Tehran, the complex process of their localisation and their lasting impacts on Tehran's housing form;² however, the first master plan's approach towards Tehran's acute housing problems and its socio-spatial consequences remains almost untouched, despite the significance of the plan in Tehran's urban planning history. In addition, this paper provides a framework to trace the changing strategy of low-cost housing in the Iranian post-war context.

During the 1960s and under the direction of several invited architects and urban planners from Europe and America, Tehran was planned as a modern metropolis. At that time, Tehran had an urgent need of 80,000 affordable houses.³ Understanding of how the master plan dealt with increasing housing demands necessitates a deeper study of the plan. Although the plan attempted to put low-cost housing in the same line with the future development of the whole city, this paper argues that in reality it resulted in the isolation and immobility of the urban poor by sequestering them in the south and adjacent to growing industrial areas. Through a short review of

the state-led low-cost housing projects in Tehran and thoroughly examination of two phases of the Tehran master plan, 'Concept Development' and 'Detailed Plan', the paper investigates the changing strategy of Tehran's low-cost housing during the post-war period. In addition, through a close analysis of the master plan's intentions and actual goals for low-cost housing, this paper not only aims to unravel the plan's housing strategy, but also touches upon its lasting socio-spatial impacts on modern Tehran.

The early state's endeavour to formalise Tehran's spontaneous settlements

During the post-war era, Tehran's accelerating population growth transformed the housing shortage into a housing crisis on an unprecedented scale. Tehran first became an industrial city in the 1930s, comprising 43% of the country's total industries by 1935.⁴ Becoming the country's second industrial core, after the oil region of Khuzestan, resulted in a dramatic influx of working class migrants into the capital. The hope for finding jobs and the better standard of living attracted more and more people from farther cities and villages. As a result, the population of Tehran increased from 200,000 to 2 million between 1927 and 1962.⁵ The growing population, the lack of suitable houses, and concomitant increase in housing costs, was not equally matched by an increase in the wage levels. Consequently, a large part of the population grew unable to pay for suitable housing accommodation. It was at this point that the first Seven-Year Development Plan⁶ (1949-1956) underlined that the intervention of the state is that of importance. So, the state play a significant role through "subsidising housing projects and encouraging and assisting private enterprise in building houses for those of lower income groups"⁷. In that context, progressive intellectuals in Iran concerned about the increasing housing problems in the capital. In the early 1940s, the Society of Iranian Architects endeavoured to get the answer by interpreting and criticising of Western mass housing concepts.⁸ To examine Tehran's housing problems and review Western solutions, many housing-related articles were published particularly in the journal of 'Architect' (1940-1948), a well-known Iranian architectural journal of that time. By understanding the socio-economic context of the city, Iranian architects attempted to localise the Western concept of mass housing during the Iranian post-war context.

Although the way of living in Western mass housing is in contrast with the Iranian traditional lifestyle, the importance of mass housing as a major solution in developed countries should not be overlooked in Iran. Besides, we should not simply imitate Western style mass housing. Through the localisation of Western ideas, we should make mass housing projects more compatible with the Iranian context.⁹

In his article on 'Tehran's housing problems' published in 'Architect' journal, Abbas Ajdari, one of the members of the Society of Iranian Architects, examined two different approaches towards Tehran's serious housing shortage: first, encouraging the development of empty lands within the city by controlling land speculation; second, the construction of mass housing in fringe areas with low land values, which did not interest private housing developers.¹⁰ During that period, the over-population, increasing rents and land prices in the central area of Tehran made the de-centralisation of the population necessary.¹¹ As a result, the construction of low-cost housing in Tehran's peripheries got a prominent place on the development agenda, especially after the approval of the first Seven-Year Development plan in 1948.¹² One decade later, the approval of the 'Public Land Ownership' Act in 1960 was a turning point in the history of Tehran's development; the Act was primarily oriented towards the construction of low-income housing outside the city limits rather than rehabilitation or renewal of blighted areas within the city.¹³

To mitigate severe housing problems of the capital, the second Seven-Year Development Plan (1955-1962) promoted a more active role for the government in housing provision.¹⁴ In order to finance the construction of affordable housing in Tehran's peripheries through long-term loans, the government entered into close collaboration with Mortgage Bank, Construction Bank, and Industry Bank and several public sector agencies.¹⁵ Subsequently, a number of new mass housing projects for low and middle income residents were constructed in the immediate post-war period until the early 1960s. These included: 400-unit housing (1944-1946), Kuy-e-Narmak (1956), Kuy-e-Kan (1958), Shahr Ara (1958-1959), Nazi-Abad (in the early 1960s), and Kuy-e-Nohome-Aban (1965-1966).¹⁶

As a result, mass housing projects began to mushroom around the city. The areas in which these projects were located only provided very basic services for the residents, rendering such dormitory suburbs highly dependent on the central area of Tehran.¹⁷ Furthermore, dispersed state-led mass housing projects did little to ameliorate social tensions and housing shortages in the capital.¹⁸ Those projects were unable to keep up with Tehran's incremental housing demands (by the mid-1960s, Tehran's population had reached nearly 3 million). Indeed,

housing the increasing population and regulating the rapid outward growth of the city necessitated the provision of the first master plan for the future development of the city.

The first Master Plan of Tehran and marginalisation of the urban poor

In the context of the Cold War and intimate connection between Iran and the United States, Victor Gruen, an Austrian-born émigré architect in America, gained a commission to provide the first master plan for the capital in collaboration with an Iranian joint venture, Abdolaziz Farmanfarmaian. As the first scientific urban planning in Tehran,¹⁹ Gruen brought new visions towards restructuring the city from different social, cultural and economic perspectives.

[. . .] In a near future, Tehran will be a totally different city. Its population will increase 80 percent (around 5.5 million) in 25 years. To meet the increasing demands of the population a larger area is necessary for the city. The complex process of expanding the city will put a crucial economic pressure on the government.²⁰

After three years of research into the spatial, socio-cultural and economic situation of the capital, in order to reduce the increasing pressure on the existing city the master plan recommended the de-centralisation of urban facilities and services. Gruen proposed a linear arrangement of six new satellite towns (each with a main active urban centre) in an east-west direction running perpendicular into the existing north-south direction (Figure 1). The plan thus structurally transformed Tehran from a monocentric city into a multicentre metropolis. Ensuring the westerly growth of the city, Gruen attempted to counteract the existing north-south expansion. Through the rapid development of the urban centres of distant new towns in the west, the plan aimed to attract the population and capital towards the west.

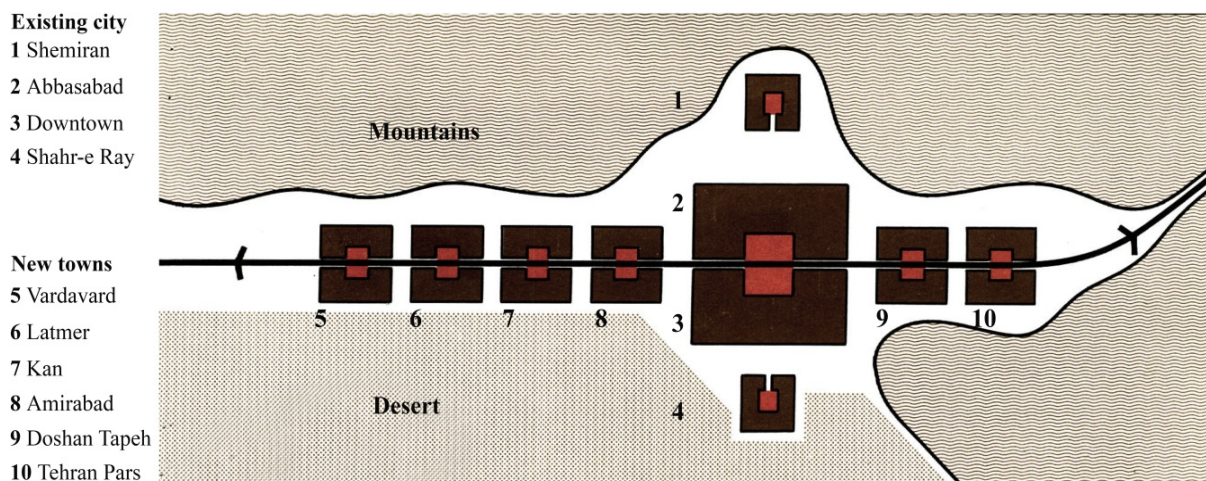


Figure 1: The preliminary diagram of Tehran's new linear structure including the existing parts and the six proposed satellite towns

Along with planning a new structure for Tehran, the provision of low-cost housing was one of the major concerns of the master plan. The urban poor acutely suffered from the housing shortage and were not able to solve it without the government's assistance.²¹ Therefore, improving the housing situation of the low-income families was of central importance. The master plan divided the problems of low-cost housing into two levels: (1) the urgent need to either re-construct or rehabilitate unsuitable houses in the old central areas which roughly estimated around 200 hectares; and (2) the rapid construction of new accommodations for both the influx of rural-urban immigrants and those who needed to be displaced by urban renewal (according to the master plan, these totalled around 600,000 people).²²

After reviewing a few cases of state-led mass housing in Tehran's peripheries, such as Kuy-e-Nohom Aban and Kuy-e-Kan, the master plan highlighted the government's disability to fully financially support the realisation of Tehran's future massive low-cost housing projects. The plan underlined the government's first obligation to support the city's development through the rapid implementation of new infrastructures rather than highly invest in housing construction. In order to solve acute housing shortage in Tehran, in terms of the location, typologies, financial policies and their integration with urban activities, Gruen put mass housing strategy in the same line with Tehran's de-centralisation and its future development. Unlike the previous strategy of the construction of mass-housing in the distant cheap-price lands, the master plan attempted to integrate the low-cost housing districts into the new linear structure of the city.

The physical re-distribution of social classes

As mentioned above, Gruen's proposal emphasised a linear development pattern. To physically re-distribute and de-centralise the population, the master plan put too much emphasis on (1) car-based mobility and (2) income levels. "Most of the master plan's analysis was based on future trends of car ownership"²³. Besides, increasing differences among social levels was that of central importance. In order to clarify the transformation of socially homogeneous structure of the old city, the master plan illustrated the huge difference between the traditional and existing social pattern of Tehran (Figure 2). By assuming that the poor could not afford a car, they were re-located in the south along with the linear structure of the city thereby positioning them closer to growing industries in the south. In fact, the plan more concentrated on the middle class –which was rapidly expanding since the Second World War– by positioning them in the middle belt of the city and in close connection with active urban centres (figure 3). Though the master plan situated the increasing urban poor nearby their possible workplaces, segregating them gave rise to their immobility, social isolation and less integration with the whole active system of the city.

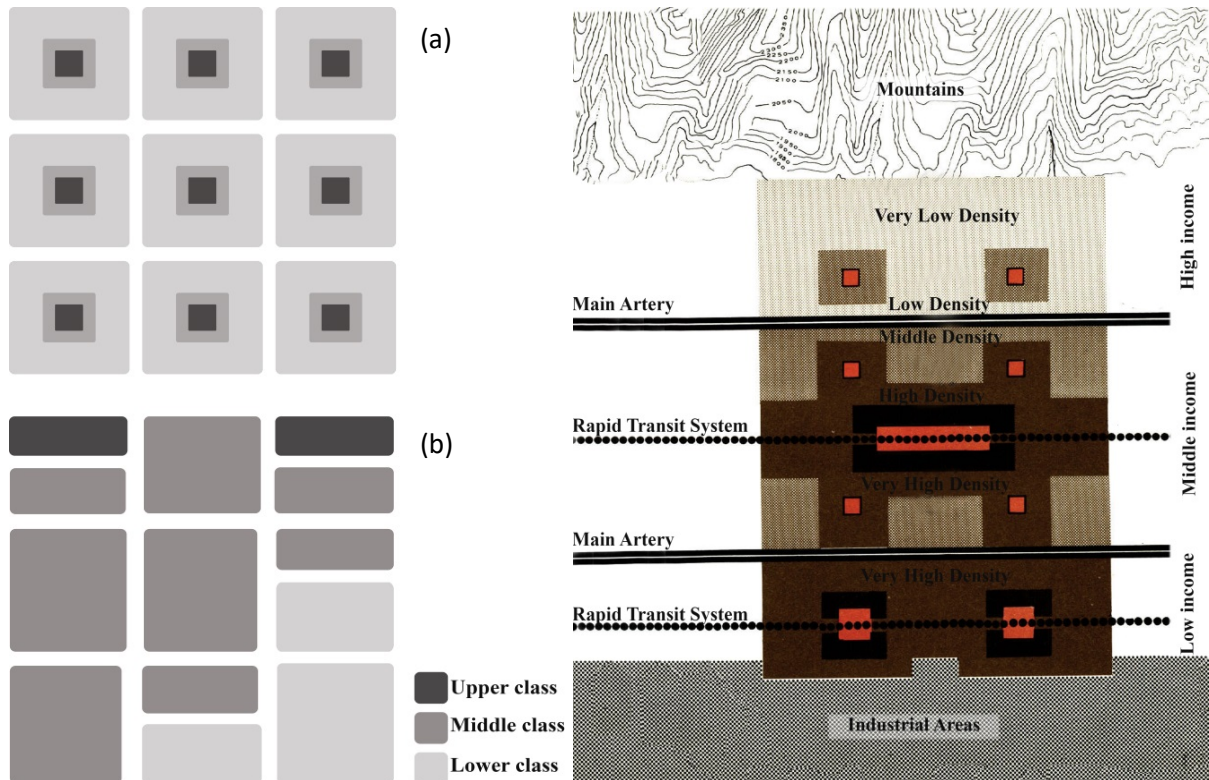
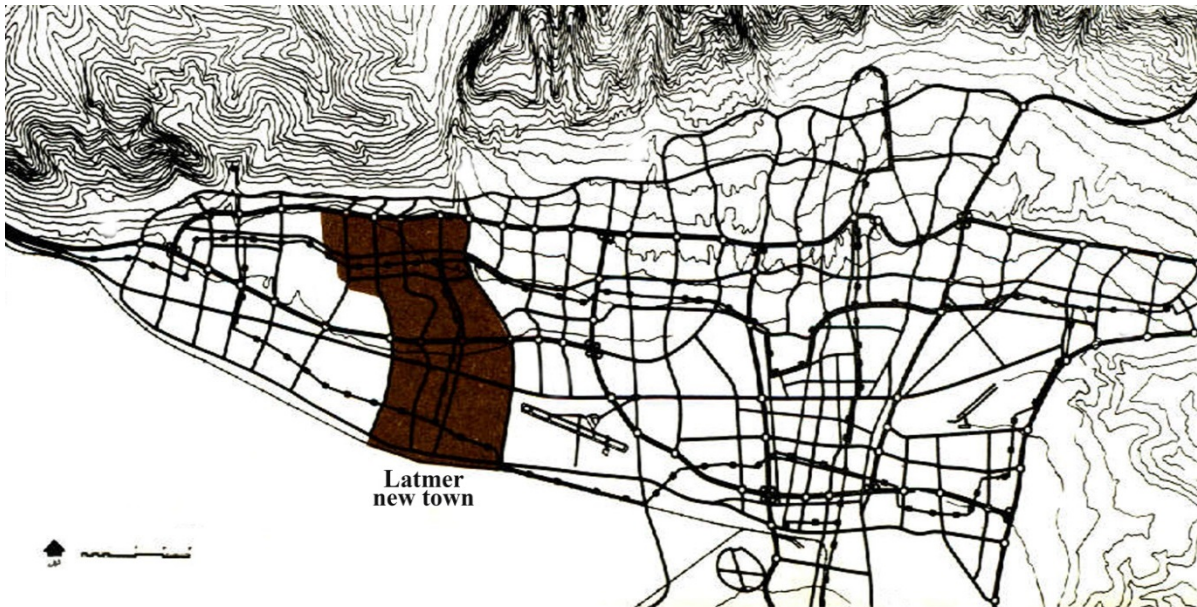


Figure 2 (Left): Diagrammatic representation of the homogeneous social structure of the traditional city of Tehran (a) compare to the social segregation in Tehran during the 1960s (b).

Figure 3 (Right): Re-distribution of social classes in the new linear structure of Tehran proposed by the first master plan.

To support the linear way of development, the master plan put emphasis on the rapid development of the farthest new satellite towns. Thus, the most strategic one, Latmer, was elaborated as the model of a modern satellite town. In detailed plans for the development of Latmer, a huge part of the town in the south (adjacent to the industries) was allocated to low-cost housing to home those who had to leave their houses in the old centre due to the urban renewal project. Because of the value of the land next to industries, the low-income district was designed based on the small plots of land with highest density (Figure 4).



Latmer's master plan

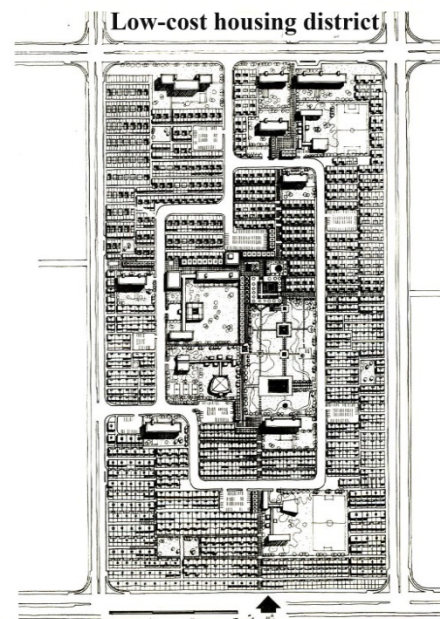
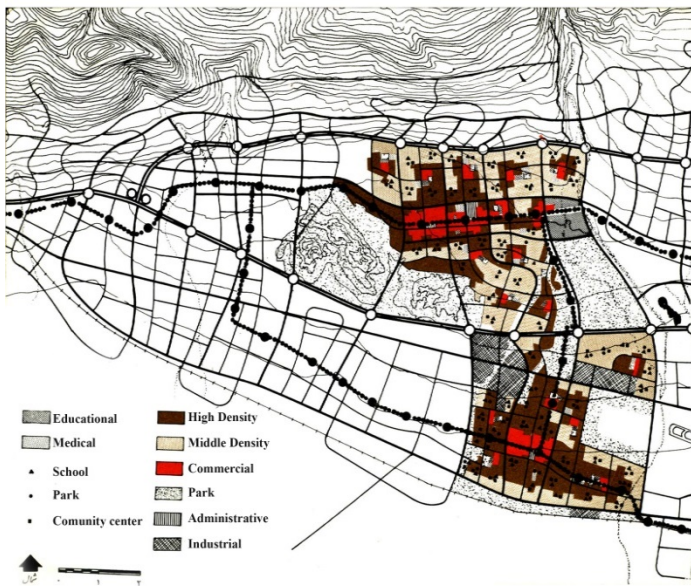


Figure 4: Detailed plans of the new satellite town of Latmer. The top image shows the position of Latmer district. The below image at the left shows detailed plan of Lamer, and the right image illustrates the planned typology for low-cost district located at the south side of Latmer.

Privatisation of low-cost housing and its socio-spatial reflection upon the city

To meet the increasing demands of the lower income residents, the master plan almost entirely relied upon free market activity through the privatisation of housing.²⁴ In contrast to early state-led attempts to alleviate Tehran's affordable housing crisis, the master plan did not indicate the need for the state to pursue the active program of low-income housing. In order to realise the privatisation of low-cost housing, the master plan emphasised the encouragement of not only private housing sectors through the state's financial support, but also private industries to provide accommodations for their workers in the south.²⁵ Both were financially supported by the state through tax exemption, long-term and low-interest loans, decrease in the price of land and such promotions.²⁶ Arguably, the master plan shifted the state-led low-cost housing strategy towards unguided private sector housing development. In the book *Privatisation and its alternatives*, William T. Gormley, thoroughly examines the controversy of privatisation: At its best, privatisation can reduce the costs of government and introduce new possibilities for better service delivery. At its worst, privatisation can raise costs and has the potential to undermine other important values, such as equity, quality, and accountability.²⁷

In the context of Tehran, the effects of the privatisation of housing were aligned with Gormley's analysis, leading to the rapid marginalisation of lower income groups. In other words, the financial facilities proposed by the government encouraged private developers to invest in high-rise and large-scale projects for privileged.²⁸ In the first master plan for Tehran, "questions of culture, class, and social discrimination were not the focal concern of the early modern planning approaches in Tehran."²⁹ As a result, public authorities chose to intervene less and less in the housing market for the disadvantaged. According to Tehran Development Council's analysis of the first master plan in 1976, "the master plan advocated a housing policy which was tailored to higher income consumption patterns"³⁰. In fact, modern housing became an apparatus to modernise the society and change their traditional form of life; transforming the social norms and values; and introducing consumer culture and new social roles for women.

Generally speaking, due to decreasing returns, private enterprise was not that much willing to provide low-cost housing. Consequently, private housing investment shifted towards luxurious high-rise buildings in outer areas, such as ASP (1969); Eskin (1972); Ekbatan (1970s); and Sharak-e Farahnaz known as Shahrak Omid (late 1970s), despite the fact that Tehran still suffered from a shortage of affordable housing (Figure 5). The master plan's strategy to solve Tehran's housing problems formed a foundation for later housing strategies. Tehran witnessed a high-rise boom during the 1970s, supported by the unprecedented Iran's oil boom, which changed the city's built form "from low-rise to high-rise and from single developments to large new towns, constituting a complex and ever-expanding metropolis"³¹. Regarding the high-rise revolution in Tehran, New York Times published an article in 1976:

During oil boom, Tehran's low-lying skyline has been sprouting modern high-rise building [. . .] The trend towards the construction of high-rise residential buildings is incompatible with the traditional needs of Iranian families [. . .] the high-rise building form could be very detrimental to the traditional aspects of Persian life.³²

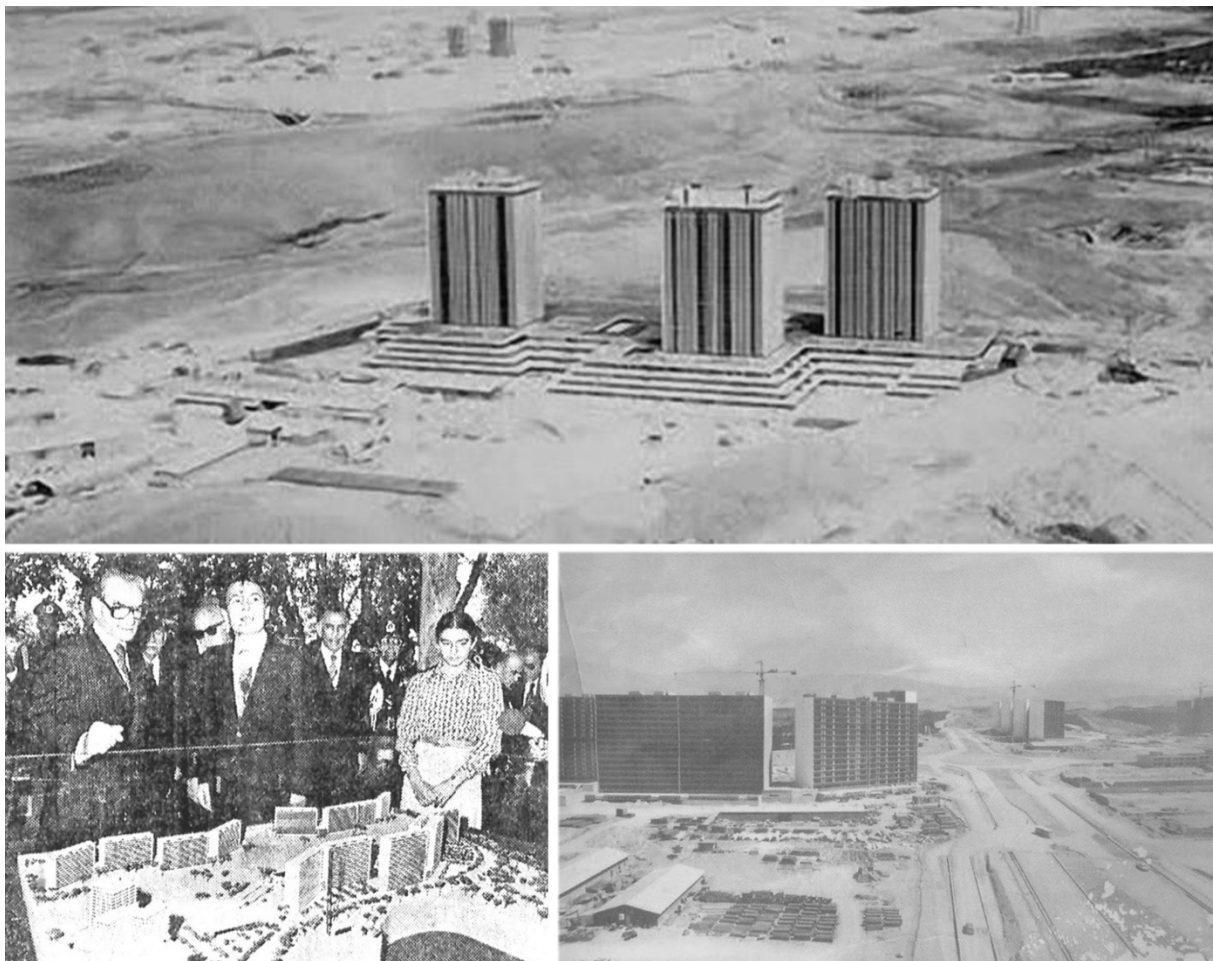


Figure 5: Tehran's high-rise boom during the 1970s. The top image shows ASP residential complex built for high-middle families. The below image at left shows the King Mohamad Reza shah and his daughter, Farahnaz, visiting Farahnaz (or Omid) high-rise residential complex in 1978. The below image at right shows the construction of Farahnaz residential complex during the 1980s.

Additionally, The effect of commodification of housing resulted in land speculation and the surging price of housing to very high levels. This situation brought about a continual decline in the quality and the number of low-cost housing stock in the capital. It also had direct repercussion on the social structure of the city, creating a harsh social polarisation which continues to affect the social geography of Tehran until present. In other words, the master plan's housing strategy gave rise to social polarisation which was cemented by spatial inequality which remains as a dominant feature of the city. In short, the incapacity of the city to meet the housing demands led to the development of "squatter" housing, as an alternative way to deal with housing problems (Figure 6).³³

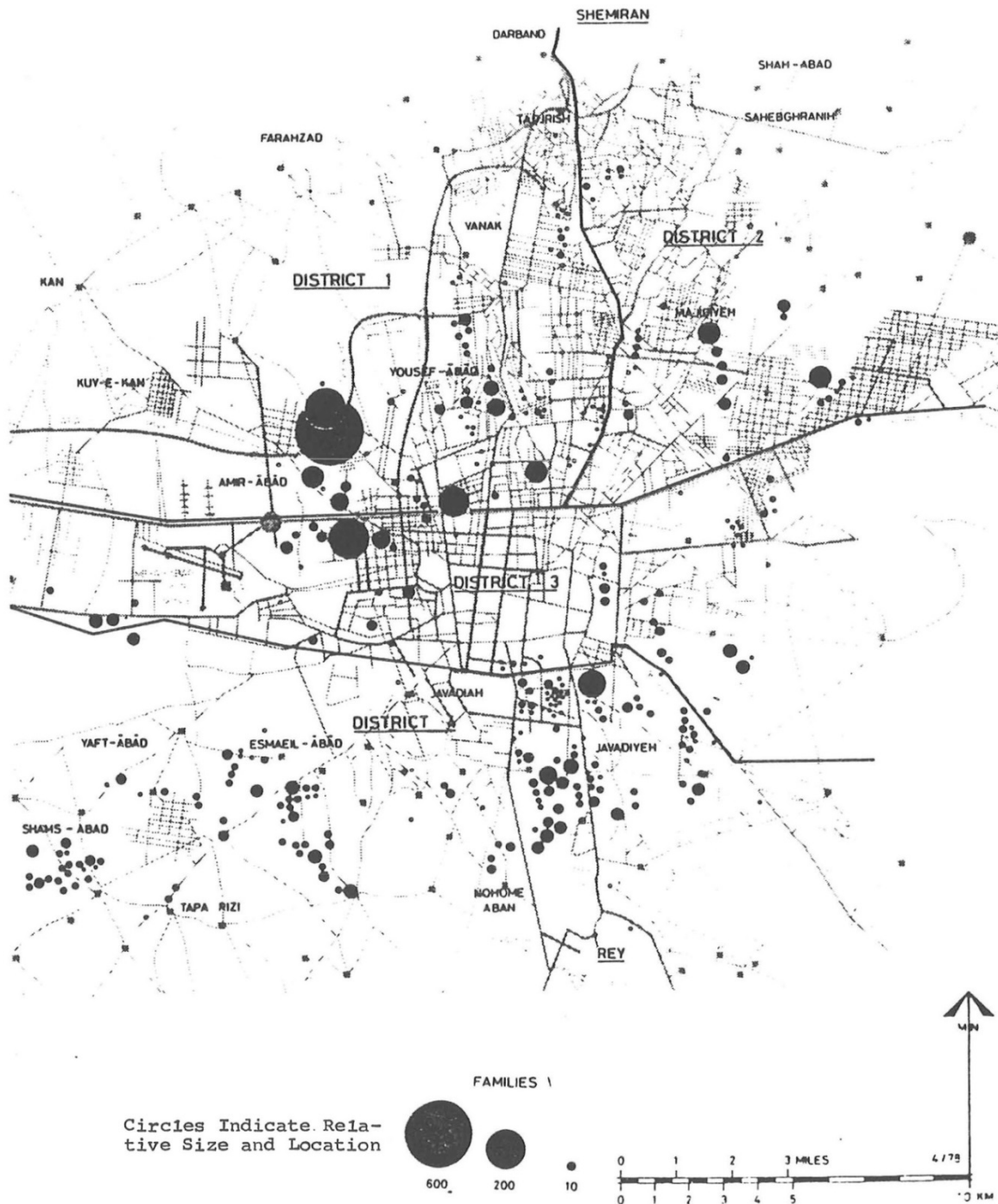


Figure 6: Size and distribution of squatter settlement in Tehran, 1972.

According to increasing problems of the city, Tehran Development Council “headed by Prime Minister Amir Abbas Hoveyda”³⁴ was formed in 1975 to evaluate the master plan and supervise the implementation of municipal plans.³⁵ Therefore, an in-depth assessment of the master plan was undertaken in 1976 to determine which parts of the plan were still viable and could continue in effect with only minor modification.³⁶ According to the analysis of the Tehran Development Council, Tehran’s master plan was a land use plan, therefore, found to be weak in the areas of social, economic and administrative programs.³⁷ Regarding housing strategies, Tehran Development Council’s report highlighted the wrong prediction of Gruen’s master plan about increase in family incomes and the probable decrease in the number of low-income families. By this assumption, the major focus of the plan was on high and middle income families, while the reality was thoroughly different. According to the Tehran Development Council’s statistics the income distribution became dramatically exacerbated between 1965 until 1972. Thus, Tehran Development Council suggested the urgent revise of the master plan to meet the needs for low-income housing and preparing public services for the poor districts of the capital.³⁸

Today, informal and spontaneous settlements are expanding in an alarming rate in the capital. The inefficacy of the official housing market to provide the urban poor with suitable houses has resulted in the fast expansion of these informal settlements.³⁹ The lack of state-sponsored housing market in Tehran can be traced back into the 1960s when the third Five-Year Development plan (1963-1967) encouraged the emergence of the private housing sector through offering tax breaks, long-term low-interest loans and such financial facilities. Thereafter, the process of privatisation of housing was further intensified by the first master plan’s housing strategy (1966-1969). As a result, the private sector investment grew to overshadow the public sector in Tehran. In this market-led system of housing, private housing firms profited from the government financial support if they built mass housing in towers of ten stories or higher.⁴⁰ They were luxurious buildings for the privileged, however, the growing numbers of the urban poor were suffering from the severe housing shortage.

Conclusion

In Iranian post-war contexts, affordable housing in Tehran underwent substantial changes, especially through a complex process of transnational practices. Tracing these changes represents a sudden shift from the dispersed affordable mass housing led by the state (during the 1940s to the early 1960s) into the privatisation of low-cost housing which intensified by the first master plan (1966-1969). The plan repeatedly highlighted the necessity of alignment of low-cost housing with the new structure of the city; however, it arguably failed to fulfil the increasing demands of affordable housing due to the promotion of privatisation of housing. Although the master plan attempted to improve the urban life of the poor, its privatisation strategy resulted in the marginalisation of the disadvantage. By ceasing the state’s endeavour to formalise spontaneous urban poor settlements, the first master plan released the government to directly take lead the low-cost housing. This market-led system of housing highly promoted by the master plan shifted the spot light from the avant-garde state-led low-cost mass housing into the luxurious high-rise residential buildings for wealthy middle-income. Additionally, the privatisation of affordable housing without any direct control and support of the government led to the noticeable reduction of the quality of their houses and in turn their urban life.

In spite of the plan’s early intention to integrate the urban poor with all socio-cultural and economic urban activities to let them freely climb the social ladder of the city, relocation of low-income families in the south and close to industrial areas made them less immobile, isolated and segregated from the whole city’s urban activities. In other words by too much focusing on car-based mobility as well as social levels, the plan almost was unsuccessful in getting the poor more involved in the active urban life of the city. It can be argued that the master plan marginalised affordable housing for the rising urban poor through the privatisation strategy and shifting the spotlight into high- and middle-class residences. To sum up, the effect of the plan’s housing policy can be divided in two levels: first, rapid reduction in quality and quantity of the low-cost housing stock; second, unprecedented residential high-rise boom and the radical transformation of building forms in the capital. In fact, the plan housing strategy resulted in a rapid top-down socio-spatial polarisation of the capital on a metropolitan scale.

Acknowledgment

The author would like to thank Professor Carola Hein, Dr Amy Thomas and Seyed Mohamad Ali Sedighi whose advices contributed to improve this paper.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Elmira Jafari graduated in architecture from Shahid Beheshti University (SBU) in Iran, in 2013. After three years professional practice in architecture, she started her PhD in September 2016; currently, she is a PhD candidate at the Chair of History of Architecture and Urban Planning, the Department of Architecture, at Delft University of Technology. The major focus of her PhD is on the transmission of urban initiatives into Iran and the complex process of localisation of Western ideas, during the 1960s and 1970s at the time when Iran experienced an unprecedented construction boom and socio-cultural transformation.

Endnotes

¹ Ali Madanipour, *Tehran: The Making of a Metropolis* (1998).

² See Seyed Sedighi and T. U. Delft, "Kuy-E Narmak: A Resilient Heritage of Modern Housing in Tehran, Iran," (TU Delft Open, 2016).; Rana Habibi, Bruno De Meulder, and Seyed Mohsen Habibi, "Re-Visiting Three Neighbourhoods of Modern Tehran: Chaharsad-Dastgah, Narmak and Nazi-Abad," in *Urban Change in Iran*, ed. Fatemeh Farnaz Arefian and Seyed Hossein Iradj Moeini (Springer, 2016).

³ Victor Gruen and Abdolaziz Farmanfarmaian, "Comprehensive Plan for Tehran," (196-1969).

⁴ Azam Khatam, "Tehran Urban Reforms between Two Revolutions Developmentalism, Worlding Urbanism and Neoliberalism" (York University, 2015), 68.

⁵ Ehsan Naraghi, "Motaleat Va Tahghiqate Ejtemae (Social Studies)," in *Baresi Masael Ejtemae Tehran [the Examination of Tehran's Social Problems]* (Tehran: Motaleat va tahghiqate ejtemae, 1964), 11.

⁶ 'Plan Organisation' (Sāzmān-e Barnāma) was the principle economic and social development agency of Iran's government. A decade after the Second World War, 'Plan Organisation' was shaped to supervise Iran's planning development activities. Designing a series of seven or five development plan and supervisoim of their execution was the main function of the 'Plan Organisation'. Accordingly, over nearly 30 years, the 'Plan Organisation' provided five series of seven/five-year national development plans, each of which containing projects such as building dams and roads, and improving the public health system and rural life. See: Azadeh Mashayekhi, "Urban Change in Iran: Stories of Rooted Histories and Ever-Accelerating Developments," ed. Fatemeh Farnaz Arefian Seyed Hossein Iradj Moeini (Springer, 2016).

⁷ *First Seven-Year Development Plan*, vol. Volume III (1949), 237.

⁸ See: Florian Urban, *Tower and Slab : Histories of Global Mass Housing* (London Routledge, 2012).

⁹ Abbas Ajdari, "Masale Maskan in Tehran Va Shahrestanhae Digar[the Problem of Housing in Tehran and Other Cities]," *Architect* Number 2 (1946): 52.

¹⁰ *Ibid.*, Number 1: 16.

¹¹ Habibi, Meulder, and Habibi, "Re-Visiting Three Neighbourhoods of Modern Tehran: Chaharsad-Dastgah, Narmak and Nazi-Abad," 31.

¹² *Ibid.*

¹³ Victor Gruen and Abdolaziz Farmanfarmaian, "Comprehensive Plan for Tehran," (196-1969), 13-5.

¹⁴ Madanipour, *Tehran: The Making of a Metropolis*, 143.

¹⁵ Fereydane Mahdavi, "Moshkel Maskan [Housing Problems]," in *Baresi Masael Ejtemae Tehran [the Examination of Tehran's Social Problems]* (Tehran: Motaleat va tahghiqate ejtemae, 1964), 317.

¹⁶ See the map in: Hamed Khosravi, "Camp of Faith: On Political Theology and Urban Form" (2014), 221.

¹⁷ Madanipour, *Tehran: The Making of a Metropolis*, 42.

¹⁸ Michael Pacione, *Problems and Planning in Third World Cities* (London Croom Helm, 1981), 24.

¹⁹ Moira Moser-Khalili, *Urban Design and Women's Lives* (Tehran: Women's Organization of Iran, 1975), 19.

²⁰ Victor Gruen and Abdolaziz Farmanfarmaian, "Kholsae Va Moghadameh [Summary and Introduction]," in *Comprehensive Plan for Tehran* (196-1969), 65.

²¹ "Barresi Va Arzyabi [Examination and Evaluation]," in *Comprehensive Plan for Tehran* (196-1969), 114.

²² "Comprehensive Plan for Tehran," (196-1969), 190.

²³ Tehran Development Council Secretariat and Executive Director Gyrus Ocia *An Analysis of the Tehran Comprehensive Plan*, Technical Report, No. 1 (Tehran: Tehran Development Council. Secretariat., 1976), xiii.

²⁴ *Ibid.*, 43.

²⁵ Gruen and Farmanfarmaian, "Kholsae Va Moghadameh [Summary and Introduction]," 102.

²⁶ *Ibid.*

²⁷ Jr. William T. Gormley, ed. *Privatization and Its Alternatives* (The University of Wisconsin Press, 1991), 3.

²⁸ Madanipour, *Tehran: The Making of a Metropolis*, 125.

²⁹ Vahid Vahdat Zad, "Spatial Discrimination in Tehran's Modern Urban Planning 1906-1979," *Journal of Planning History* 12, no. 1 (2013): 59.

³⁰ Secretariat and Gyrus Ocia *An Analysis of the Tehran Comprehensive Plan*, 43.

³¹ Madanipour, *Tehran: The Making of a Metropolis*, 20.

³² "Tehran Projects Face Challenges," *New York Times*, June 6 1976.

³³ Zahra Homa Mosleh, "Rural-Urban Migration and Urban Poverty: The Case of Tehran, 1962-1978" (1983), 49.

³⁴ Eric Pacejune, "Tehran Projects Face Challenges," *New York Times*, June 6 1976.

³⁵ Khatam, "Tehran Urban Reforms between Two Revolutions Developmentalism, Worlding Urbanism and Neoliberalism," 117.

³⁶ Secretariat and Gyrus Ocia *An Analysis of the Tehran Comprehensive Plan*.

³⁷ Ibid.

³⁸ Ibid.

³⁹ See: Esfandiari Zebardast, "Marginalization of the Urban Poor and the Expansion of the Spontaneous Settlements on the Tehran Metropolitan Fringe," *Cities* 23, no. 6 (2006). And "The Housing Domain of Quality of Life and Life Satisfaction in the Spontaneous Settlements on the Tehran Metropolitan Fringe," *Social Indicators Research* 90, no. 2 (2009).

⁴⁰ Yassamine Tayab, "L'habitat Collectif a Teheran, Produit De Luxe Ou Logement Social? (Collective Housing in Teheran, Luxury Product or Social Housing?)," in *Le Monde Des Grands Ensembles*, ed. Frédéric Dufaux and Annie Fourcaut (2004).

Bibliography

Ajdari, Abbas. "Masale Maskan in Tehran Va Shahrestanhae Digar[the Problem of Housing in Tehran and Other Cities]." *Architect* Number 2 (1946).

———. "Masale Maskan in Tehran Va Shahrestanhae Digar[the Problem of Housing in Tehran and Other Cities]." *Architect* Number 1 (1946).

First Seven-Year Development Plan. Vol. Volume III, 1949.

Gruen, Victor, and Abdolaziz Farmanfarmanian. "Barresi Va Arzyabi [Examination and Evaluation]." In *Comprehensive Plan for Tehran, 196-1969*.

———. "Kholsae Va Moghadameh [Summary and Introduction]." In *Comprehensive Plan for Tehran, 196-1969*.

Habibi, Rana, Bruno De Meulder, and Seyed Mohsen Habibi. "Re-Visiting Three Neighbourhoods of Modern Tehran: Chaharsad-Dastgah, Narmak and Nazi-Abad." In *Urban Change in Iran*, edited by Fatemeh Farnaz Arefian and Seyed Hossein Iradj Moeini: Springer, 2016.

Madanipour, Ali. *Tehran: The Making of a Metropolis*. 1998.

Mahdavi, Fereydone. "Moshkel Maskan [Housing Problems]." In *Baresi Masael Ejtemae Tehran [the Examination of Tehran's Social Problems]*, 317-20. Tehran: Motaleat va tahghiqate ejtemae, 1964.

Mashayekhi, Azadeh. "Urban Change in Iran: Stories of Rooted Histories and Ever-Accelerating Developments." edited by Fatemeh Farnaz Arefian Seyed Hossein Iradj Moeini: Springer, 2016.

Moser-Khalili, Moira. *Urban Design and Women's Lives*. Tehran: Women's Organization of Iran, 1975.

Mosleh, Zahra Homa. "Rural-Urban Migration and Urban Poverty: The Case of Tehran, 1962-1978." 1983.

Mozaffar, Ali. "Designing a Revolutionary Habitat: Tradition, Heritage and Housing in the Immediate Aftermath of the Iranian Revolution (1979) Designing a Revolutionary Habitat." (2017).

Naraghi, Ehsan. "Motaleat Va Tahghighate Ejtemae (Social Studies)." In *Baresi Masael Ejtemae Tehran [the Examination of Tehran's Social Problems]*, 9-12. Tehran: Motaleat va tahghiqate ejtemae, 1964.

Pacejune, Eric. "Tehran Projects Face Challenges." *New York Times*, June 6 1976.

Pacione, Michael. *Problems and Planning in Third World Cities* [in English]. London Croom Helm, 1981.

Secretariat, Tehran Development Council, and Executive Director Gyrus Ocia *An Analysis of the Tehran Comprehensive Plan* [in English]. Technical Report, No. 1. Tehran: Tehran Development Council. Secretariat., 1976.

Sedighi, Seyed, and T. U. Delft. "Kuy-E Narmak: A Resilient Heritage of Modern Housing in Tehran, Iran." TU Delft Open, 2016.

Sedighi, Seyed Mohamad Ali. "Kuy-E Narmak: A Resilient Heritage of Modern Housing in Tehran, Iran." *IPHS* (2016).

Tayab, Yassamine. "L'habitat Collectif a Teheran, Produit De Luxe Ou Logement Social? (Collective Housing in Teheran, Luxury Product or Social Housing?)." In *Le Monde Des Grands Ensembles*, edited by Frédéric Dufaux and Annie Fourcaut, 213-23, 2004.

Urban, Florian. *Tower and Slab : Histories of Global Mass Housing* [in English]. London Routledge, 2012.

William T. Gormley, Jr., ed. *Privatization and Its Alternatives*: The University of Wisconsin Press, 1991.

Zad, Vahid Vahdat. "Spatial Discrimination in Tehran's Modern Urban Planning 1906-1979." *Journal of Planning History* 12, no. 1 (2013): 49-62.

Zebardast, Esfandiar. "Marginalization of the Urban Poor and the Expansion of the Spontaneous Settlements on the Tehran Metropolitan Fringe." *Cities* 23, no. 6 (2006): 439-54.

Image Sources

Figure 1: Victor Gruen and Abdolaziz Farmanfarmaian, "The Comprehensive Plan of Tehran", 1966

Figure 2: Victor Gruen and Abdolaziz Farmanfarmaian, "The Comprehensive Plan of Tehran", 1966

Figure 3: Victor Gruen and Abdolaziz Farmanfarmaian, "The Comprehensive Plan of Tehran", 1966

Figure 4: Victor Gruen and Abdolaziz Farmanfarmaian, "The Comprehensive Plan of Tehran", 1966

Figure 5: Wikimedia Commons, commons.wikimedia.org/

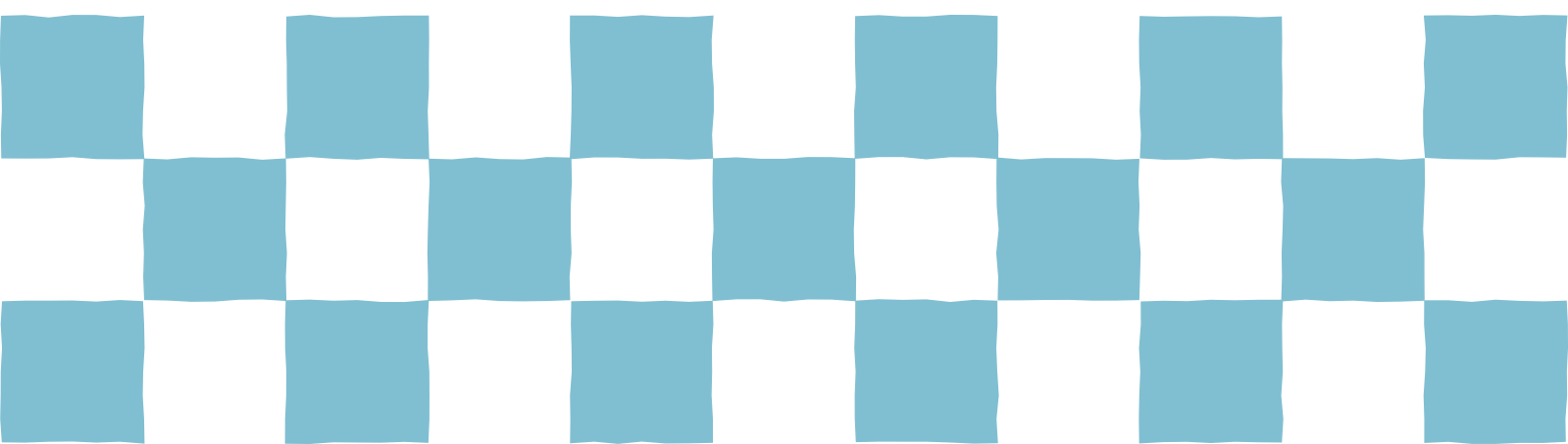
Figure 6: Institute for social research of Tehran University, First report, 1972



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

68 Planning Connections through the Iron Curtain: Phases, Themes and Impacts



Planning Connections through the Iron Curtain: Contexts, Phases, Themes and Impacts

Stephen Victor Ward (Oxford Brookes University), Rosemary Wakeham (Fordham University) and Laura Kolbe (University of Helsinki)

This paper introduces the panel 'Planning connections through the Iron Curtain'. It shows how links between Western countries and the USSR evolved after the Revolution. Western interests in the new Soviet Union were initially channelled through national 'friendship societies' (created from 1923), orchestrated in Moscow by VOKS (from 1925) and Intourist (from 1929). Meanwhile the USSR actively sought Western expertise to help shape its industrial and urban development. By 1930, more Westerners, particularly from Germany and the United States were visiting or working in the USSR. Best known were the brigade of Frankfurt modernist architect-planners led by Ernst May, recruited at the time of the 1930 CIAM conference. For their part Western governments and companies increasingly sought trade and business possibilities, while (to varying degrees) remaining suspicious of the political implications of such connections.

By the later 1930s, Soviet desire to use Western expertise had dwindled although a few foreign designers remained resident. Yet Soviet authorities still attracted (largely admiring) Western visitors (and hard currency), including many architects and planners. There were some but fewer visits in the other direction. After the hiatus of the Soviet-Nazi pact, relations between the Western allies and the USSR were cemented in the common struggle against Hitler. Soviet urban planning was widely perceived as a resonant model of bold and comprehensive state-led post-war reconstruction. Meanwhile town twinning between Western and Soviet cities from 1944 enabled direct inter-urban contacts, building on the alliances or transcending the enmities of 1939-45. Yet although Western regard for Soviet planning grew, actual visits ceased in wartime.

The onset of the Cold War further inhibited Western-Soviet planning connections. With some success, Western governments sought better links with some new Soviet satellite states in Eastern Europe. However, from the mid-1950s, under Khrushchev, technical and cultural contacts with the USSR itself greatly improved with urban planning a key point of interest. This largely reflected Soviet desires to tap Western expertise in planning (especially new satellite town development) and housing (especially industrialised methods). Links improved, especially with France, Britain, the Nordic countries and West Germany. Exchange visits became relatively common, surviving even disruptions like the Hungarian invasion of 1956 and the Cuban missile crisis of 1962.

From a Western perspective, interest in the USSR was fostered by the belief during the later 1950s/early 1960s that it would soon rival or overtake the USA, particularly in view of early Soviet successes in the 'space race'. This underpinned growing scientific co-operation which included developing scientific approaches to spatial planning. Yet although this and other areas of common interest continued, the attraction became more one-sided. Active Western desires for Soviet knowledge faded as the limits of its achievements in urban planning became clearer by the 1970s. However, growing global concerns fostered a Western anxiety to encourage Soviet interest in the environment because of the international impacts of not doing so. In the wake of the Chernobyl disaster in 1986, this dominated Western concerns until the USSR collapsed in 1991.

Learning from 'the planner's paradise': The 1936 Moscow visit of Sir Ernest Simon's team and its impact on British planning thought and practice

Stephen Victor Ward (Oxford Brookes University)

In September 1936, the well-known Manchester politician, successful businessman and leading member of the British planning movement, Sir Ernest Simon led co-researchers and family members on a month-long visit to Moscow. The aim was to examine its planning and other aspects of its governance in the wake of the renowned 1935 general plan for the city's reconstruction. This paper studies that trip, which Simon described as 'the most thrilling 4 weeks of [my] life'. The research uses Simon's own extensive handwritten diary of the visit and other relevant archive papers by members of the party. It also draws on the book, *Moscow in the Making*, which Simon and his team published in 1937, together with lectures, articles and his subsequent books, particularly his 1945 work *Rebuilding Britain – A Twenty Year Plan*. It was here that he described the Soviet capital as 'the planning paradise'.

At the time of the visit, Simon was a Liberal politician (he joined Labour in 1946) and prominent member of the Fabian Society. He and his wife, Shena (a co-author of *Moscow in the Making* and already a Labour party member) were friends of leading Fabians Sidney and Beatrice Webb. The latter partly inspired the Moscow visit and helped frame the questions considered. Although not part of a formal exchange, the visit coincided with a visit by the Mossoviet, the Moscow city government, to London and Paris. Despite this, however, the Simon team interviewed many members and officials of Mossoviet, together with various other agencies involved in city affairs. The party also interviewed various members of the expatriate community in Moscow, particularly Britons and Americans but also including several central European (modernist) architect-planners who were working in the city at the time. The party also visited many sites in and around the city, including those arranged and directly orchestrated by the hosts but also as informal unaccompanied walks around the city. The 1937 book produced by the Simon team has been regarded as one of the most perceptive Western accounts of Soviet city planning and governance at a time when most such accounts were excessively 'starry-eyed'. The visit's impact is gauged from Simon's involvements in the planning movement and British government during the later 1930s and especially during the war years. It is clear that Simon's impressions of Moscow's planning were distilled into policy advice which he gave to the British government and incorporated into his lobbying of public and political opinion. His message was balanced by other lessons he drew from other foreign countries and his extensive British experience. However, his essential message, to adopt a much bolder and more comprehensive approach to urban and regional planning, based firmly on greater state control (and preferably ownership of) of land, drew directly on his Moscow experience.

The Finnish-Soviet City Twinning meetings in 1969 and 1971 as a part on new neutrality policy in Europe

Laura Kolbe (University of Helsinki)

For almost 70 years, Finnish cities and towns have been forming friendship agreements with foreign cities, allowing them to collaborate in numerous ways with their international partners. The concept of friendship towns dates to the 1940s, but during 1950s a new dimension was added: Finnish and Soviet Union cities and towns started to collaborate across borders routinely. Historically, the steps in town twinning took place in the optimistic post-war spirit of reconciliation, cooperation and companionship.

Twin town relationships were created between many Soviet and Finnish towns, following the political YYA-treaty, meaning the agreement on “friendship, cooperation and mutual assistance between Finland and the Soviet Union” in 1948. In 1953 the first official arrangement was made between the cities of Lahti and Zaporozhe. In 1969, all in 49 cities and towns had entered into a twin agreement. Now, as the national cities unions in Finland and the Soviet Union finally made an agreement in 1969, this town twinning started to have a real relevance in international Cold War scene.

My paper analyses the presentations, speeches, declarations and petitions of the two large and first Soviet-Finnish twin city conferences, held in Leningrad (1969) and Helsinki (1971). They were the first meetings in series of eight twin city conferences (Tallinn 1974, Turku 1976, Kiev 1978, Jaroslav 1981, Tampere 1983, Riga 1985, Lahti 1988). During the first meetings, the “humane urban and traffic planning” became a central agenda. The aim was to demonstrate how planning could generate “peaceful living conditions” and “ease political tensions” on both sides of iron curtain. This friendship town network became an transnational chapter in the wide-ranging integration process that took place in Europe over 1970s, trying to bridge the iron curtain. Formal ties between cities gave additional support to national policies, trying to find out ways for peaceful cooperation, where the role of nonaligned Finland was fundamental.



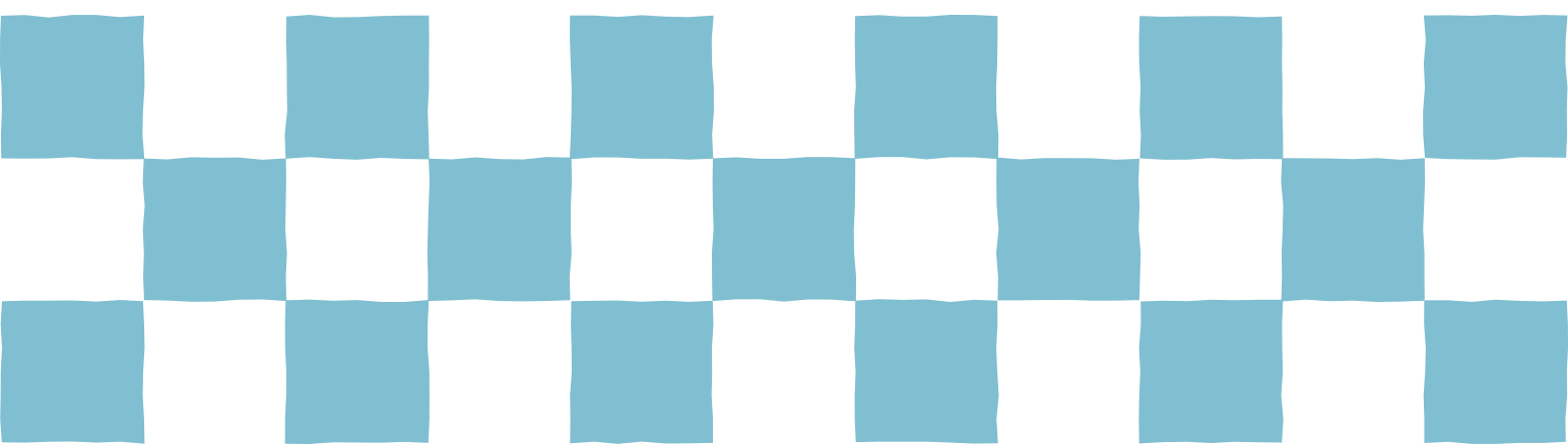
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

69 **Shrinking Planning in the Historical Planning Context / Round Table**



Wed. July 18, 2018

Session 9 (2:00PM-3:45PM)

Hall, Yokohama Information Culture Center

Moderator:

Keiro Hattori, Professor, Ryukoku University, JAPAN

Participants:

Kiyonobu Kaido, Professor, Meijo University

Tomohiko Yoshida, Professor, Ritsumeikan University, Japan

Mihoko Matsuyuki, Associate Professor, Yokohama National University, Japan

This table discusses how the idea of shrinking planning can be evaluated in a historical perspective of city planning. Is it a contemporary approach or more permanent approach that may be considered as a common way of dealing the population change of the city? This roundtable discusses how shrinking planning will be recognized in a historical planning context. It will mainly focus on Stadtumbau Program that was implemented in former GDR states in Germany and also some vacant housing and vacant land planning policy in Japan.

The scheduled participants at this moment are: Keiro Hattori (Professor, Meijigakuin University, with a knowledge of shrinking policy in Japan and East Germany), Kiyonobu Kaido (Professor, Meijo University, with a knowledge of compact city policy in Japan), Tomohiko Yoshida (Professor, Ritsumeikan University, with a knowledge of suburban shrinking problem in Japan) and Mihoko Matsuyuki (Associate Professor, Yokohama National University, with a knowledge of current planning issues).



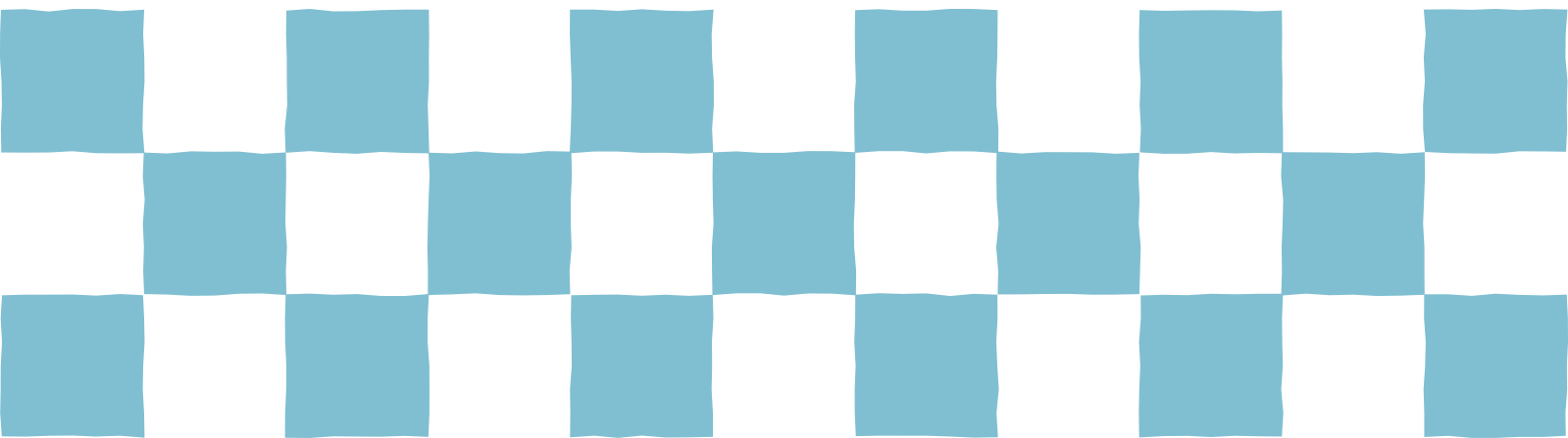
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

70 Formation and Evolution of Cities



Emergence, Evolution and Mutation: Interpretation of the Orderly Distribution of pre-modern Settlement in the Great Wall zone based on Complex Adaptive System theory

Haoyan Zhang (Suzhou University of Science and Technology) and Zhongjie Lin (UNC Charlotte)

Land-Use and Land-Cover Change (LUCC) Program is an interdisciplinary research project carried out jointly by the International Geosphere-Biosphere Program (IGBP) and the International Human Dimensions Program on Global Environment (IHBP), aiming to reveal the process of interaction between the environmental system on the earth and the human development including farming, industrialization, and urbanization. The Great Wall area represents the largest area of land-use and land-cover change in China in the past 300 years, when the borders of agricultural production and settlement continued to move northward, forming the pattern of settlements we see today.

The Great Wall, a magnificent ancient military defense works, runs consistently with the 400mm-precipitation line. It is not only a geographical boundary between sub-humid and semi-arid regions, but also draws a line that presents a dynamic balance between agricultural and nomadic nationalities. Due to the lack of an authority, the farming nationalities often faced threat from nomadic tribes, and tried to establish the order to avoid military conflict. In Ming Dynasty (1368-1644), the governing entities along the border were often characterized by a combination of its military and administrative functions in order to defend the invasion by nomadic trooper and reduce the damages. In Qing Dynasty (1644-1911), the farming-pastoral area was placed under the unified management. In order to achieve effective control, the central government Qing relies on the Great Wall and implemented regulations to limit resource flows across the Great Wall. In the modern time, with the formation of the global market and realization of long distance mass goods transportations, the border areas have been gradually integrated into a market network connecting China, Russia and Central Asia. This resulted in the transformation of the Great Wall areas from a military/political settlement system to an economic development pattern. Nevertheless, both the military settlements in Ming Dynasty (1368-1644) and the towns in Qing Dynasty (1644-1911) contributed to the process of the region's transformation from disorder to order, as well as the continuous improvement of the urban structure and its abilities of adaptation and development.

This paper focuses on the urbanization process in the Great Wall zone of China in pre-modern period to examine the model of border development, namely the transformation from a military system to an urban system. Based on the Complex Adaptive System theory, it sheds new lights on the phenomenon of the urbanization in farming-pastoral zone in pre-modern China and addresses several questions: Is the settlement system in Great Wall Zone a complex adaptive system? How to understand the mechanism, process, features of the system evolution respectively in Ming and Qing dynasty from the bottom up? To what extent does the settlement system evolve spontaneously? From a complexity science and systematic perspective, it will allow this paper to contribute to the interpretation of the particularity of the transitional zone of agriculture and animal husbandry in ancient China.

Planned and unplanned urban transformations of city center (based on the example of Vilnius city)

Dalia Dijokiene (Vilnius Gediminas Technical University, Faculty of Architecture, Department of Urban Design) and Inesa Alistratovaite-Kurtinaitiene (Vilnius Gediminas Technical University, Faculty of Architecture, Research Laboratory of Urban Analysis)

Urban development is affected by various types of factors: political, economic, social, cultural, etc. During the past three decades, in the Eastern European towns the conflict between uncontrolled suburbanisation and the traditional concept of the classical or harmonious town development has become prominent. A vision of development is missing in those towns and the quality of the urban process is deteriorating: the full-fledged urban planning genre is vanishing and the liberal tolerance, in a broad sense, of unregulated development is becoming more established. The latter may be considered to be unplanned urban development, but it radically contradicts the principals of the planned urban development established in the urban development process in the second half of the 20th century. One thing is clear – the physical shape of a town is often the result of interaction between both planned and unplanned urban developments. The recent decades of the 20th and the 21st centuries are particularly strongly characterised by a very intensive alternation of these factors in towns, which in the end, of course, impacts and alters the town itself. The presentation is based on a study of transformations in Vilnius' centre. The development of Vilnius city centre may be divided into several stages: natural development until the beginning of the 19th century, long-term urban development plans of the 19th century, development proposals as well as planned and unplanned development of the territory that has taken place in the 20-21st centuries. During the natural development stage, the city's urban texture developed adapting to the natural conditions – the main streets, their built-up and cultural, confessional, administrative urban complexes were set up. In summary, the analysis of the long-term urban development plans drawn up for Vilnius in the 19th century leads to a conclusion that those plans did not cause big changes of the key urban-structure features of the central territory that existed at that time but rather complemented them by adding new elements featuring the urban planning tradition of classicism. For instance, a new avenue emphasising the axial composition was built and became a new central street. A rectangular network of streets and blocks was developed as well. In the second half of the 20th century, radical urban transformations took place in the centre of Vilnius – the administrative-commercial centre was moved to the other side of the river Neris. The most intensive constructions of the 21st century are now taking place in that central territory.

The aim of the concrete scientific research discussed in this presentation is to use professional tools of the urban planning and design genre to manage a potential impact of both planned and unplanned urban developments, caused by the globalisation era, on the central part of Lithuania's capital city.

Planning an Automated Future: Histories of Technology, Sustainability, and Labour in the Port of Rotterdam

Victor Munoz Sanz (Delft University of Technology)

The increasing use of robotization and computer algorithms in industrial processes seem to indicate that we are heading to a future of workspaces without workers. Economists and technologists are registering the phenomenon, and offer roadmaps to guide society to the new paradigm. So far, however, little research has delved into the wider transformations that the generalized adoption of automation technologies may directly or indirectly cause in the planning and design of built environments. This gap evidences a disregard of the impact of economic decisions and the organization of industrial processes in the organization of spaces and society. By looking at the recent planning history of the Maasvlakte II area in the Port of Rotterdam, this paper examines the intersections between spatial planning, technology, and sustainability around the shift from labor-intensive industries and services to capital-intensive ones by adopting digital technologies and related platforms.

Since 2015, robotic cranes and automated guided vehicles do the work in the container terminals in Maasvlakte II, the latest expansion to the west of the port of Rotterdam. For the Rotterdam Port Authority, automation technologies were a synonym of efficiency—efficient use of land, time and energy—and therefore their implementation was integrated in the planning of Maasvlakte II and strict demands were imposed on companies aspiring to get a concession to operate there. In turn, these companies have made of Maasvlakte II a model workplace of an automated future. In these terminals, the machines follow instructions of a Terminal Operating System, while being supervised by humans in control rooms. On the surrounding logistical landscape, physical barriers and security checkpoints separate the realm of human bodies from that of semi-autonomous machines.

The paper shows how any radical planning vision driven by technology comes together with new challenges—in Maasvlakte II in particular labour conflicts, and the vulnerability of these infrastructural systems to cyber attacks. In defining through planning visions how territories are managed and organized for work, new modes of spatial segregation, inclusion, and vulnerability appear, calling for developing new forms of anticipatory planning and resilience. Looking backwards to such planning processes helps in understanding the processes that brought in certain outcomes and paths to technological and spatial lock-ins; examining the road to innovation, the actors at play, their interests, values, and motivations, and their consequences in the production of space reveal themselves as an useful matter for constructing scenarios to guide future actions. This paper builds on a long-term research being developed at the Department of Urbanism at TU Delft and Het Nieuwe Instituut focused on revealing full automation's hidden spatial production.

Analyzing 'Hybridity' in the Planned Settlements of Global South: A Methodological Approach to Study Contemporary Planning History

Sanjeev Vidyarthi (University of Illinois at Chicago)

How does one study the contemporary planning history of planned places that subsequently develop in an informal manner over time? This is important because, on the one hand, extensive literature documents how planners and decision-makers imported and imposed planning ideas and design typologies over unsuspecting populations of the global south during the colonial and postcolonial period. On the other hand, recent scholarship also describes the manner in which residents and users gradually shaped and altered the envisaged urban form of formally planned settlements, per local cultural preferences and practical needs, creating new forms of urbanism (Vidyarthi 2015). Emphasizing the extra-legal and subversive nature of such acts, many scholars, however, coalesce the diverse range of constituent city-building processes under catchall terms like 'hybridity' and 'informality.' Given that archival records and updated maps in the global south are especially difficult to find, I hypothesize that employing an inventive research approach combining a mix of relevant methods can help study such places.

Illustrating the case of a formally planned neighborhood, built during the late 1960s at the Indian city of Jaipur, this presentation will explain a multi-method approach that helps study the contemporary history of unanticipated changes in the spatial form of planned places. Using four basic lines of investigation within the overall case study approach: archival research, interviews, Geographical Information System (GIS) analysis, and the neighborhood calendar technique—an adaptation of the life-event history calendar technique modified to collect a retrospective dynamic event history of "over time community level changes" (Axinn et al. 1997)—the proposed approach is particularly helpful for unraveling the role and purpose of relevant social actors and the origin and incremental development of constituent processes effecting long-term spatial change. The paper will conclude by describing both the underlying social phenomena and the actual spatial transformations in the urban form that scholars studying places in similar contexts may find particularly useful.



Emergence, Evolution and Mutation: Interpretation of the Orderly Distribution of pre-modern Settlement in the Great Wall zone based on Complex Adaptive System theory

Haoyan Zhang*

** PhD, School of Architecture and Urban Planning, Suzhou University of Science and Technology, China ,
empirez@126.com*

The Great Wall zone represents the largest area of land-use and land-cover change in China in the past 300 years, when the borders of agricultural production and settlement continued to move northward, forming the pattern of settlements we see today, realizing its transition from wartime to peacetime. Instead of focusing on the development of individual urban, how can we understand the evolution essence of settlement system, located in the transition zone between agriculture and animal husbandry, from the perspective of complex system? In this article, the distribution pattern can be considered as a spatial projection of region social order. Then, the fractal dimension of settlement distribution is calculated by GIS, so as to demonstrate the complexity of pattern. And then, characteristics and mechanisms of the settlement system in the Great Wall area during Ming and Qing Dynasties is further analyzed from 7 basic points of Complex Adaptive System. Finally, the idea of attracting basin can be used to make a further description about the process of evolution, namely structural break and non-structural evolution.

Keywords: settlement system, the Great Wall zone, generation and evolution, complex adaptive system theory.

Introduction

The area, where the Great Wall is located, lies in the transitional zone between the humid and arid regions in Northern China. Seated in the transition between farming and stockbreeding areas, the Great Wall has always been the confronting surface of different cultures, and significantly influenced the trend of the ancient geopolitical layout in Northeast Asia. Besides, the Great Wall area represents the largest area of land-use and land-cover in China in the past 300 years, when the borders of agricultural production and settlement continued to move northward, forming the pattern of settlements we see today.

Once in quiet a long period, the Great Wall was simply known as “a wall built for the defense against Tartars”, mainly linked with military management system and how military installations were distributed and constructed along the way. Lattimore, an American sinologist, put forward the idea of “Great Wall transition zone”, regarding such a mixture of economy and culture as a result from the interaction between prairie area and farming area, which went beyond the traditional concept of “boundary line” and the inherent single viewing angle of agricultural civilization. During the field visit in the area of the Great Wall, Gaubatz sensed the military settlement along the line and its influence in this area, and then distinguished the developing pattern of “conversion from military defense to civil use” in border towns from that in inland, which made the research about the Great Wall extended from its frontier history to the history of the towns and the civil society in this area.

Ming Dynasty(1368-1644) and Qing Dynasty(1644-1912), the last two ancient dynasties in China, showed the two different situations of the Great Wall area respectively in times of war and peace. The entire Ming Dynasty was involved in the sharp confrontation between farming and animal husbandry from its very beginning, while Qing Dynasty realized the regional peace by placing them two in a unified state order. Therefore, with the historical progressing of Ming and Qing dynasties, the Great Wall area actually realized its order transition from wartime to peacetime, where farming and animal husbandry were accustomed well to each other, and also to some other conditions like nature, politics, economy and military matters. Settlements are the most straight and striking landscape that human activities add to the earth. The distribution pattern formed by different settlements turned in to a spatial projection of “order” which is abstract. Obviously, the order space in the Great Wall area can be considered as a spatial settlement-system pattern related to the Great Wall, which consequently became a start point for the “spatial turn” of research on systematic relation in the Great Wall area. What’s more, the spatial projection of the order in this area was named “the-Great-Wall order belt” because of the striped distribution of the settlements in the Great Wall area.

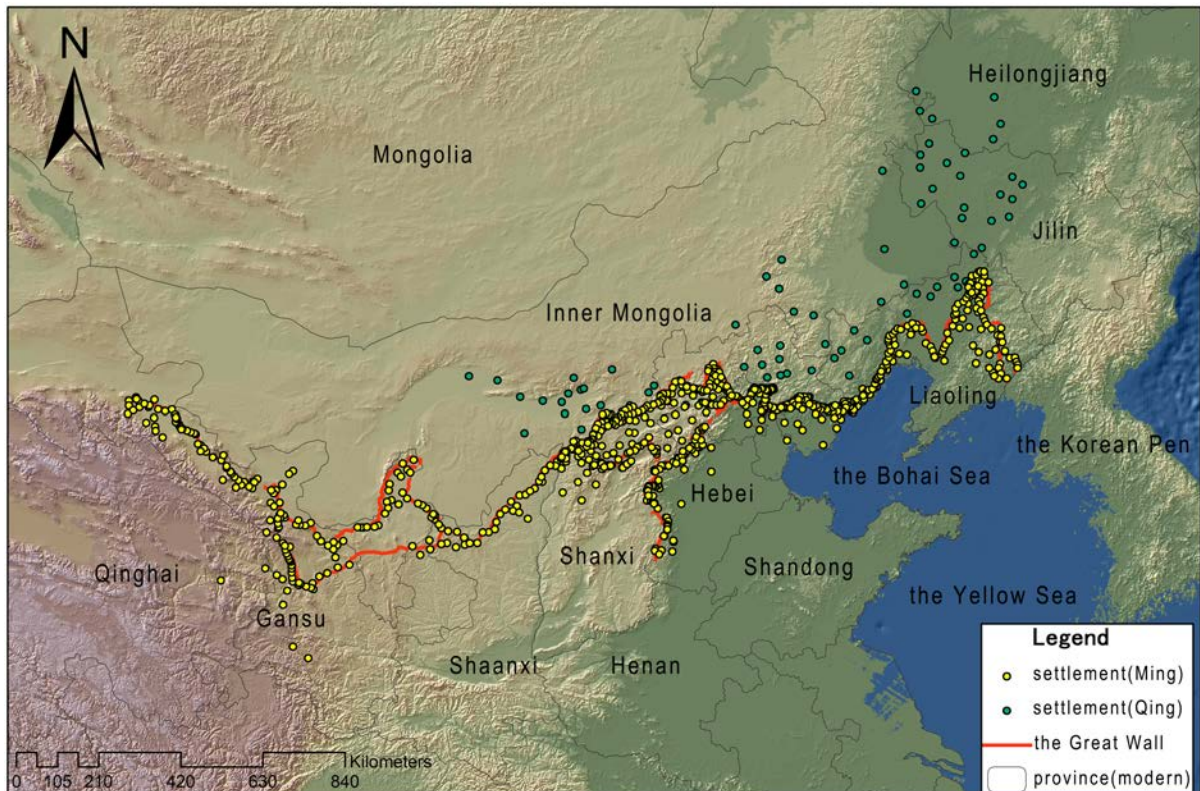


Figure 1: distribution of the Great Wall settlements in Ming and Qing Dynasties

1. Complex Adaptive System theory and the-Great-Wall order belt

1.1 Complex Adaptive System theory

Complex Adaptive Systems (CAS) was first mentioned by John H. Holland at the lecture held for the decennial of Santa Fe Institute and stated in the book named *Hidden Order* to explain the basic principle of the generation and operation mechanism of complexity. Its core concept is “adaptation builds complexity”¹. According to Holland, CAS was described as “a system that is made up of some interactive agents restricted by rules”.

Holland emphasized that adaptive agents were of active learning ability, constantly accumulating “experience” by reciprocal feedback with the outside world and accordingly adapting to external environment and other agents. An adaptive agent can pack the tested effective experience in modules and then generate the rule set (internal model) for its adaptation to the environment in the way of block stacking. A large number of agents gather according to “tags” and form the higher ranked agents (meta-agents) during interaction. Meta-agents are equipped with the specialty and structure—nonlinearity—that lower-leveled agents cannot achieve by simple addition. Also, meta-agents can continuously develop to another higher level—meta-meta-agents—by further aggregation.

1.2 The-Great-Wall order belt

The Great Wall order is the dynamic, balanced and stable state of the social organizations tied by the Great Wall, which appeared in the transitional zone between farming and animal husbandry under a specific historical circumstance, aiming to facilitate the regional structural transformation from “out of order” to “orderliness” and improve self-adaptive and self-developing abilities.

The-Great-Wall order belt spatially realized the order in the Great Wall area, reflecting on the means that the agent self-organizations took up the space. To be specific, the agent refers to the numerous individual persons. In Ming Dynasty, it meant the Ming defending warriors at the Great Wall and their family; In Qing Dynasty, it meant the Han immigrants in Mongolian land. With numerous agents gathering, settlements (meta-agent) and settlement systems (meta-meta-agent) started to emerge. Compared with agents (individuals), meta-agents (settlements) were easy to observe and analyze for the advantages of limited quantity, definite position and well-organized structure. Therefore, “the-Great-Wall order belt”, as a spatial concept, can be regarded as the settlement group distribution in the limited space under rule constraint, which also can be called the Great Wall settlement belt.



2. The spatial complexity of the -Great-Wall order belt

2.1 Method

Fractal theory, has been widely used in natural and social science fields to help understand the nonlinearity and complexity of objective things. Fractal dimensions are the parameters used to describe the irregular degree of fractals. Thereinto, grid fractal dimensions are used to describe the spatial distribution equilibrium of regional urban systems. The calculation is to cover point targets with the differently sized grids. While grid size r is varying regularly, the number $N(r)$ of the grids used to cover point targets will also vary accordingly. If the targets present fractal features in a certain scale, then: $\lg N(r) = -D \lg r + A$

D refers to the grid dimension, A is a constant, r refers to the grid size and $N(r)$ refers to the total amount of the grids whose side length is r and which are used to cover targets. The value of grid dimension is taken from 0 to 2: when $D=0$, it means towns gather together at one point; when $D=1$, it means linear distribution; when $D=2$, it means uniform distribution (Central Place Theory).

2.2 The fractal features of the-Great-Wall order belt

As the military settlement system in the Great Wall area during Ming presents the fractal characteristic in both spatial distribution and rank-size distribution³, this paper mainly worked out the grid fractal dimension for the spatial distribution of the Qing Great Wall settlement system. By ArcGIS10.3, a rectangle-shaped covering target was generated in the range of $108^\circ E \sim 128^\circ E$ and $39.5^\circ N \sim 48^\circ N$. Dividing each side into K section, the rectangular area is consist of K^2 girds, and $r=1/K$. First, the gird number N covered the points is counted, then the double logarithmic regression analysis of N and r is made. 1774, 1875, 1895 and 1911 are four nodes of immigration history in the Great Wall zone during Qing dynasty, so the grid fractal dimensions of settlement distribution corresponding to the 4 time is calculated respectively.

Table 1: Fitted Equation, R2and Grid Dimension of Grid Fractal of Global Towns during Each Time

	1774	1875	1895	1911
Fitter Equation	$\ln N_i = 0.990 \ln r + 0.752$	$\ln N_i = 1.018 \ln r + 0.689$	$\ln N_i = 1.125 \ln r + 0.545$	$\ln N_i = 1.429 \ln r + 0.217$
R ²	R ² =0.949	R ² =0.977	R ² =0.980	R ² =0.994
Grid Dimension	D=0.990	D=1.018	D=1.125	D=1.429

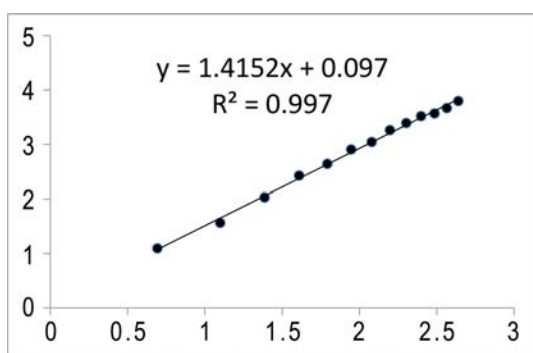


Figure 2: double logarithmic curve of grid dimension of the distribution of the Great Wall settlements in 1911

and bounds, having a good fitted degree. It indicates that the spatial structure of towns had taken its shape and started to get self-similarity.

It is shown as Table 1, the spatial distribution of towns presented a simple fractal characteristic. From 1744 to 1911, D was constantly increasing from 0 to 2 and R^2 was also rising, which reveals that the spatial structure was developing from integer dimension to fractal dimension through 3 major periods. ① Random period: In 1774, $D=0.990$. That shows settlements were randomly distributed with non-significant rank difference and low relative degree among them.

②Nurturing period: in 1774, $D=0.990$. In 1875, $D=1.018$ and $D \approx 1$, which shows the settlement in advantage of resources and location started to develop to greater towns and get the traffic lines between differentiation points.

③Developing period: In 1895, $D=1.125$, and in 1911, $D=1.429$. In this period, grid fractal dimension rose by leaps

3. The CAS-based cognitive framework of the-Great-Wall order belt



According to Holland, CAS has 7 basic characteristics: Aggregation, Tagging, Nonlinearity, Flows, Diversity, Internal Models and Building Blocks which are the necessary and sufficient conditions. Therefore, this paper made some further analysis on the characteristics and mechanisms of the Ming and Qing Great Wall settlement systems from these 7 points.

3.1 Stress reaction: spatial realization of the Ming Great Wall order

In Ming Dynasty (1368-1644), with Mongolians retreating to the prairie from central plains, the coexistence of mutually unrestrained multi-elements also got back to the transitional zone between agriculture and animal husbandry. One side is the northern prairie nomads represented by Mongol and Manchu, and the other side is southern agriculture-based regime of the Hans—the Ming Empire. Because of the absence of a higher ranked authority and mutual trust mechanism, the North and the South got involved in the violent competition for living resources. Compared with the self-sufficient agricultural economy, the animal husbandry economy which is single and unstable is determined to be more dependent on farm products. For that reason, the nomads seemed more proactive in such an imbalanced pursuit of mutual association. When looting replaced trading as the main means of association, it became urgent for Ming Government to build a boundary defending order, keeping the marginal agricultural region stable and reducing conflict possibility and expected loss.

For this purpose, Ming Government forcibly made the native inhabitant in the Great Wall area move out to the inland and a large number of armed forces and their families move in. Land was give away to these immigrants to make them feed themselves and guard for generations, artificially creating a buffer zone in the transitional area.

With the shared value and identity, these military immigrants formed differently sized military settlements by the rules of 5600, 1120, 112, 50 and 10 persons, and functioned respectively as guards, stationing, support and command according to their different locations and relative positions to the Great Wall. These settlements were distributed in radiate clusters approaching to the Great Wall: There were “Bao” fort, “Lu” fort and “Zhen” fort respectively at 3 different levels. The farther away from the Great Wall, the less the number and the higher the level.

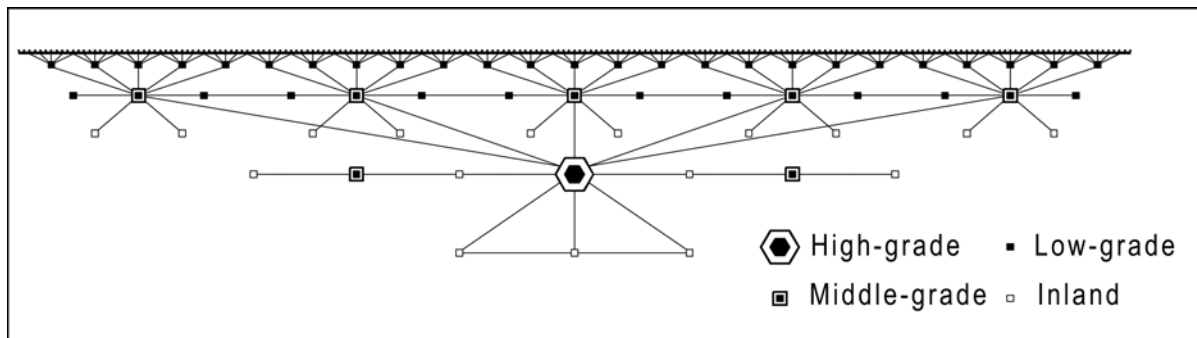


Figure 3: the distribution structure of the Ming Great Wall settlements

As shown in figure3, the low-grade “Bao” forts were arranged next to the south side of Great Wall Line in the largest number. Several middle-grade “Road ” forts were located at the medium level. The high-grade “Zen” fort in each defense areas (there were totally 11 Zen foftrs along the whole line.) was located most away from the Great Wall.

The game between farming and animal husbandry was the root cause for the existence and development of the Great Wall order in Ming Dynasty, but its spatial formation was the result of the constant adaptation of agents to the environment. In the face of the natural environment , the agents adaptively selected sites and built fortifications based on the terrain or brought in external energies to support the army. To adapt to the rival, it meant that the system had to solve the question how to make the most effective and cost-optimal response to highly mobile and uncertain invasions in a wide range. Tiny negligence was bound to result in the huge and expected consequence—looting and the periodic damage caused by the climatic fluctuation in prairie.

It can be seen that the Ming Great Wall settlement pattern was the very response to the above-mentioned restraints, using the cluster pattern to make random attacks changed into the ones in relatively predictable order and making local responses by pre-planned supporting strategies.

The layered structure made defending extended in depth. On the one hand, the rear commanding settlement gained enough time to deal with the information from a wider defensive range. On the other hand, it was more difficult for the invader to get information in back-land, and the consequent information asymmetry between the two parties resulted in the one-sided military transparency. The cluster structure optimized effective defensive range on the basis of equal strength and pre-planned the optimal pattern for troop concentration: when the



prearranged supporting plan was triggered, differently graded supporting forces would intercept the invader at the expected attack points and march lines along the “branch”, so as to win the strength superiority over the invader. According to historical materials, such a military system, which seemed to be an achievement of Ming Dynasty, was actually a result of the trial-and-error process where agents “studied”, “collected experience” and constantly performed optimization, rather than a process accomplished overnight.

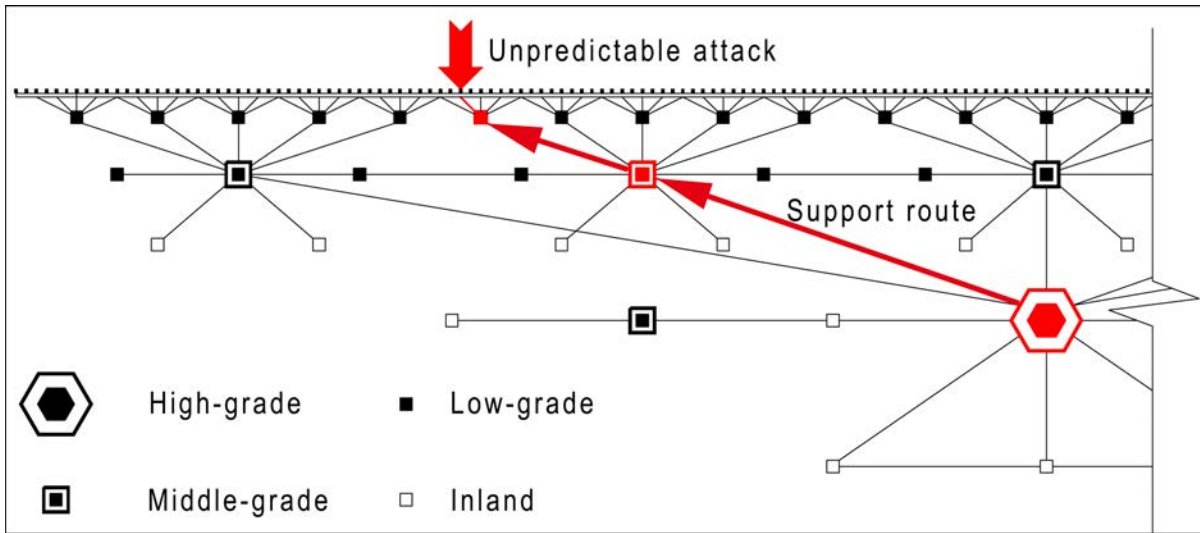


Figure 4: the stress response pattern of the Ming Great Wall settlement system

Table 2: the Characteristics of the Ming Great Wall Settlement Complex System

Number	Main Point	Key Word	Comment based on the Ming Great Wall Settlement System
1	aggregation	emergence	Because Ming warriors and their family were administratively forced to aggregate, the settlements of different sizes and functions emerged. Different settlements further aggregated and formed the defense systems in different defense area.
2	tagging	choice	Recognition of identity and subordination. Agents obediently gathered into settlements because of their identity as a military, and settlements were given different duties because of the different ranks of their commander, taking corresponding actions.
3	nonlinearity	Product effect	Spatial distribution and size-rank distribution were of fractal geometric feature. Settlement system can get a defending power more than the total number of people on its own side, for example, 3 settlements which had 1120 people in each one can successfully withdraw the attack of 3360.
4	flow	unidirectional passing	A transportation network was formed by settlement-post road, beacon tower-materials and information. The information about the enemy's situation was passed upwards by the fort closest to the Great Wall to higher graded settlements level by level, and then action directions would be passed down to relative settlements level by level. Provisions and warriors were also passed from high-leveled settlements to low-leveled ones in a unidirectional way.
5	diversity	cooperation	Settlements were different in shape, size and function. Even the settlements of the same level could have different functions and authority because of their different locations. The settlements assembled into differently functioned settlement systems according to the differences in quantity and grade.
6	internal	stress	Stress response mechanism. To resist against the uncertain attacks, the



	model		system would change from a regularly dispersed state to a regionally irregular state of aggregation.
7	blocks	fighting experience	The patterns that agents selected from plenty of practical experience were melted into the stress response mechanism, including the advantages, distribution and combinations of the settlements on different scale. For example, small fort were fit for guard; large fort were fit for dispatching; what's the proper distance for rescue; how much strength it was needed to withdraw the invasion of a certain scale; what are the possible lines for the enemy to advance or retreat.

3.2 Guide-balance: spatial realization of the Qing Great Wall order

In Qing Dynasty (1644-1912), Manchurian established a multi-ethnic country of Han, Manchu, Mongolian, Hui and Tibetan, creating favorable conditions for the development of the Great Wall area. With the realization of long-distance transportation of bulk commodities and the formation of trans-regional market, the Great Wall area turned into the transitional hinge communicating the goods from Chinese inland, Central Asia and Russia, rather than an economic marginal area, which highlighted the location advantage in this area. Therefore, in contrast to the settlement declination caused by “de-militarization” at the southern side of the Great Wall, the northern side kept on farming development and urbanization.

When the tripartite game emerged and the communication among nations was called for as an irresistible trend, it became necessary for Qing Government to construct a kind of management-and-control order in the transitional zone, so as to maintain the strength balance between them and the overwhelming superiority of Manchuria. As a result, the Great Wall, as a secret and disguised border, was playing its role of “isolation and controlling”⁴. On the one hand, the Great Wall was given full play as a hard border. Mongolia and Han were rigorously confined to the north and south of the Great Wall respectively, prohibited to cross. What's more, a depopulated zone was made out, extending dozens of kilometers wide along the Great Wall, where both farming and animal husbandry were forbidden to strengthen the isolation effect; on the other hand, the resources flowing into Mongolia were guided and managed by the controlled amount of issued passports and the appointed pass and route. As a result, although there was a thousands of miles boundary (the Great Wall) between the prairie and the inland, the elements on the two sides have to flow at an artificially higher cost.

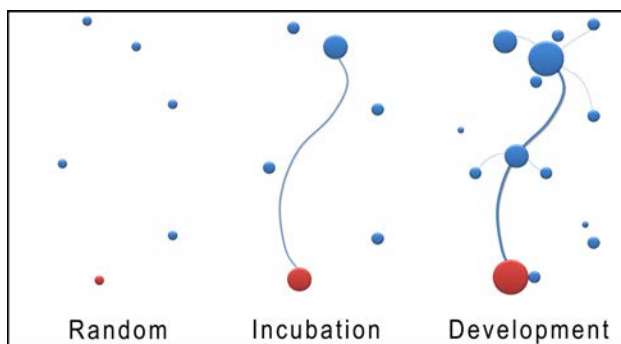


Figure 5: evolution model in point-axes way

At that time, The-Great-Wall order belt was confronted with a problem how to realize the balance between environmental carrying capacity and immigrant population by proper distribution on the condition of the designated area open to immigrant. Compared with the Ming Dynasty, the Qing Great-Wall order belt presented the spontaneity more clearly in its building process. Starting from the assigned pass, the Han immigrants spread along the post road from the south of the Great Wall, and thus formed settlement groups and energy transportation network. With new immigrants continuously moving in, the central intensity was constantly growing in the area with

regional advantage, and the large transport corridor turned into the developing axis accelerating the further attachment of resources. While area polarization was coming to saturation, resources started their gradient transfer to the newly opened area, forming new aggregating point and extension line of connection. With that process repeating again and again, space would finally be filled in a “point-axes” way.

Table 3: the Characteristics of the Qing Great Wall Settlement Complex System

Number	Main Point	Key Word	Comment based on the Qing Great Wall Settlement System
1	aggregation	emergence	Because immigrants were induced by economic interest, settlements of different sizes emerged, such as villages, towns and cities. Different settlements further gathered into 3 different systems for politics, market and military matters.



2	tagging	choice	Immigrants aggregated at the destination because of their Han nationality and geographical relationship. Depending on whether there was a administrative governor or not and the rank of governor, different settlements were divided into central cities, prefectural cities, counties, towns and villages. The affiliation between different governors facilitated the generation of political settlement system. Besides, the different resource endowment promoted the formation of market network.
3	nonlinearity	power law distribution	The scale and spatial distribution of settlements followed the power law distribution.
4	flow	recycle	A transportation network of the system was formed by settlement-post road/ water way-personnel/information/materials. The exchange of personnel, capital, materials and information happened among the settlements within the system and also between the system and outside areas (inland and Mongolian land), which promoted the intake, conversion and metabolism of system elements and consequently advanced the formation and development of spatial aggregation.
5	diversity	plentiful	There was a variety of agent needs, settlement pattern and the settlement systems. The same settlement might have different functions in different system structures.
6	internal model	self-interest of rational individuals	Following the hypothesis of “economic man”, agents took revenue maximization and cost minimization as the motivation of their actions. By figuring out the current relation between population and environmental capacity, settlements could make a prediction about the population state in the next period, aggregation or loss, and then made some relative countermeasures.
7	blocks	Survival experience	In the practice of environmental reconstruction, agents constantly collected the experience on, for example, the appropriate size for environmental capacity. In the residential areas endowed with different resources, the settlement of different sizes were grouped into differently leveled administrative network, market network and garrison network by the group elements of central cities, prefectural cities, counties, towns and villages.

4. Structural mutation: a new perspective on the evolution of the-Great-Wall order belt

The-Great-Wall order belt in Ming and Qing Dynasty was the aggregating state of agents adapting to the specific historical environment in the transitional zone between farming and animal husbandry. This system was always staying in dynamic variation along with the changes happened in the external environment. Throughout the Ming period, when prairie power rose alternately, the Great Wall system kept on its local adjustment and optimization all the time. For example, in the early and middle Ming Dynasty, new settlements backgrounded by the war between Ming Empire and Mongolia were mainly built in the middle and western part of the Great Wall (Zhang, 2016). Latterly, in order to resist the rise of northeast Manchuria, the eastern part of the Great Wall turned into the key area to defense. In Qing Dynasty, with a different immigrating policy and national situation, settlements constantly spread in the northern area of the Great Wall. Even so, the-Great-Wall order belt in Ming and Qing Dynasty still kept their own component elements and aggregating pattern. Only at the critical moment of the transition from Ming to Qing, did the system got its structural variation—phase change, which means military immigrants→immigrants and administrative enforcement→economical inducement and defensive settlements→economical towns and cluster distribution→point-axis distribution.

Table 4: the Difference between the Great Wall Settlement System in Ming and Qing

	The Great Wall settlement system (Ming Dynasty)	The Great Wall settlement system (Qing Dynasty)
--	--	--



Order	War	Peace
Agent	Ming's soldiers and their family	Immigrant or refugee
Drive	Administrative force	Economic interest
Aggregation	Military immigrant→forts→defense system	Immigrant→towns→urban system
Function	Defense	Exploit
Mechanism	Stress response	Self-interest of rational individual
Distribution Pattern	Cluster	Point-axis

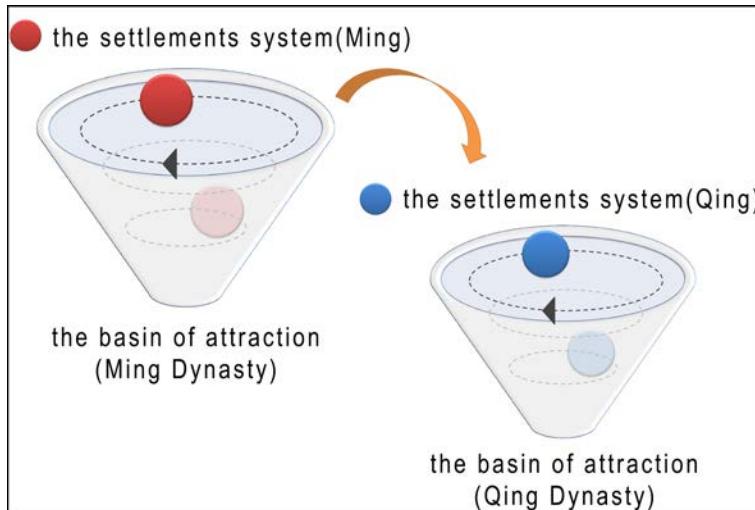


Figure 6: the evolution of settlements system in Great Wall zone in Ming and Qing Dynasties from the perspective of the attraction basin theory

The idea of “attracting basin” can be used to make a further description about this phenomenon, taking all the influential factors of the natural and cultural environment in the transition zone between farming and husbandry as a basin-shaped set of points and the settlement pattern in the Great Wall area as a small ball in this basin. Each single position where the ball stayed represents a state of agent aggregation which was adaptable to the current natural, cultural and military factor sets. With the factor content varying, the ball keeps running in the basin. However, the political ecology in Qing Dynasty was so different from that in Ming Dynasty that the factor sets in Great Wall area structurally changed into two different attracting basins. And the structural change of the Great Wall

settlement system from Ming to Qing can be regarded as the jump of the ball from the basin for Ming into the basin for Qing.

5 Conclusion

The spatial pattern of settlements across the Great Wall belt exhibited fractal geometry during pre-modern period. Especially in Qing Dynasty, with the increase of fractal dimension, the settlement system had experienced the process from random distribution to the overall self-similar, conforming to the theory and model of “Pole-Axis System”.

The order in the Great Wall area and its spatial realization respectively in Ming and Qing Dynasty represents the two different typical social situations of the transition zone between farming and animal husbandry respectively in times of war and peace, fitting the description of complex adaptive system. In Ming, military immigrants was driven by administrative force to form settlements, that further aggregated and constituted the system rely on stress mechanism. In Qing, immigrants were induced by economic interest to form villages, towns and cities spontaneously. And the settlement system maintained a dynamic balance under the influence of environmental carrying capacity.

At the moment of transition from Ming to Qing, the phase change happens. It can be seen that the system drop from a high potential energy position to a low. The direction and trend of the process may be entropy production.

Acknowledgements

This study was supported by National Natural Science Foundation of China (Grant NO. 51708378), Natural Science Foundation of Jiangsu Province, China (Grant NO.BK20170381), National Natural Science Foundation of China (Grant NO. 51608346).

Disclosure Statement

All the authors have no conflict of interest.



Notes on contributor(s)

Haoyan Zhang, male, Chinese, 33 years old, is a lecturer in architecture at Suzhou University of Science and Technology, China. He obtained a Doctor of Technical Science from Tianjin University in 2016, majored in the military settlement along the Ming Great Wall and its evolution. His main research interest aims the quantitative research of urban historical geography, including the spatio-temporal complexity, evolution mechanism and computer simulation of the regional settlement system in historical period. He has been chairing a National Natural Science Foundation of China, Natural Science Fund of Jiangsu Province, and participating several National Natural Science Foundation projects.

Endnotes

¹ John Holland, *Hidden Order: How Adaptation Builds Complexity* (Harper Collins UK, 1996), 1.

² Chen Y G, *Fractal Urban System: Scaling • Symmetry • Spatial Complexity* (Science Press, 2008),.

³ Cao Y C, *Research on Macro Systematic Relationship of Military Settlement of the Three Towns of Xuanfu, Datong and Shanxi along the Great Wall in Ming Dynasty* (Tianjin: Tianjin University, 2015), 178-210.

⁴ Ding Y Z, A historical overview of the northern border garrison of Eight Banner in Qing Dynasty, *China's Borderland History and Geography Studies*, 23.

Bibliography

- [1] Chen, Y. G. *Fractal Urban System: Scaling • Symmetry • Spatial Complexity*. Science Press, 2008.
- [2] Cao, Y. C. *Research on Macro Systematic Relationship of Military Settlement of the Three Towns of Xuanfu, Datong and Shanxi along the Great Wall in Ming Dynasty*. Tianjin: Tianjin University, 2015
- [3] Ding, Y. Z. A historical overview of the northern border garrison of Eight Banner in Qing Dynasty. *China's Borderland History and Geography Studies*, 1991, (2), 23-31.
- [4] Gaubatz, P. R. *Beyond the Great Wall: Urban Form and Transformation on the Chinese Frontiers*. Stanford university press, 1996.
- [5] John Holland. *Hidden Order: How Adaptation Builds Complexity*. HarperCollins UK, 1996.
- [6] Lattimore, O. *Inner Asian Frontiers of China*. Beacon Press, 1962.
- [7] Zhang, Y. K, Fan X, Li Y. Wars and the Construction of the Military Settlements along the Great Wall in Ming's Northern Border. *Journal of Tianjin University (Social Sciences)*, 2016, 18(2): 135-138.
- [8] Zhou, G. Z. City and its region, a typical giant open system with complexity. *City Planning Review*, 2002, 26 (2): 1-4.

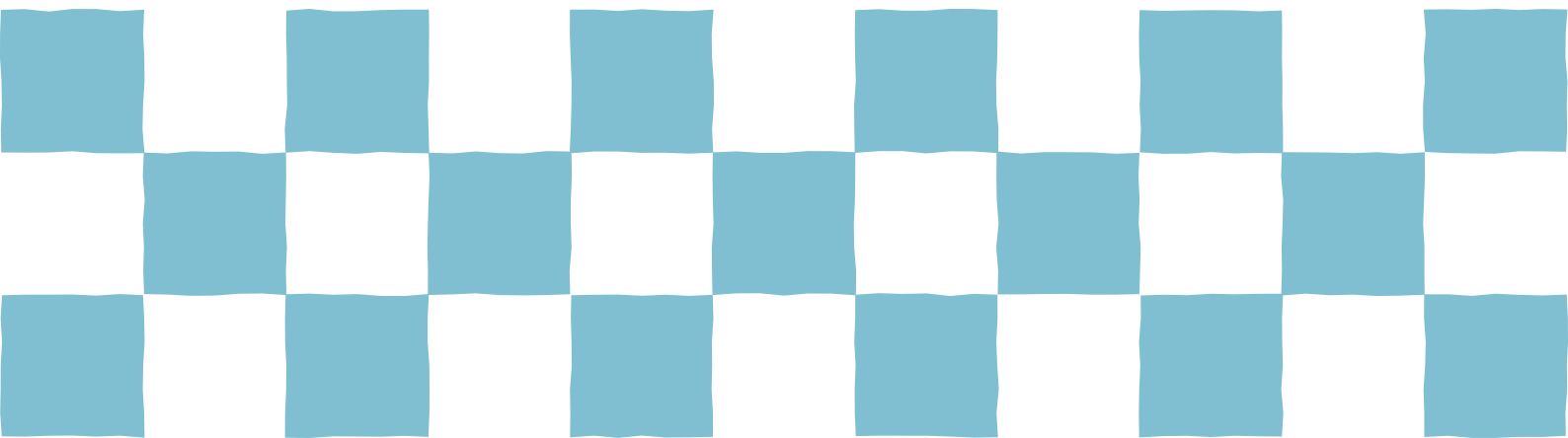


INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

71

**Professor Michael Hebbert
talks English-language
publication for international
readership: the challenge and
the reward / Round Table**



Wed. July 18, 2018

Session 8 (11:15AM-1:00PM)

Hall, Yokohama Information Culture Center

Coordinator:

Sadatsugu Nishiura, Professor, Meisei University

Main Speaker:

Michael Hebbert, Emeritus Professor, UCL Bartlett School of Planning

Speakers:

Fukuo Akimoto, Emeritus Professor, Kyushu University

Keiro Hattori, Professor, Ryukoku University

Kosuke Matsubara, Associate Professor, Tsukuba University

Shulan Fu, Associate Professor, Zhejiang University

Quite a few young scholars in the non-English-speaking countries feel difficulty in writing a paper in English. Their problems are not only those of translation but also those of theme setting, methodology, logical structure, writing style and so on. Japan hosts the IPHS conference for the first time in 30 years, expecting a number of participants from the non-English-speaking world including East Asia. Taking this opportunity, this roundtable session aims to encourage young scholars from the non-English-speaking world to write English-language papers for international peer-reviewed journals.

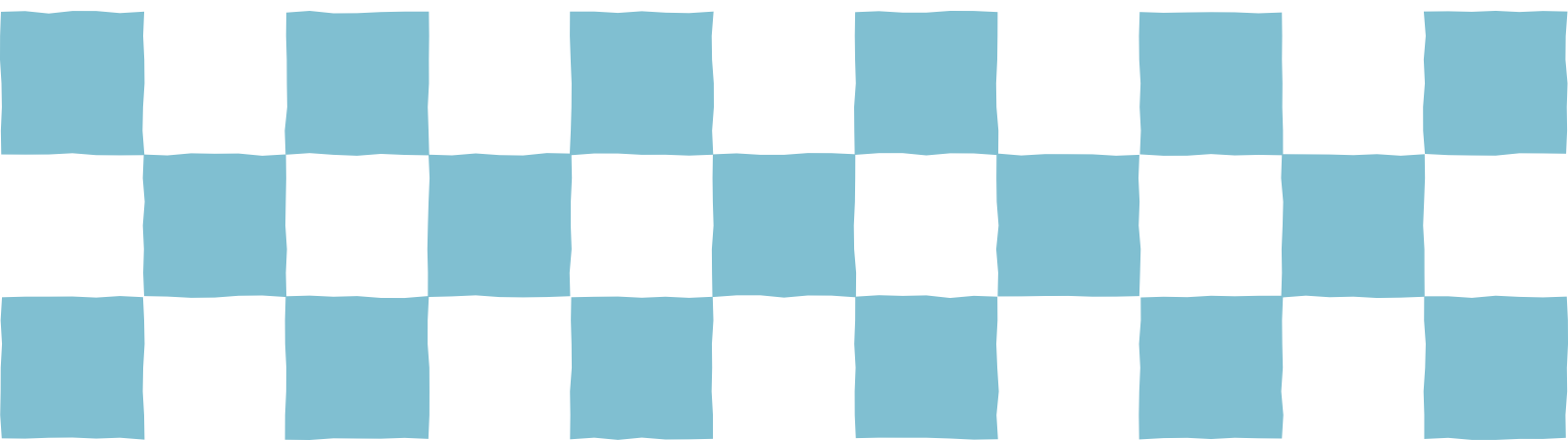
In the first half of the session, Professor Michael Hebbert, the former editor of *Planning Perspectives*, the premier international peer-reviewed journal affiliated to the International Planning History Society (IPHS), will give a lecture on how to write an English paper for the international readership on the basis of his long and rich experience as the editor, while in the latter half the audience including speakers will have question-answer dialogues with him.



INTERNATIONAL PLANNING HISTORY SOCIETY
YOKOHAMA
2018 THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

72 **The Formation of Planning
Historiography Patterns in
European and International
Writings (19th-20th c.)**



The emergence of historiography in early Spanish writings on urban planning

María A. Castrillo-Romón (University of Valladolid, Spain / urbanHIST MSCA EJD)

Spanish urban planning historiography of the 19th and 20th centuries has been subject to a different investigations over the last two decades. These studies have provided diverse perspectives on the historiographical narration of the effective evolution of cities in Spain and its colonial territories, as well as on the intellectual and normative production of Spanish urbanism. As national urban historiographies of very general nature, they offer panoramic overviews in which the history of Spanish planning mostly appears amalgamated with other narratives, as for instance the history of cities or the history of urban thought.

This paper proposes to highlight the time span between the second half of the 19th and the first decades of the 20th century, which corresponds to the crucial period in which main patterns and schemes of planning historiography were set in Spain. In other words, it aims to approach an interpretation of the urban historiography developed in some main Spanish theoretical urban planning writings between 1850 and 1930 decades. The analysis will be organized along two intertwined axes. On the one hand, I will advance firstly in the identification of the main categories that have built up this historiographic frame looking closely at the more important theories on “Ensanche” (town planning) and “Reforma urbana” (urban renewal)

I will develop on a comparative study on three different works of Ildefonso Cerdá Suñer (1815-1876) (*Teoría de la construcción de ciudades aplicada al proyecto de ensanche y reforma de Barcelona, 1859*; *Teoría de la viabilidad urbana aplicada a la reforma de la de Madrid, 1861*; and the celebre *Teoría general de la urbanización, 1867*) which are fundamental for both phenomena originated in the 19th century and developed until the middle of the 20th century. I will proceed then with the works of other Spanish urban planning theoretical writings in order to introduce other different ways to see and to use past and History. In fact, I will analyse several texts on the Ciudad Lineal of Arturo Soria Mata (1844-1920) and a contribution of Santiago Esteban de la Mora (1902-1988) corresponding to the periods of development of the international Garden City phenomenon and involving the new dimensions of early 20th century urban and regional planning.

On the other hand, I will point out some clues about the influence certain factors have had on the development of this early urban planning historiography in Spanish and about interrelations between the construction of a national planning history in Spain (containing references to France and other European and Western countries) and the increasing international circulation of concepts, ideas and patterns which is evidently revealed in the influences of foreign urbanistic cultures on Spanish planning construction.

Artistic Approach and Historiography Patterns in Early German-language Town Planning Literature

Susanna Weddige (Blekinge Tekniska Högskolan, Sweden / urbanHIST MSCA EJD)

Due to the rapid growth of industrialized cities followed by over-densification and hygienic deficiency in the mid-19th century, the conditions within the cities were in urgent need of structural improvement. First critical statements on James Hobrecht's Plan for Berlin (1858) by Ernst Bruch (1870) or about overcrowded Vienna by Arminius (1874) as well as the lecture by Rudolf Eitelberger von Edelberg (1858) during the Viennese Ringstraße competition served as preceding ideas and suggestions to Reinhard Baumeister's manual on city extensions (1876), the first comprehensive book on modern urban planning. Representing the formative years of the discipline, this book rather focused on technical, legal and economical preconditions of urbanism without concerning historical inquiries. Further writings as by Camillo Sitte (1889) and Josef Stübben (1890) leaning on Baumeister but stressing the focus more on artistic and morphological issues started to use historical references to legitimize their ideal conceptions. As notable in the dispute between Stübben and Karl Henrici in the 1890s, historiographical patterns emerged increasingly with shifting the emphasis from civil engineering to civic art.

More examples to confirm this thesis are the writings of Albert Erich Brinckmann and Cornelius Gurlitt. Brinckmann published his research on the history and aesthetics of civic art 1908. Later as a professor for urban design and its history in several German universities, he approached analysing historical references to extract artistic principles for further practice. Gurlitt founded the town planning seminar in Dresden 1910 and stressed the emphasis on historical research. In his manual on town planning published in 1920, he took a pragmatic position but still referred to historic examples.

This paper focuses on early theoretical works dealing with town planning history written in German, which shaped the international discourse from the late 19th century to the interwar period and cleared the way for the formation of an academic discipline. The connection between the artistic approach of the writings authors and the historical view on urbanism seems evident in early German-language town planning literature. It is of further interest to analyse, if this historiographical pattern also appears in other national contexts or language regions to get conclusions for a comparative transnational historiography of urbanism.

Historiographical Patterns in Early Anglophone Town Planning Literature

Helene Bihlmaier (Bauhaus University Weimar, Germany / urbanHIST MSCA EJD)

After German-language publications have been dominating town planning literature in late 19th-century Europe, Ebenezer Howard's seminal book "Tomorrow. A Peaceful Path to Real Reform" (1898) set a milestone in the Anglo-Saxon debate. Together with Thomas Horsfall and Patrick Geddes ("The Improvement of Dwellings and Surroundings of the People. The Example of Germany" and "City Development", both 1904), Howard established a scientific discourse on town planning in Great Britain, which at least since Raymond Unwin and Henry Inigo Triggs ("Town Planning in Practice" and "Town Planning, Past, Present, Possible", both 1909) has pursued an independent course. Many of these early British writings deal with the past in order to solve the problems of the present and the future. By highlighting the achievements of historic cities, the authors provided their readers with successful models and concepts. Yet, besides this rather practice-related function, historiographical discourse served to embody and forge the young discipline's self-conception and identity. In the following years, the institutionalization of town planning as an academic subject, endowed with specific chairs as well as the newly founded professional journals, further stimulated the discourse and thereby improved the historical narration of town planning.

This paper investigates the emergence of historiographical schemes and patterns in early Anglophone publications on town planning. It focuses on pivotal writings published between the late 19th century, when modern urban design was established as an academic discipline, and the 1920s, when modernist urban designers cut the ties between past and present and heralded an attitude of disinterest for planning history. It argues that, even though these publications were based on cultural, political and legislative discussions within national boundaries, some include – against the background of the British imperial and colonial setting at that time as well as the growing international significance of this topic – also historical considerations on a global scale. The paper intends to give a text-based reconstruction of the specific context, in which these writings arose, dealing with the different discourse constructions and their intersections, the transmigration and permanence of concepts and the oscillating approaches between national and global planning history.



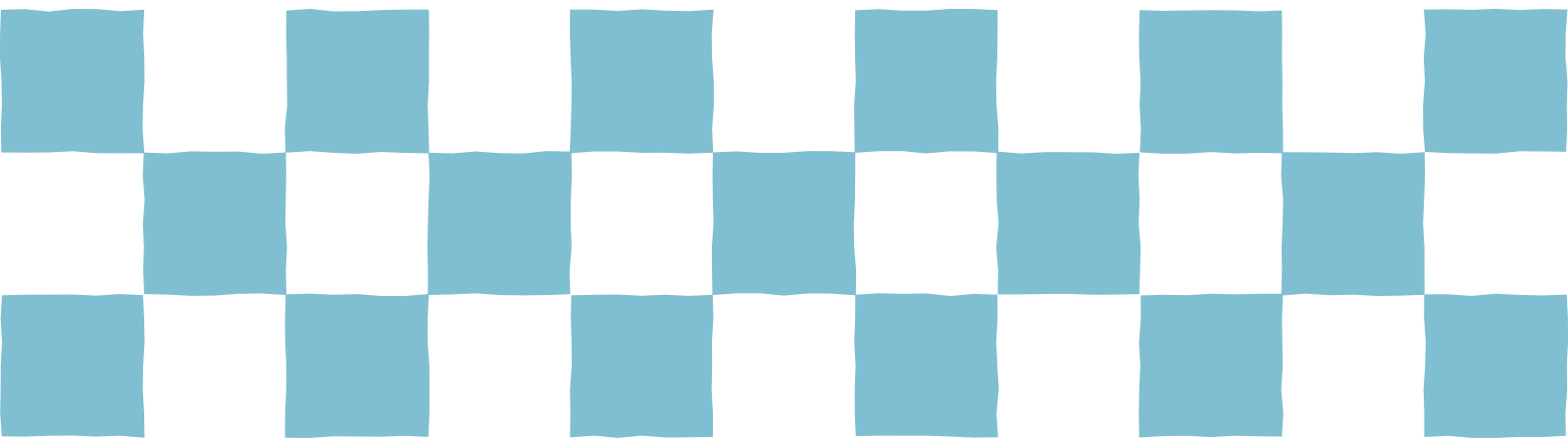
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

73 Immigrants, Settlements and Informal Urbanism



Negotiating Empires: Japanese American Settlement and the Japan Pavilion at the Golden Gate International Exposition

Lynne Horiuchi (Independent Scholar)

Japanese American settlement prior to World War II may be viewed as both Japanese colonial settlement and Asian American immigrant settlement. The ideological frames for these communities link their Japanese homeland to the American hostland during a time when Japan was aggressively colonizing in Southeast and East Asia and America was colonizing the Philippines and creating naval stations on Samoa, Hawai'i and Guam.

Using Japanese American settlement in the Western Addition of San Francisco as a case study, these links will be mapped out in an effort to understand how coloniality, as Lisa Lowe suggests, "operates through precisely spatialized and temporalized processes of both differentiation and connection." The Japan Pavilion and its colonizing narratives at the 1939-40 Golden Gate International Exposition will serve as an example of how the imaginative Japanese and American nationalisms of the Japanese government and Japanese American communities intersected in global and local contexts.

The U.S. Immigration Act of 1924 created clear generational breaks in Japanese settlement in America. Most Japanese immigrant settlers arrived between the late 1890s and 1924 when the majority of second generation Americans of Japanese ancestry were born and after which Japanese immigration into the US was barred. In the close quarters of segregation regulated by lack of access to American citizenship and land ownership, Japanese immigrants created self-supporting communities with their own services and institutions including retail and entertainment hubs, churches, health services, sports leagues, cultural centers, Japanese schools and bi-lingual newspapers.

Not only did young Japanese American women serve as hostesses in the Japan Pavilion, many of the programs organized for GGIE including publicity brochures were produced by the Japanese American community. Within the Japan Pavilion, the Japanese government exhibited messages of peace, unity, modernity and commerce, showcasing its Greater East Asia Co-Prosperity Sphere. Concurrently, the Japanese American community repeatedly stood in for Japanese nationals and signed visually as Japanese. These cultural celebrations of fictive nationalisms expressed the disconnections of ideological beliefs of both the Japanese government and the Japanese American community, at odds with the violence of a total war that by 1939 had already been set in motion.

These intersections between diasporic movement and urban development are beginning to be addressed as part of the growing literature on globalization but, with few exceptions, are rarely seen as historically interlinked and constitutive components of American urbanism that will be examined in this paper.

Teaching architecture and informal city in Recife (Brazil). 1959-1979

Enio Laprovitera Da Motta (Architecture School of the University of Pernambuco (BRAZIL))

In the first half of the 20th century, along with the phenomenon of metropolization, architects and urbanists consolidate their way of thinking the city as a single system where the parts are interdependent. That is how urbanistic interventions abandoned embellishment strategies of sectors of the city, in order to prioritize expansion plans that included the so-called informal settlements. This rearrangement of the city's territory corresponds to a rearrangement of the courses that allowed the spreading of modern urban planning.

During the first decade of the Architecture School of the University of Recife - founded in 1959 - the subjects inherited from the Fine Arts program were rearranged: the course "Urban Planning and Landscape Architecture" - that in part focused on the mindset of urban embellishment from the 1930's and 1940's - took the name "Urban Evolution and Planning" after the educational reform from 1963. The core of the debate then turned to the expansion of the city - including informal areas - in a metropolitan and even regional scale. It was only in 1969, with the establishment of a minimum curriculum in Brazil, that this course took its current name "Urban Planning", definitely drifting away from the old practices of urban rendering, once it was then based on mathematical indexes and on the specialization of uses of the modern zoning urban design.

Thus, a new academic course got consolidated in face of this urban reality where informal settlements mixed with the vertical modern architecture was starting to leave its original historical downtown area, moving towards new neighborhoods such as Derby, Espinheiro, Graças and Boa Viagem, and defining a metropolitan-sized urban smear.

However such debate was out of the "classroom circuit" - specially in subjects of projects, and theory and history - implying itself in the field of education through the "research circuit" and the "public contracts", particularly for the domain of urban planning. The individual contribution of architects newly graduated from the school started to stand out, once they would look for specialization programs in Europe - mainly at the Institute of Urban Planning of Paris - and in Latin America at the Centro Interamericano de Vivenda y Planeamento - CINVA from Bogota (Colombia) and at the Planning Institute of Lima (Peru) - even in the sixties and before the creation of the first graduation program in urban development here. At such institutions, the debate on the informal city already seemed to be consolidated.

From then on, and even though the debate encompassed many professions, this thinking migrated little by little from the writings of professor engineers of the architecture school to the newly graduated architects, especially after the creation of a graduation program in urban development in 1972, and the metropolitan planning agencies.

Thus, if the city landscape was divided between the mocambos and the first modernist vertical buildings, the field of education implied a split between the classroom and the research, which, last century, meant a kind of thematic detachment between undergraduate and graduate programs.

Cottage Areas: Squatter Resettlement and the Making of Self-Built Communities in Post-war Hong Kong

Carmen C. M. Tsui (City University of Hong Kong)

In contrast to the city's cosmopolitan image, Hong Kong has a long tradition of informal settlements and self-built homes. After the Second World War, a large number of war refugees from mainland China, as well as destitute locals, resorted to squatting on any deserted land they managed to find. Large squatter areas flourished everywhere and threatened the safety and sanitation of Hong Kong. In 1948, the government took action and required squatters to move to designated cottage resettlement areas where they would be less of a nuisance. There, evicted squatters could build simple cottages at their own expense. Most of the cottage resettlement areas were located on hilly sites, which made development difficult. These hillside cottage villages formed a characteristic architectural landscape unique to Hong Kong. What was daily life like in these cottage areas? How did settlers plan and build a community with scarce resources and minimal assistance from the government?

Interestingly, the cottage resettlement areas were portrayed by the government initially as a solution to the squatter problem and subsequently as a wasteful use of prime urban land. What made the government change its attitude towards the cottage resettlement areas? This study challenges the official narrative that often describes the cottage resettlement as a failed squatter resettlement strategy that was quickly replaced by a massive program to construct multi-storied resettlement estates. In fact, these multi-storied resettlement estates, introduced by the government in 1954, did not completely replace the cottage resettlement areas, in contrast to what the official narrative often described. The fact that the population of the cottage resettlement areas reached its peak in 1961, accommodating over 87,000 settlers in 15 locations, confirms that they were still an active resettlement tool used by the government even after the introduction of multi-storied resettlement estates. The continuation of cottage resettlement areas for five decades before the last one was eradicated in 2001 indicates their indispensable role in long-term housing development in Hong Kong.

The cottage resettlement areas were one of the most prevalent types of informal settlements in Hong Kong's history. They demonstrate the multiplicity in affordable housing solutions and the housing effort of the grassroots. The self-built nature of the cottage resettlement areas offers a flexible, economical, and quick approach to squatter resettlements, without which the government could never have the opportunities to develop a long-term housing program for Hong Kong. This study offers a more balanced view of Hong Kong's housing history by recognizing the efforts of the Hong Kong people, who have worked diligently to improve their living environments despite unfavorable conditions.

Reemergence of Plural Urbanism in the Age of Immigration: the Case of Sulukule

Canan Erten (Istanbul Bilgi University) and Duygu Yarimbasi (Mimar Sinan Fine Arts University)

Sulukule neighborhood of Istanbul is located right next to the Byzantine City walls that are surrounding the historical peninsula and is one of the oldest Roma settlements in the world where Roma population lived since early 15th century in the Ottoman Reign. Despite the efforts of the local habitants and several activist groups such as Sulukule Platform, between 2005-2009, this lively but poor neighborhood became the subject of state-led gentrification under the name of a large scale 'urban renewal project'. The luxurious looking wood clad villas were built in place those informal houses with hopes of conservative middle-class would move in and boost the area's economy. However, these new townhouses failed to attract Turkish renters who could afford to live here and the Roma people who wanted to keep living could not afford to stay and were pushed to the peripheries of the city.

In 2011, the times of crisis came when the civil war hit Syria. People started fleeing the war and coming to Turkey. After a while some Syrian refugees decided to move to Istanbul. As of 2017, there are 522.000 Syrian refugees registered in Istanbul out of over 3 million in Turkey. As reported by many national and international newspapers, as Syrian immigrants moved to Istanbul looking for a place to live, many landlords did not want to rent them their apartments and raised the rents so that immigrants could not afford them. But some tenants, like the ones now living in Sulukule, crammed a dozen beds into a small apartment, reminding an old laborer's tradition in Istanbul called Bedsitter dwellings ("Bekar Odasi" in Turkish)

As of today, there are app. 600 housing units where Syrian immigrants reside in (app. 4000-5000 people) Sulukule, along with middle class Turkish and Romani tenants who could manage live in the new houses.

Nonetheless, integration of Syrians to this new community was slurred over. Ten years later, this concluded in a neighborhood with two separate communities with two different languages those did not interact enough. Sulukule, formerly the liveliest neighborhood of the city with Romani dancing and singing in its streets, ended up with empty streets, street barriers and security guards looking up to avoid any kind of tension between two groups.

Former Romani housing units of Sulukule had a special plan typology where residents lived in single floor houses with shared courtyards. But the new housing typology hardly has an open common place let alone a balcony or a terrace, people started making adjustments to these sleek housing projects creating semi open spaces. Thus, while informal housing projects usually represented by former squatter like houses started to fall from favor, luxury residence built with global imagery became an 'informal' settlement. As a result, the possibility for hybrid urban situations started to reemerge and informal urbanism found its way to reproduce itself in Sulukule.

The urban transformation process of Sulukule and violation of Romani habitants' rights is much discussed in the last 10 years both on the academia and the media, but the situation of the neighborhood as of today, is not much debated. This paper analyzes the situation of Sulukule today and aims to probe migrants' and habitants' informal strategies to counter inadequate spatial qualities of the new Sulukule project.



INTERNATIONAL PLANNING HISTORY SOCIETY

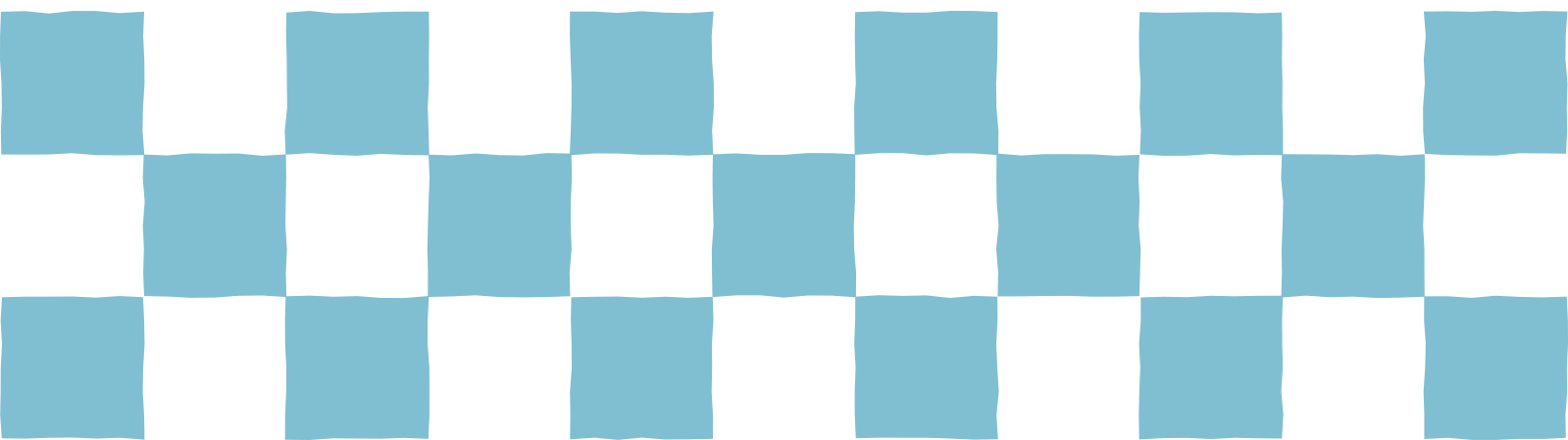
YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

74

Planning Concept and Urban Design Theory (1)



Whatever happened to biological thinking in urban planning?

Marco Amati (RMIT University)

Since 2007 the proclamation of the 'urban age' by the UN has been heralded as a critical moment in human society and history. The 'urban' has taken its place alongside the anthropocene as a new era for humanity. Its importance as a transformational moment has been underscored by scientific interest in cities. Anxiety about urbanisation was a motivator for early town planning activity in the 19th century. The tools developed by different disciplines to solve the crisis of 19th century urban development were designed around human welfare needs. With our cities forming both the origin and the solution to our planetary environmental crisis, a broader set of planning thoughts, languages and metaphors are needed that go beyond the mere human. Thinking biologically about Homo Sapiens in cities will be critical to our survival.

Planning history has a role to play in this project, drawing on the past to identify a biological lineage in urban planning and reveal what has and has not been successful. The aim of this paper is to start that identification. It forms part of a larger project to trace a lineage of biological thinking in urban planning history during the twentieth century. The paper analyses and reinterprets the use of science and biology by two influential planning visionaries: Sir Patrick Geddes (1854-1932) and Le Corbusier (Charles-Édouard Jeanneret, 1887-1965)

Among the luminaries of his age, Geddes as a biologist turned sociologist was a unique figure. He attempted to grapple with the early 20th century urban age in biological terms. Le Corbusier, also used science and biology to argue for universal rules to guide urbanism and as an aesthetic. The paper describes the biological work of these canonical planning thinkers to consider why humanism became the hegemonic frame for urban planning in the twentieth century.

Cultural Translation through Pedagogical Experiments: investigating the intermediate scale in the Southern Cone of Latin America at the turn of the 1980s

Gisela B. Souza (Federal University of Minas Gerais)

The widespread dissemination of Italian studies on type-morphology throughout Europe in the 1970s has often been characterized as a turning point in urbanism and architectural practice and theory. As Hebbert (2004) pointed out, "from 1970 onwards, urbanism meant a return to the urban spaces of street and square, with their complexity and richness of memory, and a return to the mother-discipline of architecture."

In the Latin American context, the first approaches with such studies were initiated in the late-1970s, mediated by local architects that had spent time working or studying abroad. Most of them divided their time between teaching and professional practice. Therefore, this paper focuses on the cultural translations of typo-morphological experiments that were conducted in Argentinian, Uruguayan and Chilean schools between late-1970s and mid-1980.

We intend to demonstrate that, if contact with type-morphological studies can be a clue to understanding the turning point in the recent architectural and urban culture in the Southern Cone, the teaching practice was the place to experiment with it. Through pedagogical experiments, local assumptions have been questioned and revised, and foreign ideas have been adapted to the Latin-American context. Through losses, fusions and additions, new meanings have been built into this displacement process. The level of commitment of the translators of the original typo-morphological studies was not equal: some of them sought to maintain a strong link with the European inquiries, others took a free approach to this subject. Nevertheless, despite the differences between each local approach, the intervention on the intermediate scale — the middle place "between the global concerns of the economic planner and the architectural building-as-object" (Solá-Morales, 1997)— by means of pedagogical exercises was the locus for testing those new ideas, for investigating and validating new concepts.

After an overview of the Southern Cone scenario during that period, we demonstrate, through four case studies, the relationship between investigation by means pedagogical exercises and the creation of new concepts and ideas for describing and understanding the specificities of Latin American cities. The first one is the conception of "the Urban Block Architecture" of Diaz, after a first pedagogical exercise held by Diaz, Solsona and Viñoly, in 1978, at La Escuelita—an alternative school created in Buenos Aires during the Argentinian dictatorship government. The second case is the Urban Design studio held by Manuel de Lucco at Universidad Nacional de Rosario, in 1981 (Rosario, Argentina) and the definition of "Cities of Recent Formation" in mid-80s. The third case examines the experiments conducted by Sprechmann at Architectural School at Universidad de la República (Uruguay, Motevideo) in the early-1980s and the idea of a "democratic city" in mid-80s. And the final case explores the the two studios held at the Universidad Catolica de Chile by a group of Chilean architects, named CEDLA, and the conception of the "Latin American City" identity in early 80s.

Two Initiatives for the Planning of Izmir in the mid-Twentieth Century: Le Corbusier's Proposal for a Green City (1948) and the International Planning Competition of 1951

Cana Bilsel (Middle East Technical University Department of Architecture)

The Mediterranean port city of Izmir, which is one of the three major cities of Turkey, has a pioneering place in the twentieth century planning history of the country. The first comprehensive city plan, prepared by the French planners R. Danger and H. Prost in 1924-25, was implemented partially for the reconstruction of the central districts. After the Municipalities Act was enforced in 1934, the City of Izmir searched for a new planner. The municipality addressed to Le Corbusier for the preparation of a new a master plan and signed a contract with him in 1938. Interrupted by the World War II, however, the architect handed over a master plan schema and report, in 1949, entitled "Project of Master Plan for the City of Izmir on the Theme of a Green City with a Population of 400.000." In this planning proposal, Le Corbusier applied for the first time the Grille CIAM d' Urbanisme. He proposed a new residential settlement according to his "green city" model, a civic center with cultural facilities and office towers, and a "linear green industrial city." His suggestion to transform the historic center was one of the most critical issues in Le Corbusier' s planning proposal for Izmir, which was not found feasible by the local authority.

Two years later, the Municipality organized an international competition in 1951. Sir Patrick Abercrombie was invited as the head of the jury. The brief of the "International Project Competition for the Master Plan of Izmir" was based on the prevision of a population of 400.000. It is interesting to observe that almost all the participants of this competition put forward images of a modern port city. High rise office blocks surrounded by large open spaces characterized the "civic centers" depicted in most of the projects. It can be argued that although Le Corbusier' s master plan proposal for Izmir was not implemented directly, his ideas continued to be influential in shaping the modern city image of the postwar period. Among several international entries, the planning proposal by Kemal Ahmet Arû, Emin Canpolat, and Gündüz Özdeğir, professors of city planning in the Istanbul Technical University was awarded the first prize. Neighborhood units separated by green corridors, which Arû defined as "small organic units located inside nature" characterized their planning proposal. One of the most significant contributions of this plan has been the conservation of the historical commercial center while creating a modern civic center next to it.

In this presentation, the main features of Le Corbusier' s master plan project, and significant projects selected by the jury at the International Planning Competition of Izmir will be compared with a particular focus on K. A. Arû and his team' s master plan proposal.



Whatever happened to biological thinking in urban planning?

Marco Amati*.

* RMIT University marco.amati@rmit.edu.au

Since 2007 the proclamation of the ‘urban age’ by the UN has been heralded as a critical moment in human society and history. The ‘urban’ has taken its place alongside the anthropocene as a new era for humanity. Its importance as a transformational moment has been underscored by scientific interest in cities. Anxiety about urbanisation was a motivator for early town planning activity in the 19th century. The tools developed by different disciplines to solve the crisis of 19th century urban development were designed around human welfare needs. With our cities forming both the origin and the solution to our planetary environmental crisis, a broader set of planning thoughts, languages and metaphors are needed that go beyond the mere human. Thinking biologically about *Homo Sapiens* in cities will be critical to our survival.

Planning history has a role to play in this project, drawing on the past to identify a biological lineage in urban planning and reveal what has and has not been successful. The aim of this paper is to start that identification. It forms part of a larger project to trace a lineage of biological thinking in urban planning history during the twentieth century. The paper analyses and reinterprets the use of science and biology by two influential planning visionaries: Sir Patrick Geddes (1854-1932) and Le Corbusier (Charles-Édouard Jeanneret, 1887-1965). Among the luminaries of his age, Geddes as a biologist turned sociologist was a unique figure. He attempted to grapple with the early 20th century urban age in biological terms. Le Corbusier, also used science and biology to argue for universal rules to guide urbanism and as an aesthetic. The paper describes the biological work of these canonical planning thinkers to consider why humanism became the hegemonic frame for urban planning in the twentieth century.

Keywords: Biological thinking, Le Corbusier, Patrick Geddes, urban metabolism, the urban age.

The age of biology meets the urban age

Since 2010 the leading journal *Nature* has featured a section on its website about cities¹. The site profiles and promotes the ‘special relationship’ between scientists and the city aiming to understand how they can bring out the ‘best in the other’. The hope is that scientists can assist cities in tackling their biggest problems. Included is an exemplar: a profile of the Nobel Chemistry Laureate Mario Molina who returned to Mexico City in 2005 to “tackle the messy world of public policy, urban planning and climate change”².

Molina is only one recent example of a scientist who has worked to apply science to city planning and management. Other important examples include the physicists Geoffrey West and Luis Bettencourt who have proposed a universal theory of cities³ also in collaboration with numerous other scientists at the Santa Fe Institute⁴. West’s ground-breaking and visionary transdisciplinary work is summarised in his popular science book ‘*Scale: The Universal Laws of Growth, Innovation, Sustainability, and the Pace of Life in Organisms, Cities, Economies, and Companies*’⁵ which proposes a ‘Grand Unified Theory of Sustainability’ (p. 411).

The interest of scientists and even physicists in cities has been a varying feature of urban planning for much of the twentieth century⁶. Much of this focus has been guided by an organic or biological conception of the city⁷. This continues a long tradition from Aristotle of likening the city to an organism, but throughout history the distinctions between the city, nature and landscape have remained fluid⁸. For Auguste Comte (1798-1857) for example, an organic metaphor of cities offered a way of understanding the construction of societies and the relationship between cities and hinterlands:

“The Fatherland establishes a relation between the soil and social order; and thus the organs of the Great Being can only be cities, the root of the word being the nucleus of the term civilisation. Cities are, in truth, themselves beings; so organically complete that, as each is capable of separate life, it instinctively aspires to become the centre of the vast organism of Humanity. In this tendency the Social organ differs radically from the organ in Biology, which has no separate completeness [...] The smallest city contains all the elements and tissues, required for the life of the Great Being, in the Families, and in the Classes or Castes, within it.”⁹



In the history of planning, the use of metaphors and a language to describe cities in terms of biology has been a persistent theme¹⁰. Biological thinking about cities and planning strongly influenced Patrick Geddes, the prototypical biologist turned planner, and various key thinkers – Jane Jacobs, Lewis Mumford and Christopher Alexander. Yet, biological thinking has remained a secondary concern for planners for much of the twentieth century or has appeared as an environmental concern¹¹, which is humanistic in origin. If it becomes necessary for planners to think and consider the ‘more than human’¹² developing and nurturing biological languages and metaphors for cities and for planning becomes necessary¹³. In other words, we should plan less for humans and more for *Homo sapiens* if we are to avoid widespread ecological destruction. Yet what further traces can we find of biological thinking in planning during the twentieth century and whatever happened to this? This paper contributes to this growing area of interest and points to some of the simple and fundamental reasons why biological thinking disappeared or was subsumed into a hegemonic humanistic discourse during the twentieth century.

A clear answer was that the engagement between planning and science in general but specifically biology has been tainted by problematic associations during the twentieth century. For example, planners were strongly influenced by the Chicago School’s Robert E. Park and Ernest Burgess’s borrowing of competition and other concepts from nineteenth century social Darwinism¹⁴. Although influential, this was shown to be flawed¹⁵. In general, the aim of science to achieve universal laws and theories ignores the particular and diverse reality of cities. Furthermore, the history of planning is problematically linked to a colonial project of progress which is supported by universalism. A watershed moment for science and planning during the post-War period was the failure to translate a systems theory of planning into pragmatic action and the eloquent criticisms of planning by Jane Jacobs in *Death and Life of Great American Cities*¹⁶ (1961).

The following selects two luminaries from planning history, illuminating their biological thinking and contributing to the path set by Batty and Marshall¹⁷. The selection is guided by their emphasis on science and their importance to the field. Sir Patrick Geddes’ biological thinking in relation to cities, is examined by drawing on secondary sources and primary material at the National Library of Scotland and the Geddes Archives at the University of Strathclyde. Also examined is the work of the Swiss-French architect Le Corbusier. Le Corbusier is of course an icon of modernist planning and committed much of his career to insisting on the need for a scientific approach to planning¹⁸. The overall aim is to examine the thinking of these two figures and how they attempted to reconcile science, biology and the complex reality of cities.

Geddes’ theory of biology and theory of life

Geddes, making a career transition from biology to social sciences in the late 1880s brought a particular set of ideas to urban history¹⁹. Firstly, borrowing from the German biologist Ernst Haeckel, he considered cities to be ontogenetic. In other words, in the same way that a developing mammalian embryo will briefly transition through a set of vestigial stages in the uterus (eg. tail, gills), Geddes believed that all cities both contain similar elements that both remain in vestigial form as traces of their development. Similarly, cities had to go through these stages as part of their development. Geddes also recognised from his travels that a variety of urban possibilities existed and understood that at various periods in history cities had died. He envisioned how this cycle of life and death could be linked in an evolutionary cycle and that cities developed and changed as though on a branching phylogenetic tree. The phylogenetic metaphor for thinking about city evolution is shown in Figures 1 and 2. The idea of a historical progression and development from one city to the next as with species is shown in Figure 1, with Hellenic cities at the lowest branch spawning various city types that became extinct, before a successful evolutionary model led to a Hellenistic city and so on through to a modern European city. The interaction was implicit in the definition of stages of urban development in the “Ui Breasail” Cities and Town Planning Exhibition in Dublin 1911 for example (Figure 2).

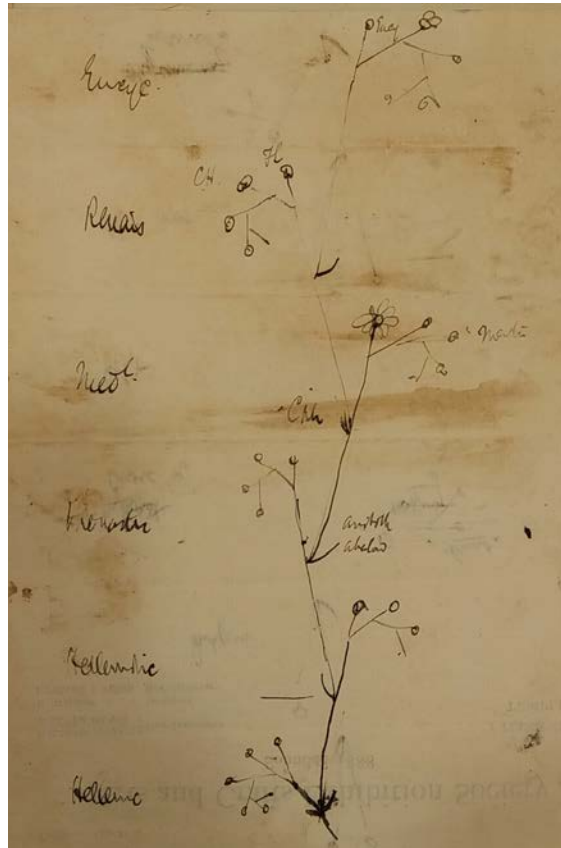


Figure 1: Phylogenetic classification of the history of cities (undated). Text on left reads: Hellenic, Hellenistic, Monastic (?), Med. (Medieval), Renaiss (Renaissance), Empire (Europe?). University of Strathclyde, Archives of Sir Patrick Geddes, T-GED/6/11. Compare with Figure 2.

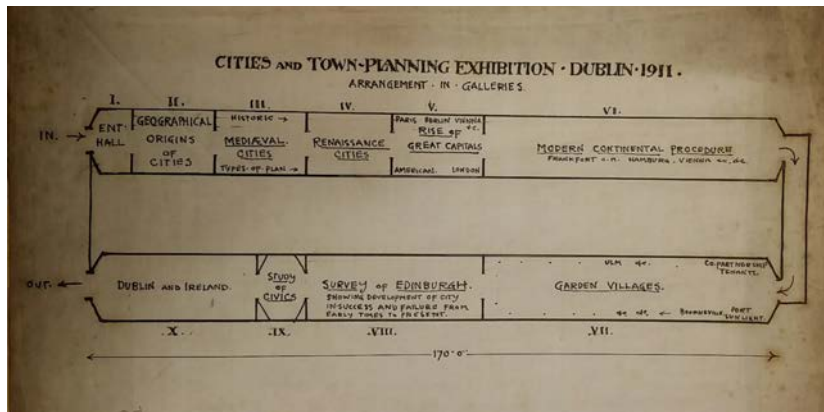


Figure 2: Layout of the Cities and Town Planning Exhibition Dublin 1911. T-GED/6/11/2.

Yet, for Geddes, city evolution, as well as being a question of genetic transfer was one of memetic or cultural transfer. In other words, the city occupied the role of a nucleus within a cell passing on the cultural inheritance of a regional civilization from one generation to the next²⁰. Permanent and travelling exhibitions represented a means of facilitating this transition²¹, as did Geddes' frequent travelling, the summer schools he organised and even the Masques or theatrical performances²².

As Helen Meller notes, Geddes was spatial thinker and for that reason he employed geometry to express his ideas rather than algebra. The two dimensions required for a flat piece of paper meant that his ideas would be limited by this medium could only be far more restricted than is needed for the increasing number of concepts he found essential use" p. 37.²³ Yet, at the same time, this limited typology forced him to bring together ideas and terms that would not normally be associated.



While Geddes' contribution is often considered in isolation his work was subsequently important to modernism in two important ways. Firstly, his enthusiasm for libraries and education through museums²⁴ found its voice through support for the 'universalism' of Paul Otlet²⁵. Secondly, through the work of the Anglo-Greek architect Jaqueline Tyrwhitt his work was translated into the post-War work of CIAM²⁶.

Le Corbusier – from the cell to the City

Geddes started his career as a scientist and then largely eschewed scientific theory and empirical testing when he applied his focus to town planning. Le Corbusier on the other hand had no formal training in science but had a firm belief in the power of science to revolutionise urbanism. As Von Moos (2009) points out²⁷, Le Corbusier's early artistic and design education in the 'Cours Supérieur d'Art et de Decoration' under Charles L'Eplattenier was embedded in the aim of creating a decorative style that was embedded in appreciating and abstracting the nature around the Jura region. Le Corbusier was motivated by a romantic engagement with nature following in the footsteps of John Ruskin. The magazine *l'Esprit Nouveau* that he co-founded and ran from 1920-1925 regularly included articles on science. In some cases, there were articles by scientist themselves, in other cases latest advances were subject to interpretation by one of the editorial team, they represent a means of illustrating the ideas of science that underpinned Le Corbusier's ideas. For example volume 9 includes an article by the engineer Paul Recht on 'Pré-adaptation' a review of the book '*Chimie et la vie*' by the biologist Georges Bohn (1868-1948). The article questions the extent to which Darwinian natural selection can be brought down to the molecular or chemical level. A key concern for Le Corbusier and his colleagues as Lopez-Duran notes²⁸, was that mechanical advances in science had made much faster progress than biological advances. Thus, the article by Recht already points to a molecular-mechanical interaction and would have been selected to show how biology was catching up with mechanics.

A major influence on the biological thinking of Le Corbusier however, was Dr Pierre Winter who wrote articles for the magazine on sport and the human body. In one article entitled "Le Corps Nouveau"²⁹ Winter describes the potential of the healthy and hygienic human body to bring about a societal revolution. After three pages of ecstatic language he describes the human body as a clean and minimal element as part of a new society: "*Le corps va réapparaître nu sous le soleil, douché, musclé, souple.*" (The body will reappear naked under the sun, showered, muscular, supple). Geddes was strongly influenced by the English philosopher and founder of eugenics Herbert Spencer (1820-1903) but never expressed or connected town planning with eugenics. While Geddes attempted to develop the theory of biology alongside town planning into a theory of life, for Le Corbusier, another means by which biology and the city came together as a eugenic project was to 'improve' man. As Lopez-Duran notes in her history of transatlantic Eugenics.³⁰

Yet Le Corbusier's biological perspective gave him an ability to see the urbanism as a problem to be tackled with the human body at the centre, although the strength of his assertion gave an impression that he alone had solved or reduced this complexity to its essentials. A clear definition of Le Corbusier's view of science comes through an analysis of his description of the functional city during the CIAM congress aboard the *SS Paris* in 1933 as Mumford notes (p. 79).³¹ Unknowingly celebrating the Anthropocene, the plans by CIAM represented no less than a 'biology of the world'. In CIAM Le Corbusier asserted that the role of the planner was to develop 'honest means of expression' to prescribe to authorities. 'Through bodily movement the three dimensions imply the notion of time, and our lives are regulated by the "solar regime" of twenty-four hours and the year, which "commands distances and heights"' (p. 79).³²

Conclusion: if the twentieth century's planning was Euclidean, the twenty first century's will be Fractal

In 1961 Jane Jacobs famously criticised planning as a 'pseudo-science' comparing it to bloodletting and labelling its 'plethora of subtle and complicated dogma' as a foundation of nonsense (p.13).³³ Since that time, planning has embraced a range of non-scientific ways of understanding. These theories are not those that would be recognisable to a physicist like Geoffrey West. In other words, a way of modelling or seeing the world that is based on first principles and has some predictive power which can be empirically tested. Instead theorising in planning is meant in part to guide practice and is in part a phenomenological project.

For both Geddes and Le Corbusier scientific understandings of cities were of course flawed from a number of perspectives. For Le Corbusier, science, rationality and standardisation were avowedly tools for prediction and analysis to derive a deeper or more fundamental understanding of cities but were also part of a suite of propaganda tools to further his own projects. For Geddes on the other hand, city planning was a spoke on a wheel in which the hub was an open-ended quest for a theory of life. Biology, geography and sociology all comprised other spokes of the wheel. His ability to jump from one spoke to another and to think laterally about a problem of city planning, particularly in a colonial context³⁴ make his ideas seem almost post-modern and contemporary.

For both, the role of science and in particular biology in city planning was an inspiration and a source of metaphor. Yet, it was not just a question of not embracing or understanding science but also that science itself wasn't up to



the task of understanding the city. Both were limited by the constraints of their Euclidean geometry. In 1967 the French mathematician Benoit Mandelbrot published a landmark study examining why the apparent length of the British coastline increases the more accurately it is mapped³⁵. This seemingly simple question gave rise to a new paradigm in mathematics and a deep understanding of fractals and their dimensions. It is the basis of the work of Michael Batty and others who work in complexity³⁶ but it also provides a way of explaining the efficiency of life forms such as trees, mammals and cities³⁷.

Table 1 is an initial and simple binary approach to the different periods during the twentieth century of thinking about the application of biology in planning. There are many further periods to detail this initial layout as part of this ongoing project.

Table 1: A binary approach to biological thinking in cities and planning

Geometric	Systems	Organic	Environmental	Ecological
Euclidean	Closed	Society as a human body	Sanitary	Location theory and social organization
Fractal	Open	City as a natural system	Sustainability	Ecological expansion and segmental growth
References				
Batty ³⁸	Berry ³⁹	Harvey ⁴⁰	Daniels ⁴¹	Morgan Grove et al ⁴²

Both Geddes and Le Corbusier while seeking to point to explanations about the city that were linear or Euclidean, had an instinctive or even artistic understanding of the relationship between fractal objects in nature and cities. In his book *Cities in Evolution* (p. 25) Geddes described a view of London that would have been unfamiliar to many at the time⁴³. He imagined looking from above on the large smoking city as though looking down on a coral reef. On his so-called 'man-reef' the buildings were the hard structures that had steadily been accreted upon over the centuries. The polyps were the humans and other life forms that existed on these.

Le Corbusier frequently used biological and fractal imagery in his designs toying with them. It can be easy to see these as providing a stark contrast with the flat and angular surfaces of some of his designs, but his writing reveals a deeper more instinctive understanding of nature. Figure 3 shows the tree growing in the middle of the patio on the Pavillon de l'Esprit Nouveau (1924). It clearly illustrates Le Corbusier's focus on light as a source of life. But there it also show the geometric contrasts of the two forms. Whereas the geometry for describing the built form was well understood that of nature was yet to be formulated. Figure 4 shows the interior of the later Pavillon Suisse 1930. A majority of the natural forms on photographs on the wall refer to the idea of natural habitation, such as animal and plant cells and honeycombs. While Le Corbusier would have been doing this to playfully and aesthetically allude to his ideas as an extension of nature the idea of bringing human and natural habitation in line with one another is a first and necessary step in thinking biologically in the city.

For contemporary planners these reflections on the historical role of science in planning should provide a way of better understanding how to embrace biological thinking in planning. The use of biology, however incompletely understood, and even as a metaphor can provide a powerful narrative to describe a vision for a new city or development. At the same time, the biology that is being advocated by West and colleagues describes a helicopter perspective on cities that seeks to propose universal rules. Yet, necessarily there are large cities and areas of the world where the data for corroborating these conclusions do not exist. A feature of the urban age is that we have very large cities, which do not reliably fall inside the ambit of reliable data gathering, let alone reliable planning control. We may never know the extent to which Bettancourt and West's laws about the city apply simply because as economies develop data gathering improves along with public welfare and cities change to resemble those of developed country cities.

For Le Corbusier a recurring theme was the human body and the idea of the city as a problem to be tackled at the human scale. While a helicopter view can offer general insights that can guide interventions about the city, science has a great deal to offer at the human scale by considering the problem of human beings as Sapiens.

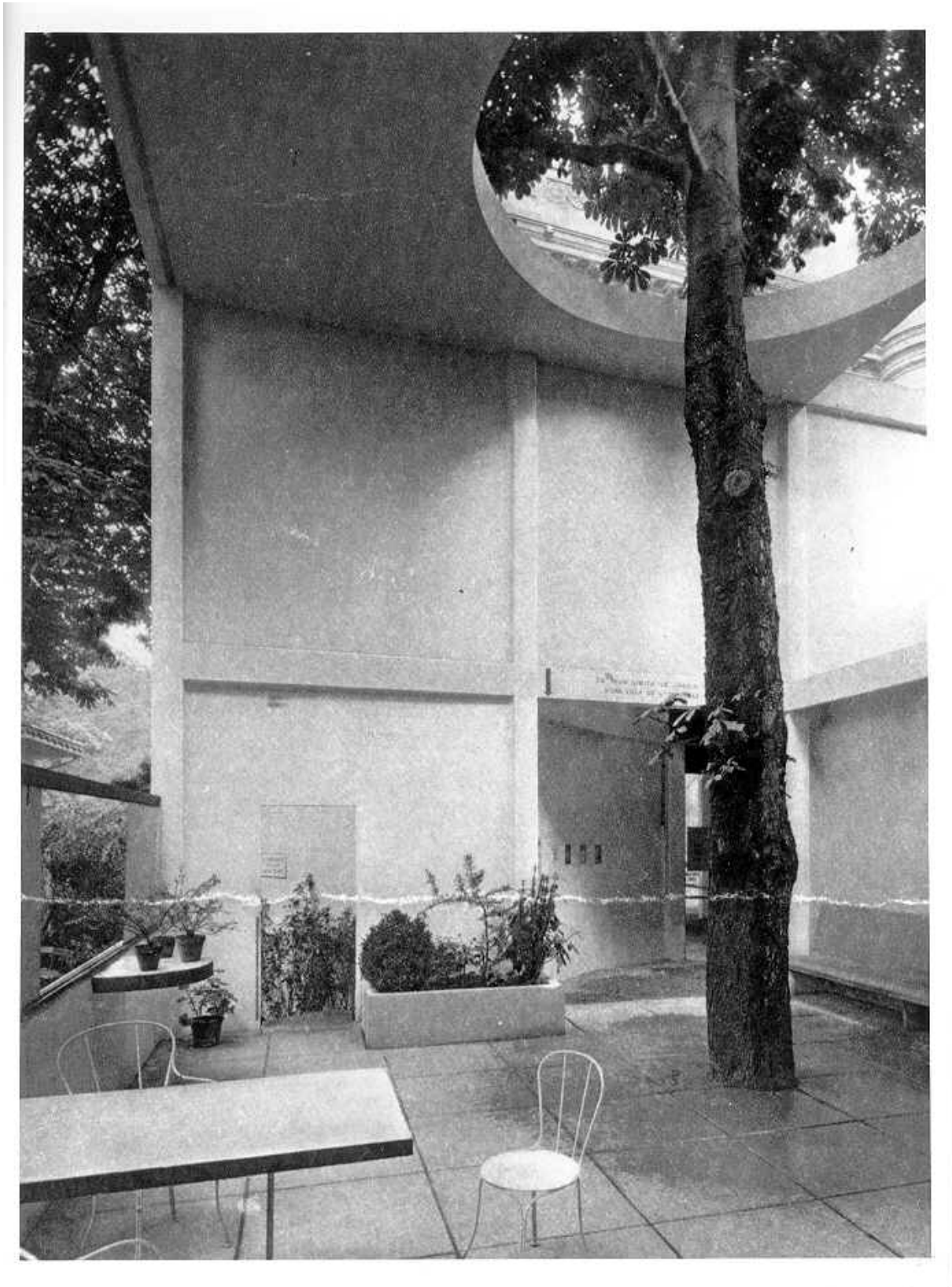


Figure 3: Pavillon de l'Esprit Nouveau 1924. Fondation Le Corbusier.



Figure 4: Interior of the Pavilion Suisse 1930. Fondation Le Corbusier

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor(s)

Marco Amati is an environmental scientist with a PhD in planning from the University of Tsukuba (Japan). He has edited three books “Urban green belts in the 21st Century” (2008); “Exhibitions and the Development of Modern Planning Culture” (2014) with Robert Freestone and “Conflict and Change in Australia's Peri-Urban Landscapes” (2016) with Andrew Butt and Melissa Kennedy. He works at RMIT University where he teaches planning history and researches urban forests.

Endnotes

¹ <https://www.nature.com/collections/gdtjmkkbjr#news>

² *ibid*

³ Bettencourt, Luis, and Geoffrey West. "A unified theory of urban living." *Nature* 467.7318 (2010): 912.

⁴ Bettencourt, Luis MA, José Lobo, Deborah Strumsky, and Geoffrey B. West. "Urban scaling and its deviations: Revealing the structure of wealth, innovation and crime across cities." *PloS one* 5, no. 11 (2010): e13541. Kühnert, Christian, Dirk Helbing, and Geoffrey B. West. "Scaling laws in urban supply networks." *Physica A: Statistical Mechanics and its Applications* 363, no. 1 (2006): 96-103.

⁵ West, G. (2017). *Scale: The Universal Laws of Growth, Innovation, Sustainability, and the Pace of Life in Organisms, Cities, Economies, and Companies*. Penguin.

⁶ J Morgan Grove et al. (2015) *The Baltimore School of Urban Ecology: Space, Scale, and Time for the Study of Cities* Yale University Press.

Marchetti, C. (1994). Anthropological invariants in travel behavior. *Technological forecasting and social change*, 47(1), 75-88.

⁷ Davison, G. (1983). The city as a natural system: theories of urban society in early nineteenth century Britain. *The pursuit of urban history*, 349-370.

⁸ Weller, R. (2016) The City is Not an Egg, in Frederick R. Steiner, George F. Thompson and Armando Carbonell (eds), *Nature and Cities: the ecological imperative in urban design and planning*, Lincoln Institute of Land Policy.



⁹ Comte, Auguste. *System of Positive Polity: Social dynamics; or, the general theory of human progress*. Vol. 3. Longmans, Green and Company, 1876. [p.240] I am grateful to Robert Freestone for this quote

¹⁰ Batty, M., & Marshall, S. (2017). Thinking organic, acting civic: The paradox of planning for Cities in Evolution. *Landscape and Urban Planning*, 166, 4-14.

¹¹ R. Freestone. Australian environmental planning: origins and theories. In J. Byrne, N. Sipe, and J. Dodson, editors, *Australian Environmental Planning: challenges and future prospects*, pages 21–35. Routledge, London, New York, 2014.

for Australia, C. Wood. Environmental planning. In B. Cullingworth, editor, *British Planning: 50 years of urban and regional policy*, pages 250–263. Athlone Press, London and New Brunswick, NJ, 1999, for the UK, T. L. Daniels. A trail across time: American environmental planning from city beautiful to sustainability. *Journal of the American Planning Association*, 75(2):178–192, 2009 for the US.

¹² D. Houston, J. Hillier, D. MacCallum, W. Steele, and J. Byrne. Make kin, not cities! multispecies entanglements and ‘becoming-world’ in planning theory. *Planning Theory*, 0(0):1473095216688042, 0.

¹³ The twenty first century is expected to be the so-called ‘age of biology’ in which life-sciences are meant to revolutionise human progress and potentially lead to solutions to avoid ecosystems collapse. For example see the OECD proclaimed in 2012 the age of biology: <https://www.oecd.org/sti/biotech/A%20Glover.pdf>. Indeed West’s departure from the world of theoretical physics is linked to the defunding of the Superconducting Super Collider in 1993 by the Clinton administration (West, 2018, 83). On cities being both the origin and solution to environmental crises: Rees, William, and Mathis Wackernagel. "Urban ecological footprints: why cities cannot be sustainable—and why they are a key to sustainability." *Environmental impact assessment review* 16, no. 4-6 (1996): 223-248.

¹⁴ M. V. Melosi. The historical dimension of urban ecology: frameworks and concepts. In A. R. Berkowitz, C. H. Nilon, and K. S. Hollweg, editors, *Understanding Urban Ecosystems: A New Frontier for Science and Education*, pages 187–200. Springer, New York, NY, 2003

¹⁵ J Morgan Grove (2015) *The Baltimore School of Urban Ecology: Space, Scale, and Time for the Study of Cities* Yale University Press.

¹⁶ Taylor, N. (1998). *Urban planning theory since 1945*. Sage.

¹⁷ Batty, M., & Marshall, S. (2017). Thinking organic, acting civic: The paradox of planning for Cities in Evolution. *Landscape and Urban Planning*, 166, 4-14.

¹⁸ To name but one example see his essay on the construction and evolution of automobiles as a proxy for functional form: “L’établissement d’un standart procède de l’organisation d’éléments rationnels suivant une ligne de conduite rationnelle également.”

¹⁹ See for example: Welter, Volker M. *Biopolis: Patrick Geddes and the city of life*. mit Press, 2002. Also: Ponte, Alessandra, and Jessica Levine. "Building the stair spiral of evolution: The Index museum of sir Patrick Geddes." *Assemblage* 10 (1989): 47-64.

²⁰ Welter, Volker. The Valley Region: from figure of thought to figure on the ground. In Ibañez Daniel and Katsikis Nikos (eds). *Grounding Metabolisms*, Harvard University Press, Mass. 2014.

²¹ Amati, Marco, Freestone, Robert and Robertson, Sarah. “Learning the city”: Patrick Geddes, exhibitions, and communicating planning ideas. *Landscape and Urban Planning*. (2017) 166,

²² Defries, Amelia. "The Masque of Learning." In *Revival: The Interpreter Geddes (1928)*, pp. 41-56. Routledge, 2018.

²³ Meller, Helen. *Patrick Geddes: social evolutionist and city planner*. Routledge, 2005.

²⁴ Geddes, Patrick. "A Suggested Plan for a Civic Museum (OR Civic Exhibition) and its Associated Studies." *The Sociological Review* 1 (1906): 197-230.

²⁵ Van Acker, Wouter. "Architectural Metaphors of Knowledge: The Mundaneum Designs of Maurice Heymans, Paul Otlet, and Le Corbusier." *library trends* 61, no. 2 (2012): 371-396.

²⁶ Shoshkes, Ellen. "Jaqueline Tyrwhitt translates Patrick Geddes for post world war two planning." *Landscape and Urban Planning* 166 (2017): 15-24.

²⁷ Von Moos, S. (2009) *Le Corbusier Elements of a Synthesis*. 010 Publishers, Rotterdam.

²⁸ López-Durán, Fabiola. *Eugenics in the Garden: Transatlantic Architecture and the Crafting of Modernity*. University of Texas Press, 2018.

²⁹ Winter, Pierre. "Le Corps nouveau." *L'Esprit nouveau. Revue internationale illustrée de l'activité contemporaine* 15 (1922): 1755-1758.

³⁰ López-Durán, Fabiola. *Eugenics in the Garden: Transatlantic Architecture and the Crafting of Modernity*. University of Texas Press, 2018.

³¹ Mumford, Eric Paul. *The CIAM discourse on urbanism, 1928-1960*. MIT press, 2002.

³² Ibid.

³³ Jacobs, Jane. "The death and life of great American cities." *New York: Vintage* (1961).

³⁴ Khan, Naveeda. "Geddes in India: town planning, plant sentience, and cooperative evolution." *Environment and Planning D: Society and Space* 29, no. 5 (2011): 840-856.

³⁵ Mandelbrot, Benoît. "How long is the coast of Britain? Statistical self-similarity and fractional dimension." *science* 156, no. 3775 (1967): 636-638.

³⁶ Batty, Michael. *Cities and complexity: understanding cities with cellular automata, agent-based models, and fractals*. The MIT press, 2007.

³⁷ West, G. (2017). *Scale: The Universal Laws of Growth, Innovation, Sustainability, and the Pace of Life in Organisms, Cities, Economies, and Companies*. Penguin.

³⁸ Batty, Michael. *Cities and complexity: understanding cities with cellular automata, agent-based models, and fractals*. The MIT press, 2007.

³⁹ Berry, Brian JL. "Cities as systems within systems of cities." *Papers in regional science* 13, no. 1 (1964): 147-163.

⁴⁰ Harvey, David. *Social justice and the city*. Vol. 1. University of Georgia Press, 2010.

⁴¹ T. L. Daniels. A trail across time: American environmental planning from city beautiful to sustainability. *Journal of the American Planning Association*, 75(2):178–192, 2009

⁴² J Morgan Grove (2015) *The Baltimore School of Urban Ecology: Space, Scale, and Time for the Study of Cities* Yale University Press.

⁴³ Geddes, Patrick. *Cities in evolution*. Williams & Norgate, 1949.

Bibliography:

Amati, Marco, Freestone, Robert and Robertson, Sarah. “Learning the city”: Patrick Geddes, exhibitions, and communicating planning ideas. *Landscape and Urban Planning*. (2017) 166, Batty, M., & Marshall, S. (2017). Thinking organic, acting civic: The paradox of planning for Cities in Evolution. *Landscape and Urban Planning*, 166, 4-14.



- Batty, Michael. *Cities and complexity: understanding cities with cellular automata, agent-based models, and fractals*. The MIT press, 2007.
- Berry, Brian JL. "Cities as systems within systems of cities." *Papers in regional science* 13, no. 1 (1964): 147-163.
- Bettencourt, Luis, and Geoffrey West. "A unified theory of urban living." *Nature* 467.7318 (2010): 912.
- Bettencourt, Luis, José Lobo, Deborah Strumsky, and Geoffrey B. West. "Urban scaling and its deviations: Revealing the structure of wealth, innovation and crime across cities." *PloS one* 5, no. 11 (2010): e13541.
- Comte, Auguste. *System of Positive Polity: Social dynamics; or, the general theory of human progress*. Vol. 3. Longmans, Green and Company, 1876.
- Daniels, T. L. A trail across time: American environmental planning from city beautiful to sustainability. *Journal of the American Planning Association*, 75(2):178–192, 2009
- Davison, G. (1983). The city as a natural system: theories of urban society in early nineteenth century Britain. *The pursuit of urban history*, 349-370.
- Defries, Amelia. "The Masque of Learning." *In Revival: The Interpreter Geddes (1928)*, pp. 41-56. Routledge, 2018.
- Freestone, R. . Australian environmental planning: origins and theories. In J. Byrne, N. Sipe, and J. Dodson, editors, *Australian Environmental Planning: challenges and future prospects*, pages 21–35. Routledge, London, New York, 2014.
- Geddes, Patrick. "A Suggested Plan for a Civic Museum (OR Civic Exhibition) and its Associated Studies." *The Sociological Review* 1 (1906): 197-230.
- Geddes, Patrick. *Cities in evolution*. Williams & Norgate, 1949.
- Harvey, David. *Social justice and the city*. Vol. 1. University of Georgia Press, 2010.
- Houston, D. J. Hillier, D. MacCallum, W. Steele, and J. Byrne. Make kin, not cities! multispecies entanglements and 'becoming-world' in planning theory. *Planning Theory*, 0(0):1473095216688042, 0.
- Jacobs, Jane. *The death and life of great American cities* New York: Vintage (1961).
- Khan, Naveeda. "Geddes in India: town planning, plant sentience, and cooperative evolution." *Environment and Planning D: Society and Space* 29, no. 5 (2011): 840-856.
- Kühnert, Christian, Dirk Helbing, and Geoffrey B. West. "Scaling laws in urban supply networks." *Physica A: Statistical Mechanics and its Applications* 363, no. 1 (2006): 96-103.
- López-Durán, Fabiola. *Eugenics in the Garden: Transatlantic Architecture and the Crafting of Modernity*. University of Texas Press, 2018.
- Mandelbrot, Benoit. "How long is the coast of Britain? Statistical self-similarity and fractional dimension." *Science* 156, no. 3775 (1967): 636-638.
- Marchetti, C. (1994). Anthropological invariants in travel behavior. *Technological forecasting and social change*, 47(1), 75-88.
- Meller, Helen. *Patrick Geddes: social evolutionist and city planner*. Routledge, 2005.
- Melosi, M. V. The historical dimension of urban ecology: frameworks and concepts. In A. R. Berkowitz, C. H. Nilon, and K. S. Hollweg, editors, *Understanding Urban Ecosystems: A New Frontier for Science and Education*, pages 187–200. Springer, New York, NY, 2003
- Morgan Grove, J. (2015) *The Baltimore School of Urban Ecology: Space, Scale, and Time for the Study of Cities* Yale University Press.
- Mumford, Eric Paul. *The CIAM discourse on urbanism, 1928-1960*. MIT press, 2002.
- Ponte, Alessandra, and Jessica Levine. "Building the stair spiral of evolution: The Index museum of sir Patrick Geddes." *Assemblage* 10 (1989): 47-64.
- Rees, William, and Mathis Wackernagel. "Urban ecological footprints: why cities cannot be sustainable—and why they are a key to sustainability." *Environmental impact assessment review* 16, no. 4-6 (1996): 223-248.



Shoshkes, Ellen. "Jaqueline Tyrwhitt translates Patrick Geddes for post world war two planning." *Landscape and Urban Planning* 166 (2017): 15-24.

Taylor, N. (1998). *Urban planning theory since 1945*. Sage.

Van Acker, Wouter. "Architectural Metaphors of Knowledge: The Mundaneum Designs of Maurice Heymans, Paul Otlet, and Le Corbusier." *Library trends* 61, no. 2 (2012): 371-396.

Von Moos, S. (2009) *Le Corbusier Elements of a Synthesis*. 010 Publishers, Rotterdam.

Weller, R. (2016) The City is Not an Egg, in Frederick R. Steiner, George F. Thompson and Armando Carbonell (eds), *Nature and Cities: the ecological imperative in urban design and planning*, Lincoln Institute of Land Policy.

Welter, Volker M. *Biopolis: Patrick Geddes and the city of life*. MIT Press, 2002.

Welter, Volker. The Valley Region: from figure of thought to figure on the ground. In Ibañez Daniel and Katsikis Nikos (eds). *Grounding Metabolisms*, Harvard University Press, Mass. 2014.

West, G. (2017). *Scale: The Universal Laws of Growth, Innovation, Sustainability, and the Pace of Life in Organisms, Cities, Economies, and Companies*. Penguin.

Winter, Pierre. "Le Corps nouveau." *L'Esprit nouveau. Revue internationale illustrée de l'activité contemporaine* 15 (1922): 1755-1758.

Wood, C. Environmental planning. In B. Cullingworth, editor, *British Planning: 50 years of urban and regional policy*, pages 250–263. Athlone Press, London and New Brunswick, NJ, 1999



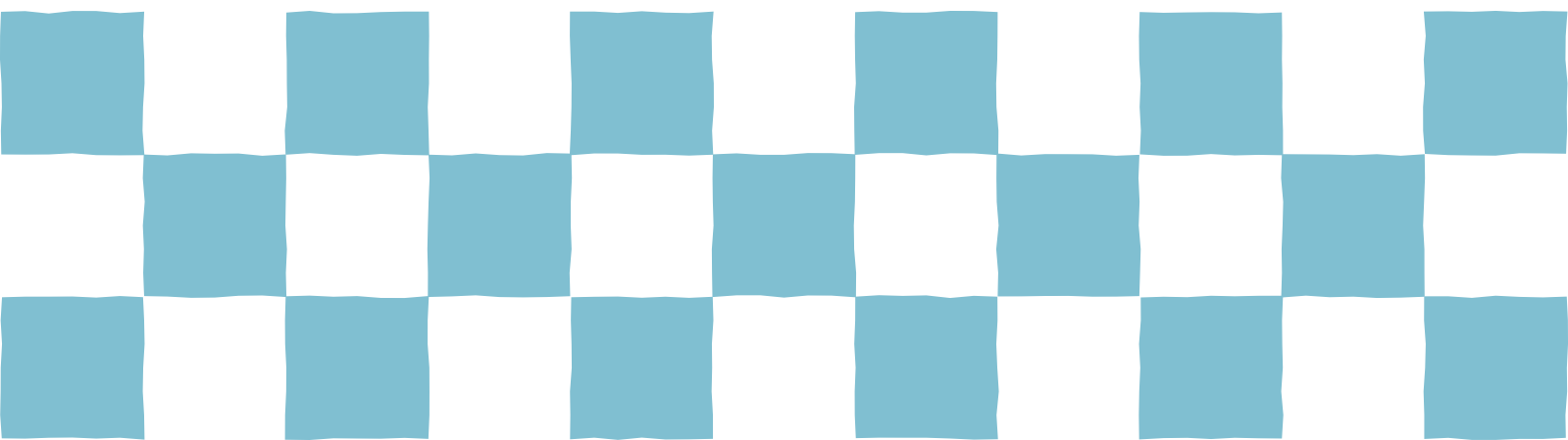
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

75 **Planning Concept and Urban Design Theory (2)**



Defining Urban Design in the Chilean context: the contributions of Munizaga

Gisela Barcellos de Souza (Federal University of Minas Gerais) and Andre Tine Gimene (Federal University of Minas Gerais)

This paper seeks to contribute to the comprehension and retrieve of the reverberation and flow of Urban Design ideas in architectural and planning culture in Chile. To achieve that, it focuses on the trajectory and work of the Chilean architect, Gustavo Munizaga, who was responsible for having written one of the first Urban Design textbooks in Latin America.

Munizaga graduated from the Universidad Católica de Chile in 1964 and one year later attended the Harvard Graduate School of Design (HGSD) to pursue a Master's Degree in Urban Design. The Harvard course was still strongly influenced by CIAM, in its own revision held on the congress held at Hoddesdon in 1951, and the concept of Urban Design, as proposed by Sert in 1956, the dean of HGSD, was an attempt to link architecture, landscape architecture and town planning. As Eric Mumford describes, at the time this concept implied the creation or intensification of a civic centre—an urban core, fostered by the insertion of pedestrian zones, perceived as an important political and cultural urban element. Munizaga's initial understanding of Urban Design, learned from his HGSD mentor, Fumihiko Maki, and developed with his colleagues Wampler and Corea, evolved further during a period of professional practice experience at the Interdisciplinary Centre of Urban and Regional Development (CIDU) in Chile. In the 1970s, Munizaga worked as a teacher and began his leadership activity in the dissemination of Urban Design: first at the Universidad de Chile (1971-1975), and, right after the Pinochet coup in 1973, at the Universidad Católica de Chile. However, at the same time the Revision of the Modern architecture movement and the typo-morphological critics were being introduced in Chilean Architectural Culture, challenging most of his former learning, which is reflected in his publications.

This paper aims to demonstrate the oscillation of Munizaga's initial understanding of Urban Design between his Harvard learnings and the contributions of the typo-morphological approach—brought by some of his teaching assistants—through late-1970s until mid-1980s. To this end, the paper analyses Munizaga's trajectory and his Urban Design definitions in the context of International Exchanges and local context adaptations, based on the examination of two key projects, as well as his Urban Design textbooks and writings published between 1977 and 1983. The Urban Design concepts learned at Harvard GSD are partly retraced, illustrating how he incorporated them into two key projects. One is a series of megastructures combined with open-ended terminals between the Baltimore-Washington megalopolis, designed during his master's course (Monacelli and Corea, 1965)

The other is his proposal for the International Competition for the Santiago West Downtown Redevelopment, organized by the Urban Improvement Corporation (CORMU) in 1972 (Pavez, 2015)

Finally, his writings are analysed to identify his translation of the urban design concept to both the Chilean context and the contemporary architectural culture.

Windows Upon Planning History - Canberra

Karl F. Fischer (The University of New South Wales)

With its theme "Looking at the world history of planning", the Yokohama IPHS conference 2018 is the ideal context in which to open windows of understanding upon a famous statement which the urban designer Edmund Bacon made about the Plan for Canberra. Bacon rated the 1911 plan designed by Walter Burley Griffin and Marion Mahony Griffin as "a Statement of World Culture" (1968)

Bacon was referring to the way in which the plan incorporated elements of space design derived from cultural realms and traditions as wide ranging as those of Europe, the USA and Asia.

While the Griffin Plan was on the one hand eulogized, it has also been heavily criticized, condemned and ridiculed. A close look reveals that the plan and its implementation have been an object of cultural controversies that have not been resolved for over 100 years (Fischer 2013)

This observation is valid for the plan itself, its transformation into the modern and post-modern world, and the way in which planners, citizens and politicians have dealt with it in spirit and partial implementation.

Enthusiasts and opponents on many sides have dug in their heels and fought battles of uncertain outcomes.

In this situation, the paper applies the famous "Windows" metaphor created by Henry James in the preface to his novel "Portrait of a Lady" to the context of planning history. That "Windows" approach was discussed in a conference in 2013 (Altrock and Fischer 2014) and applied in an edited book with case studies from Europe, the USA and Australia (Fischer and Altrock 2018)

The approach is waiting to be extended and to be applied to a wider, in fact global context.

Henry James suggested that '

[t]he house of fiction has ... not one window, but a million... At each of them stands a figure with a pair of eyes ... He and his neighbours are watching the same show, but one seeing more where the other sees less, one seeing black where the other sees white, one seeing big where the other sees small, one seeing coarse where the other sees fine. And so on...' (James 1908: xi)

Applied to the context of planning, the purpose of the "Windows" metaphor is to open up the possibility of dealing with opposing views and with the struggle between paradigms and conflicting cultural positions in different ways – not necessarily in a linear sense, 'victorious' paradigms replacing those based on the preceding or opposing, 'wrong' interpretation of 'reality', but as potentially complementary.

The windows opened in this paper upon ideas and realities, myths and models surrounding the Griffin Plan are twofold in nature and purpose. On the one hand they may help negotiate between opposing views in the sense outlined above. On the other hand they are essentially eye-openers, windows opened from the outside, more difficult to access for local observers, who may be too close to the canvas to get the full picture.

In this sense, the windows metaphor addresses the issue of blind spots and blinkers, which we are continually confronted with individually, locally, as well as in trans-cultural and global context.

Three models and its transition of city planning concept in Le Corbusier

Tatsu Matsuda (Musasino University, Faculty of Engineering, Department of Architecture)

This paper clarifies three different principles and its process of transition of Le Corbusier / Charles-Edouard Jeanneret between 1910 to 1925 during when he had started to write “La Construction des Villes” and when he published “Urbanisme” which has boldly transformed from the former, the prototype of it.

The background of this paper includes the recent continues publication of Le Corbusier’s letters and discovery of undisclosed drafts on “La Construction des Villes” and similarly the progress of research and several publications on Werner Hegemann who influenced Le Corbusier via Berlin City Planning Exhibition in 1910 which revealed the whole picture of Hegemann’s activities once buried in history. The purpose of this paper is to clarify how the principle of City Planning in Le Corbusier especially until the 1920’s has gain the clear direction like as it known today, so as to elucidate the role of Le Corbusier in the early period of scientific City Planning also in the context of urban planning history.

Le Corbusier has been influenced by medievalism before 1910, classicism after 1910 and Taylorism since around 1915. Medievalism is mainly derived from Camillo Sitte and his followers, classicism is from Berlin City Planning Exhibition and Hegemann who organized it as well as several books focusing on French classicism in 18th century and Taylorism is from of course Frederic Taylor and various movements in France at that time that was accepting American Taylorism. This paper reveals the process of Le Corbusier’s change analyzing his letters, writing and projects etc. The fact that Le Corbusier has shifted the idea of urbanism from under the influence of classicism to under that of Taylorism is explicitly read from the slightly tense relationship between Le Corbusier and Hegemann in 1920’s, especially the negative critical response of Hegemann to the Le Corbusier’s “Ville contemporaine de trois millions d’habitants” when Le Corbusier sent it to him in 1922.

As a conclusion of this research, it can be said as below. The principle of Le Corbusier’s “city planning” has transitioned rapidly from medievalism to Taylorism via classicism. The characteristics that they emphasize can be said respectively ‘artistic’, ‘monumental’ and ‘geometric’ in concept as well as ‘curve’, ‘axis’ and ‘grid’ as visual geometric model. So that his ‘Le Voyage d’ Orient’ was the journey to recognize the origin of the classicism, while his intensive research at the French National Library in 1915 triggered his awakening to Taylorism. However, what is important is that Le Corbusier did not simply change each stage, but let these three different positions coexist within himself, which made possible to create complex, rich and diverse urban / architectural projects and its thought as a result because always his project and his writing contain a sort of ambiguity and complexity at the deep basis. Le Corbusier has evolved the City Planning concept from Sitte’s medievalism to Le Corbusier’s Taylorism while allowing its versatile variety.

Moroccan Town Planning discussed at the Colonial Exhibitions and Congresses: from national to international scene (1922-1931)

Angelo Bertoni (Aix-Marseille Université)

The history of French Protectorate in Morocco (1912-1956) is marked by important experiences in town planning and, in particular, by two great figures: Henri Prost and Michel Ecochard. A new perspective on this period is elaborated today by researchers in both sides of the Mediterranean, based on the concept of model and hybridization. The goal is to understand the role that these experiences played in debates, transnational transfer and dissemination of ideas that contributed to define town planning as knowledge and know-how.

Morocco provides an excellent opportunity to experiment the most innovative theories of town planning, following some ideas developed in Great Britain and Germany since the end of the nineteenth century and spread in France by the Musée social. This private institution was founded in Paris in 1894 and aimed to improve moral and material conditions of working classes through the definition of social reforms, particularly in relation to housing and city organisation. Some crucial elements are the importance of the plan as a tool, the city organisation by functions, a wide presence of open spaces and the garden cities as a model for urban extension. These ideas are reflected in the plans drawn up in Morocco by Henry Prost and his team composed by some members of the newly established Société Française des Architectes Urbanistes. This experience is part of a wider participation of French experts in planning activities in colonial territories and in other European or Latin American countries in the early XX century.

This paper aims to focus on elements that enabled the first stage of French experience in Morocco to become a reference on the international town planning scene during the interwar period. Colonial exhibitions and international congresses organized in Marseille (1922) and in Paris (1931) are the main research sources, enhanced by professional periodicals. These events will be studied to approach two perspectives. Firstly, the rule played by town planning in the French colonial propaganda, directed at this time both towards national public opinion and to other colonial powers. Secondly, the affirmation on the international scene of what we can call the French town planning school, capable of expressing a compromise between the hygienist approach and urban aesthetics.



Defining Urban Design in the Chilean context: the contributions of Munizaga

Gisela Barcellos de Souza*, André Tiné Gimenez**

* *PhD, professor at the Department of Urbanism at Federal University of Minas Gerais, giselabarcellos@ufmg.br*

** *Undergraduate student in architecture and urbanism at Federal University of Minas Gerais. andregimenez@gmail.com*

We intend to contribute to the understanding of the initial paths and penetration routes Urban Design and Urbanistic Project notions in the urban and architectural culture in Latin America. To this end, it focuses on the trajectory and intellectual work of a Chilean architect, Gustavo Munizaga, who was responsible for writing one of the first didactic texts on urban design in Latin America and did so contemporaneously with the first manifestations of the Modern Movement's critical revision and the typomorphological approach in Chile.

Keywords: Chilean Urban Design History, Munizaga, Circulation of ideas.

Introduction

As a practical discipline, which test its concepts in distinct contexts — and eventually tears its semantic contours through borderline situations —, Urbanism has in its history multiple examples of terms originally coined for distant geocultural situations, which ended up approaching each other when they crossed different borders. This is the case of Urban Design and Urbanistic Project, notions constructed in different temporal and cultural contexts, but that had been approached by the practice — and the constant semantic displacements that it imputed to them —, as well as by cultural translation works. Even though both are very commonly used in everyday practice, their delimitations are still imprecise¹. Sert, as it is known, proposed the first one in 1953 in the United States context and, although its institutionalization was concurrent to the critics to the American Urban Renovations after mid-1950s, it reverberated CIAM's debates of the second post-war period². The Urban Project notion, on the other hand, was gestated in Continental Europe between 1970s and 1980s — notably in France, Italy and Spain —, amid the diffusion of typomorphological studies and the critical revision of Housing Projects and New Cities Policies that prioritized Modern Movement constructions and environments³.

This article intends to contribute to the understanding of the initial paths and penetration routes of these notions in the urban and architectural culture in Latin America. To this end, it focuses on the trajectory and intellectual work of a Chilean architect, Gustavo Munizaga, who was responsible for writing one of the first didactic texts on urban design in Latin America and did so contemporaneously with the first manifestations of the Modern Movement's critical revision and the typomorphological approach in Chile. The oscillations in his comprehension of Urban Design are here examined in the context of the international exchange of ideas, of his own trajectory and of the need for adaptations to the local situation. This research is based on the analyses of two of his urban design projects and in his sequence of textbooks and articles published between 1977 and 1983.

Munizaga's trajectory and Urban Design in Chile

The history of Urban Design in Chile and the professional trajectory of Munizaga intermingle in a complex net. Munizaga graduated in architecture in the Catholic University of Chile (UC) in 1962, when, despite the existence of the Institute of Planning and Housing at this university (created between 1953 and 1954), the teaching of urbanism was limited to a few theoretical disciplines, without a practical consideration⁴. To fill this gap, he pursued his studies in a master's degree in Urban Design at Harvard University, between 1964 and 1967⁵, period that he would later recognize as fundamental in his academic formation. References of what he learned in those studies would accompany him throughout his academic and professional career.

Munizaga attended to a course in which the conception of Urban Design was not limited to large-scale architecture and its adjacent spaces. A change in the comprehension of the interfaces between Urban Design and Planning was already undergoing; contributions of Lynch, Alexander, Maki and Doxiadis were part of its cultural environment. Considering the frequency of its quotations and acknowledgement in his future texts, the ideas of Fumihiko Maki seems to have been of particularly importance for the young Chilean architect. More specifically, his writings would often mention Maki's proposition of three ways of structuring the collective form that would allow unity within the diversity: the compositional form; the megastructure — which, despite



external control, would enable a freedom of functions within it —; and the group-form, a systemic approach in which a structure provides the unity of a space by the reiteration of elements and processes in its production⁶.

His mentor's ideas were experimented during his master studies, in a studio called Intercity in which a proposition of new forms of settlements in the Baltimore-Washington conurbation was investigated. Munizaga and his team — Lozano, Corea and Wample — proposed a sequence of megastructures in which each module had its own civic and commercial centre, in addition to collective equipment. The possibility of a guided expansion was researched by the proposition of an open terminal — using the concept latter incorporated in Maki's writings — and permitted the hybridization of both ideas of megastructure and collective form.

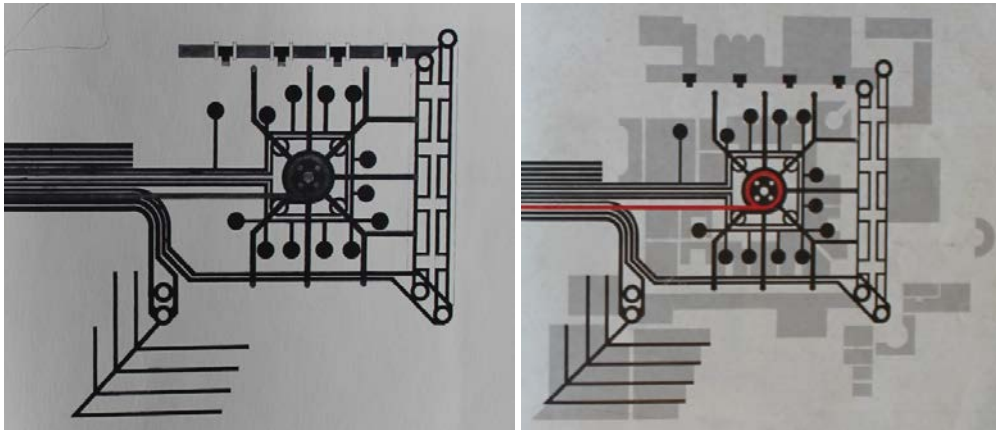


Figure 1 and 2 – Diagram of Intercity proposal, in Monacelli and Corea (1964) and diagram illustrating Munizaga's article "Estructura y Ciudad", in ARQ n. 8 (1983).

When Munizaga came back to Chile, he encountered a cultural environment of experimentation in planning which led to the implementation of several new institutions. Under the context of the Cold War struggle to control the Latin America territory, the Ford Foundation joins the efforts started by the American Aid Program (USAID) to build financed social housing in Chile, proposing a program to Alessandri government in 1963. Two years later the cooperation program — that initially aimed to produce community facilities — was revised and expanded to handle the urban and regional planning demands of Frei's government and had John Friedman as its coordinator⁷.

The cooperation between the consultant team and the local technicians took place through new governmental institutions, such as the Ministry of Habitation (MIVU – 1965), the National Planning Office (ODEPAN - 1964), and a new research centre, the Interdisciplinary Centre of Urban and Regional Development (CIDU), made in partnership between Catholic University of Chile (UC) and Ford Foundation. Conceived as an institution of research and technicians training, the CIDU actively collaborated in its initial years with the abovementioned government agencies, remarkably with one of Ministry of Habitation's autonomous corporations, the Corporation of Urban Improvement (CORMU)⁸. Responsible for the creation of a land stock and for the formulation of urban renewal plans, the CORMU had as its characteristic feature its approach to urban planning under the viewpoint of architecture⁹. Between 1965 and 1972, this corporation executed the urban renovation of San Borja and other proposals of densification of central areas. It was in this context of intense collaboration between academic and governmental institutions that Munizaga, recently arrived from his Master in Urban Design, was integrated into CIDU, been responsible for the design of Manuel Rodríguez's Sector, developed between 1968 and 1971.

Despite the term Urban Design was not, at that moment, widely diffused in Chile — a UC professor of architecture, Hernan Riesco, would acknowledge that he had heard it for the first time in 1964¹⁰ —, its notion and practice was already circulating in the Chilean specialized field. In 1971, for example, the architect Browne, who had recently returned from his master's in City Design at MIT, criticized the lack of precision of this term and the tendency to be interpreted as a large-scale architecture. Although he recognized the necessity of fill the gap between planning and architecture, he did not believe that this role was properly performed by the notion of Urban Design¹¹. In 1972, on the other side, CORMU did not use this term in the International Competition for Remodeling of Santiago Centre program.

Though the winning design was not executed — the 1973 Military Coup interrupted the process — this competition itself, which was attended by 87 teams from 25 different nationalities, became a landmark in Chilean architectural culture. Munizaga, with his teaching assistants and a group of his students from the



University of Chile (UCHile) — where he taught between 1969 and 1975, after having left UC due to an academic conflict¹² — joined with a honourable mentioned proposal¹³. This proposition reveals itself an opportunity to attempt the adaption of his North American Urban Design learning's to the Hispano-American block. Using as a reference the existing urban plot, they reinterpreted it in a new urban layout and in the location of the new proposed buildings (residential and communitarian facilities) which configured series of central patios with pedestrian access and subdivided the block into 16 parts. The idea of open terminal was present in the proposition its execution through several stages.

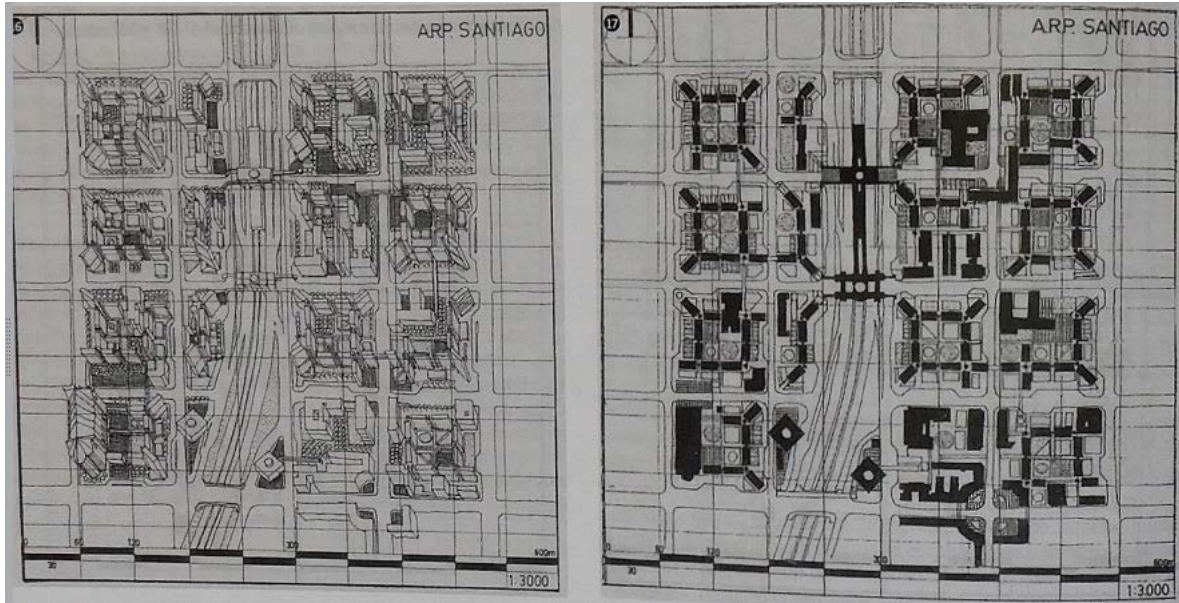


Figure 3 – Munizaga's proposal to CORMU International Competition, in Pavez (2015)

In 1974, when Riesco became Director of the UC Architecture School (EAUC), Munizaga returned to the institution as an invited teacher, receiving a tenure position in 1977. At this moment he started to work as a teacher in Urban Design studios and, due to the absence of bibliography of this subject in Spanish — few exceptions were Spreiregen (1971) and Bacon (1974) — he started to produce his own textbooks¹⁴. In those, it is possible to identify the incorporation of many of his Urban Design Master's acquaintances, to which were now added his experience with the Chilean planning institutions and his former attempts to translate these ideas to Chilean context.

There was a crescent interest in Urban Design in the EAUC that would lead, among other realizations, to a partnership with MIT in a studio to elaborate the Revitalization and Structuralizing Project for Santiago Centre (1978-1979). Coordinated by Riesco, this cooperation allowed the contribution of Halasz, from MIT, as a visiting professor and included Munizaga as participant¹⁵.

When Munizaga became a professor of Urban Design at UC, critical reviews of the Modern Movement Urbanism were starting to resonate in Chile. In the 1st Biennale of Architecture in Chile (1977), a newly created collective named CEDLA — whose architects had just returned from London — brought up the debate about the importance of historical urban fabrics and defended the typomorphological critic to Modern Movement environments. Beyond those new ideas, this collective claimed their polemic role in architectural culture through the presentation in that exhibition of an Urbanistic Project as a counterproposal to those highlighted by the CORMU competition of 1972. The CEDLA design aimed to reinterpret the built heritage and the public spaces of the existing urban fabric¹⁶. Munizaga reacted to this polemic project by publishing a letter in the newspaper *El Mercurio* criticizing its excessive formalism¹⁷.

If at first Munizaga was reticent about CEDLA's proposal, soon the distance between both would be reduced. It is important to remind that one of CEDLA founders, Humberto Eliash, had been a former assistant of Munizaga in his studio at UChile, between 1970 and 1975. On the other hand, in the same year of the 1st Biennale, José Rosas — who was interested in typomorphological contributions and in 1982 would initiate his doctorate studies under Sola-Morales's guidance — started to work as Munizaga's teaching assistant in UC. A shift in pedagogical approaches of Munizaga at UC can be noticed between 1977 and 1983: the architectural studios added the word typology to its titles, and the Urban Design ones focused on the study of Santiago through theoretical subjects — Urban Structure, in 1978; Model and Project, in 1979; Perception and Metaphor in 1980¹⁸. When Munizaga



became director of EAUC, he invited CEDLA architects to lead studios at this school: Boza, Duval and Moreno in 1980, and Murtinho and Eliash in 1981. To the young generation of students, the difference between CEDLA's studios and those of Munizaga and Rosas was not clear. In fact, both would be perceived as the main reference for an antagonistic group of students organized in UC in early 1980s: the *Contrapropuestas*¹⁹.

It is important to point that the interest for Urban Design and for the typomorphological discussion was not restricted to UC at that time. Its motivation, however, was less related to a critical review to urban planning — as it was observed in Brazil and in Argentina in the 1980s — than to seek an alternative way to incorporate urbanism contents into architecture courses in a national context of dismantling of planning institutions. On one hand, the National Policy of Urban Development (1979) transposed to the urban space the neoliberal principles, abdicating of the State control over urbanization²⁰. On the other hand, at the same moment, there was a continuing staff reduction in public and private planning research and teaching institutions²¹. In 1983, for example, in UChile under military intervention since 1976, the departmental structure of School of Architecture was abolished, and a single Urban Design chair replaced all urbanism contents of the former study program²².

Urban Design by Munizaga

To verify oscillations of Munizaga's notions of Urban Design, we did a longitudinal content analysis of four of his writings between 1978 and 1983. The first two publications, edited in 1978 and 1980, continued a work he started at CIDU in 1968, and were linked to his experience as a teacher. Both were conceived as didactic supports that aimed to guide the practice in his studios at UC. Therefore, he acknowledged these texts did not intend to present original contents, their goal was rather to "reorganize an intellectual universe that presents itself in an indeterminate and confused way"²³. The third text, from 1983, assumes a hybrid character. Although it continues the previous work, it is organized within the framework of an investigation on the notions of structure and design and to that includes contributions from his teaching practice. The last text, also from 1983, is the first one published as a book and presents reflections systematized over five years.

The analysis of this corpus was guided by two aspects: one relative to the structure of the texts — observing both the continuities and the variations of themes —, and another concerned with the bibliography presented at the end of them. Despite these references had not always had the same relevance in the central argument of Munizaga's texts, the bibliography reveals itself as a carefully and constantly remade list. In each new publication, new items are included, and others discarded, in a flow that reveals its contributions in Munizaga's understanding of Urban Design. In the graphs below, it is possible to note the progressive incorporation of references deriving of neo-rationalists and a decrease of those linked with Modern Movement Urban Design partially learned at Harvard. The structure analysis, as we will discuss on following paragraphs, reveals the change in references was accompanied by the rise of new themes.

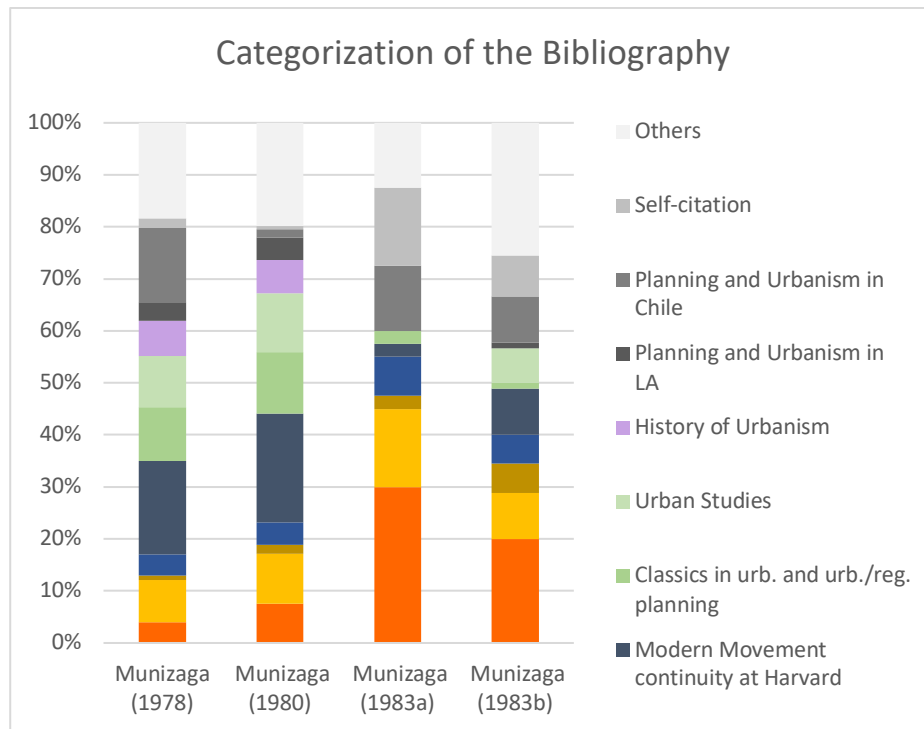


Figure 4: Percentage of the bibliography categorized according to the context of the publication. Produced by the authors.

The texts “Urban Design: Fundamentals and Processes” and “Three texts about Urban Design”, regardless of their differences in some contents and in the level of its development — the first one was uncompleted —, have both a similar structure of four parts. They begin with a delimitation of the problem and the definition of the concepts of planning, urban architecture, urbanism, urban design, city. After that, they present specific issues of urban design in the context of the “Mondial Macropolis” — the tendency of total urbanization — or the Ecumenopolis, as defined by Doxiadis. Their third part presents the urban design as a process, in which the author’s argument is supported by a historical perspective from industrial revolution to late 1970s, and by a set of models or strategies to guide urban proposals. The fourth part exposes the products and components of Urban Design, pointing what Munizaga defined at that moment as seven basic strategies: Capital cities, Satellites cities, New Cities, Specialized Functional Sectors, Regulatory plans, Central Areas Renewal and Urban Systems. As attachment to both texts, there is a chronology of urban interventions.

In his attempt to organize and categorize the writings about the theme, Munizaga seeks not to link himself directly to a single theory or body of knowledge. Thus Munizaga even recognizes the diversity in his bases for a design method: the conceptual fundament, the unit and elements from the Ekistics Theory; the variables and organization of elements of Alexander, the notions of behaviour and aggregation of Fuller; the analytical categories of Lynch and Noberg-Schultz; part of functionalism criticism of Rossi, typology of urban form of Lynch; notions of open terminals and subsystems from Maki; ideas of urban grid of Bacon and the connectors and articulators concepts of Halasz²⁴.

In this reunion of such different contributions, however, Munizaga does not always distinguish properly the authors; neither tries to contextualize them nor to condense the essence of their arguments. Instead, he undertakes the work of recombining varied origins resources to affirm convergences where it would be hardly verifiable. For example, in writing about Urban Sector and Neighbourhood Unit, and recognizing them as the fundament of CIAM’s urbanism, Munizaga²⁵ approaches them to Rossi’s Residential Areas, suppressing the key argument of the Italian architect. From late-1970s the notion of typology used in his texts is not rooted in the Italian debate, but in the classification made by Lynch in 1961.

The third publication, “Model, Structure and Project” from 1983, differs from the previous ones by its attempt to operationalize former didactic experiences as research on notions of typology, metaphors, systems and structures. To do so, it initially presents the basis of the precedent didactic experiences. After that, the pedagogical activities carried out by him and his assistants — among them Jose Rosas, in the UC, and Humberto Eliash, at the UChile — are illustrated, with brief reports of the disciplines developed between 1970 and 1983. Finally, two chapters expose theoretical reflections and possible methods used in the operationalization of two binomials: “type and typology”, and “analogy and metaphor”.



Contrary to what was pointed in the two previous publications, in the third one the notion of type is clearly supported by typomorphology studies, using as main references Rossi, Argan, Moneo, Colquhoun and Quincy. In fact, as Munizaga²⁶ explains it, this notion was experienced in his disciplines between the second half of 1982 and the first half of 1983, shortly after the workshops given by members of the CEDLA group.

If in previous works collaborators are only named in the introduction and in the report of didactic experiences, in the book “Structure and City”, from the same year, they assume the role of co-authors. Edited by Munizaga, in this book he is the author of only three of its seven chapters — having Jose Rosas as co-author in one of them. Notions that were experienced in didactic exercises in previous five years are exposed and deepened in each chapter. A common framework that would allow the reduction the dissonances between different notions and would insert them within the same operation is sought through this edition. In this sense, the Structure — understood as an ontological order and as a morphological, functional and semiological reference — was proposed and analysed through notions of configurations, systems, types and metaphors. Despite the thematic displacements noticed through Munizaga’s writings, it should be pointed that in the proposal developed for the central area of Santiago, presented in its last chapter, the megaforms and semiological structures learned at Harvard were still present, but now hybridized with the new contributions of typomorphology.

Conclusions

The exposition made throughout this text made explicit the key role of Munizaga in the cultural translation of Urban Design to the Chilean context. This is confirmed not only by being part of the first generations of students graduated from the Harvard master course, but also by the fact that he became directly involved with planning institutions and teaching activity since his return to Chile.

If, in a first moment, he assumed the position of cultural translator of his Urban Design acquaintances from the North American context, latter he would produce new notions by hybridization. His continuous conflict with local contingencies, whether through the practical experiences, pedagogical experiments, advisory or planning, and his continuous contacts with academics from other countries, enabled him to perform a hybridism between the ideas of the Modern Movement and its critical review.

Acknowledgements

We thank CNPQ for the financial support of the research project 444019/2015 and to UFMG for the scholarship.

Endnotes

¹ Krieger and Saunders, *Urban Design*, 2008.

² Munford, *Defining Urban Design*, 2009.

³ Sainz Gutierrez, *El proyecto urbano en España*, 2006.

⁴ Gross, “Medio siglo de temática urbana”, 1994, 130-145.

⁵ Munizaga, “Gustavo Munizaga, correspondent from Chile”, 1977; “Urban Patterns of Santiago”, 1979; *Estructura y Ciudad*, 1983.

⁶ Maki and Goldberg, “Linkage in Collective Form” 1962, 100-104.

⁷ Friedman, “Do Planning Ideas Travel?”, 2010.

⁸ Gross, “Medio siglo de temática urbana”, 1994, 130-145.

⁹ Perez de Arce, “Jardín de Senderos entrecruzados”, 1994, 146-151.

¹⁰ PIAPP, *Revitalización y estructuración del centro de Santiago*, 1979.

¹¹ Browne, “A propósito de un dilema: Arquitectos y Planificadores”, 1971.

¹² Strabucchi ed., *Cien años de arquitectura en la Universidad Católica de Chile*, 1994.

¹³ Pavez, *Diseño Urbano Inclusivo para Santiago Centro*, 2015

¹⁴ Munizaga, “Gustavo Munizaga, correspondent from Chile”, 1977.

¹⁵ PIAPP-UC, *op. Cit.*, 1979.

¹⁶ Souza, “Tessituras híbridas ou duplo regresso”, 2013.



- ¹⁷ Munizaga, "Carta a El Mercurio", 1977.
- ¹⁸ Munizaga et al., *Modelo, Estructura y Proyecto*, 1983
- ¹⁹ Souza, *op. cit.*, 2013.
- ²⁰ Gross, *loc. cit.*, 1994
- ²¹ Gross, *loc. cit.*, 1994 and Pavez, *loc. cit.*, 2009.
- ²² Pavez, *La institución del urbanismo*, 2009
- ²³ Munizaga, *Diseño Urbano*, 1978
- ²⁴ Munizaga, *Tres textos sobre Diseño Urbano*, 1980
- ²⁵ Munizaga, *op. cit.*, 1978
- ²⁶ Munizaga et. al, *op. cit.*, 1983.

Bibliography

- Browne, "A propósito de un dilema: Arquitectos y Planificadores" *EURE* no.2, (1971): 33-53.
- Friedmann, John. Do Planning Ideas Travel? In *Crossing borders: International exchange and planning practices*, edited by Patsy Healey and Robert Upton. Routledge, 2010.
- Gross. "Medio siglo de temática urbana". In *Cien años de arquitectura en la Universidad Católica de Chile: 1894-1994*, edited by Strabucchi. Santiago: ARQ, 1994.
- Krieger and Saunders (ed.), *Urban Design*, University of Minnesota Press. 2008.
- Lynch. The Pattern of the Metropolis. *Daedalus*, no. 15, (1961): 79-98.
- Maki and Goldberg. Linkage in Collective Form. *Ekistics* 14, no. 82, 1962.
- Monacelli and Corea. *Intercity II: comparative analysis of intercity developments*. Cambridge Mass.: Harvard University GSD, 1964.
- Mumford, Eric Paul. *Defining Urban Design: CIAM architects and the formation of a discipline, 1937-69*. Yale University Press, 2009.
- Munizaga and Cárdenas, J. "Carta a El Mercurio referente al proyecto de Santiago Poniente presentado por CEDLA a la 1ª Bienal de Arquitectura". CEDLA 1 August, 1977.
- Munizaga. *Diseño Urbano: Fundamentos y aplicaciones*. Santiago: Universidad Católica de Chile, 1978.
- Munizaga and Rosas. "Diseño Urbano: Tipologías". *ARS*, no.2 (December 1978): 79-86.
- Munizaga. *Tres textos sobre Diseño Urbano*. Santiago: Universidad Católica de Chile, 1980.
- Munizaga; Rosas and Garcés. *Modelo, Estructura y Proyecto*. Santiago: Escuela de Arquitectura da Pontificia Universidad Católica, 1983.
- Munizaga ed. *Estructura y Ciudad*. Santiago: Universidad Católica de Chile, 1983.
- Munizaga. "Estructura y Ciudad". *ARQ*, no. 8 (1983): 4-9.
- Pavez. *La institución del urbanismo en la Facultad de Arquitectura y Urbanismo de la Universidad de Chile, 1928-1988*. Santiago: Universidad de Chile, 2009.
- Pavez ed. *Diseño Urbano Inclusivo para Santiago Centro*. Santiago: Universidad de Chile, 2015.
- Perez de Arce. "Jardín de Senderos entrecruzados. Remodelación de San Borja y Escuelas de Arquitecturas". In *Cien años de arquitectura en la Universidad Católica de Chile: 1894-1994*, organized by Wren Strabucchi. Santiago: ARQ, 1994.
- PIAPP - Programa de Investigaciones Arquitectónicas y Prácticas Profesionales. *Revitalización y estructuración del centro de Santiago: estudio de diseño urbano 1978-1979*. Santiago: Universidad Católica, 1979.
- Sainz Gutiérrez. *El proyecto urbano en España: génesis y desarrollo de un urbanismo de los arquitectos*. Universidad de Sevilla, 2006.



Souza. "Tessituras híbridadas ou duplo regresso: encontros latino-americanos e traduções culturais do debate sobre o Retorno à Cidade". PhD diss. Universidade de São Paulo, 2013.

Image sources

Figure 1: Monacelli, Theodore, and Mario Coreá. *Intercity II: comparative analysis of intercity developments*. Cambridge Mass.: Harvard University GSD, 1964.

Figure 2: Munizaga, Gustavo. "Estructura y Ciudad". *ARQ*, no. 8 (1983): 4-9.

Figure 3: Pavez, María Isabel, ed. *Diseño Urbano Inclusivo para Santiago Centro*. Santiago: Universidad de Chile, 2015.



Windows Upon Planning History - Canberra

Karl Friedhelm Fischer*

*Faculty of Built Environment, University of New South Wales, email address: k.fischer@unsw.edu.au

Abstract

The conference theme ‘Looking at the world history of planning’ is echoed in a statement by U.S. urban designer Edmund Bacon on the 1911 Plan for Canberra, which he eulogized as ‘a Statement of World Culture’.¹ Bacon was referring to the way in which the Griffins’ plan incorporated elements of space design derived from cultural realms as wide-ranging as those of Europe, the Americas, and Asia. However, the plan and its transformation in modern and post-modern times have also been objects of fundamental cultural controversies.² Enthusiasts and opponents have dug in their heels and fought battles of uncertain outcomes. The core **research question** here is how to deal with the complex and controversial nature of these perspectives.

In this situation, the paper applies the famous ‘Windows’ metaphor from the preface of Henry James’ novel ‘Portrait of a Lady’ as a **narrative device** to the context of planning history.³ It **concludes** that the windows opened upon ideas and realities, myths and models surrounding the Canberra Plan and its transformations may help negotiate between opposing views, different paradigms and conflicting cultural positions as potentially complementary and at least enlightening.

Introduction – Canberra and ‘the World History of Planning’



As one of the great planned capitals created in the twentieth century, Canberra has a recognized place in ‘the world history of planning’ quasi by default, just as it does in countless textbooks in our field. Locally torn between advocates of the capital and Canberra ‘bashers’⁴ the city has won great international acclaim as an exemplary model of planning history. Founded in 1913 on the basis of the plan submitted at the international competition for the capital by Chicago architects Walter Burley Griffin and his wife Marion Mahoney Griffin Canberra is a city of today 400,000 (2018).



Fig 1 Plan View of City and Environs and View from Summit of Mount Ainslie, 1911.

The ‘Griffin Plan’: the prize winning scheme conceived by Walter Burley Griffin and Marion Mahony Griffin⁵

Already the original ‘Griffin Plan’ plan met with very different reactions between utmost admiration in the international realm and a surprising mix of responses in Australia. Local assessments have been ranging from perspicacious appreciation and complex interpretative approaches via crude exploitation as a branding tool to outright contempt. While the US urban designer Edmund Bacon eulogised it as ‘a statement of world culture’⁶, the (then) local Minister for Planning more recently (2010) derided the plan as a scheme reminiscent of the small town of Springfield in the Simpsons’ comedy series.⁷

TALE OF TWO CITY ELDERS	
 <p>JEBEDIAH SPRINGFIELD (BORN HANS SPRUNGFELD), UNKNOWN -1795 Famous for: Leading a band of wagons westward from Maryland to found the fictional town of Springfield, wrestling a bear with his bare hands, running across six states to avoid creditors. Most quoted: ♣ A noble spirit embiggens the smallest man. ♣</p>	 <p>WALTER BURLEY GRIFFIN, 1876 - 1937 Famous for: Designing Canberra, Australia's capital city, credited with the development of the L-shaped floor plan, the carport and the first use of reinforced concrete. Most quoted: ♣ I have planned an ideal city – a city that meets my ideal of the city of the future. ♣</p>
 <p>SIR WALTER BURLEY GRIFFIN</p> <p>STOCKLANDS PRESENTS THE MOST PRESTIGIOUS ADDRESS EVER TO GRACE CANBERRA'S LANDSCAPE. CASTING A GRAND REFLECTION ON THE WATERS THAT LAP AT ITS DOOR, THIS BREATHTAKING MASTERPIECE SHINES AS THE ONLY WATERFRONT DEVELOPMENT ON LAKE BURLEY GRIFFIN. IT IS A STUNNING EXPRESSION OF SIR WALTER BURLEY GRIFFIN'S VISION. EXPERIENCE THE INFINITE INDULGENCE...</p>	

Ways of seeing: Fig. 2

Fig. 3

Griffin as the ‘Jebediah Springfield’ of Canberra. ‘Sir’ Walter Burley Griffin as crude advertising gimmick



Beyond the Griffin Plan, judgments on the actual development of Canberra as a 'regional city' of New Towns⁸ over the last 105 years have been similarly divided. While Canberra shared the image of being soulless and sterile with many new towns and post-war developments internationally, the city was identified by Peter Hall as having 'achieved the difficult feat of being one of the last Cities Beautiful, and also the world's biggest Garden City'.⁹

Also from the angle of our conference theme, we can justifiably choose between opposite views. As a kind of government company town that remained without self-government until 1989, Canberra might be seen as a 'white elephant' with limited relevance for planning elsewhere. The view from a different perspective, however, reveals that due to precisely the exceptionally favourable planning conditions which Canberra enjoyed during much of its history, the city developed as a 'perfectionist manifestation of ideal concepts in planning' and can be seen as a 'laboratory' and testing ground of planning models,¹⁰ which is of considerable interest for planning and 'the world history of planning'.¹¹

In order to deal with conflicting positions such as those addressed above, this paper deploys the metaphor of 'windows' through which we are looking at cities and at the processes that shape them. It looks at a selection of situations and planning conflicts that have been objects of controversial discussions since the founding days of Canberra.

The 'Windows' Metaphor

The metaphor is taken from a famous key passage of modern literature. In the preface to *The Portrait of a Lady*, Henry James suggested that '[t]he house of fiction has ... not one window, but a million... At each of them stands a figure with a pair of eyes ... He and his neighbours are watching the same show, but one seeing more where the other sees less, one seeing black where the other sees white, one seeing big where the other sees small, one seeing coarse where the other sees fine. And so on...'.¹²

While for the author of fiction, the important message is that there is no limit to the number of windows upon 'reality' that can be opened, this is different for planners, architects and other activists. They have to be able to develop strategies and contribute to making the city. When they open new windows, they are guided by a pragmatic interest. Each newly opened window may lead to a better understanding of the whole enabling them to hopefully act more efficiently, or to act in a more just, a more sustainable way, depending on the cognitive interest, the *Erkenntnis-Interesse*. Nietzsche described it in a similar way:

'The more eyes, different eyes, we can use to observe one thing, the more complete will our 'concept' of this thing, our 'objectivity', be.'¹³

The hope is that the new insight will allow us to act more efficiently, or to act in a more just, a more sustainable way. The metaphor can be extended. If 'the house of fiction' were part of a perimeter block with a 'rear window'¹⁴ providing views into an imaginary inner courtyard, this could allow us to see the rear of objects that were otherwise invisible.

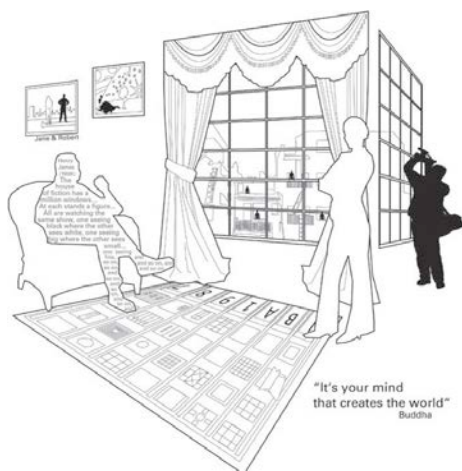


Fig. 4 'The House of Fiction' – Flyer for Conference 'Windows Upon Planning History', Kassel University 2013

It could also help us discover what may be hiding 'behind the bush', as a German idiom puts it. In this sense, the house metaphor is more versatile than the metaphor of putting on different spectacles. Glasses could not achieve this. It is even more obvious that the newly gained perspectives are much more than whims, curiosities or personal views. The 'stereoscopic' or multi-faceted view from two or more windows is by no means an



expression of postmodern arbitrariness¹⁵ of a tendency towards 'alternative facts'. On the contrary, its purpose is to achieve a more detailed view that allows us to take decisions from a better substantiated position. That has also been the intention of turns as different as the communicative turn,¹⁶ the linguistic turn¹⁷ and the transnational turn in urban history.¹⁸ Opening new windows may reveal blind spots, blinkers and 'tunnel vision'; the new windows may reveal what has been consciously hidden by particular interests; they may reveal myths as lies; they may expose the selective 'histories of the winners' and open the path to writing 'insurgent planning histories', 'making the invisible visible'.¹⁹



Figure 5. Myth and reality. Capitalist profiteering in the cloak of the non-profit housing association Neue Heimat (1986)

The radically different views can be as clear-cut as in the Copernican case. But they can also be almost as complementary yet difficult to reconcile as the interpretation of light as either waves or particles. Often, they are associated with the formation of factions and with professional controversies, for instance between modern and traditional positions or the roles of architecture, planning and other disciplines. Sometimes such conflicts stand in the way of interdisciplinary cooperation between architects and planners. The windows metaphor opens up the possibility of dealing with the struggle between paradigms in different ways – not necessarily in a linear sense, 'victorious' paradigms replacing those based on the preceding 'wrong' interpretation of 'reality', but as potentially complementary. The purpose of the metaphor does not, however, lie in blurring the differences between different positions or to avoid judgment. On the contrary, it may serve to accentuate the differences and to demonstrate that we have a choice of deciding to which view we want to subscribe and to point out the consequences of that choice.

Windows on Canberra – contrasting perspectives on an exceptional city

In the case of Canberra, this is particularly relevant, because – more than many other cities – its fate and sometimes the question of the very necessity of its existence have been dependent on the way cultural controversies have been fought out – especially when the windows opened by dominant agents of the discourse have been deployed with a strategic interest. Thus the interest behind the local planning minister's denigration of the Griffin Plan as a 'Simpsons Family' small town plan lay in pushing a high-rise agenda²⁰ and in counteracting the theme of a low to medium-rise 'city in the landscape' supported by parts of the local community.

But let us look at a selection of such discourses and the contrasting windows in detail. Following a broad survey of major cultural controversies that have been influencing debate and practice of Canberra's development the paper addresses a different window in a particularly important area - the Griffin Plan - and what has been discovered and understood, forgotten and remembered.

Planning History and Cultural Controversies

While no city can really be understood without a grasp of its history and the cultural controversies that shape it, this is valid in a particular way for Canberra as an internationally renowned model city – 'one of the treasures not only of Australia, but of the entire urban world' as the eminent US planning historian John Reps classified it.²¹ Over the years, Canberra has been described by planning historians from different viewpoints including its symbolic role²² and its role as a capital²³ in comparison with other planned capitals.²⁴ A number of overlapping cultural local discourses have emphasized specific aspects contributing to the identity of Canberra as a garden city;²⁵ as the 'bush capital';²⁶ 'a city in the landscape';²⁷ and a city of 'democratic symbolism'.²⁸ At the height of the decentralization debate in Australia in the 1970s, it was also seen as 'an exemplar for many decentralised Australian cities'.²⁹ Windows opened by the author of this paper have included Canberra as an 'open air museum



of planning³⁰ as the ‘perfectionist garden city metropolis’³¹ and as a ‘sensitive barometer of the political climate in Australia’.³²

None of these windows exclude the other, although there may be tensions between the views. Some require more explanation (e.g. ‘a statement of World Culture’) than others. Even the conflicting positions between whether Canberra might be ‘the most un-Australian city’³³ – whatever the merit of such a debate may be – or whether it is utterly Australian can be reconciled quite easily. Features such as the clear delineation of the borders between urban and rural lands and in particular the uniform, strict application of standards of design, infrastructure and hierarchical planning in Canberra’s suburban landscape established during much of the 20th century distinguish Canberra from most other Australian cities; and more than that, the principles of axial planning in the centre have motivated the use of the label ‘un-Australian’;³⁴ but the faithful translation of Australian middle-class values centred around the ideal concepts³⁵ of bungalow, quarter-acre block and motor car make it an outstanding manifestation of the Australian suburban dream. Both views can co-exist peacefully next to each other and with little consequence for development on the ground.

We are, however, confronted with quite a different situation when we look at the conflicting views and patterns of appreciation for Canberra as a federal capital, be it at the time of its conception or in the 21st century. On the one hand, Canberra was to become the prestigious symbol of a young federation, ‘the finest capital city in the world – the pride of time’, as the Minister for Home Affairs, King O’Malley, postulated in 1910.³⁶ On the other hand, its very creation was influenced by the ‘haggling of provincialisms’³⁷, and its physical construction was hampered right from the start by ‘the hostility by certain officers... to Mr. Griffin and his design’. Even the Chief Architect proclaimed that he would like to see [the Federal Capital] strangled for a hundred years’.³⁸ These windows are difficult to reconcile.

Nevertheless, this existential dialectic has been a characteristic phenomenon persisting over long periods. During the 21st century, affirmations of the national commitment to the capital culminating in the centennial celebrations in 2013 have contrasted with crippling budget cuts, political statements and gestures of disdain and eventually with plans for the transfer of national agency staff to provincial cities located in the electoral seats of the relevant minister.³⁹

1988 and 1989 were the crucial years of the turnaround for Canberra. In 1988, an enquiry⁴⁰ into the future of the planning arrangements in Canberra argued that the planning authority, the NCDC had ‘virtually completed its task of building the city’ and with ‘the completion of the new Parliament House’ the ‘national building program was now almost complete’.⁴¹ The belated introduction of self-government in the following year was not only conforming to long-established global standards of planning culture. In fact self-government had been opposed in two referenda by the citizens of Canberra, who knew that their share of contributing to the cost of Canberra would rise.

The windows of neo-liberalism and ‘normalization’

The major drivers were the desire of the Federal (Commonwealth) Government to divest itself of financial responsibility for the city beyond core national capital functions; and this was embedded within the rising tide of neoliberal ideology and practice that had begun in the preceding decades.⁴² The change was seen as accelerating a process of ‘normalization’ of urban development for city and territory.⁴³

Seen through one window, these developments put an end to that phase which was shaped by ‘a continuous series of planning models, for the most part realised with uncompromising perfection; new models supplanting the old ones as time went by’ (Fischer 1989:156). Through another window, and with a certain ironic slant, we might also come to the opposite conclusion. We might say that Canberra’s basic approach of following the mainstream trends in urban policy and development did not end but in fact continued – in the sense that it was taking the city into the phase where the neo-liberal application of ‘rigorous private sector principles’ demanded ‘a severe pruning of its ... planning functions’.⁴⁴ And once more, Canberra was hard to beat in its rigour.

The abolition of the Commission (NCDC) that had guided the city’s growth by integrated planning and development between 1957 and 1988 meant that architects, planners and urban designers were successively replaced by economists, lawyers and administrative staff.⁴⁵ Seen from a normative window of the planning discipline, we might address this as the phenomenon of de-professionalisation as experienced world-wide, or in more neutral terms, as a shift in the professional profile in the interest of lean government.

Closing windows - Loss of corporate memory with lethal consequences

This development was associated with a loss of corporate memory and knowledge that accelerated after 1988, but had already begun earlier. Already this author’s first publication on Canberra had pointed to the problematic



of ‘a lack of an interest in corporate memory..’, which had led the authorities ‘to throw away books and reports’ and to the fact that ‘my lucky presence helped me’ to preserve copies ‘that were otherwise unobtainable on the market’.⁴⁶ Locally this was interpreted as the sarcasm of ‘the acerbic Karl Fischer ☺’.⁴⁷ The question was also raised whether quoting from the material discarded – but also provided by the NCDC – wasn’t tantamount to ‘biting the hand that fed’.⁴⁸ Clearly, opening windows of knowledge is not always appreciated.

The dissipation of the NCDC’s library continued after its transfer to the NCA – much to the shock and despair of some and to the delight of collectors of rare documents. Again, as with the phenomenon of deprofessionalization, the dissipation of libraries or parts thereof is widespread between Sydney and Kassel, Germany, where I just discovered that much of the university’s planning library I had built up over 20 years has been shredded, including first editions by Raymond Unwin and other classics!

In Canberra, the loss of corporate knowledge – equivalent to the closing of windows – has had various palpable consequences. The strategies of ‘small government’ and the associated problematic practices of outsourcing without adequate control, in combination with the dissipation of planning knowledge and corporate memory, led to a demonstrable loss in the quality of buildings and urban design.⁴⁹ An extreme case can be seen in the failed implosion of Canberra Hospital in 1997 with lethal consequences due to failed practices of outsourcing. As the coroner’s enquiry confirmed ‘none of those persons possessed any knowledge or experience in the implosion technique and [they] were unqualified to prepare a true risk assessment of the demolition. The so-called risk assessment plan was a failure.’⁵⁰ In the aftermath of the catastrophe, the view from a window that focused on the search for individual scapegoats directed attention away from recognizing the failure as being systemic, in fact as constitutive features of neoliberalism.

The loss of professionalism in planning, uncontrolled outsourcing and loss of corporate, public and professional memory through myopic market-orientation resulting in catastrophic consequences, are problematic features to be observed all around the world and could be written up through the window of a rather sad ‘world history of planning’. The loss of knowledge has, however, also infiltrated the local planning debate. A characteristic case is the widespread confusion of Lord Holford’s proposals for the central area of Canberra in 1958⁵¹ with the ‘Y-Plan’⁵², the metropolitan development plan elaborated from 1967 on. ‘Lord Holford’s Y-Plan’ is a reference found in the press⁵³ and even among architects who once worked in the planning agencies.⁵⁴

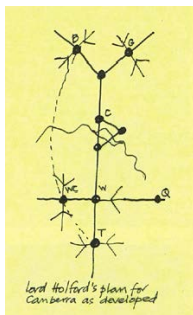


Fig. 6. 2010 Drawing by local architect confusing the Y-Plan (1970) with Lord Holford's Recommendations (1958)

Confronted with the misnomer nature of ‘Lord Holford’s Y-Plan’, University colleagues talking about it at conferences – not planning historians, though – have sometimes raised an astonished eyebrow while others dismissed the observation as pusillanimous pedantry. The loss of historic memory however, and the resulting impoverished and cock-eyed view of the potential of the plans and projects that have shaped Canberra has been of considerable consequence for the city. The following paragraphs open some windows on the history of forgetting and remembering the Griffin Plan.

The Griffin Plan – windows shut and opened

Just what a treasure the Griffin Plan was had escaped general attention up to the mid-1950s. The windows on the qualities of the plan dropped shut with World War I, just as those on the entire capital city project. Canberra fell into a big sleep, from which it was shaken up decades later by the Second World War. That War opened a number of new windows. It changed the nation's whole outlook from that of a collection of colonies to a consciousness of national identity, for which the capital could serve as a nucleus⁵⁵; but it was the military-political crises of the mid-1950s that motivated Conservative Prime Minister Menzies to bring what had thus far



been an aborted capital city project to completion. As has often been described, Menzies established the National Capital Development Commission (NCDC), an exceptionally powerful and well-resourced organization which was in charge of the planning and development of Canberra between 1957 and 1989.

In this context, new windows were opened from the mid-1950s on by Peter Harrison, the NCDC's Chief Planner from 1957 to 1972. Harrison re-discovered the importance of Canberra's landscape setting, but also confirmed the shift of the balance away from City Beautiful concepts to a modernist and overall suburban interpretation of a city of bungalows and automobiles. Almost logically, the window opened by Lord Holford's recommendations in 1957 was that of the automobile windscreen looking out to a city of highways in the landscape. Peter Harrison and later US historian Mark Peisch⁵⁶ were the first to elaborate on the synthesis of Garden City and City Beautiful elements in the Griffin Plan; a discovery that Peter Hall extended to his statement that Canberra had 'achieved the difficult feat of being one of the last Cities Beautiful, and also the world's biggest Garden City'.⁵⁷ While this statement is by nature a classification rather than a clear praise, one of Griffin's biographers emphasized how amazingly advanced Griffin's concepts were in terms of professional planning. In 1963, James Birrell pointed out: 'No major concept in town planning has been put forward in the (then) 40 years since the city was designed that is not incorporated in the original scheme'.⁵⁸

Far ahead of the conventional planning of the early 20th century, the plan incorporates a whole catalogue of ideal concepts of planning⁵⁹ that are up-to-date even a hundred years later – right through to what has to be classified as sustainable planning.⁶⁰ Features of the plan included: neighbourhood units (explicitly named as such in 1911) and diversified urban sub-centres connected by a tramway system 'borne at public expense'; principles of water recycling, decentralised sewerage treatment and urban gardening; reduction of pollution through hydro power; principles of functional and social mix and ideas on the public goods function of residential land.

The plan also adopted a long-term perspective. The competition conditions had suggested an initial population size of 25,000 with a potential to grow up to 75,000 within a foreseeable time span.⁶¹ But the plan was looking further ahead. 'Any arrangement looking forward one hundred years has to be elastic,' Griffin said, and yet had to define an urban design structure and a functional disposition of districts 'in their right relationship to the city in its later development... 'We must not plan for a village... This is done where town planning is not practiced.'

To this end, Griffin anchored the design principles of his concept on the ground in such a way that they would provide long-term guidance for the city's development right from the start, using the existing landscape features as cornerstones of his design. Set within the frame of hills, ridges and lake, only a few points of architectural accentuation, maybe even a mere stone pyramid or pennant on a hill, are needed to establish a spatial design interpretation of the natural landscape. Axes or other lines in space can thus be made visible 'almost without the assistance of man's handiwork' to delineate a spatial setting for the future city.⁶² It was the parallels between his kind of space design and those found in Asian cultures and other references to 'the longest-lived civilizations' that support Edmund Bacon's judgment on Canberra as 'a statement of world culture'.

At the same time, the whole city and in particular 'the great triangle, inscribed across the central basin was conceived as a living expression of democratic governance, its axial geometries generated from the salient points in the landscape and its disposition of city functions generated from an inspired reading of the Constitutional provisions for Australian parliamentary democracy.'⁶³ This is how in the 1980s Professor of Landscape Planning James Weirick elaborated on the qualities of the Canberra Plan as a manifestation of 'democratic symbolism'.

The reasons why so few of the design principles in the central area have materialized are complex. They have been described in 'Myths and Models' through the window of semantic impoverishment and also with reference to one of the big cultural controversies of our time, the verdict and the legacy of Modernism. Seen through one window, we are confronted with the "spiritless modernism of contemporary Canberra and the official culture that has produced it"⁶⁴ – a shallow Modernism that would best be transcended if possible. The view from another window admonishes us to consider the manifestations of post-war modernism as an important layer, in particular since the "Modernist parklands encircling the lake, for instance, are not without heritage value."⁶⁵

The Windows approach suggests discussing both perspectives. The same goes for other controversial contexts such as e.g. the position on the new and permanent Parliament House, attacked in one of the best critical pieces ever written on the subject as the source of almost all evil in the capital⁶⁶, which Myths and Models praised as a most interesting and successful building, albeit expressive of the contradictory characteristics of the society in which it is embedded.

Concluding remark

The paper has used the windows metaphor as a vehicle to explain basic conflicts in the development of Canberra. In some of the cases, alternative views can be reconciled easily, in others, the windows perspective could prove



fruitful to facilitate a dialogue that might go beyond mere confrontation. The work on the development of a ‘windows theory continues’.

Disclosure Statement

No potential conflict of interest was reported by the author.

Notes on contributor

Karl Friedhelm Fischer studied urban design and worked at the universities of Aachen, Berkeley and Canberra. He also has as a degree in English/American Literature (Aachen). At the HafenCity University, Hamburg, he was a professor for ‘History and Culture of the Metropolis’, and at the University of Kassel, he taught planning history and urban regeneration. In 2013, he took up a position as professor and acting director of the MUDD program (Master of Urban Development and Design) at the University of New South Wales, Sydney, where he is now a visiting professor. Professional affiliations include Progress in Planning (editorial board), AESOP (Council of Representatives while in Europe) and elected member of German Werkbund. Following the publication of his PhD thesis ‘Canberra – Myths & Models’ the majority of his publications have been in the field of planning history.

¹ Bacon 1968

² Fischer and Weirick 2017: 111

³ Fischer and Altrick 2018

⁴ The term was even added to the Oxford Australian National Dictionary in 2013

⁵ the superb set of presentation drawings by Marion Mahony Griffin (1871-1961) were inscribed on the UNESCO Memory of the World register in 2003. It took a long time before the window upon Marion Mahony Griffin’s importance for the Canberra plan was recognized. While emphasising her significance in this context, this paper uses the term Griffin Plan rather than the Griffins’ Plan.

⁶ Bacon 1968:625

⁷ Barr 2010, Towell 2010

⁸ Fischer 2013

⁹ Hall, 1988:196

¹⁰ Fischer 1984, 1989

¹¹ While this assessment has been supported and refined with a view to the *quality* of planning – ‘an outstanding national outdoor museum of the world’s best practice in planning from the 1910s’ (Freestone 2010: 274) – it is questionable whether the ‘best practice seal of approval’ can be granted in a similarly broad way to the developments since the 1989.

¹² James 1908: xi

¹³ Nietzsche 1887: 119

¹⁴ Hitchcock 1954; Belton 1988

¹⁵ Harvey 1989

¹⁶ Healey 1992

¹⁷ Collins 2000

¹⁸ Sandoval-Strausz and Kwak 2018

¹⁹ Sandercock 1998

²⁰ ‘Even a 20 storey building is not high rise’ argued Chief Minister Barr in February 2018. ‘You [can] go anywhere else in the world and they would laugh at you if you said a 12 storey building was high rise.’ We are stuck here in this sort of small-town, backwards, 1940s mindset and we need to move beyond that.’ Quoted by Burdon 2018.

²¹ Reys 1997:267

²² Headon 2003

²³ Gordon 2006

²⁴ Vernon 2012

²⁵ ACTPLA 2008

²⁶ Pegrum 1983

²⁷ Taylor 2006

²⁸ Weirick 1988:7–11; 1998:62–68

²⁹ Lansdown 1971

³⁰ 1984, 1987:31

³¹ Fischer 2013:ix

³² Fischer 1989:191

³³ Vernon 2010:79

³⁴ Senate 1955: 97

³⁵ Fischer 1984, 1989

³⁶ Harrison, 1995: 6

³⁷ Hancock, 1930: 278

³⁸ RCFCA 1917: 11804

³⁹ Fischer and Weirick 2017

⁴⁰ This was the ‘Block Review’ (1988) conducted by the head of the Commonwealth Government’s Efficiency Scrutiny Unit, David Block

⁴¹ Canberra Times 25.06.1999.

⁴² Fischer and Weirick 2017



⁴³ Freestone, 2009; Brown, 2014

⁴⁴ Canberra Times 1988: 2; Block 1988

⁴⁵ The complex new arrangements are discussed in Fischer and Weirick 2017

⁴⁶ Fischer 1984, acknowledgements

⁴⁷ Headon 2003

⁴⁸ Birtles 1987

⁴⁹ Fischer 2009. Features such as spot development responding to market opportunities rather than long-term planning principles, the introduction of unsolicited bids as a new instrument, and the development of a 'free enterprise zone' with 'potentially unfettered commercial development opportunity' (JSCNET, 2008: 98–103) with offices, large-scale retailing and Factory Outlet Centres at the airport (Freestone and Wiesel, 2015) are signs of a trend towards the 'normalization' of urban development for city and territory (Freestone, 2009; Brown, 2014; Fischer and Weirick 2017). Large tracts of the recent suburban development including the low-standard housing at the edges of town in north, south and west, with McMansions on small lots trying to save space by replacing traditional eaves and 'verandahs' by more air conditioning certainly do not earn the 'best practice seal of approval'. The shonky quality of craftsmanship in Canberra's building industry has recently reached the point at which it became the object of a government enquiry.

⁵⁰ Sherman 2000

⁵¹ Holford 1958

⁵² Voorhees 1967

⁵³ Swain 2013

⁵⁴ Wheeler 2010: 50

⁵⁵ Fischer 1984: ch. 2.4

⁵⁶ Peisch 1964

⁵⁷ Hall, 1988:196

⁵⁸ Birrell 1963: 92.

⁵⁹ Fischer 1984

⁶⁰ Fischer and Weirick 2014a, 2014b

⁶¹ The figures were based on the growth model of Washington

⁶² We are reminded of Daniel Burnham words in his famous quote 'Make no little plans', in which he asserted 'that a noble diagram, once recorded, will never die but long after we are gone will be a living thing asserting itself with evergrowing insistency.'

⁶³ Weirick 1988:7–11; 1998:62–68

⁶⁴ Griffin Society Website

⁶⁵ Vernon 2010: 79

⁶⁵ Doherty, 2010; Raggatt, 2016

⁶⁶ Weirick 1989

Bibliography

Bacon, Edmund. "Canberra as a statement of world culture." *Architecture in Australia*, **57** no. 4 (1968): 625–626.

Barr, Andrew. "Walter Burley Griffin is dead". <http://the-riotact.com/walter-burleygriffin-is-dead/30920>. (2010)

Belton, J. "The space of rear window" *MLN*, vol. 103, no. 5, *Comparative Literature*, 1121–1138. December 1988.

Berger, John. (1972) *Ways of Seeing*. London: BBC and Penguin Books.

Birtles, Terry. Review of K. F. Fischer: Canberra – Myths and Models. *Australian Geographer* Volume 18, Issue 1, 1987.

Block, David. *Block review, ongoing role of the National Capital Development Commission (NCDC)*. Canberra: Commonwealth of Australia, 1988.

Burdon, Daniel. "Andrew Barr hits out at 'small-town, backwards, 1940s mindset' on tall buildings in Canberra. Canberra Times 14.02.2018.

Brown, Nicholas. *A History of Canberra*. Melbourne: Cambridge University Press, 2014.

Canberra Times. Editorial: "Developing Canberra". 25.06.1988.

Doherty, M. Money-back guarantee as Immigration Bridge abandoned. *Canberra Times*, 30.03.2010.

Fischer, K. F. *Canberra: Myths and Models – Forces at Work in the Formation of the Australian Capital*, Hamburg, Institute of Asian Affairs, 1984.

Fischer, Karl. Canberra: Myths and Models. *Town Planning Review*, 60 (1989): 155–94.

Fischer, Karl Friedhelm. "Building culture, urban design culture, planning culture" *Wolkenkuckucksheim*, **8**, <http://www.tucottbus.de/theoriederarchitektur/Wolke/eng/Subjects/032/Fischer/fischer.htm>. (2004).



Fischer, Karl Friedhelm. „Modernism reloaded. Von der sozialstaatlichen Hauptstadt zur deregulierten Stadt und darüber hinaus“, in A. Hamedinger et al. (eds.), *Strategieorientierte Planung im kooperativen Staat*, Stuttgart, VSA, 2007: 286–308.

Fischer, Karl Friedhelm. “Canberra’s Centenary.” *Town Planning Review* 84, no.2, 2013: iii-xiv.

Fischer, Karl Friedhelm & James Weirick. “Canberra 2013: Planning and Urban Development Challenges at the Centenary of the National Capital.” In *Proceedings of the State of Australian Cities Conference, Sydney, 26-29 November 2013*, edited by Kristian Ruming, Bill Randolph, & Nicole Gurrán, 1-16. Sydney: SOAC Research Network, 2013.

Fischer, Karl Friedhelm and Weirick, James. “Sustainability as a Key Theme in the Planning History of Canberra.” In *Past as Guide to Sustainable Futures: Proceedings of the 16th International Planning History Society Conference, St. Augustine, Florida, USA, 20-23 July 2014*, edited by Chris Silver & Dan Zhu, 344-376. Gainesville: University of Florida, 2014a.

Fischer, Karl Friedhelm and Weirick, James. “Sustainability vs Resilience in the Planning History of Canberra.” In *Proceedings of the 2nd International Conference on Urban Sustainability and Resilience, London, UK, 3 – 5 November 2014*. London, UK, 2014b.

Fischer, Karl Friedhelm. (2013) “Canberra’s centenary”. *Town Planning Review*. **84**(2), pp. iii–xiv.

Fischer, Karl Friedhelm and Weirick, James. Canberra 2013: “planning and urban development challenges at the centenary of the National Capital”, in Ruming, K., Randolph, B. and Gurrán, N (eds.) *Proceedings of the State of Australian Cities Conference, Sydney*. Available at: <http://apo.org.au/node/59744> (2013).

Fischer, Karl Friedhelm and Altrock, Uwe. *Windows Upon Planning History*. Abingdon and New York 2018.

Freestone, Robert. “Canberra, Australia” in Hutchison, R. (ed.) *Encyclopedia of Urban Studies*. Thousand Oaks, CA: Sage, 2009: 103–105.

Freestone, Robert. *Urban Nation. Australia’s Planning Heritage*. Sydney: CSIRO Publishing, 2010.

Freestone, R. and Wiesel, I. (2015) “Privatisation, property and planning: the remaking of Canberra airport.” *Policy Studies*, 36(1), 2015: 35–54.

Hancock, William Keith. *Australia*. London, Benn, 1930.

Hall, Peter. *Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century*, Oxford, Basil Blackwell, 1988.

Harrison, Peter. *Walter Burley Griffin : Landscape Architect* (edited by Robert Freestone), Canberra: National Library of Australia, 1995.

Headon, David. *The Symbolic Role of the National Capital*. Canberra: National Capital Authority, 2003.

Hitchcock, Alfred. *Rear Window*. Hollywood: Universal Studios, 1954.

Holford, W. *Observations on the Future Development of Canberra, A.C.T.* Canberra, 1958.

Hobbs, Philip. “Scrap the NCDC says Block”. In: *Canberra Times* 17.06.1988.

James, Henry. *Portrait of a Lady*. New York: Norton, 1908.

Nietzsche, Friedrich. *On the Genealogy of Morals*, (orig. 1887) trans. W. Kauffmann & R. J. Hollingdale. New York: Vintage, 1967.

Pegrum, Roger. *The Bush Capital*. Sydney: Hale and Iremonger, 1983.



- Peisch, Mark L. *The Chicago School of Architecture: early followers of Sullivan and Wright*. London: Phaidon 1964.
- Raggatt, Matthew. "Friends of the Albert Hall welcome 10-year Plan as added protection." *Canberra Times*, 11.06.2016.
- Reid, Paul. *Canberra Following Griffin: A Design History of Australia's National Capital*. Canberra: National Archives of Australia, 2002.
- Reps, John W. *Canberra 1912: Plans and Planners of the Australian Capital Competition*. Melbourne: Melbourne University Press, 1997.
- RCFCA = *Royal Commission on Federal Capital Administration, I, Issues Relating to Mr. Griffin*, 1917.
- Sandercock, Leonie. (ed.) *Making the Invisible Visible: A Multicultural Planning History*. Los Angeles: University of California Press, 1998.
- Sandoval-Strausz, Andrew and Kwak, Nancy. *Making Cities Global. The Transnational Turn in Urban History*. Philadelphia: University of Pennsylvania Press, 2018.
- Swain, Nick. "Getting back to Plan Y". *Sydney Morning Herald* 28.05.2013.
- Taylor, Ken. *Canberra: City in the Landscape*. Sydney: Halstead Press, 2006.
- Towell, Noel. "Griffin not part of embiggened picture: Barr." *Canberra Times* 04.11.2010: 1.
- Vernon, Christopher. Canberra: the Unsustainable Landscape City? *Isola. Instant Cities: Landscape, Infrastructure and Urban Form - Proceedings of The 5th ISOLA Conference*, New Delhi, India, N/A (2010): 73-79.
- Vernon, Christopher. "Capital Connections: Australia, Brazil and Landscapes of National Identity", *Proceedings of the 15th International Planning History Society Conference*, Sao Paulo, Brazil, 1, (2012) 1-16.
- Voorhees, Alan M. *Canberra Land Use Transportation Study: General Plan Concept*. Prepared for the National Capital Development Commission. Canberra: NCDC, 1967
- Wheeler, Tone. "The shape of the sustainable city". www.vironastudio.com.au/.../ar_116_aug+sep_2010.pdf.
- Weirick, James. "Don't You Believe it: Critical Response to the New Parliament House". *Transition*, issue 27/28, Summer/Autumn, 1989, pp. 7-66.
- Wensing, Edward. Walter Burley Griffin is dead: long live Walter Burley Griffin's planning ideals! *Urban Policy and Research*, 31(2), 2013: 226-240.

Image Sources

Fig 1 National Archives of Australia (A710,38)

Fig. 2 Canberra Times 04.11.2010

Fig. 3 Stockland Corporation (2005) *Advertisement flyer for The Waterfront at Kingston Foreshore, Lake Burley Griffin*. Sydney: Stockland Corporation Ltd.

Fig. 4 Flyer for Conference 'Windows Upon Planning History', University of Kassel 2013

Fig. 5 Fischer, Karl Friedhelm and Altröck, Uwe, 2018.

Fig. 6 Wheeler, Tone, 2010.



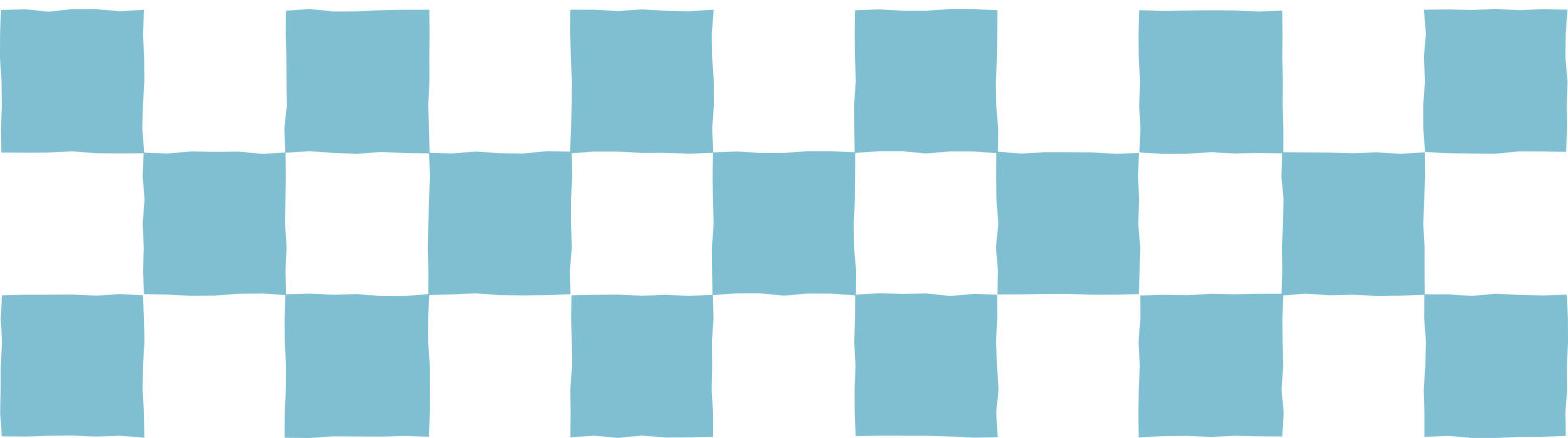
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

OAA Other Accepted Abstracts



Soviet Post-WWII urban ideas and space exploration: 1960s-1980s

Olga Zinovieva (Lomonosov Moscow State University)

The main goal of the paper is to research of how the Soviet science and space program, in particular, affected urban planning and architectural design in Moscow of the 1960-1980s. The Soviet urban concepts of 1920s -1950s mirrored technological progress and aviation in its own way. Airfields and other aviation facilities appeared on the Moscow landscape. The 1935 Stalin' s Master Plan of Moscow Development broadened the main streets not only for the growing traffic but also for some emergency airplane landings. The themes of skies, embodied in stucco, marble, brass or mosaics pictures decorated the Underground Metro stations, residential houses, public and educational buildings. Images of pilots and paratroopers, offered a great life path for the Soviet people to follow.

The research based on the Soviet urban plans, photos, professional papers and media reflections showd that the space exploration had a tremendous role in the Soviet urban space in terms of planning, architectural design, new facilities, images, street names and monuments. On October 4, 1957, the era of space exploration has begun, when the first Soviet sputnik was launched into the Earth orbit. In 1961, Yury Gagarin became the first man in the history of humanity to enter the space. It also coincided with the change of the political power from Stalin to Khrushchev, who officially proclaimed the advent of simplicity in urban design and the deny of Stalinist excessiveness in architecture in 1955. Later on the Khrushchev style of the post-WWII modernity transformed into Brezhnev' s aesthetics. It resulted in scientific approaches to zoning in urban planning, which combined monotonous residential areas, supported by the infrastructure and imposing geometric constructions of prefabricated units as public buildings. Looking like spaceships or satellites, they were supposed to bring accents to the unified quarters. Space science required new R&D buildings and corporate towns around them. The post-WWII Moscow city plans provided spacious streets and squares, as if inviting interplanetary stations to land. In 1963, Mikhail Posokhin built his wide Kalinin Avue through the old medieval city. The Council for the Mutual Assistance with a glass NLO, sitting in front of it played the role of the main accent there.

The House of Pioneers on the Lenin Hills (1963, Victor Egerev and others) was located in the middle of the square, which looked like a spaceport. Space exploration was perceived as conquest. New street names and memorials reflected this idea, such as the Obelisk to the Space Conquerors (1964, A. Faidish-Krandievsky, A. Kolchin and others). The Obelisk is the landmark of the area, which includes Alley of Cosmonauts (1967), Memorial Museum of Astronautics, Hotel Cosmos and others.

Many monuments, including the statue of Yury Gagarin (1980, Pavel Bondarenko), dedicated to space victories were erected in the city, causing noticeable changes in urban design. Monumental art in different forms presented allusions to the weightlessness.

Contemporary Russian urban planning and design uses citations of that time. However, commercial urban development ignores the ideas of zoning and well-balanced residential areas.

The protection and utilization of the historical and cultural district in southern zhejiang province of China based on the social status quo ----- Take the reconstruction of the historic and cultural district in Songyang county as an example

Wen Jiang (Traditional Architecture Design Instiute of Zhejiang Province), Lu Zhang (Traditional Architecture Design Institute of Zhejiang Province), Bing Yang (Traditional Architecture Design Institute of Zhejiang Province) and Fangfang Xiao (Traditional Architecture Design Institute of Zhejiang Province)

The effective protection and rational utilization of historic cultural district is an important part of historical and cultural city . There is an obvious advantage in historic cultural district which is it's rich cultural heritage resources . But there are also some problems such as run-down buildings/ lack of attraction/ inhospitable and so on . Then , it is not realistic to protect and utilize the whole block , firstly , it is difficult for the government to implement it because of the large number of residents/land and houses involved , secondly , it is difficult to make money . In this social reality , we consider revitalizing the entire block and even the ancient city through the revitalization of the district nodes with points , the specific techniques include the following aspects . First , combining the architecture and its cultural background to add more green space, then improving the comfort of living , Second , the aesthetic value and sensory experience of space are shaped by small then fine, small then beautiful landscape , Third , making in-depth analysis of each space, and show it in the way of landscape design , what we want to achieve is "tell the story , remember the homesickness ." Fourth , through the design of public communication space , we want to make a a place of daily life and communication for the local residents , we also want to make a platform for outsiders to understand the local human history.

From Western Experience to Soviet model: the Paradigm Shift of China Planning thoughts (1949-1952)

**Hao Xu (Department of Urban Planning, School of Architecture, Southeast University (Nanjing)),
Baihao Li (Department of Urban Planning, School of Architecture, Southeast University (Nanjing))
and Xiaoqiang Fu (Department of Urban Planning, School of Architecture, Southeast University (Nanjing))**

1949 is a special historical node in Chinese history. Before this, early modern Chinese urban planning respected European and American experience. After that, the Socialist China followed the Soviet Union planning model. The study focused on the paradigm shift of Chinese planning ideas from western experience to Soviet model in the 1949-1952.

In the three years, the western experience and the Soviet model formed a contradictory situation. On the one hand, the government led the initial intervention of the Soviet model, including planning practice in the northeast of china, and the introduction of quota index system. On the other hand, there is a continuation of the western planning ideas, which is mainly embodied in the knowledge production by Chinese planning experts who have been educated in Europe or the United States.

In the face of this opposition, the new central government adopted radical way in the criticism of Western planning thoughts while highlight the superiority of the Soviet Socialist planning. Thus regards of planning thought governance, three parallel paths are carried out from the perspective of national strategy, industry policy and individual.

Firstly, Take the Soviet Union as a teacher and transform it into a part of the national development system. Secondly, various urban planning conferences were hold in order to intervene the pro-Western ideological. At last, ideological transformation Ideological reform was also carried out by planning experts who were educated in the West. They were asked to publish article in Public media to identify the Soviet planning ideas. Through the setting of above three paths and the corresponding social practice, the collective turn of Chinese urban planning industry in 1953 was finally achieved.

PLANNING FOR MEGA EVENTS, DUAL DEDICATIONS OF LEGACY AND DELIVERY

Niloufar Vadiati (HafenCity University Hamburg)

Mega-events, including the Olympics, as 'hallmark event' are considered as a means of image building, and catalyst for economic regeneration and urban development through strategies of attracting global investment, high employment multipliers and local tax revenues. Critics, however, emphasise that running a 'spectacle' and achieving local regeneration are tasks which are not easily reconciled; Since the consumers of the spectacle are mainly middle-class, and the ultimate consequences of city renewal by means of sport/consumption-led regeneration will be gentrification, prising-out and displace local small businesses and the disadvantaged populations.

The present paper seeks to address these controversial dynamisms as the inherent to the planning of the large-scale event. Its focus is Olympic Games, and it examine the different planning measures that affects the outcome of the Games. The study has been materialised through comprehensive literature review, that on the one hand locate the Mega Events amid the planning paradigms and critical urban theories, and on the other hand consider it as an organisational project.

The examination suggests that there have been common dynamics behind the controversy of hosting the Olympic Games which could be plagued almost everywhere in the world to a greater or lesser degree, as the contradiction between two concurrent and tacit conceptions of the Mega Events. Delivery: the notion that understands the games as a project that should get done on time and perfect alongside, and as the counterpoint, legacy, which conceives Mega Event as a tool of redistributing the benefits to the citizens. The combination of legacy and delivery or public-sector (gift) and private-sector (profit) in one phrase seems awkward at best and an outright oxymoron at worst, while can be only explained by the market base city development.

Therefore, the paper set a versatile analytical tool and conceptual groundwork for an empirical work that focus on the project and urban dimensions of Mega Events.

Commons in participatory planning: exchanges between Italian participation and Japanese “machizukuri” practice in academic spheres

Alba Victoria Zamarbide Urdaniz (Waseda University), Tomoyuki Mashiko (Waseda University) and Armelle Le Mouëllic (Grenoble National School of Architecture)

Nowadays, a new interest has grown on participatory policies supported by the institutionalization of this process. For example, at global levels, institutions like UNESCO are insisting in the importance of integration of communities in planning and heritage preservation. Participatory process had been discussed by architects, urban designers and academics since the early 60' s. Ideas that had previously originated in the West are now re-discovered through Asian examples/practice.

In Japan, a specific methodology called “machizukuri” has been developed in the last decades and gradually successfully integrated into governmental planning systems (Watanabe, 2016)

It can apply to diverse scenarios, like pre and post disaster planning, territorial revitalization or place branding among others. This methodology is being exported to other Asian countries. Taiwan and South Korea for example are trying to adapt the approach to their local conditions. Besides, Japan has tried to flagship Asian heritage visions and actively participated in diverse international cooperation projects, especially in South-East Asian countries, where the bottom up community approach has been applied (e.g. Cordillera terraces, Philippines, Nguyen Royal Tombs in Hue Province, Vietnam)

In Europe, recent earthquakes occurred in Italy (L' Aquila in 2009 & Emilia Romagna in 2012) have underlined the gaps of top down systems and the need for better integration of local communities in the creation of reconstruction tool and awareness rising. Though Urban Centres, created in the 60s as the application of social ideals in urban planning, are spread all over Italy, the model is lagging behind actual needs. This has motivated exchanges. Italy-Japan at academic and governmental levels and has positioned “machizukuri” as a reference methodology that could be adapted to European cases as well.

Inside this context, the research tracks the origins of “machizukuri” in the academic exchanges between East-West, focusing specially in the cases of Japan and Italy. It studies the influence of expert and academics networks in the actual definition of the participatory methodology.

In order to do so, the research first looks at some exchanges and debates fostered by program as International Laboratory of Architecture and Urban Design.

From 1974 to 2004, every year, Giancarlo de Carlo reunited academics and students from north-america, europe and asia in order to work on a determined territory. Those experimentations were published accompanied by some theoretical works in which we can see definitions of participatory planning methodology. ILAUD was also an opportunity for many researchers to connect and elaborates common theory. The study will focus on the links between Waseda University (Japan) and Ferrara University (Italy)

It shows the creation of specific exchange through academics activities and urban projects. The connections between post disaster projects in the Tohoku area by Waseda University(Satoh lab.) and the efforts made by Italian academic institutions to adapt National post-disaster action models in Emilia Romagna and L Aquila are studied. These cases serve as an example of the exchanges of knowledge and the use of “machizukuri” as a reference model. Besides, a considerable number of research works on the Italian case have also been produced by researches in Waseda University, which portray the approach taken by Japanese on the Italian scenario.

On the other hand, cooperation projects and activities developed jointly by both Italian and Japanese parties portray the creation of agreed methodologies.

The research bases on bibliographical data, the direct involvement of the three authors in “machizukuri” practice since 2010, project data and interviews with key persons. The final objective is to analyze the capacity of the methodology to adapt and re-invent itself and its future tendencies.

The inheritance and development of participatory urban design methods under the background of “Internet-plus” era

Yiran Xu (Southeast University, Urbanisation and Urban Rural Planning Research Center of Jiangsu)

In the context of ‘Internet+’ , the new environment of network data and media brings more possibilities to the expansion of urban design participation approach, on which basis the author launches a study on the inheritance and development of participatory urban design methods. This paper begins with a review of the theories, methods and practices of participatory urban design both at home and abroad, and points out the lack of cognitive height, breadth of application and practical depth for public participation in China’ s urban design. At the same time, it also reveals the necessity of introducing multi-stakeholder participation in urban design under the trend towards shifting focus from increment to inventory of urban construction in China. Through the in-depth analysis of the various stakeholders, design phases and project scales, a framework of application conditions for urban design is built. The multiple stakeholders mainly include government agencies, local residents, design teams, developers and builders, expert advisors and commonweal organizations; the whole design process is chiefly divided into earlier survey, mid-term research and later decision-making phases; the diverse project scales basically cover regional-city level, district level and land parcel level. Then, the research sums up three types urban design participation, namely ‘Information and data collection, Urban environment simulation and Interactive communication platform’ , including nine inherent and six ‘Internet+’ methods, namely ‘Information and data collection, Urban environment simulation and Interactive communication platform’ ,with a total of fifteen kinds of urban design participation methods. Based on the nine traditional methods including ‘questionnaire, interview, participant observation, cognitive map, visioning card, layout game, open house, public meeting and thematic event ’ , the author expands six emerging approaches with the “Internet+” concept, which consists of ‘web data mining, mobile terminal tracking, virtual reality, digital city, social media and public participation GIS’ . Each method is elaborated in conjunction with empirical cases, and summarized its applicability and limitation. Finally, the author designs a ‘participatory urban design toolbox’ as a selection reference for different scenarios of urban design. As an extension of thinking, the author reviews the values of participatory design for project practices and makes recommendations on the participatory processes of future urban design.

Crossing Histories; Brazilian Planners of São Paulo and their Transnational References (1910-1930)

Jose Geraldo Simoes Junior (Universidade Presbiteriana Mackenzie) and Heliana Angotti Salgueiro (FAU-Universidade Presbiteriana Mackenzie)

This paper examines how some pioneering planners in the Brazilian state of São Paulo, Victor Freire, Prestes Maia, Ulhoa Cintra, and Anhaia Mello disseminated and appropriated the dominant principles of international urbanism in the period 1910-1930. The education in city planning is directly associated with the repertoire of engineering courses and professional associations. In this environment, where public debates on urban issues were intense, it is worth noting the presence of English urbanist Barry Parker, who lived for two years in São Paulo, implementing innovative projects and debating with local planners. The access to urban planning manuals and reviews, and the presence of these Brazilian professionals in international seminars, led to the dissemination of the international ideals and some resulting essays on the way these ideals could be applied in many fields: urban regulations, projects in downtown areas, housing, sanitation, town extension plans, city management, zoning, among others. In the library of the Polytechnic School, as well as in the personal collections of Anhaia Mello and Prestes Maia, there are precious references to be deeply studied – interests us to analyze critically how these pioneers urbanists read the books of British authors such as Raymond Unwin, Ebenezer Howard and Patrick Geddes, the Austrian Camillo Sitte, the Germans Joseph Stübben, R. Baumeister, A. Brinckmann and Werner Hegemann, the French authors Eugène Hénart, Pierre Lavedan, Gaston Bardet and Le Corbusier, the North Americans Charles Mulford Robinson, Nelson Lewis, Harland Bartholomew, Lewis Mumford, W.B. Ford and others, choosing different paradigms to guide the plans for the metropolis of São Paulo. Contradictions among practices, actors and references are requesting a conceptual and methodological effort attentive to historical dimension of the “circulation” of ideals or their limits of intelligibility and reception in other scales of time and place, such as the one proposed in this paper.

Urban planning in early modern Suzhou (1895-1937)

Wenjuan Gao (Southeast University)

As the dominant commercial, manufacturing, and cultural urban center with merchants of great wealth during the last thousand years of the Imperial China, Suzhou's economic position was rapidly replaced by Shanghai after the first concession area established there in 1843. Although the private trade and other connections with Japan quite likely predate the historical record, Suzhou demanded be opened as a treaty port officially until the 1895 when Japan's victory over the Qing. Starting from this, western urban planning was introduced to transform the physical and intellectual urban spaces, which mean to restore the economic and cultural position of its past.

This paper is a study of the urban planning in Suzhou under the influence of foreign-originated urbanist technologies and practices from 1895 to 1937. First, it analyzes the spatial transformation due to the transport changes, the first horse-road was constructed (1897) between the concession and inner city and foreign shipping companies were established (1898-1907)

Second, this paper explore how Japanese government documents, books and advertising manuals (1910s-1920s) introduced Suzhou's cityscape to their people. In order to highlight what Suzhou was in the cross-cultural dialogue. At last, this paper examines the first master plan of Suzhou (1927) that presented by Japan-trained Chinese architects. Analysing the historical reasons for remaking the city as modern by building roads and urban garden system in this project.

Living Heritage Conservation: from commodity-oriented renewal to culture-oriented and people-centred revival

Yiran Xu (Southeast University, Urbanisation and Urban Rural Planning Research Center of Jiangsu)

Identity, structure and meaning are three components of an environmental image according to the theory created by Kevin Lynch. In reality, the levels of identification of a certain object (city landmark) and its meanings are relatively easy to obtain through questionnaires or interviews with citizens when investigating the public cognition towards the city image, while spatial or pattern relation between different objects (structure) can only be vaguely described. This study aims to provide a new perspective and approach based on webometrics, in which city image can be analysed both quantitatively and qualitatively. The first step is to list as many keywords as possible, including different categories of city elements like roads, streets, rivers, lakes, mountains, parks, plazas, historical sites, skyscrapers and other landmarks. The second step is to do batch operations to fetch quantity data (such as numbers of entries, word frequency, search volume and click-through rate) of selected keywords from internet search engine. Programs can be written to retrieve and correct multiple times on different web search engines to reduce transient data errors. The last step is to sort the data, graphically illustrate the level of cognition of each city element under the same measurement standard, and compare the imageability of different elements. Spatial data visualization can be applied here to generate an intuitionistic map for easy and clear observation. Moreover, the author also collects the quantity data of the intersection between each two keywords to speculate the potential correlation among city elements. This web-metric analysis approach has been utilized in two urban design practices in China (Nanjing and Wuhu), and showed its objectivity and accuracy in discerning the city image structure. Especially at the macro level, it not only judges the overall structure of the city from a more objective cognitive perspective, but also can clearly define the urban axis and corridors, clusters of important buildings, and popular landscape areas.

Adherence and Negotiation: Italian Planning Ideas in the Chinese Port of Tianjin 1902-1943

Penglin Zhu (Delft University of Technology) and Yin Wu (Beijing City University)

The presence of Western nations in Chinese treaty ports changed Chinese urbanization, as the foreign powers introduced modern urban form and architecture. Among them, Italian planning ideas were unique in terms of the specific balance between the country's own planning culture and the Chinese built environment. Comparing to the other concessions, the particular Italian vision of building a 'proletarian' colonial neighborhood allowed the Chinese people to own estate property and even to join the Municipal Council. The Italian concession in the Chinese port of Tianjin was established in 1901 as the latest of the nine countries that established unequal treaties. The settlement area, already occupied by Chinese quarters, cemeteries, and wetlands, was considered as unpromising. Collaborating with Italian urban planners, architects, and engineers, the Colonial Municipality successfully transformed an existing, difficult Chinese area into a highly urbanized Italian neighborhood. Sino-Italian historians and scholars of the Italian concession of Tianjin have so far paid little attention to the architecture or urban form of the settlement. This paper aims to fill that gap by examining how the exchanging ideas and designs influenced the process of Chinese urbanization and people's everyday life.

The paper explores the manner and the extent to which the Italian government and colonial authority included Italian planning ideas in the development of the Chinese port of Tianjin. Specifically, it examines how the Italian planners and architects adopted Italian planning concepts and tools to respond to the cultural, social, and technological needs in China based on historical documents from the Italian government and colonial municipality, and old maps. The paper highlights three specific aspects that are particular to the Italian settlement.

- First, the paper explores in which manner and to what extent the Italian Colonial Municipality took a particular planning approach to solving the problem of insufficient financial support from the Italian government? It will use the discourse analysis to study the documents of the colonial municipality and Italian government.
- Second, in terms of architectural design, it explores how the Italian architecture movements between 1900-1940 reflected in the urban plans and architectures in the concession. The Tianjin settlement features a range of urban spaces, such as open space, military building, public architectures, and private villas that reflect consecutive designs patterns in Italy since the 1900s. For instance, the Palace of Italian Culture 'Forum' built in 1927—a simple symmetric structure made of limestone—resembled a typical piece of Fascist architecture.
- Third, it explores how Chinese people perceived and conceived of architecture and the built environment in Italian concession. It explores how the Italian urban form and architecture shaped the Chinese people's cognition of the modern urban life through the local's diaries and narratives. Moreover, it studies how the Chinese people changed the built environment as the owner of the estate property.

In conclusion, this paper aims to be a firsthand document to comprehend the influence of the foreign planning ideas for the Chinese built environment. Moreover, it brings urban form and architectures into the existed research field of Sino-Italian cultural exchange



Planning for Megaevents, dual dedications of Legacy and Delivery

Niloufar Vadiati

PhD, HafenCity University Hamburg, niloufar.vadiati@hcu-hamburg.de

Mega-events as 'hallmark event' (Essex&Chalkley 1998) are considered as a means of image building, and catalyst for urban economic regeneration and development through strategies of attracting global investment, high employment multipliers and local tax revenues (Owen 2002). Critics, however, emphasise that running a 'spectacle' and achieving local regeneration are tasks which are not easily reconciled (Eisinger 2000), since the consumers of the spectacle are mainly middle-class (Gornostaeva 2011), and the ultimate consequences of city renewal by means of sport/consumption-led regeneration will be gentrification, prising-out and displace local small businesses and the disadvantaged populations (Vigor, Mean et al. 2004, Cohen& Watt 2017).

I suggest that there are common dynamics behind the controversy of hosting the Mega Events which has plagued almost everywhere in the world to a greater or lesser degree, as the contradiction between two concurrent and tacit conceptions of the Mega Events. Delivery: the conception that understands the games as a project that should get done on time and perfect alongside, and as the counterpoint, legacy, which conceives Mega Event as a tool of redistributing the benefits to the citizens. The combination of legacy and delivery or public-sector (gift) and private-sector (profit) in one phrase seems awkward at best and an outright oxymoron at worst, while can be only explained by the market base city development. Therefore, the aim of this paper presentation is to review and analyse the whole process of Mega Event planning and legacy building which has been set to deliver the whole event and engage the locals to the benefits, while reflecting them on recent urban discourses, and the theories embedded them.

Keywords: Mega Event, delivery, legacy, city planning, project management

Introduction

In recent years, cities have focused great attention on leveraging the global resources offered through hosting mega-events such as the World Cup and the Olympic Games (Müller 2015). Mega-events can be defined as one-time occasions with a fixed duration that attract large numbers of visitors and have worldwide reputations (Horn 2007; Hall 2006; Gold and Gold 2008). They can also be regarded as major infrastructure provision opportunities and are accompanied by substantial 'drama' (Roche 2000, 1) and a high level of international scrutiny (Flyvbjerg 2013). The drama and media exposure of these 'hallmark events' (Essex and Chalkley 1998), causes them to be considered as a chance for placemaking, a process which includes both shaping the image of host cities, and acting as a catalyst for urban economic regeneration and development through attracting global investment (Gratton Shibli and Coleman 2005; Hall 2006; Smith and Fox 2007). However, the idea of utilising a mega-event to pursue mass intervention by the state has been opposed by some scholars, who criticise the negative effects of such strategies on the trajectories of urban development and policy-making processes. Their concerns relate to the record of cost overruns, schedule slips, oversized infrastructures, and 'over-promising' about the benefits and optimistic futures for host cities (for example, Müller 2015; Boykoff 2014; Cottle 2011; Gaffney 2010; Hayes and Horne, 2011; Shin and Li 2013). In addition, there is some evidence suggesting a triggering effect of mega-events on social polarisation and the displacement of existing working-class populations by middle-class residents (Bound 1996; Hiller 2000; Horne 2007; Watt 2017). Consequently, the mega-event issue has also become a worldwide platform for opponents who call attention to the destructive dimensions of strategies related to place making through mega-events, in terms of the erosion of democratic accountability and the overlooking of marginalised groups (Gruneau and Horne 2015). These critics have produced a great deal of debate about the legitimacy of hosting mega-events and their ultimate benefits.

The goal of this paper is to provide a fresh understanding of the Olympic Games through clarifying the dilemma caused by the dual nature of mega-events, in terms of projects and urban leverage. I suggest that there are common dynamics behind the controversies attaching to the hosting of mega-events which plague almost every location worldwide to a greater or lesser degree. I call this the contradiction between the dual requisites of legacy and delivery. In these two concurrent and tacit conceptions of mega-events, delivery is the notion that understands the Games as a project that should be completed perfectly and on time; it exists alongside the counterpointing requisite of legacy, which conceives a mega-event as a tool for distributing and redistributing benefits to citizens. The



combination of legacy and delivery as being an issue of 'public sector (goods) and private sector (profit)', covered by this one phrase, seems awkward at best and an outright oxymoron at worst, when only explained by the market base of city development. On the one hand, there is the desire and intention to create the greatest possible spectacle, and to put forward the best possible image of the city to the world; on another is the commitment actors have towards environmental, social and economic benefit for cities and their citizens. This duality results in the forming of two characteristics – the two-fold nature of mega-events – and each of these (delivery and legacy) should be examined according to recent narratives and the theories embedded in them.

The legacy aspect of mega-events

Despite numerous attempts to define the concept of legacy within the recent literature on mega-events (MacRury 2008; Agha et al. 2012; Chappelet 2012; Malfas et al. 2004), the term is still complex, ambiguous and multi-faceted. Preuss (2004) conceptualises legacy as a three-dimensional concept, and this is a useful tool for developing a plural understanding of this complicated construct. He suggests that legacies can be planned or unplanned, positive or negative, and tangible or intangible. Although most pre-event studies focus only on planned, positive and tangible dimensions, the same legacy may be viewed positively or negatively, depending on who is making the assessment. Being focused on legacy in terms of all and any outcomes, Cashman (2013) argues that legacy is what remains when the Games have finished and can be interpreted as 'aftermath'. In other words, legacy is "all that may be considered as consequences of the event in its environment" (Chappelet 2012, 77).

Officially, the IOC provides a list of broad meanings of Olympic legacies that it recognises and indeed promotes in order to help bid cities to frame their strategies. These include: a) economic impacts of the Games on host cities over time; b) cultural impacts connected to social values which host cities may wish to highlight, such as multi-cultural inclusivity; c) social debate created in the context of the development and reuse of Games infrastructure; d) political legacies arising through efforts to promote 'peaceful', skilled and fair sporting contests; e) education relating to the Olympic mission; and f) 'sustainable development' (IOC Olympic studies 2013, 2–4). These categories suggest a wide range of possible outcomes, not all of which may figure to equivalent extents in cities' bids. The IOC points out that although some of these Olympic Games legacies may be 'tangible' or quantifiable, such as Olympic Village infrastructure or numbers of volunteers, others may be 'intangible', for example, the value of inspiration to athletes or a sense of belonging accruing through participation. The requirement for cities to deliver more than simply physical change is clearly important both for the IOC and citizens.

Within the city context, legacy could be considered as a process of passing on through the generations – the handing down of a 'gift', or the inheritance of knowledge, property or particular attitudes. This goes beyond the definition of the term 'legacy'; rather, it offers a narrative of a "prescribed set of outcomes as a means for thinking and linking past, present and future trajectories of a city in its developmental path" (MacRury and Poynter 2008, 17). While it is critical to track those potentialities of legacy which go beyond planned outcomes, it is also critical to recognise that different sorts of outcome may have different durations and geographies of impact within cities' developmental trajectories (Gaffney 2010). For instance, one of the immediate aftermaths of an Olympic Games could be increased levels of tourism for a host city; however, such increases may prove difficult to sustain. The 1992 Barcelona Olympic Games is considered the first and only Olympics to have generated long-term tourism legacies (Li and Blake 2009). Benefits such as a boosted construction industry may be felt at the level of the city, but simultaneously, costs may be borne by localities in terms of rising property values, for example. Local people may additionally experience disadvantages through being dispossessed of their homes and livelihoods in order to make way for the scale of development that hosting a Games has come to imply. These facts raise important questions about the temporality of legacy and who is in a position to benefit.

In light of the record of cost overruns of previous mega-events (Flyvbjerg and Stewart 2012), and the impression that host cities can be disadvantaged by holding a mega-event, the issue of use of public funds creates considerable controversy. This controversy focuses on whether huge investments of this type return the money spent to citizens through delivering the claims and promises made. During the last decade, therefore, the idea of harnessing a mega-event to a broader urban agenda that moves beyond the interest of finance, developers, inner-city reclamation and the tourist industry has emerged in the mega-event literature (Hiller 2014). Critical writing on the subject conceives legacy not just as a set of predicted outcomes to be capitalised upon, but rather as a narrative of unfolding and continuing multifarious achievements. These achievements are seen as generative and driven by a momentum born of economic stimuli, infrastructure development and the elaboration of 'soft' factors and affirmed values of communities and other stakeholders in the life of the city.

Thus, legacy has become even more contested, being perceived as a symbol of the tension between pro-growth factions and locals who feel excluded from the benefits of the event. In order to untie this 'knot', MacRury and Poynter (2008) categorised the current concepts and practice of legacy as two different and contrasting narratives: legacy as 'commodity' and legacy as a 'gift'. The concept of legacy as a commodity can be located in the wider



perspective of organisational assumptions underpinning the physical aspects of mega-events, which in the context of cost-benefit planning is a supplementary part of mega-event delivery (to be further explained in the next section). Here, it is enough to say that the legacy agenda, used as the legitimisation 'story' attached to the whole setting-up mission, focuses on manifesting the benefits of mega-events as being the city's benefits, by building new transportation infrastructure, parks and facilities. On the other hand, legacy as 'gift' is a necessarily tacit discourse defined from the city planning/urban sociology perspective. It is not just about the outcomes, positive or negative, of mega-events that 'happen' to citizens, but should respond to the demands, that are made by people for their share of an event. The ideology behind legacy as 'gift' (MacRury and Poynter 2008), which can be more accurately stated as the 'right of the citizen to the event', is based on equal distribution of the benefits of legacy and on bottom-up development of the legacy agenda. This idea of the 'right of the citizen to the event' behind the concept of legacy is based on the theoretical framework of 'right to the city' discourses which, in order to apply them in my analysis, I outline in this chapter.

Legacy building based on the 'right to the city'

The importance of legacy as an intentional positive benefit for the public is an official requirement of both the IOC and host cities' national governments. This necessity can be explained through diverse but relevant discourses presented in the 'right to the city' concept. Although, Lefebvre's concept of "the right to the city" (1996, 147–151) was initially considered rather a revolutionary concept and a plea for a new and radical kind of urban politics, it is now widely accepted and used in reformist agendas. The application of this model presents an analytical tool for rationalising the importance of preserving public interests, such as legacy, within all the hosting processes of mega-events, including specifically the Olympic Games.

Lefebvre claims that the city should be created by its citizens through their acts of participation or "appropriation"; that is, through everyday routines and capacities used to realise their social needs, and not only through using "dominant strategies and ideologies" (1996, 174 and 154). Lefebvre suggests that 'right' in this context pertains to 'the interests of the whole society', but would be intended to privilege 'those who inhabit'. It can be regarded as a form of ownership, but one which, at least in philosophical terms, is differentiated from the processes of legally acquiring land and property by exchange.

Along similar lines, Amin and Thrift argue that the 'right to the city' is "the right to citizenship for all, the right to shape and influence" (1995, 154). The focus of their work is on how to apply this principle in practical terms. The 'right to the city', they argue, "cannot draw on the politics of urban design and public encounter alone, but also requires rights-based and other institutionalized actions at national and urban levels to build capacity and capability across the social spectrum" (Amin and Thrift 1995, 154). In other words, it is not enough to allow people to participate in decision-making processes; people's existing capacities and their "capabilities" – defined in terms of the opportunity to realise the things they value (Sen 2009, 231) – also need to be developed so they can perform their citizen roles more effectively. The solution they propose, and which they refer to as a 'politics of the commons', does not begin with formalised rules of engagement, but rather with the recognition that the different interests people have and contributions they can make constitute valid practices of citizenship, and that these are what a mature democracy should seek to support and cultivate.

Agreeing on Legacy

To sum up, rather than accepting one of these definitions of legacy as a 'best-fit', or producing a composite definition, legacy has assumed a complex range of meanings in the discourse of the sports mega-event and in the evaluation of its implications for urban regeneration and economic development. It is not to be confused with the 'narrower' evaluation which uses rigid statistics of socio-economic impacts and whose focus is primarily on the costs and benefits of the mega-event itself. The focus here is to combine direct Games-related impacts with a broader examination of the additional or indirect contributions to the economic and social context of the host city. In this sense, 'hard' and 'soft', 'tangible' and 'intangible' legacies are interwoven. The effort here is to distinguish a 'commodity' concept of legacy, understood as a series of concrete outcomes planned and developed by the state, from a more thorough reality of legacy which encompasses generated mobilisation among citizens and the extent to which impacts are shared and negotiated, and which reflects the more normative discourses of the 'right to the city' by defining the right of people to the legacy of the event.

The delivery aspect of mega-events

Hosting a mega-event means embarking on large-scale programmes that require delivering a set of transportation, venue and accommodation projects on time and integrating a diversity of resources with efficiency. The delivery mission is a powerful force in practice in mega-events, and it usually follows a different orientation from the legacy agenda. The public–private aspect, regulation, budget complexity, the immovable timeframe and exceptional public visibility creates a 'state of emergency' and 'action-generating capacity' temperament (Grabher and Thiel



2014). The former is a tactic used to overcome the multiple milestones that could emerge out of routine local political and administrative procedures, and the latter is the strategy which develops to facilitate swift adaptation to the challenges imposed to the city (Grabher and Thiel 2014). However, to understand better the delivery-derived dynamic, we first need to consider a mega-event as a particular type of major project, so that its management concerns can be positioned within the relevant literature of temporary organisations, project management and the major project.

Temporary organisation

The notion of organisation can be defined as the "social units of people that have been structured and managed to meet a need or to pursue collective goals" (Business Dictionary, 2016). The relations between these units of people are concrete enough to be characterised as 'organisation' rather than 'community', and the theory of organisation attempts to explain organisational structures, relationships of organisations with the external environment, and the ways that "an organisation can cope with rapid change" (Perrow 1991, 134). The theory of organisation offers a variety of paradigms used to analyse the organisational structure of mega-events. One defines these structures as temporary, complex collections of firms, institutions and occupational groups and a second can be used to characterise the conjugations and interdependencies among people and organisations.

One of the main organisational attributes of mega-events is their temporality as a linkage node between the private sector and public bodies. The main responsibilities and operations of a mega-event exist as an 'organisation with institutional termination' (Lundin and Söderholm 1995; Grabehr 2002). This particular form of administrative body enables mega-events to follow an organised (collective) course of action aimed at evoking a non-routine process while relying on longer-term structures and permanent organisations. It includes temporary contacts between 'permanent' systems creating inter-organisational temporary organisations with perceived time limits as a form of a functional organisation and as an agency for managing uncertainty (Turner and Müller 2003; Grabher and Thile 2015).

Project

The considerable need for speed and flexibility of a project alters the classical notion of organisation towards a specific fluid form that is more responsive to rapid technological changes and the global market. Therefore, a project, as a one-off venture of a temporary organisation (Hobday 2000; Grabher 2002; Grabher 2004), is usually a special task, programmed by a committee or action group(s), appointed to address a problem or handle a requested action (Lundin and Söderholm, 1995) and constrained by specific time and budget (Hobday 2000; Grabher 2002). The usual concept of a project, which certainly applies to the case of a mega-event, is as a plannable and unique task, limited in time, complex in implementation and subject to evaluation. The Olympic Games is one of the best examples of a spectacle project (Lundin and Söderholm 1995), and is run by the project-based organisation of the IOC and awarded as an opportunity to each host city. As a permanent body, the host city handles the high risk and uncertainty of delivering the Olympic Games on time through assigning to it a temporary organisation responsible for delivery.

In going beyond the basic notion of a project, it is essential to consider events such as the Olympic Games as inherently risky, with the risk resulting from long planning horizons and complex interfaces (Flyvbjerg 2003) which are critical sources of vulnerability for delivery. While the public perception is focused on the single event, the practitioners involved are well aware that the record of mega-events has largely been written as a chronicle of planning failures, financial disasters, reputational damage and infrastructural ruin which have led to significant operational and organisational risks (Grabher and Thiel 2014). Therefore, as an organisation, the practitioners involved in delivery need to integrate the necessary skills, knowledge and networks for dealing with non-routine tasks and limitations in costs and time. Within the project ecology of mega-events, the risks of misleading forecasts of demand and cost for the development and management of transportation infrastructure projects and venues are considered very high. Additionally, the "hyperpoliticisation" (Jennings and Lodge 2010, 165) of global events heightens the risk that even small disturbances can cause lasting reputational damage (Grabher and Thiel 2014).

Therefore, being involved in managing at such high risk project, significant career fame and prominent position in labour market (Grabher and Thiel 2015). To understand how the human resources (carrying the necessary knowledge and skills) of mega-events are mobilised, we should understand their 'project ecology' (Grabher 2002). The term 'relational space' of mega-events refers to the systematic ecology between the permanent contexts of institutions, corporate ties and the personal networks within the dedicated organisations (Grabher Thiel 2014). It denotes the effect of career lift of new comers on reshuffling the elite structure.

Within this project ecology, risk management becomes the primary concern of the whole event in terms of predicting the cost of all manner of possible eventualities. The massive risk burden of staging a mega-event has



resulted in the development of a widely held belief that state actors are unable to deliver the same levels of efficiency as those found in the private sector (Giddens 2009; Raco 2014). This inexorably leads to a process “in which experts participate in creating their markets by identifying new risks ever to manage their expertise” (Cutler 2010, 178). This necessarily involves a sorting process, as only a small number of major multinational developers have the capacity and the proven track record to be able to take on major development contracts (Raco 2014). The role of private developers as organisers and managers of increasingly complex assemblages of specialist consultants becomes normalised, and there is a strong belief among both public and private-sector bodies that skilled and well-resourced experts can act as guarantors of quality and efficiency in development practices (Raco 2016).

Therefore, assigning the project part of a mega-event to private sector project management consultants means the mobilisation and concentration of qualified professionals into single-project organisations, and these recruits mainly via particular channels, namely predecessor projects, personal networks and permanent organisations, to both increase speed and reduce uncertainty (Grabher and Thiel 2015). The small number of people with mega “project capabilities” (Grabher 2004, p3) could be the likely explanation for the realities of the mega-project labour market, which comprises a transnational elite circle, usually very different from the policy rhetoric of 'inclusive' and 'devolved' planning that is found in many mega-event strategies and plans. Event-induced gentrification contributes to elite capture and is a phenomenon that has become a familiar sight in most of the mega-event host cities that harness such events for urban regeneration, from Atlanta (Rutheiser 1997) and Sydney to Vancouver (Lenskyj 2008), London (Watt 2013) and Rio (Gaffney 2010). In Stratford in East London, where the Olympic Park is located, the Olympic Games accelerated gentrification and the displacement of existing residents (Watt 2013, 2017).

Conclusion: the dilemma of legacy commitment versus delivery concerns

The whole process of Olympic planning and legacy building are about both delivering the event and engaging locals in its benefits. This critical review has concentrated on the paradoxical nature of mega-events, giving different narratives of the two-fold intentions of mega-events: the direct benefits (actual legacy) of host citizens on the one hand and delivery on the other. Although there is some analysis which puts forward the paradoxical features of mega-events, for example within the literature on legacy in terms of ‘gift’ versus ‘profit’ (MacRury 2008), and within the literature of major projects in terms of decision rationality versus action rationality (Ibert 2015), other literature typically concentrates on either legacy or delivery, but not both. There is, therefore, a lack of dialogue between those who emphasise the benefits that attend successful Olympic delivery and those who work on its aftermath.

The legacy assessment literature looks at mega-events within the context of an urban process and the way that the legacy agenda is formulated and practised for the indirect benefit of local citizens. The concept of this analysis and the views of its critics are rooted in the paradigm of the ‘right to the city’. The literature mostly indicates the differences between the rhetoric of legacy and the facts, pointing to the values and priorities that alter in relation to the conflict between locals and corporate interests. The other strand of literature is dedicated to the project-management aspect of mega-events, and there is much attention paid to the delivery process in terms of the innovation and learning, network expansion and reconfiguration potential that would take place in the particular platform of the project organisation of mega-events. While, the implications of considering mega-events as a chance to show how to be successful in delivering (under the conditions of complexity, risk, time pressure, and media exposure) has created a particular mechanism of “to-do management initiative and high expert arrangement based on preventing any meddlers defined as those who have limited knowledge of 'reality' of planning process. Therefore, elite capture curtails public oversight and participation” (Müller 2015, 11). At the same time, planning for mega-events turns into a technocratic process of delivery. Thus, it seems that democratic demands become risks that threaten to delay the planning and construction process of the event (Raco 2014; see also Andranovich et al. 2001; Hiller 2000).

Therefore, it can be hypothesised that when a mega event awarded to a city, the global sensitivity and delivery commitment of event became critical, and the whole Olympic Games agenda gravitated towards the delivery aspect. In contrast, legacy promises were framed as a limited part of the project’s goals for delivery. Therefore, in reality, Mega Events are very incline to prioritise 'delivery' over 'legacy', which means highlighting the benefit of some stakeholders over the many of locals in host cities.



References

- Amin, Ash, and Nigel Thrift. *Globalization, institutions, and regional development in Europe*. Oxford university press, 1995.
- Andranovich, Greg, Matthew J. Burbank, and Charles H. Heying. "Olympic cities: lessons learned from mega-event politics." *Journal of urban affairs* 23, no. 2 (2001): 113-131.
- Boykoff, Jules. *Activism and the Olympics: Dissent at the Games in Vancouver and London*. Rutgers University Press, 2014.
- Cashman, Richard. *The bitter-sweet awakening: The legacy of the Sydney 2000 Olympic Games*. Pan Macmillan, 2006.
- Chappelet, Jean-Loup. "Mega sporting event legacies: a multifaceted concept." *Papeles de Europa* 25 (2012): 76.
- Essex, Stephen, and Brian Chalkley. "Olympic Games: catalyst of urban change." *Leisure studies* 17, no. 3 (1998): 187-206.
- Flyvbjerg, Bent, Nils Bruzelius, and Werner Rothengatter. *Megaprojects and risk: An anatomy of ambition*. Cambridge University Press, 2003.
- Flyvbjerg, Bent. "Mega delusional: the curse of the mega project." *New Scientist* 220, no. 2945 (2013): 28-29.
- Flyvbjerg, Bent, and Allison Stewart. "Olympic proportions: Cost and cost overrun at the Olympics 1960-2012." (2012).
- Hiller, Harry H. "Mega-events, urban boosterism and growth strategies: an analysis of the objectives and legitimations of the Cape Town 2004 Olympic Bid." *International journal of urban and regional research* 24, no. 2 (2000): 449-458.
- Gaffney, Christopher. "Mega-events and socio-spatial dynamics in Rio de Janeiro, 1919-2016." *Journal of Latin American Geography* 9, no. 1 (2010): 7-29.
- Gold, John R., and Margaret M. Gold. "Olympic cities: regeneration, city rebranding and changing urban agendas." *Geography compass* 2, no. 1 (2008): 300-318.
- Gratton, Chris, Simon Shibli, and Richard Coleman. "Sport and economic regeneration in cities." *Urban studies* 42, no. 5-6 (2005): 985-999.
- Grabher, Gernot. "Cool projects, boring institutions: temporary collaboration in social context." *Regional studies* 36, no. 3 (2002): 205-214.
- Grabher, Gernot. "Temporary architectures of learning: Knowledge governance in project ecologies." *Organization studies* 25, no. 9 (2004): 1491-1514.
- Grabher, Gernot, and Joachim Thiel. "Coping with a self-induced shock: The heterarchic organization of the London Olympic Games 2012." *Social Sciences* 3, no. 3 (2014): 527-548.
- a. Grabher, Gernot, and Joachim Thiel. "Projects, people, professions: Trajectories of learning through a mega-event (the London 2012 case)." *Geoforum* 65 (2015): 328-337.
- b. Grabher, Gernot, and Joachim Thiel, eds. *Perspectives in Metropolitan Research I: Self-Induced Shocks: Mega-Projects and Urban Development*. Jovis Verlag GmbH, 2015.
- Hobday, Mike. "The project-based organisation: an ideal form for managing complex products and systems?." *Research policy* 29, no. 7-8 (2000): 871-893.



The 18th International Planning History Society Conference - Yokohama, July 2018

Ibert, Oliver. "Out of control? Urban mega-projects between two types of rationality: decision and action rationality": Self-induced shocks : mega-projects and urban development, (2015): 31-49

International Olympic Committee. IOC Marketing: Media Guide. London 2012. Lausanne: International Olympic Committee(2013).

Lenskyj, Helen Jefferson. *Olympic industry resistance: Challenging Olympic power and propaganda*. SUNY Press, 2008.

Lundin, Rolf A., and Anders Söderholm. "A theory of the temporary organization." *Scandinavian Journal of management* 11, no. 4 (1995): 437-455.

Macrury, Iain. "Re-thinking the Legacy 2012: the Olympics as commodity and gift." *Twenty-First Century Society* 3, no. 3 (2008): 297-312.

MacRury, Iain, and Gavin Poynter. "London's Olympic Legacy: A "Thinkpiece" report prepared for the OECD and Department for Communities and Local Government." *London East Research Institute* (2009).

Müller, Martin. "After Sochi 2014: costs and impacts of Russia's Olympic Games." *Eurasian geography and economics* 55, no. 6 (2014): 628-655.

Muller, Ralf. *Project governance*. Routledge, 2017.

Perrow, Charles. "A framework for the comparative analysis of organizations." *American sociological review* (1967): 194-208.

Poynter, East London GAVIN. "The 2012 Olympic games and the reshaping of East London." In *Regenerating London*, pp. 146-162. Routledge, 2009.

Preuss, Holger. "Calculating the regional economic impact of the Olympic Games." *European Sport Management Quarterly* 4, no. 4 (2004): 234-253.

Raco, Mike. "Delivering flagship projects in an era of regulatory capitalism: State-led privatization and the London Olympics 2012." *International Journal of Urban and Regional Research* 38, no. 1 (2014): 176-197.

Raco, Mike. *State-led privatisation and the demise of the democratic state: Welfare reform and localism in an era of regulatory capitalism*. Routledge, 2016.

Rutheiser, Charles. "Making place in the nonplace urban realm: notes on the revitalization of downtown Atlanta." *Urban Anthropology and Studies of Cultural Systems and World Economic Development* (1997): 9-42.

Turner, J. Rodney, and Ralf Müller. "On the nature of the project as a temporary organization." *International journal of project management* 21, no. 1 (2003): 1-8.

Smith, Andrew, and Tim Fox. "From 'event-led' to 'event-themed' regeneration: The 2002 Commonwealth Games legacy programme." *Urban Studies* 44, no. 5-6 (2007): 1125-1143.

Watt, Paul. "'It's not for us' Regeneration, the 2012 Olympics and the gentrification of East London." *City* 17, no. 1 (2013): 99-118.



Crossing Histories: Brazilian Planners of São Paulo and their transnational references (1910-1930)

José Geraldo Simões Junior*, Heliana Angotti-Salgueiro**

* *PhD, Prof. FAU, Mackenzie Presbyterian University, josegeraldo, simoes@mackenzie.br*

** *PhD, Post-Doctoral Studies, Mackenzie Presbyterian University, angotti@usp.br*

This paper examines how some pioneering planners in the Brazilian state of São Paulo, Victor Freire, Prestes Maia, Ulhoa Cintra, and Anhaia Mello disseminated and appropriated the dominant principles of international urbanism in the period 1910-1930. The education in city planning is directly associated with the repertoire of engineering courses and professional associations. In this environment, where public debates on urban issues were intense, it is worth noting the presence of English urbanist Barry Parker, who lived for two years in São Paulo, implementing innovative projects and debating with local planners. The access to urban planning manuals and reviews, and the presence of these Brazilian professionals in international seminars, led to the dissemination of the international ideals and some resulting essays on the way these ideals could be applied in many fields: urban regulations, projects in downtown areas, housing, sanitation, town extension plans, city management, zoning, among others. Contradictions among practices, actors and references are requesting a conceptual and methodological effort attentive to historical dimension of the “circulation” of ideals or their limits of intelligibility and reception in other scales of time and place, such as the one proposed in this paper.

Keywords: Brazilian planners, international dissemination, city plan ideals.

Introduction

São Paulo is Latin America’s largest metropolis. However, its rapid growth started less than a century ago and, if at the local level the historiography of urban design has been developed over recent decades¹, in the international literature little is recorded about the men who reflected on and wrote about this city during its growing process. Most of the theorists or city planners were engineers from the Polytechnic School of the University of São Paulo, and also professors seldom involved in urban management issues. They were acquainted with several international city planning proposals thanks to the dissemination of books and periodicals, and to the meetings that brought them together in the first decades of the twentieth century.

Today a global perspective is methodological consensus in several fields of knowledge. However, some particulars of the histories of these urban planners remain absent from the standard widespread bibliography. In this sense, although everybody identifies “the top” authors, the professionals who practiced the discipline in European and North American countries, along with their theoretical essays, and their planning practices, there is still a vast field to study more deeply and investigate how South-American urban planners have appropriated this material².

We all know that urban and architectural designs travel a lot and their propagation and international character dates from previous centuries, but at this panel, we will focus on the pioneers of the early twentieth-century in the city of São Paulo. Historians consider this period as the founding moment of city planning as a discipline. Methodologically speaking, we know that the case studies and analyses of the trajectories (ideas and designs) of these authors who have adopted reference works and models, have been used as the tenets for historical studies since the 1980s, when *cultural transfers* became part of the analyses, attentive to the possibilities of local contexts, or specific understanding of the countries that were importing these ideas³.



Therefore, we will present here some aspects of the trajectories of the Brazilian city planners who worked in the urban environment of the city of São Paulo between 1910 and 1930, one of the most important periods of the history of Brazilian urban planning⁴. We quote topics discussed in their publications, the projects and interventions proposed for this metropolis which was then in full development. Crossing histories and intellectual references of some professionals, their role in the urbanization of the city debate and in founding the urban planning discipline, will certainly help bring to light some new facets of the thinking of Latin America's pioneers.

City Planners of São Paulo and their Transnational References

São Paulo's astounding growth between 1870 and 1930 was a significant factor in introducing urban science into the remodeling proposals that emerged in that period. Over this sixty-year period, the city underwent a strong economic and population increase as a result of the coffee production peak, intense immigration and well ahead, industrialization. Around 24,000 inhabitants lived in the city in 1870; 240,000 in 1900, and a million thirty years later. A one thousand percent increase in the first interval, and over four-hundred percent in the second. The impact of this accelerated expansion process devoid of any urban planning left deep marks that hinder city management up to the present day.

Other factors favoured the process of modernization which was impending since the nineteenth century. The main factor was the onset of the Republican regime in the country (1889), which organized the municipal sectors of public works and gave them greater autonomy. In the case of São Paulo, the creation of the Polytechnic School in 1894 provided training for civil-engineers and engineer-architects to deal with urban management. These professionals joined the city public administration, contributing to the dissemination and use of many principles and paradigms from the science of urbanism which was then being developed in several countries.

In the early twentieth century, São Paulo's city government faced big urban problems related to three areas: sanitation, road system, and architectural esthetics. Engineers proposed plans and projects based on their professional practice referencing other contexts. These projects were supposed to regulate aspects such as the decongestion of the central area, installation of infrastructure systems (sanitation, lighting, electricity, gas, transport.) the esthetic and technical modernization of built heritage, road connections between the residential districts and downtown, control of urban sprawl, salubrity of private dwellings and public housing, the quality of public spaces (urban furniture, green spaces).

Engineer Victor da Silva Freire stood out in this scenario, not only for his political role but also as the main name in planning international references. He was Director of Public Works for São Paulo for 26 years (1899-1925), and was a professor at the Polytechnic School of Engineering. The Portuguese Freire studied at the Polytechnic School in Lisbon and at the *École des Ponts et Chaussées* de Paris. Starting in 1905, he frequently attended international city planning conferences⁵, and received the proceedings of congresses held in Europe and the United States, adopting/appropriating these texts and attempting to apply them to the reality of the city of São Paulo.

The library of the Polytechnic School was another source for important references, in special books, urban planning manuals, and specialized periodicals that were consulted by the generation of the pioneer city planners.⁶ While he worked as Director of Public Works and a professor, Victor Freire mentored the first São Paulo city planners, and some of them became his assistants in the city government. Worthy of note are engineers João Florence de Ulhoa Cintra, Arthur Saboya, Francisco Prestes Maia, and Luiz Ignacio Romeiro de Anhaia Mello. All of them could be considered, along



with the public health engineer Francisco Saturnino Rodrigues de Brito, born in Rio de Janeiro, the main pioneers of city planning in São Paulo.

The main questions discussed and proposed by these pioneers are presented below, focusing on improvements of the central area, controlling the urban sprawl, modeling the city's growth and disseminating the anti-metropolis ideas.

Improvements in the Central Area (1911)

Victor da Silva Freire was behind some important projects for São Paulo, embracing Camillo Sitte's perspective by maintaining the morphology of the historical central area. For the expansion areas he preferred the British "garden-city" standard. For the central area of the city he proposed a plan called "*Os Melhoramentos de São Paulo*" (Improvements for São Paulo), in 1911, to solve the urban congestion and the connections between that zone and the up-and-coming residential districts. This pioneer document is an example to analyze the transfers from international city planning ideas. Recuperating the bibliographical references Freire quoted four works: Sitte's book *L'Art de construire les villes*, (ed 1902), Eugène Hénard, *Études sur les transformations de Paris (1907)*, Charles Mulford Robinson *The improvement of Towns and Cities or the Practical Basis of Civic Aesthetics (1901)*, Charles Buls *Esthétique des Villes*, 1909.

In addition to these five books, Victor Freire also used the plans and specifications studied by French city planner Joseph-Antoine Bouvard to intervene in the city of Buenos Aires in 1907. Bouvard was a consultant in São Paulo in 1911 and offered his opinion on the stalemate of the proposed projects. After validating Freire's plan, he proposed to expand it and also joined the City of São Paulo Improvements and Freehold Land Company Ltd. (City Company) which would initiate new ways of land division for housing.

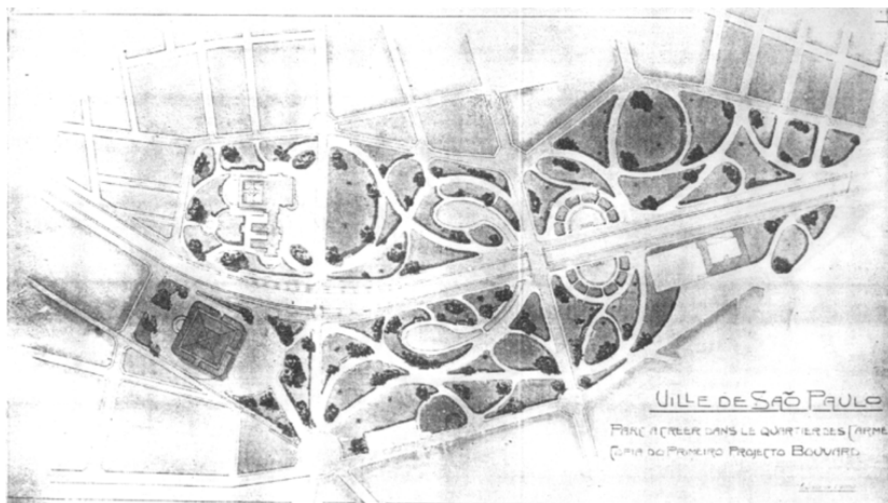


Figure 1. Plan Bouvard, proposed for São Paulo, adopting Sitte's premises and of respect for the preservation of the historical center. (1911).

Controlling the Urban Expansion Areas (1913-1923)

The rapid expansion of the urbanized area demanded a great amount of effort by city government to control the approval process of new streets and neighborhoods. Until the 1920s, legislation was inappropriate for the site of the city, whose topography was very irregular, marked by valleys and



slopes. The old rules of 1886 recommended that all streets should be straight and 16-meter wide. That would mean an orthogonal road grid for the whole city, which would be a solution for flat areas, but not for São Paulo. Beginning in 1910, Victor Freire conducted the revision of these regulations, and was later supported by British urban planner Barry Parker, who lived in the city for two years to implement the new districts of a real-state company, the above-mentioned City Company.

Freire's technical argumentation was based on the ideas of German Joseph Stübben and those of British city planner Raymond Unwin from the Garden City movement. It resulted in the approval of new modern street network regulations in 1923. Stübben's essay, "*Practical and Aesthetic Principles for the Laying out of Cities*" had been presented in Chicago, at the Colombian Exhibition, in 1893, guiding principles for new road system networks in expansion areas. In summary, it proposed a general conception of road design based on the radial-concentric model, that is, a central nucleus and radial roads connecting it to the peripheral zones, thus defining different urban sectors. The sectors were subdivided by concentric or ring-shaped roads, and within each of these trapezoidal-shaped subsectors, local lanes would show an orthogonal outline and a diagonal street. The whole system was conceived for traffic flow efficiency.

The profile of the streets should promote drainage and never consider large movements of land. Discrete curvatures were recommended along the street layout, avoiding very long straight lines. The width of the streets should always be designed according to the volume of traffic and circulation. Health would depend on a suitable width, good implementation of the construction on the lot, the existence of open spaces for squares, and green areas along the roads and inside the lots. These principles presented by Stübben and then also recommended in Unwin's work (*Town Planning in Practice*) improved the city planning rules in São Paulo and permitted occupying large steep areas with a proper road system, as well as savings in paving and drainage works. These principles were put into effect under the new street plan law, n°. 2611 of 1923, which the engineer Luiz de Anhaia Mello greatly influenced.

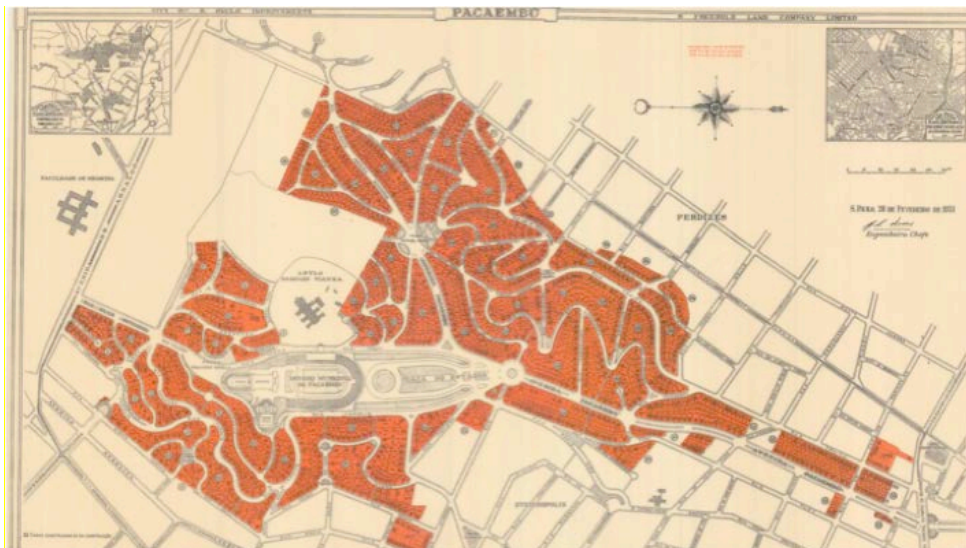


Figure 2 . Plan of urbanization for the district of Pacaembú, with reference to the ideas of the English garden-suburbs and Raymond Unwin. Implemented by City Company, based on the modifications allowed by the law n° 2311 (1923).

Adapting the City Growth to a New Urban Model (1922-1930)



During the 1920s, other city planners stood out in the city: Francisco Prestes Maia, João Florence de Ulhoa Cintra and Luiz Ignacio Romeiro de Anhaia Mello, all of them professors at the Polytechnic School, where they graduated. Maia and Cintra worked together in municipal public works. Between 1922 and 1924, they published a study that would forever mark the city's future configuration. The study was based on the works of French city planner Eugène Hénard, already mentioned, *Études sur les transformations de Paris*, and proposed that São Paulo should adopt the radial-concentric models, from the concept of "perimètre de rayonnement". Based on the idea that structuring the future metropolises followed this pattern, according to the four schemes presented by Hénard for London, Paris, Moscow, and Berlin, engineers Prestes Maia and Cintra developed the *Plano de Avenidas* (Plan of Avenues) for the city of São Paulo, projecting radial and perimetral avenues including the two main rivers of the city to help arrange this model. The plan, illustrated with photos and watercolours was published in 1930 and had a deep impact, given its graphic quality and the large number of references to German, British, North American, and French city planners. This plan was only carried out during Prestes Maia's terms as mayor of the city (1938-45 and 1961-65) - when the main structural avenues system of the city was implemented - but not without a criticism from a group of city planners who followed other lines of thinking, such as Luiz de Anhaia Mello.

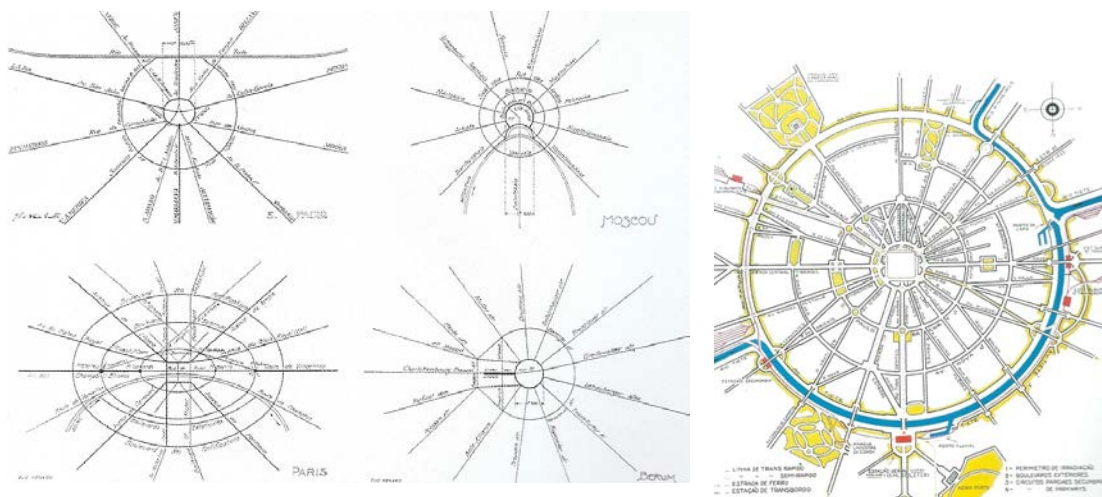


Figure 3. Models of urban structuring conceived by Hénard and the adaptation proposed by Prestes Maia for the Plan of Avenues for São Paulo 1930.

The Anti-Urban Idea. A Comprehensive and Humanistic Urban Thought

Engineer-architect Luiz de Anhaia Mello, professor of the Polytechnic School from the 1920s to the 1960s and a member of the intellectual elite of São Paulo, was the most important theorist in the urban planning field in São Paulo. He considered himself an "urbanist" throughout his career, with the "mission" of sensitizing "public opinion" and promoting education for town planning. In this sense, he defended the creation of civic associations according to the North American model, in which society would participate of urban improvements.

Around 1925, Anhaia Mello conceived a *City Plan Commission*, quoting models such as the *Regional Planning Association of America* (he owned all the volumes of the *Regional Plan of New York*) and was a reader of Thomas Adams as well as others international authors on this subject. However, it wasn't until the 1950s that a master plan would only be widely discussed in São Paulo. In addition to being the executive director of the Engineering Institute, creating some controversies and briefly



participating in city politics, Anhaia Mello founded the SAC - *Sociedade de Amigos da Cidade* (City Friends Society) in 1945: in his opinion, professional circles, councils, and planning committees had to be independent from interference by public government, which generated conflicts with his peers, who as we saw, had been proposing plans for the city following various lines of thought, since the 1910s.

He created regular courses on city planning (called “Aesthetics, General Composition and Urbanism”) at the Polytechnic School around 1926, and in 1948 he founded the School of Architecture and Urbanism at the University of São Paulo, to distinguish engineers from architects, and connect the latter group with city planners and social scientists. Throughout his entire life he was involved in disseminating the principles of an ideal city under a humanistic and civic urbanism, through an active pedagogical series of public conferences (at the Rotary Club and the Engineers’ Institute, for instance). His speeches and numerous articles were published in periodicals of professional associations, such as the *Boletim do Instituto de Engenharia*, among others, and in books, such as his first, *Problemas de Urbanismo*, in 1929. His ideals are represented on “The Urbanism Tree”, image published in this book: the roots are “public opinion” to be formed by propaganda; the trunk represents the “committees” for planning the city; the tree canopy is “legislation” which resulted in the shade that represents “urban progress”.

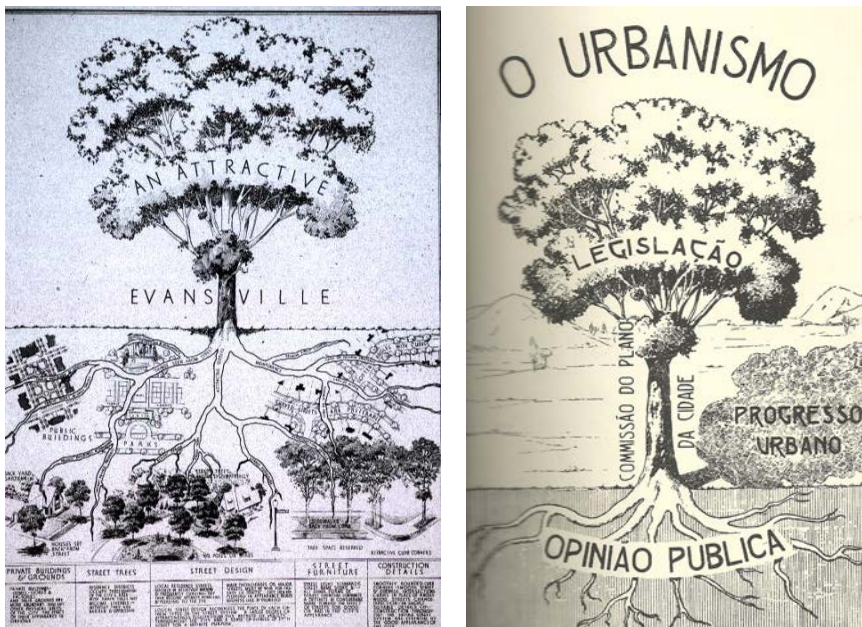


Figure 4. “The Urbanism Tree”, adapted by Luiz de Anhaia Mello, who introduced notable changes in the original image of Harland Bartholomew, a diagram from the Evansville, Indiana Comprehensive Plan of 1922.

In fact, Anhaia disapproved of the then current boastful slogan which said, “São Paulo cannot stop”. He was against skyscrapers and automobiles, and his main fight was to contain the growth of the tentacular city, introduce regional planning, and reaffirm statements by foreign authors, ranging from the Belgian poet Emile Verhaeren (*Les Villes tentaculaires*, 1895) to Patrick Geddes and his disciple Lewis Mumford, in the genesis of anti-urban critique, which culminated in reading Oswald Spengler on the decline of the machine civilization.



Figure 5: Some of Anhaia Mello's reference books, now at the library of Architectural School (FAU-USP) in São Paulo.

Anhaia Mello's personal library is our main source of study and a relevant evidence of his international knowledge and education, as he quoted numerous authors in his three books and more than seventy texts. He left no personal archives, nor confidential autobiographical notes, so our research strategy was to study his texts and the marginal notes left in the more than one thousand books that belonged to him and today are part of the library of the School of Architecture and Urbanism at USP. His library has classics of city planning history and related fields. The books quoted in his articles reveal how he accepted the view of the authors he read, mainly North Americans, although he also quoted French authors even in his last texts in the 1960s⁷. This approach is part of a cultural history of reading practices, in consonance with an intellectual biography, involving studies and institutional programmes of that time⁸.

Some images of the book *The City Plan of Memphis, Tennessee*, by Harland Bartholomew, published in 1924, can be taken as guidelines to summarize the main directions of Anhaia Mello's reflections, which were also subjects of his courses at the Polytechnic School, supported by international references. These images are inscribed in the holistic view of a "*comprehensive plan*". They are: *Civic Art*, which can evoke the aesthetics committees he wanted to create to control the "general composition" of the overall "urban architecture". This expression can be attributed to Pierre Lavedan, whom Anhaia invoked when he recalled the need for a "*esprit d'urbanisme*" in the city, in addition to the remodeling and "beautification" defended by Victor Freire. The latter had already introduced the overall view where esthetics elements should be aggregated to the plans for sanitation and road system.⁹ Another Bartholomew's topic is "*streets*": Anhaia passed laws for organizing the road network and its relation to the built spaces, since he considered streets as dangerous places, even citing traffic death statistics from American books and periodicals. Instead he defended the green *superquadras* (superblocks), or the separation of pedestrians and cars. Another central theme in his criticism coming from Bartholomew is "*transit*". Anhaia Mello referred to the "chaos" caused by vehicles, writing articles on traffic control and regulation; in this case he also wrote about improvement of mass transportation; in this sense he is contrary to the "old circulatory urbanism" of Prestes Maia's *Plano de Avenidas* (Plan of Great Avenues) that would permanently mark the urban site of São Paulo.

Regarding "*Public Recreation*" principle he defended a general system of parks with activities, or *an active and organized recreation* in play-lots, playgrounds, playfields – then "*rus in urbe*", the city/nature connection by the parkways. Multi-centered urban decentralization and salubrious dwellings were also paramount topics for Anhaia Mello who organized the I Housing Congress in 1931, when he was mayor of São Paulo, showing his interest in housing and zoning policies. Denouncing the blighted areas was inseparable from his criticism of urban density, or overcrowding,



to be solved by the garden cities, satellite towns, *neighborhood unit cells* – revealing in all these themes his readings of authors such as Ebenezer Howard, Raymond Unwin (in the French translation of Jausseley, 1926), F. L. Olmsted, Jean Lebreton, John Nolen, E. Gutkind, F. J. Osborn, Lewis Mumford, James Dahir, Clarence Perry and Clarence Stein. Anhaia Mello always referred to the concept of public spaces connected to city planning and the quest for communitarian relationships among citizens, defended by North American urban sociologists, such as Robert Park and Ernest Burgess. These readings confirm his persistent humanist view of an organic city and the basic functions of common well-being: *inhabit, work, amuse body and soul, and circulate*, recalling the Athens' Charter.

Likewise, Anhaia Mello also marked the “zoning” regulations in ~~several passages of~~ Harland Bartholomew's book (p. 117) and transcribed them in his own 1929's book; on this matter he was also a reader of Edward Basset and George B. Ford. Anhaia Mello illustrated the topic in his book by translating the ironic image of a pamphlet in Evansville, Indiana: “Zoning Will Prevent This”. The zoning law Anhaia Mello proposed in the late 1930s and the master plan for São Paulo and outskirts, although debated in the following years, would only materialize decades later, but in a very distant version from the “new models of urban composition” and regional planning he wanted, as the city had not avoided disorderly growth and the extension of urban occupation, Anhaia Mello's major battles.

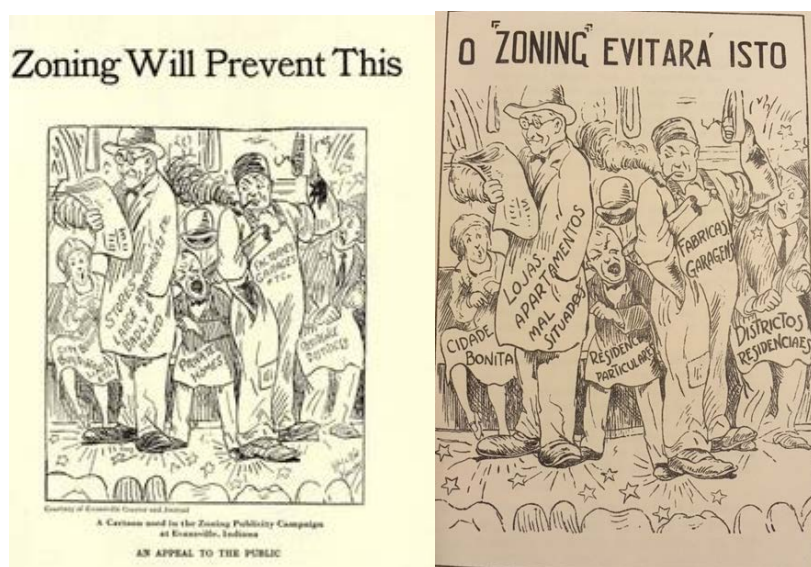


Figure 6. A cartoon from a zoning campaign in Evansville, Indiana, before 1920, exactly translated to Portuguese by Anhaia Mello for his book.

Conclusion

Divergent urban models coexisted in São Paulo where technical, academic, and institutional circles debated the problems of the rapidly growing modernizing city which was booming thanks to agro-export trade, immigration, and then industrialization. In the first decades of the twentieth century, the projects of those urbanism pioneers in São Paulo, mostly teachers at ~~from the~~ Polytechnic School and familiar with works of international authors, began to include German, English and North American ideas - while some of their compatriots¹⁰ and urban-engineers in other Brazilian cities were still using Parisian references. An example is the Pereira Passos's previous reform highlighting grand avenues, such as the *Avenida Central*, in Rio de Janeiro still carrying the symbolic weight of Haussmann's



works in Paris. The abandonment of the traditional orthogonal and geometric layouts, characteristic of the conceptions in force in the nineteenth century, started to be questioned by Victor da Silva Freire, among others, who proposed new improvements paradigms for São Paulo from 1911 on. These emerged not only thanks to the readings of Camillo Sitte's and Joseph Stübben's books but also to British references that defended plans more adapted to the irregularities of the local topography, in addition to creating green spaces. These came through Raymond Unwin and the experience of the *garden-cities*, soon adopted by real-estate companies such as *City Improvements* that profited from the growing demand for housing caused by the expressive urban expansion and population increase.

Starting in the 1920s, new actors came onto the stage and foreign references increased with the dissemination of titles in the bibliography of periodicals such as the *Boletim do Instituto de Engenharia* that had contact with several overseas publishers, especially from the United States. Also, there was the possibility of obtaining classic and recent works on city planning in local bookstores, as shown by the private libraries such as those of Luiz de Anhaia Mello and Francisco Prestes Maia, whose positions on the remodeling of the city were totally opposed. Prestes Maia and Ulhoa Cintra's Plan of Great Avenues prioritized circulation of vehicles, leaving aside social and housing projects that are basic principles of modern urbanism.

Luiz de Anhaia Mello, in turn, in his texts and courses at the Polytechnic School was aware of those times, i.e., the irreversible transformation of the city into a metropolis. He sought to regulate this progress, defending anti-urban ideas and a comprehensive plan against most of the engineers who were conceiving São Paulo with selective, partial and expansionist plans, limited to a road system, as is the case of Prestes Maia. Anhaia Mello was portrayed as a dissident¹¹, in fact a theoretical militant of the metropolitan "*décroissance*"¹². His forecast about the capital's tentacular conurbation worsened after the 1950s, to the detriment of an organic humanistic urbanity and the general regulatory planning he had idealized.

The engineers mentioned here, and many others who took part in the urban management educated generations of professionals, left unfinished projects, speeches, acts, and partially applied laws, but on the other hand, they wrote a large number of articles and books. These sources, along with the private and institutional libraries they consulted, still wait for new investigations, as for example: editorial lines of periodicals, intersections between intellectual trajectories of local and foreign authors, and even appropriations of divergent adoptions of the same author's ideas. ~~to guarantee divergent ideas.~~ Adoptions of transnational references may imply contradictions, different temporalities, partial coherence and limits of understandable application in each country, ~~and they~~ demanding constant review and deeper research.

Acknowledgements

The authors are grateful for the funding obtained through Capes PNPd and CNPq / PQ.

Notes on contributor(s)

José Geraldo Simões Junior, Architect, Ph.D. (University of Sao Paulo, Brazil, 1983). Post-Doctoral in Urban Studies (Technische Universität Wien, Austria, 2010). Since 2000, a professor and researcher at Mackenzie University at the graduate studies program. Published books: *A cidade iberoamericana: o espaço urbano brasileiro e hispano-americano em perspectiva comparada* (coord., 2003). *Anhangabau: história e urbanismo* (2004), *Urbanismo de Colina: uma tradição luso-brasileira* (coord., 2012).

Heliana Angotti Salgueiro, Ph.D. in History (EHESS, Paris, 1992). Head Professor (*Chaire Brésilienne en Sciences Sociales*, MSH, Paris, 2004-2008), and Visiting Scholar of several international institutions. Main published books: *La Casaque d'Arlequin. Belo Horizonte, une capitale éclectique au XIXe siècle* (Paris: 1997);



Bernard Lepetit. *Por uma nova história urbana*. (São Paulo: 2001 & 2016, 2nd ed.). Currently member of a research team on City Planning History at Mackenzie University, São Paulo.

Endnotes

¹ Cândido Malta Campos, *Os Rumos da Cidade. Urbanismo e Modernização em São Paulo* (São Paulo: Senac, 2002); José Geraldo Simões Jr., *Anhangabaú. História e Urbanismo* (São Paulo: Imprensa Oficial/Senac, 2004); Sylvia Fisher, *Os Arquitetos da Poli. Ensino e Profissão em São Paulo* (São Paulo: Edusp, 2005); Claudio H. Arasawa, *Engenharia e Poder. Construtores da nova ordem em São Paulo 1890-1940* (São Paulo: Alameda, 2008); Maria Cristina da S. Leme (org.), *Urbanismo no Brasil 1895-1995* (Salvador: EDUFBA, 2005).

² Among published works see M. Aurélio F. Gomes (org.), *Urbanismo na América do Sul. Circulação de ideias e configuração do campo 1920-1960* (Salvador: EDUFBA, 2009); Alicia Novick, "Foreign Hires: French Experts and the Urbanism of Buenos Aires, 1907-1932", in M. Vollaith & J. Nasr (ed.) *Urbanism, Imported or Exported? Native Aspirations and Foreign Plan* (Chichester: Wiley Academy, 2003); Arturo Almandoz (ed.) *Planning Latin America's Capital Cities 1850-1950* (London: Routledge, 2002).

³ This notion has been studied since the 1980s notably by Michael Werner and Michel Espagne – see a recent article by Espagne, "La notion de transfert culturel", *Revue Sciences/Lettres*, n.1, 2013 (<<http://rsl.revues.org/219>>); DOI :10.4000/rsl.219).

⁴ See a synthesis by Margareth C. da Silva Pereira, "Notas sobre o urbanismo no Brasil: construções e crises de um campo disciplinar", in Denise P. Machado et al (ed.) *Urbanismo em questão* (Rio de Janeiro: Proureb/FAU-UFRJ, 2003). A turning point in the history of Brazilian city planning, dating back to the nineteenth century, is the foundation of Belo Horizonte, see Heliana Angotti-Salgueiro, *La Casaque d'Arlequin. Belo Horizonte, une capitale éclectique au 19e siècle* (Paris: EHESS, 1997), to be printed in Portuguese by Edusp.

⁵ According to Piccinato (1974) and Stuecliffe (1982) among the pre-World War I conferences that consolidated the international field of urbanism, most notable were *Ersten Deutschen Städteausstellung*, in Dresden (1903); *Town Planning Conference* (1910), (that brought together in London the most renowned urbanists of the period, such as Rudolf Eberstadt, A. E. Brinckmann, Augustin Rey, Louis Bonnier, Thomas H. Mawson, Stanley D. Adshear, Joseph Stübben, Charles Mulford Robinson, Eugène Hénard, Patrick Geddes, Raymond Unwin, and Ebenezer Howard); then followed the Internationale Städtebau Ausstellung in Berlin (1910) and Dusseldorf (1913); and the Congrès International et Exposition Comparée des Villes, in Gand, also in 1913.

⁶ The collection of the São Paulo Polytechnic School library includes the following highlights: *Town Planning in Practice* (1909) by Raymond Unwin; *Études sur les transformations de Paris* (1903-1909), by Eugène Hénard; *The Improvement of Towns and Cities* (1901) and *The Width and Arrangement of Streets* (1911) by Charles Mulford Robinson; *Civic Art* (1911) by Thomas Mawson; *Der Städtebau 1924 – 3° ed.*, by Joseph Stübben; *L'Art de bâtir les Villes* (1902) by Camillo Sitte's (original 1889 in German); *Garden Cities of Tomorrow* (1902), by Ebenezer Howard, as well as various other books of planning pioneers, such as Nelson Lewis, Harland Bartholomew, John Nolen, and Augustin Rey.

⁷ See: Angotti-Salgueiro, H. "Pensamento e leituras de Luiz de Anhaia Mello – das propostas de arte urbana ao planejamento de um urbanismo humanista", in *Anais do III Enanparq – arquitetura, cidade e projeto: uma construção coletiva*, São Paulo, 2014. (<<http://www.anparq.org.br/dvd-enanparq-3/iniciar.htm>>). About authors Anhaia Mello used to read see: Angotti-Salgueiro, H. & Simões Jr. J. G., "Luiz de Anhaia Mello – em busca de um urbanismo humanizado: ideário e autores de referência". *Anais do XIV SHCU. Cidade, arquitetura e urbanismo. Visões e revisões do século XX*. São Carlos, Sep.2016; and "Por uma reflexão sobre pioneiros do urbanismo no Brasil e modalidades de apropriação de ideários internacionais. Revisando terminologias e conceitos". *Arquitextos. Vitruvius*, 17, April 2017. ISSN 1809-6298.

⁸ Following the methodology of French authors of a cultural historiography: Roger Chartier, Jacques Revel, Jean-François Sirinelli; and in the specific field of urbanism, Viviane Claude, *Faire la Ville. Les métiers de l'urbanisme au XXe siècle* (Marseille: Parenthèses, 2006).

⁹ Cf. Sarah Feldman, *Planejamento e Zoneamento em São Paulo 1947-1972*. (São Paulo: Fapesp/Edusp, 2005, p. 123).

¹⁰ The engineer Alexandre de Albuquerque and his plan for the "grand avenues" and a traffic circle like the Place de l'Étoile, constituted one of the many proposals debated in São Paulo during the 1910s. See Cândido Malta Campos, *Os Rumos da Cidade. Urbanismo e Modernização em São Paulo*, op. cit. and José Geraldo Simões Jr., *Anhangabaú. História e Urbanismo*, op. cit.

¹¹ Cf. Claudio H. Arasawa, op.cit

¹² Thierry Paquot, *Lewis Mumford, pour une juste plénitude* (Neuvy-en Champagne: Ed. Le Passager Clandestin, 2015).

Bibliography

Almandoz, Arturo (ed.). *Planning Latin America's Capital Cities 1850-1950*. London: Routledge, 2002.

Angotti-Salgueiro, Heliana. "Pensamento e leituras de Luiz de Anhaia Mello – das propostas de arte urbana ao planejamento de um urbanismo humanista", in *Anais do III Enanparq – arquitetura, cidade e projeto: uma construção coletiva*, São Paulo, 2014. Available at <<http://www.anparq.org.br/dvd-enanparq-3/iniciar.htm>>.

Angotti-Salgueiro, Heliana & Simões Jr. José Geraldo. "Luiz de Anhaia Mello – em busca de um urbanismo humanizado: ideário e autores de referência". *Anais do XIV SHCU. Cidade, arquitetura e urbanismo. Visões e revisões do século XX*. São Carlos, September 2016.

-----"Por uma reflexão sobre pioneiros do urbanismo no Brasil e modalidades de apropriação de ideários internacionais. Revisando terminologias e conceitos". *Arquitextos. Vitruvius*, 17, April 2017.

Anhaia Mello, Luiz de. *Problemas de Urbanismo. Bases para a resolução do problema técnico*. São Paulo: Escolas Profissionais Salesianas, 1929.



- Arasawa, Claudio H. *Engenharia e Poder. Construtores da nova ordem em São Paulo 1890-1940*. São Paulo: Alameda, 2008.
- Bartholomew, Harland. *The City Plan of Memphis Tennessee. A Comprehensive City Plan*, City Plan Commission, 1924.
- Bartholomew, Harland. *Evansville Downtown Appearance*. Evansville, HB Associates, 1927.
- Claude, Viviane. *Faire la Ville. Les métiers de l'urbanisme au XXe siècle*, Marseille: Parenthèses, 2006.
- Dal Co, F et all. *La Ciudad Americana*. Barcelona: G. G., 1975
- Espagne, Michel. "La notion de transfert culturel", *Revue Sciences/Lettres*, n. 1, 2013 (<http://rsl.revues.org/219>; DOI :10.4000/rsl.219).
- Feldman, Sarah. *Planejamento e Zoneamento em São Paulo 1947-1972*, São Paulo: Fapesp/Edusp, 2005.
- Freire, Victor da Silva. Melhoramentos de São Paulo. *Revista Polytechnica*. São Paulo: Vanorden, N. 33, Fev-Mars1911, 91-146.
- _____. A capital Paulista - Presente e Futuro - a ação oficial - a ação particular. *Almanach O Estado de São Paulo*, São Paulo, 1915, 175-195.
- Fisher, Sylvia. *Os Arquitetos da Poli. Ensino e Profissão em São Paulo*. São Paulo: Edusp, 2005.
- Gomes, Marco Aurélio F. (org.), *Urbanismo na América do Sul. Circulação de ideias e configuração do campo 1920-1960*. Salvador: EDUFBA, 2009.
- Leme, Maria Cristina (org.). *Urbanismo no Brasil 1895-1995*. Salvador: EDUFBA, 2005.
- Lovelace, Eldridge. *Harland Bartholomew: His Contributions to American Urban Planning*. Urbana: Illinois, 1993.
- Maia, Francisco Prestes. *Estudo de um Plano de Avenidas para a Cidade de São Paulo*. São Paulo: Melhoramentos, 1930.
- Maia, Francisco Prestes e CINTRA, João Florence de Ulhôa. Os grandes melhoramentos de São Paulo. *Boletim do Instituto de Engenharia*, São Paulo. n. 26/7, p. 56-60, Oct. 1924/Mars 1925; N.228, p. 91-4, Mars/Jun. 1925; n. 29, p. 121-32, Jul./Oct. 1925; n. 31, p. 225-32, Mars/Jun. 1926.
- Malta Campos, Cândido. *Os Rumos da Cidade. Urbanismo e Modernização em São Paulo*. São Paulo: Senac, 2002.
- Novick, Alicia. "Foreign Hires: French Experts and the Urbanism of Buenos Aires, 1907-1932", in Vollait M. & J. Nasr (ed.) *Urbanism, Imported or Exported? Native Aspirations and Foreign Plan*, Chichester: Wiley Academy, 2003.
- Paquot, Thierry. *Lewis Mumford, pour une juste plénitude*. Neuvy-en Champagne: Ed. Le Passager Clandestin, 2015.
- Pereira, Margareth C. da Silva. "Notas sobre o urbanismo no Brasil: construções e crises de um campo disciplinar", in Machado, Denise P. et all (ed.) *Urbanismo em questão*. Rio de Janeiro: Proureb/FAU-UFRJ, 2003.
- Prefeitura do Município de São Paulo. *Relatório de 1911*. São Paulo: Casa Vanorden, 1912.
- Simões Jr., José Geraldo. *Anhangabaú. História e Urbanismo*. São Paulo: Imprensa Oficial/Senac, 2004.

Image Sources

Figure 1 : Prefeitura do Município de São Paulo. *Relatório de 1911*. São Paulo, Casa Vanorden, 1912.

Figure 2 : Source: City Company Archive.

Figure 3 : Maia, Francisco Prestes. *Estudo de um Plano de Avenidas para a Cidade de São Paulo*. São Paulo: Melhoramentos, 1930.



The 18th International Planning History Society Conference - Yokohama, July 2018

Figure 4 : Bartholomew, Harland. *Evansville Downtown Appearance*. Evansville, HB Associates, 1927. Anhaia Mello, Luiz de. *Problemas de Urbanismo. Bases para a resolução do problema tecnico*. São Paulo: Escolas Profissionais Salesianas, 1929.

Figure 5 : Author's photo

Figure 6 : Dal Co, F et all. *La Ciudad Americana*. Barcelona, G. G., 1975.



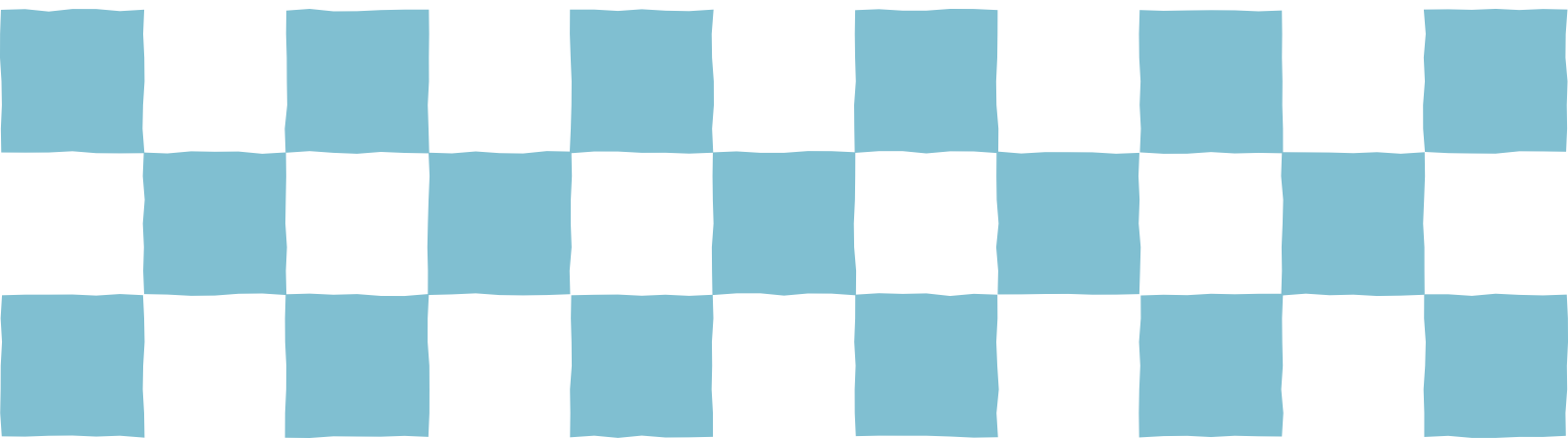
INTERNATIONAL PLANNING HISTORY SOCIETY

YOKOHAMA 2018

THE 18TH IPHS CONFERENCE

*Looking at
the World History of
Planning*

Index of authors' names



Author's Name	Panel No.	Author's Name	Panel No.
Abbott, Martin	58	Dedekorkut-Howes, Aysin	31 41
Abe, Daisuke	17	Demura, Yoshifumi	33
Alanyali Aral, Ela	18	Diez Medina, Carmen	44
Alistratovaitė-Kurtinaitienė, Inesa	70	Dijokiene, Dalia	70
Alkazei, Allam	21	Dühr, Stefanie	51
Amati, Marco	74	Eguchi, Kumi	34
Ambrogi, Ingrid	17	Ellem, Christine	20
An, Hyunjin	54	Erbey, Seher	21
Angotti Salgueiro, Heliana	OAA	Erofeev, Nikolay	67
Anh Đình, Thê	13	Erten, Canan	73
Aoki, Atsuhiko	1	Estrada Díaz, Gabriela	16
Aquil, Mohd	7	Ezquerro, Isabel	44
Asakawa, Kenji	1	Fagerlande, Sergio	58
Azlan, Nurul	28	Fairbanks, Robert	47
Banba, Michiko	3	Farris, Johnathan	5
Baş Bütüner, Funda	18	Feng, Lin	57
Basmajian, Carlton	41	Fischer, Karl F.	75
Bertoni, Angelo	29 75	Fok, Yeung Yeung	37
Bihlmaier, Helene	72	Franca, Sarah	49
Bilsel, F. Cana	41 74	Franz, Gianfranco	48
Bilsel, S. Güven	41	Freestone, Robert	47
Bin Liu, Fang	65	Fu, Shulan	55
Bona, Domenica	15 35 45	Fu, Xiaoqiang	OAA
Brand, Nikki	63	Fujisaki, Motoki	48
Broudehoux, Anne-Marie	59	Gandhi, Vidhu	24 54
Bujas, Piotr	25	Gao, Wenjuan	OAA
Campinho, Regina	28	García-González, María Cristina	51
Caro, Diego	12	García-Pérez, Sergio	44
Carvalho Filho, Luiz	30	Garcia, Guadalupe	38
Castrillo-Romón, María A.	72	Garnaut, Christine	24
Çavdar Sert, Selin	18	Gimenez, André T.	75
Chain, Faith	63	Gold, John	16 58
Chen, Chao	36 65	Gold, Margaret	58
Chen, Liran	50	Gong, Yisen	6
Chen, Xiaofei	22	Goto, Yasushi	6
Cheng, Bingqian	66	Gu, Yuanyuan	65
Cheong, Iiji	36	Guan, Rui	46
Cheung, Alex Ka Lok	15	Guarino, Monia	48
Chinasamy, Krishna	13	Guerrero, Salvador	51
Chu, Cecilia	43	Guo, Lu	33
Chunxiao, Zhao	64	Gürdallı, Huriye	4
Coutinho Marques Da Silva, Rachel	58	Gzowska, Alicja	25
Cowherd, Robert	60	Hamada, Megumi	34
Cui, Yanyu	18	Han, Xueyan	32
Dąbrowski, Marcin	63	Han, Yanjuan	15
Dahl, Jessa	57	Hartman, Joseph	20
Davis, Juliet	59	Hatsuda, Kosei	49
De Castro Teixeira Maia, Marina	56	He, Jie	23 32
De Mott, James	35	Hebbert, Michael	21
De Souza, Felipe Francisco	26	Hein, Carola	9 29 55 57
De Vries, Ben	8		62

Author's Name	Panel No.	Author's Name	Panel No.
Hindi, Nadine	28	Lee Alardín, Gabriela	16
Hirano, Kuniomi	52	Lee, Chih-Yu	31
Hirata, Koji	11	Lei, Wei	32
Hooimeijer, Fernande	63	Lersch, Inês Martina	56
Horiuchi, Lynne	73	Li, Baihao	13 32 41 55
Hou, Li	7 8 19 25		56 OAA
	30	Li, Jihuan	7
Howes, Michael	31 41	Li, Li	49
Hu, Richard	10 66	Li, Xujia	6
Hu, Ying	66	Li, Zhao	41
Huang, Guangzhi	7	Liang, Liang	64
Hwang, Soe Won	49 50	Liang, Zhiyong	66
Ibarra Alonso, Macarena	43	Lin, Hang	57
Ichiko, Taro	3	Lin, Yu-Tzu	15 31 63
Imai, Heide	7	Lin, Zhongjie	45 66 70
Imran, Muhammad	18	Lincoln, Toby	11
Ishimaru, Norioki	21	Linkous, Evangeline	52
Iuchi, Kanako	3	Liu, Jing	23
Iwamoto, Kazumasa	29	Liu, Yi	32
Izaga, Fabiana	19 58	Liu, Yichen	10
Jafari, Elmira	9 67	Locher, Michael	46
Jaquand, Corinne	13 51	Loeffler, Beate	38
Ji, Li	46	Lu, Weifang	39
Jiang, Bo	18	Luo, Zhendong	25
Jiang, Hao	19	Ma, Qiang	6
Jiang, Min	35	Ma, Rui	19
Jiang, Qijun	32	Mafrici, Noemi	46
Jiang, Wen	OAA	Mäkelä, Mika	47
Jones, David	44 65	Maly, Elizabeth	3
Kai, Xin	7	Mashiko, Tomoyuki	48 OAA
Kam, Liza Wing Man	11	Matsubara, Kosuke	21
Kashima, Akihiro	38	Matsuda, Tatsu	75
Kikata, Junne	23	Matsushita, Tomoko	22
Kim, Hyo Jin	49	Matsuura, Kenjiro	52
Kim, Meeyoung	54	Maximova, Olga	51
Kiss, Daniel	25	Meguro, Kimiro	22
Klas, Anna	44	Meng, Meng	63
Kobayashi, Keiichi	4	Minner, Jennifer	58
Kolbe, Laura	68	Miyashita, Takahiro	17
Kondo, Tamiyo	3	Mizuma, Yoko	5
Korsh, Sben	60	Monclús, Javier	44
Koyunoglu, Balin	32	Montero, Claudia Isabelle	28
Kubota, Aya	3 22	Moore, Cequyna	30
Kudryavtsev, Fedor	25	Morley, Ian	20
Kuroda, Tomoko	43	Motak, Maciej	13
Kuroishi, Izumi	3 62	Mu, Qipeng	18
Kuzniecowa Bacchin, Taneha	63	Mumford, Eric	2
Languillon, Raphael	60	Munoz Sanz, Victor	70
Laprovitera Da Motta, Enio	73	Nakabayashi, Hiroshi	62
Le Mouëllic, Armelle	OAA	Nakae, Ken	23
Leconte, Uta	60	Nakajima, Naoto	6 34

Author's Name	Panel No.	Author's Name	Panel No.
Nakajima, Shin	45	Su, Meng-Tsun	37
Nakano, Shigeo	23	Sugano, Keisuke	48
Nishikawa, Ryo	62	Sun, Yanchen	57
Nishimura, Yukio	34	Sun, Yuan	6
Niu, Yingxiang	66	Suzuki, Nobuharu	2
Okamura, Kentaro	48	Taguchi, Toshio	1
Orillard, Clement	29	Tamari, Tomoko	59
Özbay Kinacı, Merve	56	Tamura, Chihiro	1
Pan, Yuan	64	Tang, Dorothy	37
Pang, Yue	15	Tchapi, Mireille	54
Park, Hyeonyoung	54	Tokunaga, Shota	34
Park, Kwanghyun	35	Tomita, Hideo	29
Pendlebury, John	24 37	Toyokawa, Saikaku	48
Peng, Zhang	52	Tsui, Carmen C. M.	73
Pérez-Oyarzun, Fernando	33	Tsutsumi, Takashi	36
Pullan, Nicola	34 47	Tyabji, Azhar	26
Qiu, Xufeng	7	Vadiati, Niloufar	OAA
Ramanathan, Swati	54	Vale, Lawrence	44
Ramos, Stephen	9	Varma, Rohan	67
Rayas, Joseph Thomas	48	Veldpaus, Loes	24
Rego, Renato	44	Vidarthi, Sanjeev	70
Ren, Xiaogeng	13 56	Vukmirovic, Milena	13
Ren, Yunying	36 65	Wainer, Laura	44
Renzoni, Cristina	47	Wakeham, Rosemary	68
Rezende, Vera	49	Wang, Fei	32
Ryu, Maki	63	Wang, Kailai	5
Sáinz Guerra, José Luis	50	Wang, Lumin	64
Sammonji, Masaya	6	Wang, Qinglian	18
Saniga, Andrew	32	Wang, Yan	22
Sankalia, Tanu	45	Wang, Zheng	6
Sano, Hiroyoshi	24	Ward, Stephen Victor	68
Sarkhosh, Rezvan	9	Watanabe, Shun-Ichi J.	55
Satoh, Shigeru	48	Weddige, Susanna	72
Schwake, Gabriel	67	Wee, Koon	2
Sedighi, Mohamad	9 67	Wei, Dong	52
Shen, Yun	30	Wei, Zesong	6
Shi, Diwen	56	Weirick, James	10
Shinohara, Satoko	3	Wilson, Matthew	43
Shoshkes, Ellen	2	Wissing, Ross	44 65
Silveira, Amanda	19	Wu, Xiaochen	65
Silver, Christopher	31	Wu, Yin	OAA
Simões Jr., José Geraldo	17 OAA	Xi, Gao	10
Somekh, Nádia	17	Xiao, Fangfang	OAA
Song, Aeijung	54	Xing, Zhong	65
Song, Jiewon	16	Xu, Hao	OAA
Song, Kun	57	Xu, Nannan	26
Sorensen, Andre	26 55	Xu, Qiuyin	36
Souza, Gisela B.	74 75	Xu, Yiran	17 OAA
Stanek, Łukasz	25	Yamaguchi, Sayu	3
Stead, Dominic	63	Yang, Bing	OAA
		Yarimbas, Duygu	73

Author's Name	Panel No.	Author's Name	Panel No.
Yenen, Zekiye	21		
Yildiz, Sevin	19		
Yokohari, Makoto	52		
Yoshihira, Magokoro	54		
Yu, Cinco Hsinko	4		
Yuan, Meng	32		
Yuan, Yiming	64		
Zamarbide Urdaniz, Alba Victoria	OAA		
Zeren Gulersoy, Nuran	16 32 56		
Zhang, Bocheng	18		
Zhang, Fangyu	65		
Zhang, Haoyan	70		
Zhang, Kaiping	7		
Zhang, Lu	13 OAA		
Zhang, Minghao	65		
Zhang, Tianjie	5 12 13 36		
	46 66		
Zhang, Weiliang	39		
Zhang, Xiaoge	64		
Zhang, Yi-Qun	12		
Zhang, Yidan	64		
Zhang, Yuqi	12		
Zhang, Yuwei	36		
Zhao, Guanning	7		
Zhao, Yili	57		
Zhao, Zhiqing	18		
Zheng, Chenwei	64		
Zhou, Teng	22		
Zhou, Xiangpin	22		
Zhu, Biyao	25		
Zhu, Kaiyi	12 34		
Zhu, Ming	39		
Zhu, Penglin	8 OAA		
Zinovieva, Olga	OAA		