## **Reshaping the New Capital**

# Influence of The City Plan of Nanking on the Practice of Urban Planning in Modern China in 1930s

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### Abstract

The article takes The City Plan of Nanking, an important planning practice at the beginning of the development of modern urban planning in China, as the object of study. Using methods such as historical documentary information extraction, comparative research, and statistical data, the study explores the important role the plan played in the exploration of modern urban planning practice in China. The City Plan of Nanking was learnt and imitated as a construction standard by municipal governments all over the country, greatly changing the direction of the preparation and development of urban planning in China. The provisions of relevant systems and laws in the content of the plan laid the foundation of the urban planning system and regime. The City Plan of Nanking, published by the National Government of the Republic of China in 1929, was the beginning of the road towards "scientific rationality" in modern urban planning practice in China. It demonstrated a new planning ideology that was goal-oriented and design-driven. The urban spatial planning concepts constructed in the plan, integrating nationalism, scientific rationality and the integration of East and West, were the best embodiment of the spatial concepts and planning techniques of the time.

### **Keywords**

Nanjing, the City Plan of Nanking, Scientific and rationalist planning, Planning Impact.

#### How to cite

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### INTRODUCTION

The capital city is the symbol of the national social and political system, and the planning and construction of the capital city is the best expression of the spatial concept and planning technology of the era. At the same time, the planning of the capital city is often imitated by the local city planning and construction. This is most obvious in the ancient cities, and the modern period also follows this law.

As the capital city of the Republic of China (1927-1949) in the legal sense, Nanjing's urban planning practice activities, especially *the City Plan of Nanking* formulated by the American architect Henry Killam Murphy (1877- 1954) in 1929, as the most important planning document in the modern history of Nanjing and even China, have been the focus of attention of researchers on the history of modern urban planning in China. Scholars such as Wang Chun-hsiung, J. W. Cody, and Wang Yanan, etc., have all done relevant research. However, most of these studies have focused on the content and characteristics of *the City Plan of Nanking* itself, its impact on the modernization and transformation of Nanjing, and Murphy's personal research, while the impact of the Capital Plan on the development and construction of modern Chinese urban planning practices, regulations and institutions in the context of the times has been missing. The paper formally explores the historical value of the urban planning document from this perspective again.

### SOCIAL BACKGROUND OF PLANNING

On 18 April 1927, the government of the Republic of China was formally established with Nanjing as its capital. After more than half a century of war, China finally entered a rare period of stable construction in modern history, and the period 1927-1937 has been described by historians as the 'golden decade' of China's modernization and development. In 1927-1937, the construction of a modern state and the building of cities had begun to take shape, the domestic and foreign situations were becoming more stable, and the government and social elites were full of ambition to build a new urban state. Urban modernization became the prelude and the way to the modernization of the country. All over the country, the establishment of municipal governments was the starting point of construction, because it was clear that the development of the city had an important relationship with the progress of the country.

Within the national government, the group of foreign students represented by Yang Du, Wang Jingwei, and Hu Hanmin, who had studied in the accelerated course of the Legal and Political Science Academy in Japan in the early 20th century, transplanted the concepts of the state learnt in the Legal and Political Science Academy to China through top-down design; while the group of foreign students in municipal science represented by Sun Ke, Lin Yimin, Lin Yungai, Cheng Tiangu, and Shen Yi, who had studied in the United States, transformed knowledge and theories of municipal science and architecture, engineering knowledge and theories into bottom-up local practices. These two currents started from different directions and together shaped the formation of China's modern state and urban concepts, providing brand new 'ideo-

logical resources' and 'conceptual tools' for China to accept Western knowledge and theories, disseminate modern political, economic and municipal ideas, and even the transformation of China's modern state and society. It became an important factor influencing the government and intellectual elites in the municipal system to step out of tradition, criticize authoritarianism, pursue constitutionalism, and implement autonomy.

# THE BEGINNINGS OF MODERN PLANNING IN CHINA BEFORE 1929

Although there was some localized urban renewal and municipal construction in China during the timeframe of the late 19th century and the first two decades of the 20th century, the practice of urban master plan only began in 1921 with the establishment of Guangzhou, the first constituted city in China's history.

On 15 February 1921, the Guangzhou Municipal Bureau was established and promulgated the Provisional Regulations of Guangzhou City, which defined the scope of the city's administrative area, marking the official start of China's modern municipal system. The Guangzhou municipal system was used as a model for the establishment of municipal institutions such as the municipal government, municipal halls, municipal preparatory offices, municipal councils, etc., in order to maintain the municipal function under local self-government. The focus of municipal construction was on the management of the city, including administration, finance, police, public works, public utilities, etc. The practice of municipal planning was not yet independent of the overall municipal structure. The Public Works Bureau under the municipal government was in charge of public works and was responsible for urban construction. Municipal engineering planning was based on improving the appearance of the city, and continued the engineering and construction contents of urban renewal in various places before 1921, mainly including the demolition of city walls, construction of roads, urban zoning, and construction of public infrastructure. Influenced by Western modern urban planning ideas, urban planners began to tentatively apply the theory and method of zoning system, the construction of exemplary residential area in the theory of idyllic city, and the design of city beautification pattern to urban engineering planning, and formed a preliminary planning content and expression paradigm.

The content of municipal planning was based on land use planning, road and infrastructure construction, which belong to the scope of engineering planning, and its connotation was close to that of construction planning, i.e. "the planning process for the effective organization of urban construction and the completion of construction tasks". In terms of content, more emphasis was placed on determining and implementing the specific construction content, scale and mode of construction in accordance with certain standards and norms in order to achieve the desired end result. That is, the real problem-oriented, problem-solving as the goal of engineering design. The ultimate goal of governments and planners is to achieve a comprehensive transformation of the nature, functions and lifestyles of cities through municipal planning.

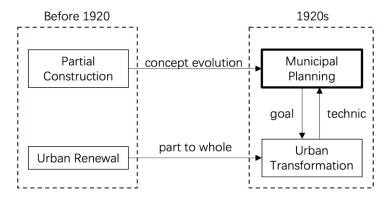


Fig. 1. The beginnings of modern planning in China before 1929 Construction background of planning

In November 1928, Sun Ke, the eldest son of Dr Sun Yat-sen, the father of the nation, drew up the *Draft Construction Programme*, in which a preliminary top-level design was made for the national urban system, to build 'the national capital, five new large cities and ten new medium-sized cities', and to drive the development of large and medium-sized cities by the construction of the national capital. As the capital of the national

government, the government naturally attached great importance to the construction of the cityscape, with the intention of building Nanjing as a 'model city of the country, and enough to compare with the famous cities in Europe and the United States'; at the same time, the government also hoped to consolidate the status of the national government and the KMT as the national leadership centre by promoting the modernization of the capital city of Nanjing.

After the promulgation of the Municipal Organization Law in 1928, municipalities began to regulate the size and structure of municipalities under municipal administration, as well as issues of municipal construction, and

\construction entered a new phase. At the same time, the pluralistic urban pattern of many cities, such as Shanghai's "three quadrants", Tianjin's "nine-country concession", Hankou's "six-country concession", etc., where each area often had its own independent municipal administration and construction organizations, and the construction of urban infrastructure such as roads, water, electricity, light and gas had long been carried out separately. These cities also urgently need a citywide master plan to coordinate modernization and industrialization within the city limits.

### FORMULATION AND CONTENT OF THE PLAN

By 1928, the population of Nanjing had risen from 360,000 to nearly 500,000, and this significant increase in population made the development of a new urban planning programme an urgent necessity for the government.

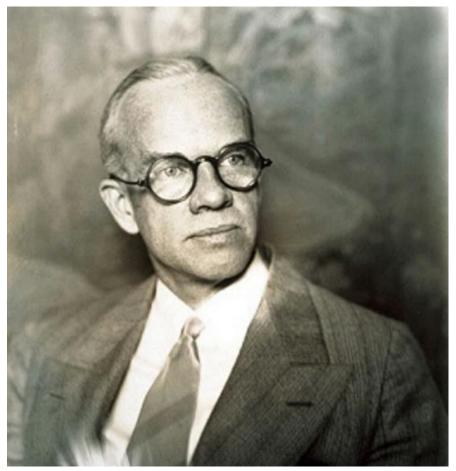


Fig. 2. Henry Killam Murphy (1877-1954)

After a series of twists and turns regarding the setting up of a special agency for the plan, the national government finally established the Office of the Technical Commissioner for the Design of the National Capital on 1 December 1928 to take charge of the formulation of the capital plan under the impetus of Hu Hanyin, Dai Jitao, Sun Ke.

In the Draft Construction Programme drawn up by Sun Ke in 1928, it was clearly stipulated in the first chapter 'Principles' that 'the national government should employ foreign specialists in order to realize the construction programme.' He also took the opportunity of formulating the capital plan to work with Murphy again to make up for the failure of the Guangzhou planning in 1922. In addition to Sun Ke (the leading technical officer), Murphy (the leading architect), and Lin Yimin (responsible for administrative coordination), the actual participants in the planning included three American engineers, E. Goodrich, C. Moller, and T. McCroskey, as well as Chinese engineers, such as Huang Yuyu and Lu Yanzhi.



Fig. 3. Cover and some of the contents of the City Plan of Nanking

On 31 December 1929, the Office of the Technical Commissioner for the Design of the National Capital under Sun Ke announced the City Plan of Nanking, which can be regarded as an epoch-making urban planning practice in terms of its content, structure and expression, demonstrating a new goal-oriented and design-led planning mindset.

In 'the City Plan of Nanking - Submission to the Capital Construction Committee', Lin Yimin argued that the lack of urban planning was one of the reasons why China was lagging behind the West, and that comprehensive urban planning was a necessary means of developing the country. <sup>3</sup> Together with the municipal system, urban planning became the two arms of building a modern country in the eyes of political elites and technical experts.

The capital plan, which was undertaken by American architects, engineers and Chinese officials who had stayed in the United States, naturally inherited the main planning procedures of the so-called 'instrumental rationality' of American urban planning practice at the time. The main working method of American urban planning included two steps: investigation and planning, after which the investigation was followed by the delineation of the plan's scope, land zoning, street system, park system, other infrastructures, annual plans and financial plans, etc. In the actual development process, the capital plan was indeed prepared in accordance with the American-style planning logic.

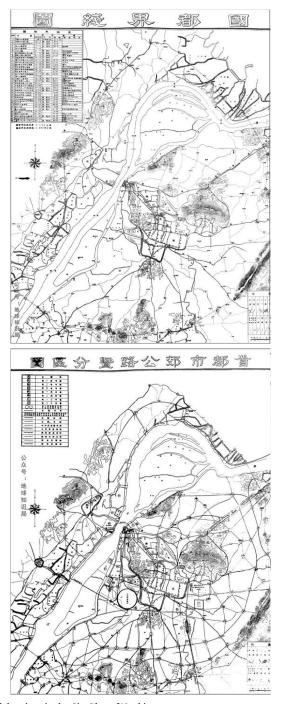


Fig. 4. Selected drawings in the City Plan of Nanking

The Capital Plan was drawn up in accordance with the idea of investigation - planning, in which the substantive planning part was divided into six parts, namely, land zoning use plan, transport plan, infrastructure plan, related business plan, ordinance and tool plan, implementation procedures and financial plan, including a brief overview of Nanjing's history and land, Nanjing's future 100-year population projections, the capital boundaries, road system planning, draft capital zoning regulations, draft zoning enabling law, implementation procedures, etc. A total of 28 chapters were included in the Plan. The plan contains 28 chapters, including the historical overview of Nanjing, the population forecast for the next 100 years, the capital city boundary, road system planning, the draft capital city zoning ordinance, the draft zoning authorization law, and the implementation procedure, etc. It is described by foreign scholar as the first 'international standard comprehensive land use plan' in China'. The plan changed the previous method of municipal engineering plan to take the urban area as the urban planning scope, but included the undeveloped land in the peripheral areas of the city into the municipal administrative area, which was very similar to the 'metropolitan tradition' planning method in the United States at that time, especially 'New York Regional Planning Association' in 1921-1920. 'New York City'. This is very similar to the 'metropolitan tradition' of planning in the United States at the time, in particular the New York Regional Planning Association's Plan of New York and its Neighborhoods, which was carried out from 1921 to 1929. The concept of urban spatial planning constructed by the Capital Plan, which combines nationalism, scientific rationality, and the use of Chinese and Western styles, played an important role in the exploration of modern urban planning practice in China.4

For the capital plan, Sun Ke, Lin Yimin, Murphy had high expectations, 'This plan is not only related to the capital city, but also for the domestic municipalities to carry out the design of the initiative. The impact will be far- reaching All the programmes are designed for a hundred years, not just for a short period of time.' The course of history had also confirmed their confidence. Since then, the City Plan of Nanking as the preparation of a sample version of the 'Tianjin Special City material construction programme' 'Guangzhou City Design Outline Draft' as the representative of the city planning and construction of imitation and learning, greatly changed the modern urban planning and practice of the development of the direction of the preparation and development. The system and regulations expanded on the basis of the planning content of the capital plan laid the foundation of China's modern urban planning system and system.

# EXEMPLARY ROLE FOR URBAN PLANNING PRACTICE IN 1930 S CHINA

The principal designer of *the City Plan of Nanking* was the American architect H.K. Murphy, who had designed the campuses of Changsha's Yale University in 1913, Nanjing's Jinling Women's University in 1923, and Beijing's Yanjing University in 1926, and who, in the process, had become so familiar with traditional Chinese design styles that he was able to respond to the rising tide of nationalism, and thus was at the height of his popularity in China.<sup>5</sup>

In 1928, Murphy was again hired by Sun Ke to develop the capital plan for Nanking. Both Murphy, an architect from Yale University, and Goodrich, an engineer from the University of Michigan, were deeply influenced by the American city beautification movement and the landmark Plan of Chicago by D. H. Burnham and E. A. Bennett in 1909. It can also be said to be the source and blueprint of the 'scientific instrumental rationality' paradigm of modern urban planning in China.

The formulation of the capital plan was the beginning of large-scale urban planning for cities in China, and it was learnt and imitated as a standard for construction by municipal governments in various parts of the country. Since then, the capital plan has been imitated and learnt from as a model for the preparation of city plans, represented by the Tianjin Special City Physical Construction Programme and the Guangzhou City Design Outline Draft, which greatly changed the direction of the development of municipal planning and urban design in modern times. The procedure of compiling according to the American-style planning logic gradually became the consensus of planners in the process of compiling the city plans of major Chinese cities in later years. Through statistical comparison, it was found that in the *Tianjin* Special City Physical Construction Programme and Guangzhou City Design Outline Draft, which were compiled in the years following the capital plan, the structure of the planning text and the high-frequency keywords of the planning content were extremely similar to those of the capital plan. In the Tianjin Special City Physical Construction Programme, there are also chapters such as 'Draft Zoning Ordinance of the City' and 'Draft Design and Zoning Authorisation Law of the City', which are very similar to the structure of the capital plan, and even directly listed as 'Standard Pavement of the Capital City by Nanking'. The standard pavement of the capital drawn up by Nanking' was even listed as a direct reference.

At that time, this kind of urban plan was often called 'urban design' or 'city design'. This conceptual change also marked the beginning of urban master planning to leave the scope of 'municipal' construction and enter a new stage of urban 'design'.

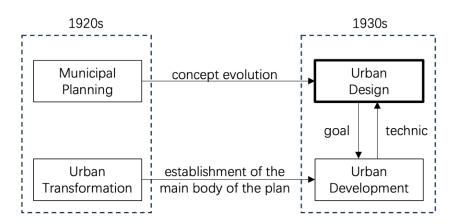


Fig. 5. Transforming Urban Planning after the City Plan of Nanking

# INSPIRED THE DEVELOPMENT OF THE FIRST URBAN PLANNING ACT

The most important contributions to the development of urban planning practice in the City Plan of Nanking are section XV, 'Draft Urban Design and Zoning Enabling Act', and section XVI, 'Draft Capital Zoning Ordinance'.<sup>6</sup>

To 'New York City 1916 version of the Zoning Ordinance' as a blueprint, in 1924, the U.S. Secretary of State Hoover assigned the 'Architectural Planning and Zoning Advisory Committee' to draft the 'Standard State Zoning Enabling Act Model'; in 1928, the U.S. Department of Commerce of the Federal Government promulgated the 'Model Town Planning Enabling Act' for the U.S. government at all levels of land use control provides a legal basis and reference standards. The Department of Commerce promulgated the Model Urban Planning Enabling Act in 1928, which provided a legal basis and reference standard for the implementation of land use control at all levels of government in the United States. In May 1930, 856 cities in the United States had formulated zoning plans and announced their implementation.

Judging from the time, the content of the first two drafts in the City Plan of Nanking (in the text of the modern Chinese city planning programme has been consulted, never before similar content), obviously by the United States not long before the enactment of the zoning laws and regulations of the direct impact. but we do not know whether this was Sun Ke's persistence, or American Murphy's advice, or the result of the two people hit the nail on the head. This speculation can also be confirmed by the content of the reply from the Jiangsu Provincial Construction Department to the letter from the Capital Construction Committee, such as 'I would like to check that the draft Urban Design and Zoning Enabling Act prepared by the Office of the Commissioner of the National Capital Design and Technology is modified with reference to the United States Enabling Standards Act, in order to be suitable for the national conditions of our country'. At the same time, as the earliest document with the nature of urban planning regulations in China, the Draft Urban Design and Zoning Authorization Law was considered to be the predecessor of the Urban Planning Act enacted in 1939.

Draft Urban Design and Zoning Enabling Act was conceived by Sun Ke when the Nationalist government succeeded in the Northern Expedition and settled in Nanking, hoping to set up a national legal basis for the planning of new cities. Overall, the Urban Design and Zoning Enabling Act had basically the structure of a complete urban planning law, while the Draft Capital Zoning Ordinance draws on New York's zoning system, for the first time providing detailed planning controls on building forms, building setbacks, and street scales within each zoning district.

After the 1930s, with the gradual improvement of the municipal establishment and the vigorous development of urban planning practice, many municipal experts and scholars had called on the government to enact urban planning laws as soon as possible. After nearly two decades of searching and accumulating after 1921, especially after the City Plan of Nanking revealed a preliminary awareness of planning regulations and a definition of the content and scope of planning practice. The National Government officially announced the Urban Planning Act on 8 June 1939, which was penned by the Director General of the Department of Construction, Mr. Ha Xiongwen, and was the first main law on urban planning in the area ruled by the National Government.

The City Plan of Nanking 1929	Article 10 of the Urban Planning Act 1939
Overview of Nanjing's history and geography, and projections of Nanjing's population in the next hundred years	Current state of urban area
borderline of capital	Plan area
Draft Urban Design and Zoning Enabling Act, draft zoning regulations for the capital city, location of the central political district, location of municipal districts	Zoning use of land
Plan of Pukou Area	public land
Road system planning, pavements, suburban road schemes, watercourse improvements, inner-city trans- port equipment	Road system and waterway traffic
Parks and boulevards, railways and stations, harbour plans, airport station locations, water supply plans, power plant locations, canal plans, power lines and street lighting plans, public housing studies, plans for schools, industries	Utilities & Water & Sewerage
Implementation procedures	Implementation procedures
Mobilization of funds	funds
Choice of building form	other

Table 1. Compare between the plan and Act

The Urban Planning Act sets out the basic elements of urban planning practice, such as article 10, which clearly defines what an urban plan should cover: 'The urban plan shall indicate the matters listed: I. The current state of the urban area. 2.Plan area. 3.Zoning use. 4.Public land. 5.Road system and waterway traffic. 6.Utilities and water and sewerage. 7. Implementation procedures. 8. Funding. 9. others.' From the content of these provisions, it can be seen that the Urban Planning Act was in fact a summary and distillation of the practical work of city government-led urban master planning since the 1920s, especially since the publication of the City Plan of Nanking.

## CONCLUSION

It can be said that the preparation and implementation of the City Plan of Nanking in 1929 marked the beginning of modern urban planning practice in China towards 'scientific rationality'. Although many scholars have carried out in-depth research on the plan, this study re-examines the City Plan of Nanking and its text on the basis of existing research. Through multiple perspectives and new methods of re-excavation and sorting, we can find that this most important object of planning research in the modern period of China still has its re-consideration of historical value.

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### DISCLOSURE STATEMENT

No potential conflict of interest was reported by the author.

### NOTES ON CONTRIBUTOR(S)

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### **IMAGE SOURCES**

- Figure 1 Drawn by the author.
- Figure 2 Cody J W. Building in China: Henry Murphy's K, Adaptive Architectural, 1914-1935. Hong Kong: The Chinese University Press, 2001.
- Figure 3 Murphy H K. The City Plan of Nanking. Nanjing: Nanjing Press, 2006.
- Figure 4 Murphy H K. The City Plan of Nanking. Nanjing: Nanjing Press, 2006.
- Figure 5 Drawn by the author.

### **ENDNOTES**

- 1. Hall. 'Cities of Tomorrow'.
- 2. Sonne. 'Capital City Planning'.
- 3. Murphy. 'The City Plan of Nanking'.
- 4. Anonymous. 'Nanking, Cina'.
- 5. Cody. 'Building in China'.
- 6. Anonymous. 'Planning for China'.