Study on the Evolution of Public Space in Historic Cities from the Perspective of Changing Needs of Users

A Case of Harbin City, China

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Abstract

As a witness and carrier of urban history, the evolution of public spaces is of significant importance for the study of urban historical and cultural preservation. Harbin, a representative historical city in Northeast China, emerged gradually in 1898 due to the construction of the Middle East Railway. During this period, Chinese and foreign nationals coexisted and jointly built the city, marking a unique historical period. This paper presents an in-depth study of the evolution of public spaces in Harbin's historical urban areas from 1898 to 1945, with a focus on changes in user needs. The paper analyses the urban construction background of Harbin, explores the changes and characteristics of user needs in public spaces, and details the evolution of Harbin's public spaces from 1898 to 1945. This encompasses the initial foundation period, functional evolution period, and cultural reshaping period. This demonstrates the construction of the public space framework, the diverse development of functions, and the integration of multifunctionality. This study not only reveals the patterns of evolution in Harbin's public spaces, but also provides valuable references for the study of public spaces in other historical cities.

Keywords

Public spaces, the historical evolution process, Evolution of user needs, Historic Cities.

How to cite

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INTRODUCTION

The study period of this paper encompasses the period from 1898 to 1945. It commences with the construction of the Chinese Eastern Railway and concludes with the liberation of Harbin. During this period of significant upheaval and complexity, Harbin underwent a rapid transformation from a relatively isolated riverside fishing village to a prosperous international city. This process established the foundation for Harbin's current urban form and spatial configuration¹, which have shaped its unique urban landscape and exerted a profound influence on Harbin's public spaces.

As Henri Lefebvre posits, space is a social construct, and a comprehensive comprehension of public spaces should not be limited to their physical characteristics. Rather, it should examine the intricate relationship between humans and space. Consequently, this paper initially examines the distinctive characteristics of Harbin's urban development history, before subsequently analysing the types of users and their evolving processes within Harbin's public spaces. The objective of this study is to analyse the evolution of Harbin's public spaces from the perspective of its users.

THE UNIQUE CHARACTERISTICS OF HARBIN'S URBAN DEVELOPMENT PROCESS

HARBIN'S URBAN CONSTRUCTION BACKGROUND

In the late 19th century, more than 50 backward natural villages formed on the south bank of the Songhua River in Harbin, showing the initial trend of urbanization, but there was no sign of modern urban planning³. In 1898, Russia selected Harbin as the hub of the Chinese Eastern Railway (CER), relocating the General Administration of the CER from Vladivostok to Harbin, and began the construction of the entire CER line. The Chinese Eastern Railway (CER), which extended from Manzhouli in the west to Suifenhe in the east, was a "T"-shaped railway constructed on Chinese territory by the Tsarist-era Russia for the purpose of exploiting resources in Northeast China and controlling the Far East. Harbin served as the point of intersection between the CER trunk line and its branches.

The construction and management of the CER have transformed Harbin into a crucial transportation hub and a logistics center, attracting a significant influx of railway engineering technicians, managers, workers, road maintenance teams of the CER, and their families. These immigrants not only brought advanced railway construction technology and resources, participated in the urban planning and construction, but also played a significant role in the social life of Harbin. Therefore, despite the strong colonial tint of the construction of the CER, objectively speaking, it significantly propelled Harbin's evolution into a modern city, bringing about profound impacts in various aspects such as politics, the economy, and culture. This enabled Harbin to rapidly emerge as an industrial and commercial hub in the Far East.

THE URBAN CONSTRUCTION PROCESS INVOLVING THE JOINT PARTICIPATION OF CHINA AND THE WEST

INTRODUCTION AND APPLICATION OF URBAN PLANNING AND CONSTRUCTION IDEOLOGIES FROM WESTERN COUNTRIES

Between 1898 and 1945, China existed in a particular historical era characterised by semi-colonialism and semi- feudalism, during which the urban planning and development of Harbin gradually emerged⁵. Since 1898, the construction of the CER commenced. Russian urban planners carried out several rounds of urban planning work, introducing advanced Western urban planning concepts and thinking into the planning schemes. The urban planning and design of Harbin's infrastructure, including functional zoning and architectural style.

The planning scheme divided Harbin into four distinct districts, each aligned with the railway network. These were the New City District (now part of Nangang District), Butou District (now part of Daoli District), Old Harbin (now part of Xiangfang District), and Fujiadian (now part of Daowai District)(Figure 1). The New City District and Butou District were designated as railway subsidiary area and were identified as key areas for Russian-led urban planning and construction.

The planning of the New City District integrated Classical Planning with European architectural forms, establishing a highly structured urban axis and symbolic landmarks, a radial road network centred on squares(Figure 2), and a political centrality emphasising the New City District and the Russian government's rule over Harbin⁶.

In 1902, the administration of the CER initiated preliminary planning for the Butou District. In contrast to the comprehensive planning and long-term layout of the New City District, the planning for the Butou District prioritised efficient land utilisation and rapid economic returns⁶. To achieve this goal, a grid-shaped road network was adopted in the Butou District, which greatly facilitated the quick division and sale of land.

Following the year 1932, Japan proceeded to expand the urban area, building upon the original planning schemes inherited from Russia. This expansion was accompanied by an optimisation of the zoning and land use layout of the city. These series of initiatives gradually transformed Harbin into an international city, characterised by a fusion of elements from multiple nations and a distinctive urban style.

CHINESE RESIDENTIAL AREAS: A BOTTOM-UP DEVELOPMENT

In numerous urban planning schemes for Harbin, the Middle East Railway Administration proposed the implementation of strategic separation measures to isolate railway subsidiary area from local residential areas in Fujiadian and Old Harbin³. This separation strategy served to reinforce Russia's dominant position in Harbin and to highlight the relative 'lag' of the 'modern civilisation' within the colony in comparison to the 'non-colonial areas'⁶.



Fig. 1. The Four Districts in <The master plan of Harbin and suburbs 1906>



Fig. 2. S.Nicholaevsky Church Circus.Founded in 1900. The surrounding roads radiate from the square as the center.

The Chinese residents in Fujiadian spontaneously promoted the development of the area³. The urban layout of this region was not strictly constrained or limited by official planning, resulting in narrow and tortuous roads and a chaotic and disorderly architectural layout⁷. This created a distinctly different urban landscape compared to the railway appendages.

In the context of economic prosperity, Chinese industrialists and merchants in Fujiadian sought to demonstrate cultural integration and identity through architectural means. They emulated Western architectural styles, particularly the decorative elements of Baroque architecture. In terms of spatial layout, these buildings, known as "Chinese Baroque," retained the characteristics of traditional Chinese quadrangle courtyards, exhibiting traditional Chinese residential culture and family values.

Against a specific historical backdrop, the urban development process of Harbin distinctly showcases the characteristics of joint participation by China and the West. This process not only shaped the overall urban landscape but also profoundly influenced the design, layout, and usage of public spaces.

THE EVOLVING NEEDS OF USERS OF PUBLIC SPACES IN HARBIN

Harbin has experienced a succession of periods of governance under various political regimes. The urban zoning under foreign domination was not merely a physical division of urban space; rather, it was a division of social space, power structures, and social strata. Similarly, the development and usage of public spaces were more influenced by the intentions of the constructors and the changing needs of the users.

THE MAIN USERS OF PUBLIC SPACES IN HARBIN

When we compared different urban districts of Harbin horizontally from a certain point in time, it became clear that there were significant differences in the level of urban development and the living conditions of the residents

in these districts. These disparities were not the result of natural processes; they were the deliberate results of urban planning and construction undertaken by the ruling class to achieve specific goals.

The intentional urban development disparity created by the colonisers served as a tool for spatial segregation, with railway subsidiary area clearly distinguished from local residents' settlements. This not only restricted the living space and resource access of local residents, but also further consolidated their social class, resulting in the concentration of quality resources in the hands of the colonisers and their nationals. The development of public spaces in various urban districts was largely synchronised with the urban development, and the types of primary users exhibited significant regional clustering.

From 1909 to 1912, the Russian population in Harbin increased from over 12,000 to 43,091, representing 62.9% of the city's total population at that time⁸, thus becoming the main component of the urban population. The proportion of Russians in the railway subsidiary area was even higher, reaching 70.8% in 1913 and continuing to grow year by year⁸.

Foreign nationals are the primary users of public spaces, mainly comprising bureaucrats, personnel of the CER, merchants, and other middle to upper-class professions. Primarily residing in the railway subsidiary area, they enjoy superior resources and services, forming a relatively independent and closed social group. They introduced modern public spaces such as plazas, parks, and racecourses, organized a variety of social and cultural activities, cultivating a unique Western cultural atmosphere.

It is, however, important to note that the public spaces constructed by foreign nationals are concentrated within railway subsidiary area, with the primary purpose of meeting their own needs for living, leisure, and entertainment. Chinese residents had limited access to these spaces.

During the early stages of the construction of the CER, due to historical and educational limitations, Chinese residents in Harbin were more engaged in physical labor ,As an illustration, the Harbin General Factory of the CER commenced operations with a workforce of over 1,300, with Chinese workers accounting for approximately 80%-90% (approximately 1,000 individuals)⁹. They often occupy a doubly marginal status in terms of social class and physical space, predominantly residing in non-railway subsidiary area such as Fujiadian and Old Harbin, forming unique Chinese communities.

Despite these challenges, Chinese residents in the area still managed to create distinctive public spaces for leisure and entertainment in their daily lives, such as teahouses and snack stalls frequented by laborers. These public spaces served as significant venues for social interaction

and rest, reflecting the living conditions and cultural characteristics of the socially disadvantaged groups of the time. As the Chinese population has grown and living standards have improved, attitudes towards the use of public spaces among Chinese residents have shifted from a passive to an active stance. They have begun to prioritize the utility value and functionality of public spaces, actively participating in the construction and management of public spaces.

EVOLUTION OF NEEDS FOR PUBLIC SPACES

EARLY STAGE (1898-1917): NEEDS UNDER THE GUIDANCE OF WESTERN CULTURE

During this period in Harbin, numerous foreign nationals had recently settled in the city, coinciding with the gradual formation of public spaces. These expatriates were eager to swiftly establish their own communities in Harbin while maintaining their original lifestyles and cultural traditions. Therefore, they preferred to engage in social activities, host cultural events, and conduct business transactions in public spaces. They demanded spaces that could accommodate social and cultural activities, as these spaces also served as carriers for their cultural and identity recognition.

In contrast, for the Chinese residents, due to their relatively low social and economic status, the majority had primary needs for basic living spaces such as housing, workspaces, and trading areas, with minimal demand for public spaces. At this stage, they were less engaged in the social and cultural activities that were largely dominated by foreign nationals. For example, when cinemas first opened in the New City District in 1908, and Russian circuses performed in theatres, due to the high prices, the majority of Chinese people were unable to afford to enter to watch 10. However, in the Fujiadian area, numerous traditional Chinese entertainment-oriented public spaces were established to cater to the local Chinese population, including teahouses and theatres. These spaces satisfied the social and leisure needs of the Chinese people 11.

MID-STAGE (1918-1931): INTEGRATION OF EAST AND WEST AND DIVERSIFICATION OF DEMAND

Following the October Revolution of 1917, a considerable number of Russian Orthodox believers, aristocrats, officials, and other refugees sought refuge in Harbin¹². The demand for public spaces among foreign nationals gradually evolved from a focus on social and cultural needs to encompass a broader range of demands, including religious, educational, medical, and other public service facilities. They aspired to settle permanently in Harbin

and enjoy a more comfortable life. The influx of a significant number of Russian refugees and expatriates from various countries rendered the existing number of churches in Harbin insufficient to meet the demands of the population, leading to the construction of a large number of new churches and surrounding ceremonial public spaces. Among the aforementioned churches among these, 18 Orthodox churches alone underwent renovation, expansion, or new construction¹².

During this period, the Chinese resident population experienced a notable increase, and the

demarcation line between the railway subsidiary area and Fujiadian was abolished. The Chinese residents' demand for public spaces gradually evolved from a focus on basic living needs to encompass cultural, educational, and recreational public services.

Harbin has become a melting pot of Chinese and Western cultures, where the Chinese residents' demands for public space types are no longer confined to traditional Chinese public spaces, but have gradually expanded to include Western cultural and recreational public spaces. This change in demand for public spaces not only reflects the progress of citizens' spiritual world, but also embodies the integration and coexistence of Chinese and Western cultures in public spaces.

LATE STAGE (1932-1945): NEEDS SHIFT UNDER THE INFLUENCE OF WAR

In 1932, Harbin fell under Japanese colonial control, and the colonisers' primary demand was for spaces that catered to the needs of their colonial governance, including administrative, military, and cultural facilities. Additionally, they aimed to conduct commercial activities in Harbin in order to sustain and strengthen their colonial dominance.

During the period of Japanese occupation, the needs of Chinese residents and other foreign nationals were severely constrained. The development of public spaces was primarily dictated by the colonialists' aspirations for the future development of Harbin. Meanwhile, Chinese residents were likely to prioritize their needs for survival and resistance, rather than cultural and social demands for public spaces.

CHARACTERISTICS OF CHANGING NEEDS FOR PUBLIC SPACES

In summary, the demand for public spaces among users underwent significant changes, characterised by a transition from basic to advanced, from material to spiritual, and from singular to diverse. In the early stages, constrained by socio-economic conditions, people's needs for public spaces were primarily focused on basic survival necessities, such as improving living environments and perfecting basic amenities.

However, with the development of the social economy and the enhancement of living standards, people's demands gradually shifted towards higher-level aspirations. These included the desire for comfortable and convenient facilities, picturesque green spaces, and comprehensive transportation systems. Concurrently, the demand for public spaces evolved from a focus on material needs to encompass spiritual aspects, with individuals seeking opportunities for cultural, artistic, and social interactions. These interactions aimed to facilitate the formation of a sense of belonging and cultural identity in public spaces.

Furthermore, as society advanced and living standards rose, the demand for public spaces diversified, expanding from initial basic survival needs to encompass cultural facilities, leisure, entertainment, fitness, transportation, and other multifaceted requirements. This transformation not only reflects the progress of the social economy but also underscores the crucial role of public spaces in promoting social and cultural interactions.



Fig. 3. China Main Street(Central Main Street)began built in 1899. The left image shows before the laid the square stone payment,The left image shows after 1924.

THE EVOLUTION OF PUBLIC SPACE DEVELOPMENT IN HARBIN (1898-1945)

1898-1917: INITIAL FOUNDATION AND ESTABLISHMENT OF THE PUBLIC SPACE FRAMEWORK

Between 1898 and 1917, Harbin's urban public spaces underwent a pivotal stage of initial establishment. As previously stated, the needs of public space users during this period were relatively fundamental, primarily focused on fulfilling basic living requirements, engaging in social activities, and having initial exposure to cultural and entertainment pursuits.

At this stage, the urban road system underwent initial planning, with a grid-like road layout providing a framework for the division and expansion of urban spaces. A series of critical transportation nodes and railway- adjacent areas emerged as significant components of urban spaces, not only serving as transportation hubs but also becoming centres of urban economic and social activities. The New City District and Butou District underwent a rapid process of development, becoming hubs for commercial activities. In particular, China Main Street in the Butou District(Figure 3), due to its distinctive geographical position and architectural style, attracted a multitude of businesses, thereby establishing itself as a renowned commercial district in Harbin.

Urban squares, parks, racecourses, and street center park began to emerge as venues for socialising and leisure¹³. Such spaces serve not only as locations for residents to interact, relax, and entertain themselves, but also as catalysts for enhancing the urban environment and improving the city's liveability. These public spaces often hosted a variety of sporting events and entertainment activities such as horse racing, concerts, theatre performances, etc., satisfying the cultural needs of some citizens, especially foreign nationals¹⁴.

The design of public spaces in Harbin was influenced by Howard's theory of the 'rural city', which resulted in the creation of street center park(Figure 4), roadside tree planting, court-yard planting, etc., which better met the daily needs of residents. Relevant laws and regulations, such as the "Rules for Paving Streets and Sidewalks (1908)" and the "Regulations for Managing Pedestrian Roads (1911)", were introduced to ensure that residents had sufficient

development space for their walking and leisure activities ¹⁵. The incorporation of green spaces within urban environments, including roads, squares, and other public spaces, has facilitated a more rational and structured urban public space framework, laying a solid foundation for future urban development. However, most of the public spaces mentioned above were built in the New City and Butou District, while it was not until 1917 that Binjiang Park in Fujiadian was completed and became a modern park ¹⁶.

During that period, the construction of religious edifices commenced, including the S. Nicholaevsky Grand Church and the S. Sophia Church. These structures not only served as places for citizens to engage in religious rituals, but also constituted integral parts of the city's cultural fabric.

1918-1931: FUNCTIONAL EVOLUTION AND DIVERSIFIED DEVELOPMENT OF PUBLIC SPACES

As Harbin's urban economy developed and its population grew, the user groups of public spaces became more diverse, and the demand for public spaces had accordingly increased. Consequently, the functions of public spaces began to diversify and expand.

The commercial activities in Harbin had been experiencing a period of accelerated growth, which had led to the rapid development of commercial spaces such as shopping streets and markets. These spaces not only met the shopping needs of residents but also became significant venues for socialising and entertainment. The expansion of commercial spaces had also facilitated the growth of surrounding public spaces, including the emergence of leisure venues such as cafés and teahouses.



Fig. 4. The Street Center Park formed in 1907 in Butou District

As cultural education became increasingly popular and residents' living standards improved, Chinese residents continued to engage in social and cultural activities primarily in traditional Chinese public spaces, such as teahouses and theatres. Concurrently, Western-style concert halls, theatres, and cinemas gradually emerged, providing citizens with a more diverse range of cultural and entertainment options. According to the 1928 edition of the Binjiang Times, a library was built in the New City (which had been renamed Nangang by that time) to satisfy people's need for cultural life¹¹. Chinese residents became more active in urban public life, with the construction of a comparable number of recreational or ritualistic public spaces to those established by foreign nationals. Between 1918 and 1923, 25 new cinemas were constructed in Harbin, with 12 of these being built by Chinese entrepreneurs¹8 Such spaces not only enriched the spiritual and cultural lives of residents but also contributed to the prosperity of urban culture.

During this period, Harbin's public spaces began to emphasise the enhancement of design sense and artistic quality. Parks, squares, and other public spaces began to incorporate Western landscape design concepts, with a focus on greening and landscape creation(Figure 5). The famous Chinese essayist, poet, and scholar Zhu Ziqing passed through Harbin in 1931 and described his impressions of the city in a letter to his friends. He mentioned the "lively atmosphere" in some public places in Harbin at that time, stating that "there were many benches on both sides of the streets for resting. Many Russians sat there unsupported, some of whom came for leisure. In the midst of the more leisurely streets, there was a small garden surrounded by a short fence, where many people walked back and forth..."19. The letter also noted that there was little distinction between the lives of Chinese and foreign nationals in the Butou district (which had been renamed Daoli) during that period. Other literature also records:The Special City Park was "filled with numerous visitors walking on the paths in a continuous stream, almost resembling a bustling market."20, 15, "there was hardly any room for tourists in the park"²¹, ¹⁵.Locals often rowed boats and swam in the Songhua River.This letter indirectly reflected the openness and inclusiveness of Harbin's public spaces during that era, greatly satisfying residents' aspirations for a higher quality of life. Through the introduction of Western garden design, the establishment of resting benches and small gardens, and the setup of outdoor sports facilities, it catered to residents' needs for an aesthetic environment, social leisure, and outdoor activities.

Furthermore, the ascension of the Republic of China government and the influx of Russian refugees led to a surge in the construction of religious buildings in Harbin. Foreign nationals constructed churches and other Western religious edifices for the purpose of religious activities such as worship, while the Chinese government erected oriental religious buildings such as the Temple of Ultimate Bliss and the Temple Of Confucius for temple fair and other religious ceremonies¹⁰.

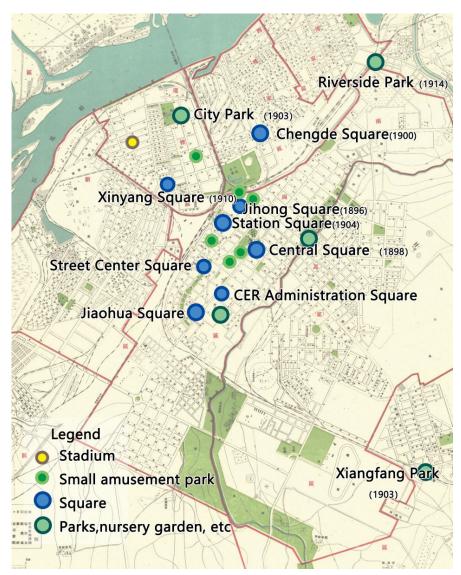


Fig. 5. Partial addition of public spaces from 1989 to 1931

1932-1945: CULTURAL RESTRUCTURING AND MULTI-FUNCTIONAL INTEGRATION OF PUBLIC SPACES

During the Japanese occupation, the functional trends of Harbin's public spaces exhibited both complexity and specialisation. Although Japan's planning and construction of Harbin undoubtedly exhibited a distinct colonialist tint, such as the construction of numerous Japanese Buddhist temples and Shinto shrines¹², objectively speaking, its planning schemes had significant positive implications for the development of Harbin's urban public spaces.

Most of the Japanese planners' urban planning for Harbin continued the Russian planning programme, drawing on the most advanced design concepts of Western countries, especially in the creation of public space. They planned a large number of green parks and set up squares at important road intersections, further improving the spatial structure of Harbin(Figure 6). The Japanese attached great importance to the construction of sports and athletic venues, such as the New Racecourse in 1934 and the Eight Stations Sports Park in 1936.

Concurrently, there emerged a trend of functional diversification in public spaces. Parks were no longer solely utilised for leisure and entertainment purposes; they also became venues for cultural and commercial activities. In contrast, squares underwent a transformation, becoming significant stages for political gatherings, commercial promotions, and cultural performances. This diversification of functions enhanced and expanded the scope of public spaces.

DISCUSSION & CONCLUSION

A comprehensive examination of the evolution of public spaces in Harbin's historical urban areas reveals that this evolution not only delineates the developmental trajectory of the city's history but also serves as a vivid manifestation of societal cultural shifts and transformations in people's lifestyles. To gain a more comprehensive understanding of the dynamic process of public space development, it is necessary to examine the social, economic, and cultural factors that underlie it from the perspective of user needs. This will enable us to uncover the intricate interplay between space and humanity.

From a methodological perspective, however, we inevitably face the challenges posed by historical distance and data scarcity. Although we can construct this evolution process through literature reviews, historical records, and

existing data, there are significant difficulties in directly proving whether these public spaces met the needs of residents. Due to the long history and incomplete information, it is difficult for us to verify this through direct research or conclusive material. Therefore, we rely mainly on indirect evidence and logical reasoning to construct this argument, which naturally involves certain limitations, subjectivity, and uncertainty.

We acknowledge that our method may have shortcomings and cannot quantify the needs and satisfaction of residents as accurately as modern surveys. However, we believe that this limitation is not the end point of our research, but rather the starting point for further exploration. It reminds us of the need for a more careful and comprehensive approach to understanding the development of urban public spaces. We need to constantly broaden our research horizons and combine different methods, such as fieldwork, oral history, and social surveys, to obtain more accurate and richer data.



Fig. 6. Partial addition of public spaces from 1932 to 1945

Harbin, a city of historical interest in Northeast China, offers a valuable case study for the evolution of its public spaces. A comprehensive analysis of this process can provide a more nuanced understanding of the direction and objectives for the preservation of historical and cultural heritage. It is recommended that urban planners give priority to the functionality and usability of public spaces, while respecting historical values, in order to meet the diverse needs of citizens and make these spaces an integral part of their daily lives. This will inject new vitality into the sustainable development of the city.

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DISCLOSURE STATEMENT

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ENDNOTES

- 1. Yu Zhengwei Quantitative Study on the Evolution of Urban Spatial Form in Harbin (1898-1945) Harbin Institute of Technology, 2019
- 2. Lefebvre, Henri . The Production of Space. Blackwell, 1991.
- 3. Xu Lusi Modern Harbin Urban Construction under the Influence of Railways (1898-1931) Beijing Jiaotong University. 2012.
- Zhang Wei "Foreign factors in the development of urban culture in Harbin at the beginning of the 20th century." Western Journal 06 (2023): 79-83
- 5. Li Deda "Exploration of Modern Urban Construction and Architectural Style in Harbin." Huazhong Architecture 02 (1987): 42-47
- 6. Xue Rui Research on the Evolution of the Form of Harbin Central Urban Area (1898-2018) Harbin Institute of Technology, 2020.
- 7. Zhang Xiangzhou Research on the Spatial Evolution of Harbin City Northeast Normal University, 2002.
- 8. Fang Chonglin Harbin Chronicle Heilongjiang People's Publishing House, 1998
- 9. Jiang Ye Research on Social Stratification in the Process of Social Civilization Transformation in Harbin Region (1898-1931)
- 10. Heilongjiang Academy of Social Sciences, 2012.
- 11. Han Shupeng Research on the History of Nangang City in Harbin (1898-1937) Harbin Normal University, 2013.
- 12. Shao Hua Research on Early Modernization of Harbin from 1898 to 1931 Harbin Institute of Technology, 2011.
- 13. Yang Jiaming Research on the Evolution and Morphological Characteristics of Modern Religious Architecture in Harbin Harbin Institute of Technology, 2020.
- 14. Lin Dawei Research on Russian Capital in Harbin at the Beginning of the 20th Century Heilongjiang Academy of Social Sciences, 2016.
- 15. Li Weifeng Changes in Consumer Culture among Harbin Citizens Heilongjiang Academy of Social Sciences, 2015.
- 16. Zhang Zhong Research on Early Municipal Modernization in Harbin (1898-1931) Jilin University, 2011.
- 17. Zhu Haixuan, Jia Xiaoyu, and Que Pengluo A Study on the Spatial Evolution and Historical Value of Harbin Fujiadian's Self opened Commercial Port under the Modern "Commercial War" and "Protection of Rights" Policies (1898-1932) Proceedings of the 2020 China Urban Planning Annual Conference (04 History and Theory of Urban Planning), July 17, 2021
- 18. Raising Library Construction Fees [IN]. Binjiang Times, 1928-8-17 (6)
- 19. Ma Ao Research on the Early Cinema Industry in Harbin (1896-1945) Harbin Normal University, 2022.
- 20. Zhu Ziqing European Travel Notes (Selected Modern Celebrity Travel Notes) Phoenix Publishing House, 2008

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- 21. Zhao Junting, You Chen Zaiji, Lang Gan Jingshe, 1934, p. 64
- 22. Daoli Garden with additional security guards. Binjiang Times, 1922-07-18

REFERENCES

Dong Jianhong History of Urban Construction in China (China Building Materials Industry Press, 2004) Zhang Guanzeng Outline of Western Urban Construction History (China Construction Industry Press, 2011)

Liu Songfu "Urban Planning under the Transformation of Modern Harbin City." (Journal of Harbin Institute of Technology 03 (2004): 370-374)

Echizawa, Ming, Li, Shuxiao, and Wang, Xiliang "Urban Planning of Harbin: 1898-1945." (2014)

Yu Binyang Impression of Harbin 1 (1897-1949) (Chinese English text China Construction Industry Press, 2005)

IMAGE SOURCES

Figure 1 Modify according to the literature named % Impression of Harbin 1 %, the ISBN number is 9787112071425.

Figure 2-4 the literature named 《Impression of Harbin 1 》, the ISBN number is 9787112071425. The rest of the tables and figures are made by the author.