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# Between Tradition and Modernity

## Western urban planning and street improvement projects in Hankou (1889-1937)

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### Abstract

This article examines street improvement projects in Hankou's case for unearthing the contribution of Chinese political elites and planners in exchanging planning concepts and technologies from the West to China. Aiming to realize the Modern Metropolis, which Sun Yat-sen proposed in the fundamentals of national reconstruction, Chinese political elites and planners selected, borrowed, and imported western planning ideas to transform traditional Hankou city by implementing street improvement projects. Using the case of street improvement of Hankou during the Late Qing period(1889-1911), Early Republic China period(1911-1926), and Municipal Government period(1926-1937) as case studies, this article examines street improvement projects which authorities developed for Hankou in three different periods. By analyzing planning concepts, street plans(both realized and planned), and management regulations of these projects, the paper argues that improvement projects aimed to develop economic and industrial and improve public hygiene. Furthermore, the Chinese political and planning elites imported European and American design principles and practiced them in the Hankou local context for their own needs. In conclusion, the built environment showed hybridization features after implementing continuous planning schemes.

### Keywords

Hankou, urban transformation, planning history, street improvement, modernity

### How to cite

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## INTRODUCTION

Hankou is part of the tri-city complex of Wuhan, an inland port city and economic centre in the middle reaches of the Yangtze River in modern times. With the down-to-earth industrial centre of Hanyang's bombastic political posturing of Wuchang, it forms Wuhan city nowadays. As William T. Rowe has noted, Hankou was the largest commercial centre and highest urbanization level in modern China. Hence, its commercial status and influence in China were equivalent to Chicago in the United States<sup>1</sup>. Hankow has held the commercial centre for its excellent geographical location and commercial conditions since the 18th century. In 1858, Hankou opened as a treaty port, and it has been involved in the international commercial market. Western concessions were built next to the local Chinese community along the Yangzi River, followed by British, German, French, and Japan. Hankou's modernization started from Westernization Movement launched by Zhang Zhidong in 1889<sup>2</sup>, which in this paper has been defined to the starting point of transformation of urban space.

This article examines street improvement projects in Hankou's case for unearthing the contribution of Chinese political elites and planners in exchanging planning concepts and technologies from the West to China. Despite the different cultural and social contexts, Chinese planners actively participated in the "planning diffusion" or "transnational urbanism" that Stephan Ward and Carola Hein termed<sup>3</sup>. In the late 19th century and early 20th century, Chinese reformers and planning experts introduced the modern planning concept and technology to Chinese cities, beyond the case of Hankou in the context of striving for a modern nation-state country<sup>4</sup>. Aiming to realize modernising Chinese cities proposed by Sun Yat-sen in the fundamentals of national reconstruction, they regarded modern planning as a valuable tool for creating a modern and landscaped urban vision, reducing traffic jams, improving public hygiene, and promoting citizen participation morality. In this way, street improvement, which was the central role in western planning concepts and technology, prioritized being applied and practiced within the city, transforming the traditional Hankou into a modern industrial and commercial metropolis<sup>5</sup>.

In China, the term in the newspapers and periodicals books that resembled the concept of urban planning was Urban improvement (市区改正) in 1911, which came from the Japan<sup>6</sup>. At the end of the 19th century, roadism(马路主义) termed by Baihao Li<sup>7</sup>, was an improvement movement in the late 19th century and the early 20th century which mainly focused on improving and broadening old roads within the cities. However, the Chinese reformer has long been familiar with the modern planning model of Western countries, such as Haussmann's renovation of Paris; probably, they only interpreted and imitated the municipal model of concession as the means to reform traditional cities at first<sup>8</sup>. Somehow, parallel to other treaty cities like Shanghai, Tianjin, etc., street improvement was the first step in the modernization of Hankou city and the most essential planning issue even during the Beijing Government and Kuomintang(KMT) Government.

The article highlights, first, traditional urban form, street construction, and streetscape before 1889 and provides an overview of traditional Hankou's urban transformation, the con-

struction of western concession. Second, this article uses the case of street improvement of Hankou during the Late Qing period(1889-1911), Early Republic China period(1911-1926), Municipal Government period(1926-1937) as case studies. By analysing planning concepts, street plans(both realized and planned), and management regulations of these projects, the paper argues that improvement projects aimed to develop economic and industrial and improve public hygiene.

## TRADITIONAL URBAN FORM AND STREETScape IN HANKOU BEFORE 1889

Hankou's urban form and streetscape differed from traditional political cities regarding their geography and excellent transportation conditions. The founding of Hankou can be traced back to Ming Dynasty and is related to the geographical event of the diversion of the Han River, which happened from 1465 to 1470<sup>9</sup>. In the early 1600s, Hankou had developed into a commercial river port and commercial town in Central China with the reputation of "The Four Famous Towns"<sup>10</sup> and "Four Gatherings in China"<sup>11</sup>, serving as the center of the Qinghai, Yunnan, Sichuan, and Hunan provinces in the upper reaches of the Yangtze River and the downstream provinces of Hubei, Jiangxi, and Anhui. Its boundary was strictly confined to a narrow space of its geography factor. After the construction of Yuangong Dyke by Yuanchang in 1636, Hankou had been kept its spatial boundary even in the 19th century. Even after the City wall of Hankou was built in 1864, its spatial cope did not change that much. As the map shows(figure 1), Hankou was a commercial town and many wharves along the Hankou River; outside of Hankou was low-lying land called the Hou Lake.

Unlike Wuchang and Hanyang, political cities, Hankou's spatial structure was inseparable from its commercial characteristics and geographical conditions, developing along the river and entirely relying on water transportation and commodity circulation. In the Chinese context, the street can also be considered as a collection of names called "街(jie)", "道(dao)", "路(lu)", "马路(malu)", "大道(dadao)". In the 19th century, Hankou mainly consisted of four main streets, which were called the River Street(Hejie), the main street(Zhengjie), the middle street(Zhongjie) and the back street(Houjie), and the rest of the 40 small streets and lanes connected with main streets and extended to river wharves for transporting goods. Due to the extreme prosperity of commerce and limited space, the land value of Hankou can be described as "one inch of land and one inch of gold"<sup>12</sup>. Its land use was highly intensive, row by row, criss-crossing<sup>13</sup>. Its street and lane grew freely, densified and extended along the Han River. Its buildings mainly were narrow frontage, deep two-story houses for the function of residential commercial.(figure 2).

As William T. Rowe argued, Hankou was considered the city with the highest degree of "urbanization" in the late Qing Dynasty of the Chinese Empire. In Hankou, there were four community units in Hankou along the river, including Juren, Youyi, Xunli, and Dazhi<sup>14</sup>. As the Baojia system's basic unit, they played an essential role in managing the population, supervising

the neighborhoods, and dealing with public welfare-related fire control, social relief, public transportation, and public facilities by cooperating with the non-governmental association.<sup>15</sup> In 1818, the population in Hankou was around 129182 households which were recorded under the Baojia System. However, the data was much lower than the actual population living there for the mobility of people<sup>16</sup>. However, in such a limited space, Hankou gathered the population of business organizations and groups from different parts of Hubei and neighboring provinces before 1861.

Isabella Bird Bishop who was a British women photographers, recorded the real street scene of Hankou in her book<sup>17</sup>:

*“Of the crowded and semi-impassable state of such streets no adequate idea can be given. Though on my first visit to the native city the British Consul was walking beside me with an attendant, and my bearers wore the red plumed hats and well-known liveries of the Consulate, I was often brought to a halt, more or less ignominious, or was roughly shaken by the impact of the burden of some hurrying coolie, while the chairmen threaded their way with difficulty through thousands of busy, blue-clad Chinese, all shouting or yelling, my bearers adding to the din by the yelling in chorus which is supposed to clear a passage for a chair…… The streets of Hankow, like those of most of the large trading cities, present a perpetual series of dramas. In them hundreds of people eat, sleep, bargain, gamble, cook, spin, and quarrel, while they are the sculleries, sinks, and sewers of a not inconsiderable portion of the population……”*

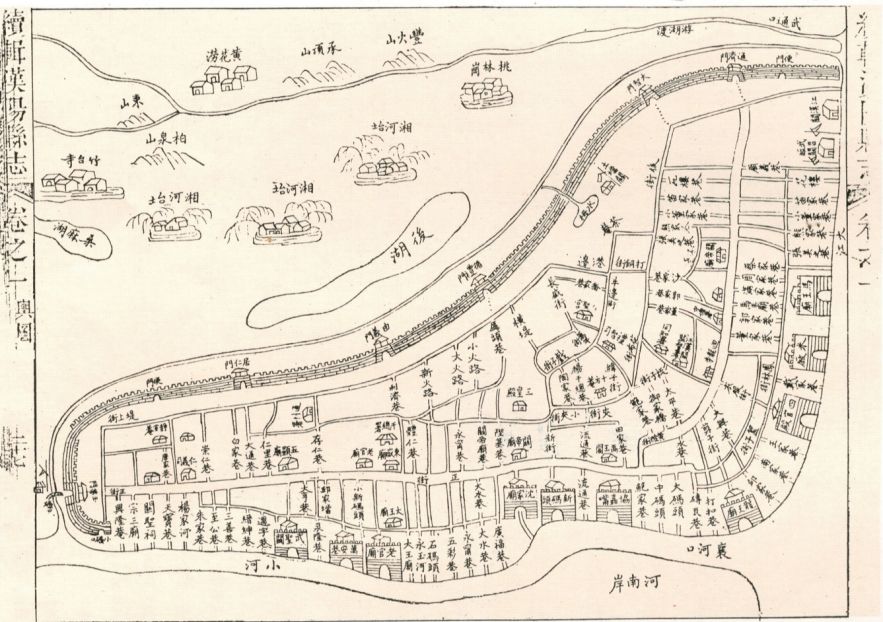


Fig. 1. Map of Hankou in 1864. Source: Compilation Committee of Wuhan Historical Atlas. Historical Atlas of Wuhan. Beijing: China Map Press, 1998:18.



Fig. 2. Streetscape of Hankou. Source: Bird, Isabella Lucy. "The Yangtze valley and beyond", 64.

Therefore, it is not hard to imagine Hankou's narrow and overcrowded streets in the traditional period, which began to change after the open trading port in 1861. Somehow, the promotion of foreign capital and business brought by foreigners made Hankou's geographical location and commercial center more prominent, so being called "Oriental Chicago" and "China's International City"<sup>18</sup>. Britain, Russia, France, Germany, and Japan have successively set up concessions and piers along the Yangtze River and, at the same time, built orderly western-style streets next to the Chinese community (figure 3). In 1864, the British concession had carried out unified overall planning, following the Yangtze River trend, three parallel and six roads perpendicular to the direction of the Yangtze River, and connecting wharf vertically for transportation. The other four concession countries had also continued the road system, building an orderly western street system, opening up wharves along the Yangtze River, setting up warehouses and freight yards, and building public buildings. Compared with the crowded and disordered streets in the Chinese community, Hankou Concession's streets are spacious and beautiful, with sidewalks and street trees on both sides, drainage ditches on both sides, and underground water pipes.

Before opening port in 1858, Hankou's geographical location and commercial position had been maintained in the Central China region. Moreover, it is also why foreigners chose Hankou to be the trading port after the Second Opium War. On the one hand, Westerners would like to rely on Hankou's original business center and then turn it into a source of raw materials for European and American countries; on the other hand, they transported goods to their own countries by water transport and incorporated Hankou into the international business network. As the significant role of streets in the transportation of goods, business development, and public health in modern cities, the authoritarian government has focused on street improvement, intending to modernize Hankou.

## FIRST STREET IMPROVEMENT PROJECT IN THE LATE QING PERIOD(1889-1911)

In Hankou, street improvement projects in local Hankou started with the Western Modernization, when Zhang Zhidong launched New deal in Hubei in 1898. Zhang Zhidong's vision for Wuhan region actually was transform traditional cities into commercial and industrial cities through introducing western science and technology, namely the guideline of Chinese Essence and Western Utility proposed in his paper Exhortation to Study (劝学篇). In 1889, Zhang Zhidong managed the construction of Jing-Han Railway starting from Hankou to Xinyang in Henan province, which was the first railway in Late Qing Empire. In this way, Hankou's commercial status have been consolidated for the reason of railway transportation. In addition, the railway has also led to the expansion of Hankou's urban area and the increase in land prices near the railway, as described in Xiakou County annals (夏口县志).

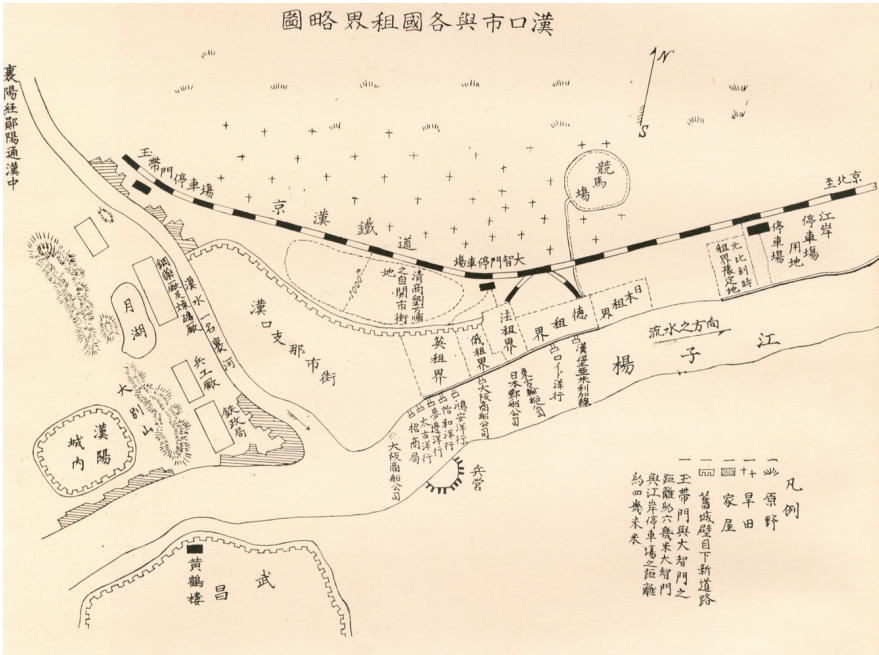


Fig. 3. Map of Hankou community and foreigner concessions in 1908. Source: Compilation Committee of Wuhan Historical Atlas. Historical Atlas of Wuhan. Beijing: China Map Press, 1998:38.

Zhang Zhidong's version was to develop Hankou into a commercial hub of China<sup>19</sup>; however, the old streets, narrow, crowded, dilapidated, and unhealthy, could not meet the requirements of more efficient modern transportation and the need for fire prevention. It was far from the vision of a truly modern metropolis, where streets in the Western play an essential role in public hygiene and circulation and equip with sidewalks and sewer systems.<sup>20</sup> Hence, Chinese political elites approached the needs of the changing cities practically rather than aesthetically at that time. They arranged and constructed modern infrastructure such as railways and roads without changing its original lots a lot; they established institutions specialized in improving and constructing roads, and cooperated with the local merchants to contribute the financial and land. As in the case of Hankou, Zhang Zhidong started street improvement with the public land, namely the city wall of Hankou.

At this time, the large-scale transformation seems quite ideal for Hankou in terms of its private land ownership and possible colossal cost. Hankou's administrative status in 1889 was promoted to Xiakou County to develop commerce; correspondingly, its spatial scope has also increased by about 890 times, with a total area of more than 1000 km<sup>2</sup>. Soon afterward, the Hubei provincial government proposed demolishing the city wall and constructing the road<sup>21</sup> to sell the land to redeem the land purchased by Belgium in Liujiamiao, north of the Japanese concession intended to use as the concession of Belgium. However, this plan failed to be released because of the resolute opposition of the Hankou gentry and merchants. Sang Bao, the supervisor of Jiangnan Customs, suggested to Zhang Zhidong that government could lease the

land on both sides of the city wall to local merchants, and the rent could be used as the cost of road construction. The bricks and stones removed from the wall can be used for constructing Houhu Dyke to save a massive amount of money<sup>22</sup>. In 1905, Sangbao established the Road Engineering Bureau of Hankou with the support of Zhang Zhidong, which was primarily responsible for improving the narrow streets and frequent fires in the old urban area of Hankou. In addition, Zhou Yihan, the alternate magistrate, was appointed to take charge of the demolition of the city wall of Hankou and the construction of the road based on the city wall<sup>23</sup>.

Systematic street improvement was proposed for fire protection needs within the old city. In 1906, Zhang Zhidong commanded to widening the old streets system of Hankou and Hanyang and stipulated that newly built houses facing the street must be backed 3 feet from the original line<sup>24</sup>. Thus, Zhang Zhidong probably recognized the importance of street improvement projects, especially in fire protection, hygiene, and business. Meanwhile, the Hankou Chamber of Commerce put forward more magnificent streets system projects between the railway and Houcheng Road, namely, 26 longitudinal roads connecting the Jinghan Railway and Houcheng Road and structuring a grid with the remaining five flat roads (figure 4)<sup>25</sup>. These street planning failed to be implemented; it was evident that the vision and expectations of Hankou by the Qing Government and Local Chambers of Commerce promoted Hankou's commercial status by developing modern transportation systems, including railway, water, and city transportation.

Consequently, although a limited scale in street improvement projects at this stage, Houcheng Road provided the foundation for later Hankou development. Somehow, it has broken through the barrier to the expansion of Hankou's old urban area and has accelerated the process of Hankou's urbanization and commercialization. This urban improvement movement is mainly manifested in the improvement of streets; more importantly, it might initially be a more pragmatic approach. Indeed, most of the urban improvements in modern Chinese cities started with the movement of demolishing city walls; in this way, Western pavement technology can be applied to old cities without substantial sources of funds.

## **REBUILDING HANKOU AND ITS STREET IMPROVEMENT ATTEMPTS IN WESTERN URBAN PLANNING (1911-1926)**

Obvious, achievements brought by Westernization Movement were obviously, but Xinhai Revolution was a turning point for Hankou. The democratic revolution first occurred in Wuchang, but the battlefield was in Hankou. On 31th October, 1911, Feng Guozhang, as the General of the Qing Dynasty, commanded to set fire to destroy the stubborn resistance of the revolutionary armies hidden in Hankou. Finally, it burned nearly 80% area of Hankou City, destroyed 60-70% houses.<sup>26</sup> More importantly, the destroyed area was originally the most prosperous and prosperous place in Hankou (figure 5). As recorded in Decennial Report, the population of Hankou decreased from 590,000 in 1911 to 200,000 in

1912.<sup>27</sup> After the Revolution of 1911, people believed that the bloody conflict would become a powerful driving force for civilization, and continued to struggle to recast China into a new modern-state nation<sup>28</sup>. In the context, reconstruction became urgent and necessary, especially for local merchant and authority government.



Fig. 4. New district plan of Hankou in 1908. Source: Su Yunfeng, *Regional studies of China's modernization: Hubei Province, 1860-1916*. Taipei: Institute of Modern History, Academia Sinica, 1981: Figure 5.



Fig. 5. Burned area of Hankou in 1911. Source: Dingle, “China’s Revolution”, illustration.

Since January 1912, political leaders of central government and Hubei Military government, social elites, and local merchants had depicted the version of Hankou, namely, remodeling Hankou into a modern metropolis by importing western planning technologies and concepts. In February 1912, Sun Yat-sen, leader of China’s modern democratic revolution, issued two documents to express concern about rebuilding Hankou into a model city. Li Yuanhuong, vice president of the republican of China, believed that the reconstruction of Hankou was “the great cause of opening up the commercial port for the first time in China”, and it was necessary to “change the old landscape, pursuit perfect buildings, embody national prestige”<sup>29</sup>. As Robert Dollar observed in his travel diary *Private diary of Robert Dollar on his recent visits to China*, he recorded the tragic city like refugee camps he saw after sailing to Hankou Scenarios, and the new urban ideals that the Chinese aimed to remodel modern Hankou with wide and straight streets<sup>30</sup>.

After Revolution, the government took quick action to instruct the rebuilding of Hankou. Their planning ideal for Hankou was to produce a modern space; in this way, they looked to the west for the planning model. Inspired by the model of Concession, the Hankow General Chamber of Commerce firstly proposed a planning scheme in January 1912, which emphasized the construction of wide public roads, three-story brick houses, and other fire prevention for commercial development<sup>31</sup>. As they were involved with substantial commercial interests, local merchants were not allowed to preside over the reconstruction work. Thus, Hubei Government set up a planning agency and convened professional architects and surveyors with the support of Sun Yat-sen and Li Yuanhong. One British architect Tilly Percy, was invited as a consultant to make a new plan for Hankou<sup>32</sup>. The plan he made in 1912 was a completely

new grid street plan with 30.5 meters(100 feet) and 15.2 meters(50 feet) wider roads, paved with sidewalks and drainage (figure 6 ). As the government expected, the layout was designed following the modern criterion of city planning, but it was unfruitful for the reason of strong objection from local merchants<sup>33</sup>. In this context, the Hubei government decided to reduce the scale of construction and invited Rong Jintong from Yale University in the United States as the chief engineer to formulate a new master plan (figure 7) <sup>34</sup>. Inspired by the grid planning model of London and Boston, he considered several planning points for the modernizing city: 1) improve old roads as straight streets and widen 11.7 meters (35 feet) wide streets from the original 4.6 meters (15 feet); 2) construct a market along the river and build a railway as well to connect 18.2 meters (60英尺) avenue along the embankment; 3) lay trams on 24.4-meter-wide (80 foot) radioactive roads and plan two railway stations according to the standard of New York<sup>35</sup>. The planner imported modern planning into the Chinese context and expressed new functional priorities of land use, infrastructure, and efficient circulation.

Hubei government leaders and planners produced a series of improvement plans to rebuild Hankou in 1912. However, the final achievement was only constructing roads instead of house construction<sup>36</sup>. In November 1912, Li Yuanhong disbanded the planning agency and decided to only carry out street improvement projects in the face of the actual situation. <sup>37</sup> They could learn from the West that modern cities should be equipped with efficient transportation and infrastructure to improve their commercial function, including railway, street, river, and sewing systems. More importantly, it is unrealistic to reconstruct Hankou in full accordance with Western grid planning.

Therefore, in the following years, the planner still did planning projects and improved Hankou in two aspects improving the old center and developing the new district on a regional scale. In 1914, Yang Du, supervisor of the reconstruction commissioned by the Beijing government, hired British engineer Greywood to make a plan for Hankou to remake Hankou both its commercial center and industrial center<sup>38</sup>. Hankou's improvement version was to improve old streets within the city, plan a model market, and construct a railway to connect with Hanyang and Wuchang. Unfortunately, the residents rebuilt Hankou without the guidance of modern planning; even the government made so many Visionary plans. It is noteworthy that private real estate had made tremendous development without government control over land development.

Consequently, what allowed these planning projects to be realized was that planners could only choose the most efficient and easiest way to remake the city at that time. This might explain why the modernization of Chinese cities in early-stage has displayed the phenomenon of "Roadism" even planners imported western planning technology and concepts into the Chinese context. Road projects are easier to handle at the practical level, as Wang Zhengting argued in 1922<sup>39</sup>. Moreover, these projects probably provide lessons for the following period: choosing a planning model of efficient and practical that could implement according to the actual situation.



Fig. 6. Street plan of rebuilding Hankou in 1912. Source: “Street plan of rebuilding Hankou in 1912” Real Business Magazine(實業雜誌),vol.1,(1912):18.

### ADAPTING LOCAL CONDITIONS: IMPROVEMENT AND MODERNIZATION OF STREET LANDSCAPE AND URBAN FORM (1926-1937)

Despite the imperfection of rebuilding Hankou, Hankou city planners and political leaders kept dedicated to the aim of remaking Hankou into a modern metropolis. At that time, the Kuomintang government in 1926 established its political status, but their aspiration for Hankou reminded the same Hankou as the commercial center of China. To create a modern model urban with new social, psychological, political, and spatial order, well foreign-trained political elites and architects worked to realize this ideal. Indeed, as noted by Jeffrey Cody and other scholars, the development of Shizheng(municipal administration) in Chinese cities was deeply influenced by the idea of urban planning and municipal progress in America, which highlighted the significance of zoning, municipal annexation, improvement to housing and infrastructure, and better design of public spaces<sup>40</sup>. In the case of Hankou, planning experience of municipal improvement in American cities was introduced to Hankou by Chinese planners, which emphasized efficient transportation, public hygiene, and fire prevention.

In 1928, Tung Hsiu-chia, as the director of the Public Works Bureau, proposed a more comprehensive improvement project to improve the function of commerce and meet the need for transportation<sup>41</sup>. As he majored in municipal administration and economics at the University of Michigan and the University of California, he advocated the importance of aesthetics and practicality in the level of street improvement. They were widening the old streets on the base of the original street structure within the old urban area, adopting a rectangular street system in the newly-developed area with 45, 40, 30, 20, and 15 meters-wide roads<sup>42</sup>. Wu Guobing, a planning technician who worked for Public Works Bureau, prioritized riverside roads im-

provement to enhance Hankou's transportation system; in this way, the riverside road became the first modern street improvement with the function of leisure and transportation and aesthetics<sup>43</sup>. The planned Yanjiang Road is 45 meters wide parkway, including 24 wide carriageways for cars and horses in the central, 7 meters near the river for garden grass and two rows of trees, 7 meters of sidewalks on each side and other "Herringbone" groove<sup>44</sup>. Finally, Yanjiang road, in reality, was designed and constructed as a 40m wide boulevard from Jianghanguan to Minsheng Road after the demolition of houses and land acquisition (figure 8)<sup>45</sup>. In order to implement street improvement projects and unify an orderly streetscape, the government promulgated building regulations and land acquisition rules to provide an institutional guarantee<sup>46</sup>. More old streets within the old center, such as Minsheng Road, Minquan Road, and Sanmin Road, were paved and widened without changing the original structure.



Fig. 7. Complete Map of Hankou, Attached Map of New City Street Design of Hankow in 1912. Source: <https://www.geographicus.com/P/AntiqueMap/Hankow-toppan-1912>

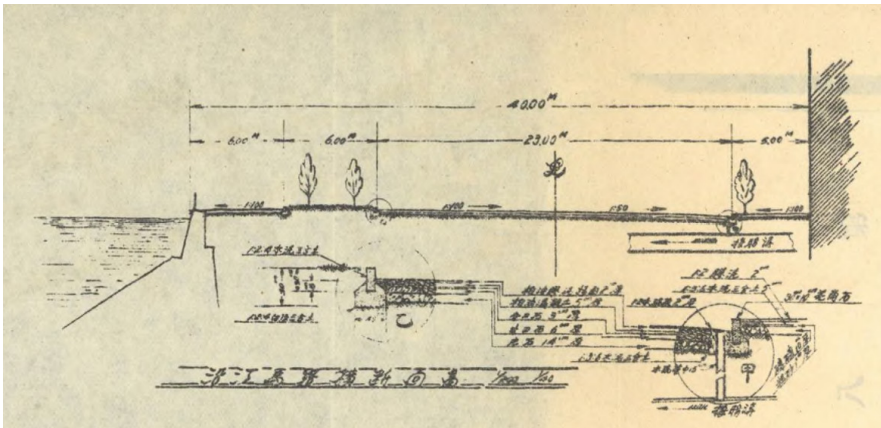


Fig. 8. Cross section map of Yanjiang road. Source: "The second part, public works: Chapter 12, house demolition (with chart)" in Introduction of Hankou municipal development, No. 1(1930): figure 7.

Moreover, a more comprehensive street improvement in 1930 was designed by Liu Kexin(刘克信). His street improvement plan was to improve the old streets system by implementing the plan in stages and classifying the street level, including two main roads(30-40m), eight secondary roads(21-30m), and an inner street(10-20m)(figure 9)<sup>47</sup>. These street improvements strongly henced the connection and mobility between downtown and port, beautified the cityscape, and shaped the modern urban image. What is more, new comprehensive planning for Hankou was approved in 1936 by the Ministry of the interior of the National Government. Gao Lingmei(高龄美), the Head of the design section of the Public Works Bureau, majored in civil engineering at Kyoto Imperial University and made this plan in early 1931. His planning ideal was to plan system parkways to connect parks and administrative centers on a citywide scale due to the inspiration of Paris's Boulevard and the New Urbanism of American cities. In his planning proposal, he clearly stated that the street design of Hankou within the old urban area combined the style of chessboard street of New York and diagonal street of Washington, and streets in the new urban area with new planning standards(figure10)<sup>48</sup>.

As Hankow became the commercial center, planners had considered the need for a symbolic space at the regional level. This new version was to create railway stations and bridges to link Hankou with Wuchang and Hanyang together, which was proposed in Gao Lingmei's planning in 1931. Moreover, he planned a more magnificent station in Hankou and considered making a more specific plan with a new district behind Railway<sup>49</sup>. However, these planning ideals didn't come true due to the Japanese occupation after 1938. Somehow, Hankou was a product of an urban improvement project and created an orderly streetscape through s series of the improvement project. With the common goal of creating Hankou into a modern metropolis, Chinese planners attempted many different ways to improve the city. They were more focused on transportation and infrastructure. They believed sincerely that improved modern streets and efficient mobility could promote the prosperity of business and the most efficient way to be modernized.

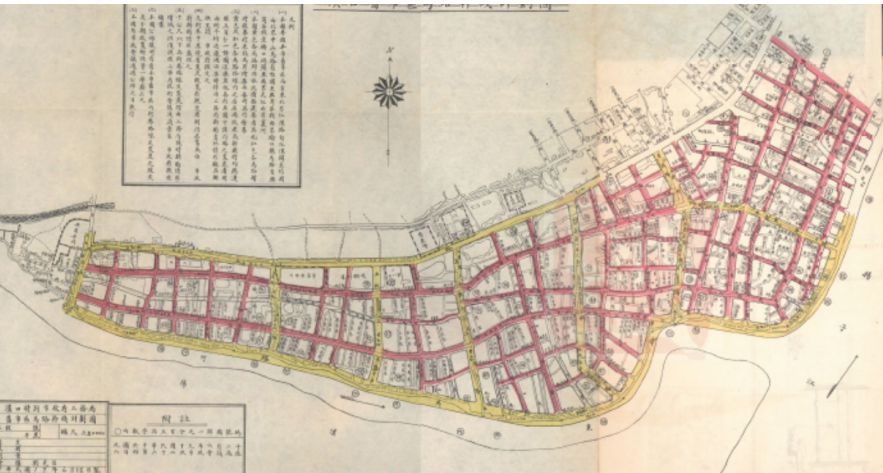


Fig. 9. Street improvement Plan of Hankou in 1930. Source: “The second part, public works: Chapter 12, house demolition ” in Introduction of Hankou municipal development, No. 1(1930): figure 1.

## CONCLUSION

The street improvement projects in Hankou was highly related to the exchange of modern planning concept and municipal development. Street improvement attracted the attention of the authority government at the beginning. They searched for modern planning technology from the West and learned the close relationship between the transportation system and commercial development, that is, to improve the street, sewing system, railway station, etc. In the late Qing period, they demolished the city wall and constructed roads to destroy the physical barrier and create more grand space to develop commerce and construct the railway hence its commercial status. Thus, although the idea of rebuilding Hankou was unsuccessful, they still chose to construct roads without financial support. This might be why street improvement projects continued to be the first planning issue even in the Kuomintang government period. Through a series of improvement projects within the old city, they remake Hankou into a modern and international metropolis with modern infrastructure, efficient transportation, and a modern streetscape.

As we have seen, the planner's preference for street improvements was not only focused on its commercial function but also on its aesthetics to the city, especially for these improvement planning in the 1930s. In particular, Hankou formed a system of modern streets on the main road scale within the old urban area, but the inside of the street still kept the same urban fabric. Furthermore, the Chinese political and planning elites imported European and American design principles and practiced them in the Hankou local context for their own needs. In conclusion, what was finally formed in the built environment showed hybridization features after implementing continuous planning schemes.

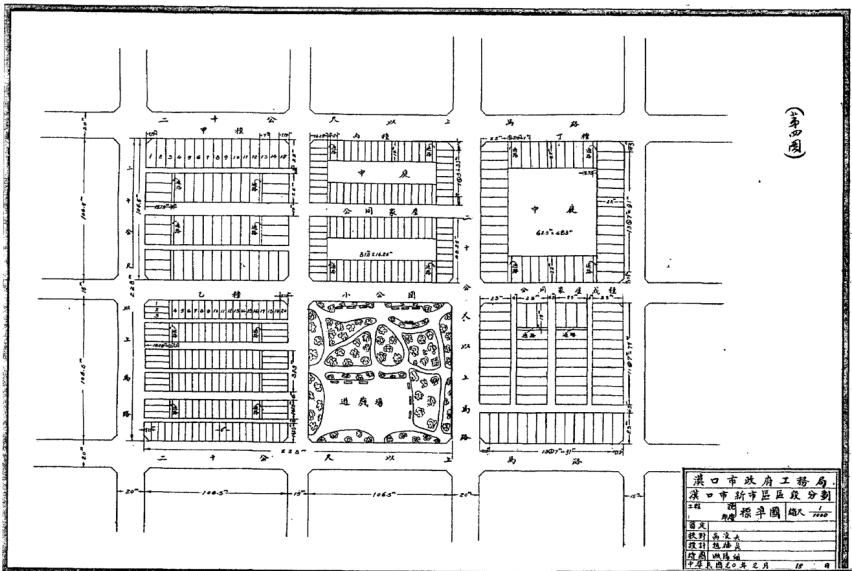


Fig. 10. Zoning division of new district in Hankou. Source: Gao, "City planning of Hankou", figure 4.

## DISCLOSURE STATEMENT

No potential conflict of interest was reported by the author.

## NOTES ON CONTRIBUTOR(S)

**Xiaogeng Ren** is a Ph.D. candidate in urban planning at the School of Architecture, Southeast University (China), and works as a researcher at the School of Interdisciplinary, Vietnam National University in Hanoi, Vietnam, from April 2022 to March 2023. She also worked as a guest Ph.D. student at the Faculty of Architecture and the Built Environment, TU Delft, from October 2018 to August 2020. Her research interests focus on modern planning history and the transformation of traditional Chinese cities.

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## ENDNOTES

1. Rowe, *Commerce and society*, 28-29.
2. Rowe, *Commerce and Society*, 17.
3. Ward, *Planning the Twentieth-Century City*, 2; Hein, "Transformation of Planning Ideas".
4. Esherick, *Modernity and nation*, 1-16.
5. Sun, "Road is the first step in National reconstruction", 165-166.
6. Tian, "phraseology and concepts evolution", 38-39.
7. Li, and Yan, "Neoteric Xiamen", 104-110.
8. "Re-exploration of imitating the West", *Shenbao*(申报), 11 September, 1899.
9. Pi, "Introduction", 1-4.
10. The four famous towns refer to Zhuxian Town (prints, New Year's paintings) in Henan, Hankou Town (commercial center), Foshan Town (handicraft industry) in Guangdong, and Jingdezhen (porcelain) in Jiangxi during Ming and Qing Dynasties.
11. "Four Gatherings" was a popular saying about the four most important commercial centers in the Qing Dynasty, including Beijing in North China, Foshan in South China, Suzhou in East China, and Hankou in the Midwest.
12. Sha, *Zhu Zhi Ci*, 11.
13. Dong, *Ziyang academy*, 52.
14. Xu, and Wang, "Hankou chronicles", 4.
15. Fang, "participation of folk Municipal Administration", 49-55.
16. Wang, and Huang. "Chronicles of Hanyang County", 9, 19.
17. Bird, Isabella Lucy. "The Yangtze valley and beyond", 63, 69.
18. Weyl, *The Chicago of China*, 716-724.
19. Yuan, and Sun, and Li, "Zhang Zhidong's complete works", 4233-4234.
20. McShane, "Transforming the use of urban space", 279-307.
21. Hou, and LV, "Xiakou County annals", 118.
22. Yuan, and Sun, and Li, "Zhang Zhidong's complete works", 4272.
23. Ibid.
24. Xu, and Wang, "Hankou chronicles", 6.
25. Su, "Hubei Province, 1860-1916", 529-530.
26. Dingle, "China's Revolution", 81-91.

27. Imperial Maritime Customs, "Decennial Report", 351.
28. Dingle, "China's Revolution", 172.
29. "The great building of new Hankou", 26 March 1912, 6th Edition.
30. Dollar, "Private diary of Robert Dollar", 159.
31. "Planning for rebudding Hankou, Shenbao", January 26, 1912, 6th Edition; "Measures of Hankou new market", Shenbao, February 9, 1912, 6th Edition.
32. Bureau of Foreign and Domestic Commerce. "Rebuilding of Hankow", 102-103; "Rebuilding of Hankow", The Straits Times, 21 February 1912.
33. Reconstruction of the new Hankou. Shenbao, April 20, 1912.
34. "TO REBUILD HANKOW", The New York Times, 1912-7-14.
35. "Rong Jintong", Miniaturized 5:3 of the national news, collected by Wuhan Library, October 8-10, 1912 and October 12, 1912. Hankou construction new city procedures, application, 1913-1-28.
36. "Vice President cancels Hankou construction preparation office", Shenbao, November 21, 1912.
37. "Procedures of Hankou reconstruction", Shenbao, January 28, 1913.
38. "Yang Du", official gazette, July 23, 1915, No. 1153.
39. Wang, "Introduction of China National Road Construction Association", 2.
40. Cody, "American planning", 339-377; Wong, "planning connection", 421-4.
41. Dong, "Rectifying the traffic plan", 95-102.
42. Public Works Bureau of Hankou Special Municipality, ed, "Planning", 5.
43. Zhang, and Cheng, "The negotiations among progress, Tradition and Privilege", 19-24.
44. Jun, "The new project of Hankou: Yanjiang Road", 174-175.
45. "Public works: notice the demolition of houses along the river road", 166-167; "Public works: general report on house demolition fee of Yanjiang Road", 153-154; Liu Wendao. "Abstract of official documents", 117-118.
46. Public Works Bureau of Hankou Special Municipality, ed, "Regulation", 32-55; "Public works: Interim Rules", 153-154.
47. "Public Works Bureau: improvement of old urban street plan", 184-186.
48. Gao, "City planning of Hankou", 37-38.
49. Gao, "City planning of Hankou", 45.

## REFERENCES

- Bird, Isabella Lucy. *The Yangtze valley and beyond: an account of journeys in China, chiefly in the province of Sze Chuan and among the Man-tze of the Somo territory*. J. Murray, 1899.
- Cody, Jeffrey W. "American planning in republican China, 1911-1937." *Planning Perspectives* 11, no. 4 (1996): 339-377.
- Dingle, Edwin John. *China's Revolution: 1911-1912*. Commercial Press, 1912.
- Dollar R. *Private diary of Robert Dollar on his recent visits to China*. WS Van Gott & Company, 1912.
- Dong, Guifu. *A brief introduction to Ziyang academy*. Interoperate by Li, Jingtian and Li, zhu. Wuhan: Hubei Education Press, 2002.
- Dong, Xiujia. "Rectifying the traffic plan of Hankou special city". *Road monthly*, Vol.1, No. 2, (1930): 95-102.
- Esherrick, Joseph W. "Modernity and nation in the Chinese city." in *Remaking the Chinese city: modernity and national identity*, 1950 (1900): 1-16.
- Fang, Qiumei. "A study on the participation of folk Municipal Administration in Hankou on the eve of the new deal in Hubei Province -- Also on William Luo's theory of Hankou autonomy in the 19th century". *Journal of Jiangnan University* (humanities edition), No 30, (May 2011): 49-55.
- Gao, Lingmei. "City planning of Hankou", *Xinhankou: municipal bulletin of Hankou*, Vol. 2, No. 10, (1931), 40-58.
- He, Yuanyuan. "A study on early management of Beijing-Hankow railway (1895-1912)". *Master Thesis*, Harbin Normal University, 2010.
- Hein, Carola. "The transformation of planning ideas in Japan and its colonies". in *Urbanism: Imported or Exported* (2003): 51-82.
- Hou, Zuyu, and LV, Yindong. "Transportation record" in *Xiakou County annals*, Vol. 9. 1920: 3.
- Imperial Maritime Customs, Decennial Report, 1902-1911: 351.
- Jun. "The new project of Hankou: Yanjiang Road", *Xin Hankou: municipal bulletin of Hankou*, 1929, Vol. 1, No. 4, (1929): 174-175.
- Li Baihao, Yan, Xin. "A Study on Practice and Thoughts of the Historic City Renovation Planning of Neoteric Xiamen (1920-1938)", *Urban Planning Forum*, No 3, (2008): 104-110.
- Liu Wendao. "Abstract of official documents: public works: stipulate the width of the road from Jiang-

hanguan to Minsheng Road: the width of the road from jianghanguan to Minsheng Road is determined to be 40 meters by discussion (August 14, 1918)", *Xin Hankou: municipal bulletin of Hankou*, Vol. 1, No. 3,(1929) : 117-118.

"List of national urban demolition and road construction", *Jiangsu Construction bulletin*, Issue 3(1928):9-10.

McShane, Clay. "Transforming the use of urban space: a look at the revolution in street pavements, 1880-1924." *Journal of Urban History* 5, no. 3 (1979): 279-307.

"Measures of Hankou new market". *Shenbao*, February 9, 1912, 6th Edition.

Pi, Mingxiu. "Introduction." *Five hundred years of history in Hankou*, (1999) :1-4.

Procedures of Hankou reconstruction, *Shenbao*, January 28, 1913.

Public Works Bureau of Hankou Special Municipality, ed. "Planning" in *Work report of Public Works Bureau of Hankou Special Municipality*, no.1(1929).

"Public works: notice the demolition of houses along the river road", *Xin Hankou: municipal bulletin of Hankou*, Vol. 2, No. 7,(1931):166-167.

"Public works: general report on house demolition fee of Yanjiang Road ", *Xin Hankou: municipal bulletin of Hankou*, Vol 2, No. 8,(1931):153-154.

Public Works Bureau of Hankou Special Municipality, ed, "Regulation" in *Work report of Public Works Bureau of Hankou Special Municipality*, no.1(1929).

"Public works: Interim Rules for the transfer the possession of land in Hankou special city", *Xin Hankou: municipal bulletin of Hankou*, Vol. 1, No. 5 (1929): 153-154.

"Public Works Bureau: improvement of old urban street plan", *Xin Hankou: municipal bulletin of Hankou*, Vol. 1, No. 12, (1930): 184-186.

"Planning for rebuilding Hankou". *Shenbao*, January 26, 1912, 6th Edition.

"Re-exploration of imitating the West", *Shenbao*, 11 September, 1899.

Rebuilding of Hankow . *The Straits Times* , 21 February 1912. Microfilm Reel NL359.

Reconstruction of the new Hankou. *Shenbao*, April 20, 1912.

Rong Jintong, chief engineer of Hankou reconstruction, offer plan to Hubei government and the chief civil affairs officer. The national news, collected by Wuhan Library. October 8-10, 1912 and October 12, 1912.

Sun, Yat-sen. "Road is the first step in National reconstruction" in *Complete works of premier's legacy*(1943):165-166.

Sha, Yue. *Interpretation of bamboo words in Hankou of the Qing Ye family*. Wuhan: Chongwen publishing house, 2012.

Sun, Yat Sen. *Complete works of Sun Yat Sen*. Beijing: Zhonghua Book Company, 1985: 68-69

Su Yunfeng. *Regional studies of China's modernization: Hubei Province, 1860-1916*. Taipei: Institute of Modern History, Academia Sinica, 1981.

Tian, Yuan. "Study on phraseology and concepts evolution of "city planning" in early-modern China". *Master Thesis*, Southeast University, 2015.

TO REBUILD HANKOW. San Francisco Chinese Engineer Asked to Do So by Yuen Hung. *The New York Times* , 1912-7-14.

The great building of new Hankou, Shen Bao, 1912-3-26, 6th Edition

United States. Bureau of Foreign and Domestic Commerce. "Rebuilding of Hankow" in *Daily Consular and Trade Reports Volume 2*. Washington Govement Printing office, 1912.

Vice President cancels Hankou construction preparation office. *Shenbao*, November 21, 1912.

William T. Rowe. *Hankow: Commerce and Society in a Chinese City, 1796-1889*. Translated by Rong Jiang and Xiqi Lu. Beijing: China Renmin University Press, 2006;

Ward, Stephen V. *Planning the twentieth-century city: The advanced capitalist world*. Academy Press, 2002.

Wang, Boxin, and Huang, Shidu. *Chronicles of Hanyang County during Emperor Tongzhi*, Vol. 12. 1818.

Weyl, Walter. "The Chicago of China." *Harper's* 18 (1918): 716-24.

Wang, Zhengting. "Introduction of China National Road Construction Association monthly issue", *Road monthly*, Vol. 1, No. 1, (March 1922): 2.

Wong, Sidney. "The planning connection between Clarence Stein and Liang Sicheng in republican China." *Planning Perspectives* 28, no. 3 (2013): 421-4

Xu, huandou, Wang, kuiqing. *Administration record in Hankou chronicles*. Commercial Press, 1915.

Yang Du, supervisor of Hankou rebuilding, report Hankou rebuilding plan, *official gazette*, July 23, 1915, No. 1153.

Yuan, Shuyi, Sun, Huafeng, Li, Bingxin. *Zhang Zhidong's complete works*, Volume 6. Shijiazhuang: Hebei People's publishing house, 1998.

Zhang, Tianjie and Cheng, Bingqian. "The negotiations among progresssm, Trandition and Privilege: the planning and construction of Hankou's riverfront avenue". *New Architecture*, No 6(2017), 19-24.

Zhang, Shoubo. *Recent Hankou industrial and commercial*. Shanghai: Shanghai Commercial Press, 1911.