# From Ritual City to Modern City: The City Space Transformation of Xi'an in the Early 20th Century

Zhang Bian, Zhao Jijun

Abstract—The urban layout of Xi'an city (the capital Chang'an in the Tang dynasty) was shaped by feudal etiquette, but this dominant factor was replaced by modern city planning during the period of the Republic of China. This makes Xi'an a representative case to explore the transformation process of Chinese cities in the early 20<sup>th</sup> century. By analyzing the contrast and connection between the historical texts of city planning and the realistic construction activities recorded by the maps and images, this paper reviews the transformation process of the urban space of Xi'an in the early 20th century and divides it into four phases according to important events that significantly impacted planning and construction activities. Based on this, the entire transformation of Xi'an's city planning and practices can be characterized by three aspects: 1) the dominant force of the city plan and construction changed with the establishment of modern city administrations; 2) the layout of the city was continuously broadened to meet the demand of modern economy and city life; and, 3) the ritual space was transformed into practical space for commercial and recreational activities.

Keywords—City space, early 20<sup>th</sup> century, transformation, Xi'an city.

#### I. INTRODUCTION

TNDER the influence of Chinese traditional etiquette and government system, the layout of Xi'an had basically maintained the pattern of 'Lifang' since the Tang Dynasty [1]. With the gradual weakening of government management and control after the Opium War (1840), formal and informal urban construction activities have gradually transformed the spatial pattern of Xi'an, and the most significant changes happened in the early 20<sup>th</sup> century. This makes Xi'an a valuable research case to further the understanding of the transformation of Chinese cities in this period. Current research on the city development of Xi'an in the early 20<sup>th</sup> century mainly focuses on the evolution of urban spatial structure from the perspective of historical geography [2] but is short of the perspective of urban planning to analyze the interactive process between planning and practice. This article thus tries to explore this process and summarize the characteristics of the urban transformation in Xi'an by establishing a comparative connection between planning and practice. This case study of Xi'an will hopefully provide not only references for the historical research of other similar cities but also practical experiences for contemporary city planning.

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#### II. SPONTANEOUS DEVELOPMENT WITHOUT PLANNING

Comparing the maps of Xi'an in the Ming dynasty with those in the Qing dynasty, it can be found that Xi'an's urban structure in the late Qing Dynasty was basically inherited from the Ming dynasty (Figs. 1, 2). Except for the Manchu City 满城, which was an enclosed inner city and served as a base for the Eight Banners, the urban structure did not change significantly in the Qing dynasty. In terms of the roads, four main streets with the Bell Tower 钟楼 as the intersection point constituted the main road skeleton of the city (Fig. 2). However, due to the restrictive management of the Manchu City 满城, the East Street 东大街 and the North Street 北大街 were more like lines of demarcation rather than streets for public transport. As for the different functional areas, the government offices were mainly located near the Bell Tower 钟楼 and the Drum Tower 鼓楼. The North Courtyard 北院门, South Courtyard 南院门 and the surrounding areas formed the most concentrated commercial and recreational area in Xi'an. A large number of sacrifice places such as temples and halls were distributed along the road, forming a sacrifice space in the city.

After the failure of the Boxer Rebellion in 1900, the Qing government issued a new policy to carry out systemic reforms. This open policy led to a result that new administrative, financial and commercial institutions, hospitals, and schools gradually settled in the city, though some of them just made use of the original buildings of temples to realize the new function. In general, all these spontaneous construction activities before the Republic of China did not have a structural impact on urban space.

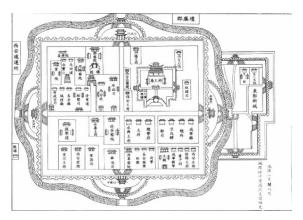


Fig. 1 The Map of Xi'an in the Ming Dynasty [3]

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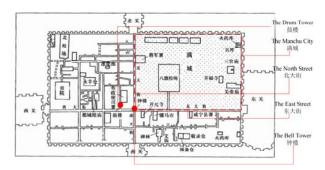


Fig. 2 The Map of Xi'an in the Late Qing Dynasty [4]

## III. PRELIMINARY PLANNING AND INFRASTRUCTURE CONSTRUCTION FOR IMPROVING CITY FUNCTIONS

After the war of warlords ended in 1927, the reunified Nationalist Government had a relatively stable period for state construction and development. In the same year, Xi'an was officially promoted into an administrative city, and this establishment of a municipal management system provided the possibility of unified planning for Xi'an.

In 1927, the Shaanxi Provincial Government Construction Department 陕西省政府建设厅 first formulated the 'Shaanxi Changan Municipal Construction Plan' 陕西长安市市政建设 计划, which is the first modern planning of Xi'an [5]. The plan had 12 parts including the construction of roads, parks and commercial streets, repairing the Bell Tower and the Drum Tower, dredging sewers, banning random stalls, setting up road signs, building public toilets and so on, which indicates that the primary aim of this plan is to restore the city damage caused in the successive years of war.

In terms of space planning in this plan, firstly, the road system was set up, in which the four streets centered on the Drum Tower were designated as urban main roads. Secondly, the first market (in the South Courtyard 南院门), the second market (in the Chenghuang Temple 城隍庙) and the third market (also known as 'Changle Shopping Mall' 长乐市场, where Kaiyuan Temple 开元寺 was located) were designated as the commercial area. These three markets would be under the unified management of the municipal administration. Furthermore, it was planned to reorganize the Revolution Park 革命公园 and other new parks as an expanded public entertainment area. This plan eliminated the privileged restrictions of the Manchu City 满城 and followed the former spatial form shaped by the spontaneous construction activities of citizens. But it was still a symbol that the government took the first step to lead and control the expansion of the functional areas in the city.

A series of construction activities directed by the government during this period [6] also realized the main purpose of repairing the city appearance, constructing the municipal infrastructure, improving the basic functions of the city and serving the lives of modern citizens. From the Xi'an city map of 1930 (Fig. 3) and other maps of this period [7], it can also be found that the number of administrations, medical services, schools, and factories in the city increased significantly, but their locations were scattered and still not formed in a clear urban spatial order or functional zones.

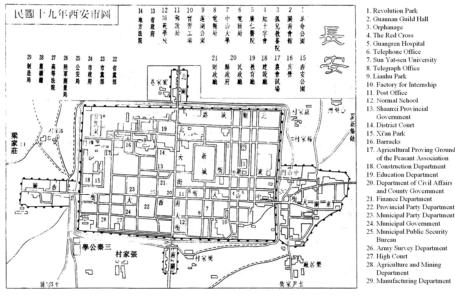


Fig. 3 The Map of Xi'an (1930) [8]

The building process of the Revolution Park 革命公园 shows another characteristic of the construction practice in this period. The park was located in the site of former Manchu City 满城, and two mass graves were built inside the park to bury the

revolutionary soldiers died in the war. The 'Mingyuan Building' 明远楼 was removed from the official examination institution of the Qing Dynasty to this park and was renamed the 'Revolution Pavilion' 革命亭 (Fig. 4). A memorial

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ceremony was held in the park in 1927, which gathered tens of thousands of people in memory of revolutionary soldiers [9]. In this process, the buildings representing the etiquette and order of the old dynasty were completely moved hurriedly to a new place to accommodate the emerging political and civic activities. This revolutionary enthusiasm for building a new society in Xi'an also made the urban construction not only imperfect but also rather hasty.



Fig. 4 The 'Revolution Pavilion' and One Grave in Revolution Park (1927) [9]

## IV. ZONING AND ROAD CONSTRUCTION UNDER SYSTEMATIC PLANNING

In 1932, out of consideration of the war situation, the Nationalist Government decided to choose Xi'an as the alternate capital named Xijing 西京 and set up a Committee for Xijing Preparation 西京筹备委员会 for planning and Xijing Construction Committee 西京市政建设委员会 for construction issues [10]. This improvement of political status brought Xi'an more systematic and professional guidance to its planning and construction. With the publishing of the Athens Charter in 1933, new ideas in overall planning and functional zoning were gradually introduced to the planning of Xi'an.

Scholar Ji Ping 季平 published 'Opinions on the Division of Xijing District' 西京市区分化问题刍议 in 1935 [11] (Fig. 5). He took Britain, the United States, and Japan as examples to introduce the zoning system and suggested that Xi'an should adopt this way to avoid the disadvantages of totally disordered development in the past. Furthermore, he proposed a zoning plan for Xi'an including residential, commercial, industrial, cultural, scenic, and political areas after analyzing its restrictions and advantages. Another person, Sun Jingtian 孙经 天 published the 'Guidelines for the Municipal Construction and Plan of Xijing' 西京市政建设计划之准则 [12], which was essentially a simple introduction of the Garden City concept to solve the environmental and public health problems in the process of urban expansion. Besides, he also stressed that the government should pay attention to the leading role of specialized talents in urban planning and construction. In 1937, the article of Feng Zhenchang 冯振常, 'Garden City and Xijing Municipal Construction'田园都市计划与西京市政建设 [13] (Fig. 6), introduced the content and principles of Howard's Garden City theory in detail. He believed that Xi'an should create a new city planned according to the principle of Garden City outside the old city to meet urban development needs.

Although these three civil planning schemes had different perspectives, they all recognized the realistic needs of systematic planning for Xi'an and intend to adopt Wsestern planning theories and methods to carry out spatial zoning to make Xi'an worthy of the name of the alternate capital.



Fig. 5 First Page of the 'Opinions on the Division of Xijing District' by Ji Ping (1935) [11]



Fig. 6 First Page of the 'Garden City and Xijing Municipal Construction' by Feng Zhenchang (1937) [13]

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In addition to non-governmental planning assumptions, the government mainly drafted the 'Description of the Xijing City Zoning Plan' 西京市分区计划说明 in 1937 and the 'Xijing Planning' 西京规划 in 1941 [12]. These two plans redefined the urban scope of Xi'an with Baqiao 灞桥, Fengshui 沣水, Zhongnan Mountain 终南山, and Weishui 渭水 as the new boundary, so that the development of the city could break through the old city walls and have more space to expand. Setting new cities outside the old Xi'an city indicated that the western satellite city theory influenced the planning idea of Xi'an in this period.

The former plan, 'Description of the Xijing City Zoning Plan' 西京市分区计划说明 divided the urban area of Xi'an into six districts, including administrative districts, historical and cultural districts, industrial districts, commercial districts, agricultural experimental districts, and scenic spots. The later

plan, 'Xijing Plan' 西京规划, followed this functional zoning plan but added another administrative division that divided the newly demarcated urban areas into 10 administrative areas for municipal management (Fig. 7). What is more, it published a comprehensive investigation and analysis of Xi'an, including social conditions such as economy and population, natural conditions such as topography and climate, and the survey results of the built environment situation like administrative buildings, public buildings, places of interest, roads, and other elements. This showed that the zoning plan mentioned above had undergone a process of continuous improvement from at least 1937 to 1941, and was formed based on comprehensive investigation and analysis of Xi'an. After the Nationalist Government promulgated the Urban Planning Law in 1939, 'Xijing Plan' 西京计划 was the first but most systematic urban plan of Xi'an that made according to the zoning theories [14].

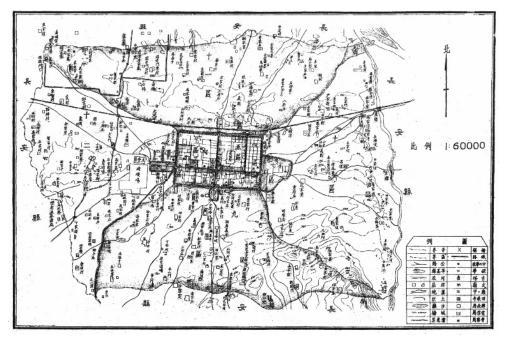


Fig. 7 The City Scope and Administrative Division of Xi'an (1940) [8]

Actually, before the government of Xi'an had drawn up the plans, construction of these functional areas had already begun and many projects were completed in 1935. The Longhai Railway 陇海铁路 passed Xi'an in 1934, which drove the industry development of this city gradually. The northeastern part of Xi'an's old city, which used to be the Manchu City in the past, was revived because of its geographical advantage of nearing the new railway station. Besides, more and more space in the city was transformed into public entertainment areas. The Bell Tower, the Drum Tower and the gates of the old Xi'an city walls were no longer used as ceremonial or defensive buildings but were listed as historical sites after repair. Four new city parks like Lianhu Park 莲湖公园 and Jianguo Park 建国公园 were well-built in 1935, and there were even new children's play facilities along with the traditional pavilions and bridges in

the Jianguo Park 建国公园 (Fig. 8).

Additionally, the roads in Xi'an gradually formed a system. The four main roads in the city were further expanded with separated sidewalks and vehicle lanes, and trees were planted along the roads (Fig. 8). At the same time, many new-built branch roads remarkably improved the accessibility of various areas in the city. The municipal department also formulated a special plan for road management and maintenance [15]. The most important change of the road system was the construction of two suburban scenic roads [16]. One was called the Southwestern Section 西南段 from the South Gate 南门 to the Zhongnan Mountain 终南山, and the other was the Xitong Section 西潼段 from the Dongshaomen 东稍门 to the Huaqing Pool 华清池. This kind of scenic road connecting multiple scenic spots should be learned from the construction experience

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of the park system in Europe and America [17]. Their construction not only facilitated the sightseeing travel of residents from the city to suburbs, but also strengthened the connection between Xi'an old city and newly developed cities outside.

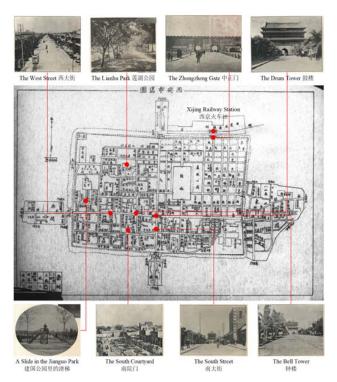


Fig. 8 The map of Xi'an and Some Built Municipal Projects (1935)
[18]

All in all, both the planning and the construction during this period have shown that the economic and political needs have become the main promoting factors guiding the expansion of urban space and the positioning of functions. Western concepts and ideas such as Garden City, satellite cities, functional zoning, and park system are adopted in the planning and construction practices of this period.

## V.CONTINUATION AND ADJUSTMENT OF PLANNING AND CONSTRUCTION

With the full-scale outbreak of the Anti-Japanese War in 1937 and the official establishment of Chongqing as the temporary capital by the Nationalist Government in 1940, the social environment and political status of Xi'an's planning and construction ceased to exist. Until the end of this War in 1945, Xi'an began a new round of post-war reconstruction activities.

In 1947, the 'Xi'an City Division and Road System Plan' 西 安市分区及道路系统计划书 adjusted the urban functional zoning and divided it into school districts, residential districts, commercial districts, administrative districts, industrial districts, middle school districts, university districts, and commercial districts. Besides, it set three more new cities in the suburbs of Xi'an and listed a series of municipal constructive projects, which mostly involve the restoration of parks, roads, and squares damaged during the war. This plan basically followed the 'Xijing Plan' 西京规划, the most complete and systematic plan of Xi'an in the early 20<sup>th</sup> century.

From the map of Xi'an in 1949 (Fig. 9), the main changes in the layout of Xi'an happened near the railway station. Due to the transportation advantages brought by the Longhai Railway 陇海铁路, which was the main driving force for urban construction and development, a dense road network was formed in the northeast area of the city where the original utilization rate was low, and a large number of public buildings and residences were built. The northeastern corner outside the city wall also formed a new residential area. These changes coincided with the prediction and guidance of the 'Xijing Plan' 西京规划 for urban development.

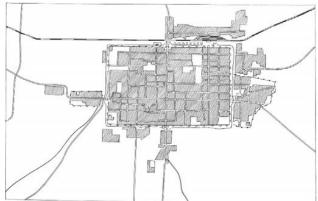


Fig. 9 The framework of Xi'an city (1949) [3]

## VI. CONCLUSIONS

Through comparing the transformations process of urban planning and actual construction of Xi'an in the early 20<sup>th</sup> century, it is clear that the period from 1932 to 1945 was the most important stage for the change of Xi'an city. The Garden City theories, satellite cities, functional zoning, park system, and other western planning concepts and methods in this period were systematically introduced and applied, which fundamentally paved the way to the future development of Xi'an as a modern city.

The characteristics of this transformation process of Xi'an can be summarized as follows. First of all, the introduction of a modern political system brought changes into the main directions of urban planning and construction, and civil citizens could provide their opinions and also made contributions to the city plan making besides the leading role of government. Secondly, the dual needs of the economy and life forced the urban space to be increasingly broadened and the traditional etiquette space constantly kept giving way to commercial production space and citizen living space. Finally, the theories and methods of modern Western urban planning (e.g., zoning) greatly influenced the change of Xi'an city. It was the interactions between the planning and constructions that gradually promoted the transformations of Xi'an from a ritual city to a modern one.

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## References

- [1] Fu Chonglan, Cao Wenming. An Urban History of China. Beijing: Social Sciences Academic Press, 2019.
- [2] Ren Yunying. Evolution of the Spatial Structure of Xi'an City from 1840 to 1949. PhD dissertation. Shaanxi Normal University, 2005.
- [3] History Compilation Committee of Xi'an. *The Annals of Xi'an, Volume 2, Urban Infrastructure.* Xi'an: Shaanxi Normal University Press,2000.
- [4] Xue Fengxuan. The Evolution of Chinese Cities and Their Civilization. Beijing: Beijing United Publishing Co., Ltd, 2010.
- [5] Ren Yunying. Development of Urban Planning Concepts in Xi'an—A Case Study of the File Documents by the 1927-1947 Republic of China. *Journal of Shaanxi Normal University (Philosophy and Social Sciences Edition)*, Vol.38, No.5 (Sep. 2009), pp. 105-112.
- [6] Xie Lin. Dreaming Shaanxi, Old photos of Shaanxi in the Republic of China. Xi'an: Shaanxi People's Fine Arts Press, 1996.
- [7] Shi Nianhai. Xi'an Historical Atlas. Xi'an: Xi'an Map Press, 1996.
- [8] History Compilation Committee of Xi'an. *The Annals of Xi'an, Volume 1, General Category.* Xi'an: Shaanxi Normal University Press,1996.
- [9] Huang Hairong. A Compilation of Pictures and Records of Xi'an Revolutionary History 1919-1949. Xi'an: Sanqin Press, 2011.
- [10] Wu Hongqi, Yan Xijuan. Preparations and District Zoning Plan of Xijing as the Alternate Capital of China During the Anti-Japanese War Period. Chinese Ancient Capitals Society: Proceedings of the 2002 Annual Conference of the Chinese Ancient Capitals Society, 2002.
- [11] Ji Ping. Opinions on the Division of Xijing District. Northwest Life, No.4 (1935), pp. 18-20.
- [12] The City Archives Administration of Xi'an. A Compilation of Historical Materials of Xijing's as the Alternate Capital in the Republic of China. Xi'an: Northwest University Press, 1994.
- [13] Feng Zhenchang. Garden City and Xijing Municipal Construction. Xi'an Municipal Engineering Monthly, Vol.1, No.3-4 (1936), pp. 2-9.
- [14] Guo Wenyi, Wu Hongqi. A Comparative Study on Three Varieties of Xijing City Plans as Alternate Capital during the Anti-Japanese War Period. Journal of Shaanxi Normal University (Philosophy and Social Sciences Edition), Vol.32, No.5 (Oct. 2002), pp. 553-556.
- [15] Xi'an Road Maintenance Plan. Xi'an Municipal Engineering Monthly, Vol.1, No.5 (1936), pp. 5-7.
- [16] A Summary of the construction of scenic roads in the suburbs. Xi'an Municipal Engineering Monthly, Vol.1, No.1 (1935), pp. 22-23.
- [17] Zhao Jing, Zhu Xiaqing. City Park System and City Space Development: The History of Park System Development of the Mid-nineteenth Century in Europe and America. *Chinese Landscape Architecture*, Vol.30, No.9 (2014), pp. 13-17.
- [18] The Map of Xi'an and Some Built Municipal Projects. Xi'an Municipal Engineering Monthly, Vol.1, No.1 (1935), pp. 1.