

Planning and Spatial Characters of Zhongshan Road District in Shenyang

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Abstract. In the modern northeastern cities in China, both the Russian and Japanese colonialists adopted urban planning methods to strengthen the form of composition to express their conquering will and political ideal. The historical urban structure has been followed in these cities until now. This paper takes Zhongshan Road district as an example, to discuss the application of a Baroque urban structure in four aspects: road network, square form, street building and landscape greening. What is more, it compares with domestic and international typical Baroque cities to make it more clearly to uncover its unique characters.

Keywords: Urban planning, Baroque, Northeast China, space, heritage.

1. Introduction

The Zhongshan Road district is located at the area with the Chinese Eastern Railway line to the west and extends eastward to Heping Street, occupying a total land space of approximately 93.7 hectares. It is the most characteristic district developed in the South Manchuria Railway Zone and also a hallmark of Shenyang on its way to a modern city. After being constructed in 1912, this district formed a distinctive style under the influence of the theory of western modern urban planning and architectural fashion at that time, featuring the Eclecticism architectural style, diversified layout of buildings and a Baroque urban spatial pattern of “grid + radial road network + central squares”. The district is home to 11 cultural relics (19 relic buildings) and many other historical buildings, including two national heritages: the site of Fengtian Courier Station (now Shenyang Station) with the annex building complex and the building complex around Zhongshan Square, there are also 4 sites of provincial heritages such as the Site of Qiulin Corporation and that of Fengtian Post Office [1].

As an import, the planning idea of the northeastern cities in China is closely related to the western urban planning theory in the same period. They have a lot of reference from western cities at that time. They are basically referring to the idea of foreign advanced planning and construction, which plays an important role in the planning idea is Baroque planning theory. Therefore, these areas have similarities with the Baroque planning theory guided foreign cities (such as Paris, Canberra and Washington). However, due to many factors, there are significant differences between them. Taking the Zhongshan Road district as an example, the Baroque urban structure is reflected in the four aspects of the road network, the square form, the street building and the landscape greening. Then, this paper selects Harbin Nangang District and Washington Central District as a typical representative of domestic and foreign, through the comparison to find the Baroque spatial characters in Zhongshan Road district.

2. Spatial Characters

2.1 Road Network.

Zhongshan Road district has an independent road system out of the ancient city area of Mukden. In 1902, Russia has built a few dirt road (now Victory North Street) in front of the train station. In 1907, the Japanese repaired the dirt road and built the first north-south main road (now Victory Street) parallel to the station. From 1910, centering on the railway station, three radial roads has been built, namely China Road, Democratic Road and Zhongshan Road, in which China Road is vertical with

Victory Street, Zhongshan Road and Democracy Road have a 50° angle with Victory Street. In the construction of the radial road extending to the ancient city area, it also built north-south trunk road, Central Avenue (now Nanjing Avenue) and the Concord Avenue (now Peace Avenue), which both are in parallel with the direction of Victory Street [2]. The Democracy Square and Zhongshan Square were also been constructed. So, it is formed a checkerboard lattice street road network by Shenyang Station as center, Nanjing street as horizontal axis, China Road as longitudinal axis, with rectangular grid and radiate road as skeleton. Round Square in road interchange becomes the center of the city. Around the square, the banks, companies, hospitals, post offices, police stations and other large public buildings highlight the node of the city landscape.

In the road network organization, because Harbin is located in a hilly terrain, the Russian colonists mainly adapted small plots of the organization form conforming the terrain in the planning. Only in the central area of Nangang District, it retains a more formal grid of the road network road path form. In other up-and-down areas of Nangang District, the road network form on the basis of formal grid, has a lot of flexible handlings to adapt to the terrain. Unlike the first two, the plan of the Washington Central District uses a radioactive roads directly cutting grid network transfer mode. The result is that the junction has left many sharp angle blocks, which can make the city form have a strong memorial effect, but the disadvantage is that the block shape is irregular, which is not conducive to commercial operation.

2.2 Square Form.

In modern northeastern cities planning, it is common for planners to set plazas at the important nodes of the city, and the layout that radiating roads with square layout is also one of the main features of northeastern cities different from other cities in China.

In 1909, the Japanese built Fengtian Courier Station (now Shenyang Station), and formed the earliest station square in Shenyang. The "radial grid" pattern, consisted of "parallel, vertical, slash" roads and centered on "Fengtian Courier Station" and the square in front of the station, set off the elegant and varied "Fengtian Courier Station", and make it a new urban landscape and visual center. According to a square classification method, "dominant square" is on one side of the core building to dominate the space. Obviously, the station square is a "dominant square".

Big Square has been built in 1913, now known as Zhongshan Square. It located in an interchange of Zhongshan Road, Nanjing Street and North Fourth Road. All the buildings around the square are centripetal distribution in the vicinity of each junction. Built in 1922, the Peace Square is now known as Democracy Square. It is circular just like Zhongshan Square. But the square scale is slightly smaller, with its center of radiation for the six roads. The space center of "core square" is in the square's center, rather than one side of the building or space. Similar to the pattern of "traffic island square", "core square" in modern northeastern city is circular. The main difference between them is: First, "core square" is much larger than "traffic island square" in one same city. Second, "core square" can often provide a place for crowd activities, but "traffic island square" is only as a traffic island, can not be entered. Finally, "core square" generally refers to the most important city square for the city image, public life, and the majority of them is commemorative square. Clearly, the Zhongshan Square is a "core square", and the Democracy Square is a "traffic island square".

Of numerous city squares in Harbin, the Nicholas Church Square (now Hongbo Square) is the most typical and important one. The Nicholas Church (demolished in 1966) square, though small in scale, is different from other squares. The Nicholas Church is in the center of the square as a core to guide the entire space. In addition, if most of the buildings around Nicholas Church are considered to be more retreated, there is no obvious relationship between the buildings and the square, and the church has a certain relationship with the Moscow Shopping Mall on the west side (now the Heilongjiang Museum). This square can also be seen as a dominated square. In the planning of the Washington Central District, three types of square forms are also expressed but have their own characteristics. In addition, there are many squares in this area similar to the traditional European open square called "neighborhood square": a number of radial roads converge at one point which is just a block center,

then the block is none of buildings or monuments, completely open. This type of square is also very unique [3].

2.3 Street Building.

Mumford said that the main street is the most important symbol and subject in a Baroque city. Baroque planning often emphasizes the magnificent effect of wide streets and the unity of the square and the street space, often sets landscape at the end of street, and on both sides of the street designs a similar approach to continuous building interface [4]. In modern urban planning in Northeastern China, the main streets are mostly wide and flat. The street interface design was also valued: the straight street connects two points in a straight line to facilitate traffic links, but also eliminates the secret of irregular neighborhood. When necessary, the design of straight streets is also advantageous for the colonists to control effectively. Urban form, straight streets and tightly controlled continuous construction interface interact to establish a well-organized public order to express the magnificent panorama of the city.

During the Japanese occupation period, the baroque concept of planning was well preserved and put into practice by the Japanese colonists. The streets of South Manchurian Railway Zone are in strict control of street design and construction of height and form in order to protect the overall street appearance. Zhongshan Road, for example, pays attention to it through the continuous street wall to shape the street landscape. Buildings along the street are mostly maintained in two to three layers in European style. The interface is continuous and the overall effect of street view is nice. Buildings are close to the road about one-meter distance, so the pedestrian is narrow. From the construction of interface on both sides of the enclosing streets, as the building recedes small, the corners of building make the most space to minimize the sight of the traffic. Zhongshan Road focus a lot on the design of the street corner of the building. The corner on both sides of the interface does not directly intersect, but be cut or arced, at the same time be deeply designed on the corners of the architecture to make it a little higher than central part of the building by decorating. So, the corners of the building along the street become the focus of the street and make buildings continuous scattered rhythm.

Street buildings in Harbin are also similar, but architectural style of the corner buildings is based more on Russian architecture practices, reflecting a Russian style. In Washington Central District, the concept of the main building reflects the principle of separation of powers and the use of natural elements sets off the way of artificial buildings. The buildings are commemorative and respected classical form. Surprisingly, after this, many single buildings' style can be relative with the initial planning style, and the formation of a general and unified urban pattern have a sense of history and eternity.

2.4 Landscape Greening.

According to type, the landscape greening of modern northeastern cities can be divided into road greening, park greening and green belt around the city. Russian and Japanese planners have different greening design characters, but both prefer Parisian-style boulevards. In particular, these main roads and tree-lined pedestrian streets often represent the image of the city, which is the focus of landscape greening.

Zhongshan Road Historic District attached special attention to roadside landscape design and urban greening. In 1910, the Japanese colonial authorities began planting poplar on both sides of Victory Street. In 1916, the main streets of this area (the main road with a width of 15 meters or more) were planted with trees. In 1919, the trees were planted on the Grand Place (now Zhongshan Square) and both sides of a dozen roads in which Kasuga-cho (now Taiyuan Street), Chiyoda- (Now Zhongshan Road), Zhaode Street (now Zhongshan Road), South Slope Street (now Democratic Road). One of the best greening is Mukden International Road (now Peace Avenue). The road is not only on both sides, but also in the middle of the road planted with different height trees, forming a patchwork of green isolation zone. In addition to road greening, the other two green types of park greening and greening around the city in Shenyang area are not particularly evident.

The landscape greening of Harbin in the Russian period has two main characteristics: firstly, the amount of greening is large, especially trees; secondly, the greening method is ingenious. Houses on

both sides of Harbin's main roads are back a lot, forming a large area of green space, known as residential vestibular green space. By contrast, in the landscape pattern of Washington Central District, the central axis, from the Capitol Hill to the east and west sides of the extension, respectively, arrived on both sides of the city east and west water system. This long axis controls the form of the whole city, and the green space, forming a green landscape axis, which is known as the "National Boulevard".

3. Conclusion

The Russian and Japanese colonists carried out large-scale modernized planning and construction experiments on the northeastern cities, and combined Baroque urban structure with modern ideals, such as functional zoning and regional planning, to northeastern urban constructions gradually, which promoted a rapid development. As the representative of the Zhongshan Road district, and an important symbol of Shenyang's entry into the modern city, the Baroque spatial in Zhongshan Road district has a high historical value. Besides, Zhongshan Road district still plays an extremely important role in the function of Shenyang operation. On the other hand, in 2015, "Zhongshan Road Historic District" was approved as a historical heritage. This indicates that the awareness of protection of this region will be raised to a new level. The following development and utilization will also make its historical value and artistic charm better spread, and make this region more vibrant.

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