Chapter 2
A Review of Beijing's Urban Development in the Twentieth Century

Abstract This chapter takes a review of the urban development of Beijing during the twentieth century in three stages: first, before the founding of the People's Republic of China (1900–1949); second, during the period of the planned economy (1949–1979); and third, during the transformation towards the market economy (1979–2005). The review for each stage includes three aspects: the planning policies of the city, the redevelopment of the old city proper and the development of its urban housing.

Keywords Urban development · Master plan · Beijing · The twentieth century

During the twentieth century, great changes have taken place in China. The three most critical ones occurred separately, and at distinct periods during the early, the middle and the late years of the century. These periods were times of profound transformations: from an imperial system to a republican system in the 1910s, from capitalism to socialism in the 1950s and from a planned economic system to a market economy in the 1990s.

These transformations of the society and economy had a profound effect on the development of Beijing. Therefore, I shall accordingly review the urban development of Beijing during the twentieth century in three stages: first, the state of urban development before the founding of the People's Republic of China (1900–1949); second, urban development during the period of the planned economy (1949–1979); and third, urban development during the transformation towards the market economy (1979–2005). To make the discussions for each stage consistent and comparable with each other, I shall follow a uniform approach. The discussion for each stage will include three aspects: the planning policies of the city, the redevelopment of the old city proper, and the development of its urban housing. The newly rapid urban development of Beijing during the early years of the twenty-first century will also be considered, so as to extend some aspects of the discussion up to today.

In addition—since it is a city with a history of such long standing—the development of today's Beijing cannot escape the influence of its past, particularly its

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transformations during the past 700 years. It was under the three dynasties of Yuan (1271–1368), Ming (1368–1644) and Qing (1644–1911) that the foundations were laid Beijing's Old City. It is therefore necessary to begin with a brief review of the city's origin before discussing its urban development in the twentieth century.

2.1 The Origin of the City

2.1.1 From a Strategic Point to a Political Centre

As a city settlement, Beijing has a three-thousand-year history, which is documented in ancient writings. The earliest name for the city to appear in the documents is Ji, which was one of the numerous feudal city-states under the rule of the Zhou Dynasty (eleventh century B.C. to 256 B.C.). It was located on the northern bank of the Yongding River, southwest of today's city of Beijing. Later, another city-state called Yan sprang up on the southern bank of the same river. It subjugated Ji and moved its capital to the site of Ji. Therefore, Yan and Ji are early names for Beijing in the various historical records.

The reason why the city of Ji was not abandoned can be explained by its strategic geographical position: its proximity to the ferry station on the Yongding River and its location at the intersection of roads running northwest, northeast, southwest and due east (Fig. 2.1). Generally speaking, its easy access to transport is the main reason why Ji survived as a city for several thousands of years until today.

In 226 B.C. Emperor Qin Shihuang occupied Ji after unifying China. From then until A.D. 916, when the Khitans occupied the city, a succession of cities existed here, taking advantage for more than a thousand years of Beijing's status as both an important military stronghold and an important trade centre in North China. There were different names for these cities, such as Zhoujun and Youzhou; their location, however, was the same—the city never moved from the site of Ji.

In the early tenth century, the Khitans, a nomadic people who rose abruptly in the north-eastern region of China, founded the Liao Dynasty (916–1125). The Liao established its capital at Linhuangfu in present-day Inner Mongolia; it also occupied Beijing and established it as its secondary capital. The Liao people called the city Yanjing; it was also called Nanjing (Southern Capital), since it was located to the south of the principal capital. Based on the former site of Youzhou, Nanjing completely incorporated the former city, and was not rebuilt except for its city walls. According to historical documents (Hou and Deng 2001: 49), Nanjing once had a resident population of more than three hundred thousand people.

The next group of people who established Beijing as their capital were the Nuzhen or Jurchen, another people from the north-eastern regions of China. In the early twelfth century, the Nuzhen conquered the Liao and established the Jin

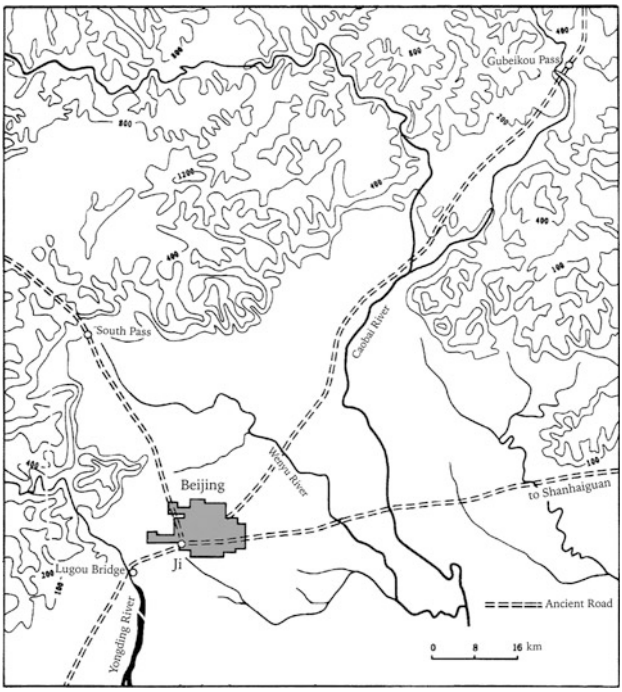

Fig. 2.1 The location of Beijing and the routes to neighbouring regions in ancient times. *Source* Edited by author based on data from Hou and Deng (2001: 21) and Nameless (1996)

Dynasty (1115–1234). In 1153 Jin moved its capital from Huiningfu, in present-day Liaoning Province, to Yanjing, and renamed it Zhongdu (Central Capital). This was a great historical moment for Beijing, and marks the beginning of the city's role as the political centre of north China.

Based on the site of Liao's Nanjing, Zhongdu underwent a large-scale reconstruction before Jin moved its capital there. The reconstruction of the new capital began in 1151. The urban area was extended toward the east, west and south, and was encircled by newly built city walls. After the extension, the layout of the city was utterly changed, and the palace, which had previously been located in the southwest corner of the city of Nanjing, now became the centre of the city of Zhongdu. According to historical documents (Hou and Deng 2001: 56–57), the palace in the centre measured about nine *li*[1] in circumference, the outer city walls measured about 37 li in circumference, and the registered population amounted to 226,000 households, which was approximately one million people.

[1]Li is a Chinese unit of length, 1 li is equal to 1/2 km.

2.1.2 *Dadu in the Yuan Dynasty*

In the early thirteenth century, another nomadic people, the Mongols, rose to power in the north of China. In 1215 the Mongols took Zhongdu by storm under Genghis Khan, and burned this capital city of the Jin Dynasty to the ground. It was not until 1271 that Kublai Khan, the grandson of Genghis Khan, established a dynasty on the Chinese model called Yuan (1271–1368) and proclaimed Jin's Zhongdu, which had been desolate for many years, as the capital. He gave the city the Chinese name of Dadu (Grand Capital).[2] After the Mongols completed their conquest of the Southern Song (1127–1279), in the south of China, and unified China in 1279, Dadu became the capital of China as a whole for the first time.

Since Yuan's Dadu initiated the configuration and character of Beijing, we have to begin here in order to understand the city as it stands today. According to historical documents, Dadu, whose designers were the two Chinese experts Liu Binzhong and Guo Shoujing, was grandly conceived and methodically planned (Hou and Deng 2001: 85, 89). A thorough survey of the site was carried out before the plan was devised, and special care was taken with its water supply. Here, I shall summarize the four features of the plan of Dadu (see Fig. 2.2).

First, since the original site of the Jin capital, Zhongdu, was destroyed by fire during the dynastic transition from the Jin to the Yuan, the Yuan capital of Dadu was moved to the north-eastern suburbs of Zhongdu, and arranged around the beautiful lake region which had been the suburban palace of the Jin. This change in site also meant that the source of its water supply changed from the Lianhua Pond to the Gaoliang River.

Second, the city was arranged along a north-south central axis, which began at the Lizheng Gate, a city gate in the south, passed through the Palace City in the middle, and ended up at the Central Terrace, which was the geometrical centre of the city. This central axis is still the backbone of Beijing today and still influences the thinking of Beijing's urban planners (see Chap. 5).

Third, the city was organized according to a hierarchical system, which consisted of the Palace City, the Imperial City and the city of Dadu. Each of these was encircled by city walls, which made Dadu a triple-walled city. Both the Palace City and the city of Dadu were in a perfect rectangular shape; furthermore, there was a mathematical relationship between their sizes. If one takes the Palace City as the basic modulus, the east-west breadth of Dadu was exactly 5 times of that of the Palace City, and the south-north length of Dadu was exactly 9 times of that of the Palace City. That is, the whole land area of the city was 45 times (5 times 9) that of the Palace City (Fu 2001: 11). The outermost city walls had eleven gates altogether: three gates on each side, except for the northern side, which had only two. In the

[2]In Mongolian it had been known as Khanbalig, or the City of the Grand Khan, and in the West the city was also known as Cambaluc, the Venetian traveller Marco Polo's transliteration of the Mongolian name.

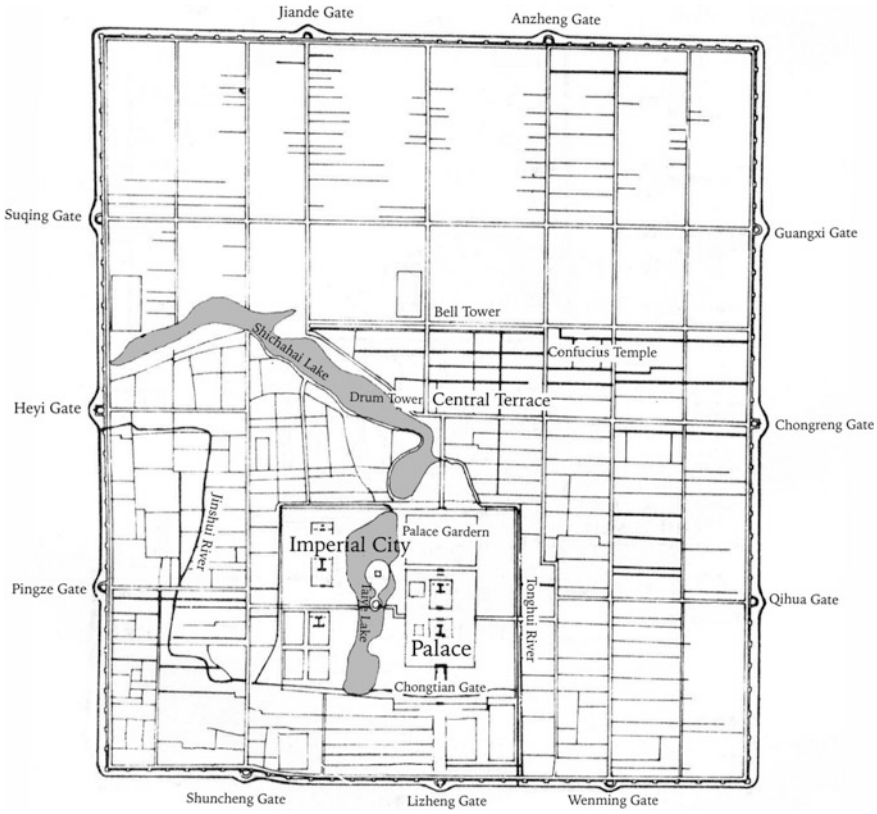

Fig. 2.2 The Yuan capital Dadu. *Source* Edited by author based on data from EBHUCB (1986: 14)

later years of Kublai Khan's rule, the city was inhabited by 100,000 households, that is, by about 500,000 people.

Fourth, the street system of Dadu was laid out in a chessboard pattern, comprised of rectangular blocks. The main streets led to the eleven city gates, and between them were the lanes (*hutong*, in Chinese). The breadth of the main streets was 25 m, while that of the narrow hutongs was 6–7 m. The space between the hutongs was 60 m, which was large enough for a large-sized dwelling compound with three courtyards. A further discussion about Beijing's courtyard housing will be given in Chap. 4.

The construction of the Yuan Dynasty, Dadu had begun before 1267, when Kublai Khan proclaimed the founding of the Yuan Dynasty, and ended in 1293. From the start, everything was carried out systematically and according to plan. The sewage system for the whole city was installed before the houses and streets were built.

As the capital city of the Yuan Dynasty, Dadu enjoyed great fame in the thirteenth century. Envoys and traders from Europe and Middle and West Asia were astounded by the splendour and magnificence of the city. Marco Polo was greatly

impressed by this well-organized city and described it's palace as "the most beautiful palace in the whole world" (Bredon 1922: 94). He descripted the palace in his travelogue: "These walls enclose the palace of that mighty lord, which is the greatest that ever was seen. The floor rises ten palms above the ground, and the roof is exceedingly lofty. …… The hall is so spacious that 6000 can sit down to banquet; and the number of apartments is incredible. ……. The roof is externally painted with red, blue, green, and other colours, and is so varnished that it shines like crystal and is seen to a great distance around" (Murray 1858: 104). He also said in his travelogue: "The streets are so broad and so straight that from one gate another is visible. It contains many beautiful houses and palaces, and a very large one in the midst, containing a steeple with a large bell" (Murray 1858: 105).

2.1.3 Beijing in the Ming and the Qing Dynasties

In 1368, Zhu Yuanzhang led his rebel forces to victory over the Mongols and seized Dadu. He founded the Ming Dynasty (1368–1644), but made his capital at Nanjing, a city on the Yangzi River in South China. Soon after the death of this dynastic founder, his fourth son, Zhu Di, usurped the throne and decided to move the capital north to Beijing. Generally speaking, Zhu Di, thereafter named Emperor Yongle (see Fig. 2.3), is considered to be the ruler who bequeathed the name "Beijing" to the city (Yu 1997: 179).

Unlike some of the earlier dynasties, which deserted former capitals and established new ones, the Emperor Yongle built his capital on the same site as Yuan's Dadu. Beginning in 1406 and ending in 1420, the city witnessed a 14-year reconstruction on a large scale. The Emperor formally transferred the capital to Beijing in 1421. In comparison with Dadu, with regard to the configuration of the

Fig. 2.3 Portrait of Emperor Yongle (1360–1424). *Source* Arlington and Lewisohn (1935: title page)

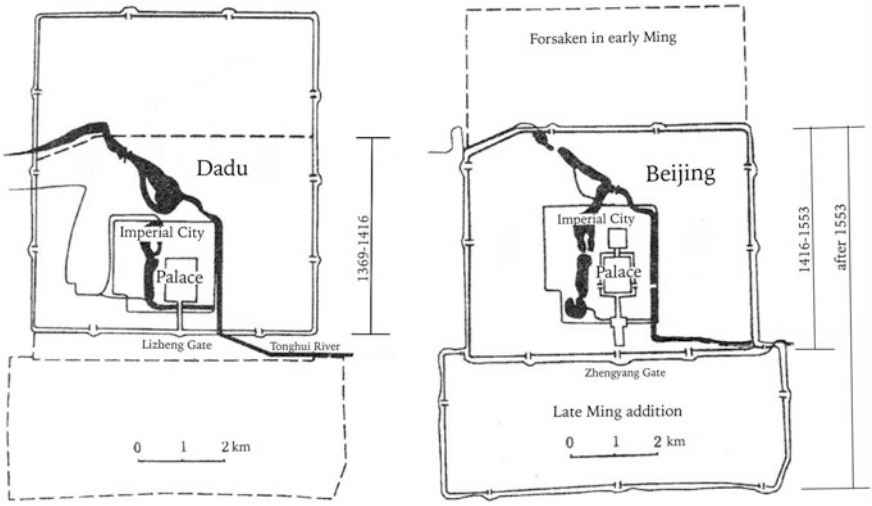

Fig. 2.4 Changes in the city walls from Yuam's Dadu to Ming's Beijing. *Source* Edited by author based on data from Hou and Deng (2001: 94) and Pan (2008: 74)

city, the changes made in Ming Dynasty Beijing can be summarizsed in the following two aspects (Fig. 2.4).

First, Beijing became a city with two-walled city under the Ming Dynasty. After Ming seized Dadu, massive new city walls, which were 12 m high and 10 m thick at the base, were built or reinforced. In order to protect the city from attack by Mongols, the northern part of Yuan's Dadu, because it was sparsely inhabited, was forsaken and the northern city walls were moved five li (2500 m) inwards in 1369. After the Ming capital had moved to Beijing, During the construction of the new palace, in order to make more space for the new palace in the south, the original southern city walls of Dadu were moved two li outwards in 1416. A century later, the area outside the southern city walls became a flourishing built-up district. In order to protect the growing population, the construction of yet more walls was started in 1553. The original plan was to surround the entire city completely with a second layer of city walls. However, because of financial difficulties, only the southern part was completed—this was in 1564—giving the rectangular city a slightly wider "base" in the south. Thus was formed the final configuration of Beijing, which consisted of two walled cities: a nearly rectangular city in the north known as the Inner City, and a wider rectangular city in the south known as the Outer City.

Secondly, Ming Dynasty Beijing more strongly reinforced the central axis of the city than had Yuan Dynasty Dadu. With the addition of the Outer City, the central axis was extended about 3 km to the south, thus making the whole axis nearly 8 km long. It ran through the imperial palace (also known as the Forbidden City) in the middle, from the Yongding Gate in the south to the Bell Tower in the north. At the southern part of the axis, two altars, the Temple of Heaven and the Temple of Earth,

were built symmetrically on opposite sides of the axis. At the northern part of the axis, a hill was constructed, called Wansui Hill (known as Jingshan under the Qing Dynasty). The Forbidden City, which was the most significant mark of the axis, was a completely new palace, built on the site of the Palace City of Yuan's Dadu. Being composed of thousands of halls and gates arranged symmetrically around the axis, its large dimensions and luxuriance were a fitting symbol of the power and greatness of the Chinese Empire. Like the city walls and moat around the whole city, similar city walls and a moat of a slightly smaller size were built for the Forbidden City. All these constructions played an important and dramatic role in reinforcing the central axis of the city (Fig. 2.5).

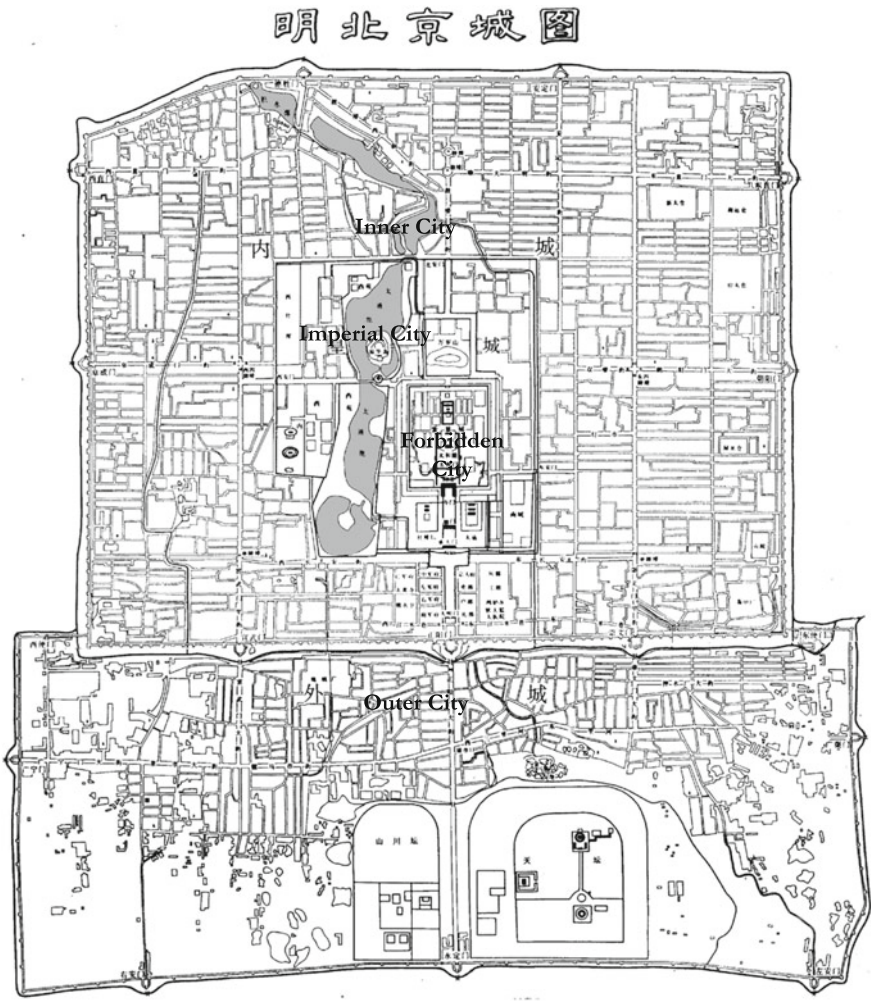

Fig. 2.5 Beijing in the Ming Dynasty (1368–1644). *Source* Dong (1998: 294)

Fig. 2.6 British and French allied troops entering into Beijing from Anding Gate on October 24, 1860. The engraving shows Beijing's cityscape before the twentieth century. *Source* ILN (1861)

The Qing Dynasty (1644–1911) was founded by the Manchus. After the last Ming emperor was dethroned in an internal rebellion, Manchu armies poured in from the Northeast to fill what was essentially a power vacuum. The Qing Dynasty they founded kept Beijing as its capital. During its reign of 267 years, the city was not subject to any major changes and stayed almost the same as Ming Dynasty Beijing. Even the palaces in the Forbidden City underwent only slight changes, with occasional repairs or partial reconstructions.

However, the Qing rulers spent huge financial resources to build enormous imperial pleasure-gardens in Beijing's north-western suburbs, the most famous of which was the Garden of Perfect Brightness (*Yuanmingyuan* in Chinese), the old Summer Palace. The imposing columned palaces and open-air pavilions of these grounds blended with the serenity of well-planned gardens to create a masterpiece of garden architecture unrivalled in the history of China (Hou and Deng 2001: 121).

In the late nineteenth century, after ruling China for more than 200 years, the Qing Dynasty gradually got weak, and the First Opium War of 1840 became a milestone in its decline. In the First Opium War, Beijing did not suffer serious, direct damage, since it was far away from the battlefield in the south of China. In the Second Opium War, of 1860, however, British and French allied troops directly overran Beijing and set fire to Yuanmingyuan, which was completely burned. From the engravings done then, we can get what Beijing's cityscape look like before the twentieth century (see Figs. 2.6 and 2.7).

2.2 Urban Development Prior to the People's Republic of China (1900–1949)

2.2.1 Introduction of Western Houses into Beijing

Beijing has a long history of communicating with the West. Marco Polo was probably the earliest and most famous Western traveller, who introduced thirteenth-century Beijing (in the Yuan Dynasty) to the West in his famous travel account *The Travels of Marco Polo* in 1298. In the Ming Dynasty subsequently, not far behind the arrival of the Portuguese on the China coast, established themselves at Macao and traded regularly under the Ming Dynasty, European Christian missionaries made their way to China, hoping to make converts there. Matteo Ricci, an Italian missionary, was the first to establish himself in Beijing. He arrived at Canton in 1582, lived in Beijing from 1601 until his death in 1610. In 1650, the Shunzhi Emperor of the Qing Dynasty permitted to build a church in Beijing. It was erected on the site of the house of Matteo Ricci, with the name of Southern Cathedral, as it was just located inside the Xuanwu Gate in the southern district of the Old City. It was the first western-style building, with a notable tower, appeared in Beijing. There is still a church on this site today, though it is the fourth Southern Cathedral, rebuilt after 1900 (Fig. 2.8).

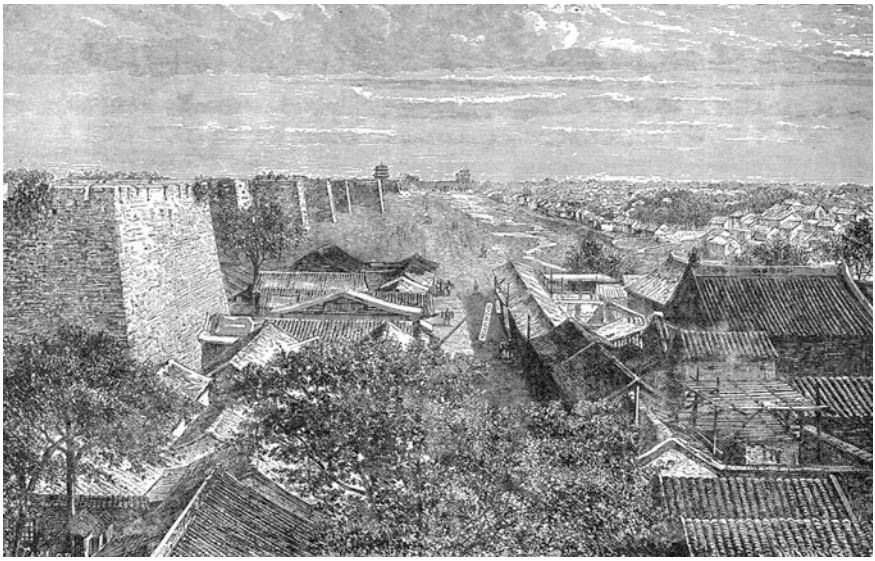

Fig. 2.7 The engraving from a book published in 1894 presented the view of Beijing's Outer City at that time. *Source* Northrop (1894: 111)

Fig. 2.8 Southern Cathedral rebuilt after 1900. *Source* By courtesy of the Reference Room of the School of Architecture, Tsinghua University

While the Portuguese and the Dutch were given permission to trade, separately in 1653 and 1655, by the Qing government, the Russians attempted to open diplomatic relation with the Qing Empire. After a series of fighting in the Amur region, a treaty was signed in 1689. The *Nerchinsk Treaty* was significant, as, for the first time, the Qing emperor accepted the equality of a foreign ruler, the Tsar of Russia (Haw 2007: 69). After 1694, a Russian House was setup in Beijing for Russians to reside for to trade or for diplomatic purposes. This was the first official residence for a European power to be established in Beijing. It was located in a district outside the south-east corner of the Imperial City, and more than 100 years thereafter became the Legation Quarter of Beijing.

As the result of the Second Opium War (1856–1860), the Qing government was forced to sign the *Tianjin Treaty* in 1858 and *Beijing Convention* (see Morse 1918a: 30–35) in 1860, which permitted Western resident ambassadors to live in Beijing permanently. As a consequence, many foreigners moved to Beijing and gradually formed a Legation Quarter, which was set up mainly along the Legation Street, now called Dongjiao Minxiang, on the south side of the Russian House (see Fig. 2.9).

In 1900, the Boxer Movement broke out in Beijing and the Legation Quarter was attacked. Under the pretext of suppressing the movement, an allied army of eight powers[3] blasted the city walls of Beijing and ransacked this ancient city. In 1901, the Qing government was forced to sign the *Xinchou Treaty* (see Morse 1918b: 347), and according to this, Dongjiao Minxiang was set as a special Legation Quarter for foreign settlements only, and foreign garrisons were allowed to quarter in Beijing. The construction of the Legation Quarter accelerated thereafter, and larger numbers of foreigners came to live in Beijing. Since the Legation Quarter had extraterritoriality, that is, the activities of foreigners were not restricted by Chinese laws, the Legation Quarter effectively became "a nation within a nation" (Zhang 1995).

Meanwhile, having suffered the invasion of Western powers, Beijing also experienced the introduction of a number of modern Western techniques, and its urban infrastructure and service facilities, such as electric power supply, water supply and transport system, were improved.

[3]These powers were Britain, Germany, Russia, France, America, Japan, Italy and Austria.

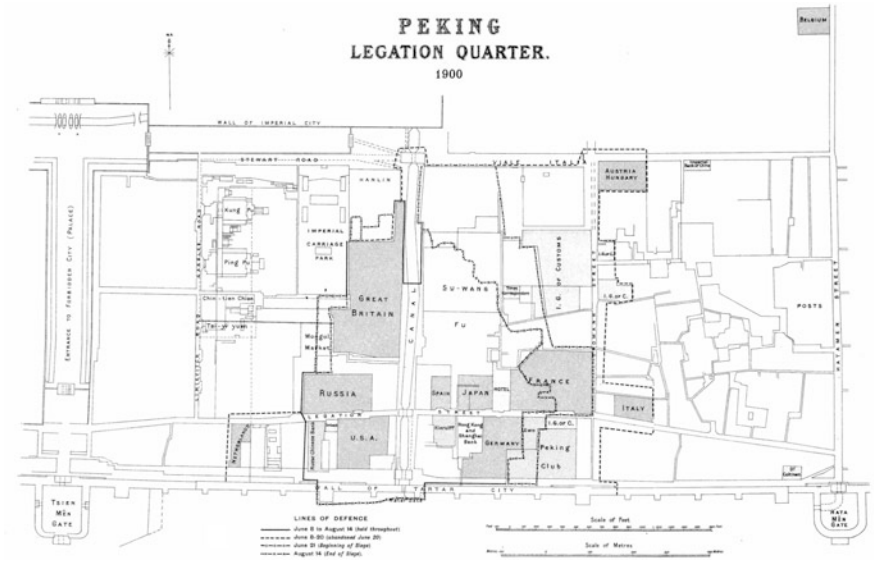

Fig. 2.9 Map of foreign legation quarter in Beijing, 1900. *Source* Morse (1918b: 224)

In 1888, an electric light was fixed on the ceiling of the Dowager Empress Cixi's bedroom. This was the first time in Beijing's history that electric lights were used, which inaugurated the age of electricity in the city. After the German company Siemens built a commercial powerhouse to supply electric power to the foreign legation quarter in 1899, the first Chinese electric company was established in 1905 to supply electric power to the inhabitants of Beijing. In the late nineteenth century, interior water transport in Beijing almost disappeared, and land transport was still in the stage of using wagons. The first Western car was introduced into Beijing in 1902 and the first railway was built in 1903—it looped around the old city proper and improved the transport conditions of the city (see Fig. 2.10). There was no public water supply system in Beijing before the twentieth century. The imperial family had channelled a spring to the palace from West Mountain (*Xishan* in Chinese), and the residents also dug wells to obtain water in the ancient manner. By 1910 the first water supply system had been built by a German company.

The Legation Quarter was a visible sign that the Western powers had forcibly opened the door of China. By providing a Western model within such an old city, it also played a direct role in promoting the modernization of the city. In 1915, the first asphalt streets were built in the Legation Quarter, which with their cleanliness and orderliness served as a model for the rest of Beijing. The Legation Quarter accommodated foreign embassies, banks, Western offices, clubs, hotels and military garrisons. Furthermore, a number of Western churches, schools and hospitals were built outside the Legation Quarter as well. These buildings, with a distinct Western style, gave Beijing an international look (Bredon 1922: 36) (Fig. 2.11), which created an observable change in the Chinese traditional townscape (Sit 1985: 83).

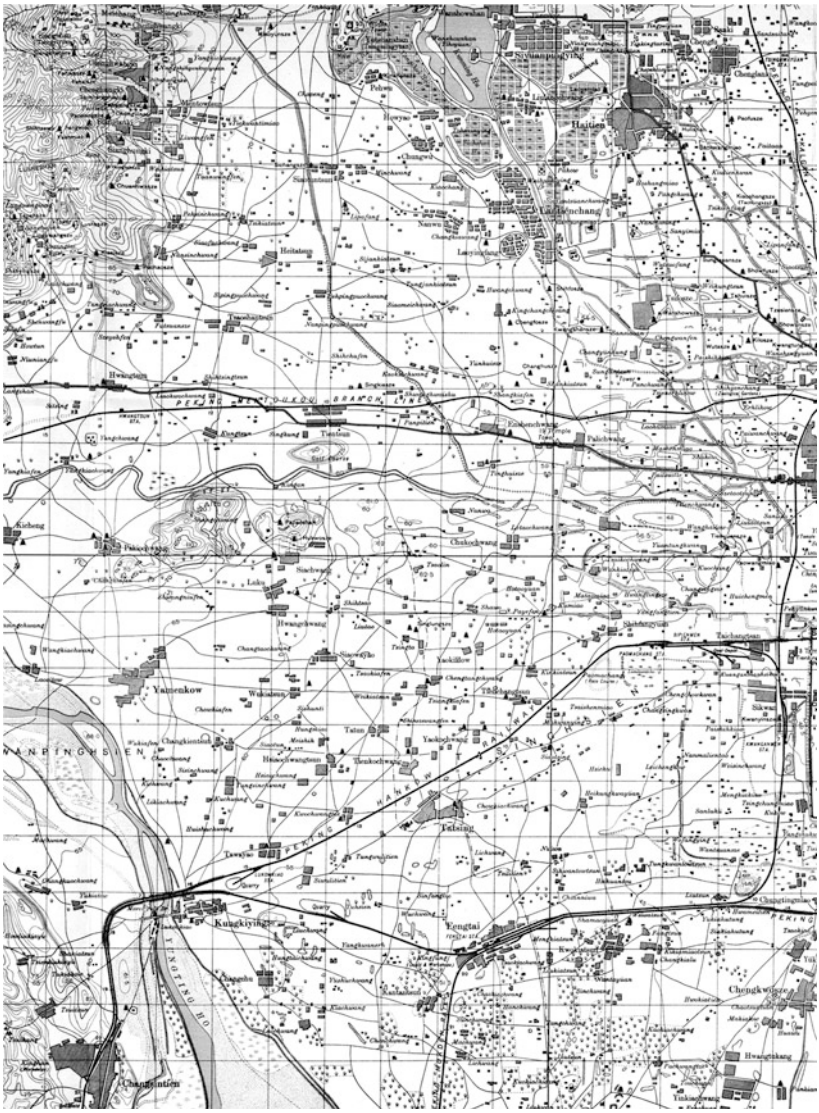

Fig. 2.10 Map of Beijing in 1920. *Source* Map collected by Cambridge University Library

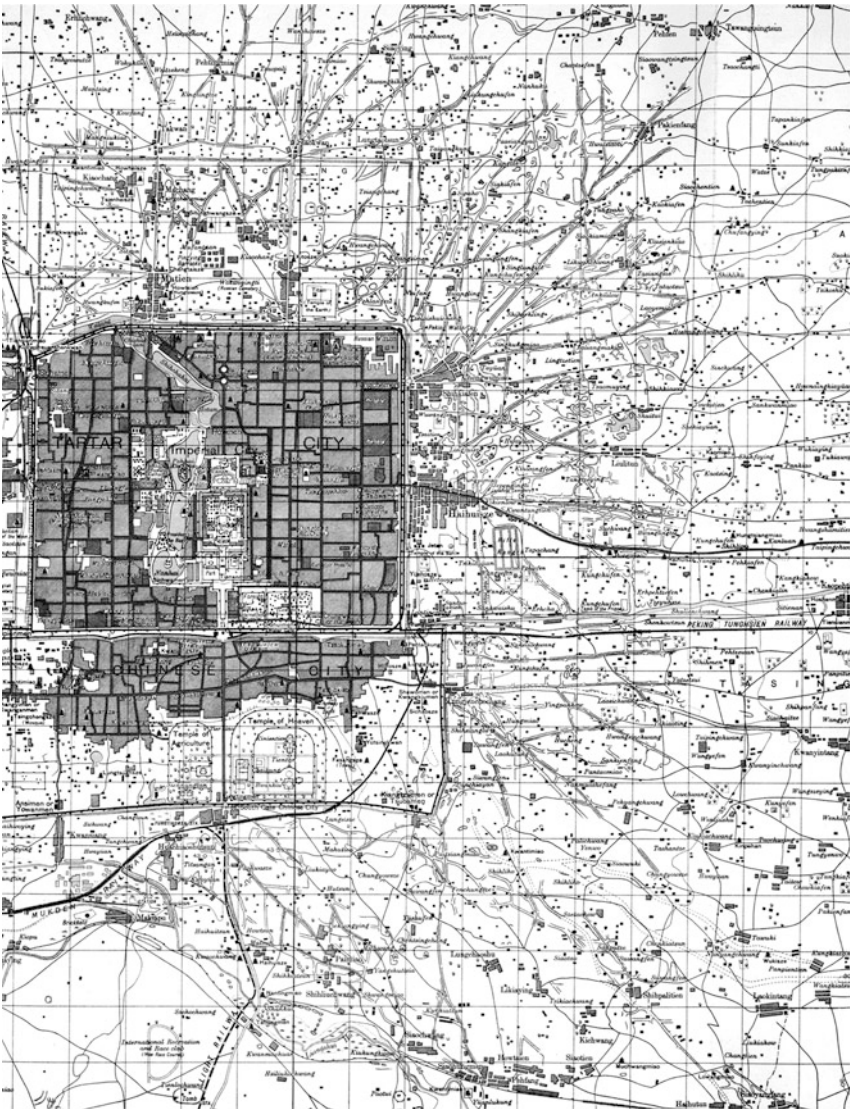

Fig. 2.10 (continued)

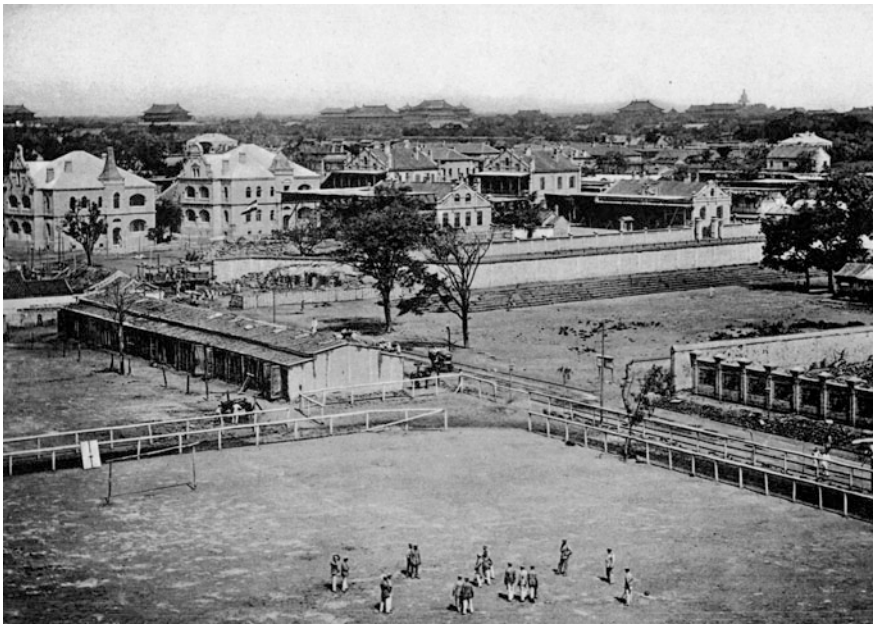

Fig. 2.11 View of foreign legation quarter with the Imperial City in the background in 1900. *Source* By courtesy of the Reference Room of the School of Architecture, Tsinghua University

2.2.2 The First Modern Redevelopment of Beijing's Old City

During the early period of the Republic of China, which was founded after the revolution of October 1911, Beijing underwent a modern urban redevelopment for the first time in its history. Many changes took place, but the most significant ones, which had a direct influence on the urban structure of the city, were, first, the opening of the Forbidden City and the imperial gardens to the public; second, the building of new roads through the city walls; and third, the construction of a new business quarter in the old city proper.

The opening of the Forbidden City and the imperial gardens to the public was the first obvious change that the 1911 Revolution brought to Beijing. In 1914, a historic museum was founded in it. Meanwhile, many other imperial gardens, palaces and temples, such as Beihai Park, Jingshan Hill, the Imperial Ancestral Temple, the Temple of Heaven and the Summer Palace in the suburbs, were opened in succession. They became museums, public parks and accessible to ordinary people. The opening of Tiananmen Square was an outstanding example. As an imperial square within the Imperial City, this square was surrounded by walls to prevent the common people from entering. After the gates and the walls were removed one after another, this square was opened to public access.

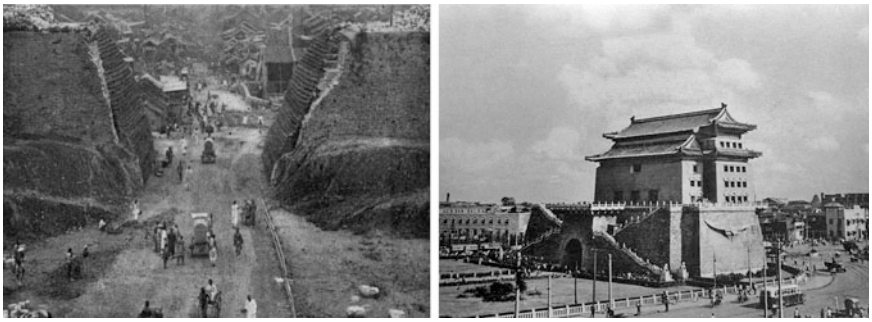

Fig. 2.12 City wall was broken down for new road pass through (*left*). *Source* Holmes (1919: 237); Qianmen Gate after reconstruction (*right*). *Source*: By courtesy of the Reference Room of the School of Architecture, Tsinghua University

The second change of Beijing was that, in order to improve traffic conditions, some of the city walls were broken down to let the newly built roads or railways pass through. The walls of the Imperial City, which were located at the city's centre and blocked traffic between the east and the west, were removed first, and then, some breaks in the walls of the city were made for roads to go through, and some gates, considered bottlenecks for traffic, were reconstructed or dismantled (see Fig. 2.12). The reconstruction of Qianmen Gate caused a conflict between two groups who disagreed about the way to effect the urban redevelopment of the city. After the reconstruction, the wall was razed, and the gate that had been previously surrounded by the wall became a single tower surrounded by traffic. The newspapers of the time were full of either praise or condemnation. One columnist wrote that the reconstruction "satisfied the demand for the development of the city as a capital" (Wang and Zhao 2007). Others, however, thought that the reconstruction obliterated one of the most important elements in the townscape of Beijing.

The third change is the appearance of new business quarters in the old city proper. During the period of the Qing Dynasty, trading was strictly prohibited in the Inner City, and the only commercial district of Beijing, Qianmen, was based in the Outer City. After the founding of the Republic of China, Wangfujing and Xidan, in the Inner City, were successively established as the commercial districts of the city. By 1934, Wangfujing, being the home of 136 Chinese and foreign firms (Xi 2002), became one of the most famous commercial districts not only of Beijing but also of all China.

2.2.3 The Master Plan of the City During the War Years

Beijing had undergone numerous wars in contemporary times. Fortunately, the Old City was spared from major demolition. As mentioned in previous section, in the Second Opium War, of 1860, British and French allied troops burned down the imperial gardens on Beijing's north-western suburbs, the Old City itself, however,

suffered no serious damage. In the Boxer Movement, of 1900, for selling Western medicine, Laodeji Pharmacy at Dashila commercial district was torched by rebels and large numbers of houses nearby were burned down as well. The invasion by the allied army of eight powers in the same year was more damaging. What they destroyed were mostly the city walls and many gate towers and watch towers on the walls. Among them, Zhenyangmen Gate Tower and Watch Tower and Chaoyangmen Watch Tower were rebuilt in 1903.

Beijing came under Japanese occupation after the famous Lugou Bridge (Marco Polo Bridge) Incident on 7 July 1937. During the Japanese occupation, two breaks at the east and west sides of the walls of Inner City were made for roads go through, which were named as Qimingmen (Gate of Enlightenment) and Chang'anmen (Gate of Eternal Peace).[4] The occupation continued until the Japanese surrender of 1945, but the city had precious little time to recover before being swept up in the Civil War, which lasted until 1949.

During these war years, the urban development of Beijing was in recession. However, it is worth mentioning that two master plans for Beijing were produced during this period. The first plan, *The Outline of City Planning of Beijing*, was made by the Japanese in 1938, and the second plan, *The City Planning of Beiping*,[5] based on the Japanese project, was made by the municipal government of Beiping in 1946. This was the first time that Beijing had taken on urban planning in a modern sense, although these plans were applied only on a small scale.

After occupying Beiping, the Japanese made the city into the capital of a puppet state, renaming it Beijing. Thereafter more and more Japanese moved into the city. According to statistics (Sun and Wang 2002), the number of Japanese living in Beijing was 4000 by December 1936, but by October 1939, the number had risen sharply to 41,000, with females accounting for 39 %. This high percentage of women indicated that Japanese migrants had moved to Beijing, mostly in families. As the Japanese rolled into the old city proper and occupied the courtyard houses by forcing the original Chinese residents out, conflicts between Chinese and Japanese residents occurred frequently.

In order to solve the problems of population pressure, and especially the conflicts between Chinese and Japanese residents, a Japanese-controlled construction bureau, established in 1938, drew up a master plan for the city (Fig. 2.13) Within this plan, two new towns were planned to be built in the eastern and western suburbs, and the new towns and the old city proper would be separated by green space of one to three kilometres in width. In order to separate Japanese residents from Chinese residents, the new western town, located at Wukesong with a distance of 10.5 km from Tiananmen Square, was planned to become a district solely for Japanese residences and Japanese military offices (Fig. 2.14). The new eastern town would

[4]The names were changed into Jianguomen (Gate of National Construction) and Fuxingmen (Gate of National Rehabilitation) after Japan surrendered.

[5]During 1927–1949, the national capital was moved to Nanjing, on the Yangzi River. Beijing lost its capital status and in 1928 was renamed Beiping, with the status of special municipality. But during the period of Japanese occupation (1937–1945), the city was renamed as Beijing.

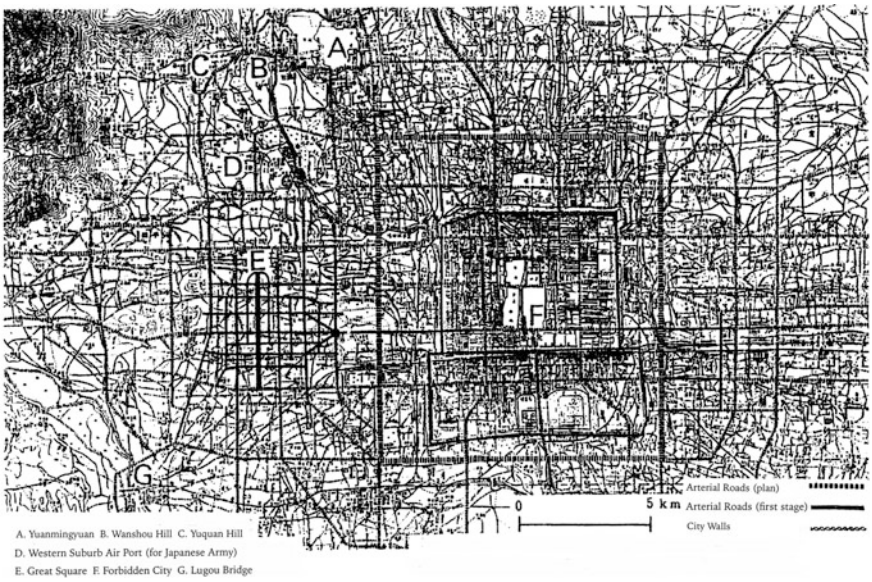

Fig. 2.13 Network of arterial roads of city planning of Beijing by puppet municipal government in 1938. *Source* Dong (1998: 300)

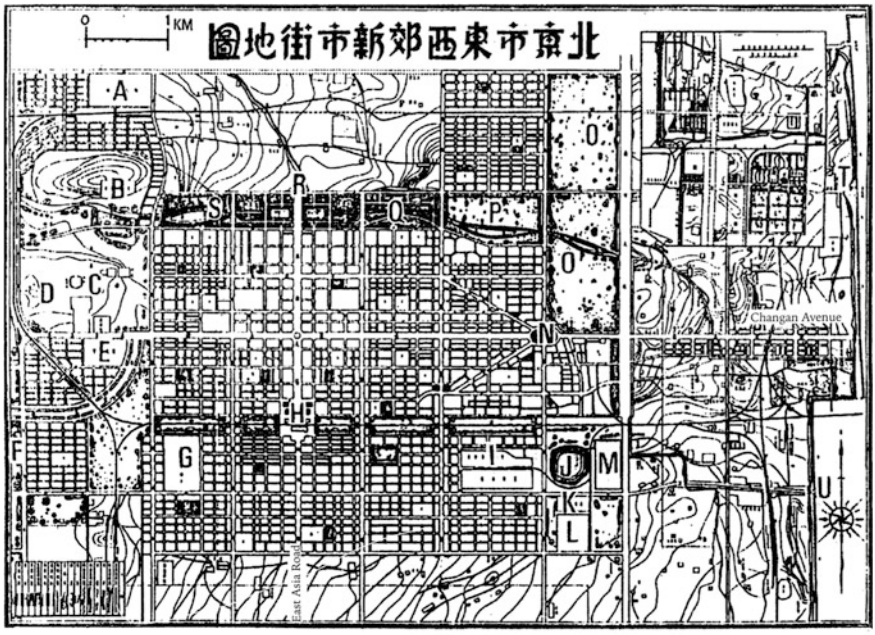

Fig. 2.14 Plan of West Surburban New Town of Beijing in 1938. *Source* Dong (1998: 301)

be an industrial district. Chang'an Avenue would be extended, and a ring road would be built around the old city proper in order to connect it with the new towns. Apart from 581 houses (with a total floor area of 67,083 m^2) and 8.02 km long roads been built in the western suburbs, this master plan was not yet fully carried out when the Japanese surrendered in 1945.

In the three years following the Japanese surrender, the municipal government of Beiping examined the problems that the city had experienced during the occupation period and came up with a new master plan for the city, based on the Japanese plan. The new plan, which focused on developing the traffic system, cleaning up the slums, improving urban infrastructure facilities, and protecting historic sites, was announced in 1947. Within the new plan (Fig. 2.15), some changes were made. The western town would become an administrative centre; the central railway station would be relocated, and a public traffic system would be built; and a nature park, a golf course and an international sports field would be added to the plan. One remarkable point about this plan is that it was the first in history to propose the redevelopment of Beijing's Old City. It highlighted the need to protect historic sites while modernizing the city, and also submitted a zoning plan for limiting the height of buildings near historic sites. Although this new master plan of Beijing was not put into effect because of the Civil War, it provided many reference points for research on the urban development of Beijing in the coming years.

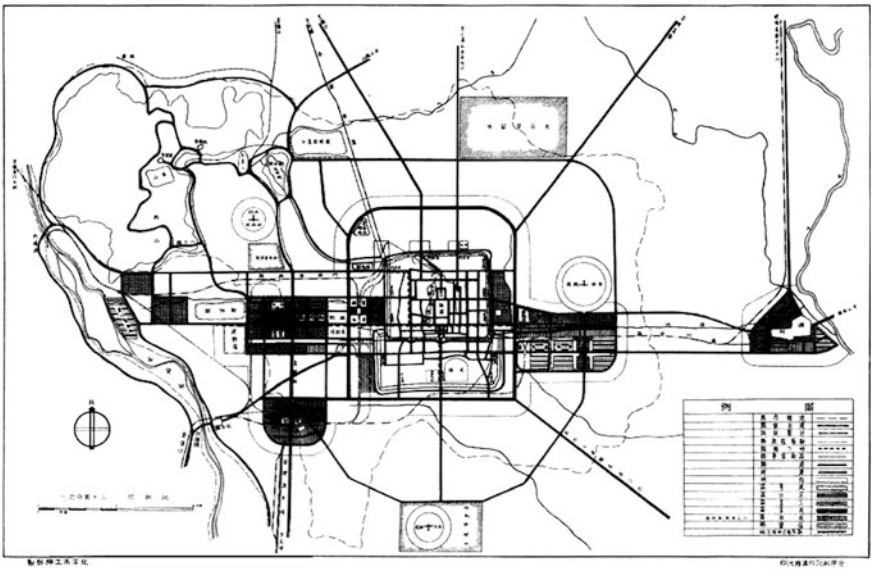

Fig. 2.15 The Master Plan of Beiping in 1947. *Source* Chen and Wu (2003)

2.3 Urban Development Under the Planned Economy (1949–1979)

2.3.1 Urban Planning of the New Capital

In 1949, Beijing was established as the capital of the People's Republic of China. When Beijing's municipal government was charged with the planning of the city, not only were some Chinese experts engaged in the planning work, but experts from the Soviet Union, who had previously engaged in planning the city of Moscow, were also invited.

The first problem that the planning of the city encountered was to decide where the new administrative centre should be put, in the old city proper or in a new urban district outside the old city proper (Shen 2000). The location of the new administrative centre was primarily concerned with the question of how to make use of, or redevelop and protect, Beijing's Old City. One group believed that it would inevitably damage Beijing's Old City if massive new administrative departments were introduced into it. In a project proposed by two Chinese architects, Liang Sicheng and Chen Zhanxiang advised that the new administrative centre should be built outside the city walls and in the western suburbs, suggesting that this would preserve Beijing's Old City in its entirety. Different form the "New Urban Area" developed under Japanese occupation, Liang and Chen proposed a site to the east of Wukesong, also in the city's western suburbs but closer to the Old City, with a distance of 7.5 km from Tiananmen Square. They called for developing the area "where work should be done in a planned way to choose a site with sufficient open space to be home to the government bodies, serving as the capital's administration centre" (Liang and Chen 1986: 15). "Liang-Chen Proposal" (Fig. 2.16) took the whole situation into account that there is an acute shortage of open space within the city walls while the "new urban area" developed by Japanese aggressors is too far away from the city, which totally ignored the redevelopment of the Old City.

The other group, mainly made up of the Soviet Union experts, recommended that the administrative centre be constructed within the old city proper in order to make full use of the Old City, suggesting that protection must be combined with redevelopment of the city (Dong 1998: 315). In *The Proposals on Improving Beijing's Municipal Infrastructure*, the Soviet expert group refuted "Liang-Chen Proposal" and elaborated on a plan for having the new administrative centre constructed in the exact centre of the old city. They alleged that plan of building the new centre on the suburbs was "uneconomical", which would "give up the attempt in rebuilding and improving the existing city" (Wang 2003: 83). Barannikov, one of the Soviet experts, stated in his report, "Beijing does not have large industrial enterprises. However, as the capital, in addition to a city of culture, science and art, it should be a large industrial city as well". Further more, he proposed, "It will be good to begin with transforming one avenue or one square, such as Tiananmen Square in the historic centre of the city, which has become all the more important because of the military parade and the mass demonstration took place there not long

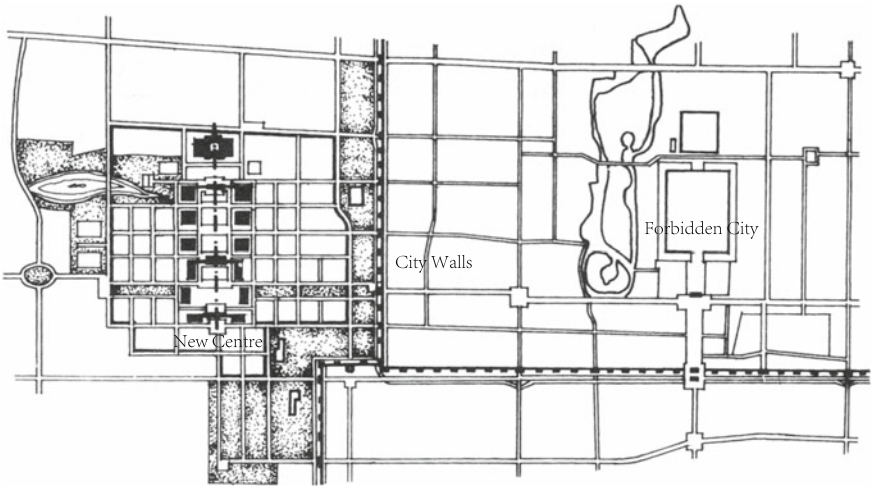

Fig. 2.16 "Liang-Chen Proposal": the new administration district in relation to Beijing's Old City. *Source* EBHUCB (1986: 26)

ago for the inauguration of the People's Republic of China. Tiananmen Square, therefore, should be made the centre of the city" (Wang 2003: 83).

It is clear that both sides had as their aim a wish to protect Beijing's Old City, but the methods they advocated were very different. Considering them today, it would seem that the proposal of the Chinese experts Liang and Chen was the more far-sighted. However, the result was that the opinions of the Soviet Union advisors got the upper hand; and after that, Beijing's municipal government established an urban development guideline of "fully using and developing the Old City" (Song et al. 2004; Shen 2000). Further more, following the so-called "Stalin's principle for city planning", which was introduced to China by the Soviet advisors and advocated "the capital cities of all socialist countries must be large, nationally important industrial centres" (Gao and Wang 1991). Beijing's municipal government, in 1950, set up the development policy of "transforming Beijing from a consumption city into a production city, from an old, backward city into a modern city" (Wang 2003: 66).

In 1953, the municipal government proposed *The Draft Plan of Redeveloping and Expanding the City of Beijing*, the first master plan of the city after the founding of the People's Republic of China. This plan clearly pointed out that the old city proper would serve as the location of the central government of China (Lu 2005). In 1957, the municipal government, based on the 1953 plan, proposed *The Preliminary Plan of Urban Construction of Beijing*, which was approved by the central government in 1958 (see Fig. 2.17). The urban development guideline of "fully using and developing the Old City" brought about in Beijing a monocentric urban structure, which was referred to, in jest, as "spread cake structure" by the architects and city planners in China (Wang 1999). This urban structure has caused hidden trouble for the protection of Beijing's Old City ever since.

Fig. 2.17 The Master Plan of Beijing in 1958. *Source* EBHUCB (1986: 41)

In 1958, Beijing began to build the "Ten Major Constructions"[6] to commemorate the tenth anniversary of the People's Republic of China. Seven of these buildings were located in the old city proper. They adopted an imposing and magnificent style, seeking a bulky, symmetrical form. The Great Hall of the People and the National Museum of History represented the influence from the Soviet Union, and the National Cultural Palace, the National Agriculture Exhibition Hall and Beijing's Railway Station incorporated modern buildings with traditional Chinese style roofs (Fig. 2.18). In addition to the "Ten Major Constructions", many administrative departments, such as Ministry of Foreign Trade, Ministry of Textile Industry and Ministry of Coal Industry, were built in the old city proper as well.

Besides the location of the administrative centre, another problem that the planning of the city had to face was whether Beijing should become an industrial centre as well as a political and cultural one. Because of the extreme economic difficulties which the state had encountered during the early years of the People's Republic of China, the central government carried out a policy of "giving priority to industrial development". In the 1958 master plan of the city, Beijing's municipal government carried out a policy of "converting a consumptive city (Beijing) into a industrial city" and proposed that Beijing would indeed become an industrial centre as well (Lu 2005). As a result,

[6]The "Ten Major Constructions" included: the Great Hall of the People, the National Museum of History, the National Military Museum, the National Agricultural Exhibition Hall, Beijing's Railway Station, the Worker's Stadium, the National Cultural Palace, the National Hotel, Diaoyutai State Guest Hall and the Overseas Chinese Building.

Fig. 2.18 Two of the "Ten Major Constructions": the Cultural Palace of Nationalities (*left*) and the Great Hall of the People (*right*). *Source* By courtesy of the Reference Room of the School of Architecture, Tsinghua University

this plan accelerated the construction of new industrial enterprises within the city. In the course of only two years, from 1958 to 1960, 800 new factories were built in Beijing: these included textile mills in the eastern and north-western suburbs and electron tube factories in the north-eastern suburbs, with a floor area of about three million square metres. This accounted for 26 % of the city's total annual construction (Tan 2002). Most large-scale heavy industries were set up around the suburbs, at some distance from the old city proper, and were like "urban enclaves" in a rural area.

During the period of the planned economy, Beijing produced two master plans for the city: those of 1953 and 1958. However, during the Great Cultural Revolution (1966–1976),[7] the urban planning and housing management system suffered serious damage. In 1967, indeed, during that time, the master plan of the city ceased to operate, and in 1968, Beijing's Municipal Bureau of Urban Planning was closed and was not reopened till 1972. In 1973, the reopened Beijing's Municipal Bureau of Urban Planning produced a master plan (see Fig. 2.19). It indicated that the city had occupied so much land and the industries have become over centralized that they had resulted in serious shortages of water and land, and environmental pollution. The plan was submitted to Beijing's Municipal Communist Party Committee[8] and, however, was pigeonholed, not open to discussion (Wang 2003: 345).

[7]The Great Cultural Revolution was a radical movement in China initiated by Mao Zedong in 1966. It intended to eliminate counterrevolutionary elements in the government and resulted in purges of the intellectuals and ended in socioeconomic chaos. It was on a mammoth scale, lasted for two years in its intense form, lingered on for another year and a half, and was not officially declared over until 1976.

[8]During the Great Cultural Revolution, many functions of the government's departments were performed by Communist Party Committee.

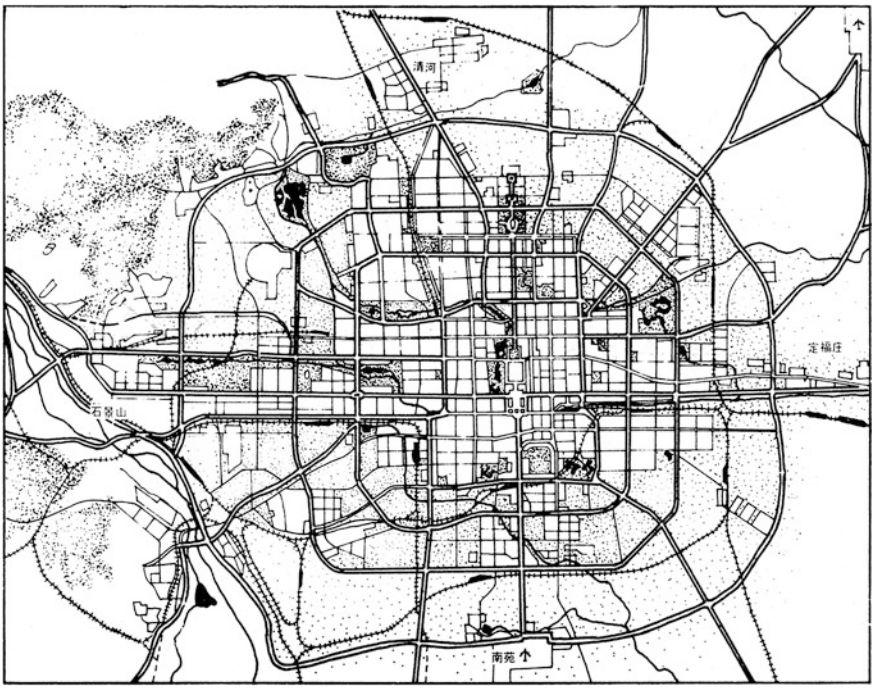

Fig. 2.19 Beijing's Master Plan in 1973, the only plan made during the Great Cultural Revolution. *Source* EBHUCB (1986: 55)

2.3.2 Destruction of the Old City Proper

Under the guideline of "fully using and developing the Old City", many urban functions became concentrated within Beijing's old city proper. After the 1950s, when administrative departments and public facilities were constructed on a large scale within this area, it followed that a considerable number of courtyard houses had to be dismantled in consequence.

Between 1956 and 1959, when the "Ten Major Constructions" were built, the demolition of courtyard houses tended to peak (Table 2.1). In particular, in 1958, in order to build the Great Hall of the People and the National Museum of History on Tian'anmen Square, and to break through Chang'an Avenue from east to west, altogether 540,000 m^2 of old houses were dismantled (see Fig. 2.20). Unfortunately, these old houses were for the most part not dilapidated houses, which needed to be reconstructed, but courtyard houses of relatively good quality located along the street frontage (Ping 1999). And after these good quality courtyard houses have been demolished, many poor quality courtyard houses in other areas of the Old City still remained. In the 1958 master plan, the municipal government set itself a target of redeveloping the old city proper within 10 years.

Table 2.1 The old houses that were dismantled in Beijing's old city proper during 1949–1976

Socioeconomic background	Year	Old houses dismantled (1000 m^2)	Average dismantled (1000 m^2/year)
Period of economic recovery at the early stage of the People's Republic of China	1949–1955	296	42
Late period of the "First Five-year Plan" and the period of the "Great Leap Forward", many new administrative buildings were built in the old city proper	1956–1959	1065	266
Period of economic readjustment	1960–1965	448	75
Period of the "Great Culture Revolution", many courtyard houses began to decline	1966–1976	748	68

Source Made by author based on data from Ping (1999)

Fig. 2.20 A bird's-eye view of Tiananmen Square after reconstruction in 1959. *Source*Li (1959)

However, after all this urban redevelopment, the number of "old and dilapidated houses" (ODH) in the old city proper did not decrease but actually underwent a huge increase, and by 1966 their number was even greater than it had been during the early years of the People's Republic (EBHUCB 1992: 443).

Even the traditional residential districts in the old city proper which were not demolished did not survive undamaged. From the latter part of the Great Cultural Revolution (1966–1976) onwards, in order to relieve the pressure due to the shortage of housing, Beijing's municipal government carried out a policy which allowed residents to use the yards in their courtyard houses for extensions. Furthermore, government even tried to make the most of the open space within the old city proper to build a kind of temporary housing (Fig. 2.21). Such "dime houses" were generally only three or four-storeys high, and were equipped with communal kitchens and toilets, but no heating. Each household who lived in one of

Fig. 2.21 "Dime houses" inserted into courtyard houses neighbourhood in Jianchang Hutong. *Source* By courtesy of the Reference Room of the School of Architecture, Tsinghua University

these could possess only a 31.5-m^2 floor area. The "dime houses" were intentionally constructed below the normal standards, and had a notional service life of only 20 years (EBHUCB 1992: 443). With such low construction standards and simple and crude facilities, the living conditions in these "dime houses" were very poor.

This policy did great damage to Beijing's Old City: bunkhouses were crammed into the open space or gardens of courtyard houses, and crude rectangular buildings were inserted into traditional residential districts. This infill development did not disappear until 1986, when the municipal government prohibited "inserting new buildings into the open space of the old city proper" by an explicit order (Tan 2002). However, it is recorded that during the 12 years between 1974 and 1986, a total of 11 million m^2 of new buildings had already been inserted into the old city proper, of which 7 million m^2 were filled with proper housing and one million square metres with "dime houses" (EBHUCB 1992: 281).

In addition to the removal of many courtyard houses and the infill of "dime houses" within the old city proper, the city walls, erected since Ming Dynasty (1868–1644), were dismantled during this period of time. As mentioned in the previous section, in the early years of the Republic of China, some breaks in the city walls had been made for roads go through. These openings had caused controversy during discussions on how to redevelop Beijing's Old City. Although some of the city walls had been breached in this way, a large part remained intact up until the early years of the People's Republic of China. In the 1950s, however, a new controversy arose among experts and professionals, as well as the ordinary citizens, about the dismantling of the city walls. Liang Sicheng, the famous Chinese architect mentioned earlier, was one of the dissenters. He wrote articles appealing to the government to protect the city walls, but his efforts were in vain.

From 1952 on, the outer city walls began to be dismantled gradually. Till the Great Cultural Revolution, almost nothing had been left of the outer city walls. During the Great Cultural Revolution, the inner city walls were dismantled as well, and a broad ring road, the Second Ring Road, and the subway under it were built. In 1965, a report, approved by the central government of China, said that "the construction of the subway is to serve military purposes and solves the traffic problems as well. As most parts of the city walls have been demolished or collapsed, the

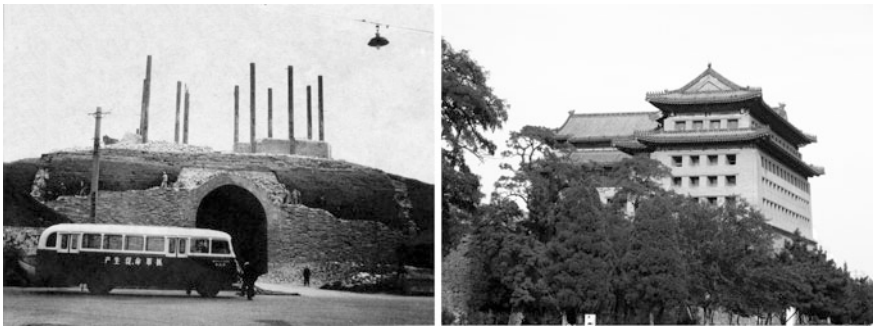

Fig. 2.22 Xizhimen Gate Tower being dismantled (*left*). *Source* Luo and Yang (1999: 15); The watch tower survived on the south-east corner of the inner city walls (*right*). *Source* By courtesy of the Reference Room of the School of Architecture, Tsinghua University

subway would be built on the foundation of the city walls. This conforms to both military needs and avoids the dismantling of large number of houses, and meanwhile the construction will not obstruct the normal traffic of the city. It facilitates the construction and lowers cost" (Wang 2003: 297). The historic city walls of Beijing, giving way to the new subway, came to their end at last.

Only two gates, Zhenyanmen Gate and Qianmen Gate, due to their special sites located on the central axis, were preserved (see Fig. 2.22). In addition, another gate, Deshengmen Gate, the watch tower on the south-east corner of the inner city walls, and a segment of the inner city walls at the southwest corner, which had not yet been pulled down during the Great Cultural Revolution, luckily escaped demolition.[9]

2.3.3 *Urban Housing Characteristics*

After the founding of the People's Republic of China, the new government adopted a socialist system of public ownership within a planned economy. By confiscating privately owned courtyard houses and transferring them as public properties and by developing ""work-unit" compounds", the majority of urban housing in Beijing gradually became publicly owned. Therefore, two types of housing appeared in Beijing: ""work-unit" compounds" managed by "work-units"—the state-owned enterprises or institutions—and publicly owned houses. These latter were mainly those old houses which had been inherited from the former regime or confiscated

[9]Not long after the Great Cultural Revolution, the government acknowledged that the demolition of Beijing's city walls was short sighted. In 1980s, a mile-long segment of the inner city walls at the south-east corner, which was almost pulled down completely, was reconstructed. In 2003, Beijing's municipal government decided to reconstruct Yongdingmen Gate, one gate of the outer city walls, at the southern end of the urban central axis. In September 2004, the gate was re-erected at the site a little north to the original site.

from private owners, to be managed by the urban housing management departments of the municipal government. Within a "Welfare-oriented Housing System" (WHS), urban housing was not regarded as a consumer good but as a kind of welfare, and residents paid rents for their housing at a uniform and low rate.

Because of the government's policy of "giving priority to the development of industry", many industrial projects were being built around the suburbs of the city. Residential districts for employees—known as ""work-unit" compounds"—were also being set up nearby. These constituted a new type of residential district, which provided not only housing but also social welfare facilities, such as kindergartens, grocers and clinics. They constituted a major part of the urban housing development constructed during that period.

In order to keep housing construction and costs and standards of provision under control, the state policy propagated "six unifications" in housing development, in the areas of planning, design, investment, construction, distribution and management. These received state investment, were constructed under the supervision of the relevant "work-units", and were distributed to their employees for a low rent.

During the early stages of the People's Republic, China yielded to the influence of the Soviet Union in numerous aspects. In the matter of urban development, these are reflected not only in the "Ten Major Constructions" as mentioned above, but also be seen in the overall layout of residential districts. In the early 1950s, the "perimeter block neighbourhood" pattern, derived from Soviet Union, was used in planning residential districts. A "perimeter block neighbourhood" normally had a distinct axis, and within that area, houses were arranged along streets or in a symmetric pattern. The neighbourhood therefore had a strong sense of order and formalism (see Fig. 2.23). However, since a considerable number of houses stood east-west in this type of neighbourhood, access to sunlight and ventilation was far from suitable for Beijing's climate and for the living habits of its residents. At the end of the 1950s, from the Soviet Union again, the idea of the complete planning of a residential district, which was similar to neighbourhood units in Western countries, was introduced into Beijing and put into practice. Accordingly, the 1958 master plan of the city proposed that residential districts from thirty to sixty hectares would become the basic residential units of the city, and that each would accommodate ten to twenty thousand residents. Within these residential districts, residents could purchase daily necessities and children could have their primary school. Public transport would go around the residential district. Xizhaosi, built at the end of the 1950s, was the first residential district of Beijing to apply this concept.

However, during the period of planned economy, the state policy of "production first and livelihood second" kept urban housing standards low. In particular, from the end of the 1950s to the mid-1960s, China's economy experienced its first major setback after it broke its ties with the Soviet Union: and following this setback, the principle of economic saving on housing was taken to extremes, and many houses with poor conditions were built. Due to the housing shortage, it became common practice for two families to share a house, using a communal kitchen and toilet. In 1960, the amount of living space per capita in Beijing dropped to 3.24 m^2. This was the lowest point for the city since the founding of the People's Republic of China in 1949.

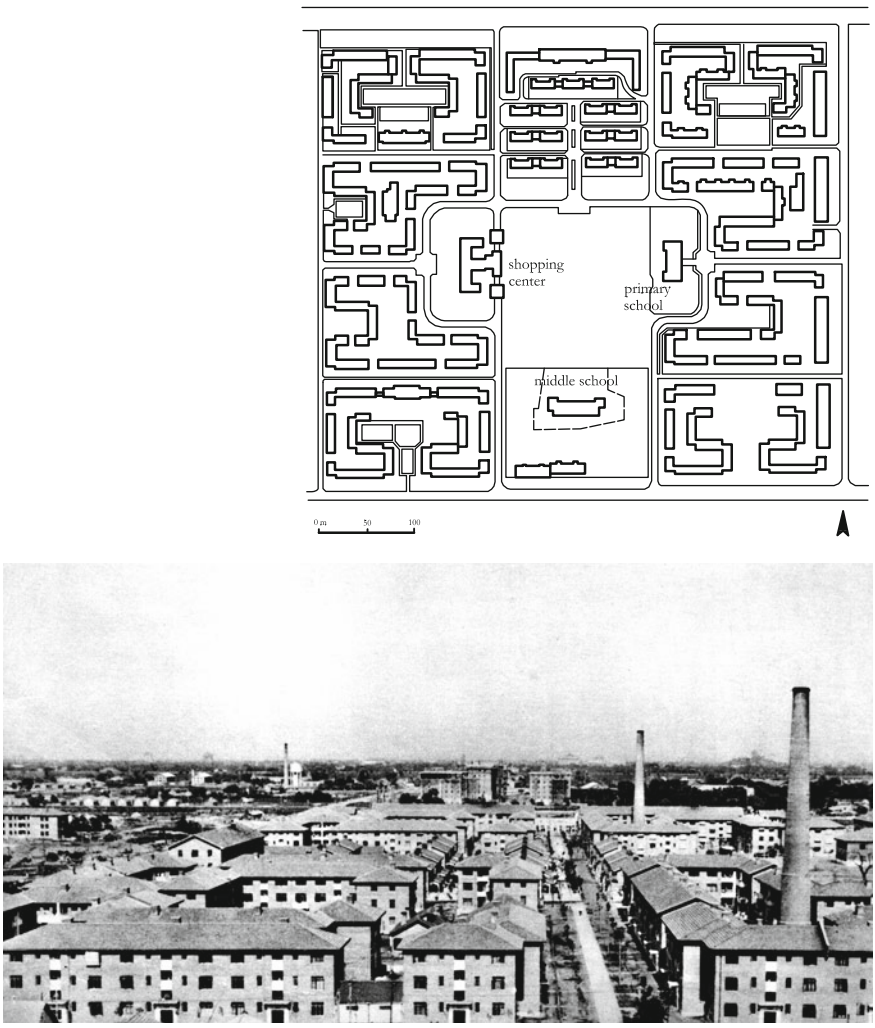

Fig. 2.23 The layout of Baiwanzhuang neighbourhood (*above*). *Source* Dong (1998: 227); The view of Baiwanzhang in the 1950s (*below*). *Source* BMCUP (1958)

Between 1966 and 1978, the period of the Great Cultural Revolution (1966–1976) and its immediate aftermath, society and life in general fell into chaos all over the country, resulting in the stagnation of urban housing development. In the case of Beijing, the floor areas of the new houses completed in 1967, 1969 and 1970 were, respectively, only 201 thousand, 291 thousand and 224 thousand square metres. This marks another of the lowest points for the city since 1949 (Fig. 2.24): and this extremely serious housing shortage created an inevitable need for urban housing reform.

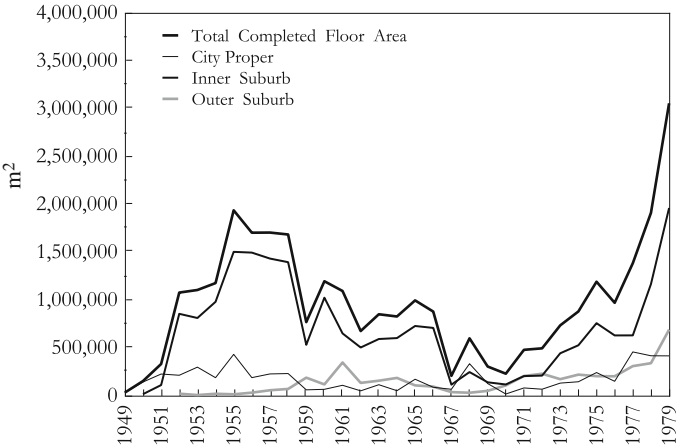

Fig. 2.24 Completed residential floor area per year, 1949–1979. *Sources* Drawn by author based on data from BMBS (2001) and BMBS (2002–2006)

2.4 Urban Development Under the Market Economy (1979–2005)

2.4.1 The New Master Plans and the Opening of the Urban Land Market

Since 1979, when the Chinese government embarked on a "reform and opening-up"[10] policy aimed at shifting the planned economy to a market economy, Beijing has entered a period of rapid urban development. In 1981, Beijing's municipal government began to produce a new plan for the city: The Plan of Urban Construction of Beijing (see Fig. 2.25). It was approved by the State Council of China in 1983. The most significant difference between this master plan and those produced in the 1950s is that the 1981 plan no longer emphasized that Beijing must be an industrial production base. In this plan, the city was identified as a political centre as well as a cultural one. In 1991, the municipal government, based on the 1981 plan, produced a new plan for the city: The Master Plan of Beijing (1991–2010). It was approved by the State Council of China in 1993. This plan set a new goal: to rebuild Beijing as a modern international city. It placed great emphasis on the development of high-tech and tertiary industries in the city, and promoted a trend toward suburbanization to fulfil the decentralization of the population (Lu

[10]Reforms and opening-up: In December 1978, the Third Plenary Session of the 11th Central Committee of the Communist Party of China decided to shift the focus of the Party's work to economic development and set a policy of reform and opening-up to the outside world. It is a historic landmark in China's modern history. Since then China has gradually transformed from a planed economy to a market economy.

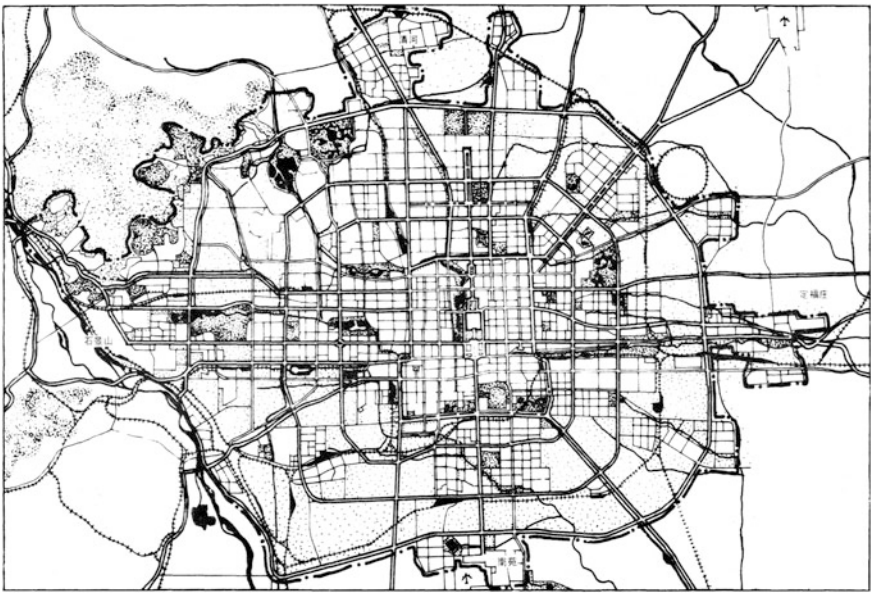

Fig. 2.25 The Plan of Urban Construction of Beijing in 1982. *Source* EBHUCB (1986: 57)

2005). These two plans were both produced against the background of China's transformation from a planned to a market economy. They both stressed that any master plan of the city had to be implemented within market economy rules.

From 1992, the opening of urban land market has produced a profound impact on the formulation and implementation of these new master plans for Beijing. During the period of the planned economy, China established state-ownership of land: the state was the sole authority which could assign the right to use land with no charge and no time limit. The right to use land could not be transferred from one land-user to another. In other words, there was no land market in China at that time. During the same period, as mentioned before, China implemented a policy of "converting the consumptive city into the industrial city" over a substantial period of time. In comparison with cities in developed countries, Chinese cities tended to emphasize primary and secondary industries and to neglect tertiary industries (Jiang 2001: 256). As a result, in most cities in China, industrial land-use usually occupied a higher proportion of land than commercial land-use for the business and service industries. This was also the case with Beijing.

In 1992, regulations for urban land-use with compensation were established in China. These separated the right to use land from the ownership of land, and permitted the transference of land-use rights with compensation. Since that time, the urban land market has gradually come into being and land prices have begun to play an important role in urban development. During the twenty-first century, the global economy, which caused a transformation of industries in many countries, has influenced China's economy as well (Zhou and Ma 2000). Service industries have

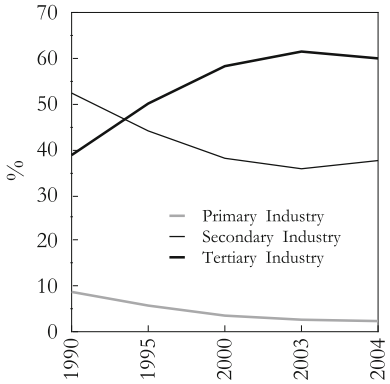

Fig. 2.26 The proportion of total output of industries of Beijing, 1990–2004. *Source* Drawn by author based on data from BMBS (2001, 2002–2006)

risen quickly and begun to thrive, and the urban industrial structure of Beijing has gradually evolved from one mainly made up of heavy industries to one that is centred on tertiary industry. According to government statistics [BMBS 2004], by 2003 the tertiary industries had become the pillar industries of the city, with a total output which accounted for 62 % of Beijing's gross domestic product (Fig. 2.26). This adjustment of its urban industrial structure has, in consequence, necessitated adjustments to the master plan of the city.

The increasing mobility of global capital has increased competition between cities to attract investment. Since the beginning of this new century, and with this aim in mind, Beijing has been building several large-scale urban development projects in the suburbs, such as that based in the Central Business District in the eastern part of the city, the Zhongguancun High-tech Research and Service Centre in the northwest of the city, and the Olympic Sport Centre in the north of the city. In 2005, in order to respond to the new situation, Beijing produced yet another plan for the city: The Master Plan of Beijing (2004–2020). This plan emphasized the need to develop sub-centres, and proposed a "polycentric" structure for the city. As for the nature of this "polycentric" structure, and more especially, whether it will play a role in the protection of Beijing's Old City, a further analysis will be given in Chap. 5.

2.4.2 The Large-Scale Redevelopment of Beijing's Old City

Since living conditions in the courtyard houses in the old city proper had by then become very poor, in 1990 Beijing's municipal government made the decision to accelerate the redevelopment of the Old City. This was the beginning of the "Old and Dilapidated Housing Redevelopment Project" (ODHRP). Most of the activities undertaken by the ODHRP involved levelling existing structures and rebuilding

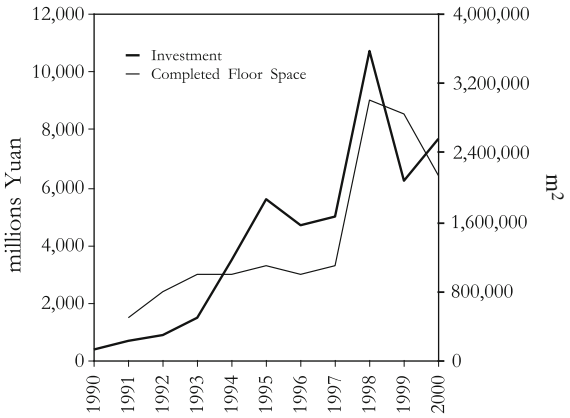

Fig. 2.27 Investment quantities and completed floor space in the redevelopment of Beijing's Old City, 1990–2000. *Source* Drawn by author based on data from BMBS (2001)

them. Meanwhile, in an attempt to transform the urban industrial structure, various government policies aimed to encourage and support tertiary industries. This has transformed the old city proper of Beijing into a hotbed of real estate development. Thus investment in the urban redevelopment of the old city proper, and the amount of floor space completed, have both increased significantly during the 1990s (see Fig. 2.27).

Economic competition in turn caused competition for urban land resources: and so factories previously situated in the old city proper had to move to suburban areas, and the more expensive central areas are now reserved for business and the service industry. In contrast with the situation during the period of the planned economy, yet more courtyard houses were dismantled and more new buildings were built. Until 1949, dwelling houses in Beijing were composed mostly of courtyard houses with a total floor area of over 11 million m^2 (Ping 1999). However, during the period between 1949 and 1999, about 12 million m^2 of the "old and dilapidated houses" (ODH) in the old city proper were dismantled. These included courtyard houses built before 1949 and houses built after that year but which had now became dilapidated, such as the "dime houses" mentioned above. Meanwhile, about 30 million m^2 of new houses were constructed. Of all the old houses which have now been dismantled, 75 % were demolished between 1979 and 1999. On the other hand, 60 % of the new houses were also constructed during this 20-year period (Table 2.2).

As to whether or not the traditional residential districts of the old city proper should be included within the region of protection, Beijing has experienced a tortuous process. In 1961, the Chinese government issued a list of the first batch of "Historic Sites to be Protected" (HSP). Up to 2001, altogether 231 historic sites in Beijing's Old City were identified as falling within this category. The total area of these historic sites and their surrounding settings amounted to 15.52 km^2, approximately 25 % of the whole of the old city proper. Besides these historic sites,

Table 2.2 The old houses that were dismantled and the new houses that were built in Beijing's Old City during 1949–1999

Time	Old houses dismantled (m^2)	Average dismantled per year (m^2)	%	New buildings built (m^2)	Average built per year (m^2)	%
1949–1979	3,000,000	100,000	25	12,000,000	400,000	40
1980–1999	9,000,000	450,000	75	18,000,000	900,000	60
Total	12,000,000		100	30,000,000		100

Source Made by author based on data from Ping (1999)

however, there were also large traditional residential districts within the old city proper: but since these were not considered as falling within the protection target, they were therefore demolished in great numbers during the ODHRP of the 1990s.

In fact, Beijing's municipal government had originally listed 25 traditional residential districts in the old city proper as "Historic and Cultural Conservation Districts" (HCCD) back in 1990: but unfortunately, these districts were earmarked only on paper. Most of them were still not given any clear conservation range or detailed planning, even as late as the year 2000 (Li 1999). After Niujie, which was one of the HCCD, had been totally dismantled and redeveloped in 1999, the municipal government re-divided the remaining 24 HCCD into 25 new ones in November 2000, and determined the ranges of their core conservation districts, which together account for 17 % of the total area of the Old City, and their surrounding areas, where construction is under control. But, in December of the same year, the municipal government made a plan to finish the ODHRP in five years. That means the residential buildings classified as ODH with a combined floor space of 9.34 million m^2, located at 164 separate blocks, were to be torn down and "redeveloped".

In September 2002, the *Conservation Plan of 25 "Historic and Cultural Conservation Districts" in Beijing's Old City* was finally promulgated by the municipal government of Beijing; and in 2003, Beijing settled on a second batch of HCCD with 15 more districts, among which 5 were located in the old city proper. Thus, the total conservation range of the HCCD in Beijing's Old City now covered 1287 hectares, and accounted for about 22 % of the total area of the old city proper.

Is 22 % enough? Fireworks started to explode in the realm of architecture and urban planning (Zhou 2000; Tao 2004). However, while the arguments were still going on, redevelopment of the traditional residential districts accelerated, and the courtyard houses which had not been included in the range HCCD, were dismantled even more swiftly in the new century than they had been before. In fact in 2001, the area of old houses which had been dismantled amounted to more than 1.8 million m^2: an unprecedented record. The areas of 2002 and 2003 had been 1.6 and 1.3 million m^2, respectively (Wei 2005). Although that figure dropped to 0.5 million m^2 in 2004, this was still larger than the average figure during the years 1980 to 1999 (see Table 2.2). By 2004, according to studies made by Tsinghua University (Wei

2005), the districts with traditional courtyard houses occupied 12.4 km^2 within Beijing's old city proper, thus accounting for 19.2 % of its total land. The districts with modern buildings occupied 24.2 km^2, accounting for 38.7 % of the total land, and the districts which contained courtyard houses mixed in with modern buildings occupied 10.5 m^2, accounting for 16.7 %. The remainder constituted areas for roads and green space. Thus it can be seen that, in contrast with the situation in 1949, when 86 % of the buildings in Beijing's old city proper were one-storey buildings (Ping 1999), multi-storey or high-rise buildings have now become the main component of the old city proper. A further analysis of the protection of Beijing's e courtyard houses and its Old City will be given in Part II.

2.4.3 The Rapid Housing Progress

As China's economic reform process developed and its economy underwent rapid growth, reform of its urban housing system began in earnest. This aimed to transform the "Welfare-oriented Housing System" (WPS) into a housing market system, i.e. the commercialization of urban housing. People who became rich began to buy their own residences in the housing market rather than obtain them through the WPS. This process of reform has been gradual and has been conducted over a fairly long period of time. Not until 1998 did China completely abolish the WPS, which had existed for about 50 years—in fact, ever since the founding of the People's Republic of China. This was a historic landmark in China's urban housing reform.

This rapid development of urban housing owes its existence to the growth of the real estate industry. Not until 1980 did the first real estate company appear in Beijing, and even by 1985 real estate companies numbered only 62, all of whom were state-owned enterprises. By 1995, however, this number had expanded to 623, and the ownership of these companies varied from state-owned to private-owned, to Sino-foreign joint- and exclusively foreign-owned (Tan 2002). By the end of 2002, it had rocketed to 3482 (BMCC 2003: 72). This rapid housing development was also reflected in the increase of living space per capita. As mentioned above, in 1960, under the WPS, the amount of living space per capita in Beijing had dropped to 3.24 m^2. In 1980, however, the living space per capita of the city reached 4.8 m^2. This was the first time that this indicator, having diminished for many years during the period of planned economy, exceeded that of the 1950s (Tan 2002). Thereafter, urban housing stock in Beijing grew in leaps and bounds, until in 2000, living space per capita in Beijing had reached 16.8 m^2. In 2004, it had risen to 19.1 m^2 (BMBS 2001, 2005).

Along with this rapid housing development, the scale of residential districts increased greatly and the city began to witness a process of fast residential suburbanization. An example is Fangzhuang, a residential district which began to be built in the southern suburbs of Beijing during the 1980s. Fangzhuang occupied a land area of 150 hectares and had a housing floor area of nearly 1.7 million m^2. It accommodated 82 thousand residents, and resembled a "small town". This pattern has become increasingly common since the mid 1990s. Residential districts, such as

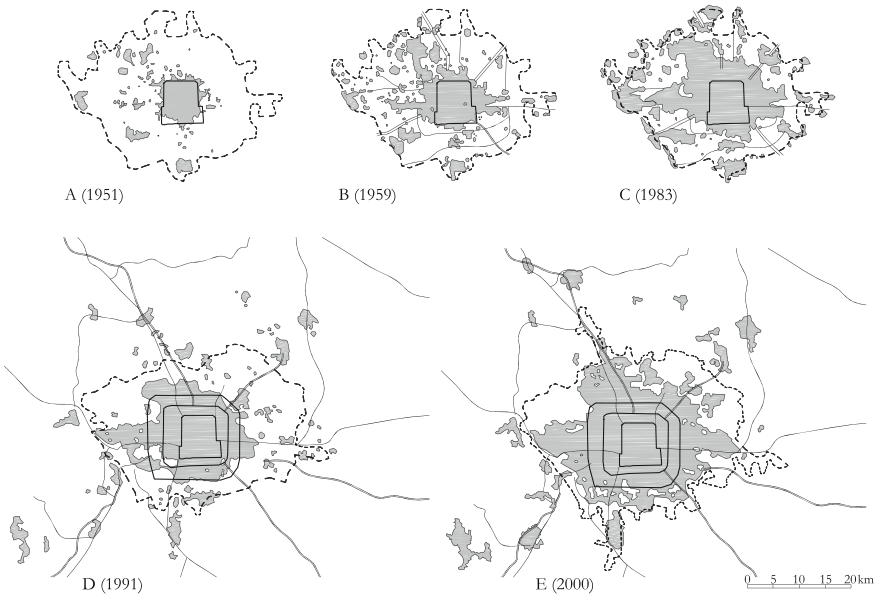

Fig. 2.28 Urban expansion of Beijing since the 1950s. *Source* Wang (2003: 30–31)

Wangjing, Huilongguan and Tiantongyuan, located in the north-eastern, north-western and northern suburbs of the city respectively, are huge in size, with a floor area of several million square metres and over one hundred thousand residents. Meanwhile, the built-up area of the city has spread rapidly outward, and has grown from 339 km^2 in 1979 to 490 km^2 in 1999, reaching an area of 604 km^2 in 2004 (BMBS 2001, 2002–2006) (see Fig. 2.28). Correspondingly, the completed residential floor space in the suburbs of the city between 1979 and 2004 has also increased significantly (Fig. 2.29), and Beijing has taken on many characteristics of residential suburbanization.

Although the figure above shows that Beijing has experienced rapid housing development during the past two decades, this does not mean that the living conditions of all the residents of the city have improved equally as a result. In contrast, housing reform promoted both the improvement of living conditions and also the diversity of housing estates. Under the "Welfare-oriented Housing System" (WPS) during the period of the planned economy, the construction criterion issued by the government was an imperative requirement for housing design and construction; no models which lay outside that criterion were allowed (Tan 2002). However, with the coming of urban housing reform and the opening-up of the property market, housing in Beijing ceased to follow a unified model any more. Differences in income between rich and poor have led to differences in the affordability of housing, which in turn has caused residential segregation in Beijing. This has been apparent since the mid 1990s. While rich people moved into high-grade flats and detached houses, low-income families still lived in the "old and dilapidated"

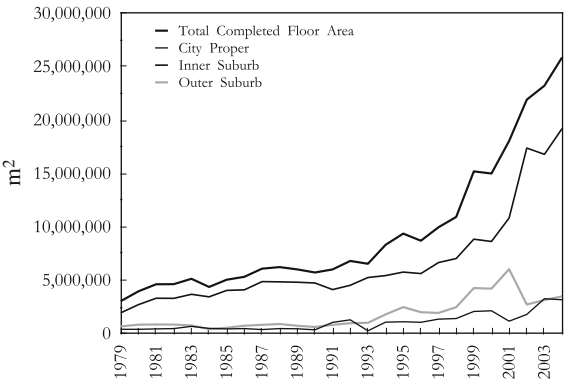

Fig. 2.29 Completed residential floor area per year, 1979–2004. *Sources* Drawn by author based on data from BMBS (2001, 2002–2006)

houses, or were pushed out of their original residential districts into the suburbs, and the migrant workers from the countryside concentrated in the "urban villages" with very poor living conditions. Although Beijing's municipal government has set up an "affordable housing" scheme and a "low-rent housing" scheme, with the purpose of helping low-income families, the trend towards residential segregation has become increasingly visible continued well into the new century. A further analysis of Beijing's trend towards residential segregation will be given in Part III.

2.5 Summary

In Beijing's history of urban development before the twentieth century, Dadu in the Yuan Dynasty produced a profound influence to the city thereafter. It initiated a central axis of the city, a chessboard pattern of the street system and a hierarchical layout of the main buildings within the city. Beijing in the Ming and Qing Dynasties more strongly reinforced the urban structure of Dadu, although some changes took place in the city walls and the gardens in the suburbs.

Beijing has witnessed remarkable changes during the twentieth century, particularly during the second half. *The Outline of City Planning of Beijing*, issued in 1941, was the first modern master plan of the city. Since then, six additional master plans have been produced (Table 2.3). *The Preliminary Plan of Urban Construction of Beijing*, issued in 1958, was perhaps the most influential of these, as it established a mono-centric urban structure for the city. Subsequent plans were all based on this mono-centric structure, which still dominates Beijing's development up to the present day. Urban planning policy during the period of the planned economy advocated "fully using the old city proper" and "giving priority to industrial development". This emphasis stopped with the 1983 master plan, *The Plan of Urban Construction of Beijing*. Then *The Master Plan of Beijing (1991–*

Table 2.3 The master plans produced for Beijing

Socioeconomic background	Issued in	Title of the plan	Focus
Period of Japanese occupation	1941	The Outline of City Planning of Beijing	New town for Japanese residents
Civil war after Japanese surrender	1946	The City Planning of Beiping	Improvement of the infrastructure
Early stage of the People's Republic of China	1953	The Draft Plan of Redeveloping and Expanding the City of Beijing	"Fully using and developing the Old City"
Period of the "Great Leap Forward"	1958	The Preliminary Plan of Urban Construction of Beijing	"Giving priority to industrial development"
Early period of the "Reform and Opening Up"	1983	The Plan of Urban construction of Beijing	Identified Beijing as a political and cultural centre, no industrial centre any more
Further reforms, market economy	1993	The Master Plan of Beijing (1991–2010)	Advocated a development of tertiary industry
Under the influence of global economy	2005	The Master Plan of Beijing (2004–2020)	Proposed a "poly-centric" structure for the city

Source Made by author

2010), issued in 1993, shifted the emphasis yet again by its advocacy of the development of tertiary industry.

During the twentieth century, the old city proper of Beijing has experienced various cycles of decline and redevelopments: and as has been discussed in this chapter, many courtyard houses have been demolished. Both the 1983 and the 1993 master plans targeted the protection of the Old City, and in particular, the "Old and Dilapidated Housing Redevelopment Project" (ODHRP), initiated in the 1990s, aimed to stop the decline of Beijing's traditional residential districts. However, because the old city proper remained a hot spot for real estate development, these policies seemed weak in the face of the redevelopment, and were evidently ineffective. Consequently, the old city proper has been seriously destroyed. Although more and more experts have appealed that the redevelopment of the traditional residential districts must be slowed down, there is no sign that this is actually happening. The questions to be asked are these: why did this urban redevelopment has such a destructive effect on Beijing's Old City, what is the underlying driving force of the redevelopments projects, and what is the fundamental solution to protect the traditional courtyard houses and the Old City itself? In 2005, a "poly-centric" structure was proposed in *The Master Plan of Beijing (2004–2020)*. This scheme, however, will be even less effective in protecting the Old City, as my analysis will show in Part II (Chaps. 4 and 5).

The city's progress in housing development during the twentieth century found expression chiefly in the improvement of living space per capita after China entered the market economy. During the period of the planned economy, urban housing development was restricted by the "Welfare-oriented Housing System" (WHS), and housing and its construction were far from meeting the demands of the residents. As has been shown in this chapter, living space per capita increased to 4.8 m^2 only in 1980, the first time that this indicator had exceeded that of the 1950s. Yet by 2004, living space had quadrupled to 19.1 m^2 per person. This rapid progress in urban housing, however, does not mean that living conditions have improved equally for all the residents of the city. Since the mid 1990s, Beijing's housing has been characterized by the new phenomenon of residential segregation. In Part III (Chaps. 6–8), I shall further discuss this transformation of Beijing's residential structure from a homogeneous type under the planned economy to a segregated type under the market economy. I shall analyze the reason for the residential segregation, and will suggest solutions for improving Beijing's housing security system.

Before moving on to Parts II and III, I shall also review the relevant literature on urban structure and the relevant studies on Beijing.

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