Chapter Three

Beijing: an Imperial Ideal City

History

The foundation of the present city was laid over seven hundred years. The earliest predecessor of Beijing was the primitive town of Ji, capital of Yan in the 11th century. Its location is now the northwest corner of the present Outer City. In 936, it was captured by the Liao (907-1125), who made it the secondary capital and renamed it Nanjing. After 1125, the Jin emperors made it their residence and enlarged the city, which they called Zhongdu, toward the east. Extensive rebuilding was carried out under the Jin, and grand palaces were erected. (Figure 3.3)

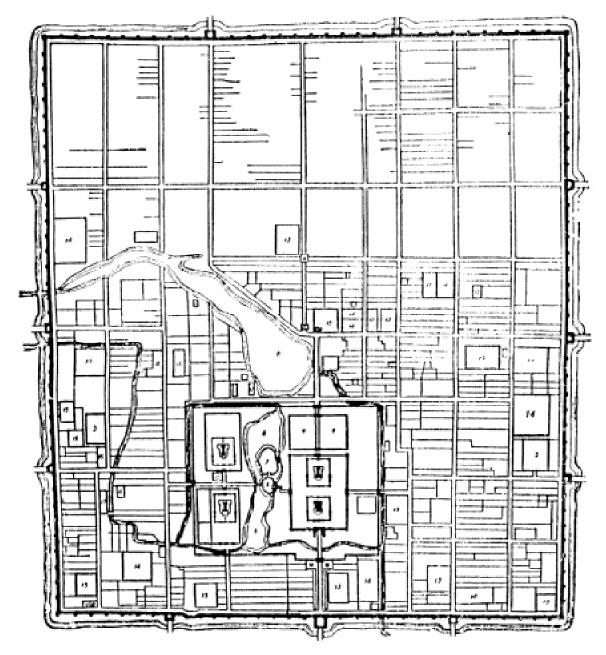
The Mongols conquered the city in 1215 and burned the palaces. In 1264, a new capital city was rebuilt by the Mongols called Dadu (The Great Capital). The scheme of the new city plan was very close to the ancient rules set forth by the Chinese philosophers. It was rectangular in shape, with two gates to the north and three gates on each of the other three sides. Broad, straight roads ran between opposite pairs of gates, and the principal streets formed a chessboard design. Two important groups of buildings outside the imperial city were built according to philosopher's plan: the temple of Ancestor inside the south gate of the east wall, and the Altar of earth and Grain inside the south gate of the west wall (Figure 3.1).

The Ming Dynasty founded in 1368 had its first capital at present-day Nanjing. In 1421, the Ming emperor moved to Beijing. New palaces were built on the site of the old palace of Dad. The palace walls were moved slightly to the south, forming the Forbidden City enclosed by the walls which remain today (Figure 3.2). The earlier foreshortening of the northern walls to exclude vast open space was followed between 1420 and 1421 by moving the original Dadu southern wall nearly a kilometer farther south giving the city nearly 24 kilometers of ringing walls. This was done in order to make room for a host of new administrative offices and bureaus called *yamen* that were built just outside the southern gate of the Imperial City. Moving the southern wall also led to a repositioning of the Imperial City and the Palace City, placing them at a more central and concentric position relative to the outer walls. A new palace as well as the Drum and Bell Towers were being built in 1420, the Forbidden City itself was shifted somewhat to the east of

the axis of Yuan Dadu in order to affirm a new north/south axis. In addition, a magnificent complex gate structure was constructed at the main southern entrance to the Ming capital and called Zheng-Yang Men.

In the mid-sixteen century, a major effort was undertaken to expand further the area of the capital in order to protect the thriving commercial area that was developing outside the southern wall of Beijing and to increase security against Mongol horsemen who continued to harass the new rulers. (Knapp) In front of the Forbidden City, a new Temple of Ancestor and Altar of Earth and Grain were built inside the south gate of the east and west palace walls respectively, the temple and altar were closer to the imperial palaces than they were in Dadu, yet they were located in the traditional positions. In addition, two important building groups were erected south of the city: the Temple of Heaven on the east and the Altar of Agriculture on the west. In 1553 a new city wall was added to enclose the southern suburbs which were called the "Outer City". The old city was from then on known as the "Inner City".

Throughout the 16th and 17th centuries, the vibrancy of Ming power withered as social unrest and peasant rebellions increased across the land and the military power of non-Chinese "barbarians" grew apace along its northern borders. In late spring 1644, the Manchu (the non-Chinese barbarian) leader occupied Beijing, the last Ming emperor committed suicide by hanging, and the Manchu dominated Qing dynasty was established. Beijing, the imperial capital and the grand Ming walled city passed to the new rulers without any of the destruction that had accompanied the dynastic transitions in the past. However, the new Manchu rulers banished the Han Chinese from the Inner City that surrounded the imperial precincts forcing them into the rectangular Outer City to its south. Eight Manchu military groups called banners were stationed with their families in the area around the Imperial City that had been evacuated by the Han Chinese residents. (Knapp) After this action, the Inner City was called the "Manchu City or Tartar City", the Outer City was called the "Chinese City". The historical development of old Beijing was thus completed. From 1644 to 1949, the plan of the old capital remained eventually unchanged (Figure 3.2).



Sketch map of capital Dadu of Yuan Dynasty (1279-1368).

1. Imperial Palace; 2. Imperial Ancestral Temple;
4. Lake; 5. Qionghua Islet; 6. Imperial Garden; 7. Bell Tower; 8. Drum Tower.

Figure 3.1 Plan of Dadu in Yuan Dynasty (from Building in China, Feb,1984, p2.)

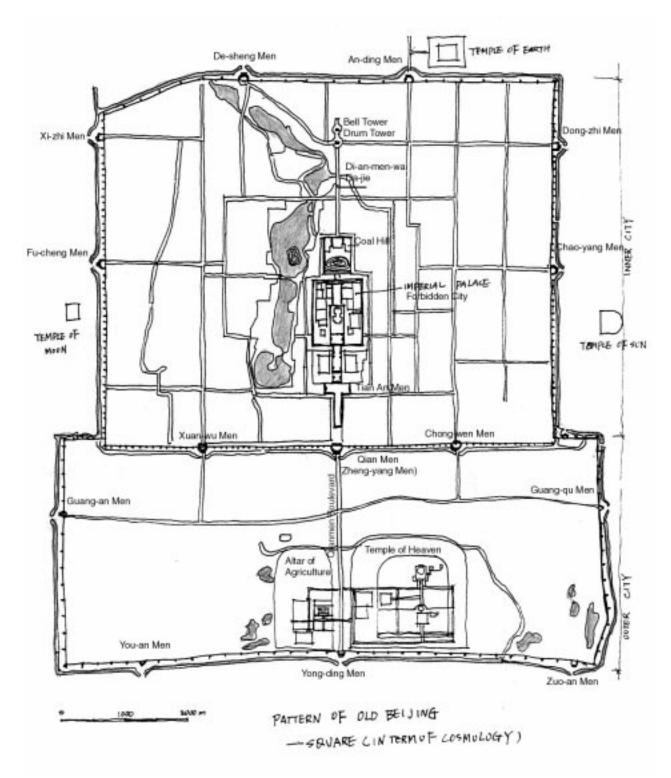


Figure 3.2 Plan of Beijing in Ming and Qing Dynasty (Redrawn from Building in China, Feb, 1984, p.3)

Beijing is a collective achievement, whose unity is due to the tradition on which its plan was based and to a view of the monumental whole rather than a few major

edifices. Figure 3.3 shows the successive locations of the Liao, Jin and Yuan capitals at Beijing. Every emperor wanted his own capital, so the capital moved often. It was easy to rebuild the city, copying what was already there, either on the accession of a new dynasty or for demographic reasons. Beijing is a classic example of the re-utilization of a site and the remodeling of an administrative city in the course of centuries.

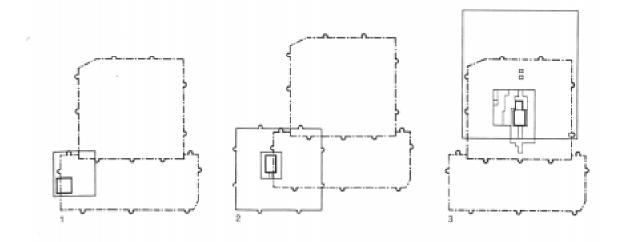


Figure 3.3 Locations of the Liao, Jin and Yuan Capitals Dotted Line: Beijing of Ming and Qing. Heavy Line: palace sites

- 1. The Liao capital Yan Jing
- 2. The Jin capital Zhong
- 3. The Yuan capital Dadu

Analysis of Physical Elements

The literature review reveals that certain physical elements defined the order of the ideal city space at Beijing. They were: the city boundary, the important institutions, the spatial organization, the circulation and the relationship between the city plan and dwelling unit. This section will focus on the analysis of these physical elements and examine how these elements expressed the supreme power of emperor. Figure 3.3 – The Plan of Ming and Qing Dynasty will be used as the basic map of the city.

City Boundary - Walls

Beijing is a walled city. The word for "city" in Chinese "Cheng" is also the word for "wall". The essence of what makes a Chinese city. "Wall" is contained in that shared definition. Walls delineated the boundary of the city, the boundary of the Imperial City, and the boundary of Forbidden City. Beijing is composed of these three square walled

enclosures. Like many city walls in western cities, walls in China were built essentially to protect palaces, residences and the city against barbarian invasion. Towers were always erected at corners and over gates. They are typically the most striking feature of the city's architecture (Figure 3.4), and served as living quarters for the soldiers on duty at the gates and as posts for archers in the time of siege. (Compare Figure 3.2 with Figure 2.2, 2.3), A moat surrounded the city wall, like that in Andrea's Christianapolis, But what is the meaning of these walls at Beijing?



Figure 3.4 Tower at the Corner of the City Wall (from Morrison, 1985, p.21)

To understand the meaning of walls, we need to review the philosophical basis of ancient Chinese space. The Chinese philosopher Lao Tzu used the relative perceptions of the concepts of "something" and "nothing" to explain ancient Chinese space. He said: "Though clay may be molded into a vase, the essence of the vase is in the emptiness within it." In empty, undefined space, if one draws a circle, the space within the circle is

set apart from empty space and a converging space is created. This space becomes "something", separate from the surrounding nothingness. In order to be something, there must be a boundary which will form an entity, a substance that functions as the borderline of a figure. (Figure 3.5)

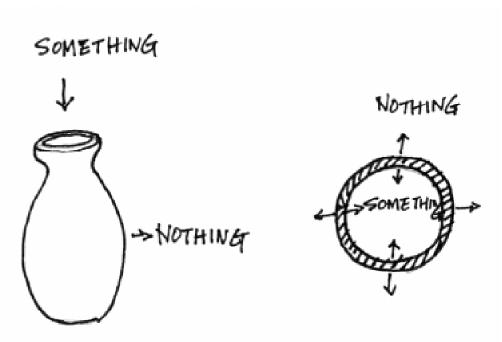


Figure 3.5 Something and Nothing

The vase here cannot be compared with one building, Lao Tzu used one vase, to explain the function of "boundary". If several buildings form a circle, the space inside the circle is "something" and the space outside the circle is nothing. The buildings become the boundary. Normally, a city is formed by many single buildings, so one building is the "prototype" (or minimum unit) of the city. But from Lao Tzu's idea, the minimum unit in Chinese cities is not one building, but the "boundary prototype", which include the buildings and the space they enclose.

The "boundary prototype" emphasizes the continuity and entity of boundary. Since "wall" has both of these characters, it was used widely in the planning of Chinese cities. Thick, solid walls formed the boundary of courtyards, of palaces, of cities, even of the nation (the Great Wall). Chinese city space throughout history reflects this "boundary prototype": in the plan of *Ming Tang* (Figure 2.4), only two boundaries which were formed by walls defined the space; in the plan of *Wang Cheng* (Figure 3.6), the place

within the city walls, boundary within boundary, is the origin of the plan of Beijing, we can get the diagram of Ming Tang from this plan (Figure 3.7) (Zhu, 1993). And the square "boundary prototype" and spatial arrangement of the city are also consistent with the ancient Chinese cosmology "heaven is round and earth is square."

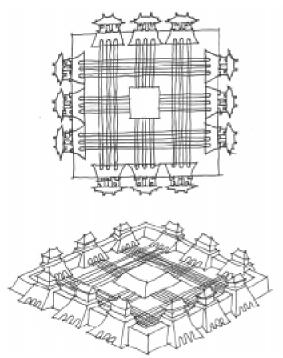


Figure 3.6 Plan and Perspective of Ming Tang (redrawn from He, 1986)

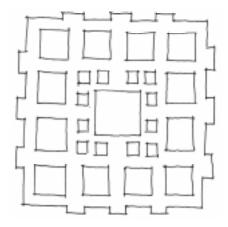


Figure 3.7 Diagram of Ming Tang (redrawn from Zhu, 1993, p.136)

The minimum unit of the Chinese city is not the building, but the "boundary prototype". One building can not exist by itself, it always exists with the space it encloses. Together, they are the "boundary prototype". In this system, one building is not

emphasized. Therefore, if a wall of a building is part of the outside edge of the unit boundary, this wall is thick and solid. (Zhu, 1993) (Figure 3.8). This type of wall defines boundaries in the ancient Chinese ideal city plan, these walls defined "something" from "nothing". The original plan of the city has a heavy boundary, the nation has the Great Wall as its boundary, and the traditional courtyard house (*Siheyuan*) also has a wall as a boundary (Figure 3.9). These walls at different scales formed a hierarchy of boundaries (walls) with similar meanings: Defense was the essential function of these walls; moreover, the walls were related with the Chinese cosmology as we discussed in the last section. The walls of the city, of the Imperial City, of the Forbidden City are all this type of wall. They are boundaries of space. If the wall of building is not the boundary, the wall is temporary and thin. Most building walls are these thin walls with large doors and windows. The other symbolic meaning of the space of the building is the transition between man and nature. Instead of constructing a heavy wall to cut off the relationship with nature, ancient Chinese people would rather create a fluid space by using light material such as wood. The post-and-beam structure provided the possibility of this idea.

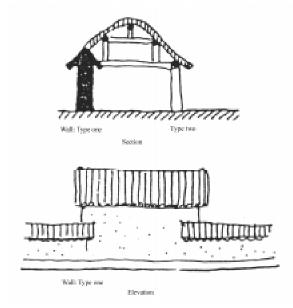


Figure 3.8 Two types of walls (redrawn from Zhu, 1993, p.124)

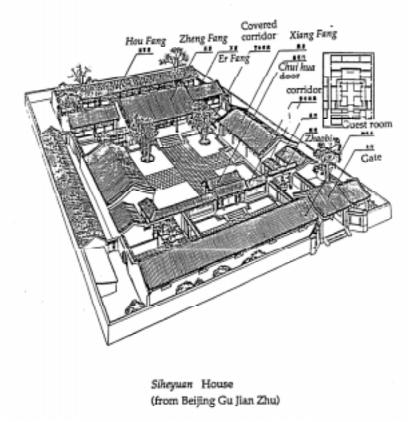


Figure 3.9 Perspective of the Courtyard House

Beijing is a city of walled enclosures within walled enclosure. Walls in Beijing have both functional and symbolic meanings. They protected against barbarian attacks and any other disorder that might threaten the harmonious organization of the city. The walls also reflected the Chinese cosmology and symbolized the supreme power of the emperor.

The Most Important Institutions – the Forbidden City

As the imperial ideal city, every aspect of the built environment in Beijing reflected the supreme power of the Son of Heaven – the emperor. Therefore the most important institutions – the Imperial Palace is on the center of Beijing and middle of the five-mile north-south axis in the city (Figure 3.2). This spatial hierarchy clearly represented the center of the emperor's power.

The imperial palace or Forbidden City is almost a square enclosure measuring a little over 1 kilometer from north to south and 786 meters from east to west. It is surrounded by a broad moat and a wall over 7 meters high. It is called by the Chinese *Zi-jin Cheng* (Purple Forbidden City). The name is derived from a literary allusion to the

Polar star. The Imperial Palace is considered the center around which the whole terrestrial world gravitates, just as the Polar star is the center of celestial world. The name of an ancient Polar star is, in Chinese, *Zi-wei Xing*, and several of the old palaces built by emperors of Qing dynasty, were aligned in accordance with the Polar star and the adjoining constellations. (Siren, 1976)

The outer walls of the Forbidden City are pierced by four gates (Figure 3.10). The two principal gates (Wu Men and Shen-wu Men) are in the center of the south wall and north wall respectively, placing the two ends of the entire palace on the main axis. The gate of the east (Dong-hua Men) and west (Xi-hua Men) walls are placed near the southern corners in order to have easily access to the official and ceremonial quarters of the palaces, which they all situated at the southern part. The orientation of the Purple Forbidden City, like all important buildings in Beijing, is directly north-south; with the principal façades facing south. Along the north-south direction, the plan is divided into two sections: the Outer Court (Wai Chao) in the south, the Inner Court (Nei Ting) in the north. The Outer Court is the ceremonial, administrative and throne room, which includes three Great Halls – Tai-he Dian (Hall of Great Harmony), Zong-he Dian (Hall of Central Harmony), and Bao-he Dian (Hall of Preserving Harmony) in the center, Wu-ying Dian and Wen-hua Dian on the west and east separately. The Inner Court is private living place, which include three Back Halls and an Imperial Garden in the middle, six palaces on the west side and six palaces on the east side. (Figure 3.10)

The three Great Halls formed the procession climax. They are set on an H-shaped mound built in three tiers. Each hall has its rich balustrade of white marble. The space in which the mound is located is divided into three zones by walls which cut across the mound. "The earth forms, which are basic to the whole design, and the space modulation determined by the planes of walls, each have their own independent but interrelated existence." (Bacon, 1976) The mounds create a high level space, and intensified the sensation of sequence, then, achieved the climax of the procession. The Hall of Great Harmony was the site of the New Year's ceremony, the celebration of the winter solstice, the emperor's birthday, and the announcement of successful candidates in the imperial examinations. It was the most important building in the palace. Its size and mass are not

much greater than other buildings on the axis, but the ancient designers used the central movement system along the axis to create the climax and reflect the imperial power.

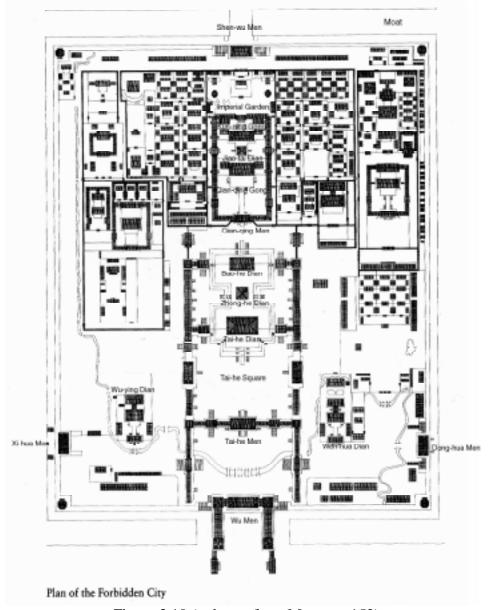


Figure 3.10 (redrawn from Moore, p.152)

Spatial Organization – Axial Alignment and Nesting of Boundary

The "boundary prototype" is the basic structure to define the space at Beijing.

Each boundary forms an enclosure. One spatial characteristic of Beijing is the nesting of enclosures, one enclosure within the other. The second distinguishing spatial characteristic of Beijing is the north-south axial alignment of a series of gateways, the

courtyard, the palace, and the pavilions (Figure 3.11), This axis connects the nesting of enclosures of the boundary prototypes.

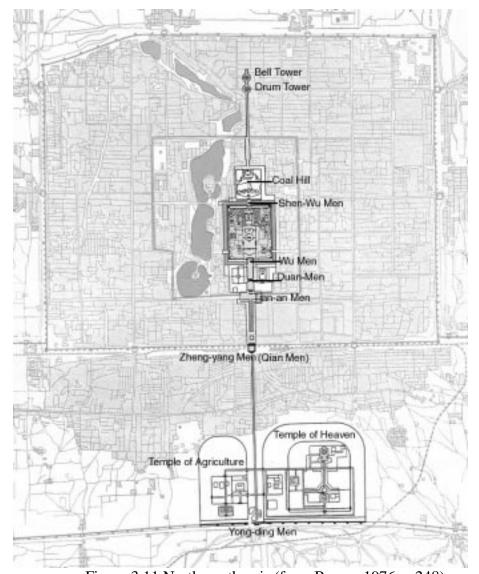


Figure 3.11 North-south axis (from Bacon, 1976, p.248)

The north-south axis of the city starts from the southern central gate of the Chinese City – Yong-ding Men. It opens upon the Qianmen Boulevard along the north. At this point, The Temple of Agriculture is on the west, the Temple of Heaven is on the east. Beyond the Outer City are the black roofed residences for the Chinese. "These prepare the eye for the fresh experience," of the next enclosure (Bacon, 1976), beyond a magnificent complex gate structure – Zheng-yang Men. The buildings in the Manchu City have brilliant purple tile roofs and red doors with golden decoration. Outside the monumental gate is a T-shaped walled imperial way and then an elongated open space

that eventually reached the gate of the Imperial City – Tian-an Men. Across two small courtyards and Duan-men, is the gate of the Forbidden City – Wu-men, a huge U-shaped building at the end of a long, narrow, rectangular enclosed space. Across the moat and beyond the walls, is the Outer Court, three Great Halls with brilliant golden roofs intensify the power of the architecture. The three courtyards between the buildings and walls intensify the rhythm of open space. The Tai-he Dian (Hall of Great Harmony) is at the northern center of the greatest courtyard of Forbidden City – Tai-he Square. (Figure 3.10) It "climaxes the progression of rectangular enclosures, of varying scales and proportions" (Moore, Mitchell, and Turnbull, 1988). The progression moves across the three private halls in the Inner Court and an imperial garden, the moat and the northern gate of Forbidden City, and up to the highest point of Beijing – Coal Hill. A street runs from the foot of Coal Hill north to the Drum Tower. Just beyond the Drum Tower, the Bell Tower terminates the north-south axis of the city.

There is a clear rhythmic modulation of space along this 5 mile north-south axis, with a systematic intensification of the rhythm as the climax is achieved at the Forbidden City.

Circulation System

The circulation system of imperial Beijing was laid out like a chessboard. The street network, which passed through the wall gates, linked the Forbidden City and the Imperial City with all parts of the city. But the Forbidden City and Imperial City became the enclosed and secluded compound at the center of Beijing, and they blocked traffic from all directions and created congestion.

Within the walls of Inner City, straight broad avenues crossed the city and connected more than twenty gates. But, since Chinese planners emphasized the north-south axis, and all important buildings orientated north-south, few broad avenues connected from the west to east except the road from Guan-an Men to Guang-qu Men in the Outer City. (Figure 3.2) East-west circulation was very difficult. Beijing did not have a center with radiating roads that facilitated traffic in all directions, the Forbidden City and Imperial City, blocked traffic and created congestion. The city walls and the limited numbers of gates made the situation even worse.

But why was the circulation system of capital design this way? First, the urban layout was based on military considerations. The seat of the imperial government, at the center of the city, surrounded by layers of walls, was safe from enemy attack. Moreover, in traditional Beijing, the residents were separated ethnically during the Qing Dynasty – the Manchu and Han Chinese lived in the Inner City and the Outer City respectively. They rarely left their neighborhoods. Consequently, there was little demand for an intracity network of streets. Most important, the urban spatial hierarchy represented the power of the imperial order. The early planners must have known that the Forbidden City and Imperial City would be the physical impediments to traffic and mobility, but to demonstrate supreme imperial power, the citizens' interests were sacrificed, the city residents were considered only as subjects.

The street hierarchy also reflected the traditional social hierarchy. The broad main streets accommodated people and goods moving in and out of city. Thronged with traffic and commerce, they were usually lined with elaborately painted and carved shops, temples and memorial arches. (Figure 3.12)(Shi, 1998) Behind these broad streets were networks of smaller lanes and alleyways which provided spaces for walking, and the community activities of those residents living in the traditional single-story courtyard residences. (Figure 3.13)



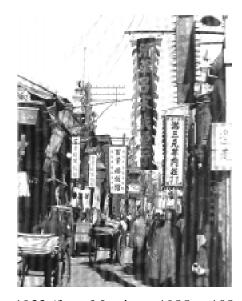


Figure 3.12 Commercial Street c1933 (from Morrison, 1985, p.108, p.109)





Figure 3.13 Residential Lane (today), *Hutong* (from Xu, 1990)

The paving of the city streets also reflected the city's social heirarchy. The numerous courtyards and pathways in the Forbidden City were covered by high-grade stone tiles and custom-made bricks. Granite and marble ramps, which led to all the palaces, were carved in complicated patterns showing mystical dragons and phoenixes. These ramps were reserved for the emperor to walk on exclusively. Special gates and the streets that led out of Forbidden City were also carefully maintained for occasional use by the emperor when he traveled to the ceremonial altars scattered around the city such as the Altar of Heaven and the Altar of Gain and Earth. These streets were also paved by granite and marble and symbolized the supreme power of the son of heaven in the feudal society. In contrast to these well-maintained imperial passages, the majority of the city's streets were unpaved. They were either ankle-deep in mud or dust during the different seasons. The imperial government did attempt to maintain good road conditions, but after the mid-nineteen century, the worsening financial situation forced the Qing court to decrease the number of full-time street workers. The drastic reduction in the workforce contributed to the serious deterioration in road conditions. (Shi, 1998)

In short, the circulation system of Beijing expressed the social hierarchy of imperial society, and reflected the supreme power of emperor.

Relationship between City and Courtyard House

During the Renaissance, Alberti emphasized the intimate relationship between the town plan and the private dwelling, the great house was regarded as a small city. Therefore, the house was the smallest unit of the city. The city is the assemblage of all dwellings. The plan of ideal city – Beijing and Siheyuan (courtyard house) presented a similar relationship. *Siheyuan*, the courtyard house can be regarded as the city's smallest unit and Beijing is a large *Siheyuan* House. (Figure 3.14)

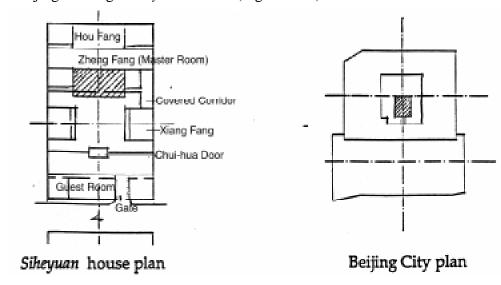


Figure 3.14 Comparison between Courtyard house and the city plan (redrawn from Zhang, 1993)

The plan of *Siheyuan* house and Beijing have four similarities: their layout and spatial organization, their use of a north-south axis, clear boundary, and a legible social structure. 1. Layout and organization: the Outer City resembles a front courtyard of the house, and the Forbidden City (Emperor's palace) resembles the principal room (*Zheng-fang*) of the house, which was use by the master, the most important and respected person in a family. (Figure 3.9) 2. The north-south axis: Both the house and the city have the north-south axis as their main axis, with structures symmetrically situated on each side of the main axis. 3. Clear boundary: Both the city and the house are surrounded by thick and heavy walls. 4. The social structure: The structure of the family is similar to the city's social structure. In a family of feudal era, the eldest person had the great power and

decided everything. In the city, the emperor was the son of heaven and had supreme power. No one could defy the emperor or the family elder. (Zhang, 1993)

Therefore, the City of Beijing can be understood as a magnified courtyard house, symmetrically arranged and surrounded by rectangular high walls.

All the physical elements discussed above formed and ordered space in Beijing. Every aspect of the city's built environment reflected the elaborate system of social hierarchy. Confucianism is the basis of the hierarchical order that structured Chinese society, the ideal city – Beijing was built according to the Confucian classic – Zhou Li as noted in the literature review.

"The Confucian interpretation of the ancient sage kings is that they were so virtuous that Heaven's will and blessing or, in Confucian terminology, the dao (nature of things, law of nature) and de (the expression of dao or its application) shine through them without any activity on their part. ... The period of sage kings ended in the Xia Dynasty (2205-1765BC) with the establishment of hereditary succession. As the divine and potent influence...so Confucian thought believe believes it be characteristic of any truly royal throne, since unworthy occupants of that throne could prevent the virtue of Heaven from reaching the people...If true sincerity could be restored to the state rituals, then the de would shine forth as it did in the days of the sage kings. This view that the sovereign was the mainspring of government and acted as an agent on earth for Heaven (i.e. he was regarded as the Son of Heaven), and that he should position himself like the Polar Star, with other heavenly bodies around him, has espoused a host of ideas which affected both the Chinese world view and the perception and design of Chinese city." (Sit, p.9, 1995)

"The Chinese traditional world view of mutual interaction of the human and natural worlds focus on the behavior of one person, the sovereign, or the son of heaven." (sit,p.11,1995) Such Confucian ideology was behind everything and was symbolically expressed through the design of the ideal capital city – Beijing. Imperial power was evident everywhere: every wall, temple, palace, street and courtyard had its designated place and style in terms of the social hierarchy in Chinese society. Beijing was a carefully developed imperial ideal city.