A city with many faces: urban development in pre-modern China (c. 3000 BC - AD 900)

WANG TAO

Introduction

Urbanism is an important phenomenon in human history. Comparative studies have, however, shown that each city possesses its own characteristics within a particular historical context. The fundamental elements that determine the construction and functions of a city, such as the economic, political, military and religious factors, play different roles in different cases. In other words, each city may potentially be unique.

Modern scholars have now realised that the most appropriate way to approach a city is to approach it in its own cultural tradition. To understand the cultures of different cities and the idea of urbanism and its manifestations in various contexts, we must consider the experiences and feelings of the people who lived in these cities rather than just the half-buried city walls and broken roof tiles. In this chapter I will examine different models and the crucial stages of urbanisation in pre-modern China, mainly from an archaeological perspective, but also in conjunction with some contemporary historical sources. The aim is to reveal a general pattern, if there is one, and the key elements that underlay the development of Chinese cities from 3000 BC to AD 900.

The ideal city and some basic terms: *cheng/yi, du, guo, she, jiao, li/fang, shi*

A good way to detect what people think of their cities is to find out what they call them. The most common word in the Chinese language for city is *cheng*, meaning a walled settlement. The term *yi* is interchangeable with *cheng*, and is older, first appearing in Shang oracle bone inscriptions (*c*. 12th century BC). The idea of the city-wall is poignant one, providing a physical distinction between town and village. Though the wall is not the only important element of a city, it has been widely employed by archaeologists in China as the working criterion by which to identify city remains.

Another important term is *du*, meaning imperial cities, i.e. capitals. The morphology and functions of imperial cities differ considerably from those of ordinary towns and cities. In terms of physical layout, a typical Chinese city was often divided into two parts: the *cheng* inner-city, and the *guo* outer-city; the former was for the king and his officials, while the outer-city was usually occupied by those providing a service, such as soldiers and craftsmen. From a very early time, the residential area in a city was divided into living quarters, called *li* or *fang*. This tradition probably originated from the residential groupings in earlier

Neolithic villages, which later were replaced by the walled enclosures which came to dominate Chinese medieval city landscapes. Religion also played an important role in Chinese cities. *Zong* and *she* were the major religious centres - the former refers to the Ancestral Temple and the latter to the Altar of Earth. The two are essential for any settlement, and are always found together within a city context, patronised directly by the royal courts. In addition, the commercial centre, such as the *shi*-market also played a crucial role in the development of cities, but its function may have varied according to different situations.

Outside the city, the *jiao*-[suburbs] were again divided into many smaller settlements. The majority of agriculturists who worked on the land lived further out in the *ye*-[fields]. These features are important elements in the development of a city, for not only do they sustain the cities with basic supplies, they also mark the contrast, both mentally and physically, between city and rural ways of life. Deep down inside the core of Chinese idea of urbanism, there lies the model of an ideal city. In the *Zhouli*, an ancient document retrieved from the imperial library in the first century BC, we can read the earliest description of the ideal city in which the kings lived: it was square shaped, surrounded by suburbs which were further sub-divided into several zones where people of different professions and status lived. The city had twelve gates, three on each side. The palace was located in the middle, with the Ancestral Temple on the left, the Altar of Earth on the right, and the Market at the back. Within the city, there were nine streets aligned north to south, and another nine aligned east to west. This ideal model of the kings city was not based on an actual city, but was probably derived from ancient cosmology. Nonetheless it contains key elements relating to Chinese urbanism, and its impact on later city planning is apparent (Wright 1977, He Yeju 1982).

Moats to walls: early cities

Artificial ditches or moats appear to have been a prominent feature in a number of early Neolithic settlements from 6000-3500 BC in northern China. The famous Banpo village of the Yangshao culture, excavated in the 1950s, represents the basic form of a Neolithic village in the middle Yellow River valleys (Institute of Archaeology, CA 1963). The residential houses, common halls, animal pens and storage pits are surrounded by a moat 6-8 m wide and 5-6 m deep. The cemetery and kilns are located outside the moat. Another village site of the Yangshao culture, Jiangzhai, excavated in the 1970s, is perhaps the best preserved site (Banpo Museum 1988). It comprises of more than one hundred houses, divided into five groups, occupying nearly 20,000 sq. m. Three ditches dug separately to the north, south and east protect the village, and to the south-west is a river that functioned as a natural defence. Both the Banpo and Jiangzhai sites are C14 dated to 4800-3600 BC. In recent years, settlements with artificial ditches have been found with an even earlier date; for instance, the Xinglongwa site in Inner Mongolia, dated to 6200-5400 BC (Institute of Archaeology, CASS 1985, Ren

Shinan 1994). It has more than 160 house remains, arranged in rows, occupying about 24,000 sq. m. The artificial ditch surrounding the village is 1.5-2 m wide and 570 m long; access was retained on the north-western side. These large moated Neolithic settlements, in particular the Jiangzhai village, revealed an already sophisticated organisation of space, and the moats themselves, built primarily for defensive purposes, led to the construction of fortified walls. (Yan Wenming 1994, Cao Bingwu 1996).

In about 3000 BC, a number of walled settlements, or cities, began to appear on the Chinese landscape. Dozens of city sites have been identified in the Central Plains, in the north and south, and along the east coast,. The most recent discovery is the Xishan site near Zhengzhou (Zhang Yushi & Yang Zhaoqing 1995), covering approx. 100,000 sq. m. The remains of the city wall are about 300 m long, with its base measuring 11 m wide, narrowing to 5-6 m at the top. The corners of the wall are thicker, about 8 m. The remaining wall stands 3 m above ground level. The wall was constructed of rammed-earth (*hantu*) and was built in sections. This construction technique is a distinctive trait for all later architecture in the Central Plains - the power base of Chinese civilisation. The city is round, and outside the wall is a moat 5-7.5 m wide, and 4 m deep. Archaeologists have ascertained that the city was built during the later Yangshao period (c. 5300-4800 bp).

Other important walled settlements of the Central Plains include the Pingliangtai (Henan Provincial Institute of cultural Relics 1983) and Wangchenggang (Henan Provincial Institute of Cultural Relics 1992) sites, dated between 2500-2000 BC. Pingliangtai is a square enclosure measuring c.185 m along each side. The remains of the wall stand 3 m in height, with a base 13 m wide, narrowing to 8-10 m at the top. There are gates in both the southern and northern walls. Excavation has also uncovered the roads and drainage system of the city. The Wangchenggang site is somewhat different. It consists of two separate enclosures. Compared to Pingliangtai, Wangchenggang is smaller, but, significantly, both sites have yielded traces of using bronze and the latter has been associated with the Xia, the first legendary dynasty, and linked archaeologically with the Erlitou culture (An Jinhuai 1985). Along the east coast, the nuclear Longshan culture area, the remains of a number of cities have been reported. Further excavations have also been made at Chengziya which was first excavated in the 1930s (Cao Bingwu 1996, n. 3). In north-east China, in western Liaoning and eastern Inner Mongolia, many stone walled sites were built during the period 2300-1600 BC (Xu Guanji 1986). The evidence indicates that from 3000 BC onwards, in Central and Northern China, a revolutionary transformation was taking place from Neolithic villages to prehistoric cities (Qu Yingjie 1989).

What was the driving force behind such changes? And what were the social conditions like? As K. C. Chang (1986, pp. 286-88) observed, the third/second millennium BC was a period of innovation within the Longshan cultural sphere, which quickly spread.. These developments, in addition to growing cities, included new technology in the ceramics industry and the emergence of a metal industry, public works, and importantly, the emergence in society

of an elite, who controlled ritual practices and the right to interpret them. There was evidence of an institutionalised violence. The economic divisions, the concentration of manpower, and the stratification of the social classes also paved the way for the transition to an urbanised society. The most astonishing new discoveries however have come from the south. In the middle ranges of the Yangzi River, archaeologists have uncovered several large walled settlements dated to c. 2800-2000 BC, including Pengtoushan, Shijiahe, Jimingcheng and Yingxiangcheng (Zhang Xuqiu 1994, Ren Shinan). Shijiahe is the largest site, covering about 1000,000 sq. m, and including a cluster of nearby settlements. Excavation of the site has revealed systematic spatial arrangement. Evidence of the manufacture of many ritual objects indicates that Shijiahe was probably a religious centre. Some evidence of bronze casting has also been found within the city).

Building massive walled cities of the south required a technology quite different from the rammed-earth method commonly used in the north. Analysis of the early section of the remaining wall at Yingxiangcheng shows it is about 40m wide at the base narrowing to 5 m at the top. The wall was constructed not by the rammed- earth method, but by layering different soils on top of one other. Outside the wall was a huge 45 m wide moat, from which had been taken the soil used for building the wall (Okamura Hidenori 1996). Remains of wooden boats have been retrieved from the moats, indicating that the moats were probably used for protecting against floods, or maybe even for fishing. The distinctive morphology and technology of the cities along the Yangzi River suggest that the emergence of urban centres in this region might derive from an independent origin from those of the north, and may have performed different functions.

The city for kings

In China, like many other places, the development of cities is closely associated with the formation of states. The Bronze Age in China started in approximately 2000 BC, which corresponds to the rise of dynastic power in the Chinese historical tradition. At the Erlitou site (c. 1900 BC) in Henan archaeologists have found the most convincing evidence of the use of bronze for making ritual vessels. In Erlitou, more than ten architectural remains have been identified as palaces and temples. Although no city wall has been found so far, many archaeologists believe that Erlitou was probably the old capital of the Xia dynasty, or, as others have suggested, an early city of the Shang people (Yin Weizhang 1986).

In 1983-84, archaeologists excavated a city site at Yanshi in Henan. The enclosure is rectangular; the southern wall is no longer extant and the northern wall is partly damaged, but the western and eastern walls remain, measuring 1710 m, and 1640 m respectively. There were gates on each side and the main street of the city was about 8 m wide.

Scholars believe that the Yanshi site is likely to be Xibo, the capital of the Shang king Tang (Zhao Zhiquan & Xu Diankui 1988).

Another city site discovered in Zhengzhou, Henan is undoubtedly a Shang capital (c. 1600 BC). It is larger than the Yanshi site; with a rammed-earth wall 6960m long. Within the enclosure, architectural remains of palaces have been found, outside of the city are cemeteries, workshops and a number of dwellings (An Jinhuai 1986). Recent excavations at the site have revealed the earliest use of a wheeled vehicle in China (Peoples Daily [Overseas Edition], 31 December 1996). As K. C. Chang argues (1985), the Shang city at Zhengzhou meets all the criteria for a mature city, clearly associated with the state machine.

However, the city wall may not be indispensable for every royal city. The Xiaotun site at Anyang was the last capital of the Shang dynasty. Contrasting with the Zhengzhou site, no city walls have yet been found at Xiaotun. It is possible that the powerful Shang did not need a fortified wall as protection, and that natural barriers such as rivers and artificial ditches were sufficient defence. In the Shang divination records, we read that the Shang kings frequently went out to inspect the different settlements around the capital. This suggests that the Shang may have already established the jiao-suburb and yie-fields system, in areas that were outside the direct rule of the Shang kings.

During the Western Zhou period (c. 11th century - 771 BC), after the Shang had been overthrown by the Zhou people from the north-west in about 1040 BC, the new rulers inherited the Shang writing system, metal industry, and to a degree, the Shang rituals. Politically, they established a system of enfeoffment, dividing their territory into petty states, ruled by the *zhuhou* or dukes, who were members of the royal family or old heads of various tribes. Only a limited number of Western Zhou cities have been excavated; contemporary literary sources, however, relate the close association of urbanisation with statecraft during this period (Lu Liancheng 1993). The lands under heaven all belonged to the king. A hierarchical administrative zone system was established to control the fiefs/dukedoms. The symbolism of space order was apparent in both political and ritual thinking.

Inner city, outer city

In the beginning of the Western Zhou dynasty, in addition to the capital Zongzhou, King Cheng ordered the construction of a second capital Chengzhou, near modern-day Luoyang. The project was directed by the Duke of Zhou, and in terms of city planning, the Chengzhou city marks a significant development. It was, according to contemporary sources, built in two parts: the inner-city, *wangcheng*, occupied by the king's palaces, and the outer-city, *guo*, mostly for the military and the old Shang aristocrats who had now became citizens subject to the new regime (Hsu and Linduff 1988, pp.123-26).

Recent archaeology has pushed for an even earlier origin for the inner and outer cities structure. In 1986-7, outside the enclosure of the Shang city at Zhengzhou, to the south

and west, archaeologists uncovered the remains of the base of a rammed-earth wall, which could be a wall of the outer enclosure (Henan Provincial Institute of Cultural Relics 1991). The function of the outer-city was obviously to control and protect, but the increase of population and an intensification of commercial activities could also account for the appearance of the outer-city. This is clearly demonstrated by the excavation of a number of city sites of the Eastern Zhou period (771-221 BC). For instance, the excavation of Linzi in Shangdong, the capital of the Qi State revealed a double city (Qun Li 1972), where a small enclosure was located in the south-west corner of a much larger walled surround. The northern and southern sides of the city were protected by moats. The remaining eastern wall of the inner-city is 2195 m long, the western wall 2274 m, the northern wall 1404 m, and the southern wall 1402 m. There were five gates altogether, with two leading to the outer-city, which was of rectangular shape with a 3316 m long northern wall and 5209 m long eastern wall. Archaeologists have also identified gates on all sides and roads within the outer-city. Examination of the walls shows that the inner city was built later than the larger enclosure, probably during the Warring States period when trade intensified in the cities, and, at a time when the warfare between states was commonplace.

The majority of the Eastern Zhou cities, including Xinzheng of the Zheng and Han States, Xintian of the Jin State, Handan of the Zhao State, but excepting Jinancheng of the Chu State in the south, share a similar layout, with the inner city located in the western part of the outer-city, and the main gate facing to the east. This custom lasted for several hundred years until the first century AD. When the Eastern Han dynasty constructed its capital in Luoyang, the orientation of the city was now set to face south.

The inner/outer city model represents the second transformation of Chinese urbanism (Du Zhengsheng 1992, pp. 609-727). From the eighth to the third century BC, improvements in agricultural technology, i.e. the use of iron tools, resulted in surplus which allowed trade to develop in an urban context. Commercialism encouraged the politicians, craftsmen, artists and philosophers to integrate further within society, and bronze and ceramic manufacturing centres, even academies for philosophers mushroomed throughout the country. Cities and markets often served as places to exchange goods and ideas. At the same time though, the decline of the central power of the Zhou kings also made the traditional city model untenable. The concept of the classical ideal city had to be shelved to wait for its revival in a new context.

The Warring States were unified by the First Emperor of Qin, Shihuangdi, in 221 BC. The old capital of the Qin dynasty has been badly eroded by the Wei River and archaeological work has proved extremely difficult there. However, on the southern banks of the Wei River stands the capital of the Western Han dynasty, Chang'an, one of the most important capital cities of the ancient world, and one which has been under archaeological investigation since the 1950s.

As Wu Hung (1995, pp. 148-9) points out, Han Chang'an was not a single construction, but consists of different strata. When the Han dynasty was first established in 206 BC, it re-used the old palaces left by the Qin Empire. Systematic construction of the city wall did not start until 194 BC. When the wall was finally completed and new palaces had been added, the Han rulers did indeed seem to have had some idea of city-planning. Han dynasty Changan was an impressive city: the remaining eastern wall is 6000m, the southern wall 7600, the western wall 4900m and the northern wall 7200m, with 25700m of the perimeter remaining. The city had 12 gates, three on each side. The road network consisted of eight avenues running north to south and east to west; the longest of which is the Anmen Avenue, 5400m long and 45-56m wide. Within the enclosure were five royal palaces, one armoury in the middle, and two markets behind the palaces. A ritual complex built by Wang Mang in AD 4 has also been uncovered in the suburbs south of the city (Institute of Archaeology, CASS 1984, pp. 393-97).

The size of Han dynasty Chang'an is large (36 sq. km), but could even a city this size have been adequate for the population of a quarter of million recorded in contemporary documents, when we consider that the city was mostly occupied by royal residences. As a consequence, Yang Kuan (1993, pp. 114-33, 573-613) has suggested that Chang'an was only the inner-city of the Western Han capital, and that there was an even larger outer-city. However, several archaeologists disagree with him for no traces have been found to date of such an outer enclosure (Liu Qingzhu 1996).

In AD 25, the Eastern Han dynasty established its capital in Luoyang. This city has also been excavated. It is rectangular, and consists of two palaces, the Northern Palace and Southern Palace. Compared with Chang'an, the Luoyang city is much smaller (9.5 sq. km), and is likely to have been the inner-city. We would expect there to be a much larger outer-city surrounding it. The most significant difference between Chang'an and Luoyang is that the main gate of Luoyang was the southern gate, instead of the eastern gate of earlier times. This change of orientation probably reflects the ideological and ritual changes of the Eastern Han period (Yang Kuan 1993, pp.186-7, 191-200).

A grid city

One of the most distinctive characteristics of Chinese medieval city planning is that the city landscape is divided into numerous regularly shaped wards, often described as similar to a chess board. From literary sources we read that as early as the Eastern Zhou period, the population of a city was divided into different groups, which lived in separate enclosed wards, called *li*. Each ward had its own administrators and guards. This system may have started with military units in mind, and its purpose was clearly for easier control of the movements of population.

Historical documents record that during the Western Han dynasty Chang'an had about 160 *li*-wards, and about 50-100 families lived in each ward. However, archaeological excavations of Han dynasty Chang'an do not show a regular layout of wards. The first clear evidence of the use of a grid plan in China is Luoyang during the Northern Wei period (386-535). Luoyang, as the capital of the Eastern Han dynasty, was burned down in AD 190, then re-built as the capitals of the Cao-Wei court and the Western Jin dynasty for another 100 years. In 312 it fell once again, this time to attack from the Xiongnu horsemen. The Northern Wei dynasty moved its capital from Pingcheng in Shanxi to Luoyang in 494, and decided that the new city ought to be properly designed and constructed. Compared with older Chinese cities, the new Luoyang capital had certain distinguishing features: (a) the royal palaces were located on the axis of the city; (b) the city was based on a grid system, with 320 residential wards and the royal palace and park complexes. The wards were square. Each ward had four gates, one on each side, and was controlled by two officers, four administrators and eight gate-keepers (Su Bai 1978a).

Was the idea of the grid plan indigenous to China or was it imported? Several Chinese archaeologists have argued that this model was probably diffused from a western tradition (Meng Fanren 1994) . The invention of the grid-plan has been attributed to the Greek town planner Hippodamus of the 5th century BC, whose model spread beyond the Greek world, reaching Central Asia with the conquest of Alexander the Great in the 4th century BC. Many Central Asian cities were based on the grid system. The northern Wei dynasty was established in the 4th century AD by a non-Chinese ethnic group - the Toba, or the Xianbei . Though there is a substantial time difference of several hundred years between the Hellenistic cities and Northern Wei Luoyang, the nomadic origins of the Xianbei may have brought them in contact with other peoples of Central Asia, from whom they learned such knowledge.

During the 6th - 8th centuries, the royal capitals of the Tang dynasty (618-906) were designed along a grid plan. The Tang dynasty had two capitals: the western capital, Chang'an was built to the south-east of the Han dynasty Chang'n; and the eastern capital was built at Luoyang . Archaeological investigation of Tang dynasty Chang'an has revealed both an inner and outer city (Institute of Archaeology CASS 1984, pp. 572-81). The inner-city is roughly square, located in the centre, and measuring 3335 m north to south, and 2820 m east to west, with the palace complex at the back. The outer-city is rectangular, 8651 m north to south, 9721 m east to west, covering a total area of 84 sq. km. The outer-city was divided into more than 100 wards, now known as fang, of three regular sizes. There were two markets, the Western Market and the Eastern Market.

The basic layout of Tang dynasty Chang'an clearly follows the Northern Wei model at Luoyang. It was symmetrical, with the position of palaces and the rectangular wards exactly as previously, but on a much larger and more sophisticated scale. The classical model of the ideal city, as well as geomancy, also influenced city planning for Tang dynasty Chang'an.

Luoyang was much smaller than Chang'an, about 47 sq. km. Whilst Luoyang was designed with an inner and outer city and a grid plan, it was less elaborate than Chang'an, where the layout was determined by ideological factors, such as the palace in the centre according to the classical model (Su Bai 1978b). In Luoyang, the palaces and the imperial city were located in the north-west corner of the city. The outer-city was divided by the Luo River into the northern and southern sections, and many canals ran through the city. The advanced canal system provided good transportation, particularly for business. Luoyang had three markets, all close to the canals. In other words, commercial factors played an important role here.

City and market

The market is a place for trade. It is a result of economic divisions and the expansion of craft production. Goods need to be distributed. By the times of the Eastern Zhou period, many markets appeared in an urban context. However, they were probably multifunctional and were firmly controlled by the state. At Yong, the old capital of the Qin State, near modern-day Fengxiang in Shaanxi, archaeologists have identified such structural remains, close to the northern city wall, as the marketplace. This was a rectangular enclosure (160 m north to south and 180 m west to east, a total area of almost 30,000 sq. m) with one gate on each side (Yang Kuan 1993, p. 81). The walled marketplaces could have made tax-collecting easy, and, like the closed residential wards, seemed to prevent the free movement of people. Newly excavated Qin-Han bamboo slips also show that the markets were strictly regulated by the government.

The markets in Han dynasty Chang'an were divided into the eastern and western sections, and stood behind the palaces. They may have been further divided into sub-sections for different trades. This model was followed in Tang dynasty Chang'an, where archaeologists have excavated both the eastern and western markets. The western market measured 1031m north to south, 927m west to east, and the eastern market was almost the same size, 1000m north to south, 924m west to east. The markets were surrounded by walls and within each market there were two vertical and two horizontal streets crossing each other. Along the streets were shops and stalls, and at the end of one street stood two storage buildings. The government set up special offices in each market, to administrate daily business and solve arguments among traders. There was a clear division between the Eastern and Western markets: the former was mostly for tailors and butchers, the latter for medicine stores, gold and silversmiths and jewellery shops. Foreign traders to Tang Chang'an all gathered in the western market where the wine bars served by foreign ladies and music were famously popular places for Chinese poets.

By the tenth century, however, the rigid market system was no longer appropriate. In Tang dynasty Luoyang, considerable changes were taking place. There were

three markets, instead of two, in the outer-city of Luoyang, all near the canals, for easy transport of goods. The growing importance of commercial concerns in city planning can be better seen in another Tang city - Yangzhou in Jiangsu.

The city of Yangzhou was located by the Grand Canal, built by Emperor Yangdi of the Sui dynasty in AD 605-10. The original purpose of building the canal was to transport supplies from the south to the north to support the war against Korea. In the 7th century, the traditional land trade route, via the Silk Road, between China and Europe was obstructed by the Tibetans, making sea trade more safe and economical. Foreign goods were loaded in the Persian Gulf, transported to the coastal ports such as Canton, Jiaozhou and Quanzhou, then shipped along the rivers to Yangzhou, whence they were distributed throughout the country. Goods exported from China also followed the same route. Yangzhou became a very important commercial centre for west-east trade (Yu Yongbing 1994). It was also the national base for ship building.

Archaeological excavation in Yangzhou (Yangzhou Archaeological Team 1990) has shown that the old city consisted of two parts: the date of the old town, Zicheng, can be traced back to the Han period, but the new town, Luocheng, was entirely constructed in the Tang dynasty, around AD 783. The new part was almost three times bigger than the old Zicheng. To the east of Luocheng ran the Grand Canal, and two rivers ran north to south through the city. The two rivers provided the city with its main transport and markets were probably set up along the river banks. Contemporary writers described twenty-four bridges on the rivers, and this story is largely confirmed by archaeological investigations (Jiang Zhongyi 1994). It is difficult to think why was a need for so many bridges along the rivers, if they were not for flourishing commercial activities. Excavations have also yielded many foreign objects, such as glass, gold, Persian porcelain, and a flask with Arabic writing on it.

Commerce transformed the landscape of Chinese cities, and by the Song period (960-1279), the main feature of big cities was the predominance of crowded streets and shops. The most vivid picture of this comes not from archaeology, but from a contemporary artist, Zhang Zetuan's painting, *Qingming shanghe tu* [Up the river on Qingming festival], painted between 111-1126, which depicted the busy riverside street scenes of Kaifeng, the capital of the Northern Song dynasty (Whitfield 1965). People were no longer confined to enclosed wards, but moved out onto the streets, planting trees and digging wells. New features developed in the market too, with inns, restaurants and theatres. This marks another important transformation in Chinese urbanism, from the traditional closed wards to the open market.

Conclusion

Urbanisation in China seems to coincide with the global cycles (Bandaranayake, this volume). The first urbanisation took place around the third and second millennia BC, at the turning point

of the transition from the Neolithic to the Bronze Age. Archaeologists have offered different interpretations for the emergence of early cities in China (Yu Weichao 1985). What drove people to move from open fields into walled settlements? It should be noted that furious warfare was becoming commonplace during the later Neolithic period in the Central Plains, probably due to an increase in population and, at the same time, the decrease of natural resources. We should also pay attention to the deep divisions within the society and the emergence of institutionalised religion. Religious objects from many of the sites seem to show that the worshipping of the earthly gods and making sacrifices to ancestors became the key factor in the establishment of a supreme power. Rulers always acclaimed their superior spiritual power, in addition to their military power over ordinary men. In this sense, urbanisation is closely associated with the formation of a state religion.

The second urban revolution in China is associated with the use of new technology and the decentralisation of political powers, together with intensified warfare among petty states, during the later half of the first millennium BC. Once China had become an empire, the city, or the imperial capital, always fulfilled its function as the centre of political, military and religious affairs. These functions more or less determined the basic features of city planning in pre-modern China. Before the tenth century, a typical Chinese city was a closed, socially rigidly defined place, where different classes exercised their powers or struggled to survive.

Growing commercial activities and social mobility from the tenth century onwards shook the traditional closed urban model. However, the inception of many capitalist elements did not bring China into a capitalist society, for after the Song dynasty, China came under the rule of the Ming dynasty and several non-Chinese governments (Tanguts, Mongol and Manchus). There had never developed fully an independent city economy in traditional China (Fu Zhufu 1980, pp. 321-86). City planning returned time and again to the closed model. This classical model is the result of Chinese social development, reflecting the social relationships and the ideology which mainly derived from Confucianism. Many neighbouring countries, such as Japan (Ueda Masaaaki 1976, Steinhardt 1990, pp. 108-18), took this model and developed it in their own cultural traditions.

References:

An Jinhuai. 1985. *Shilun Tengfeng Wangchenggang Longshan wenhua chengshi yu Xiadai Yangcheng: Zhongguo kaogu xuehui disicinianhui lunwenji*. Beijing: Wenwu Press.

An Jinhuai. 1986. The Shang city at Cheng-chou and related problems. In *Studies of Shang Archaeology*, Chang K. C. (ed.), 15–48. New Haven and London: Yale University Press.

Banpo Museum (& Shaanxi Provincial Institute of Archaeology, Lindong County Museum). 1988. *Jiangzhai*. Beijing: Wenwu Press.

Cao Bingwu. 1996. Zhongguo shiqian chengzhi luelun. *Zhongyuan wenwu* 1996/3, 37–46.

Chang, K. C. 1985. Guanyu Zhongguo cuqi eechengshi zhegee gainian. *Wenwu* 1985/2, 61–7.

Chang, K. C. 1986. *The Archaeology of Ancient China* (Fourth Edition). New Haven and London: Yale University Press

Du Zhengsheng, 1992. *Gudai shehui yu guojia*. Taipei: Yunsheng Cultural Company.

Fu Zhufu. 1980. *Zhongguo jingjishi luncong*. Beijing: Sanlian Press.

He Yeju. 1982. eeZhouguang wangji guihua cutan. *Jianzhu lishi yanjiu* 1, 96–118.

Henan Provincial Institute of Cultural Relics (& Dept of Archaeology of The National Museum of Chinese History). 1992.Tengfeng Wangchenggang yu Yangcheng, Beijing: Wenwu Press.

Henan Provincial Institute of Cultural Relics(& The Cultural Bureau of Zhoukou District). 1983. Henan Huaiyang Pingliangtai Lngshan wenhua chengzhi shijue jianbao. Wenwu 1983/3, 8-20.

Henan Provincial Institute of Cultural Relics. 1991. Zhengzhou shangcheng wai hantu qiangji de tiaocha yu shijue. Zhongyuan wenwu 1991/1, 87-95.

Hsu Cho-yun and Linduff, K. M. 1988. Western Zhou Civilization. New Haven and London: Yale University Press.

Institute of Archaeology, CA (Chinese Academy). 1963. Xi'an Banpo. Beijing: Wenwu Press.

Institute of Archaeology, CASS(Chinese Academy of Social Sciences). 1984. Xin Zhongguo de kaogu faxian he yanjiu. Beijing: Wenwu Press.

Jiang Zhongyi. 1994. Tangdai Yangzhou hedao yuershici qiao kao. Han Tang yu bianjiang kaogu yanjiu 1, pp.162-68.
Liu Qingzhu. 1996. Han ChangAEan cheng de kaogu faxian ji xiangguan wenti yanjiu -- jinian Han Chang'an cheng kaogu gongzuo sishi nian. Kaogu 1996/10, 1-14.

Lu Liancheng. 1993. Zhongguo gudai ducheng fazhang dezaiqi jieduan - Shangdai Xi-Zhou ducheng xingtai de kaocha. Institute of Archaeology, CASS eds. Zhongguo kaoguxue luncong. Beijing: Kexue Press.

Meng Fanren, 1994. Shilun Bei Wei Luoyangcheng de xingzhi yu zhongya gucheng xingzhi de guangxi - jiantang silu yanxian chengshi de zhongyaoxing. Han Tang yu bianjiang kaogu yanjiu 1, 97-110.

Nalan chengde. 1676. Sanli tu.

Okamura, Hidenori. 1996. Exacavations at Yingxiangcheng in Hubei province. Conference paper read at the conference *Mysteries of ancient China* held at the British Museum, 6-8 December 1996.

Peoples' Daily [Oversea Edition], 31 December 1996.

Qu Yingjie. 1989. Lun Longshan wenhua shiqi gu chengzhi. Tian Changwu and Shi Xingbang eds. Zhonguo yuanshi wenhua lunji. Beijing: Wenwu Press, 267-80.

Qun Li. 1972. Linzi Qiguo gudu kantan jiyao. Wenwu 1972/5, 45-54.

Ren Shinan. 1994. Xinglongwa wenhu de faxian jiqi yiyi. Kaogu 1994/8, 710-18.

Ren Shinan. 1996. Changjiang zhongyou wenming qiyuan tansuo -- yi Qujialing, Shijiahe wenhua wei zhongxin. Institute of History, CASS eds. Hua Xia wenming yu chuanshi cangshu -- Essays of the International symposium on Sinology, Haikou, China, 1995. Beijing: Chinese Social Sciences Press. 252-84.

Steinhardt, N. S. 1990. Chinese imperial city planning. Honolulu: University of Hawaii Press.

Su Bai. 1978a. Bei Wei Luoyang cheng he Beimang lingmu. Wenwu 1978/7, 42-52.

Su Bai. 1978b. Sui Tang Chang'an cheng he Luoyang cheng. Kaogu 1978/6, 406-25.

Ueda Masaaki. 1976. Tojo. Tokyo: Shakai shisosha.

Wenwu jinghua 1 (1959). Beijing: Wenwu Press.

Whitfield, R. 1965. Chang Tse-tuan's *Ch'ing-ming Shang-ho T'u*'. Ph.D dissertation, Princeton University.

Wright, A.. 1977. The cosmology of the Chinese city. William Skinner ed. *The city in late imperial China*. California: Stanford University Press. 33-73.

Xu Guanji. 1986. Chifeng Yingjinhe Yinhe liuyu shicheng yizhi. Zhongguo kaoguxue yanjiu bianweihui ed. Zhonguo kaoguxue yanjiu. Beijing: Wenwu Press. 82-93.

Yan Wenming. 1994. Zhonguo huaihao juluo de yanbian. Guoxue yanjiu 2, 483-92.

Yang Kuan, 1993. Zhongguo gudai ducheng zhidushi yanjiu. Shanghai: Guji Press. Yang Yubin. 1993. Zhengzhou Shang cheng de kaogu faxian he yanjiu. Zhongyuan wenwu 1993/3, 1-10, 22.

Yangzhou Archaeological Team, 1990. Yangzhoucheng kaogu gongzuo jianbao, Kaogu 1990/1, pp.36-44.

Yin Weizjhang. 1986. A reexamination of Erh-li-t'ou culture. K. C. Chang ed. *Studies of Shang Archaeology*. New Haven and London: Yale University Press. 1-13.

Yu Weichao. 1985. Zhonguo gudai ducheng guihua de fazhang jieduanxing. Wenwu 1985/2, 52-60.

Yu Yongbing, 1994. Shitang Sichouzhilu shang de Yangzhou Tangcheng, Han Tang yu bianjiang kaogu yanjiu 1, pp.169-72.

Zhang Xuqiu. 1994. Qujialing wenhua gucheng de faxian he cubu yanjiu. Kaogu 1994/7, 629-34.

Zhang Yushi & Yang Zhaoqing. 1995. Xinshiqi shidai kaogu huo zhongda faxian - Zhengzhou Xishan Yangshao wanqi chengzhi mianshi. Zhongguo wenwubao 10 September 1995.

Zhao Zhiquan & Xu Diankui. 1988. Yanshi Shixiangguo Shangdai zaiqi chengzhi. Zhongguo kaogu xuehui eds. Zhongguo kaogu xuehui diwuci nianhui lunwenji. Beijing: Wenwu Press.