

Longshan-Era Urbanism: The Role of Cities in Predynastic China



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THE ORIGIN OF ARCHAIC STATES and civilizations is the subject of an ongoing research in anthropological archaeology. In the past, much of the discussion has focused on the ancient Near East and Central or South America. Ancient China, with her wealth of historical records and archaeological evidence, was until recently mostly absent from this global archaeological debate (cf., however, Chang 1983; Keightley 1983; Liu Li 1996; Service 1975; Shelach 1994, 1998; Underhill 1991, 1994). China's absence from the global archaeological debate on the origin of archaic states probably stems from the lack of effective communication between Chinese and foreign archaeologists, associated with linguistic and political barriers. With the opening of China to the West as an equal power, and with the increase in academic communication, archaeological understanding between East and West is improving. China is now granted greater attention, as is her prehistory and protohistory. In this climate, it is now possible to address problems concerning the origins of Chinese civilization and to reevaluate the role played by predynastic polities in the establishment of state-level society at the time of the first dynasty, Xia (2100–1600 B.C.). This predynastic period, known from traditional sources as the legendary Five Emperors period (Wudi Shi), is known archaeologically as the Longshan era.

THE PROBLEM

In addressing the problem of increasing complexity in the Longshan era, some scholars (Liu Li 1996; Underhill 1991, 1994) have proposed that this period represents the prestate stage of socioeconomic and political organization referred to in cultural evolution as *chiefdom*. In these studies, the label of chiefdom is applied to the Longshan period to suggest that these societies were quite complex but had not reached the more complex level of sociopolitical organization known as the *state*. While these assessments of the relative complexity of the Longshan-era societies are sound, the use of the chiefdom concept for the Chinese evidence is not particularly useful or explanatory. This is because chiefdom, a term first used by Elman R. Service (1962) to identify one of four societal stages (bands, tribes,

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chiefdoms, states), is a generic descriptive concept whose intrinsic lack of specificity is bound to increase once the term is applied to the archaeological record, where, unlike in ethnographic or historical context, clear-cut socioeconomic and political structures are generally difficult to identify.

According to Johnson and Earle (1987:207),

The evolution of chiefdoms is marked by distinctive changes in the scale of society, in the organization of leadership and stratification, and in political economy. The scale of the society is the most dramatic change. Chiefdoms are regional systems integrating several local groups within a single polity (Carneiro 1981). For the first time the polity, defined as a group organized under a single ruling chief, is unusually large in comparison with non-stratified societies; however, the more dramatic change is in the size of the population that is united politically.

The sheer size of chiefdoms mandates the existence of a hierarchical organization, dominated by a ruling elite that has control over the religious, political, and social realms. Archaeologically, chiefdoms are said to be identifiable by the exchange of prestige goods and the presence of large-scale constructions that are taken as symptoms of the “central organization of a large labor force and [of] the function of a site as a regional ceremonial and political center” (Johnson and Earle 1987:207). However, other elements of chiefdoms generally considered essential to the definition (e.g., chiefly control of redistribution, chiefly political power, etc.) are difficult to detect in archaeological contexts. Even more worrying, for an archaeologist, is that chiefdom definitions are not tied to a specific type of settlement pattern (Feinman and Neitzel 1984:65–72). Urbanism, for example, is not a necessary trait: while Peruvian chiefdoms are characterized by urban sites, in Hawai‘i this feature is traditionally absent (Earle 1997).

Based on this loose definition and problems with archaeological measurement, *chiefdom* appears as a generalized term that fails to address local and historical peculiarities, and that cannot be uncritically applied on a worldwide basis. Previous studies have already pointed out some of these limitations (Feinman and Neitzel 1984; Kristiansen 1991:16–21), as well as the problem of overreliance by archaeologists on the rigid structure of cultural evolutionary theory (Hodder 1986; Shanks and Tilley 1987:143–165). Rather than accepting such definitions as explanations, we must examine the archaeological record, and where possible use available textual sources to reach a more complete understanding of the past and its processes of change.

The objective of this article is therefore to examine the pertinent features of the Longshan-era archaeological evidence, and at the same time use relevant textual evidence concerning the pre-Xia or predynastic period to establish how certain elements played a crucial part in the dynamics of sociocultural change. Given the presence in the prestate Longshan era of several clusters of walled cities in focal parts of the Chinese territory, I believe that increasing social complexity can best be understood by focusing on the role that emerging cities, incipient urbanism, and political power played within the Longshan period and eventually on the process of state formation, which culminated in the early dynastic period.

THE LONGSHAN ERA

The cultural landscape of the third millennium B.C., which has been defined by Yan Wenming (1992*b*) as the Longshan era (*Longshan shidai*, 2600–2000 B.C.) and

by K. C. Chang as the Lungshan or Lungshanoid horizon (Chang 1977: 144–184, 1986: 238), is often indicated as the beginning of Chinese civilization, complex political organization, and, possibly, writing. Due to the incipient emergence of copper and bronze technology, and its chronological position between the end of the Neolithic and the beginning of the Bronze Age in the Xia–Shang, it has also been suggested that Longshan be termed Chalcolithic (Yan Wenming 1986). The existence of a sophisticated technology for the production of jade artifacts and the comparative wealth of jade finds dating to this period and slightly earlier have prompted some scholars to suggest that the term “Jade Age,” a term first found in the text *Yuejueshu* “Waijuan Ji Baojian” (juan II, vol. 2) (1966: 3), may also be appropriate.¹ The concepts of stone, bronze, and iron ages were devised within the tradition of Western prehistory, and as they are problematic even within that framework, they should not be uncritically applied to other parts of the world.

The importance of the Longshan era lies in its having been transitional between the increasingly stratified societies of the late phase of the late Neolithic (c. 3500 B.C.), and the confederate state societies of the Xia and Shang dynastic periods. Far from being characterized by a unified cultural type, the Longshan era is a complex archaeological phase, made up of roughly contemporaneous regional cultural subtypes. Besides the traditional Longshan of Shandong (Shandong Longshan), which was first discovered at the site of Longshan Chengziyai in the 1930s and gave the name to the period (Li Ji 1956), there are several other cultures and subcultures. Most important are three closely related subgroups located in the middle–lower Yellow River Valley: (1) The pre–Shang Hougang II in the Anyang area (northern Henan–southern Hebei), (2) The pre–Xia Wangwan III in the Luoyang–Zhengzhou area (central Henan), and (3) Wangyoufang (also known as Zaolütai) in eastern Henan. Slightly to the west of this grouping are Taosi (Shanxi) and the pre–Zhou Kexingzhuang II (Shenxi). Beyond the middle and lower Yellow River Valley are other significant cultures, such as Qijia in the Gansu–Qinghai area, Liangzhu in the lower Yangzi River Valley, Qujialing and Shijiahe in Hubei, and Xiaoheyuan in the West Liao River Valley, which partially complete this complex panorama (Figs. 1, 2).²

Beyond geographic differences, Longshan-era cultures share several traits. Each shows comparable evidence of complex social organization, class stratification, an increasingly urban landscape, specialized crafts and technologies (such as copper and bronze metallurgy, jade carving, standardized pottery production, and textile—particularly silk—manufacturing), as well as competitive and/or cooperative interaction. Within some of these areas there are also indications that some form of graphic record keeping, in the form of writing, may have existed.

Besides elements that are generally characteristic of complex societies, what makes archaeological cultures of the Longshan era particularly significant is that several of them exhibit traits typical of the later Shang–Zhou civilization, such as the use of *hangtu* (rammed earth) for the construction of city walls and platforms in public buildings (Fig. 3), of pyro-scapulimancy in divination, of jade objects for ritual purposes, such as the *bi* and the *cong*, and of very fine wheel-made and hard-fired pottery in standardized shapes. Among these cultural traits, the one I focus on here and which deserves greater attention is the appearance in the archaeological record dated to c. 2600 B.C. of a number of *hangtu* or rammed-earth walled towns and cities in relative proximity, an indication of an emerging urbanization.

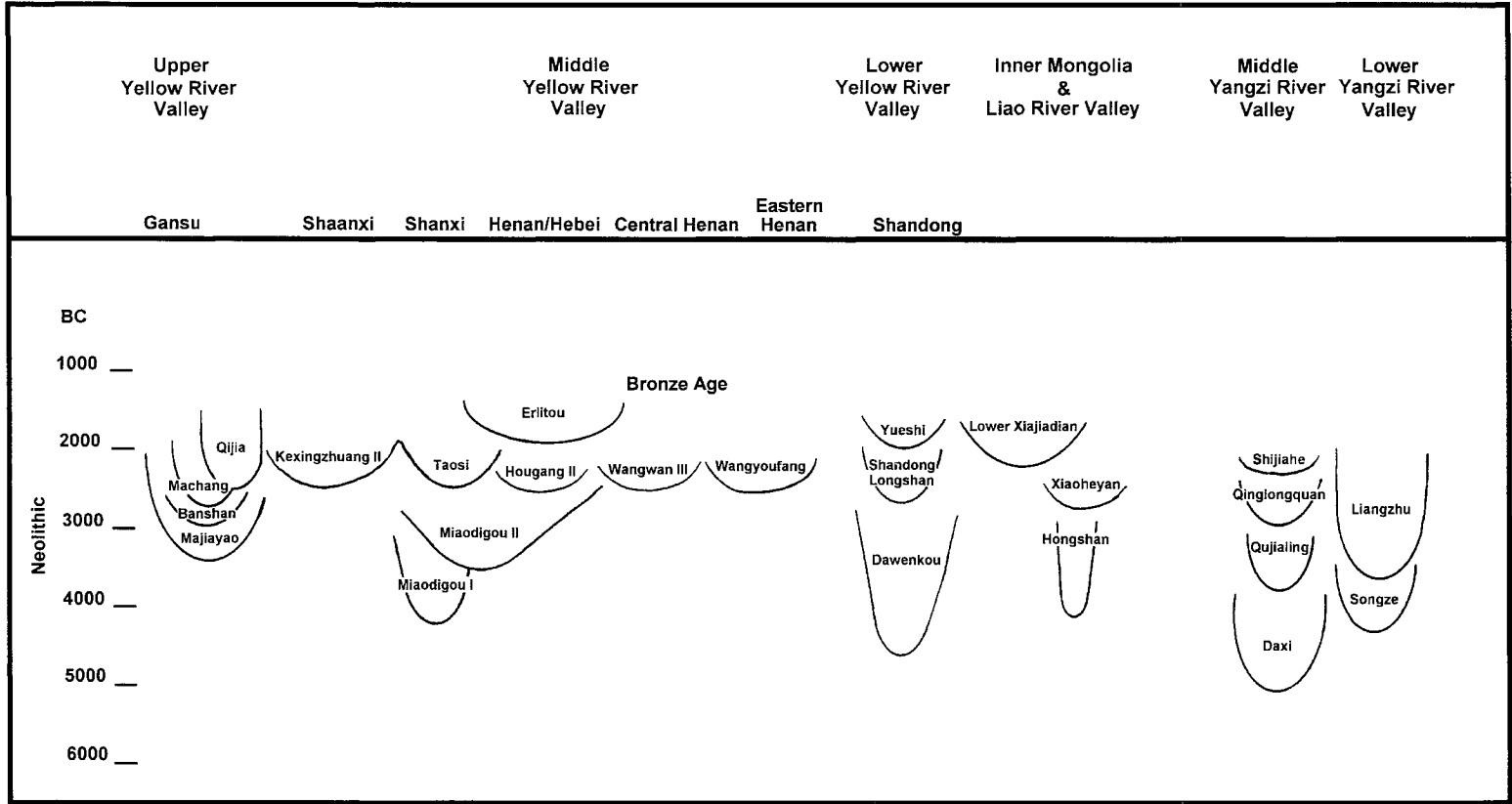


Fig. 1. Chronological and geographic diagram of the Neolithic cultures of China.

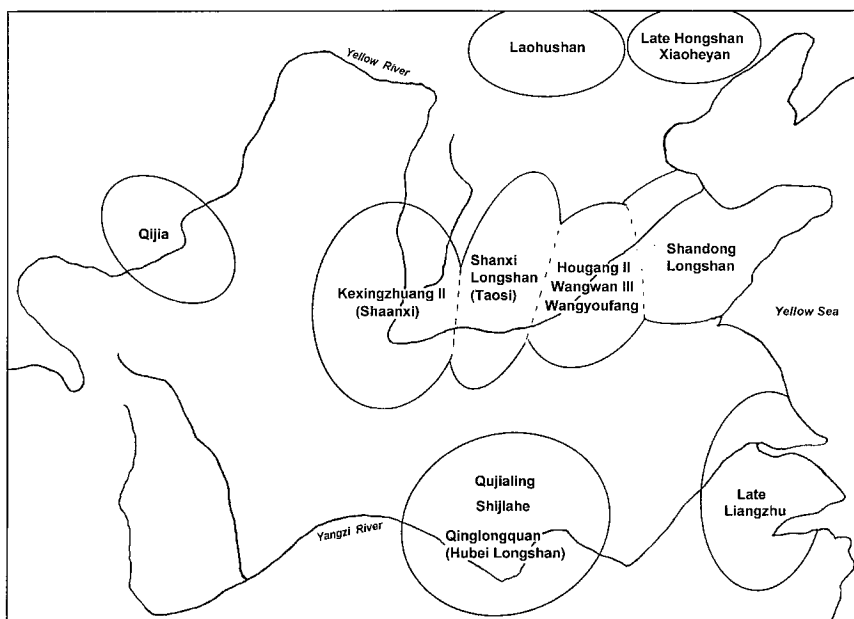


Fig. 2. Map of Longshan-era cultures, showing their geographic distribution throughout northern, central, and southern China.

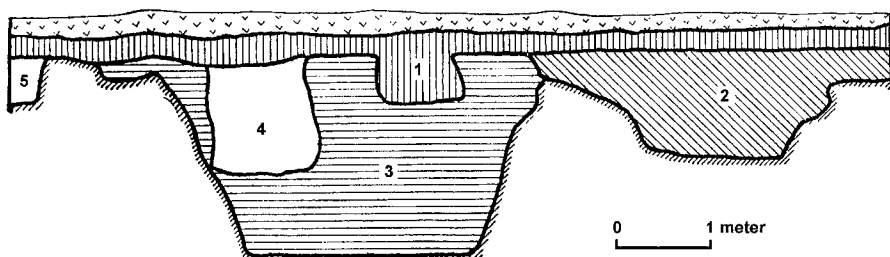


Fig. 3. Section of the site of Wangchenggang, showing Longshan cultural strata with *hangtu*. 1: disturbed stratum; 2: third phase of Longshan culture; 3: second phase of Longshan culture with *hangtu* construction; 4 and 5: ashpits. (After Dengfeng Wangchenggang Yu Yangcheng 1992: 34, Fig. 19.)

ARCHAEOLOGICAL EVIDENCE OF WALLED SETTLEMENTS IN CHINA

So far, about 30 cities with massive defensive *hangtu* walls dating to the Longshan era have been identified. Several others are under excavation, and new ones are being identified with regular frequency. While most of the best known are located in the middle-lower Yellow River Valley (in the Henan-Shandong there are about ten), several others are found throughout China, such as in the Hunan-Hubei area, in Inner Mongolia, and in Sichuan. What is most relevant is that all appear to be arranged in significant regional clusters (Fig. 4; Appendix 1).

Unwalled Longshan-era settlement sites have also been discovered, such as Baiying (Tangyin, Henan), but they are generally smaller in size and simpler, thus indicating that the walled enclosure reflected a degree of regional importance. An

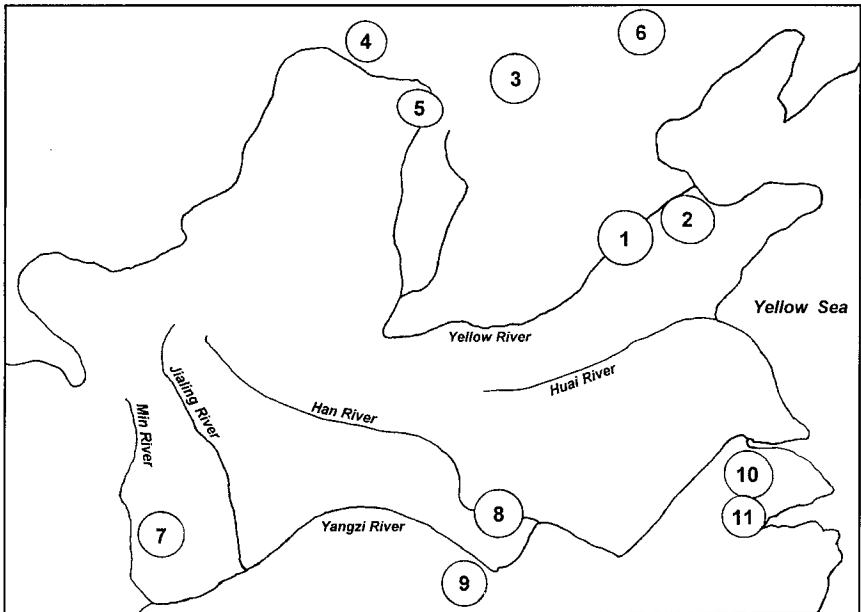


Fig. 4. Map of areas in China with Longshan walled cities. 1: Henan area; 2: Shandong area; 3: Liancheng area; 4: Baotou area, Inner Mongolia; 5: Ordos area, Inner Mongolia; 6: Chifeng area, Inner Mongolia; 7: Chengdu area, Sichuan; 8: Hubei (Qujialing-Shijiahe) area; 9: Hunan (Qujialing-Shijiahe) area; 10: Shanghai (Liangzhu) area; 11: Hangzhou (Liangzhu) area.

exception to this is Tenghualuo (Liuyungang, Jiangsu), an apparently unwalled dwelling site complete with a canal and a pier, which covers an area of 10 ha (Anonymous 1996a).

Within Longshan city walls a variety of structures were discovered, the most impressive of which are the large *hangtu* platforms used as foundations for what appear to be religious monuments or aristocratic dwellings. Some Longshan-era sites show evidence that mud bricks were employed for construction of the walls of these buildings, and that the latter were plastered, and in few instances painted (Yan Wenming 1992b: 148). Beyond residential or religious units, within Longshan cities, or immediately outside, are pottery workshops, bronze foundries, and water wells. Water wells, which provided drinking water, as well as water for processing and manufacturing of pottery, and possibly for irrigation, have been discovered at Cuoli (Luoyang), Jianguo (Handan), and Baiying (Tangyin, the deepest measuring 11 m) in Henan, and at the Liangzhu site of Chenghu (Wu County) in Jiangsu (Li Xiandeng 1986: 50; Yan Wenming 1992b: 148).

Henan Province

A brief description of the main characteristics of some of the Longshan-era walled cities and towns will give further indication of the level of complexity that marks the period. The main walled sites of Henan province are Pingliangtai, Wangchenggang, Hougang, Haojiatai, and Mengzhuang (Fig. 5).

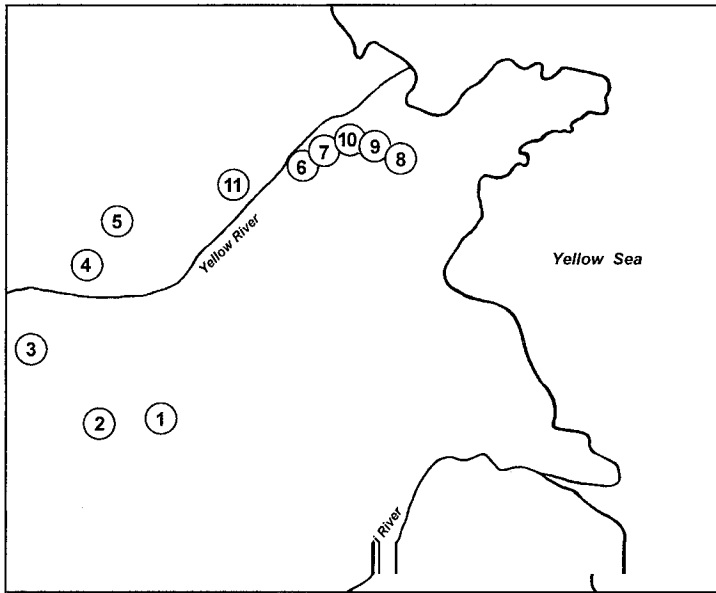


Fig. 5. Longshan-era walled sites in the Henan and Shandong areas. 1: Pingliantai; 2: Haojiatai; 3: Wangchenggang; 4: Mengzhuang; 5: Hougang in Henan; 6: Chengziyai; 7: Dinggong; 8: Bianxianwang; 9: Tianwan; 10: Shijia; 11: Jingyanggang in Shandong.

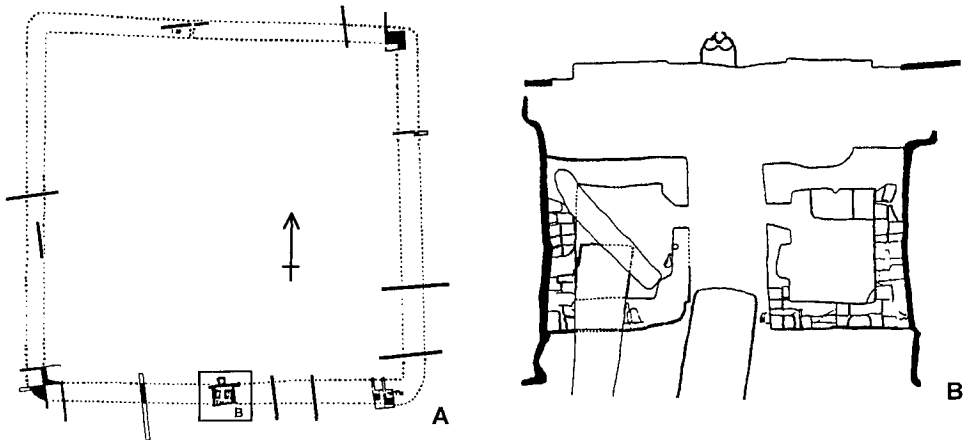


Fig. 6. Site of Pingliantai (Huaiyang, Henan). A: trenches showing the structure of the Longshan-era outer wall; B: the southern gate with the two guard houses. (After Anonymous 1983b: 27–28, Figs. 16–18.)

Pingliantai is surrounded by square walls (Fig. 6a) enclosing an area of 3.4 ha (Anonymous 1983b). The area within the walls is on an elevated platform. Excavation has revealed two city gates on the north and south walls. At the southern city gate, archaeologists have also identified the remains of two guardhouses (Fig. 6b). Within the walls, besides earthen platforms serving as foundations of large

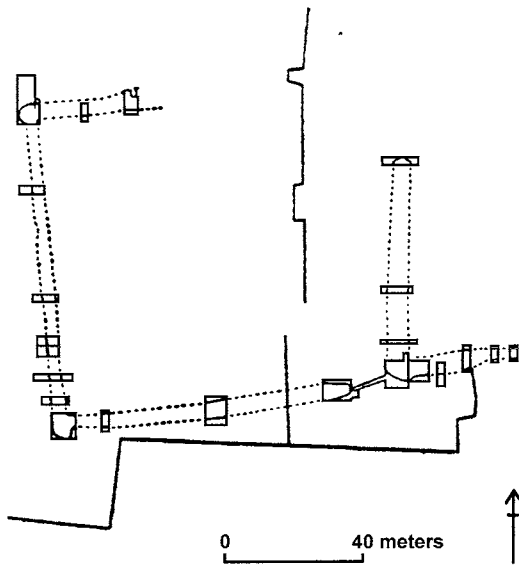


Fig. 7. Trenches of the site of Wangchenggang (Dengfeng, Henan), showing the plan view of the structure of the Longshan-era wall. (After Anonymous 1983c: 14, Fig. 13.)

buildings, there also existed an underground system of water pipes for draining purposes. The water conduit, which now extends more than 5 m, was made of terra-cotta pipes, each about 40 cm long, with a diameter varying between 23 and 32 cm (Anonymous 1983b: 29). In addition, a bronze metal fragment and some pottery graphs were also recovered at Pingliangtai (Henan Sheng Wenwu Janjiusuo Zhongguo Lishi Bowu-guan Kaogu Bu 1992: 38–42, 58, fig. 29).

Haojiatai, whose walled enclosure covers an area of 6.5 ha, is also built on an elevated platform and is further protected by an external ditch, most likely a defensive moat. Within the walls are houses, ashpits, and tombs. Several ^{14}C dates are available for the various strata, and the results confirm that the *hangtu* walls date to the Longshan. The calibrated date from an ashpit (H122) in quadrant T11 for period II is cal 2656 ± 121 B.C., and for the subsequent period III is cal 2590 ± 145 B.C. (Anonymous 1992: 62–91).

Wangchenggang (Fig. 7), the smallest Longshan walled settlement, measuring 0.8–1.0 ha, is characterized by the presence of several *hangtu* platforms (Anonymous 1983c: 8–20; Dengfeng Wangchenggang Yu Yangcheng 1992). Below some of the platforms are pits filled with skeletons from human sacrifices. The largest sacrificial pit contains the remains of seven people, including young men, women, and children. A metal fragment and pottery with graphs were also recovered from this site. Radiocarbon dates place Wangchenggang period II remains at about cal 2400 ± 100 B.C. (Zhongguo Shehui Kexueyuan 1980).

Mengzhuang, at 16 ha, is one of the largest walled Longshan settlements of Henan province. The walls, reinforced by a further addition at the base, are surrounded on the outside by a ditch. Stratigraphic evidence (Yuan Guangkuo 1992) shows a rather complex sequence, which can be subdivided into four main cultural periods: Chalcolithic (middle and late Longshan), Xia dynasty period (Erlitou type culture), early Shang dynasty (Erligang type culture), and Eastern Zhou (eighth century B.C.).

Hougang is an urban site of irregular oval shape covering an area of 10 ha situated about 1.5 km northwest of the Shang capital site of Yinxu at Anyang Xiaotun. Only sections of *hangtu* walls were discovered there. Hougang is notable for its custom of sacrificing children and entombing them in foundations, postholes, and walls. Based on the pottery typology and stratigraphic sequence (Anonymous 1985: 33, 81–82), the site of Hougang has been assigned to three Longshan occupation intervals, which, following ^{14}C dating, have been placed at approximately 2700–2500 B.C. (early Longshan), 2500–2300 B.C. (middle Longshan), and 2300–2100 B.C. (late Longshan).

Shandong Province

In Shandong, the walled sites that have received the most attention (Anonymous 1993a: 295–299; Anonymous 1997(5): 18; He Deliang 1993: 2; Shandong Institute of Archaeology 1997; Wang Shougong 1998; Zhang Xuehai 1998) are: Chengziyai, Dinggong, Bianxianwang, Tianwan, and the recently excavated Shijia and Jingyanggang (see Fig. 5). A recurring characteristic of Longshan walled settlements in Shandong appears to be the presence of incipient forms of writing; at four of the six sites (Chengziyai, Dinggong, Shijia, and Jingyanggang) excavators have found inscribed pottery or bones.

Chengziyai, one of the largest of these sites, covers an area of 17.6 ha, and includes both dwellings and terra-cotta kilns within its walls. What remains of the city walls is only about 2 to 3 m high, but archaeological investigations have determined that the walls were originally about 6 m high, with a width at the base of more than 10 m and a width at the top measuring about 9 m. The wall is built of *hangtu* layers (of c. 12 to 14 cm) on a trench foundation 14 m wide and 1.5 m deep (Li Ji 1956). Even though Chengziyai is a very large Longshan city, it was still considerably smaller than the major cities of Shang times (such as Zhengzhou Shangcheng in Henan, which has a walled enclosure 1.7 km by 1.8 km). Among the excavated artifacts at Chengziyai were numerous pottery types both ritual and utilitarian, metal artifacts, 16 pieces of crudely prepared oracle bones, and some pottery graphs.³ The presence of oracle bones and fine pottery ritual vessels suggests a politico-religious system similar to the subsequent Shang period.

The second most important walled city site of Shandong, Dinggong, covers an area of about 10 ha, and has received much attention as the result of the recovery in an ashpit of an inscribed potsherd, which, if genuine, may represent one of the oldest texts in China (Anonymous 1993a: 295–299; He Deliang 1993: 2). The association of the inscribed potsherd with the Longshan city is significant because it suggests an association between the origins of writing and the appearance of urbanism in ancient China. Survey investigations determined that the city walls had an almost square perimeter (310 m on a side), enclosing an area of about 10 ha, and that the walls measured 20 m wide and 1.5–2.0 m high. On the interior, the walls slope, while on the outside they are vertical and paired with a defensive moat about 3 m deep. Within the walls are houses, kilns, tombs, and ash-pits, as well as evidence of violent deaths (human remains were found in disused storage pits) and human sacrifices of both adults and children at the foundation of large buildings (He Deliang 1993: 2).

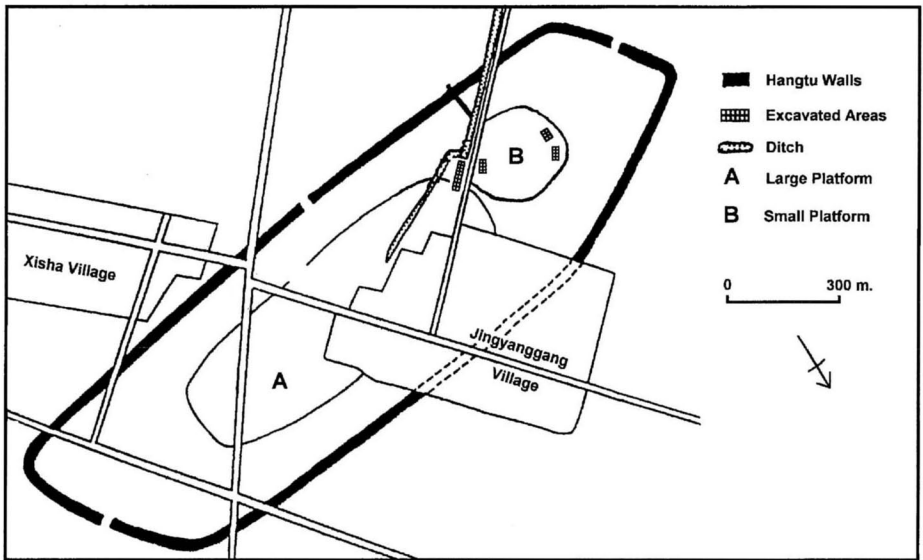


Fig. 8. The site of Jingyanggang (Yanggu, Shandong), showing *hangtu* walls and interior platforms of the site. (After Wang Shougong 1998 and Shandong Institute of Archaeology 1997: 12, Fig. 2.)

At Bianxianwang, which covers an area of between 5.0 and 5.7 ha, the most interesting element besides two *hangtu* enclosure walls is the presence of both human and animal (pig and dog) sacrifices within the fill of the wall foundation near the northeastern corner (Shouguan Xian Bowuguan 1989: 46; Zhang Xuehai 1985).

The Shijia site (Huantai County) is a 5-m-high mound covering an area of about 400 × 500 m. Because of excavations for clay by nearby villagers, the site has nearly disappeared. Archaeologists have determined, however, that its walled enclosure, of which only a small portion remains, was built during the late Longshan era, and continued to be used in the subsequent Yueshi and Shang phases. During the Longshan era, the site was also protected by a defensive moat (c. 2.5 m deep and 6–8 m wide), which apparently surrounded an area of about 4.4 ha (c. 200 m by 220 m). Shijia's importance is related mainly to the discovery of very early written material within the site or in its surrounding area (Tangshan): seven pieces of inscribed Yushe culture oracle bones (c. 1700 B.C., Xia period), and the earliest Chinese (middle Shang, c. 1500 B.C.) bronze inscriptions (Anonymous 1997: 1; Zhang Xuehai 1998).

The site of Jingyanggang (Yanggu County) occupies an area of c. 38 ha (Fig. 8) and in addition to an oblong *hangtu* city enclosure (1150 m by 300–400 m), includes gates and two *hangtu* platforms or foundations, the largest of which measures 520 × 175 m (Shandong Institute of Archaeology 1997). Among the important artifacts recovered at Jingyanggang are an inscribed but indecipherable Longshan-era potsherd comparable to the inscribed potsherd found at Dinggong

(Wang Shougong 1998), several pottery ritual vessels, and some bone artifacts and stone weapons.

Inner Mongolia

In Inner Mongolia, archaeologists have discovered several walled settlements dating to the Longshan era. There are three locations of major importance: (1) Liangcheng County (Laohushan area), (2) Baotou and the western Daqing Mountains, and (3) the area on the eastern bend of the Yellow River in southwestern Inner Mongolia (Kessler 1993: 34; Tian Guangjin 1991: 1). According to recent reports, a network of walled cities also exists in the vicinity of Chifeng in eastern Inner Mongolia (see Fig. 4), even though they appear to date to a slightly later period (pers. comm., Inner Mongolian Institute of Archaeology; cf., Shelach 1994).

Inner Mongolian fortifications differ from those in the rest of China by having walls that are for the most part made of stone. The presence of stone in the wall construction at this early time is unexpected and may be explained by the abundance of local materials. A similar tradition of stone buildings and funerary chambers is known from the Hongshan culture of eastern Inner Mongolia and western Liaoning, particularly at the site of Niuheliang (Anonymous 1986: 1–17). A characteristic of Inner Mongolian walled sites is that they were built alongside mountain ridges, and the number of dwellings was limited. Archaeologists working in Inner Mongolia have observed that this may be an indication that rather than being civilian settlements, these sites were military garrisons.

The walled settlement for which there is more information is Laohushan, located on the southern slope of the Laohu Mountains in Liangcheng County (Tian Guangjin 1986). The site covers approximately 13 ha. Its most visible remains is a stone and pounded-earth city enclosure visible on the surface that measures 1 m wide and 0.5 m high (Pl. I; Fig. 8).⁴ Among the artifacts recovered, aside from some pottery and stone tools, were potsherds with engraved marks, uninscribed oracle bones, and *bi* discs. Based on the excavated remains and on cross-stratigraphic study, the excavators have suggested a date between 2800 and 2500 B.C. for the site, even though a ¹⁴C date would place Laohushan at 1870 ± 70 B.C.⁵ In the vicinity of Laohushan, again in Liangcheng County, are three additional walled sites of comparable age and type (Xibaiyu, Bancheng, and Damiaopo). Also nearby is the dwelling site of Yuanzigou, which was not walled (Tian Guangjin 1991: 1).

Yangzi River Valley

Beyond the Yellow River Valley and northern China, clusters of walled settlements are known from the southern regions. Particularly crucial was the Yangzi River Valley area, which as new discoveries in Neolithic and Bronze Age archaeology indicate, formed a civilization system different from and yet connected to that of the north. Urban and proto-urban settlements have been discovered near the upper, middle, and lower Yangzi fluvial system, starting from Sichuan in the west and ending with the Zhejiang-Jiangsu Delta area in the east (see Fig. 4).



Pl. I. Photograph of cross-section of *hangtu* wall at Laohushan site in Inner Mongolia.

In Sichuan, Longshan-era walled cities have been discovered in the fertile Chengdu plain; these sites include Baodun, Mangcheng, and Yufu. Judging from the preliminary excavation reports now available, the building technique for the walls of these settlements was not technologically as advanced as that of the cities in the north (Anonymous 1996*b*: 1). At Baodun, the wall was built in the later part of the occupation, after the area had been in use for quite some time, and it enclosed only a small section of the site. The wall at Baodun has been dated comparatively to c. 2500–2000 B.C., and other similar sites in Sichuan suggest dating to the same interval.

An incipient urban system is also becoming known for the area of the middle Yangzi River Valley in the Hunan–Hubei Jianghan area (Figs. 4, 9). In this region, archaeologists have discovered six walled sites, ranging in date from the Daxi (c. 4000–3300 B.C.) to the Qujialing (c. 3300–2500 B.C.) and Shijiahe phases (roughly Longshan era, c. 2500–2000 B.C.). These sites are: Shijiahe (Tianmen), Yingxiangcheng (Jingzhou), Majiayuan (Jingmen), and Zoumaling (Shishou) in Hubei Province; and Chengtoushan and Jimingcheng at Nanyue in Li County, Hunan province (Anonymous 1996*c*: 1; Yan Wenming 1992*a*: 48). Unlike the city sites of the north, which often continued to be in use in later periods, those of the Jianghan area were abandoned after c. 2000 B.C. (middle Shijiahe phase), and large urban sites are not known for this area for some time afterward, with the exception of the Shang city of Panlongcheng in Hubei (Yang Quanxi 1994). While some of these sites, such as Shijiahe, are quite large, all of them appear to have been less complex in their urban planning and building structure than those from the Yellow River Valley area, which may be related to

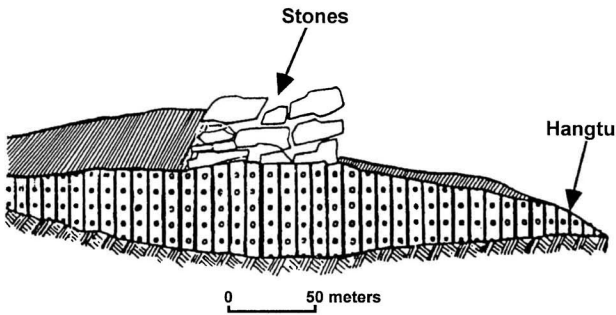


Fig. 9. A cross-section of the *hangtu* and stone wall at the site of Laohushan (Liangcheng, Inner Mongolia). (After Tian Guangjin 1986:42, Fig. 10.)

their earlier dates, since the Daxi and Qujialing culture phases predate the Longshan era.

The largest walled city site discovered so far is Shijiahe (Fig. 10) in Tianmen, Hubei, which dates to the middle Qujialing to middle Shijiahe periods. The urban site proper lies in the middle of a dense cluster of 40 contemporaneous sites concentrated in an area of 5 km². The settlement itself is surrounded by a square

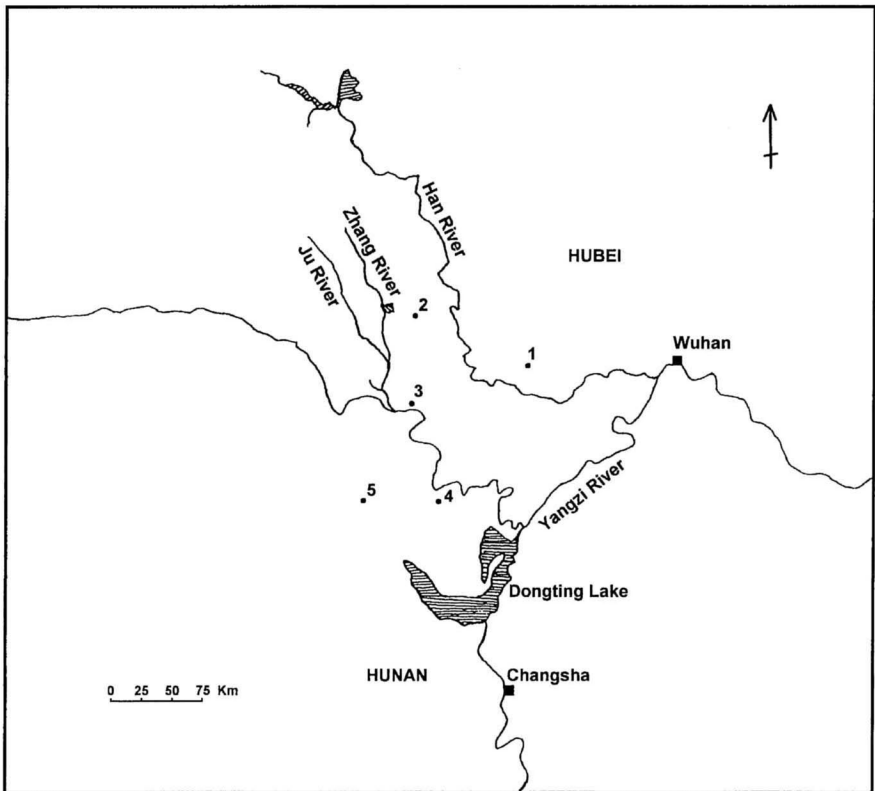


Fig. 10. Map of the Daxi-Qujialing-Shijiahe cultures and walled sites in the Hunan and Hubei areas of the Yangzi River 1: Shijiahe, Tianmen; 2: Yingxiangcheng, Jingzhou; 3: Majiayuan, Jingmen; 4: Zoumaling, Shishou; 5: Chengtoushan and Jimincheng, Li County.

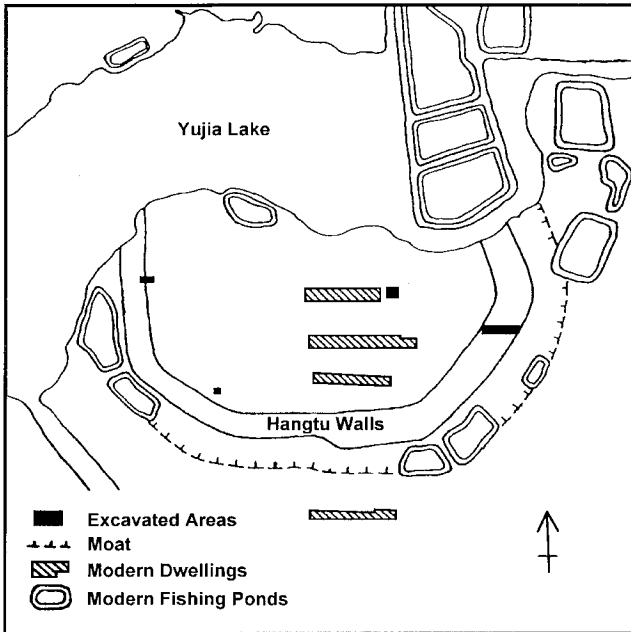


Fig. 11. A plan map of the site of Yingxiangcheng (Jingzhou, Hubei). (After Jingzhou Museum 1997: 2, Fig. 2.)

enclosure (south wall 1000 m) and an external moat, which protected an area of about 100 ha. Within the walls are dwellings, burials (Anonymous 1990a: 6–7, Figs. 16–17; Anonymous 1994b: 32–41), and specialized areas such as Dengjiawan, possibly a ritual center characterized by the presence of an elevated platform, several ritual objects, and a bronze fragment (Yang Quanxi 1994). Near the city site, at Luojiabailing, archaeologists have found a long wall and a roughly contemporaneous earthen foundation with a stone and jade workshop (Shijiahe period II; Anonymous 1994a: 191–229). According to Yang Quanxi (1994), the walls appear to have had several gaps, and could not have provided total protection. There are no signs of elite residences and of large and rich burials. Shijiahe, like the other Qujialing cities, may simply be a proto-urban settlement.

Yingxiangcheng, a settlement in use from the Daxi phase until the western Zhou period, is characterized by rectangular walls with rounded corners and an outer moat dated to the Qujialing phase, c. 3000 B.C. The western, southern, and eastern portions of the enclosure are well preserved, while the northern section has been eroded by the growth of a small lake. Test excavations have determined that within the walls (Fig. 11) are the remains of dwellings, storage pits, burials, and, in the middle, a flowing channel that separates the living area into an eastern and a western section (Anonymous 1996c: 1; Jingzhou Municipal Museum 1997).

Majiayuan, one of the best-preserved walled sites of the area, is surrounded by a trapezoidal enclosure c. 2000 m long, and by an additional external defensive moat constructed by partially taking advantage of an existing watercourse. The enclosure has four openings: those on the north and south sides are regular gates, while the remaining two (on the east and west sides) are connected by a flowing channel that, as in Yingxiangcheng, subdivides the site in two sections (Fig. 12).

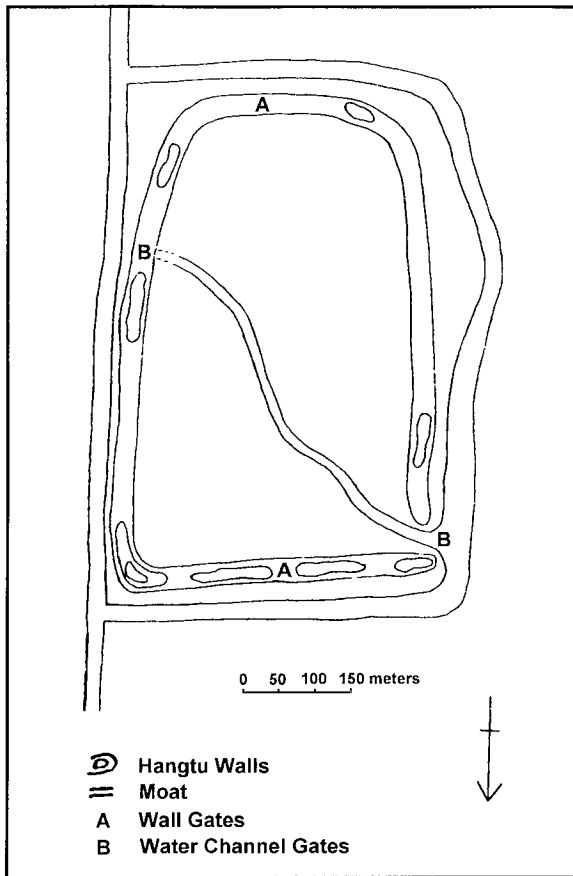


Fig. 12. The site of Majiayuan (Jingmen, Hubei), showing *hangtu* walls and moats. (After Jingmen Municipal Museum 1997: 49, Fig. 2.)

During a preliminary investigation within the site, archaeologists have recovered Daxi- and Qujialing-era artifacts, ranging from tools to ritual pottery vessels. Majiayuan was briefly occupied during the Shijiahe period and was subsequently abandoned (Jingmen Municipal Museum 1997).

Chengtoushan is probably one of the oldest walled settlements of China: its enclosure and external moat were built at c. 4000 B.C. (Daxi phase) and continued to be in use for 2000 years afterward. The site, which covers an area of 88 ha and includes well-preserved house foundations, has received much attention also for the discovery below the eastern wall of the remains of a 6500 B.P. rice paddy, possibly one of the oldest in the world (Anonymous 1998: 1).

Liangzhu Area

Urban settlements and religious centers of considerable size have also been identified in the Liangzhu area, both in the Yangzi River Delta, and the Taihu Lake areas. An extremely large Liangzhu monumental site was excavated between 1992 and 1993 at Mojiaoshan (Fig. 13) in Yuhang County, 25 km northwest of the city of Hangzhou in Zhejiang province, and a short distance from all the other major

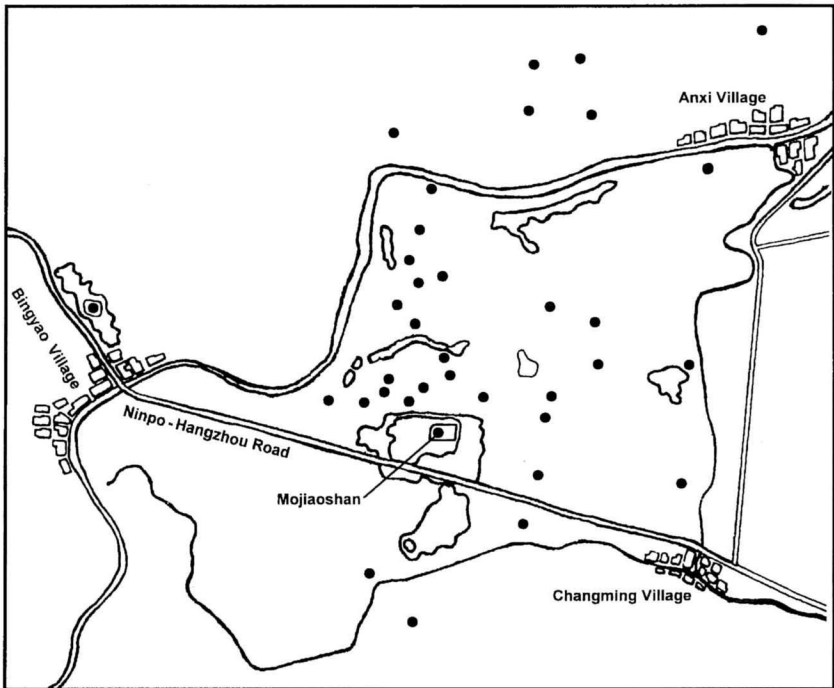


Fig. 13. Map of the Liangzhu site of Mojaoshan; small dots show other Liangzhu sites in its vicinity (Zhejiang). (After Yan Wenming 1996b: 33, Fig. 2.)

Liangzhu ceremonial and cemetery sites (Anonymous 1993b: 1). Preliminary excavation reports indicate that the site covers a surface of more than 30 ha (670 m by 450 m). The excavation encompassed an area of 1400 m² and uncovered a large man-made platform of pressed earth dated to the early Liangzhu, above which were postholes, remains of building structures, and storage pits. Tentative interpretations suggest Mojaoshan was one of the largest ceremonial centers of the Liangzhu culture (Gu Shu 1994: 8). Yan Wenming (1996b: 33–35; pers. comm. 1993) has discussed the possibility that Mojaoshan was the largest center within a large area and may have served as the ritual center for several settlements of Liangzhu culture located in the vicinity, including the cemeteries and ritual centers of Fanshan and Yaoshan (see Fig. 13). Furthermore, Yan Wenming (1996a) suggests the entire Liangzhu region had a crucial role in the development of Chinese dynastic civilization.

Yan Wenming (1996c) identifies another Liangzhu urban cluster in the area around Shanghai in Jiangsu, which includes the major sites of Sidun and Zhaolingshan (Fig. 14). Unlike other Longshan-era cities, these Liangzhu centers are not walled. One hypothesis is that, because of an abundance of water in the area, these sites were defended by large, deep canals, a tradition that continued until historic times (Che Guangjin 1994: 50). The recent excavation of the sites of Zhaolingshan (Kunshan) and Sidun (Wujin County), both in Jiangsu, appears to confirm this proposition. At Zhaolingshan, an artificial mound stands at a height of 8 m and covers an area of 4000 m²; besides finding large graves and altars,

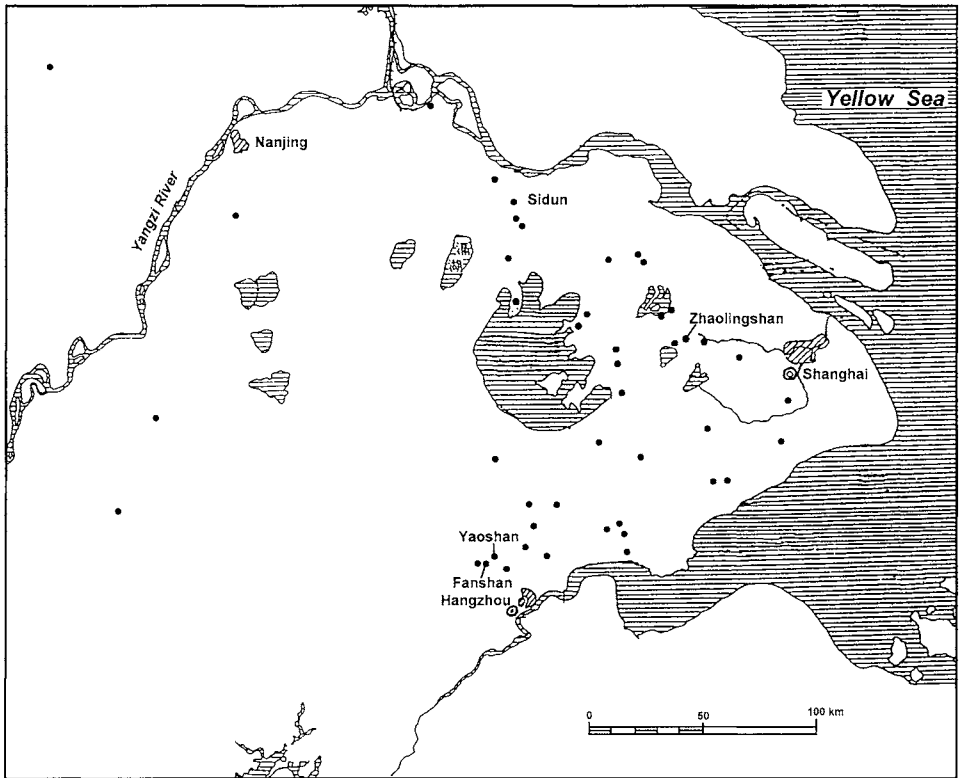


Fig. 14. Map of the Liangzhu area, showing contemporaneous sites. (After Anonymous 1989.)

archaeologists have also found the remains of a canal, 20 m wide, surrounding the site (Che Guangjin 1994). Similarly, the site of Sidun is an artificial mound standing at an elevation of 20 m and with a diameter of 100 m. During excavations between 1978 and 1982, three extremely rich Liangzhu tombs were discovered, as well as a platform 10 m high \times 200 m long, and the remains of the western and southern portions of a river canal measuring 20 m wide (Anonymous 1981: 193–200; Anonymous 1984: 17–22). Because there is evidence that similar canals existed on the eastern and northern sides of the settlement, it appears that Sidun, like Zhaolingshan, was protected by a system of large water enclosures. Outside the enclosure and around the site is an elevated (7 m at ground level) circular platform on which rich Liangzhu tombs were dug. Beyond the cemetery platform is a ground level area of the site and surrounding this is another (outer) water enclosure, measuring 20 m wide and 3500 m long, which marks the limits of the site. These features define the boundary of Sidun as having a diameter between 1000 and 1100 m and an area of 90 ha. The outer and the inner canal connect at the four cardinal points by way of smaller waterways, which function also to separate the elevated cemetery from the ground level area. The ground level area is also served by other connecting waterways. The soil removed from the canals was apparently used to build the platforms; that of the inner canal was

used to make the platforms of the inner city, and that of the outer canal was used to create the base on which the elite tombs were built.

AN INTERPRETATION OF THE LONGSHAN ERA

Longshan-era cities and the related geopolitical structure did not emerge from a vacuum. The development of Chinese urbanism during the third millennium B.C. is intimately connected with the creation of an intense interaction sphere among some of the Longshan-era cultures, a phenomenon that had its roots in the increasing cultural and social complexity of the preceding late Neolithic, beginning at c. 3500 B.C.

By the late Neolithic, settlements throughout China had begun to expand and become more differentiated by size and internal configuration, graduating from villages comprising dwellings of nearly comparable size, such as those of the early Yangshao phase at Banpo, to larger sites with a variety of different-sized buildings, such as the ones at Dadiwan (Gansu) dating to Period III, c. 3000 B.C. In this process of diversification and enlargement, some settlements were surrounded by perimeter walls, which, while smaller in size, were comparable in building technique to those of the Longshan era. An example of this practice is found at the site of Xishan near Zhengzhou, where excavation has revealed a round, rammed-earth enclosure, 3 m high and 11 m wide at the base, dating to the late Yangshao (Miaodigou II phase) between c. 3300 and 2800 B.C. (Gu Shu 1996:3). These large settlement sites were also associated with increasingly rich burials (as at Puyang Xishuipo, Henan, where sacrificial victims have also been discovered), and such complex ritual centers as the late Hongshan temple structures of Niuhe-liang, Liaoning, c. 3500 B.C. (Yan Wenming 1992a:43, 1996c), indicators that settlement diversification proceeded with social stratification and ritual and ideological codification.

As intravillage differences emerged, a pattern of mutually dependent larger and smaller settlements developed, changing the preexisting simple geographic relationship of political control (Liu Li 1996; Underhill 1994). From the network of small, largely self-sufficient villages of the middle Neolithic phase, the archaeological record of the Longshan era shows a hierarchical complex of territorial relationships gravitating around a single, increasingly large, political center. These hierarchical relationships probably included the creation of strong codependent ties between the center and its surrounding villages. Examining similar issues for Mesopotamia, Mario Liverani (1986:47) has theorized that ultimately this diversification among villages generated a tendency that would lead the urban center to exploit the countryside, while at the same time being completely dependent on it. Thus, while the major centers would create a bureaucratic system with a specialized class devoted to the handling and control of information, the smaller centers and villages were made to specialize in food and resource production, losing their political and economic independence in the process.

By the beginning of the Longshan period, there was a general increase in population and in the concentration of sites in the middle-lower Yellow River Valley and coastal areas. Surveys in Shandong province indicate that, compared to the Dawenkou times, by the start of the Longshan period, village densities had almost quadrupled. In the county of Shouguang, for example, only 14 Dawenkou sites

were discovered, compared to the 51 Longshan sites. In the southern part of the county, in the Sunjiaji village area, 47 sites were discovered, in an area of c. 77 km², a number that gives a density of one village per 1.68 km². In certain areas, the concentration is so high it rivals today's. These settlement clusters included, for the most part, populous and well-developed villages (He Deliang 1993: 4).

Geographic factors may have contributed to greater competition within the growing population. While fertile, the delta area was geographically circumscribed by the sea, densely populated, and subject to inundation and changes in the course of the Yellow River. Wang Qing (1993) and Liu Li (1996) present evidence that shows how the Yellow River changed course several times during the Neolithic, a fact entirely consistent with the later history of the river.⁶ However, geoarchaeological prospecting in the Shangqiu area (Henan) indicates that flooding did not begin in this area until 2000 B.P. (Jing and Rapp 1995). Because the Yellow River could hardly change its course without flooding, more investigations are needed to thoroughly assess this issue.

Archaeological evidence also shows that during the Longshan period the process of settlement diversification, which was in full swing, was coupled by an increase in organized violence, at least in the middle-lower Yellow River Valley and the coastal zone, the areas of highest interaction and competition among some Longshan-era cultures: Shandong Longshan, Hougang II/Wangwan III, and Liangzhu (see Fig. 2). The archaeological record shows that conflict became an issue: besides the fortified settlements discussed above, the number of weapons increased,⁷ and there is evidence of massive killing and the burning of villages. At Jiangou (Handan, Hebei) wells were discovered that were filled with dismembered skeletons of young and adult men, as well as children, with some of these skulls bearing evidence of scalping (Anonymous 1959: 531–532). At Xiaofangou (Mengjin), a half skeleton was discovered, apparently a sign of violent death or mutilation (Chang 1986: 270–737; He Deliang 1993).

Further archaeological research is needed to determine if warfare was endemic beyond this area, in the middle and upper Yangzi River Valley and in Inner Mongolia, as is possible given the presence of walled settlements. As Steven LeBlanc (1997: 236) has pointed out, much evidence for warfare is subtle (such as settlement patterns), and direct evidence of actual fighting and destruction is hard to identify. Competition was not limited to inter-settlement interaction: habitation diversification within the sites and related burial data, particularly at the cemeteries of Xi Zhufeng in Linqu County, Shandong (Anonymous 1990b: 587–594; Shandong Sheng Wenwu Kaogu Yanjiusuo 1989), and Taosi in Xiangfen County, Shanxi (Anonymous 1983a: 30–42), indicate that both social stratification and gender distinctions were also being institutionalized.

Even though conflict and competition existed and were at times intense, cooperation, in the form of long-distance trade of precious goods, also occurred (He Deliang 1991: 44). One of the most important traded items was jade. Geological studies of this stone's provenance have shown that while there were sources for jade along the eastern coast (such as Xiaomeiling, Liyang County, Jiangsu), the material was often transported for long distances, and some may have come from farther inland (Wen Guang and Jing Zhichun 1995: 6; Wen Guang and Jing Zhichun 1996: 74). Some Liangzhu artifacts inscribed with Dawenkou symbols

appear to indicate that jade was probably traded in finished form. Evidence of interaction among various cultures is confirmed by the presence of Dawenkou pottery at what appear to be Miaodigou sites in Henan (Huacheng and Pingdingshan, both in Yanshi County) and by the presence of Miaodigou-style pottery at the sites of Wangyin and Dawenkou in Shandong (He Deliang 1991).

Accounts in ancient sources indicate that many traded goods came from peripheral areas, especially in the south, inhabited by what the Huaxia of the Central Plain called "barbarians."⁸ Finds of typically southern material, probably from the Yangzi River Valley in northern burials, confirm such claims. Ivory artifacts and alligator skins have been found in Dawenkou burials in Ying and Teng counties in Shandong (He Deliang 1991: 45), as well as in Longshan-era graves such as M202 at Xi Zhufeng (Linqu, Shandong) and M3015 at Taosi (Xiangfen, Shanxi) (Anonymous 1983*a*; Anonymous 1990*b*; Yan Wenming 1996*a*). Other exchange goods included feathers, shells, turquoise, agate, and possibly animals and grain as well. Evidence of an advanced trading system is provided also by the discovery at Niuheliang of shell-shaped jade money (Guo Dashun 1995: 43).

The important subject of regional trade and communication for this period has not yet been addressed systematically, but it is now becoming clear that by the late phase of the late Neolithic, long-distance trade was flowing along an established network of communication routes. While land routes were of the utmost importance (and this is confirmed by the positions of walled cities along present-day routes), it is likely that most long-distance trade took advantage of waterways, which in the middle-lower Yellow River Valley and coastal areas were particularly favorable. Preliminary finds of Longshan and Yueshi pottery off the coast of Shandong in 1960 and 1991, the discovery in the 1950s of a Neolithic boat (now at the History Museum in Beijing), and the colonization of nearby islands make this hypothesis feasible (Yu Weichao 1995).

While most of the evidence presented above relates to the cultures of the middle-lower Yellow River Valley and coastal areas, recent discoveries indicate that during this time similar changes occurred in other parts of the Chinese territory (such as the Chengdu plain and the middle Yangzi River Valley, and possibly Inner Mongolia and the Qijia area). However, unlike the culture complexes of the middle-lower Yellow River Valley and coastal areas, which interacted within a larger geographic area, these clusters were more isolated and protected, and change occurred at a slower pace. The spatial distribution of culture complexes in Longshan-era China gives an idea of why this was so (see Fig. 2).

The most prominent Longshan-era cultures were positioned in a somewhat circular fashion, with a focus on the Central Plain (Hougang II/Taosi area). This arrangement, which has much to do with the physical environment of northern China, highlights the advantageous position of the middle-lower Yellow River Valley. While in the late Neolithic the Central Plain may have been less developed than other regions, by the late Longshan growing pressure in the eastern portion may have led to faster growth of social complexity there (Fig. 15). Jiang Leping (1993) has pointed out that, notwithstanding the importance of other regional cultures such as Hongshan in the northeast and Liangzhu in the lower Yangzi River Valley area, the final steps toward the formation of the state in the late predynastic and early Xia periods came from the Longshan cultures of the middle-lower Yellow River Valley area in Henan and southwestern Shandong.

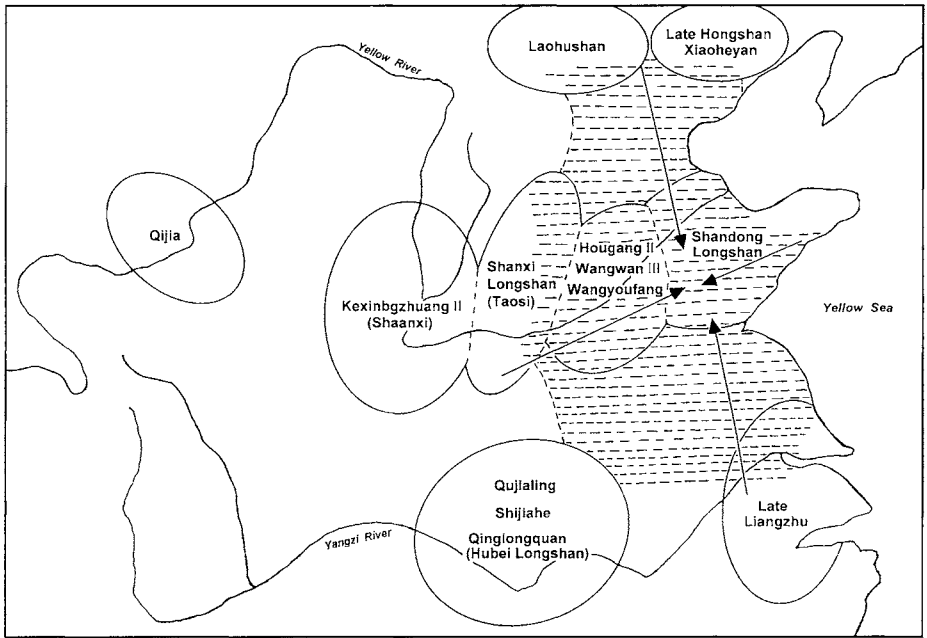


Fig. 15. Hypothesized competition among Longshan-era cultures in China.

Here, Jiang finds that a direct stratigraphic correlation exists between Longshan- and Xia (Erlitou)-era cultural remains (either Erlitou type in Henan province or Yueshi type in Shandong).

These induced transformations between the periphery and the core may be linked to changes in climatic patterns, which caused formerly wet areas to the north to become much drier, possibly causing southward population movement down the eastern coast, increasing population density in the lower Yellow River Valley (Tian Guangjin 1991). While this proposition needs further investigation, material remains indicate that because of their proximity and favorable geographic position, polities centered on Liangzhu, Shandong Longshan, and Hougang II/Wangyoufang interacted with each other more closely than with other Longshan-era groups, and contended for resources in overlapping areas.⁹ The association of these regional units as a dominant eastern block of Chinese civilization draws attention to the relationships existing between these eastern cultures and those of the rest of China, particularly in the west (middle-upper Yellow River Valley), the far north, and possibly the southwest (middle Yangzi River Valley). There was considerable territorial diversity among the various Longshan-era cultures, and those of the eastern portion were in a favorable position to slowly extend their influence farther west and south, possibly exploiting groups and the resources of these areas to their advantage. Similar relations of disparity between the plains and the mountainous regions were noted in the archaeological record of the protohistoric period in Mesopotamia, and have been deemed crucial to the understanding of state formation in that part of the world (Algaze 1989).

THE ROLE OF URBANISM IN PREDYNASTIC CHINA

Archaeological evidence indicates that by the beginning of the Longshan era, c. 2600–2500 B.C., in some parts of China there were already several elements that would have favored the development of complex polities. Most important among these were an increase in population in highly favorable but limited areas, and the contemporaneous growth within the same territories of a network of walled cities and towns characterized by advanced technologies, complex politico-religious ideologies, and incipient bureaucracies. These polities were engaged in competitive interaction, warfare, and trade.

These cities' or towns' defensive systems and their geographic arrangements indicate that urban clusters most likely represent groups of rival polities interacting in increasingly competitive environments in China's key areas. Given their prominence in the Longshan era, I suggest that these walled settlements, rather than being chiefdoms, were a network of independent cities or emerging city-states, which interacted but maintained political autonomy. Aside from the specific ways in which it has been historically used to discuss the Greek *polis*, the term *city-state* is generally taken to indicate "small, territorially based, politically independent state systems, characterized by a capital city or town, with an economically and socially integrated adjacent hinterland," which, while economically autonomous and characterized by distinct ethnic identities, "often occur in groups of fairly evenly spaced units of approximately equivalent size" (Charlton and Nichols 1997: 1; cf. Renfrew 1975: 12–20). As Bruce Trigger (1993: 8–9) has observed, and as it is possible to infer from the Longshan archaeological evidence, these groups or city-state systems formed a network of competing centers that, while often clashing for the control of territory or trade routes, at the same time shared status symbols and probably entered in marriage alliances.

In Prehistoric contexts, the term *city-state* has been successfully adopted in the study of Mesopotamian (2800–2350 B.C.) and Indus Valley cultures (Liverani 1986; Nissen 1990; Possehl 1990). Critics of this terminology argue that not every ancient civilization was characterized by urbanism, and that both the Mayan and Egyptian states, for example, lacked cities. While urbanism may have been absent from Mayan and Egyptian states, they did possess large ritual complexes that functioned as centers of power. Some scholars have taken this to be evidence of the existence of a different type of city, the regal-ritual city (Sanders and Webster 1988).

The presence of large, walled settlements during the Longshan era is not proof that these sites were developed city-states comparable in complexity to those of Mesopotamia and the Indus Valley. What is more important, they represent a trend in that direction, one that eventually materialized in the later Xia/Shang periods (cf. Yates 1997). Unlike the concept of chiefdom, city-state brings into focus the urban features of such seats of power, where a certain political ideology and worldview were taking form. The progression toward state power can be seen as a territorial one, from the village to the city and eventually to the territorial state. At the same time, more space is given to the ideological forces that shape this change from within. As Buccellati (1977: 22) remarked, the most important difference between a village and a city is that while within the village there exists a one-to-one personal bond among people, in the city the bond

becomes “corporate” and suprapersonal. Within the city, citizens know that they belong to the same group even though they do not necessarily know each other personally (cf. Morris 1997:96 on the concepts of *metrios* and *homonoia* in the Athenian *polis*), but at the same time they differentiate and specialize in separate activities to survive.

The establishment of the first cities may then be connected with the growth of both a *political group identity* and an *individual social identity*. If the establishment of the political identity of the “citizen” laid the foundation for the progression to the even newer concept of territorial state (particularly in military but also in economic matters), social changes and stratification promoted key specialization in the ideological sectors. Under the new urban circumstances, political control took a more bureaucratic shape (cf. Buccellati 1977:29), one that required, among other things, the systematization of former simple recording devices (tokens, pottery marks, notches, seals) into more unified systems (such as writing, but also other forms of record keeping), and the codification and implementation of ritual, religious, and political ideologies. While there is an ongoing debate about the presence of writing in pre-Shang China, archaeological evidence indicates that simple recording systems occurred before the Longshan period, and that by the Longshan era some simple form of writing may have appeared (Demattè 1999). Particularly crucial are the discoveries of pictographic signs structurally similar to later Chinese characters in the area of the eastern coastal cultures (such as Dawenkou, Liangzhu, and Yueshi). The presence of several altar sites, and a whole array of ritual jade and pottery objects of comparable shapes over a good part of the Chinese territory, appear to indicate that by the Longshan era the standardization of ritual and religious practices and the formation of iconographic formulae was already well in place (Wu Hung 1990). This would include the finds of recognizable ritual objects, such as *bi* discs and *cong* tubes, beyond the Liangzhu nuclear culture to an area that ranges north-south from Inner Mongolia to Guangdong, and east-west from Shandong to Gansu (Huang 1992:78–80, figs. 9–10), and the existence of an established set of ritual vessel types (*li* pitchers, *dou* cups, *ding* tripods, etc.), which were to have a paramount religious importance throughout the early dynastic period.

THE LONGSHAN ERA AND THE PROBLEM OF THE PREDYNASTIC PERIOD

The nature of the Longshan city-network identified in the archaeological record, and the concentration of urban centers in the middle and lower Yellow River Valley and along coastal areas, can be further interpreted by linking the archaeological evidence to relevant information obtained from historical sources. Even though this methodology has been overused, textual data are crucial for archaeological research. These accounts, although found in later documents that also contain legendary material, may retain the sequence of past events, either through oral histories or collation from now lost texts.

According to some scholars (Chang 1986:307; Yan Wenming 1992a:49), the archaeological remains of the Longshan era may correspond to the traditional predynastic phase recorded in historical sources as the Five Emperors period (Wudi Shi), a time when various legendary “emperors” (*di*) and “kings” (*wang*), treated as real historical personae, are said to have dominated the Chinese terri-

tory. Textual criticism has challenged this traditional interpretation, proposing that these kings and emperors are part of a much later mythical construction (Lü Simian and Tong Shuye 1970), and that their connection with Chinese protohistory is nonexistent (Allan 1981, 1984). Another view, adopted here, holds that these emperors and kings are legendary entities that refer to ancient ethnic or social groups active in protohistoric China, and whose domains can be traced back to specific archaeological cultures (Chang 1986:307; cf. Wu Hung 1985, 1990).

Based on several historical accounts and particularly the “Wudi Benji” (Five Emperors Basic Annals) chapter of the *Shiji*, the Five Emperors period was characterized by recurrent warfare among several groups for supremacy in key areas of the middle-lower Yellow River Valley and coastal areas. The most active of these groups were the Huangdi and Yandi in the Central Plain; Chiyou, Taihao, and Shaohao on the eastern coast; and Zhurong and the Sanmiao in the south. According to Xu Xusheng (1985:5), these groups can be roughly classified as belonging to three main nationalities: the Huaxia of the middle Yellow River Valley, the Dongyi of the lower Yellow River Valley (present-day Shandong and Anhui and eastern coastal area), and the southern Miaoman, Manyi, or Nanman (middle and lower Yangzi River Valley), a subdivision that, as Chang (1986:305) has pointed out, matches the geographic pattern of predynastic archaeological cultures.

Crucial events of the Five Emperors period include the battle between the Yandi and Huangdi groups, which reportedly took place at Banquan; the long-lasting competition between the Huangdi group and the Dongyi (Eastern Barbarians), which resulted in the destruction of the Dongyi leadership (Chiyou) at Zhuolu (*Shiji* “Wudi Benji” 1959:3; cf. Xu Xusheng 1985); and wars and subordination involving other groups, such as the southern Sanmiao, the northern Beidi, and the western Xirong (*Shiji* “Wudi Benji” 1959:28). These events support the hypothesis of a series of competing centers and, when combined with the archaeological evidence, indicate that during the predynastic Longshan era there were several centers of power, limited in territorial size and highly competitive with each other.

The proposition of competing and cooperating polities during the predynastic period is hinted at also by assertions in the classics, according to which during the predynastic and early dynastic periods there existed *wan guo*, Ten Thousands (innumerable) States, or *wan bang*, Ten Thousands Nations (*Shiji* “Wudi Benji” 1959; *Zhanguo ce* “Zhaohui Wang 30” 1992:121), and that the numerous legendary “emperors” (*di*) had their capitals or seats of power (*du*) in various parts of the Chinese territory. For instance, it is often said that Yandi had its capital at Chen and then moved to Qufu, that Taihao had its capital at Chen or at Wanqiu, Huangdi at Xiong, Shaohao at Qufu, Zhuanxu at Diqu, Diku at Bo, Yao at Pingyang, and Shun at Pupi (*Shiben* “Jubian” 1957). It is possible that these so-called capitals (*du*), whose toponyms can be traced to locations in the middle-lower Yellow River Valley, indicate the political centers of some of the competing groups of the predynastic Longshan era.

According to traditional sources, the Chinese began building walled cities (*cheng*) in the predynastic or early dynastic period (Li Xiandeng 1986:49). The *Hanshu* “Jiaosizhi-xia” (1970:1247, vol. 4) states, “The magicians say that at the time of Huangdi (the first of the legendary emperors of the predynastic) there

were five walled cities (*cheng*) with twelve gate towers (*lou*) to protect spirits and people at Baoqi.” Most sources, including the *Lushi Chunqiu* “Junshou 17/2” (1994:101–111) and the *Shiben* “Zuobian” (1957:40), place the origin of the walled city at a later time associated with Gun, the purported father of the founder of the Xia dynasty. Similarly, the *Huainanzi* “Yuandao” (1992:3/21) states, “In the past Gun of the Xia [dynasty] made a city wall three *ren* high (= 7/8 m), (as a result) the feudal lords left him and the distant regions were rebellious.” The *Bowuzhi* (*Taiping Yulan* 1960:928, chapter 192) attributes the origin of walled settlements to the slightly later Yu of the Xia, saying, “Dong Lihuai accused Yu of making the world unrestful, so Yu retreated and built three walled cities.”

The sources’ discrepancies concerning the interval when walled settlements were first established may be attributed to different perceptions of the city and the use of the defensive wall. If incipient urbanization and walled settlements first appeared in the Longshan era as a response to intense competition among rival groups, it is likely that larger cities developed later, at the time of the Xia dynasty. Earlier walled settlements may have been defensive in orientation and protected only a small portion of a polity’s population within the enclosure. Later cities were primarily civilian.

We can examine the structure and evolution of some Chinese characters (*yi* ‘city’ and *guo* ‘state’), which, even though dating to a later period, refer to concepts such as “city” and/or “state.” On Shang oracle bone inscriptions, *yi* (town/township) consists of a small square (either city walls or a temple) placed on top of a kneeling human figure (Fig. 16a). This combination, “people in/and a walled complex/ritual center,” appears to point to a civil settlement. Differently, *guo* (Fig. 16b), originally written *huo* (without the outer enclosure), is made up of a small square plus a weapon (cf. Gao Ming 1980:349, 417). *Guo* stresses the concept of an army defending a walled complex, and may mean both a military encampment or a seat of political power that is protected and also controls the military. As it is written today, *guo* means “state” and is made up of three parts: the original two plus a large enclosure that surrounds and includes them. Paleographic interpretation usually explains this as representing the king’s quarters (the small square), the army, and an outer wall to include a larger territory. The change in the structure of the character *guo* may also represent an evolution in the layout of the ancient Chinese city, whereby the walls protecting the inner quarters of the ruling class were in place before the appearance of the outer enclosure. According to the *Bowuzhi* (in *Taiping Yulan* 1960:928, chapter 192, vol. 1) it was Yu of the Xia

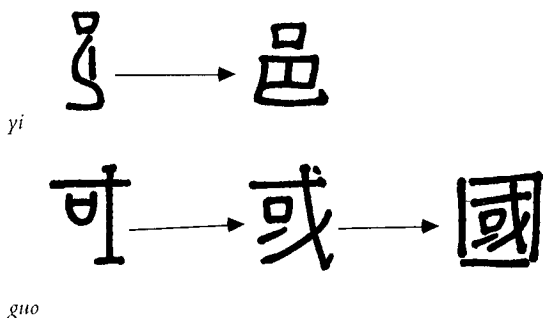


Fig. 16. The development of the character for *yi* 邑 and *guo* 國.

who “began the practice of the inner (*cheng*) and outer (*guo*) walls.” Alternatively this may represent the transition of the city from the original smaller fortified settlement to a political seat within a larger territory.

The duality of meaning for *guo*, which can indicate both city and state (the seat of power) and the protracted centrality of the city as the symbol of state-level political power in early China, are also indications that here state power developed around the city. Possibly, the most ancient state was a city-state or a leading city-state within a confederation of equals. The geographic fragmentation of political power among different groups, which was still evident after the Longshan, indicates that far from being unified states, even the Xia and the Shang (and from a different perspective, the Zhou) were confederations led by a dominant group, which emanated its power and found its identity in a specific urban center (Chang 1976: 62). The mention of several belligerent *fang* or *fang guo* (peripheral states) in oracle bone inscriptions indicates that several groups had not yet joined with the Shang confederation (Tong Zhuchen 1991; cf. Yates 1997: 80).

Archaeological and textual evidence support the hypothesis that in the pre-dynastic Longshan, as a consequence of competitive interaction and cooperation, several groups active in the middle-lower Yellow River Valley and coastal areas created local centers of power, which eventually took the shape of politico-religious urban polities. While these emerging rival cities played a pivotal role in shaping the new political panorama, the existence of political fragmentation did not prevent the growth of a basic ritual and political *koine* among the various Longshan-era cultures. The concentration of several fortified towns or cities that, particularly in the Henan and Shandong area, often are in direct stratigraphic relation with later Xia and Shang remains, suggests that these proto-historic settlements played a major role in the development of a cohesive territorial entity that led to the appearance of state societies of the Xia/Shang dynastic period.

Most of these events were concentrated in the Central Plain thus corroborating traditional beliefs that the cradle of the Chinese Xia and Shang civilization is to be found in the middle-lower Yellow River Valley. Yet the occurrence of other polities both to the south and farther north shows that this fulcrum of Chinese civilization did not exist in isolation, and that for some time there was a dynamic interchange both aggressive and cooperative between these areas. As such, even though we may speak of the origin of Xia and Shang civilization in the middle Yellow River Valley, this does not preclude the development of other independent and contemporaneous states both near and far from the Central Plain in China.

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NOTES

1. The issue of the existence of a “Jade Age” was discussed by Mou Yongkang, Wen Guang, Teng Shu-ping, Elizabeth Childs-Johnson, and Adam Kessler at the International Jade Age Symposium held at the Los Angeles Museum of Natural History in March 1996; proceedings forthcoming. See also Xie Zhongli (1994). A contrary opinion on the concept of “Jade Age” was expressed by

- Jessica Rawson (1995:28) in the catalog of the exhibition of the jade collection of Sir Joseph Hotung at the British Museum.
2. For this and all subsequent maps, please keep in mind that, as explained in note 5, during the Longshan era the Yellow River most likely flowed on a different (southern) course than the one shown on the maps (which is the contemporary one).
 3. The bones were found in six different areas, all located at the edges of the site, but were concentrated in the northwestern part of it. Most of the bones are crudely prepared, some were not scraped; or if scraped, their thickness is uneven. The holes for placement of the heat source were bored in different sizes and depths, and were arranged in a disorderly way compared to the rather symmetrical arrangements of the Shang examples (Li Chi 1956: 101–124).
 4. These measures would have been even larger considering that the site is on the surface and the wall has been subject to erosion for c. 4000 years.
 5. Apparently, there is only this ^{14}C date for Laohushan, which does not agree with the archaeological evidence. The sample was a piece of carbonized wood (Tian Guangjin 1986: 47).
 6. From 2600 to 2000 B.C. (roughly the Longshan era), the Yellow River is supposed to have flowed south of the Shandong peninsula into the Yellow Sea, while before and after it flowed north and emptied into the Bohai Gulf (Wang Qing 1993, Liu Li 1996).
 7. Even though it is difficult accurately to distinguish between weapons used in war and those used for hunting, the increase in total number is quite significant. See, for example, the excavation of the site of Chengziyai (Li Ji 1934: 73–79). About the general increase in tools and weapons (especially axes), see Zhang Zhiheng (1988: 148–158).
 8. See, for example, the *Yugong* or “Tribute of Yu,” a chapter of the *Shangshu* datable to the late Zhou period, which gives an account of the people and places of the nine Chinese “provinces” during the time of Yu of the Xia and describes the goods produced in every one of them. Even though the account was written later compared to the period here discussed, it is very likely that the same goods continued to come from the same areas for a long period of time.
 9. Shandong Longshan and Liangzhu (the so-called Coastal Cultures, to which also the late Hongshan could be added) are often indicated as Dongyi cultures. Hougang II is thought to be a pre-Shang culture, and its local variation in the Yi-Luo area (Wangwan III, Luoyang–Zhengzhou) is considered pre-Xia. Another culture, the Kexingzhuang of Shaanxi, which is thought to be a pre-Zhou horizon, while not tightly involved in this early interaction had constant exchanges with them as well (Yan Wenming 1992a).

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ABSTRACT

One of the key features in the development of social complexity in ancient China was the emergence of urbanism and the construction of large, fortified settlements of increasing size and complexity. This trend predates the earliest dynastic period in China and is associated with the Longshan era dating to c. 2600–2000 B.C. A new construction technology involving rammed-earth walls and platforms was developed and was increasingly employed to create large walls surrounding Longshan settlements, some of which were as much as 30 ha in size. Several of these large, fortified centers are now known along the middle and lower Yellow River basin, as well as from coastal regions, Inner Mongolia, and to the south along the Yangzi River. Both archaeological and textual sources from China are surveyed, and the geographic distributions of early urban settlements and their associated polities are described. Several hypotheses are advanced to interpret the organization and development of these early city-states and their relationship to the later and larger dynastic states of early historic China. KEYWORDS: Chinese archaeology, middle and lower Yellow River, Longshan era, urbanism, social complexity, the state.

APPENDIX 1. LONGSHAN-ERA WALLED SETTLEMENTS

HENAN PROVINCE

[Area 1]

Pingliangtai (Huiyang County)

Walls: square, c. 185×185 m; gates and guardhouses

Moat: width 30 m

Area: enclosed 34,000 m²; site 50,000 m²

Within the walls: enclosed area on elevated platform, height 3–5 m; dwellings, earthen platforms, height c. 0.72 m; kilns; drainage system, depth 0.3 m

Date (TR-calibrated ¹⁴C): walls, c. 2300–2100 B.C.

Haojiatai (Yancheng County)

Walls: c. E-W 148 m, N-S 222 m

Moat: no details available

Area: enclosed 32,000 m² site 65,000 m²

Within the walls: enclosed area on elevated platform, height 2–3 m; houses, ashpits, tombs, kilns

Date (TR-calibrated ¹⁴C): walls (period II): 2656 + 121 B.C.; period III, 2590 + 145 B.C.

Wangchenggang (Dengfeng County)

Walls: badly preserved; only sections of two walls: (1) S-W 65 + 30 m; (2) S-W-N 82.4 + 92 + 29 m; gate?

Area: c. 8000–10,000 m²

Within the walls: *hangtu* platforms, pits with sacrifices

Other elements: metal fragment (bronze alloy of lead, tin, and copper), pottery graphs

Date (TR-calibrated ¹⁴C): walls (period II), 2400 + 100 B.C.

Mengzhuang (Hui County)

Walls: square, c. 400×400 m; width 8.5 to 5.5 m, reinforced (10 m) at the base

Moat: 5.7 deep m

Area: 160,000 m²

Date (stratigraphy/seriation): middle and late Longshan, c. 2300–2000 B.C.

Hougang (Anyang)

Walls: irregular shape, only sections discovered, 70 m

Area: site 100,000 m²

Within the walls: dwellings with sacrifices, kilns, tombs

Date (¹⁴C and stratigraphy/seriation): site, early (c. 2700–2500 B.C.), middle (2500–2300 B.C.), and late (2300–2100 B.C.) Longshan; walls, middle Longshan

SHANDONG PROVINCE

[Area 2]

Chengziyai (Zhanqiu County)

Walls: rectangular, N-S 405, E-W 390 m

Area: 175,500 m²

Within the walls: elevated platform, dwellings, kilns

Other elements: ritual pottery (*li*, *ding*, *xian*, and *dou*), pottery graphs, some metal artifact, oracle bones

Dates (stratigraphy): site (Longshan-Xia) 2400–1800 B.C.

Dinggong (Zouping County)

Walls: square, N-S 310, E-W 310 m; width 20 m, height 1.5–2 m

Moat: yes, depth 3 m, width 20 m

Area: 100,000 m²

Within the walls: elevated platform, houses, kilns, tombs, ashpits;

Other elements: inscribed potsherd, violent deaths, human sacrifices

Dates (stratigraphy): Longshan period, cat 2600/2000 B.C.

Bianxianwang (Shouguang County)

Walls: trapezoid, shorter N side; E 175 m, W 225 m, possibly two enclosures (inner, outer); gates?

Area: inner c. 10,000 m²; outer cat 48,400–57,000 m²

Other elements: ritual pottery (*ding*, *gui*), human and animal (pig and dog) sacrifices

Dates (stratigraphy): middle and late Longshan, c. 2000 B.C.

Tianwan (Linzi)

Walls: rectangular

Area: 150,000 m²

Within the walls: elevated platform

Dates (stratigraphy): early-middle Longshan, c. 2600 B.C.

Shijia (Huantai)

Walls: probably square, but only few pieces remain; length 6 m, width 0.64–0.90 m

Moat: yes, depth cat 2.5 m, width 6–8 m

Area: 44,000 m²

Other elements: early incised material

Dates (stratigraphy/seriation): late Longshan

Jingyanggang (Yanggu)

Walls: oblong, 1150 × 300–400 m, width 20–10 m

Area: 380,000 m²Within the walls: gates and two *hangtu* platforms

Other elements: inscribed potsherd, ritual vessels, bone artifacts, and stone weapons

Dates (stratigraphy/seriation): Longshan

INNER MONGOLIA

[Areas 3–6]

[Area 3, Liancheng county
(Laohushan culture)]

Laohushan

Walls: triangular; N wall 600 m, S-W wall 405 m; width 1 m, height 0.5 m

Moat: ?

Area: 130,000m²

Within the walls: houses with plastered walls

Other elements: pottery marks, oracle bones, small statuary, and stone bi discs

Dates (stratigraphy/seriation): c. 2800 and 2500 B.C., even though a ¹⁴C date would place Laohushan period II at 1870 + 70 B.C.

Xibaiyu

Walls: perimeter 245 m

Bancheng

Walls: trapezoid, N 188 m, W 146 m, S 146 m

Within the walls: stone mounds

Damiaopo

Walls: only a section of 100 m

[Area 4, Baotou/Western Daqing Mountains]

Weijun

Three sections surrounded by walls, possibly ritual centers: A: walls: 120 × 65 m; width of wall 1–1.2 m; height 0.4–0.8 m; B: walled area: 8.000 m²; C: stone wall foundations remains

Other sites: Ashan, Xiyuan, Shamugui, Heimaban

[Area 5, Ordos: Yellow River area
Between Qingshuihe County and
Jungar Banner]

Zhuzita (Jungar Banner)

Walls: 2 enclosures, inner length 137 m, outer 142 m

Other sites: Zhuzishang (Jungar Banner), Maluta (Qingshuihe County) Houchengzui (Qingshuihe County)

[Area 6, Chifeng, Eastern Inner
Mongolia]

SICHUAN

[Chengdu Plain Cluster, Area 7]

Baodun (Xinjin County)

Walls: N 500 m, E 500 m, W 270 m; height 4/4 m

Area: 250,000 m²

Within the walls: elevated platform, 3 m

Date: walls, period III of three, dated comparatively to Sanxindui period I with relevant ¹⁴C dates, c. 2500–2000 B.C.

Other sites: Mangcheng (Dujiangyan city), Yufu (Wenjiang County)

HUBEI-HUNAN AREA

[Areas 8–9]

[Area 8, Hubei]

Shijiahe-Dengjiawan (Tianmen County)

Walls: irregularly square, N-S 1200 m, E-W 1000 m, width 30, height 4 m

- Moat: yes
 Area: 1,000,000 m²
 Within the walls: dwellings, burials
 Date: (middle) Qujialing/(middle) Shijiahe periods, c. 3000–2000 B.C.
- Yinxiangcheng (Jingzhou)
 Walls: rectangular, rounded corners, E-W 580 m, N-S 350 m; height 4–6.5 m, width 10–25 m
 Moat: width 30–40 m, depth 1–2 m
 Within the walls: dwellings, burials, flowing channel
 Date (stratigraphy/seriation): Qujialing culture, c. 3000 B.C.
- Majiayuan (Jingmen)
 Walls: trapezoidal, E 640 × N 250 × S 440 × W 740 m, width 3, 5–8 m, height 5–6 m, gates
- Moat: width 30–50 m, depth 4–6 m
 Area: 24,000 m²
 Within the walls: flowing channel
 Date (stratigraphy/seriation): Daxi, Qujialing, and early Shijiahe
- [Area 9, Hunan]
- Chengtoushan (NanYue)
 Walls: yes
 Area: 880,000 m²
 Within the walls: house foundations
 Date:(stratigraphy/seriation): walls, Daxi, c. 4000 B.C., Qujialing
- Other sites: Zoumaling (Shishou), Jimingcheng (NanYue)