Discovery and Preliminary Study to the Liangzhu Culture

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Process of the Discovery and Study of the Liangzhu Culture

The Liangzhu site group is located about 20km northwest of Hangzhou city, distributed largely in an area of about 50 sq km between Liangzhu Town and Pingyao Town. Geographically, to the north of the site group, the lofty eastern branch of Tianmu Mountain extends from Penggong in the west to Zhangshan in the east, running roughly from southwest to northeast. To the south of the site group is also an extension of Tianmu Mountain, which forms a disjointed series of small hills from Pingyao in the west to Liangzhu in the east. Between the two mountain ranges, a valley about 5km wide from the north to the south extends about 8km from the west to the east, and the Eastern Tiaoxi River winds its way from southwest to northeast.

In 1936, Mr. Shi Xingeng of the West Lake Museum carried out surveys and excavations at Liangzhu and Changmingqiao with inspiration by the discovery of the Longshan Culture in Shandong and the excavation of the Gudang site in Hangzhou, as well as by the fact that some farmers of his hometown Liangzhu, Yuhang brought to light similar black pottery when they dug ponds. He obtained great achievements and published them in the work *Liangzhu: Hangxian Di er Qu Heitao Wenhua Yizhi Chubu Baogao* (Liangzhu: Preliminary Report on Sites of the Black Pottery Culture in the Second District of Hangxian County). The discovery, however, under the influence of the Diffusionism and the theory of Yellow River center widespread at that time, was naturally taken as a black pottery culture diffused southeastward from the Longshan Culture.

From 1950, related sites were excavated one after another in Zhejiang, Jiangsu and Shanghai, and the contents of this culture were understood increasingly clear. In 1959, the famous archaeologist Xia Nai proposed formally the name of Liangzhu Culture.

In 1973, excavation revealed for the first time Liangzhu Culture tombs at Caoxieshan in Wuxian County, Jiangsu that contains funeral black pottery and large-sized ritual jades, such as *cong*-prismatic tubes and *bi*-discs. Thus the two types of jades previously taken as artifacts of the Zhou to Han period came to be understood as objects of the Liangzhu Culture.

Following the excavation at Caoxieshan, large-sized Liangzhu Culture tombs with *cong* and *bi* were excavated at Zhanglingshan of Wuxian County in 1977. These finds gradually drew attention to the Liangzhu Culture in archaeological circles.

In 1978, 1979 and 1982, the Nanjing Museum carried out several times of excavation to explore still magnificent tombs on the Sidun site at Wujin in Changzhou, and brought to light dozens of *cong*, *bi* and other funeral jades, upon which they obtained more knowledge and put forward the ideas of clan elites and their kin graveyards.

In the following years of 1982 and 1983, the Shanghai Commission for the Preservation of Ancient Monuments also discovered large-sized Liangzhu Culture tombs with numerous jades when they carried out excavation on the Fuquanshan site in Qingpu, Shanghai. Moreover, they learnt through selective excavation in the cemetery that the earth hills are actually truncated-pyramidal-shaped earthen mounds artificial piled up

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for burying tombs. This cognitive breakthrough provided new material not only for researching into the nature and features of large-sized tombs in the Liangzhu Culture, but also experience and inspirations for gaining discoveries in the future.

Inspired by the above-mentioned archaeological find-ings and knowledge, in 1986, the Zhejiang Provincial Institute of Cultural Relics and Archeology eventually revealed 11 well-arranged large-sized tombs of the Liangzhu Culture at Fanshan of Changming Township, Yuhang County, the first discovered locality of the culture. These graves reflect distinct difference and re-strictive regulations in the disposition and rank of tomb pits as well as the quantity and type of funeral objects. Being an unprecedented discovery, it furnished new evidence to inquiring into the social differentiation and the division of labor in the Liangzhu Culture.

In 1987, the Zhejiang Provincial Institute of Cultural Relics and Archaeology carried out excavation on the Yaoshan site in Anxi, Yuhang and revealed the remains of a truncated-pyramid-shaped altar formed of three earthen circles varied in color and surrounded by a stone revetment. Atop the altar, they uncovered 12 large-sized Liangzhu Culture tombs similar to those discovered at Fanshan. The excavation not only gained a great num-ber of fine jades, but also revealed an altar, a new item of the contents of the Liangzhu Culture. Thus the re-searchers began to pay attention to the close relation-ship of large Liangzhu tombs with sacrificial sites and that of Liangzhu jades with sacrificial activities.

In 1991, another altar similar to that at Yaoshan was excavated on Pingyao Huiguanshan Hill only two km east of Fanshan. It occupies an area of 1,500 sqm ac-cording to reconstruction, where, in addition, four large-sized tombs of Liangzhu Culture were uncovered. The excavation brought further knowledge of this type of Liangzhu altar, evidencing its three-dimensional shape to be terrace-like, which provided clues for future work.

While exploring the high-rank cemeteries and sacrificial sites at Fanshan, Yaoshan and Huiguanshan, Zhejiang researchers began to seek living places of the tomb-owners before their death. Attention was drawn to the large-sized level earthen platform to the east of Fanshan. Through 1987, 1992 and 1993 excavations it has been confirmed that this vestige called Mojiaoshan or Gushanding is the artificially piled foundations of large buildings. It measures over 670m in length from the west to the east, above 450m in width from the north to the south, and about 10m in piled thickness, with the center built of rammed earth, sand and stone layers. This discovery provided the ground for understanding the system of fine, developed ritual jades in the Liangzhu Culture, as well as the level of productive force and the structure of social organization in that period. It proves that the Mojiaoshan area must have been an important center of the Liangzhu Culture.

Moreover, archaeological excavation revealed in this region a number of other sites, such as those at Wujiabu, Luocun, Yaojiadun, Miaojian, Boyishan, Meiyuanli, Guanzhuang, Shangkoushan, Shiqianwei, Wenjiashan, Bianjiashan and Hengweili, where middle-rank and com-mon people’s cemeteries of the Liangzhu Culture were brought to light along with remains of various-grade buildings. These sites reflect distinct social differentia-tion and the disparity of various social groups, and fur-nish data to the analysis of social structure in this region.

Since the discovery of a Liangzhu site in 1936, thanks to the unremitting efforts of several generations of archaeologists, more than 130 sites in this region have been affirmed to be Liangzhu Culture vestiges through archaeological surveys and excavations.

From June 2006 to November 2007, through over a year of archaeological coring, survey and excavation, the cultural remains around the Mojiaoshan site have been confirmed to be vestiges of city walls. It enriched our knowledge of the distribution of settlements in the Liangzhu site group, the nature and layout of the sites and the condition of social development.

Discovery and Preliminary Understanding of the Liangzhu City Site

In June 2006 to January 2007, to inquire into the under-ground condition of the protecting area of major Liangzhu sites, the Zhejiang Provincial Institute of Cul-tural Relics and Archaeology carried out excavation on the western side of the tableland where the Pingyao Putaofan site is located, and discovered there a north-to-south moat of Liangzhu Culture period, which mea-sures about 45m in width and over 1m in depth, and contains rather thick layers of the late Liangzhu Culture on the bottom. Through a selective excavation on the tableland by the eastern bank of the moat it became clear that the tableland is entirely man-piled up to an thickness of over 3 m, with the bottom laid with quarried stone blocks in quite a regular shape. Considering the discovery and the information from local inhabitants that
such stones they had also found in well digging, we made the preliminary inference that the tableland may be the remains of a man-built dike of the Liangzhu Culture period. As it lies about 200m to the west of the Mojiaoshan site and is parallel with the latter, it may also be a remaining outer enclosing wall of the large-sized Mojiaoshan palace-site.

From March 2007, we expanded southward and northward the coverage of coring survey and trial excavation with the Putaofan site as the starting point and the following ideas as the selection standards. Firstly, the vestige should be built of pile-up yellow earth. Secondly, its bottom should be laid with stones. Thirdly, outside the vestige should be accumulations of the river or trench phases. Based on these standards we soon found out the distribution scope of cultural remains on the western side of the Mojiaoshan site, which joins Fengshan Hill in the south and the Eastern Tiaoxi River in the north, covering an area over 1,000m long in total and 40–60m wide. In May 2007, a trial excavation of the Baiyuanfan section in the north affirmed the results of coring and discovered the existence of a moat on either side of the remains and, at the moat edges, the Liangzhu Culture layers superimposed upon yellow earth and stone vestiges and containing potshards identical in date with those from the Putaofan section. This discovery preliminarily proved our inference, greatly inspired us, and pointed out the aims and ways of the next step of our work.

The most important aim for the next step of work was to clarify whether the remains are left over from a dike or a city wall. Nevertheless, both the northern and southern ends of the remains show no traces owing to the effect of the natural geographic environments: the northern end joins the dikes of the Tiaoxi River while the southern end is linked with Fengshan Hill, which forced certain difficult to the seeking work. In this situation, on one hand, we continued to make coring in the north to south direction so as to clarify whether this is a dike of the ancient Tiaoxi River; on the other, we began to docoring on the southern and northern sides of Mojiaoshan Hill, at the places corresponding to Fengshan Hill and Zhishan Hill. In early June, we found out remains of stone layers by coring in the north of Hechitou Village to the north of Mojiaoshan. By mid September we gradually clarified that the eastern end of the remaining stone foundations is linked with Zhishan Hill and the western end joins the Tiaoxi River. Again we lost the direction of advance. It was not until the last ten-day period of October that we found related remains extending in the south-to-north direction on the eastern side of Zhishan Hill, and in early November, we revealed vestiges running from west to east on the southern side of Mojiaoshan Hill. Thus it can be affirmed that these remains of stone foundations are left over from the city walls of Liangzhu Culture period that surrounded Mojiaoshan. Meanwhile, we carried out trial excavations on the vestiges of the northern, eastern and southern city walls, which verified that the city walls on the four sides are all identical in date and building techniques.

The results of selective excavation on the remains of the four city walls suggest that the accumulations superimposed on their toes belong to the late Liangzhu Culture, so the walls stopped functioning and began to be abandoned no later than the late Liangzhu Culture. As for their starting point, it calls for further archaeological work.

Judged by the results of coring and trial excavation, within and outside the city walls were water systems. The outer water system included rather vast water areas to the northwest, north and east of the city. They must have been small lakes. The outer sides of the city walls were not straight lines. They were formed of wide concavities and convexities resembling projecting fortifications, the convex parts exceeding one hundred meters in total. A preliminary analysis suggests that these concavities and convexities must be remains of the city wall sections built according to the waterside natural terrains.

The Mojiaoshan site already known in the city is situated roughly in the center. It is a man-piled massive earthen platform occupying an area of above 300,000 sq m, where rammed sandy clay layers and large-sized postholes were found in the central part. In the northwestern corner is the Fanshan aristocratic cemetery; in the tableland of the southwestern area is the Sangshutou site, which once yielded Liangzhu bi discs and other jades; in the southeast, excavation encountered stone-paved ground on the Huayuanli site, and widespread red-burnt clay accumulations were discovered on the Zhongjiaucn site; and in the northeastern corner is the Majinkou site, where workers of a brickyard encountered Liangzhu Culture layers with fine potshards and large-sized wooden structural members when they dug there for clay material.

Outside the city are also densely laid-out sites, among which the high-rank ones include the Yaoshan and
Huiguanshan altars and cemeteries and Wenjiashan and Houyangcun aristocratic cemeteries. In addition, there are important localities of jade artifacts, such as Wujiabu, Baimushan and Mashanhou.

In the north of the site group, about 2km apart from the northern city wall, there is an earthen wall extending for about 5km, which, as known from a preliminary survey and excavation, measures about 20–50m in width and about 3–7m in height and must have been man-piled-up in the period of Liangzhu Culture. In the eastern Lucun section, excavation revealed jade material and Liangzhu aristocratic tombs, and in the middle Mao’ernong section, traces of stone foundations were discovered beneath the bottom of piled-up earth through a selective excavation. As the earth wall is built at the hill-foot along the run of the hill, it was previously taken as vestiges of mountain flood control installations. Presently, thanks to the discovery of ancient city walls around the Mojiaoshan site, in the light of the spatial relationship between the earth wall and the city walls as well as the comparison of their building methods, it can be preliminarily inferred that it may have been an outer wall of the city. On the Bianjiashan site lying about 500m to the south of the ancient city-site, corresponding to the earthen wall and extending from west to east, excavation in 2002 to 2005 discovered remains of a late Liangzhu Culture wharf and a mid and late Liangzhu Culture cemetery.

The Liangzhu city-site is the remains of so far the first known Liangzhu Culture city in the Yangtze River valley and also the largest among the city sites of that period so far discovered in China. Its discovery evidenced once again that the area centering on Mojiaoshan was the center of the Liangzhu Culture, opened a completely new field of view for understanding the layout and relationship of more than 130 sites in the Liangzhu site group, and provided important data for restudying the social development stage of the Liangzhu Culture, as well as the position and value of the culture in the origination of Chinese civilization.

Our work is still at the incipient phase, and our understanding is only a stage-marking piece of knowledge. The solution of many issues and the further deepening of researches call for archaeological work in the future.

Postscript: The present paper is published for the first time. It is prepared by the author Liu Bin and translated into English by Mo Runxian.