

New Discoveries in the Fifth Excavation of the Lingjiatan Site in Hanshan County, Anhui

Anhui Provincial Institute of Cultural Relics and Archaeology

Key words: *Lingjiatan site (Hanshan County, Anhui Province)* *Tombs-Neolithic Age*
Jades-Neolithic Age-China

A Brief Account of the Site

The Lingjiatan site is a state-protected ancient monument and lies about 10 km southwest of Tongzha Town in Hanshan County, Anhui Province, at Lingjiatan Village of Changgang Administrative Village. In the past, there were four times of large-scale archaeological excavation, which resulted in the discovery of densely arranged Neolithic tombs and other important vestiges, such as altars, sacrificial pits, stone circles and house-foundations. Among the unearthed objects are quantities of fine jades, stone implements and pottery vessels. This is a large-sized high-rank settlement of the late Neolithic Age in the Chaohu Lake Basin. Starting from 10 May 2005, the fifth excavation there was carried out by opening 16 excavation squares (5 × 5m each) and one 1 × 5m excavation trench, which covered an area of about 450 sqm, where the explorers revealed the north-west of the Southern cemetery and the altar area in the cemetery (Figure 1).

Major Achievements

1. A group of stone remains. It is located about 10m to the east of the altar and arranged from the west to the east of a sloping hillside, occupying an area of approximately 20 sqm and looking like an irregular circle in

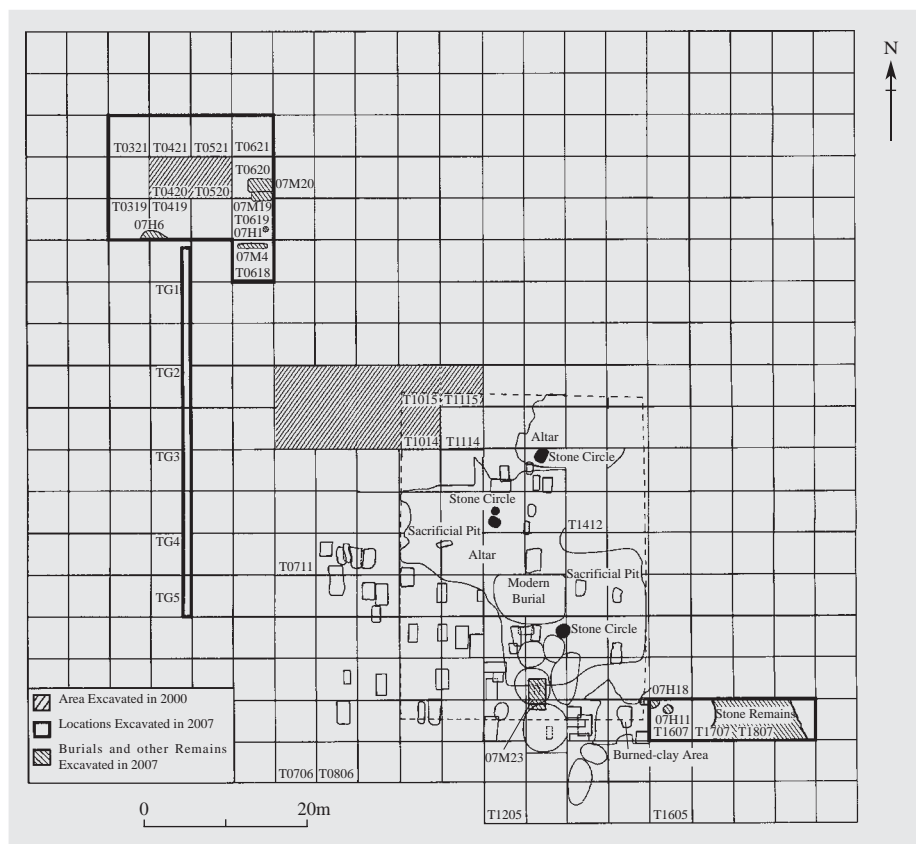


Figure 1. Excavation squares and vestiges
 altar stone circle sacrificial pit Jiang family tomb (modern times) stone vestiges red
 burnt clay
 20m area excavated in 2000 area excavated in 2007 tombs and others vestiges exca-
 vated in 2007

plan. As it has not been completely uncovered, its nature is difficult to determine, but judged by its shape and material, it must have been closely related to the altar and might have been used in sacrificial activities.

2. Tombs in the northwest of the Southern cemetery. Three (07M12, 07M19 and 07M20) are excavated, lying in east-west orientation, measuring about 2m long, over 1m wide and about 0.25m deep, and all belonging to the Neolithic Age. 07M12 yielded no grave goods except for a pottery bowl. Among the grave goods of 07M19 and 07M20, jades come first in amount, stone implements next, and pottery occurs in a small quantity. The jade and stone *yue*-battle axes are large in size, bear no use-wear at the edge, and may be non-practical tools of production. The two tombs feature most distinctly the great proportion of rings, *jue*-rings, and other small-sized jade ornaments among the grave goods, as well as the occurrence of bits and pieces left over from jade working (Figure 2).

3. A large-sized jade pig from 07M23. It is the most important find in this excavation. The provenance is close to the altar in the Southern cemetery, above the earth

filling of the tomb, at the point a little to the west of the pit center. This sculpture is made of a naturally pig-like raw jade block and measures about 72cm in length and 32cm in width and weighs as much as 88 kg. Vivid in shape, it has projecting lips with two nostrils above them and a pair of upward-turned fangs protruding from the lip corners. The eyes are molded in bas-relief, and the ears are made in the same technique erected from the head. The neck is slightly sculptured and polished. On one side of the belly, two curved lines are simply carved to show bent legs or wings. From the neck to the tail, the original appearance of the raw jade is preserved without any traces of working (Figure 3). The whole work is very similar to the previously discovered one (87M13: 1). This is the earliest, largest and heaviest jade pig recorded so far in China.

07M23 is located in the south of the cemetery, a little to the east of the middle, in the southeast of the altar area. It intruded the altar at the point almost atop the latter, lying in the core area of the Lingjiatan cemetery. The tomb pit is opened beneath the third cultural layer of the site, intruding the altar and raw soil, and has been intruded by 07M22 on the southern side. It has an irregularly rectangular plan, measuring 3.45m in length, 2.1m in width, and 0.3m in depth (0.55m from the bottom to the surface of present-day ground). The major axis points to the south a little by west, the occupant's head to the south. The coffin can be inferred to be 2.65m long and 0.8m wide judged by its traces, and the human skeleton has gone away. The unearthed grave goods are extremely rich, totaling 330 pieces, i.e. 200 jades, 97 stone implements, 31 pottery objects, a bone fragment and a piece of turquoise (Figures 4–7).



Figure 2. Tomb 07M20 (W–E)



Figure 3. Jade pig unearthed from above earth filling of Tomb 07M23

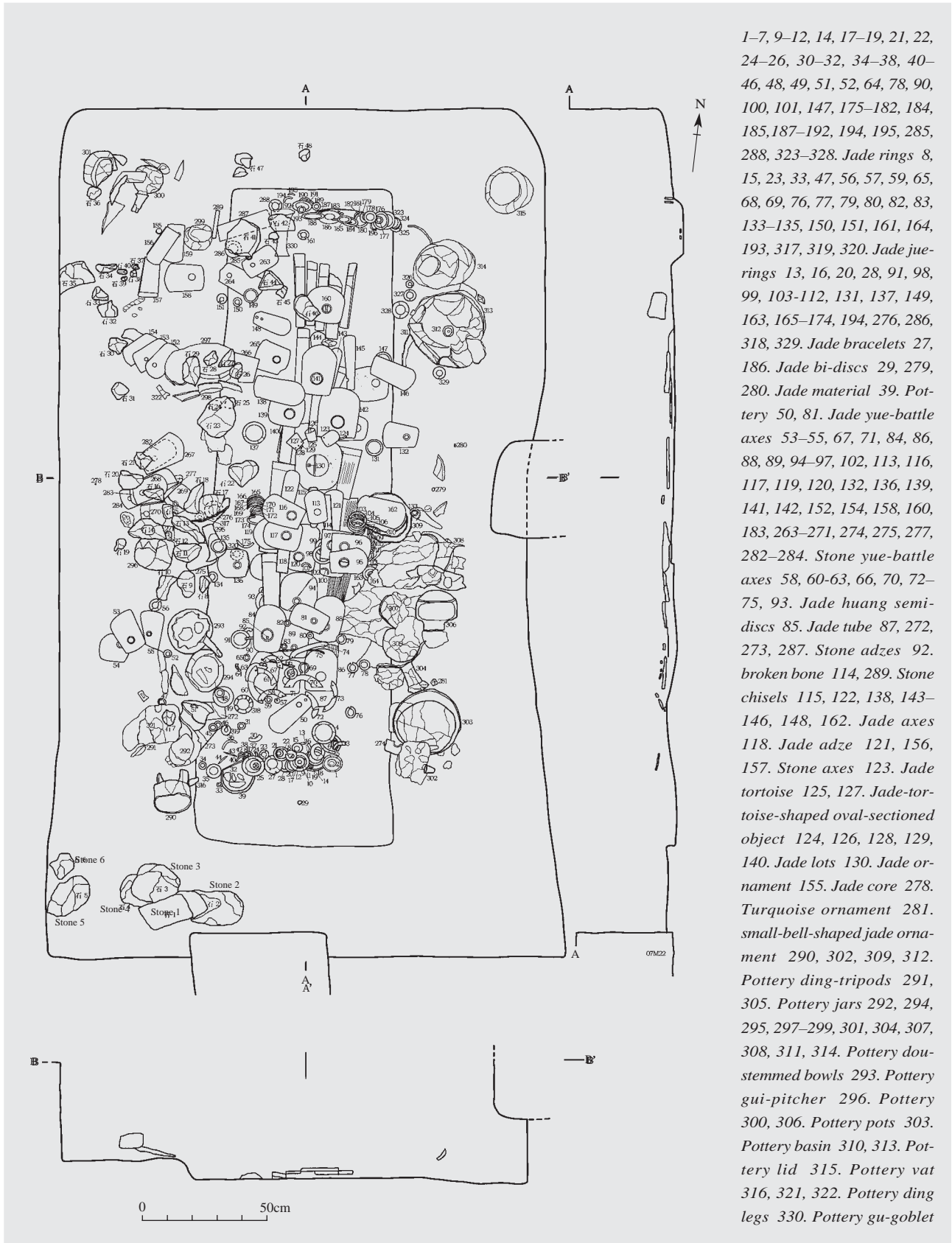


Figure 4. Plan and section of the first layer in Tomb 07M23

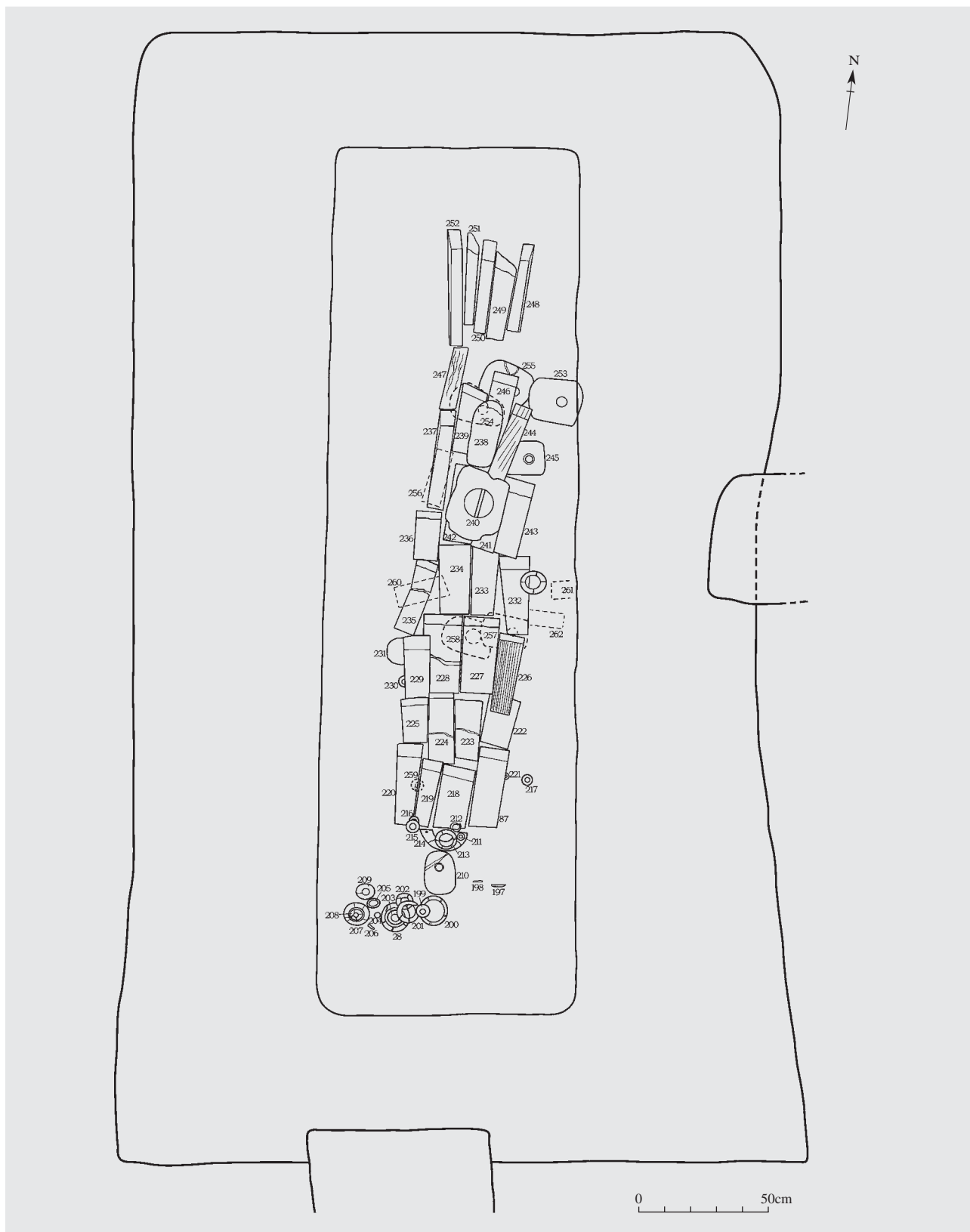


Figure 5. Plan of the second layer in Tomb 07M23

197–199, 201, 202, 205–208, 216, 217, 221, 230. Jade rings 200, 213. Jade bracelets 203, 209, 211, 212, 215, 259. Jade jue-rings 204. Round jade ornament 210, 231, 240, 245, 253–255, 257, 258. Stone yue-battle axes 214. Stone huang semi-discs 218–220, 222–229, 232–236, 239, 241–244, 246, 256, 260–262. Stone adzes 237, 247–252. Stone chisels 238. Jade axe



Figure 6. A full view of Tomb 07M23 (E-W)



Figure 7. Grave goods in the second layer in Tomb 07M23 (E-W)

The jade and stone artifacts are widely varied in type, largely belonging to the *yue*-battle axe, ring, bracelet, *huang*-semi-disc, *jue*-ring, *bi*-disc, adze and chisel. They are compactly arranged in the tomb pit and partly superimposed on each other in 2–6 layers. The *huang*, *jue*, ring and bracelets are all made in jade and placed especially densely. The stone implements are mostly adzes, chisels and *yue*. They are large-sized and fine-polished, with the edge well sharpened. Some *yue* are square in plan; the central bifacial perforation reaches 9cm in diameter in a few cases.

Near the occupant's head, above 20 jade rings are put one in another. They measure 9 and about 4cm in diameter for the largest and smallest respectively. The body is flat and thin; the inner wall bears traces of bifacial perforating by means of a tubular drill, the hole measuring only 0.2cm in diameter for the smallest examples. A green jade *yue* is also put in this position. Along the arms are two 10-piece groups of jade bracelets arranged symmetrically on the left and right, which must be arm ornaments. Near the waist, two jade bracelets are placed on the two sides; they might be ornaments for the wrists.

Just in the middle of the waist, a jade tortoise and two oval-sectioned tortoise-shaped jades were found to be disposed in a fan-shaped pattern. The jade tortoise, arranged in the east, is completely shaped with the belly hollowed and the abdomen bearing a tortoise-shell pattern. It must have been combined into a group of divinatory implements along with the two tortoise-shaped jades, each containing one or two jade lots in the abdominal cavity.

The jade *huang* are placed at the occupant's chest, numbering ten pieces, mostly flat semi-circles. Except for the one erected on the right of the chest, they form a column right on the chest, maybe a string of chest pendants. This type of object is very important on the Lingjiatan site for it may have symbolized the occupant's status, position and authority.

The *jue* are generally made in jade and total nearly 20 pieces. They are close to each other in size, diameter measuring 4cm or so, and were found above the chest or scattered at other places. These artifacts functioned as earrings and maybe also as pendants on dress.

The *yue* are made of jade or stone, mostly the latter. They were found largely on the occupant's upper body. Those occurring below the waist are larger in size, and a few pieces are put on the western side of the tomb pit. Those in the middle line of the human body are placed

with the edge generally facing to the north, while those on the western and eastern side of the middle line are directed to the west and east respectively, and a few pieces seem to have been originally placed close to inner walls of the coffin and then fell to the outside after the coffin rotted away. The stone *yue* are well shined by polishing and largely have a curved edge. Some specimens have edges on two or three sides. The edge is sharp and the body usually bears a single perforation, which constitutes the most distinct feature of the jade *yue* from the Lingjiatan site.

The unearthed stone adzes come first in number. They are put on the pit bottom, occupying most of the area and forming seven five- or four-piece west-to-east rows with the edge facing generally to the north. It seems that the occupant was laid on the stone adzes while entombed. The adze surface is polished; the edge is sharpened and fine-made, and bears no use-wear.

The pottery vessels number over 20 pieces, most of which are seriously broken, thin-bodied and low in baking temperature and belong to gray-bodied black-slipped clay ware, red clay ware occurred in a small amount, and black and red sandy specimens emerged in a few cases. The discernible types include the *ding* tripod, *dou* stemmed bowl, *gui*-pitcher, basin, vat and *zun* vase, with the dish-shaped *dou* on a flared stem encountered most frequently. These vessels are placed mainly on the western and eastern sides of the tomb-pit. A large-mouthed *zun* was found erected in the earth filling of the north-eastern corner. It is of red sandy ware, has a thick body and a round bottom, and measures about 30cm in remaining height (mouth missing), about 20cm in belly diameter and about 3cm in body thickness.

Description of Some Typical Objects

A bit of jade (07T1308 :3) is left over from a piece of serpentine. It is irregular in shape, even and smooth on one face and two-tier terraced on the other with traces of flaking near the middle, those of emery-wheel cutting on one side, and a round knob formed by thread cutting at one end of this facet. Obviously the raw material was cut first with an emery wheel from one end and then with a thread when the cutting reached the other end. The length is 12.3cm long and the width 5.6cm (Figure 9).

A jade lot (07M23:140) is a grayish-white tremolite object shaped like a tall tablet with a triangular point at the wider end, bears a circular bifacial perforation in the

middle and measures 5.4cm in length (Figures 8:3 & 10).

A jade tortoise (07M23:123) is an object of greenish-gray actinolite. The inside is hollowed, the dorsal shell is arched with the center thickened, the frontal end is thin and curved, and the rear one is cut straight. The abdominal shell is flat and thin and is carved with the characteristic pattern. In the dorsal shell, a pair of bifacial perforations are symmetrically made near the rear end, and in the abdominal shell, such a hole is also perforated in the corresponding position. The abdominal cavity contains two jade lots, one of which is broken.

This artifact is 6.5cm and 4.8cm long for the dorsal and abdominal shells respectively, 6cm wide, and 4.2cm high for the whole object (Figures 11 & 12).

A tortoise-shaped oval-sectioned jade object (07M23:125) is a roughly complete greenish-gray actinolite artifact. The inside is hollowed and the back-like upper part is curved in section, while the belly-like lower part is flatter and roughly even in thickness, with the ends made straight and oblique respectively. The upper part has three bifacial perforations near the straight end. The hollowed inside contains a jade lot. The two parts mea-

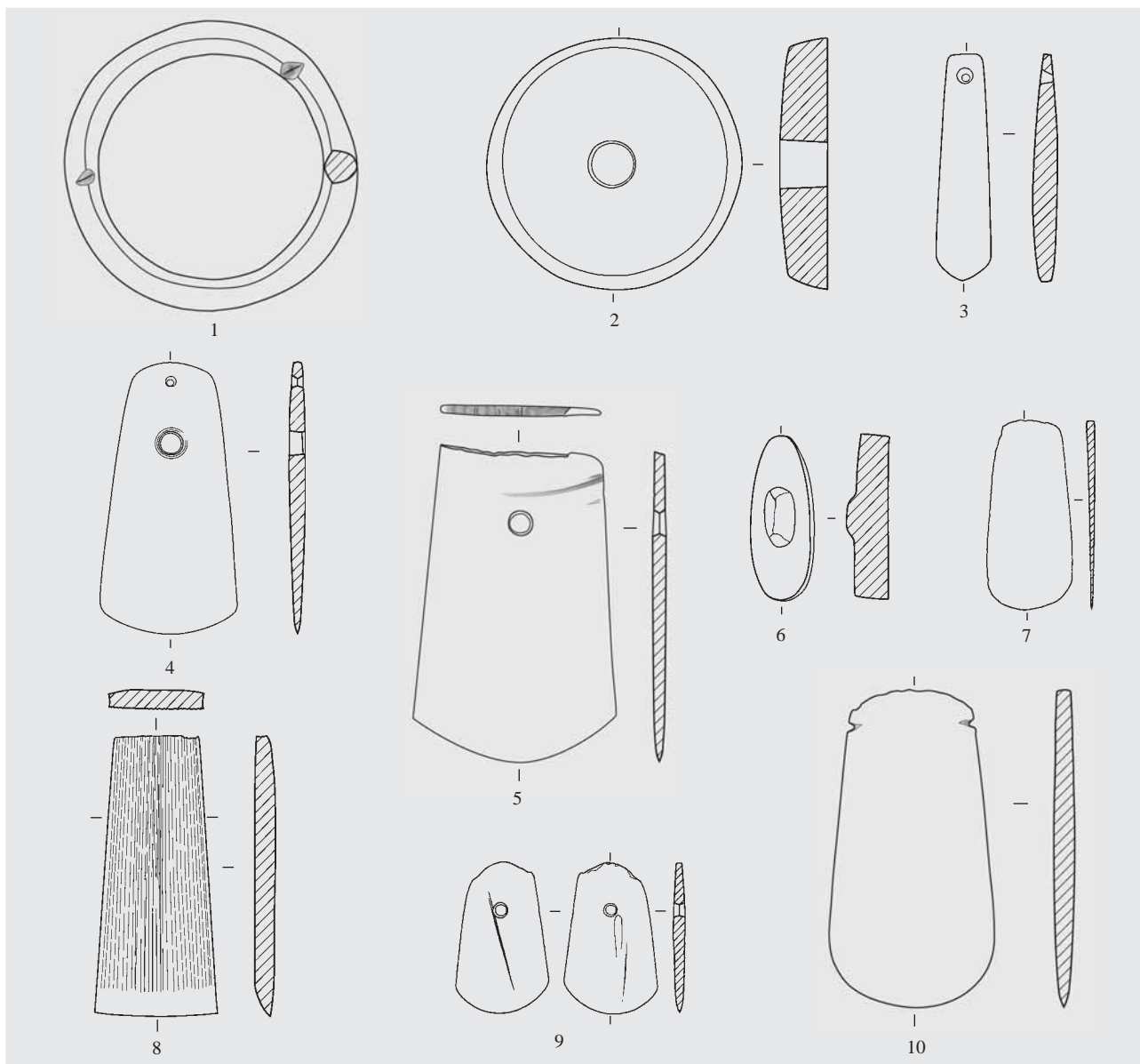


Figure 8. Unearthened objects

1. Jade bracelet (07T1607:2) 2. Stone bi disc (07T1607:4) 3. Jade lot (07M23:140) 4. Jade yue-battle axe (07M23:50) 5. Jade yue-battle axe (07M20:12) 6. Jade ornament (07T1607:3) 7. Jade axe (07M23:238) 8. Stone adze (07M23:226) 9. Stone yue-battle axe (07M20:11) 10. Jade axe (07M23:162) (1-3. about 3/5 6. about 9/10 the rest about 1/5)



Figure 9. Jade leftover bit (07T1308 :3)



Figure 10. Jade lot (07M23:140)

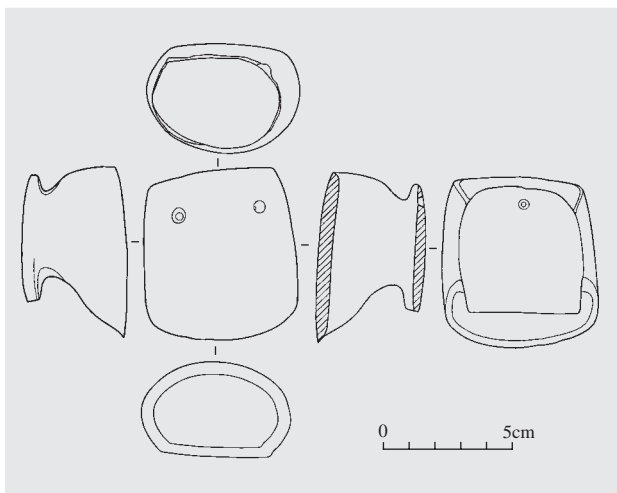


Figure 11. Jade tortoise (07M23:123)



Figure 12. Jade tortoise (07M23:123 the jade lot inside numbered 07M23:124)

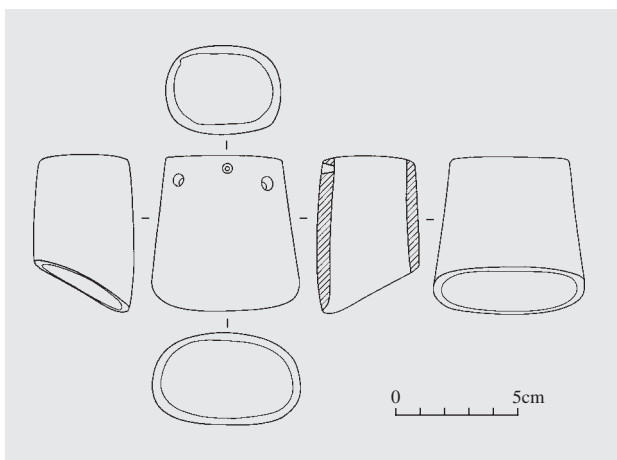


Figure 13. Jade tortoise-shaped oval-sectioned object (07M23:125)



Figure 14. Jade tortoise-shaped oval-sectioned object (07M23:125 the jade lot inside numbered 07M23:126)

sure 6.2 and 4.4cm in length respectively, and the whole object is 4.2cm in height (Figures 13 & 14). Another object of this type (07M23:127) is the same as 07M23:125 in material and similar to the latter in shape and size. Its inside contains two jade lots (Figure 15).

A jade axe (07M23:162) is made of grayish-white tremolite with green and yellowish-brown spots. The surface is smooth and shining, and the shoulders bear notches. The whole object measures 22.5cm in length (Figures 8:10 & 16). Another specimen (07M23:238) is a bone-white tremolite artifact. It is 20.5cm in length (Figures 8:7 & 17).

A stone adze (07M23:226) is greenish-gray and has a slightly concaved curve at the top and 57 concave and convex lines on a face. The two sides are curved and the

edge is unifacial. The length is 20cm (Figures 8:8 & 18).

Two jade *yue*-battle axes. 07M20:12 is a greenish-white serpentine implement with blue stripes and a curved edge. It is thin, flat and trapezoid with a bifacial perforation at the upper end, and measures 22cm in length (Figures 8:5 & 19). 07M23:50 is made of green quartzite with white veins and is also thin, flat and trapezoid with a curved edge and a curved top. It has two perforations in the upper part. The length is 19.3cm (Figures 8:4 & 20).

A jade bracelet (07T1607 :2) is made of greenish-white serpentine with a bluish tint. It is flat and round,



Figure 15. Jade tortoise-shaped oval-sectioned object (07M23:127 the jade lots inside numbered 07M23:128 and 07M23:129)



Figure 16. Jade axe (07M23:162)



Figure 17. Jade axe (07M23:238)



Figure 18. Stone adze (07M23:226)

bears on one face triangular notches, and has a roughly semi-circular section. Its diameter measures 6.85 and 5.4cm for the outer and inner circles respectively (Figures 8:1 & 21).

A jade ornament (07T1607 :3) is a bone-white tremolite artifact. It is flat and oval, bears an elongated round bulge on one face, and measures 3.9cm in length (Figure 8:6).

A stone *bi*-disc (07T1607 :4) is made of purplish-red lava with whitish spots. It is thin, flat and circular and has an inclined edge. At the center is a unifacial

round hole made by tubular drill. Its diameter measures 5.4–5.95cm for the outer circle (Figures 8:2; 22).

Conclusions

Tomb 07M23 is the most important discovery in the excavation of the Lingjiatan cemetery over the years and also one of the most important discoveries in the archaeology of the Neolithic Age across the middle and lower Yangtze River valleys. It holds the first position in this cemetery for large scale of its structure, the great quantity of its grave goods, and the exquisiteness of their



Figure 19. Jade yue-battle axe (07M20:12)



Figure 20. Jade yue-battle axe (07M23:50)



Figure 21. Jade bracelet (07T1607 :2)



Figure 22. Stone *bi*-disc (07T1607 :4)

craftsmanship, which are peerless on this burial ground and also among the tombs of the adjacent cultures. The unearthed jade tortoises, lots and pig are all recorded for the first time in the archaeology of Neolithic China. They constitute extremely important data for researching into the origin of Chinese civilization and evidence that the Chaohu Lake Basin is one of her birthplaces.

On the earth filling of 07M23, a jade wild pig was found to weigh as much as 88 kg. A similar finding had been got from the earth filling of Tomb 87M4, which yielded a huge stone *yue*-battle axe weighing 4.25kg. Both graves feature the entombment of heavy ritual objects as well as jade tortoises and divining instruments, the meaning of which is worthy of deep-going study.

The three sets of tortoise-shaped jades and jade divining lots are especially remarkable among the 200 jades from 07M23. This discovery made up a gap in Chinese archaeology and verified historical records on the tortoise, the Eight Trigrams and divination. It indicates that the Lingjiatan people were already familiar with jade tortoise divination for good or ill omens. The making technology of the jade tortoises and lots was very advanced and reached rather a perfect level.

The jade tortoises, lots and tablets from the Lingjiatan site going back to 5300 BP and the numerous oracle-bones with traces of burning from the Yin Ruins demonstrate archaeologically the distant source and long stream of Chinese divination and evidence the reality of ancient textual records on divination. As known so far,

the Lingjiatan jade tortoises, lots and tablets (primitive Eight Trigrams) are the earliest remains of Chinese divining culture, a true embodiment of the originating and developing course of Chinese civilization in the cultural and ideological field and a milestone in the origination of Chinese civilization.

Previously Tomb 87M4 yielded a jade (87M4:36, named jade hairpin at that time) in association with objects belonging to the jade tortoise and tablet. Judged by the present condition, it must be a jade lot for its similarity in shape and function to those from Tomb 07M23. On the analogy of this, the oblique-mouthed sleeve-shaped objects in Hongshan culture, similar to the tortoise-shaped jades from 07M23, must also have had such function. The Lingjiatan and Hongshan cultures yielded anthropomorphic jades, both groups depicting human figures with the hands in front of the chest, which must have symbolized a religious ceremony. The objects from the Lingjiatan and Hongshan cultures suggest that there must have been certain communication between the two cultures that existed in 5300 BP in the regions far away from each other, which reflects that the origin and development of Chinese civilization features the tendency from multi-polarity to uniformity.

Reference

Anhui Sheng Wenwu Kaogu Yanjiusuo 安徽省文物考古研究所. 2006. *Lingjiatan: Tianye Kaogu Fajue Baogao zhi Yi* 凌家滩: 田野考古发掘报告之一. Beijing: Wenwu Chubanshe.

Postscript: The original report is written by Zhang Jingguo and published in *Kaogu* 考古 (Archaeology) 2008. 3: 7–17 with seven figures and seven plates. The present version is prepared by the author himself and translated into English by Mo Runxian 莫润先.