

Primary Report on the Excavation at Xinzhai Site in Xinmi, Henan in 2000

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The Xinzhai 新砦 site in Xinmi 新密 City, Henan 河南 is well-known as the central settlement of the “Xinzhai phase” named after the site. A cooperative team of the Center for the Study of Ancient Civilizations, Beijing University and the Zhengzhou Municipal Institute of Antiquity and Archaeology launched the third excavation at the site from April to July 2000, during which an area of 324.7 sq m at the middle and eastern parts of the Liangjiatai 梁家台 district of the site had been exposed.

Stratigraphy of the two parts is quite different. In grid T1 of the middle part, nine layers can be recognized. Layer 1, 15 cm thick, is cultivated gray soft sandy soil. Layers 2 to 7, totally 80–95 cm thick, contain porcelain shards dating from the Tang and Song to the Ming and Qing Dynasties. Pits H8, H14 and H15 were discovered under layer 7. Within H8, were found ceramic deep-belly pots, lids, *zun*-shaped urns, *dou*-stemmed plates and grooved basins of the late Xinzhai phase. Layer 8, 20–30 cm thick, is relatively solid gray sandy soil containing ceramic flat-top lid knobs, deep-belly pots, small-mouth high-neck urns, flat-bottom basins and feet of *ding*-tripods of the early Xinzhai phase. Within pit H55 discovered under this layer, were found ceramic deep-belly pots, *jia*-vessels, ring-foot plates, single-handle cups and big-mouth *bo*-bowls of the Wangwan 王湾 Phase III culture. Layer 9, 55 cm thick, is relatively solid gray-yellowish sandy soil containing ceramic small-mouth high-neck pots, bowls, deep-belly pots, feet of *gui*-tripods, big flat-bottom grooved basins and thick-stem *dou* plates of the Wangwan Phase III culture. Pits H30, H66 and H105 were found under this layer.

In grid T6 of the eastern part, 18 layers can be recognized. Layer 1, 10–15 cm thick, is cultivated soil. Layer 2, 15–20 cm thick, is disturbed soil. Layers 3–5,

totally 105–145 cm thick, are deposit of the early Erlitou 二里头 culture containing lace-brims of pots and mushroom-shaped knobs of lids. Layers 6–14, totally 295–368 cm thick, are deposit of the Xinzhai phase. Layers 6–13 belong to the late Xinzhai phase. Layer 14, the contents of which are similar with those of the layer 8 of grid T1, belongs to the early Xinzhai phase. Layers 15–18, totally 100–155 cm thick, contain typical ceramic vessels of the Wangwan Phase III culture.

I. Remains of the Wangwan Phase III Culture

1. Pits

H30. Covered by layer T1 ① and broken by pit H28, this round small-mouth big-bottom pit is 1.8 m in mouth diameter, 2.6 m in bottom diameter and 1.7 m in depth, with black-gray filling soil.

H55. Covered by layer T1 ③, breaking H65 and broken by H6 and H14, this round small-mouth big-bottom pit is 1.6 m in mouth diameter, 2.2 m in bottom diameter, 1.6 m in depth, with gray-yellowish solid filling soil. Its walls are smooth. Four round small pits were found at the northeastern part of its bottom.

H113. Covered by layer T2 ⑧, breaking H124 and broken by H54, H74, H83 and H101, this round small-mouth big-bottom pit is 1.9 m in mouth diameter, 2.15 m in bottom diameter and 0.92 m in depth. Filling soil in the pit consists of three layers: the upper yellow soil, the middle gray-brown soil containing charcoal grains, and the lower soft gray-brown soil.

2. Artifacts

Main types of stone tools include the spade, the hoe, the knife, the arrowhead, the axe, the sickle, the adze, the chisel, the *gui*-tablet and the scraper. Most of them are polished. Only a few are chipped and pecked. Fine

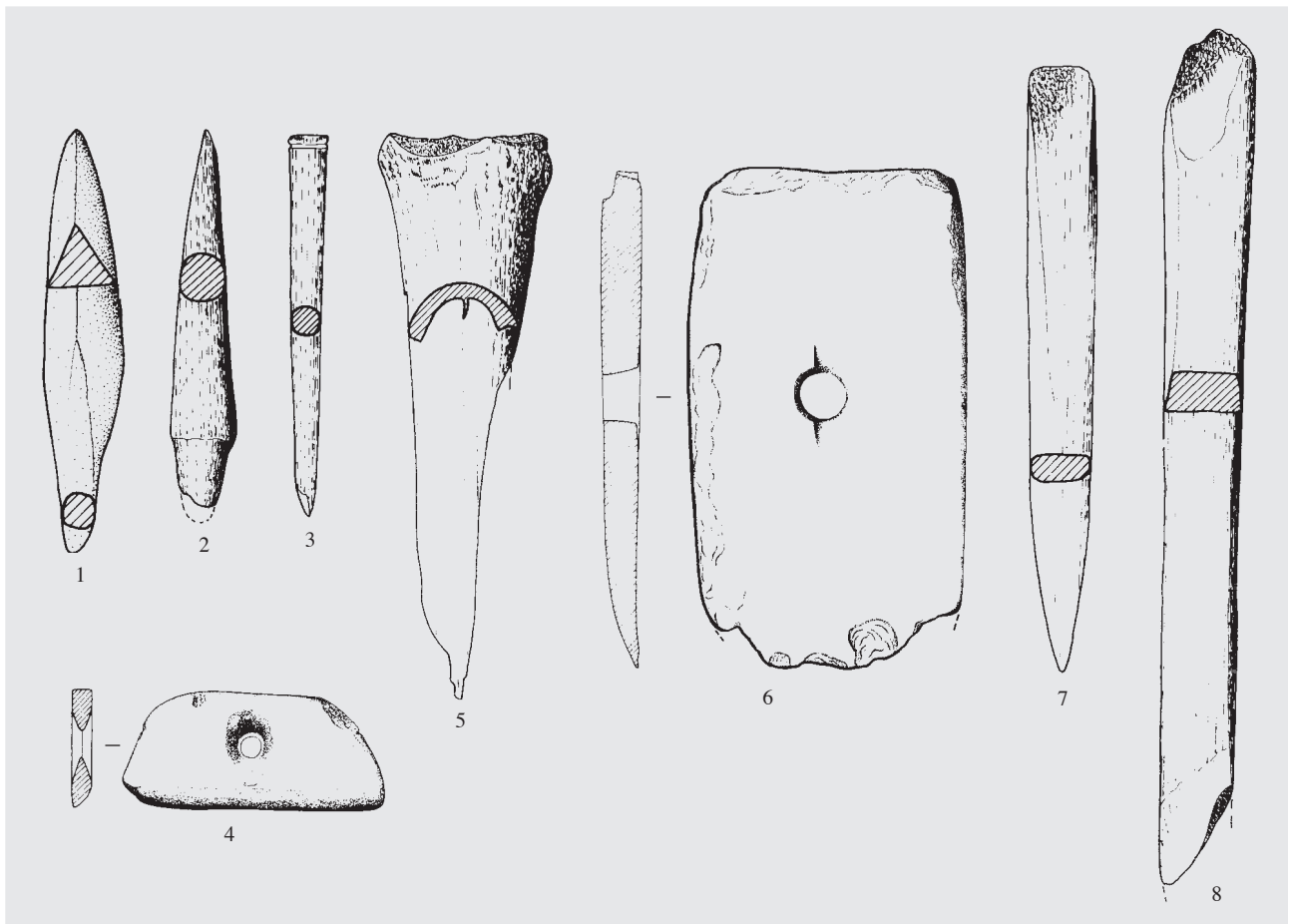


Fig. 1 Artifacts of the Wangwan Phase III culture

1. stone arrowhead (H58:1) 2. bone arrowhead (H96:5) 3. bone hairpin (H30:1) 4. stone knife (H114:1) 5. bone awl (H111:1) 6. stone spade (H103:3) 7. bone awl (H58:2) 8. bone spoon (H103:5) (scales: 4, 6. c.2/5; the rest c.3/4)

perforations are found on many tools. Trace of handle fixing can be recognized on some hoes and spades.

Spade (H103:3). The flat rectangular caesious spade is 17.3 cm long with a unifacial arc blade and a perforation drilled from one side (Fig. 1:6).

Knife (H114:1). The polished trapezia-shaped knife is 9 cm long, 4 cm wide and has an arc back, a unifacial straight blade and a perforation drilled from double sides (Fig. 1:4).

Arrowhead (H58:1). The polished arrowhead has a body with triangular section, a short thick conic tang and is 7.1 cm long (Fig. 1:1).

Main types of bone objects include the awl, the hairpin, the arrowhead and the spoon.

Arrowhead (H96:5). The polished arrowhead is 6.8 cm long with a conic body and a short tang (Fig. 1:2).

Hairpin (H30:1). The hairpin is 6.5 cm long with a groove on the top and a thin conic end (Fig. 1:3).

Awl. H111:1. The awl is 9.4 m long with a dagger-shaped point. Bone joint can still be recognized at its top

(Fig. 1:5). H58:2. The flat polished awl is 11.7 cm long (Fig. 1:7).

Spoon (H103:5). The finely polished flat rectangular spoon is 14.8 cm long with a damaged end (Fig. 1:8).

Gray fine clay pottery and gray sandy ware, followed by black fine clay pottery and black surface fine clay pottery formed the ceramic assemblage of this phase. Fine clay red and white pottery was seldom found. Most of the vessels were wheel made. Surface decorations of the vessels consist of the basket pattern, the trellis pattern, the cord pattern, the openwork pattern and the fingernail deign. The main vessel types include the deep-belly pot, the high-neck pot, the bowl, the *bo*-bowl, the single handle cup, the *ding*-tripod, the *dou*-stemmed plate, the ring-foot plate, the grooved basin, the flat-bottom basin, the deep-belly basin, the *zeng*-steam basin, the *yan*-tripod, the lid and the *jia*-tripod.

Deep-belly pot. H84:15, gray sandy ware, round belly, curved rim, contracted neck, small flat bottom, cord pattern on surface, 29 cm high, 20.4 cm in mouth diam-

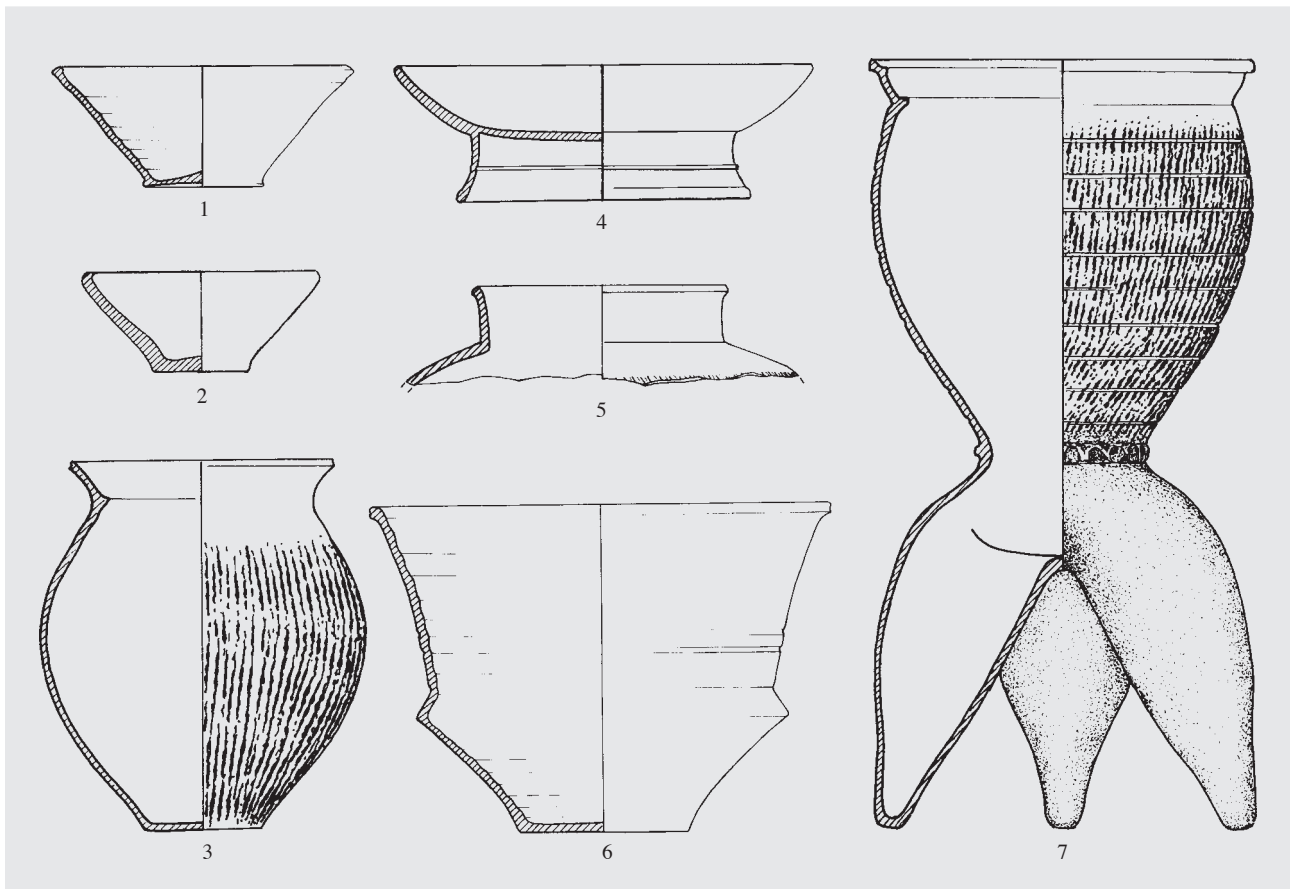


Fig. 2 Ceramic objects of the Wangwan Phase III culture

1. bowl (H84:95) 2. *bo*-bowl (H84:76) 3. deep-belly pot (H84:15) 4. ring-foot plate (H84:81) 5. high-neck pot (H84:69) 6. double-bellies basin (H113:55) 7. *yan*-tripod (H113:23) (scales: 3, 7. c.1/6; the rest c.1/2)

eter (Fig. 2:3).

Bo-bowl. H84:76, black fine clay made, contracted mouth, oblique belly, small flat bottom with basket pattern outside, 13.2 cm in mouth diameter (Fig. 2:2).

Bowl. H84:95, gray fine clay made, flared mouth, oblique belly, concave bottom, 18 cm in mouth diameter (Fig. 2:1).

High-neck pot. H84:69, gray fine clay made, small mouth, high neck, sloping shoulder, basket pattern under the shoulder, 15 cm in mouth diameter (Fig. 2:5).

Ring-foot plate. H84:81, gray fine clay made, flared mouth, shallow plate, low thick ring foot, 25 cm in mouth diameter (Fig. 2:4).

Double-bellies basin. H113:55, fine clay made with polished black surface, flared mouth, curved belly, small flat bottom, 27.2 cm in mouth diameter (Fig. 2:6).

Yan-tripod. H113:23, black thick sandy ware, the upper part in the shape of a deep-belly pot with thick cord pattern separated by line pattern, an attached clay strip on the waist, relatively thin and long hollowed legs without decoration, 60.3 cm high (Fig. 2:7).

II. Remains of the Xinzhai Phase

1. Features

Features of the Xinzhai phase include house foundations, pits, burials, a large ditch and some postholes.

Pits are usually round or oval in shape with level bottom. Some of them are small in mouth diameter and large in bottom diameter. H19 discovered under layer 4 of T4 is 1.92 m in mouth diameter, 2.64 m in depth, with level bottom. The fillings in it consist of six layers (Fig. 3:1).

Burial H53 was discovered under layer 4 of T4. It is in the shape of an irregular square, 2.1 m long, 1.4 m wide, 0.4–0.52 m deep, with straight walls and round bottom. Within the upper part of the gray-whitish soft sandy filling soil, were found shards of ceramic vessels. A skeleton of a 50 years old male with no burial offerings was discovered on the bottom heading to the south. His upper body is in the shape of struggle. No thighbones were found. There is no trace of coffins (Fig. 3:2).

2. Artifacts

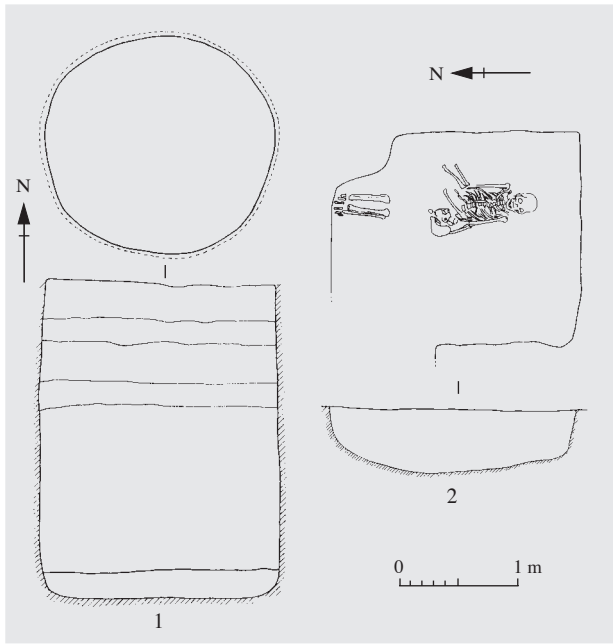


Fig. 3 Remains of the Xinzhai phase
1. pit H19 2. burial H53

Main types of stone tools of the Xinzhai phase are similar with the Wangwan Phase III culture. However, perforations become more popular.

Spade. H93:9, completely polished, flat, unifacial arc blade, 21.2 cm in length (Fig. 4:11). G1 ①:2, 12.2 cm in length (Fig. 4:10).

Axe. H22:23, thick body, rectangular-shaped section, bifacial blade, 6.4 cm in remaining length (Fig. 4:5).

Sickle. H93:7, arc back, unifacial straight blade, 7.1 cm in width (Fig. 4:8).

Adze. H59:6, rectangular-shaped section, unifacial blade, 4.9 cm in length (Fig. 4:4).

Chisel. H56:1, rectangular-shaped section, unifacial blade, 3.5 cm in length (Fig. 4:6).

Arrowhead. T6 ⑧:1, gray-whitish, polished, triangular-shaped section, no tang, a hole at the end for shaft fixing, 5.1 cm long (Fig. 4:2). H62:2, flat wide body, conic tang, 6.8 cm long (Fig. 4:3).

Spear head. H24:2, triangular-shaped flat body, blades at two sides, 14.8 cm long (Fig. 4:1).

Ornament. H59:5, shell-shaped, a perforation drilled from one side in the middle, 3.3 cm long (Fig. 4:7).

Jade chisel. H59:1, green-whitish, trapezia-shaped flat body, unifacial blade, 2.5 cm long (Fig. 4:9).

Bone tools were made of bones of pigs, cattle and goats. The main types include the arrowhead, the hairpin, the knife, the awl, the needle, the hoe, the chisel and the spoon. A shell ornament with two perforations was also discovered.

T3 ⑤B:1, a 8.4 cm long piece, probably fragment of

the spout of a *gui*-tripod or a *he*-vessel, is the only bronze object unearthed from the site.

Gray fine clay pottery and gray sandy ware, followed by black fine clay pottery, black surface fine clay pottery and brown sandy ware, formed the ceramic assemblage of this phase. Fine clay red pottery was seldom found. Most of the vessels were wheel made. The main types include the deep-belly pot, the lid, the small-mouth high-neck urn, the curved-shoulder pot, the curved-shoulder urn, the *dou*-stemmed plate, the *ding*-tripod, the flat-bottom basin, the grooved basin, the *he*-vessel, the single handle cup, the *gu*-vessel, the thick body *bo*-bowl and the bowl. Surface decorations of the vessels consist of the basket pattern, the trellis pattern, the carved pattern, the attached clay strip, the cord pattern, the fingernail design, the line pattern and the openwork design. Some vessels have comb-shaped handles.

Small-mouth high-neck urn. H26 ④:76, gray fine-clay made, straight neck, round shoulder, round belly, small flat bottom, polished surface above the shoulder, line patterns and basket patterns under the shoulder, 22 cm high (Fig. 5:6).

Urn with lid-fixing mouth. H19:100, black fine clay, contracted mouth, lightly arc body, small flat bottom, four symmetrical handles on the belly, four tile-shaped feet, concave line pattern on the belly and feet, basket pattern near the bottom, 33 cm in mouth diameter (Fig. 5:4).

Zun-shaped urn. T6 ⑧:781, gray sandy ware, flared mouth, contracted neck, sloping shoulder, oblique arc belly, small flat bottom, basket, concave line and attached-clay-slip patterns on the surface, 40 cm high (Fig. 5:7).

Deep-belly pot. T6 ⑧:930, dark gray sandy ware, curved rim, contracted neck, round belly, trellis pattern on the surface, 28 cm high (Fig. 5:5).

Curved-shoulder pot. H19 ③:135, fine clay made, black surface, small mouth, sloping shoulder, oblique belly, small flat bottom, trellis pattern on the surface, 23.9 cm high (Fig. 5:9).

Round-shoulder pot. T6 ⑧:307, gray fine clay made, flared mouth, short neck, round belly, small flat bottom, thick cord pattern on the surface, 26.3 cm high (Fig. 5:8).

Low-feet *ding*-tripod. H19 ⑤:102, dark gray sandy ware, curved rim, contracted neck, round bottom, basket pattern on the surface, 16 cm high (Fig. 5:11).

High-feet *ding*-tripod. T6 ⑧:772, dark gray sandy ware, contracted mouth, drooped belly, round bottom, comb-shaped handles on the upper belly, triangular-shaped feet, basket pattern on the surface, 30 cm high

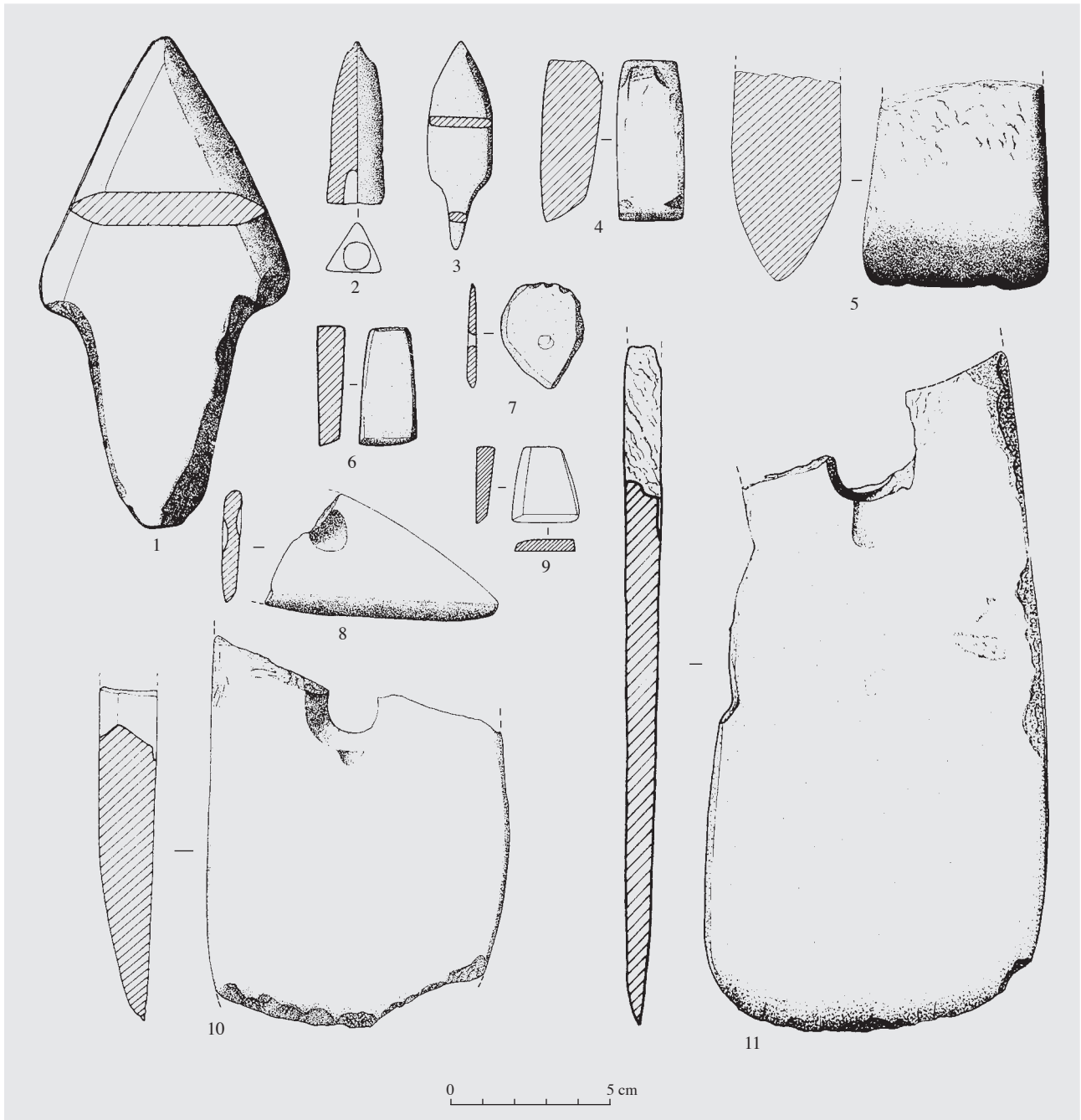


Fig. 4 Artifacts of the Xinzhai phase

1. stone spearhead (H24:2) 2, 3. stone arrowheads (T6⑧:1, H62:2) 4. stone adze (H59:6) 5. stone axe (H22:23) 6. stone chisel (H56:1) 7. stone ornament (H59:5) 8. stone sickle (H93:7) 9. jade chisel (H59:1) 10, 11. stone spades (G1 ①:2, H93:9)

(Fig. 5:10).

Double-belly *dou*-stemmed plate. T6 ⑧:804, gray fine clay made, flared mouth, oblique curved belly, round bottom, high ring-foot, concave line pattern on the surface, 28 cm in mouth diameter (Fig. 5:2).

Tureen-shaped *dou*-stemmed plate. T6 ⑧:705, fine clay made, black polished surface, curved rim, arc belly, round bottom, thick ring-foot, 19.5 cm in mouth diameter (Fig. 5:1).

Flat-bottom-basin. T6 ⑧:598, gray fine clay made, flared mouth, shallow belly, big flat bottom, a line pattern near the rim, 33 cm in mouth diameter (Fig. 5:3).

Lid. T6⑧:702, dark gray fine clay made, mushroom-shaped hollow knob, lightly convex top, straight body, 21 cm in diameter (Fig. 5:12). T6⑧:782, gray fine clay made, pig-head-shaped, 23 high, 23 cm in diameter (Figs. 5:13; 6).

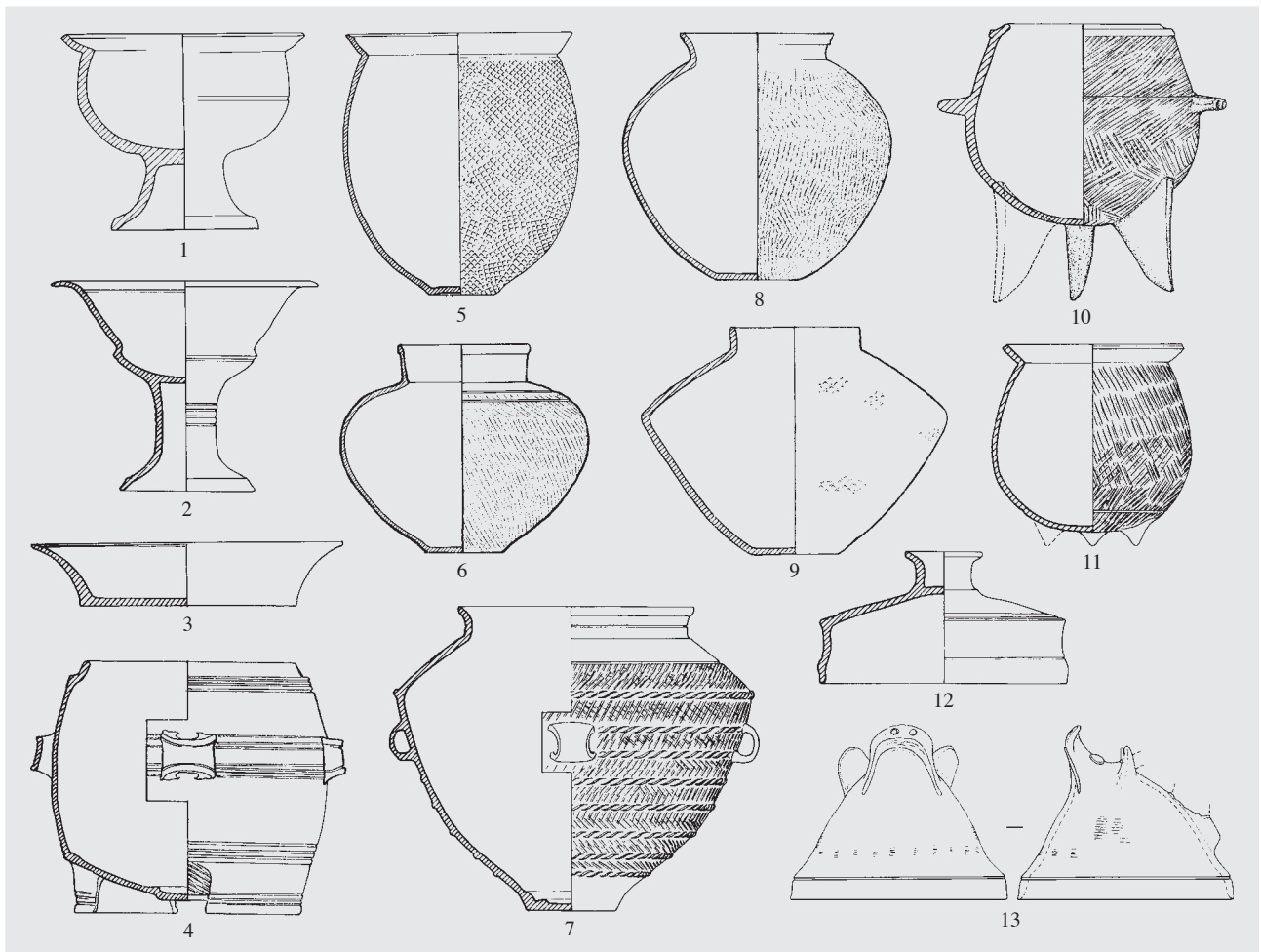


Fig. 5 Ceramic artifacts of the Xinzhai phase

1, 2. *dou*-stemmed plates (T6 ⑧:705 and 804) 3. basin (T6 ⑧: 598) 4, 6, 7. urns (H19:100, H26 ④:76, T T6 ⑧:781) 5, 8, 9. pots (T6 ⑧:930, 307, H19 ③:135) 10, 11. *ding*-tripods (T6 ⑧:772, H19 ⑤:102) 12, 13. lids ((T6 ⑧:702 and 782) (scales: 1, 11, 12. 1/6; 4. 1/12; 7. 1/10; the rest 1/8)

III. Remains of the Erlitou Culture

Remains of the Erlitou culture were only found in parts of the excavated area. A small number of stone, jade and ceramic artifacts were unearthed.

Stone objects of the Erlitou culture are similar with the Xinzhai phase on type and shape. However, polished tools became more popular. The main types include the sickle, the chisel, the adze and the *cong*-tube. A jade *cong* T5⑤:4, was also found. It is cubic in shape with a round hole in the middle and 9.7 cm high.

Gray sandy ware and gray fine clay pottery, followed by brown sandy ware and black fine clay pottery formed the ceramic assemblage of this phase. Fine clay red and white pottery was seldom found. Most of the vessels were wheel made. About 34% of them are polished and have no decoration. Surface decorations on other vessels consist of the basket pattern (20%), the cord pattern



Fig. 6 Ceramic lid in the shape of boar's head (T6 ⑧:782)

(20%), the trellis pattern (6%), the attached clay slip design, the line pattern, the lacework, the stamped pattern, the fingernail design and the cloud-thunder pattern. Some vessels have comb-shaped handles. The main vessel types include the deep-belly pot, the *ding*-tripod, the lid, the basin, the urn, the pot with laceworks and the plate.

IV. Conclusion

The 2000 session excavation indicates that assemblages of three phases: the Wangwan Phase III culture, the Xinzhai phase and the early Erlitou culture, can be recognized at the site.

Small-mouth big-bottom pits were popular in the Wangwan Phase III culture. Human skeletons were found in some of the pits. The main types of ceramic vessels include the deep-belly pot, the *bo*-bowl, the small-mouth high-neck pot and the *ding*-tripod (nipple-shaped feet or high feet). All these remains show the characteristics of the Meishan 煤山 type of the Wangwan Phase III culture.

Assemblage of the Xinzhai phase can be further divided into the early and late sub-phases. The round deep-belly pot with grooves on the square rim, the *dou* with thick stem and shallow plate and the ring-foot plate of the early sub-phase show a close relationship with the Longshan 龙山 period. Curved-shoulder pots, *zun*-shaped urns and lids became popular in the late sub-phase. The rim of the deep-belly pot became thicker. The grooved basin usually has a small flat bottom or round bottom. The *dou* with a thin stem and a curved-belly plate and the lid with a mushroom-shaped knob are similar with their counterparts of the Erlitou culture.

As assemblage of the Xinzhai phase was covered or broken by the remains of the Erlitou culture, it is clear

that the former is earlier than the latter. Typical Erlitou style vessels unearthed from the site include the pot with laceworks, the lid with a mushroom-shaped knob, the spout of the *jue*-vessel and the flat-bottom basin with double handles and attached round clay pieces. Yet the pot with a nipped mouth and the round belly pot, which are typical vessels of the Phase I of the Erlitou culture, had not been found at Xinzhai. This demonstrates that the Erlitou assemblage of the site might be contemporary with or earlier than the Phase I assemblage of the Erlitou site.

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