

2002 Excavations on the Xinzhai Site in Xinmi City, Henan

Henan Xinzhai Archaeological Team, Institute of Archaeology, CASS
and
Zhengzhou Municipal Institute of Cultural Relics and Archaeology

Key words: Xinzhai Site Xinzhai Phase Settlement Pattern

After the excavations of the Xinzhai Site in Xinmi City, Henan Province in 1979, 1999 and 2000, the notion of a “Xinzhai Phase” achieved general acceptance in scholarly circles. Thereafter, starting in 2002, the focus of research shifted to attempts to understand the nature of the settlement. The Xinzhai Site is divided into four research zones: A, B, C and D (Figures 1 and 2). In the spring of 2002, excavators set up excavation trench CT1 (14 x 4.5m in size, Figure 3) to the southeast of Meitugou Village in Zone C and DT1 (2 x 10m, Figure 4) to the north of Dongwan Village (otherwise known as Xinzhai Village) in Zone D and AT51 (2 x 10 m) in Zone A. This report summarizes the results of the spring of 2002 campaign.

I. Stratigraphic Relationships

The stratigraphic relationships are not consistent across all areas of the site. First we discuss them individually.

1. Zone A: The south profile of excavation trench AT51 is representative. Stratum 1: Topsoil, 14–22cm thick. Stratum 2: Disturbed layer, 54–60cm thick. Stratum 3: Light grey soil mixed with yellow clods, 0–18cm thick. This stratum dates to the Tang-Song Period and is superimposed above two Longshan Culture Pits (H4 and H31). Stratum 4: This is subdivided into four sub-strata (A, B, C and D). 4C is superimposed above two

Longshan Culture pits (H29 and H30). Below Stratum 4 is sterile soil.

2. Zone C: The north profile of excavation trench CT1 is representative. Stratum 1: Topsoil 15–25cm thick. Stratum 2: Disturbed layer of dry, compact, light yellow sediment distributed across the entire unit, 12–27cm thick. This stratum includes brick fragments, tile fragments and ash. Several Xinzhai Phase ash pits are found immediately below this stratum including H1, H6, H11, H12, H13 and H22. Stratum 3: Mixed yellowish-grey sediment, 8–10cm thick. A number of features are below this stratum including Xinzhai pits H2, H3, H5, H14,

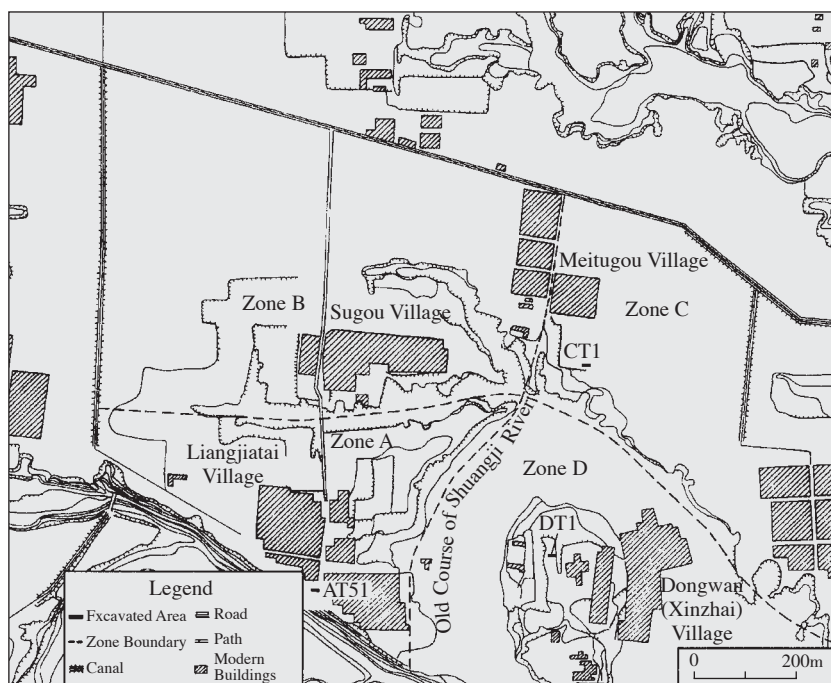


Figure 1. Plan of the Xinzhai Site Showing the 2002 Excavation Areas and the Site Zones



Figure 2. The Topography around the Xinzhai Site (Based on a 1987 Aerial Photograph)



Figure 3. Excavation Results for Unit 02CT1 (E-W)



Figure 4. Excavation Results for Unit 02DT1 (W-E)

H15, H16, H17, H18, H19, H20, H21, and H23 as well as Longshan pits H24, H25, H26 and H28.

3. Zone D: In this area a single excavation trench was opened (DT1). The strata in this trench include: Stratum 1: Topsoil. Stratum 2: Disturbed soil. Strata 3-6: Late Xinzhai Phase cultural layers. Because the later strata are severely disturbed, only a single late Xinzhai pit (H27) and one ash ditch (GII) were identified.

II. Cultural Remains

Similar to the results of previous seasons, the main cultural remains from this work date to the Late Longshan Phase and the Xinzhai Phase. Most of the remains are ash pits, in addition to two incomplete hearths.

1. Phase I (Late Longshan) remains, including ash pits and hearths.

In total 11 pits were discovered. These can be separated into two principal types based on the shape of the pit openings.

Type A: Circular (and oval) pits. There are ten such pits, one example of which is CT1H25. This pit is located slightly to the east of the center of the excavation unit below Stratum 3. It was intruded by three other pits (H19, H3, and H17) and intruded into H28. The pit was circular, bag-shaped, with neat walls and a flat bottom. The opening of this pit was 0.45m below the present ground surface and 2.4m in diameter. The base of the pit was 2.5m in diameter and the pit was 0.9m deep. The walls of the pit were marked with tool marks 5.5cm long and 4cm wide. The contents of the pit were divided into two strata. Stratum 1 was grey sediment that was rather loose. This stratum was 0.2m thick and contained burned earth and grey ash. Stratum 2 was yellow-grey and harder. This level was 0.7m thick and contained burned earth and ash as well.

Type B: Rectangular pits with straight walls. Only one such pit was discovered (AT51H29), positioned to the west of the center of the excavation unit. The opening of this pit was below Stratum 4C, and it intruded into H30. All four walls of this rectangular pit were straight, the corners were rounded, and the base was mostly flat. The opening of the pit was 0.85–1.1m below the present ground surface, its dimensions were 1.9m long and 1.63m wide at both the top and bottom of the pit, and the pit was 0.8–0.88m deep. The pit was filled by light yellow and grey soil which contained many fragmentary animal bones, and square areas of piled burned earth were found at the base of the pit in the southwest, southeast and northeast corners. Each of these locations also had fragments of long-neck jars.

Two poorly preserved hearths were also found. One example is CT1Z1 which was positioned in the east part of the excavation unit CT1 with an opening below Stratum 3. This feature was disturbed by later strata and therefore only a portion of the hearth wall remained comprising irregular burned earth.

2. Phase II (Xinzhai Phase) features comprise 19 ash pits. With one exception that was irregularly shaped, all of these pits were circular or oval in shape, but they can be subdivided into three types based on the form of the pit walls.

Type A: Round, bag-shaped pits. Nine examples were discovered. One example is AT51H8, which was positioned in the northeast corner of the excavation unit. The mouth of this pit was below Stratum 2, and it had neat walls and a nearly flat base. The mouth of the pit was 0.44–0.6m below the present ground surface. The mouth was 2.12m in diameter, while the base diameter was 2.65m and the pit was 1.84m deep. The fill of the pit comprised two strata. Stratum 1 was grey soil while Stratum 2 was light yellow.

Type B: Oval pits with straight walls. Five such pits were identified, one example of which is DT1H13. This pit was located in the northwest corner of the excavation unit below Stratum 2. The pit had been cut into by H11, and it had neat walls. The walls contained tool marks that were 5cm long and 3cm wide. The base of the pit was higher in the west than in the east. The pit opening was 0.45m below the present ground surface. At the mouth, the pit was 2.4m long and 1.5m wide, whereas the base was 2.3m long and 1.48m wide. The pit depth ranged from 0.82–0.9m and it was filled with loose grey sediment, some burned earth, and ash.

Type C: Oval pits with slanted walls. Three such pits were found, one example being CT1H23. This pit was located in the northeast corner of CT1 below Stratum 3 and intruded into by pit H17. The base of this pit was the same shape as the bottom of a pot and contained a 1.5cm layer of fine sand. The mouth of the pit was 0.45m below the present ground surface and was 2.4m long and 1.1m wide. The pit base was 1m long and 0.4m wide, and the pit was 0.36m deep. The pit contained two layers. Layer 1 was 0.1m thick and comprised loose, grey sediment mixed with burned earth and ash. Layer 2 was 0.26m thick, yellow-grey, and relatively hard with mixed in burned earth ash.

III. Unearthed Artifacts

1. Phase I: The representative specimens found within AT51H30 include the following examples.

Potteries include jars, *ding*-tripods, basins, bowls and spindle whorls.

Deep-belly Jar (AT51H30:11). This vessel fragment is made of grey sandy ware and has a square lip, a flared

mouth, and a folded rim. The rim is marked by a single protruding strip, and the vessel has a constricted neck, a drum-shaped body, and gridded surface treatment. The mouth of the vessel is 21.5cm in diameter (Figure 5:2).

Ding-tripod (AT51H30:26): This is represented by a single foot which is made of grey sandy ware, is triangular in shape, and has no surface treatment. It is 2.6cm high.

Jar with rounded belly (AT51H30:12). This vessel fragment is from a grey sandy ware, has a square lip, and a folded rim. This fold is rather abrupt and the interior edge is particularly prominent. The vessel has a constricted neck and a rounded body. The body has gridded surface treatment. The mouth of the vessel has a diameter of 31.6cm (Figure 5:6).

Jar with double handles (AT51H30:10). Fine, grey pottery with a square rim, bending lip with a prominent inner fold, a restricted neck, rounded body, a flat bottom and two bridge-shaped handles on either side of the body. The body is decorated with basket pattern and a single line of bowstring pattern. The rim diameter is 18.9cm and the vessel is 21cm high (Figures 5:7 and 6).

Jar with swelling belly (AT51H30:3): This vessel

fragment is from a grey fine ware. It has a pointed lip and a bending rim. The interior of the rim is particularly prominent. The vessel has a constricted neck and a swelling body that has both basket pattern and four rings of intaglio bowstring lines. The rim diameter of this vessel is 27.2cm (Figure 5:5).

Small-mouth jar with a long neck (AT51H30:15). This fragmentary grey-fine ware vessel has a rounded lip, a bending rim and basket pattern on its body. The rim diameter is 7cm (Figure 5:4).

Double-belly basin (AT51H30:8). This vessel is made of grey fine ware and has no decorative patterns. The rim is rolled over and is marked by a single incised line. The belly has a bending ridge. The upper part of the body has two bridge-shaped handles and the base is small and flat. The rim diameter is 36cm (Figures 5:1 and 7).

Bowl (AT51H30:9): This grey fine ware has no decorative pattern and the wall is slanted. It has a concave base in the style of those with a false ring foot. The rim diameter is 16.2cm (Figure 5:3).

Pottery spindle whorl (AT51H30:1): This object was made of fine grey pottery and is a flat disk with a hole in the center and comb marking on one surface. Its diameter is 4cm (Figure 8:3).

Stone tools include knives, sickles, chisels and arrowheads.

Knife (AT51H30:6): This fragmentary specimen is greenish grey in color and ground to shape. It has an arched back and a two sided blade with a pair of holes. It is 8.3cm long (Figure 8:6).

Sickle (AT51H30:4): A fragmentary ground stone artifact, this sickle has a bow-shaped back and a single sided concave blade. The fragment is 9.4cm long and 4.5cm wide (Figure 8:1).

Chisel (AT51H30:7): This ground stone artifact is dark-grey in color and flat, trapezoidal shaped. It has a single blade and is 3.47cm long (Figure 8:2).

Arrowhead (AT51H30:2): This ground stone object is dark-grey and a triangular fragment. The tang is missing. The fragment is 4.5cm long (Figure 8:4).

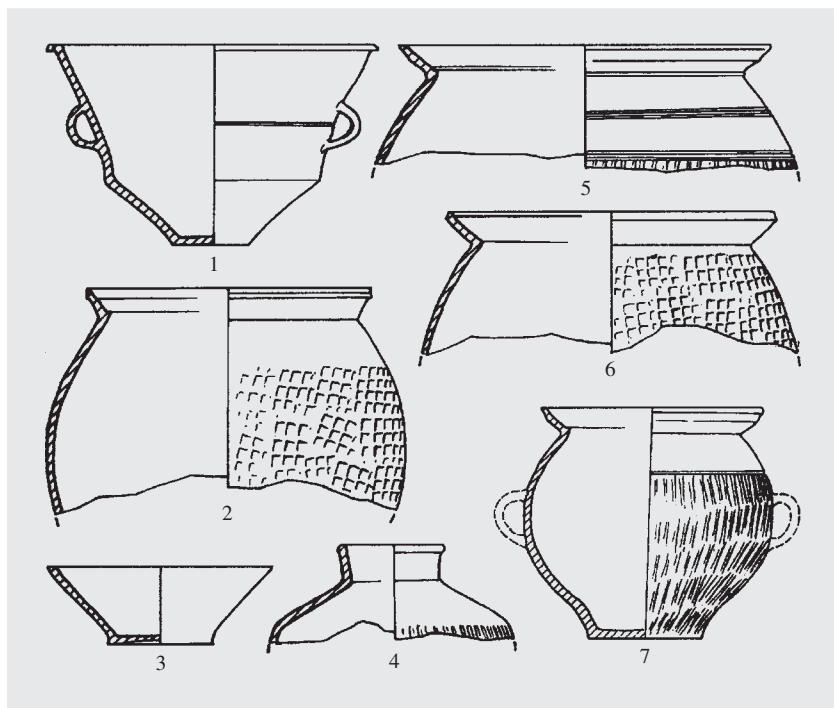


Figure 5. Potteries from Ash Pit AT51H30

1. double-belly basin (AT51H30:8)
2. deep-belly jar (AT51H30:11)
3. bowl (AT51H30:9)
4. small-mouth long-neck jar (AT51H30:15)
5. jar with swelling belly (AT51H30:3)
6. round-belly jar (AT451H30:12)
7. double-handle jar (AT51H30:10)



Figure 6. Double-handle Jar (AT51H30:10)



Figure 7. Double-belly Basin (AT51H30:8)

Oracle Bone (AT51H30:5). This bone fragment is part of the scapula of a bovid that has baking marks. It is 9.2cm long (Figure 8:5).

2. Phase II. We can take the loci with more abundant finds from this period as examples. We first introduce the significant specimens from AT51H8 which include a pottery steamer and basin and a stone shovel.

Steamer (AT51H8:1): this vessel is made of black fine ware and has a bending rim – the fold is particularly noticeable on the inside. The neck is constricted and the body is swelling. There is basket pattern and one incised line on the body of the vessel. The vessel body also has two cockscomb-shaped handles. The rim diameter is 23.2cm (Figures 9:1 and 10).

Basin (AT51H8:13). This fragmentary vessel is made of grey fine ware and has no decorative patterns. It has a round lip and a flared mouth. A single incised line is present on the rim. The rim diameter is 28cm and the preserved portion of the vessel is 7.6cm tall (Figure 9:4).

Stone shovel (AT51H8:9). This is a dark grey ground stone fragment. It is flat and has a double-sided blade and a single perforation. The fragment is 7.8cm long.

A second locus is CT1H5 which contained deep-belly jars made of grey sandy pottery with a flared mouth, a narrow and bending rim, a constricted neck, and a deep, drum-shaped body with a base that is slightly concave. One vessel (CT1H5:17) has a rounded lip, and an impressed strip along the rim with cord pattern. Its mouth diameter is 27.4cm (Figures 9:2 and 11). Another example (CT1H5:19) has a pointed lip with cord pattern. The mouth is 25cm in diameter (Figures 9:7 and 12).

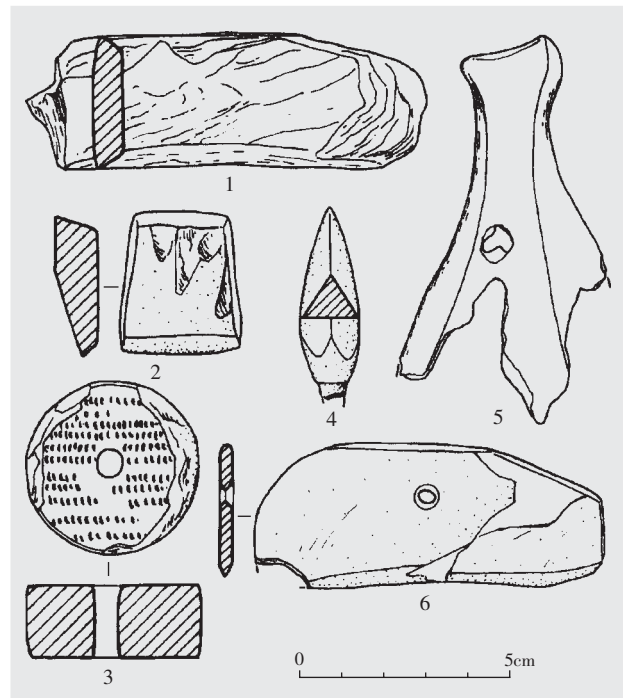


Figure 8. Artifacts from Ash Pit AT51H30

1. stone sickle (AT51H30:4)
2. stone chisel (AT51H30:7)
3. pottery spindle whorl (AT51H30:1)
4. stone Arrowhead (AT5H30:2)
5. oracle bone (AT51H30:5)
6. stone knife (AT51H30:6)

Example CT1H5:18 has a round lip and a single impressed strip on the rim. The rim is bending and has the bending ridge inside the rim. The body is marked with grid pattern. This vessel has a mouth diameter of 23.8cm (Figures 9:6 and 13).

Stratum 6 of DT1 contains a *ding*-tripod foot, bowls,

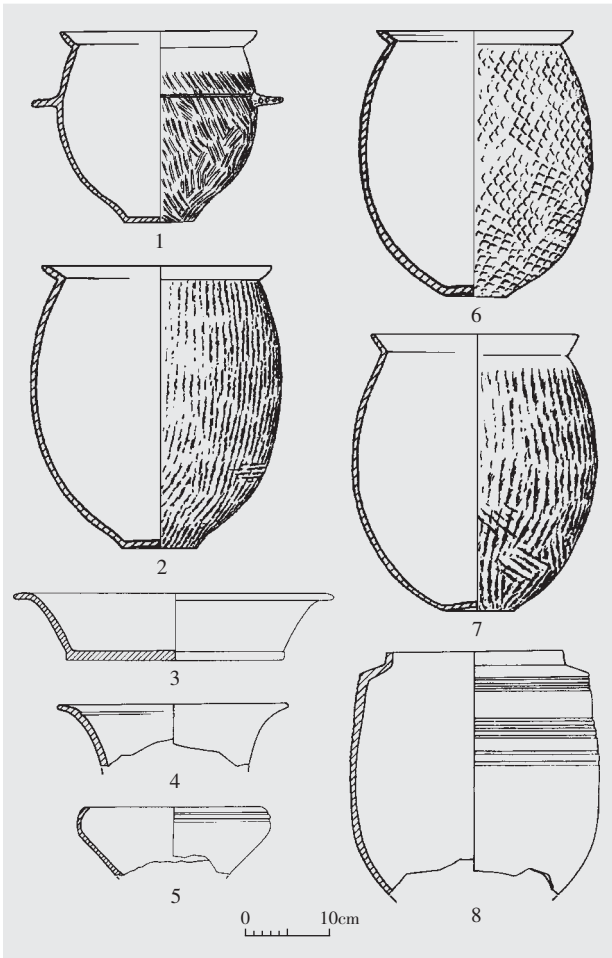


Figure 9. Potteries from Xinzhai Site

1. steamer (AT51H8:1) 2. deep-belly jar (CTIH5:17)
3. flat-bottom basin (DTI ③:1) 4. basin (AT51H8:13)
5. bowl with constricted mouth (DTI ⑥:26) 6. deep-belly jar (CTIH5:18)
7. deep-belly jar (CTIH5:19) 8. jar with "Mother-child" mouth (DTI ③:2)



Figure 11. Deep-belly Jar (CTIH5:17)



Figure 12. Deep-belly Jar (CTIH5:19)



Figure 10. Steamer (AT51H8:1)



Figure 13. Deep-belly Jar (CTIH5:18)

jars, and a basin.

Ding-tripod foot (DT1 ⑥:21): This vessel is made of grey-brown sandy pottery and is triangular shaped. One side has two rows of impressed marks. The fragment is 10.6cm high.

Bowl with constricted mouth (DT1 ⑥:26): This fragmentary specimen is constructed of fine, grey pottery. It has a rounded lip and slanted walls with two string marks on the inside of the rim. The rim diameter is 22cm (Figure 9:5).

Jar with a “mother-child” mouth (DT1 ③:2): This fragmentary, fine grey pottery vessels has a square lip, a narrow, bending shoulder, a cylindrical body with straight walls, and eight bands of bowstring marks. The rim diameter is 32cm (Figure 9:8).

Flat bottom basin (DT1 ③:1): This vessels is made of grey sandy pottery and has a rounded lip, bending rim, inclined sides, and a false ring foot. Rim diameter is 37.5cm (Figure 9:3).

IV. Conclusions

Among the most important results of the excavations reported here is the clarification that the cultural remains from Zone C also spanned the Late Longshan and Xinzhai Phases. In Zone D, although only 20sq m has been excavated, remains from the Xinzhai Phase have already been discovered. During the survey of this zone, potteries of the Late Longshan Phase were discovered which suggests that this region may have existed simultaneously with the others. When considered together with the excavation results from previous years in Zones A and B, these results indicate that the various areas of Xinzhai may have been occupied for approximately the same periods of time and the site may therefore have been a single large settlement. This is a basic result of

our investigation into the settlement patterns of the Xinzhai site.

Another important result of these excavations is the fact that the ¹⁴C dating results obtained by the Institute of Archaeology, Chinese Academy of Social Sciences with conventional dating methods generally matched that got by Peking University by AMS radiocarbon dating method which collectively reinforce the existence of a “Xinzhai Phase.”

References

- Aurora Center for the Study of Ancient Civilizations 北京大学古代文明研究中心 and Zhengzhou Municipal Institute of Cultural Relics and Archaeology 郑州市文物考古研究所. 2004. *Henan Sheng Xinmi Shi Xinzhai Yizhi 2000 Nian Fajue Jianbao* 河南省新密市新砦遗址2000年发掘简报 (Excavation of the Xinzhai Site at Xinmi, Henan). *Wenwu Wenwu* (Cultural Relics) 3: 4–20.
- Aurora Center for the Study of Ancient Civilizations 北京大学震旦古代文明研究中心 and Zhengzhou Municipal Institute of Cultural Relics and Archaeology 郑州市文物考古研究所. 2008. *Xinmi Xinzhai: 1999–2000 Niandu Tianye Fajue Baogao* 新密新砦: 1999–2000年度田野发掘报告 (Xinzhai Site in Xinmi). Beijing: Wenwu Chubanshe.
- School of Archaeology and Museology, Peking University 北京大学考古文博院 and Zhengzhou Municipal Institute of Cultural Relics and Archaeology 郑州市文物考古研究所. 2000. *Henan Xinmi Shi Xinzhai Yizhi 1999 Nian Shijue Jianbao* 河南新密市新砦遗址1999年试掘简报 (Trial Excavation of the Xinzhai Site in Xinmi City, Henan, in 1999). *Huaxia Kaogu* 华夏考古 (Huaxia Archaeology) 4: 3–10.
- The Second Henan Archaeological Team of IA, CASS 中国社会科学院考古研究所河南二队. 1981. *Henan Mixian Xinzhai Yizhi de Shijue* 河南密县新砦遗址的试掘 (The Trial Excavation to the Xinzhai Site in Mixian County, Henan). *Kaogu* 考古 (Archaeology) 5: 398–408.

Postscript: The original report was published in *Kaogu* 考古 (Archaeology) 2009.2: 3–15 with 17 illustrations, four plates and one table. The report was written and abridged by Zhao Chunqing 赵春青, Zhang Songlin 张松林 and Gu Wanfa 顾万发 and translated into English by Rowan Flad 傅罗文.