

2008 Excavation at Locus North of Liujiazhuang within the Yinxu Site, Anyang City, Henan

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Key words: *Yinxu* *Locus North of Liujiazhuang* *Shang Dynasty*

In May through August 2006, the Anyang Archaeological Team undertook an excavation in the southwest of the Tongle Northern Zone at Locus North of Liujiazhuang. In February through October 2008, it undertook another excavation to the east of the excavation area of 2006. Altogether the two excavations exposed 7000sq m, and discovered three paths, hundreds of house foundations, over 1000 ash pits, 27 ash ditches, over 40 cellars, over 30 wells, one bronze hoard, several sacrificial pits, all of the Shang Dynasty, and 950 tombs of various periods. This report presents materials of the excavation in 2008.

Cultural deposit within the given excavation areas is

rather simple. Underneath the ploughed layer, except for a layer of the Tang and Song Dynasties, some Han and Wei Dynasties remains, and Sui and Tang Dynasties tombs and roads, all are of the Shang Dynasty. While cultural deposit of Phase I is thin and spatially limited, those of Phases II-IV are thick and pervasive.

I. Structural Remains

The excavation in 2008 uncovered the following structural remains of the Shang Dynasty: house foundations, trash pits, storage pits, paths, wells, trash ditches, a bronze hoard and cultic pits. Below is a summary of distinctive examples.

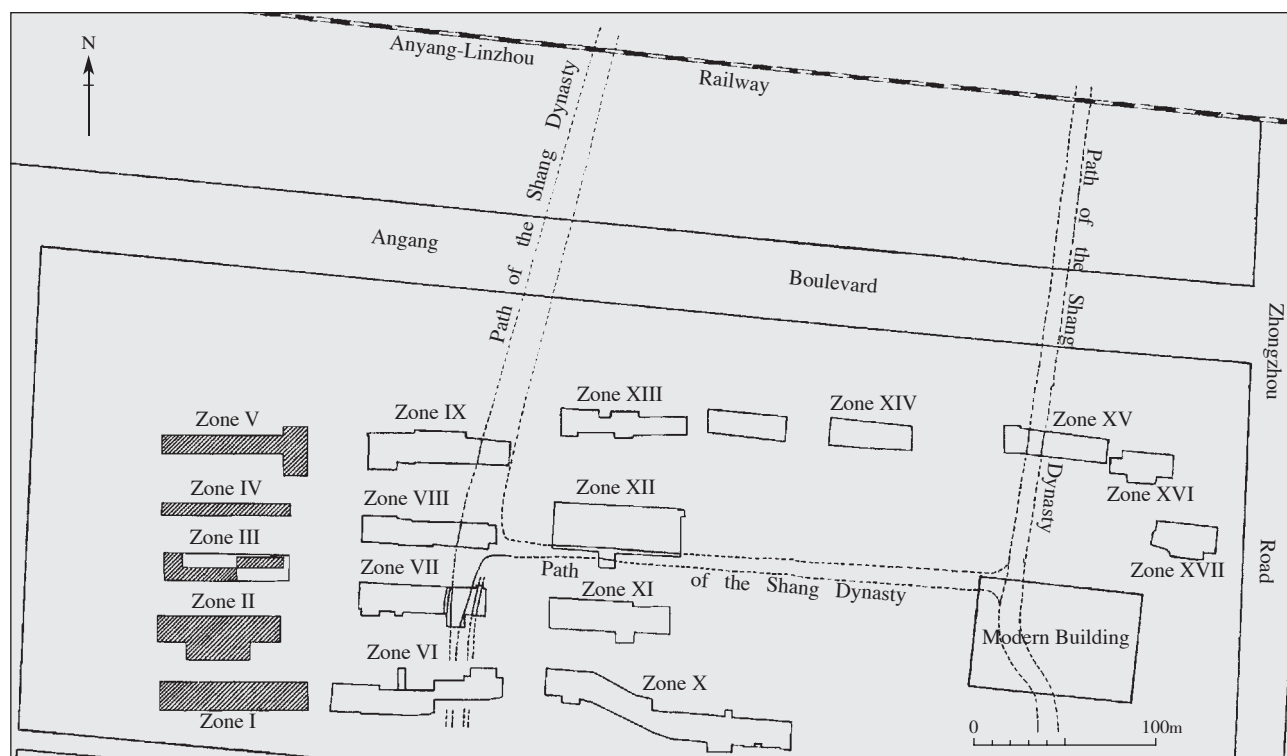


Figure 1. Plan of the Excavation Zone and the Shang Paths



Figure 2. Path L10 and Sacrificial Pits (Top is South)

1. Paths. Three of them have been recovered, two of which were in north-south orientation, parallel at a distance of about 350m, and one in east-west orientation (L10). It meets the former two at right angles: it meets the western path in a T-shaped intersection, but whether it extends beyond the eastern path is uncertain. Coring test finds that the path there is destroyed by later remains. All the three paths are over 10m wide and sometimes over 20m wide (Figures 1 and 2).



Figure 3. The Western Path in North-south Orientation with Wheel Tracks (N-S)

The western path in north-south orientation is paved with pure loess with distinct wheel tracks (Figure 3), the distance of which, 1.3–1.5m, echoes those found at Huayuanzhuang Southwest in 1980 and differs from the one of 2.4m commonly seen in the Yinxu Precinct. L10 and the eastern path are paved with sand, gravel, and crushed potsherds, and because of the hard surface, wheel tracks are found only sporadically.

The three paths are all built in pre-dug trenches. They are not only 3m below the present-day ground, but also 1–1.5m below their contemporaneous ground. Along the paths are often found sections of ditches, which could have been water-drainage facilities to accompany them.

These paths underwent long-term use, from Phase II through Phase IV of Yinxu, and several expansions. Coring test shows that the two north-south orientated

paths extend northward beyond the Anyang-Linzhou Railway till 200m to the south of the Great Ash Ditch. They could therefore have been thoroughfares leading to the Palace/Temple Complex.

2. Wells. Around houses built of rammed earth, there are over 30 wells recovered. At opening they are mostly round or oval, but sometimes square or rectangular are also seen; they are mostly shaft pits to the depth of more than 10m. At bottom are often found water utensils.

Well J31, located in the excavation pit T0208, opens below a layer of yellowish silt (3B), 2m under the present-day ground. As a result of caving in, it is irregular at opening, 5.16m long, 2.66m wide, and 10.3m deep. Near the bottom, cypress logs are interlocked to build a

framework of 1m long per side, which retains the height of 1.1m. The space around it is filled with pebble. Under the northern side of the well a stairway of twelve steps spirals down, and 0.72m below the last step there is a terrace of 2.2m long and 0.8m wide, which is about 5.8m above the bottom (Figures 4 and 5). The well is evidently built with great care. It is probable that it has a rain-averting building atop. The stairway and terrace to-

gether facilitate the operation of drawing water.

The fill of the well consists of four layers, all of which are composed of soft dark grey soil but few objects. Near the bottom are found three red and grey pottery jars respectively. Accompanying them are a bronze *jue*-cup, a bronze *gu*-goblet, a bronze lid of a *gong*-vessel, a bronze ring-grip used to be on the shoulder of a *lei*-vessel, and fragments of the swing handle and belly of *you*-wine vessel. Based on these finds, Well J31 can be preliminarily assigned to late Phase III.

3. Giant Ash Pits. There are three of them, all irregular in form and ranging from 500sq m to 3000sq m in dimension. H698, about 8m deep, consists of a layer of ashy earth and hundreds of layers of silt. Along the western rim there is embankment built of rammed earth; at the eastern side there are a gravel-paved path and a water drainage leading to the pit. To the east and west of the pit are house foundations. The northern and southern sides of the pit are not excavated. We believe that the pit is first used as an earth quarry for constructing the houses, then as a reservoir, and finally as a trash pit.

4. Bronze Hoard. H326, located in the excavation grid T0401 and to the east of House F22. It opens 1.3m below the present-day ground in a square plan with curved cor-

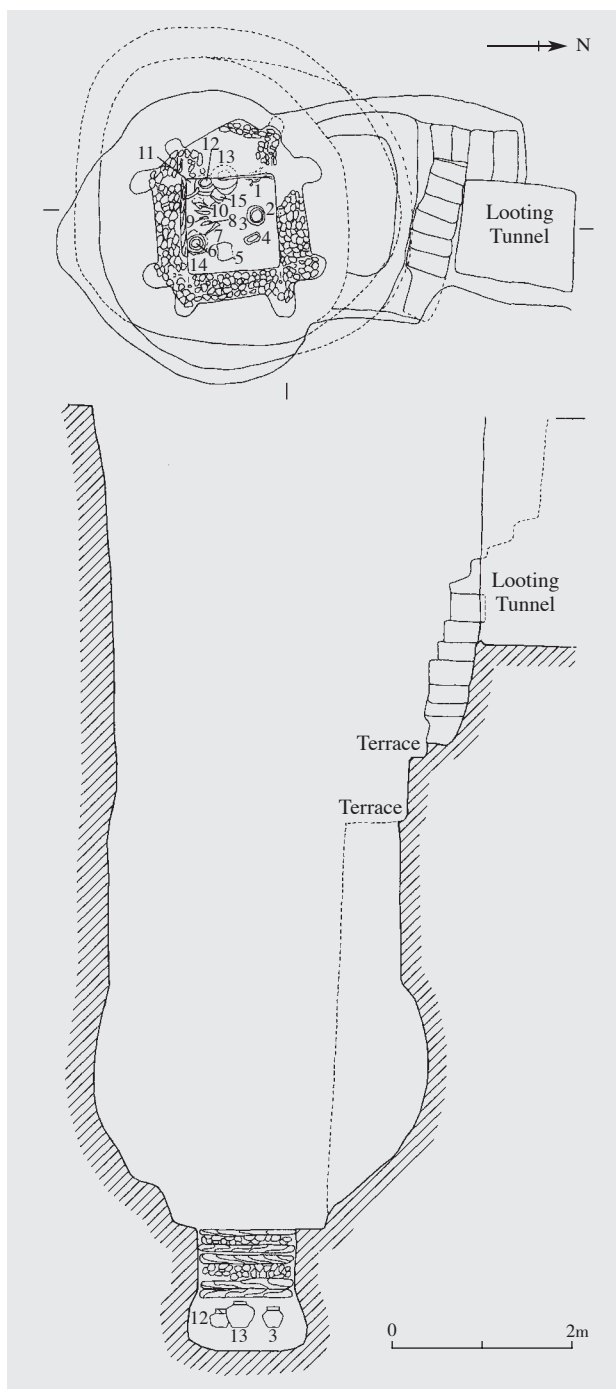


Figure 4. Plan and Section of Well J31



Figure 5. Well J31 (Top is West)

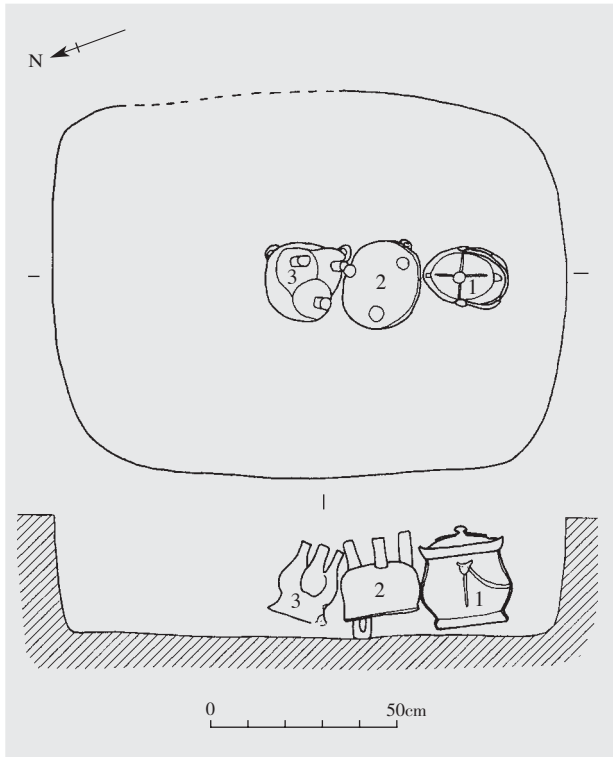


Figure 6. Plan and Section of the Bronze Hoard H326

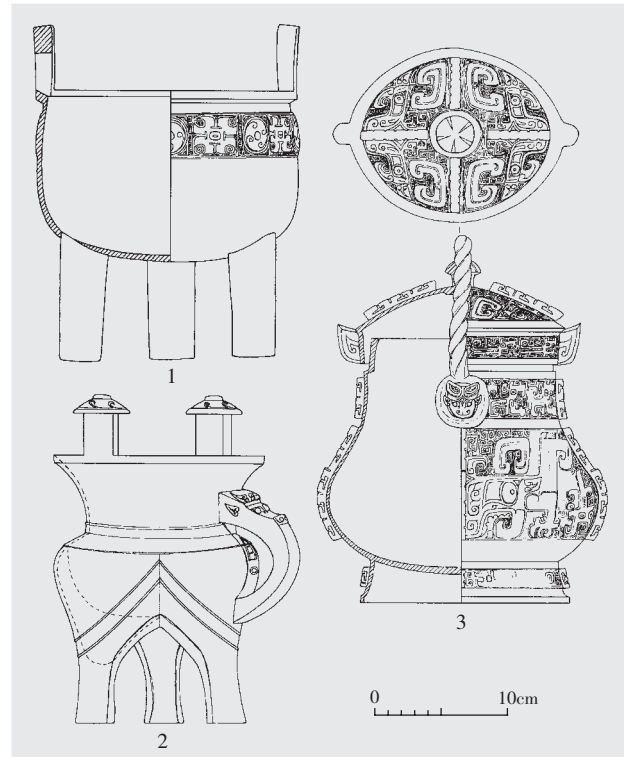


Figure 7. Bronzes from the Hoard H326

1. ding-tripod (H326:2) 2. jia-pitcher (H326:3) 3. you-vessel with swing handle (H326:1)



Figure 8. Human and Animal Skeletons in the Sacrificial Pit H524 (Top is South)

ners of 1.35m long, 1.02m wide, straight walls of 0.32m high, and a flat bottom. The pit is filled with soft yellowish earth. Upon the bottom are placed a round *ding*-tripod, a three-pouch-legged *jia*-pitcher. The *ding*-tripod and *jia*-pitcher are upside-down and one pillar of the *jia*-pitcher is broken and fallen into the *you*-vessel (Figures 6 and 7). This hoard could have been related to House F22, and dates to late Phase IV. Find of this kind is rather rare in the past in the Yinxu Precinct.

5. Sacrificial Pits. They are concentrated to the north of Path L10 and in the shape of shaft pits. They contain ashy earth and a large number of complete or dismembered human and animal skeletons. So far 18 of them have been excavated. The human victims have been tested to be mostly young adults but some adolescents. The sacrificial animals consist of the types of cattle, horse, dog and sheep; among them horse is most common, whereas dog and sheep are modest in quantity. In chronology, these pits span from Phase III to Phase IV and they often intrude into each other.

Pit H524 is located upon the northern slope of Path L10 and its opening slants from north to south. 1.65–3.85m under the present-day ground, it is an oval pit with the major axis in east-west orientation; the major axis is 8m long and the minor axis, 5.5m. We only uncovered the upper layer of human skeletons; for the sake of protecting them, we stopped at this layer and the overall depth of this pit is unclear.

The upper layer of this pit consists of a sub-layer of yellowish ashy earth, which contains complete skeletons of three female humans and two male horses, and a sub-layer of grayish brown earth, which contains skeletons of three humans, fourteen horses, nine cows, and five bovines. Among the human skeletons, one is a male the left tibia bone missing; another is possibly a male that retains only skull and arm bones; the other only retains skull of unknown gender but of age of 16–30. Among the horse skeletons, two are complete; the other are possibly dismembered, missing certain parts. The nine bovines are all incomplete; it is possible that some skeletons come from one individual. Among the five pig skeletons, only one is complete; the other are dismembered with distinct traces of cutting (Figure 8).

II. Tombs

Altogether over 950 tombs are excavated. Most are of the Shang Dynasty; only a few are of the Sui, Tang, and Song Dynasties. All the Shang tombs are shaft pits of

2–6sq m in dimension and usually placed around contemporaneous houses. Most are single burials, but a few are double or quadruple burials. Accompanying goods are modest; most are only furnished with pottery wares; many others are empty. Tombs of upper ranks are mostly plundered.

Tomb M508, located in the excavation pit T1711, is oriented 90°. It opens 2.5m under the present-day ground, 2.35m long, 0.9–1.04m wide, and 2.05m deep. It has a red-lacquered coffin within artificial second-tier terraces, and a sacrificial dog in the rectangular waist pit. The grave goods are a bronze *ding*-tripod, a bronze *gui*-tureen, a bronze *yan*-steamer, a bronze *gu*-goblet, a bronze *jue*-cup, a bronze *ge*-dagger ax, a bronze chisel, and two bronze adzes, all of which are placed upon the second-tier terraces. The occupant has a small jade ornament and a cowry in mouth and a shell ornament at

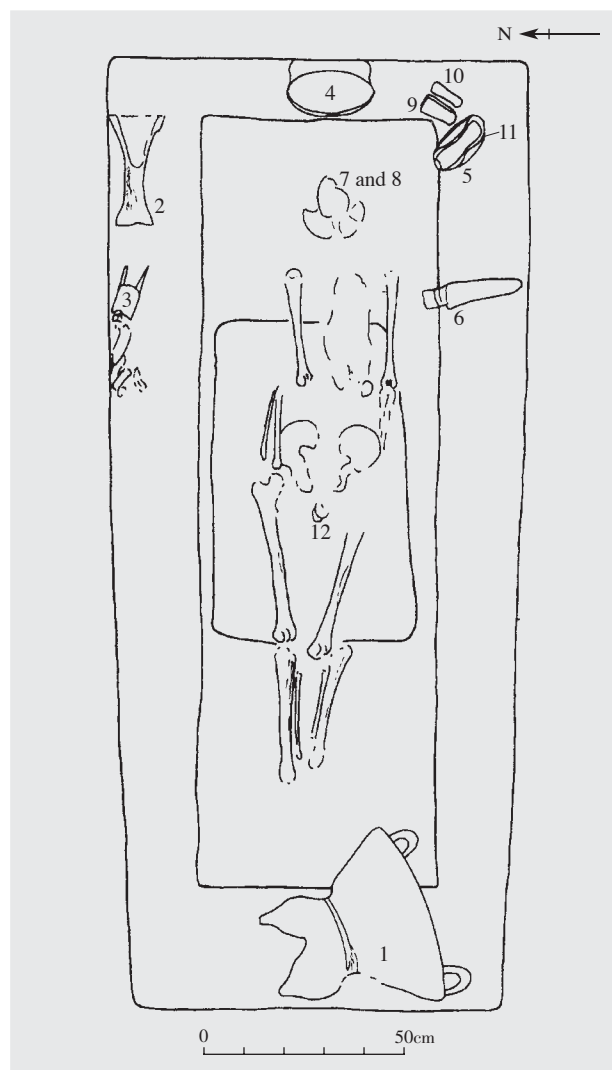


Figure 9. Plan of Tomb M508

the pelvis (Figures 9 and 10).

The *ding*-tripod (M508:5), severely deformed, has a flapped rim, a rounded belly, and three straight legs. Height 35.6cm (Figure 11:5).

The *gui*-tureen (M508:4) has a flaring mouth, a straight body, and a ring foot. It is equipped with three rings of raised bowstring lines and two small animal-head handles. Diameter 20.6cm (Figure 11:3).

The *yan*-steamer (M508:1) has a deformed *zeng*-steamer above and a distinctly pounded *li*-cauldron below. The *zeng*-steamer features a



Figure 10. Full-view of Tomb M508 (Top is South)

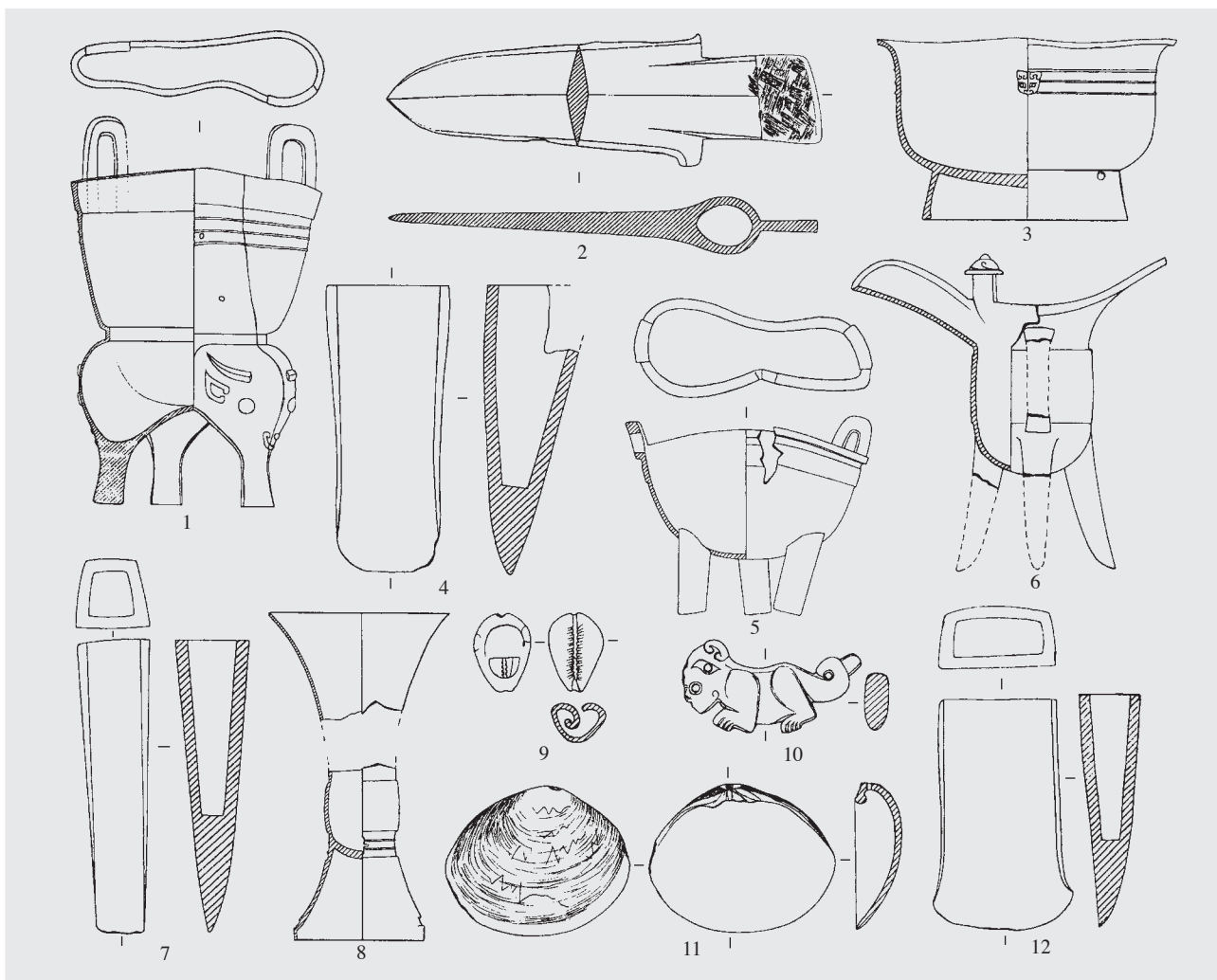


Figure 11. Artifacts from Tomb M508

1. bronze yan-steamer (M508:1)
2. bronze ge-dagger ax (M508: 6)
3. bronze gui-tureen (M508:4)
4. bronze adze (M508:9)
5. bronze ding-tripod (M508:5)
6. bronze jue-cup (M508:3)
7. bronze chisel (M508: 11)
8. bronze gu-goblet (M508:2)
9. cowry (M508:8)
10. jade tiger (M508: 7)
11. shell ornament (M508:12)
12. bronze adze (M508: 10)

straight mouth, a deep and slightly shrinking body with grate spurs; the *li*-cauldron features a high bottom and three column-shaped legs. The *zeng*-steamer is decorated with three rings of raised bowstring lines, whereas the three pouch-shaped legs with simplified animal-heads. Three casting fins are visible from bottom to top. The entire vessel is 42.1cm high (Figure 11:1).

The *gu*-goblet (M508:2) is broken into two parts, with the middle section missing. It has a flaring mouth, a slightly bulging body, and a trumpet-shaped ring foot. The ring foot bears several raised lines and a symbolized cruciform openwork. It is 14.4cm in diameter (Figure 11:8).

The *jue*-cup (M508:3) has its handle and two legs missing. It features an upward bending spout and tail, two mushroom-shaped pillars upon the spout, an egg-shaped body, and three outward bending legs. The *jue*-cup is 17.4cm long from the spout and the tail, and 18cm high (Figure 11:6).

The *ge*-dagger ax (M508: 6) features a triangular blade and an oval shaft socket but without an extended vertical blade. The tang retains imprints of mat, and the blade has visible use-wear. Altogether it is 23.6cm long (Figure 11:2).

Among the two bronze adzes, M508:9 features a rectangular shaft socket and a wedge-like body, altogether 11.2cm long (Figure 11:4). M508: 10 features a trapezoid shaft-hole and a fan-shaped blade, altogether 8cm long (Figure 11:12).

The bronze chisel (M508: 11) has a trapezoid shaft socket and a straight blade, 10.1cm long (Figure 11:7).

One jade tiger (M508: 7) is in a crouching position and features 臣-shaped eyes, 4.9cm long (Figure 11:10).

The shell ornament (M508:12) has a hole at the top, 5.1cm long (Figure 11:11).

One cowry (M508:8) is 2.3cm at the longest part (Figure 11:9).

III. Conclusions

1. The three paths are an important discovery during the past eighty years since the first excavation of the Yinxu Site; they provide an important insight into the layout of

the Shang capital of Anyang.

2. The three giant ash pits that are accompanied by houses with rammed earth foundations, water drainages, and sometimes gravel-paved paths could have been created by earth quarrying and then turned into a small pond. This discovery threw a new light into clan settlement researches of the Shang Dynasty.

3. The over thirty wells have all been excavated to the bottom, which offered valuable materials for the study of Late Shang wells, their construction techniques, and water-drawing techniques. Several wells even yield materials unrelated to their original function, such as intact bronze wares, fragments of bronze wares, and a bronze lid. They might have linked with rain-requesting rituals. We have also acquired water table data of the surrounding area, which will enable us to inquire into the ancient micro-climate of the Huan River Valley, where the Yinxu Precinct is located.

4. Of the numerous sacrificial pits, each might have been intended as one time of sacrificial activity; and the types and quantities of sacrificial animals represent one ensemble of such activity. When combined with oracle bone inscriptions, they will further our inquisition into Late Shang sacrificial rituals.

5. This excavation involves specialists of several disciplines. They not only train archaeologists methods of sample collecting, discuss new approaches that integrate multiple disciplines in rescue excavation, but also collect a large quantity of samples for laboratory analysis. We also collected a large quantity of faunal and botanical samples, and up to one thousand carbon-dating samples, which will provide the basis for the study of Shang Dynasty ecology.

References

Anyang Archaeological Team of Institute of Archaeology, Chinese Academy of Social Sciences 中国社会科学院考古研究所安阳工作队. 1992. *1986–1987 Nian Anyang Huayuanzhuang Nandi Fajue Baogao* 1986–1987年安阳花园庄南地发掘报告 (Excavation at South Locus of Huayuanzhuang, Anyang in 1986-87). *Kaogu Xuebao* 考古学报 (*Acta Archaeologica Sinica*) 1: 97–128.

Postscript: The original report was first published in *Kaogu* 考古 (Archaeology) 2009.7: 24–38 with 14 illustrations and three plates. The authors and rewriters are Yue Zhanwei 岳占伟 and Yue Hongbin 岳洪彬 and the translator of the English version is Zhang Liangren 张良仁.