Spring and Autumn Tomb No. 1 at Shuangdun, Bengbu City, Anhui

Anhui Provincial Institute of Cultural Relics and Archaeology and Bengbu Municipal Museum

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mounds Bai (Lord of Zhongli State)

This tomb is located in the Shuangdun Village, Bengbu City, Anhui. The Huai River flows through the city from west to east, and the tomb is located on a plateau 3km to the north of the riverbank. There are two large tombs in Shuangdun Village, separated by a distance of 80m. In June 2005, tomb No. 1 was subject to an unsuccessful looting attempt, at which point a team assembled by the Anhui Provincial Institute of Cultural Relics and Archaeology and the Bengbu Municipal Museum began a rescue excavation. Work began in December of 2006 and finished in August 2008 with significant results; the discovery was recognized as one of the ten most important new archaeological discoveries in China for 2008 and received an Archaeological Fieldwork Award from the State Administration of Cultural Heritage.

I. The Structure of the Tomb and the Historical Remains Found in the Tomb Fill

The tomb was a vertical earthen pit burial, including traces of an earthen mound, a cushioning layer of white earth, a tomb pit, a tomb ramp, and a tomb floor. In the fill of the tomb pit were found traces of "radial lines," "earthen mounds and clay figurines," "clay figurine walls," and other phenomena. The earthen mound reached a height of 9m and was 60m in diameter at the base, forming the shape of a dome; it was built by piling up earth. The fill of both mound and pit was a variegated blend of five colors of earth (yellow, grey, black, red, and white), of which both the black and the white earth had been brought in from elsewhere. The use of this type of five-colored earth would seem to have definite significance.

At the base of the earthen mound, a covering layer of white earth was discovered, measuring 0.2–0.3m thick.

This white earth was applied over the layer of natural earth outside the tomb opening, covering an area essentially similar in diameter to the bottom of the mound. The white earth itself was quite fine; preliminary investigation suggests that it might have been formed from weathered quartzite. The tomb ramp was situated to the due east of the tomb chamber and consisted of a flight of 14 steps; the portion lying outside the tomb opening was 6.3m long and 3.2m wide. The tomb chamber itself was round, 20.2m in diameter at the opening and 7.5m deep. A terrace measuring 1.8m wide began at the depth 2m below the tomb opening. The walls of the chamber were coated with a layer of white clay approximately 3cm thick: the chamber itself was 14m in diameter at the bottom. The burial furniture had rotten away and only traces remained. The main inner and outer coffins had been located slightly to the north of the chamber's center; burials of accompaniment surrounded it, with three on each of the north, east, and west sides and one on the south side. The southernmost burial of accompaniment faced the outer coffin chamber, which was divided into northern and southern sub-coffins; the southern sub-chamber was for foodstuffs, while the northern one contained grave goods (Figure 1). A cruciform plan was formed at the bottom of the chamber (Figure 2).

Based on the remnants of the burial furniture, it appears that the occupant was interred with one inner and one outer coffin. The outer coffin was approximately 3. 5m long, 1.6m wide and 0.9m tall, and its bottom was covered with two square logs. The traces of the inner coffin were 2.5m long, 0.9m wide and 0.5m tall. Grave goods of jade and bronze were placed in the coffins of the main burial, the latter including swords, *ge*-daggeraxes, *ji*-halberds, arrowheads, etc (Figure 3). The buri-



Figure 1. The Southern Sub-chamber of Tomb M1 at Shuangdun (N-S)



Figure 2. The Plan at the Bottom of Shuangdun Tomb M1 (W–E)

als of accompaniment all bore traces of relatively narrow wooden coffins measuring about 1.8m long, 0.3m wide and 0.3m tall; many of them had small bronze knives and processed potsherds as grave goods, while a few had cowry ornaments, bone hairpins, etc. The skeletons were preserved comparatively poorly. The main coffin contained only a few teeth, the evaluation of which suggests an age of 40 for the main occupant. Analysis of teeth from the burials of accompaniment places their ages from 20 to 30, except the southernmost individual,

who was about 40. There was no basis for determining the genders of these occupants.

The most notable attribute of this tomb was the traces of three separate layers, formed by fill soil or "clay figurines," that were discovered in the portion of the fill above the level of the terrace. The first layer, reaching from the opening of the tomb to a depth of 0.7m, consisted of a set of lines radiating out in all directions from the center to form a fan pattern; this was surrounded by a belt of dark-colored fill soil measuring approximately 2m wide. This "radial lines" layer was formed from variegated earth of five colors with variations in depth; the shape was very distinct. There were a total of 20 rays, forming a set of regular angles (Figure 4).

Beneath the first stratum of remains was a second layer of "earthen mounds" and "clay figurines," reaching from a depth of 0.7m to a depth of 1.4m. More than 1000 such clay figurines were placed in the fill. Within an area about 2m in width surrounding the tomb chamber, a total of 18 dome-shaped earthen mounds had been set up; these ranged from 1.5m to 3m in diameter at the base (Figure 5).

Below this layer was the third, the "clay figurine wall" layer, reaching from a depth of 1.4m to a depth of 2m. The "clay figurine wall" was

stacked along the inner edge of the terrace of natural soil; 3–4 layers of "clay figurines" were stacked up to form a wall of 0.34–0.4m in height, with square corners at both sides of the tomb ramp. The corridor formed between the clay figurine wall and the tomb wall was filled with yellow silt; clearing this revealed that the corridor contained a flight of steps leading into the tomb ramp (Figure 6).

II. Grave Goods

The grave goods were quite abundant. Chief among

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Figure 3. Interior of the Main Coffin of Tomb M1 (E-W)



Figure 4. Traces of "Radial Lines" in the Fill of the M1 Tomb Pit (NW-SE)

them were colored pottery, lacquered wooden items, stone implements, jades, and a large number of bronze vessels; small amounts of hard potteries with geometric patterns, grey pottery bowls, etc. were also found. More than 400 items were found in all, in addition to 2200 clay figurines.

1. Bronzes: More than 380 bronze items were found, many of which were corroded and fragmentary. These included a set of chime bells, *ding*-tripods, *lei*-wine vessels, *fu*-vessels, *dou*-stemmed bowls, a *he*-pitcher, a *yi*-pourer, a *yan*-steamer, ladles, a case, knives, an adze, a sickle, axle finials, horse-bits, *ge*-dagger axes, spearheads, a sword, arrowheads, etc.

Nine pieces of chime bells similar in shape were



Figure 5. Traces of Earthen Mounds and Clay Figurines Around the Edge of the M1 Tomb Pit (SW-NE)



Figure 6. Panoramic View of the "Clay Figurine Wall" (E-W)

found. They were intact but bore serious surface corrosion. They form a complete set of graduated size. The largest (M1:1) is 26.5cm tall, while the smallest (M1:9) is 15.5cm tall; each successive bell is about 1.38cm shorter than the next larger one. The central inset on the front surface of each bell bears the inscription 唯王正月初吉丁亥童丽 (钟离) 君柏作其行钟童丽之金 ("In the King's first month, during the *chuji* moon phase, on the day *dinghai*, Bai, Lord of Tongli (Zhongli) State, makes a set of bells. Tongli's metal.") On the rear surface of each bell, the central inset, top surface, ridges, and striking area all bear decorative patterns, while the bosses and the top ring are unadorned (Figure 7).

Five *ding*-tripods were found, of which three bear vertical ears; M1:133 is 28.2cm tall. The remaining two have lids and side-mounted ears; M1:356 is 37.5cm tall. All of them bear fine decoration. The legs are all adorned with animal-face patterns.

Two *lei*-wine vessels were found, jar-shaped, bearing fine decorative patterns. The shoulders bear four round openwork ears in the shape of dragons, and each



Figure 7. Bronze Chime Bells (M1:1-9)



Figure 8. Bronze Lei-wine Vessel (M1:400)

lei has three short, round animal-shaped openwork feet. A further piece of openwork is attached to the mouth of each *lei*. M1:400 is 45cm tall (Figure 8).

Four *fu*-vessels were found, two large and two small, with square bases; the covers and bodies are similarly

shaped, and the vessels are thoroughly covered with decoration. The inner bottom surface of each large vessel bears the inscription 唯王正月初吉丁亥童丽 (钟离) 君柏择其吉金作其食簠 ("In the King's first month, during the *chuji* moon phase, on the day *dinghai*, Bai, Lord of Tongli (Zhongli), chose auspicious metal and made a *fu*-vessel for eating"). M1:376 is 20.5cm tall (Figures 9 and 10).

One *yan*-steamer was found (M1:32), of the variety formed from a pot on the top and a tripod on the bottom, with a grate in the middle. The entire body is decorated. The shoulders of the tripod portion bear symmetrically attached ears, and the top outer portions of the feet bear animal mask designs. The vessel is 53.5cm tall.

Two *dou*-stemmed bowls were found, identical in size and shape. They have bowl-shaped pans, patterned bellies, and flared ring feet. The handles are decorated with triangular openwork holes. M1:286 is 19.5cm tall.

One *he*-pitcher (M1:20) was found, the lid of which is missing. It has a round, jar-shaped belly adorned with fine patterns. The spout and handle are both made in dragon-head shape, and the belly opposite to the spout bears a fin-shaped ridge. It has three hoof-shaped feet decorated with animal mask pattern. The full height of

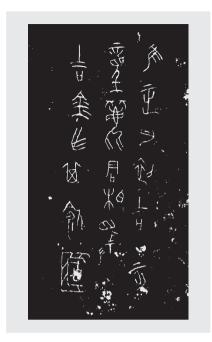


Figure 9. Inscription on the Inner Bottom of a Bronze Fu-vessel (M1:376)



Figure 10. Bronze Fu-Vessel (M1:376)

this he-pitcher is 25cm.

One *yi*-pourer (M1:286) was found, oblong, with a flat bottom, with a short, animal-head-shaped spout. The rear section bears a ring-shaped handle. The vessel is 12cm tall.

One *pan*-basin (M1:283) was found, with a shallow and flat belly, and three short feet.

Two ladles. M1:18 has a large head, a short handle, and a deep, pot-shaped belly. The head is 9cm tall, and the handle is 10.5cm long.

One case with lid (M1:19). The front side has two joint bellies, while the back side is flat and straight. The bottom is flat. The vessel measures 6.7cm tall and 12.8cm in major diameter.

10 chariot axle finials. Two of them are slightly larger and in prismatic shape; the rest are cylindrical. M1:394 is 10cm long.

8 horse bits. All of them are in the shape of paired rings interlocked together with holes at the two ends for rivets.

Four *ji*-halberds. These are weapons consisting of a spear and a dagger-ax combined. By the time of excavation, the wooden shafts had rotten away. M1:47 bears the inscription 童丽 (钟离) 君柏之用戟 ("A halberd for use by Bai, Lord of Tongli [Zhongli]", Figure 11).

Over 200 arrowheads. These can be divided into three types: flat, two-winged broadheads with tangs; trilateral



Figure 11. Inscription on the Blade of a Bronze Halberd (M1:47)

bodies and three-winged broadheads with sockets; and bullet-shaped bodies with tangs (i.e. field points).

In addition to the above items, the excavation also uncovered 2 bronze *ge*-dagger axes, 4 spearheads, one sword, 2 serrated sickles, 2 knives, 9 scrapers, one adze, one saw, 5 engraving knives, etc.

2. Lacquered wooden items: In the vessel chamber, the excavation uncovered large volumes of black charred residue from the decayed lacquered wooden items, as well as a thickly piled layer of lacquer peels. From the remnants, there appear to have been both round and square items in the tomb. Atop the remaining, charred lacquer peels, there were clear traces of fine decorations and patterns made in red, yellow, and black colors.



Figure 12. Painted Pottery Jars (M1:403, M1:404)



Figure 13. Jades

3. Potteries: These consisted of two types: painted potteries and hard potteries impressed with geometric patterns.

14 items of painted potteries were found. All of these were found in the vessel chamber; by the time of excavation, all of them had been shattered by the collapse of the ceiling of the outer coffin. These items were painted over their entire bodies with red, black, and yellow pigments; the decorative patterns, delicate and beautiful, were divided into top, middle, and bottom registers. M1:403 was 38cm tall and 21cm in diameter at the mouth; M1:404 was 50cm tall and 26cm in diameter at the mouth (Figure 12).

3 items of hard potteries impressed with geometric

patterns were found. Two of them, a jar and a basin, were found at the southwest corner of the tomb chamber, while the remaining item, a jar, was found in the northeast corner of the vessel chamber. The bellies of the jars are fully covered with impressed patterns; the patterns adorning the upper and lower bellies are completely different from one another. M1:33, a jar, is 51.8cm tall and 27.5cm in diameter at the mouth. M1:34, a basin, has a level rim, a deep belly, and a flat bottom; it is fully covered in impressed patterns.

4. Stone implements: These included chime-stones and whetstones.

12 chime-stones were found. Based on size, they can be divided into two sets, both consisting of dragon-head-shaped chime-stones, a rarely seen shape. M1:21, the largest stone in one set, is 51–59cm long and 10–11.2cm wide; M1:11, the smallest, is 21.5–25.3cm long and 5.8–6.5cm wide.

Two strip-shaped whetstones were found, bearing traces of use; at the time of excavation, they were layered on top of each other.

5. Jade items: 13 jade items were found, mainly ornaments placed inside the inner coffin. These included

tubes, *jue*-pendants, *bi*-discs, rings, dragon-shaped ornaments, *huang*-semicircular pendants, etc. One particularly exquisite jade thumb-ring was found in the vessel chamber (Figure 13).

6. Clay figurines: 2200 of these "clay figurines" were found in the fill of the tomb pit. They are pointed, with circular or square bodies; a few irregular and/or broken ones were also found. The surfaces bear clear cruciform marks left by rope or plant stems. The figurines range from 20 to 25cm tall and 10 to 15cm in diameter.

III. Conclusions

On the Occupant of the Tomb. The round shape of this tomb's burial chamber is rarely seen. The tomb is massive in scale, and the various traces remaining in the structure of the fill are complex. Numerous burials of accompaniment were included in the tomb, and the grave goods are abundant and are relatively heavily weighted towards chariot fittings and weapons. Obviously, the occupant was a figure of position and authority. Inscriptions mentioning a 童丽 君柏 ("Bai, Lord of Tongli [Zhongli]") were found on a set of bronze bells, a bronze fu-vessel, and a ge-dagger ax; this confirms that the chief occupant of the tomb was a ruler of the state of Zhongli bearing the personal name Bai 柏.

The Dating of Zhongli and of the Tomb. Zhongli is little mentioned in historical records; it is seen earliest in the Zuozhuan record for the 10th year of King Jian of Zhou (576 BCE), the 11th month, wherein Duke Cheng of Lu 鲁成公 "having a meeting with Wu at Zhongli, and this is the first instance of communication between the States of the north and Wu (会吴于钟离,始通吴 也)". In the winter of the seventh year of King Ping of Zhou (538 BCE), the Zuozhuan states, "Yijiu, Director of Remonstrance (of the Chu State), fortified Zhongli (to guard against the Wu State 箴尹宜咎城钟离)". The entry for the second year of King Jing of Zhou (518 BCE) notes that Zhongli was conquered by the King Liao of Wu. In 2007, the tomb of a "Tongli Kang" was discovered at Bianzhuang, Fengyang County, Anhui, and the ruins of the old city of Zhongli are still preserved at a location 2.5km to the east of Linhuaiguan Township, Fengyang County. Archaeological materials confirm that Zhongli was located in the vicinity of Bengbu City and Fengyang County, and was one of the most important regional states of the middle reaches of the Huai River. The geographical location it occupied was of particular importance. It was a vassal state of Wu and Chu in succession, and it acted as a focal point for the struggles between those two states to achieve hegemony over the Yangtze and Huai Rivers until its final destruction in the course of wars of annexation. The fragmentary records concerning Zhongli that survive in the *Zuozhuan* do not explain the state's history and dating. In reality, its initial founding probably predated the *Zuozhuan*, and the tomb under consideration probably dates to approximately 2600–2800 BP.

The excavation of Spring-and-Autumn tomb No. 1 at, Shuangdun is a major archaeological discovery with significant value for historical, scientific, and artistic researches. First, the unusual characteristics of the tomb's structure, including the newly discovered round tomb pit, the cushioning layer of white earth, the five-colored earth, and the cruciform tomb plan and burial arrangement; as well as the never-before-seen phenomena of radial lines in the tomb fill, the earthen mounds, the "clay figurines" and the clay figurine wall, and other extremely complex vestiges of structural phenomena are all important attainments for pre-Qin archaeology. This new discovery has enormously enriched the material content of Chinese mortuary archaeology. Second, the discovery of this tomb has confirmed the historical reality of the existence of the Zhongli State in the middle reaches of the Huai River valley during the Spring-and-Autumn era, providing rare and precious evidence for the study of the location and history of Zhongli, the genealogy of its monarchs, the features of its archaeological culture, etc.; this evidence will be of use in amending, correcting and writing history. Third, the tomb's distinct and mysterious cultural phenomena are rich in implications. The tomb has provided completely new data for the study of the structure and composition of Chinese tombs and of Chinese systems and traditions of burial. It is of extreme value for the study of the cultural phenomena of the middle reaches of the Huai River, and of the archaeology, history, ethnology, religion, and architecture of this region.

Postscript: The original report was published in *Kaogu* 考古 (Archaeology) 2009.7: 39–45 with three illustrations and three plates. This version is revised by Kan Xuhang 阚绪杭, Zhou Qun 周群, and Qian Renfa 钱仁发 and translated into English by Nicolas Vogt 侯昱文.