

# Archaeological Investigations and Excavations of the Front Hall Ruin of the Epanggong Palace

Epanggong Joint Archaeological Team of the Institute of Archaeology, CASS  
and  
Xi'an Municipal Institute of Monument Preservation and Archaeology

**Key words:** Qin period Epanggong Palace site front hall Xianyang Shanglinyuan garden site

## I. Location of the Site and Stratigraphy

Archaeological remains belonging to the front hall of the Epanggong 阿房宫 Palace are identified in the area west to Xi'an 西安 city. Across Weihe 渭河 River is Xianyang 咸阳 ruin, capital of Qin Dynasty. The structure site is located on southwestern end of a flat terrace, which is namely by local villagers as “Meiwuling 郿塢岭,” at 394.2–401.4 m above sea level. The foundation of this structures, built on the stamped earth, has remaining length 1,119 m east-west, and its width is 400 m and the height 7–9 m. Both eastern end and western end of the foundation were covered by modern structures of existing villages. In 1961, the Epanggong Palace ruins become one of first registered National Cultural Heritage Sites (Figs. 1 and 2).

Surveys of the front hall of Qin's Epanggong Palace revealed its areas covering 350,000 sq m. A series of excavations exposed about a 3,000 sq m area. At present, the field investigations provide us with important information of the complex distribution and layouts.

The cultural remains consisting of the stamped foundation is directly below the plough zone, with disturbed deposit in some areas.

The site profile can be described

from an example of east wall of 2003T2 test unit.

Layer 1 is the plough zone, dark-grey and loss sediment, 0.20–0.28 m thick.

Layer 2 is the disturbed deposit below the plough zone at the south wall of the pit. Soils of disturbed layer are dark-yellow in color with fine sand and are of relatively hardness, 0.48–0.54 m thick. Below this layer is the deposit of the structured foundation, which is directly below the plough zone on the northern wall profile.

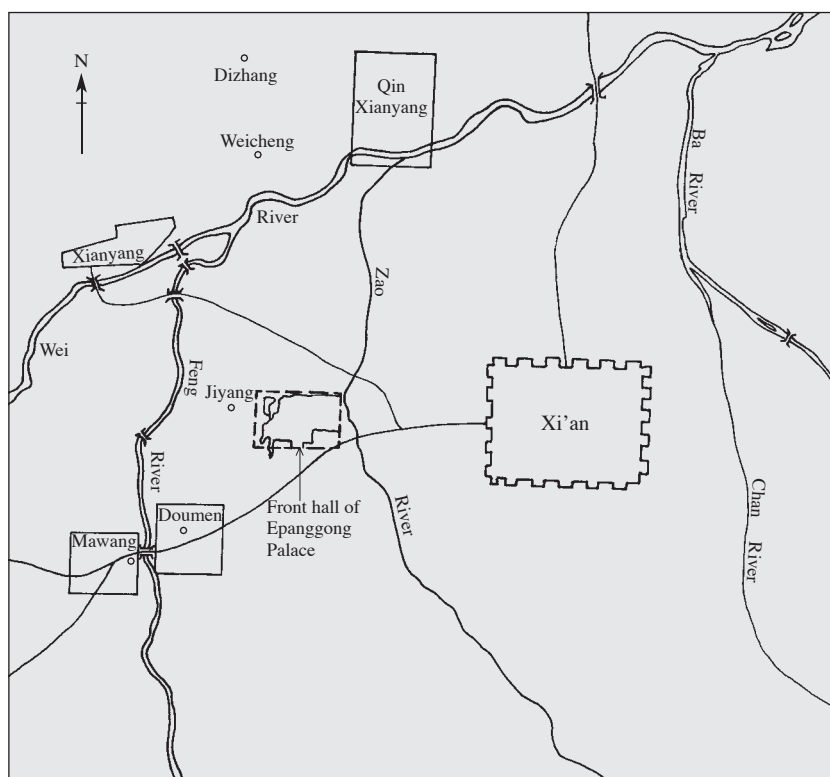


Fig. 1 Location of the front hall site of the Epanggong Palace



Fig. 2 Pounded earth foundation site of the front hall of the Epanggong Palace (photo taken from southwest to northeast)

## II. Front Hall Ruin

The surveys and test-excavations reveal the following measurements of the front hall of Epanggong Palace. Its foundation is about 1,270 m long east-west side, and 426 m wide. The remaining height of the foundation (measured from the northern side at the surface level) is about 12 m. The layers of stamped-earth range from 5 to 13 cm in thickness, while the diameter of the stamp marks are 5–8 cm. The results of coring survey suggest the bottom of the foundation platform is leveled; only the southwestern corner and east ends are relatively built on relatively higher

surfaces (Fig. 3).

To stabilize the stamped-earth platform, the northern edge of the platform, clearly showing three divisions of the eastern end, the middle part, and the western end, was built with the step-in enhancing method. In the middle part, the step-in platform displays the northern and southern platform sections. The western end of this middle part is about 286 m east of the west edge of the foundation, while the eastern end of the middle part is about 661 m west of the east edge. The northern section of the platform is 7.85–11.8 m wide and 4.5–4.8 m high. The southern section is about 9.4 m wide and 4.3–4.4 m high (Figs. 4–6). Both

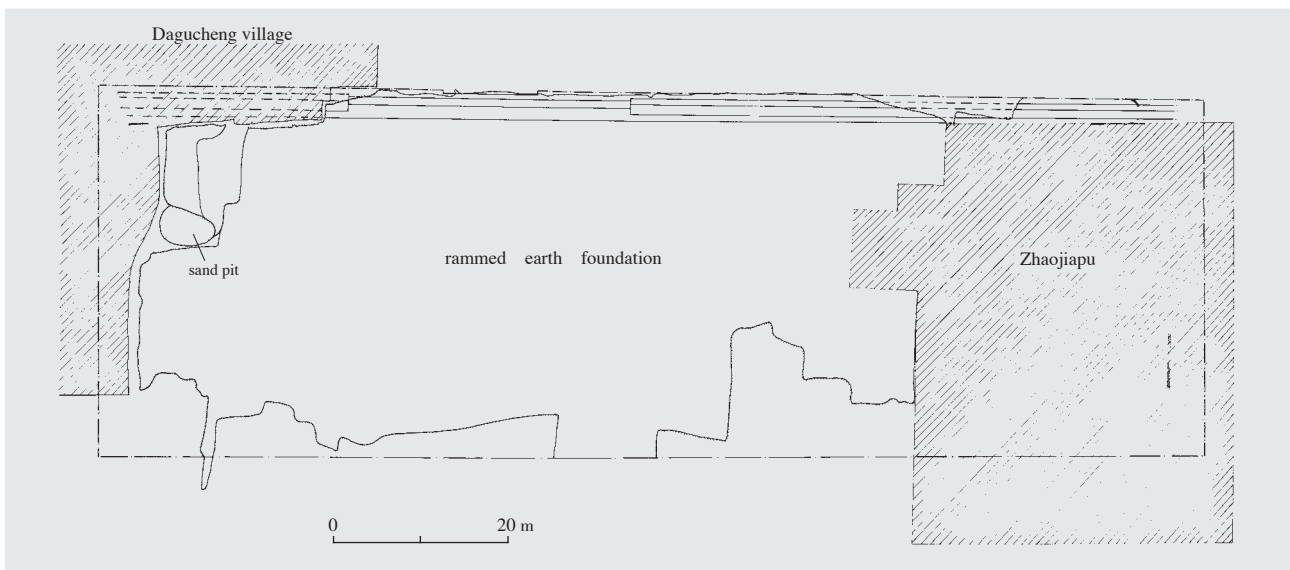


Fig. 3 Plan of the front hall site of the Epanggong Palace

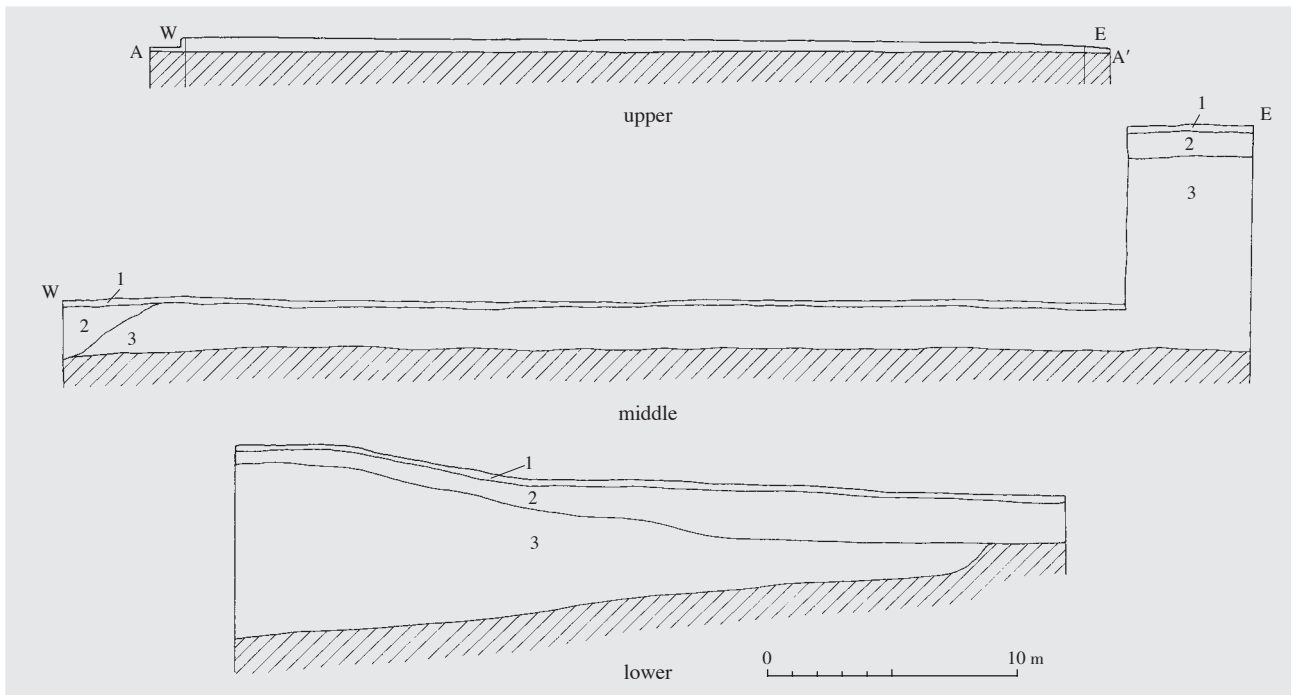


Fig. 4 Vertical-section of the front hall site of the Epanggong Palace

1. plough soil 2. disturbed soil 3. pounded earth (upper: vertical-section; middle: western part of the vertical-section lower: eastern part of the vertical-section)

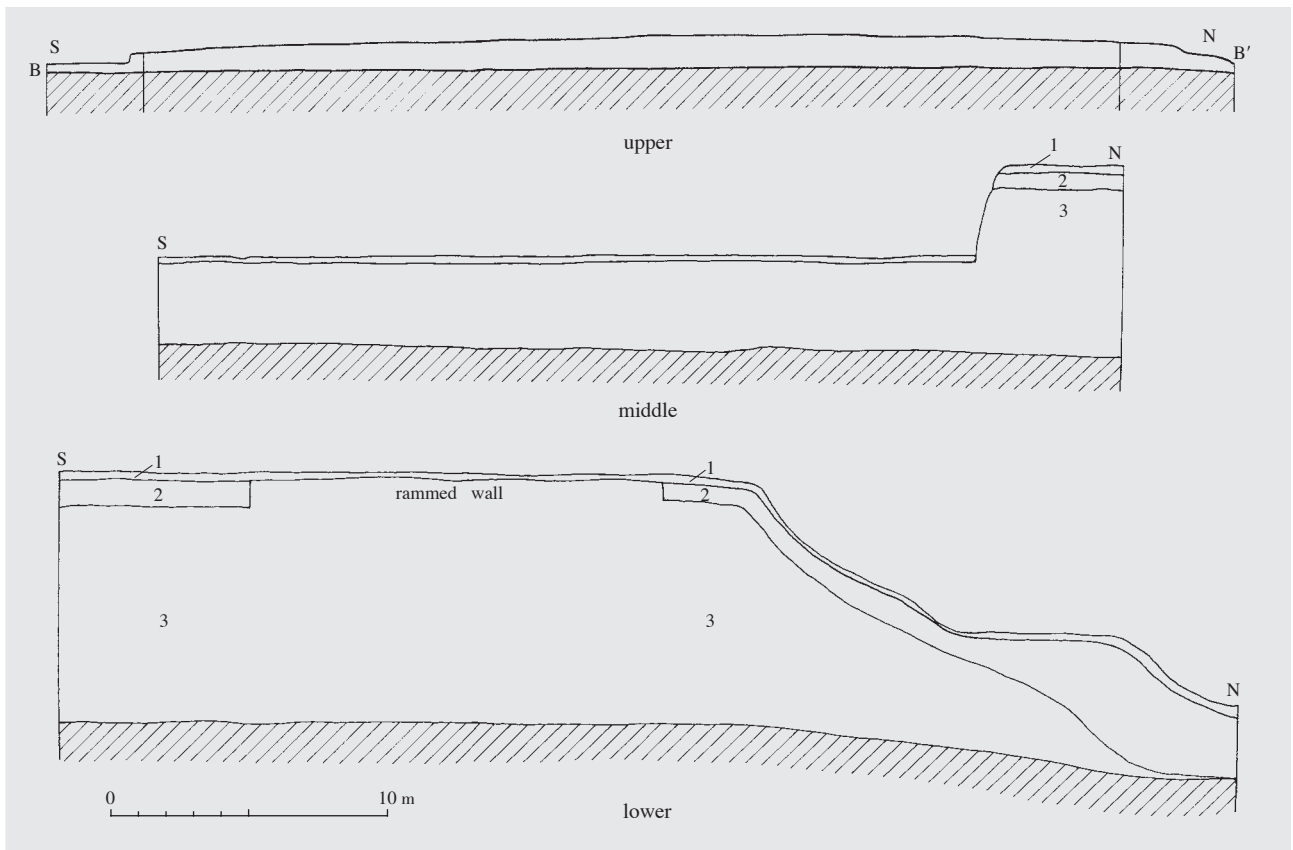


Fig. 5 Cross-section of the front hall site of the Epanggong Palace

1. plough soil 2. disturbed soil 3. pounded earth (upper: cross-section; middle: southern part of the vertical-section lower: northern part of the vertical-section)

eastern and western ends of the northern edge were built in three step-in platform sections from the north towards south. The west end of the section is the end of west edge of the foundation, while the section's eastern end is connected to the western end of the middle part, about 286 m long. The east end of the section is the end of east edge, while the



Fig. 6 Step-in northern edge of the front hall site of the Epanggong Palace in T2 (photo taken from north to south)

section's eastern end is connected to the western end of the middle part, about 661 m long. The foremost northern step-in platform sections is about 8.3 m wide and 3.22 m high, the second-from-north section is about 9.05 m wide and 2.94 m high. The foremost southern one is 11.5 m wide and 0.7 m high (Figs. 7 and 8).

Remains of an enclosure wall, built with stamped-earth section, were found inside the foremost south step-in platform section of the foundation. Corresponding to the step-in platform sections, the wall remains were also divided into three sections. At the middle part, the width of the wall is about 15 m (along the south side of the wall, it narrowed in about 0.5 m for every 16 m interval), and its remaining height is 2.3 m (including the above-ground remains, but at the north wall of the excavated pit, the depth of wall is about 1.05 m). During the excavation, a large quantity of collapsing debris were found at the south side of this wall, probably from the roof of north wall of the front hall structure. The band of tile debris is 4.7 m from the south side of the wall (Fig. 9). The tiles include various types for different architectural elements, with code-marks or plain decorations, usually between 1.5 to 1.7 cm thick. Some of slab tiles have inscriptions, both incised or stamped, most inscriptions include “zuo 左”, “you gong 右宫”, “zuo si 左司”, “zuo gong 左宫”, “bei si 北司”, “da jiang chang 大匠昌”, “sui 燧”, “yi 衣”, “lu 鹵” etc. (Fig. 10). Decorations of tube-tiles are dominated by fine cord-marks and dots. They are about 52 cm long, 16 cm in diameter, and 0.8–1.3 cm thick. In addition, there is one special tube-tile with eaves, finely decorated:

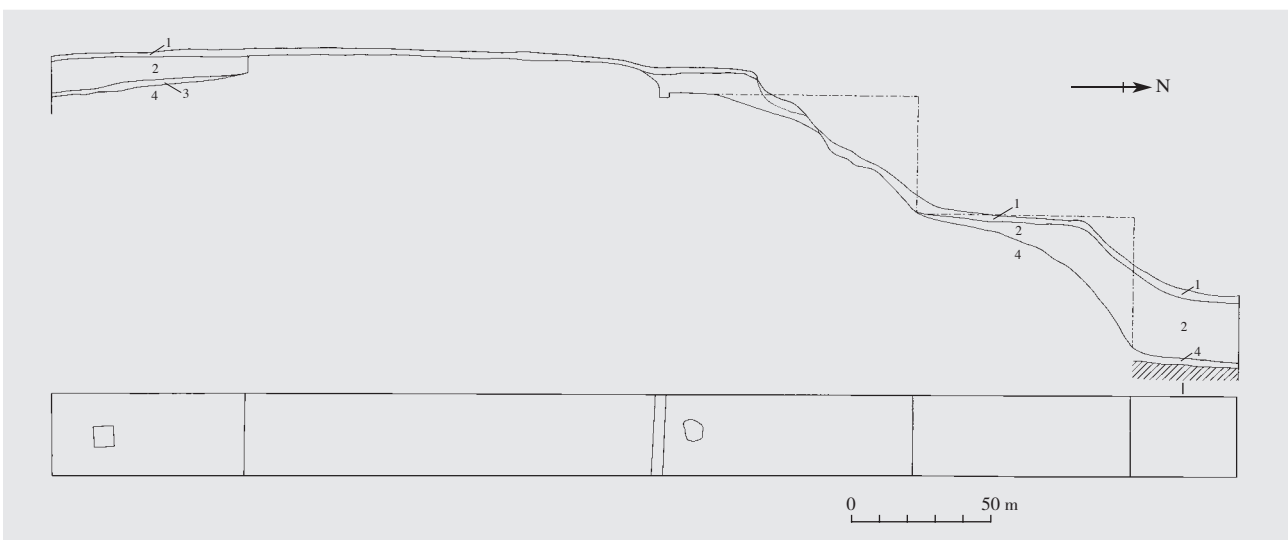


Fig. 7 Plan and cross-section of T2

1. plough soil 2. disturbed soil 3. Han period deposit 4. pounded earth





Fig. 8 Step-in northern edge of the front hall site of the Epanggong Palace in T5 (photo taken from south to north)



Fig. 9 Northern wall and roof debris of the front hall site of the Epanggong Palace in T2 (photo taken from south to north)

the center of the eaves has diamond-shape design while the circular surface is decorated with mushroom-shaped cloud designs. These tube-tiles have inscriptions including “北司”, “左司”, “右宫”, “da jiang yin 大匠印”, “da jiang yi 大匠乙”, “wu gong zuo 五工左”, “da zuo 大左”, “shao zuo 少左”, “wu 五”, “省” (Figs. 11 and 12).

The width of the wall section at the south side of the third step-in platform sections belonging to the east end of the foundation’s north edge is about 6.5 m and its remaining height is 2.3–2.4 m. At each side (north and south) of the wall there is a band of collapsing roof tiles remains (4 m in width at the south side, and 4.5 m at north). The tiles are exactly the same to those found at the middle part mentioned above (Fig. 13).

The same material remains of wall structure and features were recovered at the third step-in platform sections at the west end of the foundation north edge.

However, there are some differences between the southwest corner edge and the south edge of the foundation, because the front hall was built on the southwestern extending terraces of Longshou 龙首 (the terrace is about 394.2–401.4 m above sea level), thus the

hall was not built on a foundation that were made entirely on stamped-earth, but rather partially on stamped-earth on top of natural slopes of the Longshou terrace. The excavation reveals a fact that the south side of the foundation was built directly on the archaic Qin floor surface, thus the platform at this area were entirely made on stamped-earth. The southwestern corner has high-elevated natural surface, which was built into as a part of platform foundation. The northern part of the foundation was also made entirely on stamped-earth.

Floor surface of Qin Dynasty at the south edge is 3.05 m below the modern surface. The floor surface has a stamped-earth layer of 0.2 m thick. The remaining floor is about 205 m long north-south, and about the same width with the stamped-earth foundation. The remaining height of the foundation at the south from the Qin floor surface is 2.8 m high, while the floor surface extends to areas below the bottom of the foundation.

At the south edge, there is a layer of unstamped earth, about 0.05–2.2 m thick, spread out on top of the floor surface. Above this, there is a layer probably indicative of street roads (an example from Layer 4C at the pit 2003T7). The road surface is about 1–2.3 m below the



Fig. 10 Glyphs in the ceramic tiles from the front hall site of the Epanggong Palace  
 1. “zuo 左”(T19④:16) 2. “you gong 右宫”(T19④:17) 3. “da jiang chang 大匠昌”(T19④:18) 4. “zuo si 左司”(T2 ③:1) 5. “zuo si 左司”(T2 ③:5) 6. “zuo gong 左宫”(T2③:2) 7. “zuo si 左司”(T2 ③:3) (1–6. plain tiles; 7. semi-cylindrical tile)

current surface, and extends to the south about 26 m in way of slopping about 8 degrees. The street-road layer is about 3 cm. Both layers, unstamped earth and street road, were underneath directly the bottom of the foundation. In the area south to the south edge of the foundation, a layer of unstamped earth is recovered on top of the street-road surface, about 0.2–0.7 m thick, on top of which there is another layer of street-road surface

that is about 0.6–2.15 m below the current surface and 33.7 m long (an example from Layer 4B at the pit 2003T7), also appearing southward down slopping with 8–10 degrees. The street-road layer is about 3–5 cm thick too. The above-mentioned unstamped-earth and floor surface are extended into below the bottom of the foundation. At the northern part of the pit, a layer of road surface appears on top of the stamped-earth plat-



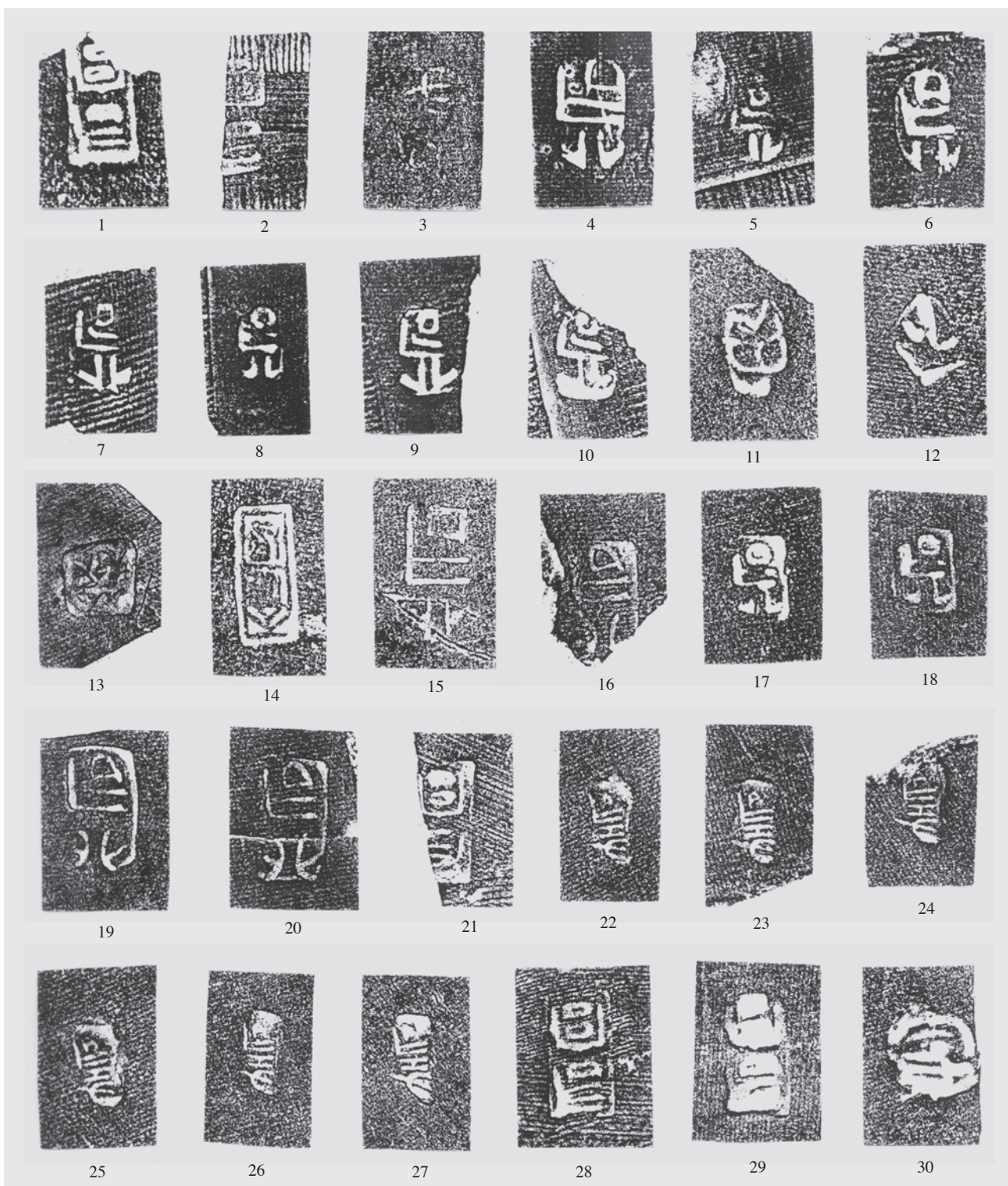


Fig. 11 Glyphs in the ceramic tiles from the front hall site of the Epanggong Palace

1. “zuo 左”(T19④:16)
  2. “you gong 右宫”(T19④:17)
  3. “you gong 右宫”(T19④:48)
  4. “zuo si 左司”(T2③:1)
  5. “zuo si 左司”(T2③:5)
  6. “zuo si 左司”(T19④:21)
  7. “zuo si 左司”(T19④:31)
  8. “zuo si 左司”(T19④:32)
  9. “zuo si 左司”(T19④:33)
  10. “zuo gong 左宫”(T2③:2)
  11. “bei si 北司”(T19④:22)
  12. “bei si 北司”(T19④:26)
  13. “bei si 北司”(T19④:27)
  14. “bei si 北司”(T19④:28)
  15. “bei si 北司”(T19④:29)
  16. “bei si 北司”(T19④:30)
  17. “da jiang chang 大匠昌”(T19④:18)
  18. “sui 燧”(T19④:34)
  19. “yi 衣”(T19④:35)
  20. “lu 鹵”(T19④:49)
  21. “bei si 北司”(T19④:19)
  22. “bei si 北司”(T19④:23)
  23. “bei si 北司”(T19④:38)
  24. “bei si 北司”(T19④:39)
  25. “bei si 北司”(T19④:40)
  26. “bei si 北司”(T19④:45)
  27. “bei si 北司”(T19④:46)
  28. “bei si 北司”(T2③:3)
  29. “you gong 右宫”(T2③:4)
  30. “you gong 右宫”(T19④:25)
- (1–20. plain tiles; 21–30. semi-cylindrical tile)

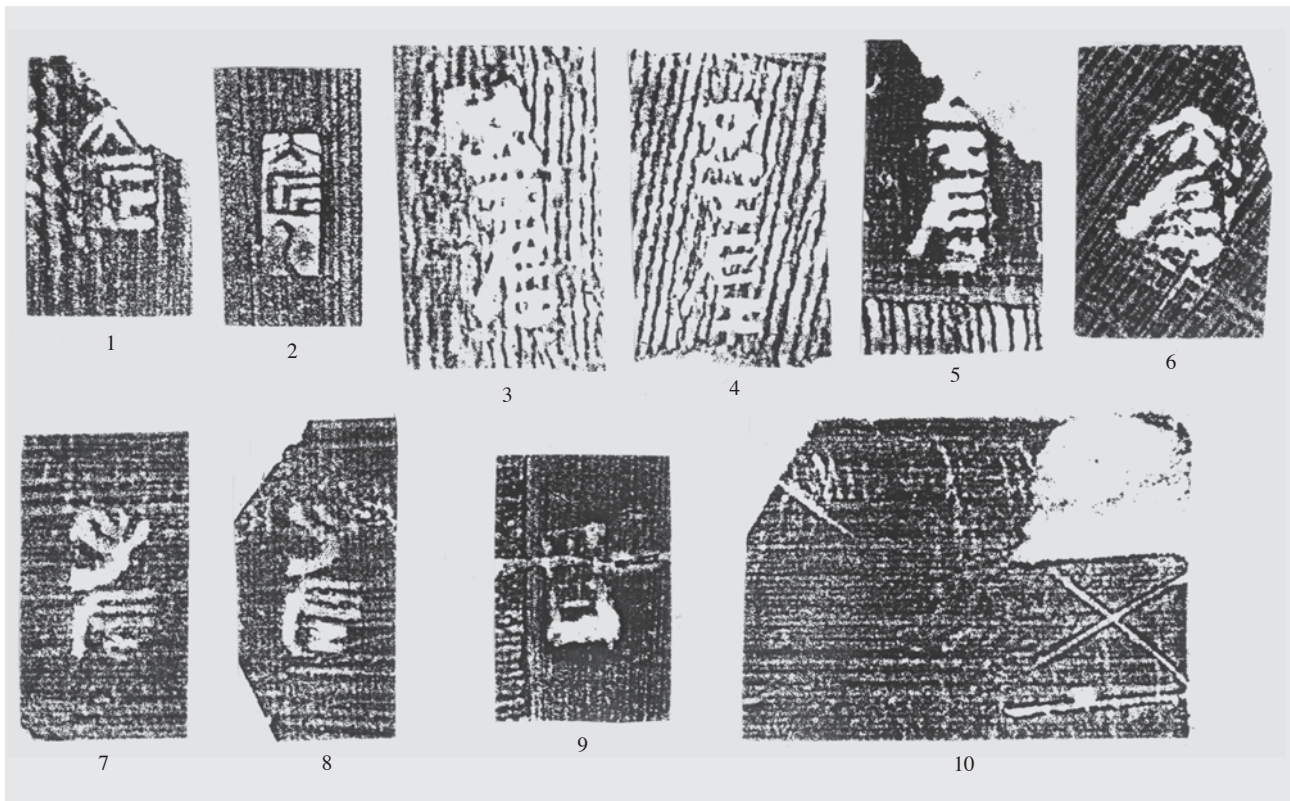


Fig. 12 Glyphs in the ceramic semi-cylindrical tiles from the front hall site of the Epanggong Palace

1. “da jiang 大匠”(T19 ④:41) 2. “da jiang yi 大匠乙”(T19 ④:20) 3. “wu gong zuo 五工左”(T19 ④:24) 4. “wu gong zuo 五工左”(T19 ④:37) 5. “wu gong zuo 五工左”(T19 ④:47) 6. “da zuo 大左”(T19 ④:36) 7. “shao zuo 少左”(T19 ④:42) 8. “shao zuo 少左”(T19 ④:43) 9. 𠄎 (T19 ④:50) 10. “wu 五”(T19 ④:44)

form section (i.e., Layer 4A from the pit 2003T7), about 3 cm in thickness (some areas of the road surface appears to be of harden mud about 2–3 cm thick). This layer of the street road surface is embedded northward into the foundation. In general such unstamped-earth layer and street-road surfaces can be seen at the south side of the foundation at large, suggesting that they were probably formed by walking and stepping during transporting materials to build the foundation.

Below the deposit of Han Dynasty materials at the southern part of the pit is floor surface and unstamped-earth mixture stepping layer, both near the south of the foundation.

In the area about 3 m south of the front hall foundation, remains of roof tiles were recovered from the Han Dynasty deposits. The catch of the tile remains is about 3.06 m long east-west and 3 m wide, and is 1.04 m below the current surface, but only two-third area (2.3 × 1.1–1.74 m) were exposed during the excavation. The area of the catch also appears in form of a 25 degrees southward down slope. Underneath the tiles is a layer of mixture of sand and mud, about 0.1–0.18 m thick. Below that

are unstamped-earth layer with a surface of stepping floor, which is 3–5 cm thick. Within the tile catch, there are 6 rows of tube-tiles paralleling from west to east (a total of 14 pieces including fragments) and 5 rows of slab-tiles (16 pieces including fragments). Rows of tube-tiles are in between two rows of slab-tiles. They were arranged in building the roof from north towards south; in other words, tiles at north are on top of tiles at south. Most of the tube-tiles have a rim towards north, which were joint with the tile from the top. Slab tiles were joint each other from north toward south, with a joint length of 12–19 cm. The tube-tiles recovered from this catch is about 46–54 cm long and 1.2–2 cm thick, and their diameter range between 44 and 48 cm. The rims are about 2.5–3 cm wide and 0.5–1 cm. The decorations have fine to moderate code marks on the out surface and dots surface inside. Some of these tiles show cording marks. The length of slab-tiles range 58–62 cm, the width 40–48 cm, the thickness 1–1.8 cm. Judging from the decorations and making-techniques of these tiles, the catch of the tiles should belong to Qin-Han periods (Fig. 14).





Fig. 13 Step-in northern edge and north wall of the front hall site of the Epanggong Palace in T5 (photo taken from north to south)

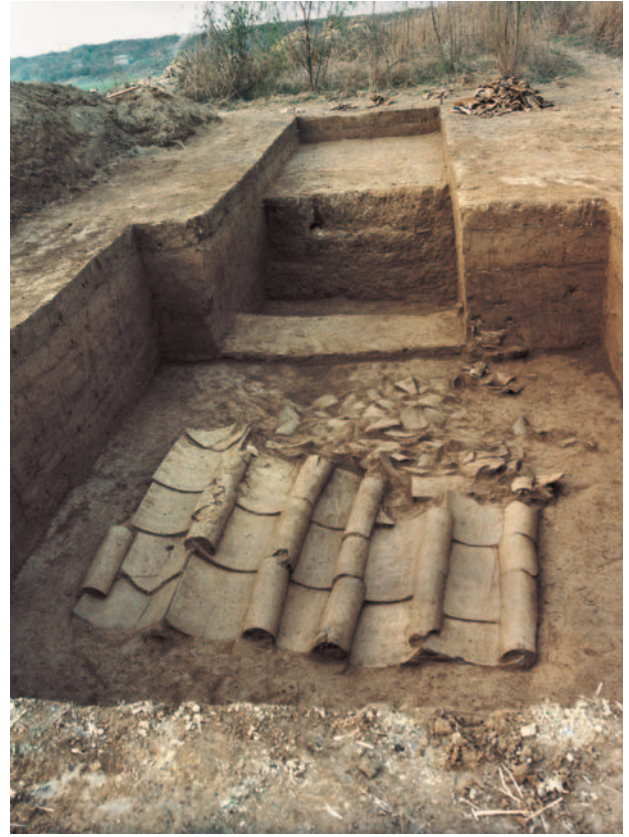


Fig. 14 Tile remains of the front hall site of the Epanggong Palace in T8 (photo taken from south to north)

### III. Conclusion

#### 1. About the location of the Epanggong front-hall

The name of “Epanggong” was known as early as back to the Western Zhou period. Some scholars believe the bronze inscription “莽京” of the Western Zhou Dynasty referring to a suburban area north of the capital Haojing 镐京. Such a place was once called as “Fang 方” during the end of Western Zhou and the Spring and Autumn period, and as “房 Pang” or “阿房 Epang” during the Warring States and Qin periods. In the chapter of “Qinshihuang Benji” of the *Shiji* 史记·秦始皇本纪 records a palace was built at the north of former capital of the Western Zhou–Haojing. The ruin of the palace has been identified near western side of today’s Fenghao 沔镐 Village. A series of stamped-earth foundation remains are still visible. This ruin being excavated should belong to the front hall of the Epanggong Palace. Its size being determined during the excavation is consistent with the records in the historic documents.

2. There is no sign of burning at the front hall of the Epanggong Palace, and the front hall was not completed

in construction.

Archaeological investigations suggest there is no sign of burning at the front hall. This discovery is not consistent with the historical records suggested by the book of *Shiji*. The records suggested that the rebellion led by Xiang Ji 项籍 conquered Xianyang 咸阳 capital, killed the young emperor and other royal family members, and burned all of palaces including the Epanggong. During the previous excavations at the Nos. 1–3 palace remains, burn signs were recovered from these structures, proving the story recorded in the history. The fact that the Epanggong was unfinished is also suggested in the historic documents, such as in the chapter of “Qinshihuang Benji” of the *Shiji* and also seen at the chapter “Wuxing Zhi” in the book of *Hanshu* 汉书·五行志.

According to the surveys and excavations, the front hall structure was not completed; only the stamped-earth foundation platform and three sides of wall structures were finished. During the excavations, only remains of enclosure walls as well as collapsing roofs were clearly identified. Materials recovered mainly include various tiles. There are no remains of architectural structure above the foundation. Therefore, we determined that

the front hall was never finished by the time of being abandoned, only completed with the foundation platform as well as the north wall, east wall, and west wall with roofed structures.

Note: The original report, published in *Kaogu Xuebao* 考古学报 2005.2: 207–238, with 31 illustrations and 14 plates, is written by a group including Li Yufang 李毓芳, Sun Fuxi 孙福喜, Wang Zili 王自力, and Zhang Jianfeng 张建锋. This summary is prepared by the first author and English-translated by Shen Chen 沈辰.