

The Western Zhou Building Foundations at Yuntang and Qizhen in Fufeng County, Shaanxi, in 1999–2000

Zhouyuan Archaeological Team

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Since the autumn of 1999, the Zhouyuan Archaeological Team organized by the Institute of Archaeology, Chinese Academy of Social Sciences, Shaanxi Provincial Institute of Archaeology, and the School of Archaeology and Museology of Peking University carried out large-scale archaeological investigations and excavations in the Zhouyuan 周原 Site.

The Yuntang 云塘 Western Zhou Building Site is located about 300 m to the southwest of Yuntang Village and 200 m to the northwest of Qizhen 齐镇 Village in Huangdui 黄堆 Township, Fufeng 扶风 County. The Qizhen Building Site is located to the northwest of Qizhen Village and 50 m to the east of Yuntang Site. The two sites seemingly had some kind of relationship.

In sum, eight tamped-earth building foundations have been excavated in this season of fieldwork. Among them, the F1 complex is the typical group. The F4 complex is similar to F1 in planning with one more bay on each facade. Hereby we introduce the results of our excavation with F1 complex as the case.

I. The Tamped-Earth Foundation

A well-preserved 品-shaped architectural complex consisting of several buildings is excavated in Yuntang (Figs. 1 and 2).

1. F1

The whole plan is in the shape of 凹, the recessed portion is on the southern side. The northeastern corner of the tamped-earth foundation is slightly damaged. The excavated foundation is a double-tiered platform, the top surface of which is about 70 cm above the surrounding ground. It is a terrace-type building. On each of the eastern and western sides of the platform, there is a gateway with steps; on the recessed portion of the

southern side, there are two gateways with steps and on the northern side, one. The azimuth of the site (based on the west side) is 8 degrees.

The lower pier of the platform is 35 cm in height and 40 cm in width. The upper pier (the top surface of which is the floor of the platform) is 30 to 35 cm in height. The overall height of the platform is about 70 cm.

The lengths of the western and northern sides of the lower pier of the platform are the same, 1650 cm. The northern side (restored) is 2200 cm in length. The southern side consists of three portions: the western protruding portion, 610 cm in length; the eastern protruding portion, 612 cm in length and the recessed portion in the middle, 978 cm in length (including the lengths of the two gateways). The eastern and western protruding portions protrude out of the middle portions 338 and 340 cm respectively. If we measure the length of the platform from the outer edges of the lowest step of the steps of the two gateways on the eastern and western sides, the overall length is 2343 cm.

Column base pits. There are 37 column base pits on the top of the platform forming seven lines in north-south direction. On the eastern and western sides, there are two lines respectively with six pits in each line, and between the two pits on the southern end of each line there is one extra pit (Nos. 7 and 31); the due central line consists of three pits and the two lines on the left and the other two to the right of the central line all consist of four pits each. The distances between each two pits (center to center) are commonly 300 cm, only that in the three middle lines are different: the distance between the two pits on the southern end of the due central line (Nos. 19 and 20) is 720 cm and that between the two pits Nos. 16 and 23 on its two sides is 750 cm. The space within the

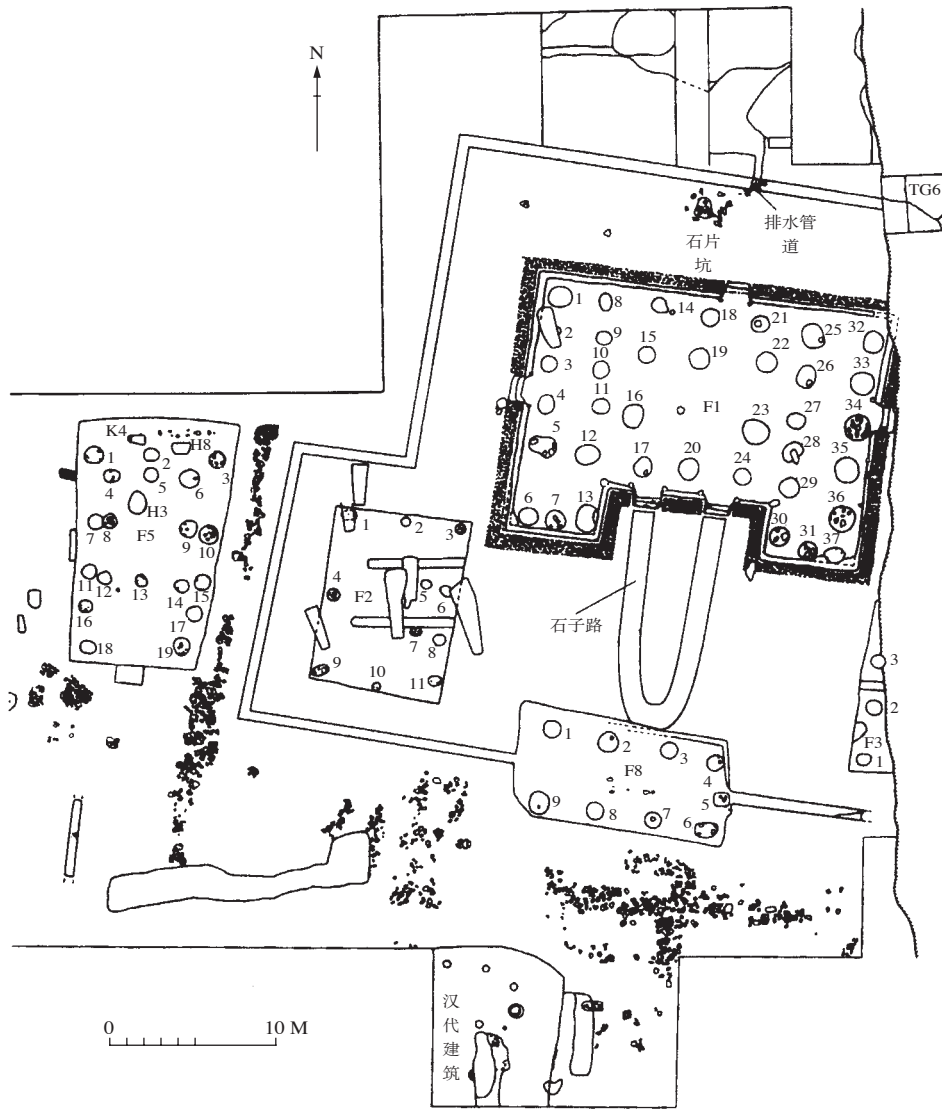


Fig. 1 Plan of the Western Zhou period foundation of architectural complex

F1: 1-37. column base pits F2: 1-11. column base pits F3: 1-3. column base pits F5: 1-19. column base pits F8: 1-9. column base pits



Fig. 2 Houses F1, F2, F5, F8, and enclosure



Fig. 3 Apron

four pits formed a spacious chamber, which is located in the center (slightly to the south) of the platform. This chamber should be the location where important activities were held. The two rings of column base pits are arranged in pairs apart from each other in about 300 cm, forming smaller rooms surrounding the central chamber.

Column holes. Totally 21 found on the two sides of gateways, in the corner of the recessed portion on the south side of the platform and on the eastern protruding portion.

Steps. Five in total. There is one on each of eastern, northern and western sides and two on the recessed portion of the southern side.

Apron. Except for the front of the five steps, apron 60 cm in width surrounds the whole platform (Fig. 3).

Pebbled path. In the shape of U, the two branches on the north link to the two gateways and the southern end links to F8. The path is paved in the same way as the apron. The branches of the path are 120 cm in width and the south end is 256 cm in width. The overall length of the path is 1310 cm (Fig. 4).

In addition, remains of red baked clay and stone flake pit are discovered in the area of F1.

2. F2

F2 is located to the southwest of the platform of F1, and its eastern edge is 150 cm to the western edge of F1. The platform is preserved well and in the shape of



Fig. 4 U-shaped pebbled path to the south of house F1

rectangular. The longer sides of which are in north-south direction. The eastern side of the platform is 1160 cm in length, the southern side, 840 cm, the western side, 1140 cm, and the north side, 850 cm. The extent platform is 35–50 cm higher than the surrounding ground. The azimuth of the platform (based on the west side) is 8 degrees.

Column base pits. In total, eleven column base pits are found on the top of the platform and roughly arranged into three lines in north-south direction and three rows in east-west direction. No clear remains of steps have been found around the platform but we conjecture that the steps should be on the middle of the eastern side and might be destroyed by modern graves. No remains of apron are found around the platform either.

3. F3

F3 is located 164 cm to the southeastern corner of F1. Because of the destruction of modern digging, only the southwestern corner survived. The remaining length of the western side is 1076 cm, and the top of the platform is 46 cm higher than the surrounding ground. The azimuth of the platform (based on the western side) is 8 degrees. Only three column base pits remain on the platform, which are arranged into a line in north-south direction and the spaces between them are 292 and 330 cm respectively. The three column bases belong to the most western line of columns of F3.

The structure of the platform. From the cutaway section of the side of F3, we see the platform built of tamped earth layer by layer and the foundation pit. The layers of tamped earth are 18–30 cm thick and in hard

texture. The two layers on the top forming the platform are made of pure loess and the lower layers forming the foundation are made of mottled earth with impurities.

4. F8

F8, which is located 1410 cm to the southern edge of F1, is a rectangular platform. The longer side of which is in east-west direction, and parallel with F1. The platform is 1284 cm in length (the north side) and 670 cm in width. It is built of tamped loess. No apron is discovered around the platform but activity space processed into red baked clay is found to the south of the platform. The remaining platform is 0–35 cm higher than the surrounding ground.

Column base pits. Nine column base pits are found on the top of the platform. They are arranged in two lines in east-west direction. Each consists of four column bases, and one base pit is between the two column base pits on the east ends of the two lines. From the arrangement of the column bases, we infer that there had been a building with at least three bays in the width on this platform. In the middle of the southern side of the platform, there is trace of a path stretching to the south.

5. The accumulations of tile shards

To the south of the enclosing walls on the two sides of F8, there are large accumulations of tile shards including shards of flat tiles and semi-cylindrical tiles. The accumulations covered an area about 20 m from east to west and 16 m from north to south.

6. Enclosing walls

The enclosing walls are attached to the two sides of F8 and stretched out, enclosed the three buildings F1, F2, and F3.

The remaining length of the enclosing wall to the east of F8 is 800 cm, that to the west of F8 is 1720 cm; the enclosing wall to the west of F2 is 1840 cm and that to the north of F2 is 772 cm; the enclosing wall to the west of F1 is 2140 cm and that to the north is 2700 cm. The drainpipe is under this portion, 1790 cm to its west end. The overall remaining length of the enclosing wall is 9952 cm, which formed a 回-shaped symmetrical architectural complex. In this complex, F1, the main hall, is located at the central place and F8 is a guardhouse. These buildings enclose into a courtyard among them and the U-shaped pebbled path is paved in it.

7. The drainpipe

It is set under the wall to the north of F1, 1790 cm to the west corner, and 660 cm to the northern apron of F1. It is constructed with semi-cylindrical tiles laid with the concave faces upward on the bottom and flat tiles

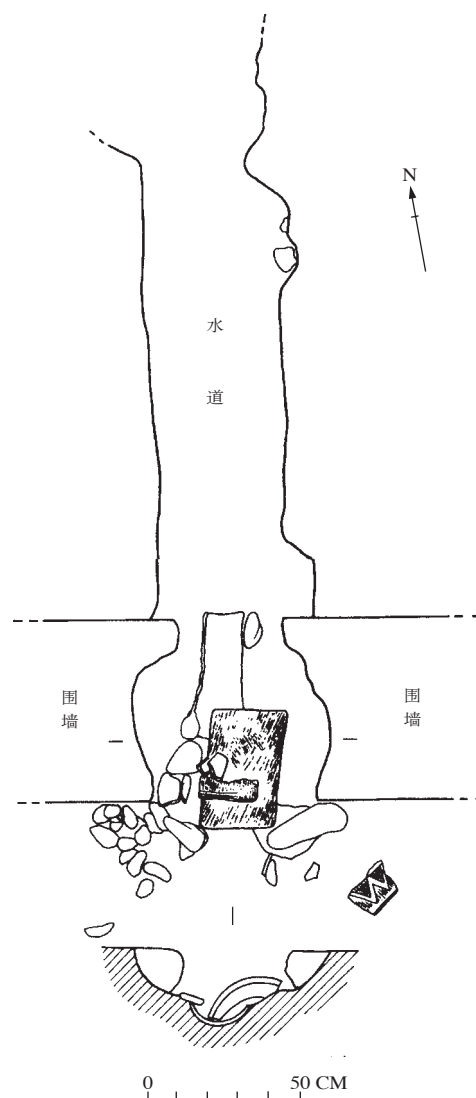


Fig. 5 Plan and elevation of drainpipe

covered with the concave face downward on them. The length of the drainpipe is 67 cm, equal to the thickness of the enclosing wall. An escape ditch 45 cm in length and 20 cm in depth is linked to the outer end of the drainpipe (Fig. 5).

8. F5

F5 is located to the west of F2 and outside of the enclosing wall. The eastern edge of F5 is 324 cm to the western portion of the enclosing wall. The azimuth of the platform (based on the west side) is 10 degrees. The platform is in the north-south direction and about 36 cm higher than the surrounding ground. No second pier and traces of apron are found. The plan of the platform is in a shape of trapezoid, the length of which is 1616 cm, the width on the northern edge is 1000 cm and that on the southern end, 812 cm. Traces of steps are found in the

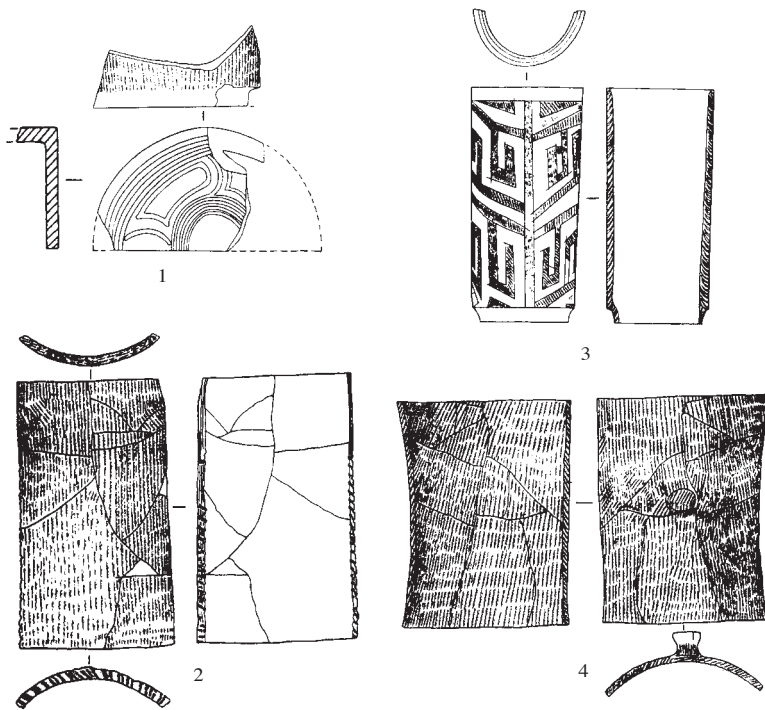


Fig. 6 Pottery artifacts

1. tile-end (T1010 ③ A:6) 2. type B flat tile (H21:5) 3. semi-cylindrical tile (T0708 ④:1) 4. type A flat tile (H9 ①:16) (Scales: 1. 1/8; 2. 1/13; 3, 4. 1/16)

middle of the western and southern edges of the platform.

Column base pits. In total 19 column base pits are found on the platform of F5, which are arranged in two rings. The inner ring consists of eight pits and the outer, eleven pits.

Foundation laying sacrifice pit. In the north of the platform of F5 and to the northwest of column base No. 2, a rectangular pit (K4) is discovered. It is in rectangular shape. The longer side of which is in east-west direction and 100 cm in length, 50 cm in width, and 18 cm in depth. A headless dog skeleton heading the east is unearthed in this pit. The dog skeleton was lying on right side with the four legs stretching to the north. Six jade pendants are found near the neck of the dog.

The structure of column base pit. The column bases are built in the tamped-earth platform. That is, to dig bowl-shaped pit 80 cm in diameter and 93 cm in depth on the finished platform then to sandwich earth and pebbles of different sizes into the pit and tamp them firm. In each pit, four layers of earth and four layers of pebbles are filled and tamped.

II. Recovered Artifacts

Tiles. There are two types of tiles, both made of

fine gray pottery, have been excavated: semi-cylindrical tiles and flat tiles.

Flat tiles. Can be sorted into two types. Type A: rough cord patterns are decorated on both inner and outer surfaces, and knob on the convex side. The shape is not very regular. Sample H9 ①:16 is 48 cm in length, 36.4 cm in width and 1.6 cm in thickness (Fig. 6:4). Type B: fine cord patterns are decorated on the obverse and the reverse is undecorated. Sample H21:15 is 47.2 cm in length and 28 cm in width (Fig. 6:2).

Semi-cylindrical tiles. The diameter on one end is larger than that on the other end, and the smaller end is made into lip rim. The obverse is decorated with many kinds of designs and patterns and the reverse is always plain. The two ends are undecorated but the two sides are decorated with cord patterns. The sizes of the semi-cylindrical tiles are not identical and the small-sized ones take the majority. Sample T0708 ④:1, 49.6 cm long, 22.4 cm wide in larger end and 18.4 in smaller and 1.6 cm in thickness, is decorated with mean cord patterns as ground and symmetrical fret pattern (Fig. 6:3).

Tile-end. Sample T1010 ③ A:6 unearthed on the platform of F5, which is made of fine red pottery, is a fragment. The face is semi-circular, decorated with concentric circles on the margin and in the central area and curved rectangular spiral patterns which is popular in the decorations of the bronzes of the later stage of the Western Zhou Dynasty. It is attached to the end of a semi-cylindrical tile. This tile-end is 24 cm in diameter and 13 cm in height (Fig. 6:1).

Jade pendants. Six pieces, unearthed from the dog pit (K4) near the neck of the dog. The jade pendants are in the shape of dovetailed rectangle, the obverse is decorated with ragged curves pattern, which was typical in the later stage of the Western Zhou Dynasty, and the reverse is undecorated. There are perforations on the four corners of the reverse for lacing. Sample K4:1 is 4 cm in length and 2.8 cm in width (Fig. 7).

Jade *ge*-dagger-axe. One piece (F4:1), unearthed from the platform of F4. It is milky white in color and triangular in shape with thin blades, 15.7 cm in length, 2.7 cm in width, and 0.6 in thickness (Fig. 8).

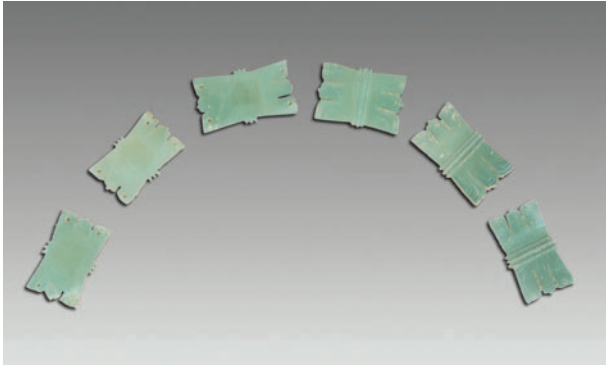


Fig. 7 Jade pendants in pit K4



Fig. 8 Jade ge-dagger-axe (F4:1)

III. Conclusion

From the stratigraphical relationship and unearthed relics, we date the main building sites as in the earlier period of the later stage of the Western Zhou Dynasty, because the typical pottery wares of the earlier period of the later stage of the Western Zhou Dynasty, such as the *dou*-stemmed bowl with large bowl, *yu*-basin, *gui*-container with tile pattern, small-mouthed jar, joining-legged *li*-tripod and so on.

Typical pottery wares of later period of the later stage of the Western Zhou Dynasty such as the *dou*-stemmed bowl with large bowl, small-mouthed jar and *yu*-basin are unearthed from the layers 5–7 superimposed on the building sites. From the stratigraphical relationship we judged that the use of F1–F5 and F8 was in the later stage of the Western Zhou Dynasty and they were built in the same time.

From the layout, we believe that F1–F3 and F8, even F5, belong to the same architectural complex.

The positions of Yuntang-Qizhen building groups are in the central area of Zhouyuan Site. They are located between Fengchu 凤雏 building group and Shaochen 召陈 building group and 900 m to the east of Fengchu building group and 500 m to the west of Shaochen building group.

Note: The original report is published in *Kaogu* 考古 2002.9: 3–26 with 20 illustrations, four pages of plate, and six tables, written by Xu Lianggao 徐良高, Liu Xu 刘绪, and Sun Bingjun 孙秉君. The present version, an abridgment from the original, is prepared by the first author and English-translated by Ding Xiaolei 丁晓雷.

The planning of this complex is intact and regular; the techniques of platform building, tile using, apron paving and column base laying are similar to those of Fengchu and Shaochen sites excavated in the 1970s. However, its structure and planning are rather different from them: the 品-shaped symmetrical layout, the enclosing wall and the 品-shaped pebbled path, are all unique, and the area it covered is not smaller than two of them. The 品-shaped symmetrical layout, the U-shaped pebbled path and the designing of east and west steps all meet the record of *Zuo Steps* and *Bin Steps* in *Yili* 仪礼 (The Ceremony and Ritual). All of these discoveries provide new material for the researches on the architectural techniques and ritual systems of the Western Zhou Dynasty.

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