

# The Early Yangshao Settlement at Dadiwan, Qin'an County, Gansu Province

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The Dadiwan 大地湾 site is located 45 km east of the urban district of the Qin'an 秦安 County, Gansu 甘肃 Province. It is 1,100,000 sq m in size and occupies the terrace and slow slope on the south bank of the Qingshui 清水 River—a tributary of the Wei 渭 River. In the excavations from 1978 to 1984 and in 1995, the Gansu Provincial Institute of Antiquity and Archaeology exposed 14,752 sq m at the site. The abundant discoveries include 240 house-foundations, 325 ash-pits and storage-pits, 71 burials, 35 kilns, 12 ditches, 4,147 pieces of pottery, 1,931 stone implements, and 2,227 bone objects and shell implements. The site thus was elected as one of the 100 most significant archaeological discoveries in China in the 20th century.

The cultural deposit of the site is usually between one to two meters in thickness, and is around three meters at some parts. The remains can be divided into five phases dating cal. 7800 BP–cal. 4800 BP. The first phase shows the characteristics of the Laoguantai 老官台 Culture, the second, third, and fourth phases were contemporary with the early, middle, and late periods of the Yangshao 仰韶 Culture, and the fifth phase belongs to the Changshan 常山 Culture. The second phase (the early Yangshao period) can be further divided into three sub-phases. This article focuses on the best-preserved settlement of sub-phase I.

The settlement of sub-phase I is on the second terrace beside the Qingshui River. It is 150 m in length, 120 m in width and 13,000 sq m in size. Within the 9,671 sq m excavated area, one surrounding ditch, 37 houses, one kiln, 12 hearths, 22 ash-pits, and 20 burials were discovered (Fig. 1).

## I. The Surrounding Ditch

Houses and burials of the settlement are surrounded by an ellipse-shaped ditch, which has a gap at the south and

the west. The ditch is wide at the mouth and narrow at the bottom. A basin with flared rim, a *zeng*-steamer 甗, a pot with flared mouth, fragments of pottery (Figs. 2 and 3), bone awls, bone needles, stone axes, stone knives, ceramic spindle whorls, and a half of the skeleton of a deer were unearthed in the ditch. Typological study of the artifacts indicates that the ditch was functioning at the sub-phases I and II, and was filled up in the sub-phase III.

## II. Houses

The 26 well-preserved houses among the 37 sub-phase I houses found at the site can be grouped into three types—big, middle, and small, according to their sizes.

1. Big houses. There are two of them: F229 (58.9 sq m) and F246 (69.5 sq m).

F229 is a round-corner square semi-subterranean house, which is 7.96 m in length and 7.4 m in width. The doorway, orientating 110 degrees on compass, is at the east side of the house. The best-preserved south wall is 0.94 m in height, while the heights of other walls are between 0.35 m to 0.75 m. The floor and walls are covered with straw-mud (0.05–0.08 m in thickness). There are six postholes (one of them was damaged by a pit) on the floor: two (diameter: 0.25–0.3 m, depth: 0.3 m) in the front of the hearth, and four (diameter: 0.36–0.4 m, depth: 0.4–0.5 m) near the corners of the house. Other 21 postholes were found outside the walls (Figs. 4 and 5).

Facing the doorway, there is an elliptic bucket-shaped hearth. It is 1.1–1.2 m in diameter, 0.75 m in depth, and has a gray-green hard bottom and brown-red hard walls. At the back of the hearth, there is a vertically buried damaged small sandy-ware ceramic pot. At the east of the bottom, there is an elliptic ventilating duct (length: 0.45 m, width: 0.25 m), which connects the hearth with a rectangular pit (length: 0.86 m, width: 0.6 m, depth: 0.85

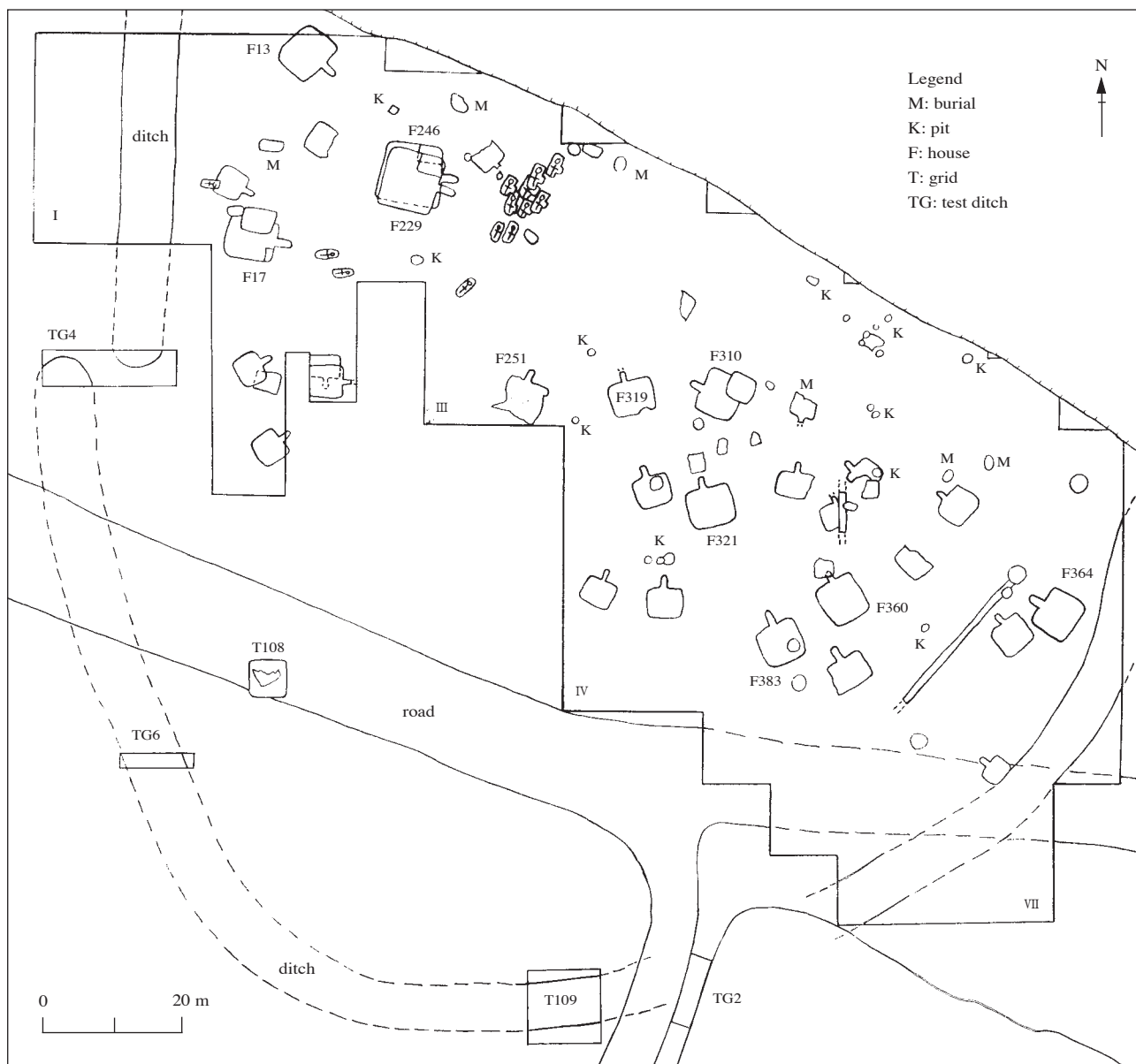


Fig. 1 Plan of the settlement site of sub-phase II at Dadiwan

m) in the doorway. On the above surface between the pit and the hole, there is a mud bank (length: 2.8 m, width: 0.5–1 m, height: 0.18 m). A mud-made platform was found at the northeast corner of the house. It is 2.8 m in length, 2.4–2.5 m in width, 0.18 m in height, and has a smooth surface.

Within the thick deposit in the house, were found ceramic knives, files, pellets, stone axes, knives, balls, bone knives with microlithic blades, awls, arrowheads, needles, hair-pins, fish-spears, jade pendants, horn awls, ceramic basin with painted fish designs, *bo*-bowl 钵 with the painted wide band pattern, pointed-bottom jars, sandy-ware pots and pottery fragments.

2. Middle-size houses. There are nine of them, the

sizes of which are between 25–26 sq m. They are similar in structure, except for F17 and F310, both of which have double rooms.

F360 is a round-corner square semi-subterranean house, which is 5.96 m from the east to the west and 5.7 m from the north to the south. The sloping doorway, orientating 340 degrees on compass, is at the north side. It is 1.6 m in length, 0.55 m in width, 0.15–0.4 m in depth and has two steps (each is 0.15 m in height) at its north end. The floor, the walls, and the doorway are all covered with straw-mud (0.03–0.05 m in thickness). There are remained marks of red-brown paints on the floor.

Inside the house and facing the doorway, is the ellipsoidal-shaped hearth which is 1.4–1.5 m in mouth diameter,

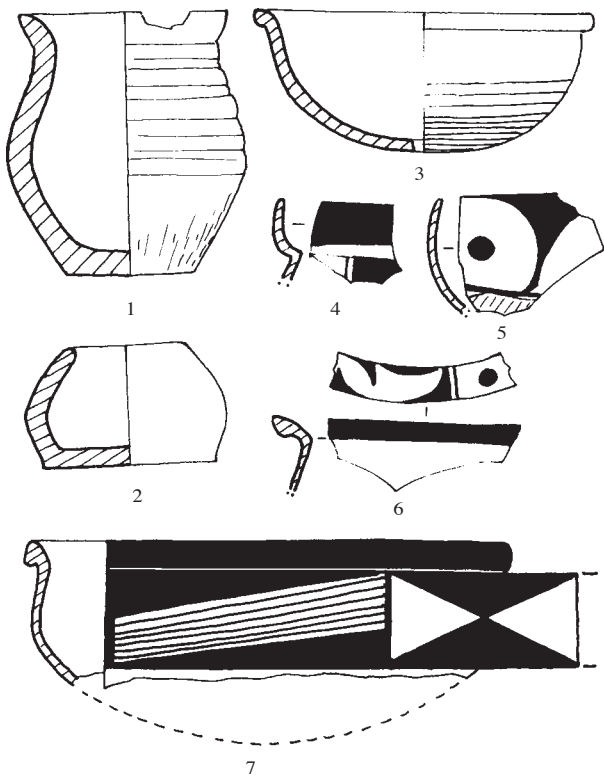


Fig. 2 Unearthened pottery from the ditch G100

1. pot with wide flared mouth (G100:177)
2. pot with contracted mouth (G100:222)
3. *zeng*-steamer (G100:223)
4. basin with double rims (G100:P102)
5. *bo*-bowl (G100:P53)
6. basin with wide rim (G100:P84)
7. basin with flared rim (G100:12) (Scales: 1. 3/5; 4. 1/5; others 3/10)



Fig. 3 Ceramic basin with flared rim (G100:12)

1.22–1.32 m in bottom diameter, 0.3 m in depth and has an edge a bit higher than the floor. There is a red sandy-ware pot for keeping tinder at the back of the hearth. At the north side of the hearth, there is a round-bottom ventilating duct, which is 0.26 m in length and 0.2 m in width. The hard walls and bottom of the hearth is in the colors of

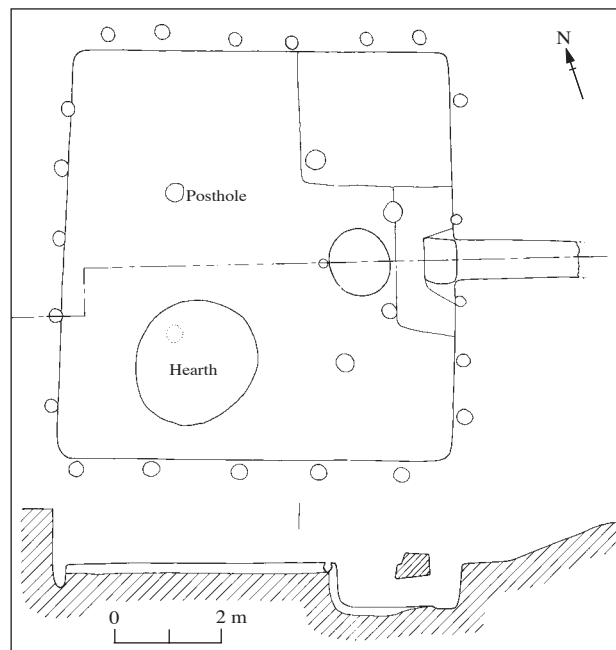


Fig. 4 Plan and elevation of the house F229



Fig. 5 House F229 (from southeast to northwest)

brown-red and dark-gray. Behind the hearth, there is a small smooth-surface platform, with a length of 0.38 m, a width of 0.28 m, and a height of 0.09 m. Six postholes, five big ones (diameter: 0.22–0.32 m, depth: 0.25–0.41 m) and a small one (diameter: 0.14 m, depth: 0.3 m) were found in the middle of the floor. Three small postholes (diameter: 0.15 m, depth: around 0.2 m) of reinforcing-posts were found beside the east, west, and south walls. Other 13 postholes were discovered outside the walls, together with two smaller ones beside the doorway (diameter: 0.18–0.25 m, depth: 0.3–0.6 m) (Fig. 6).

Within the soft gray filling earth of the house, were found double rims ceramic basins, stone axes, bone



Fig. 6 House F360 (from northwest to southeast)

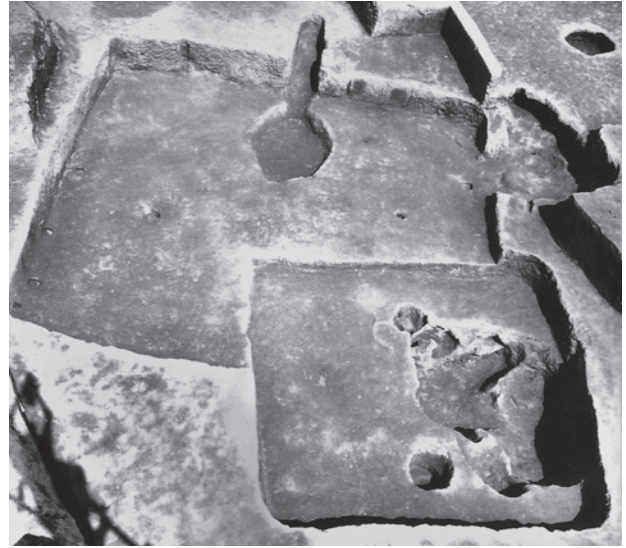


Fig. 9 House F310 (from southeast to northwest)



Fig. 7 Ceramic basin with double rims (F360:14)

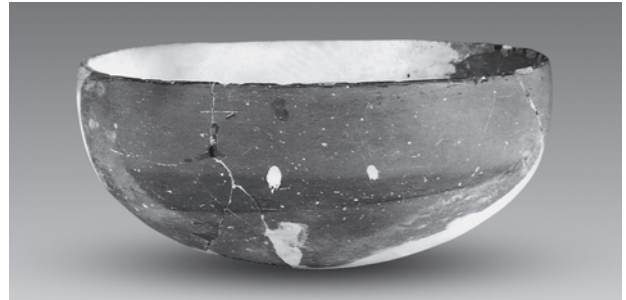


Fig. 10 *Bo*-bowl with contracted mouth (F310:3)

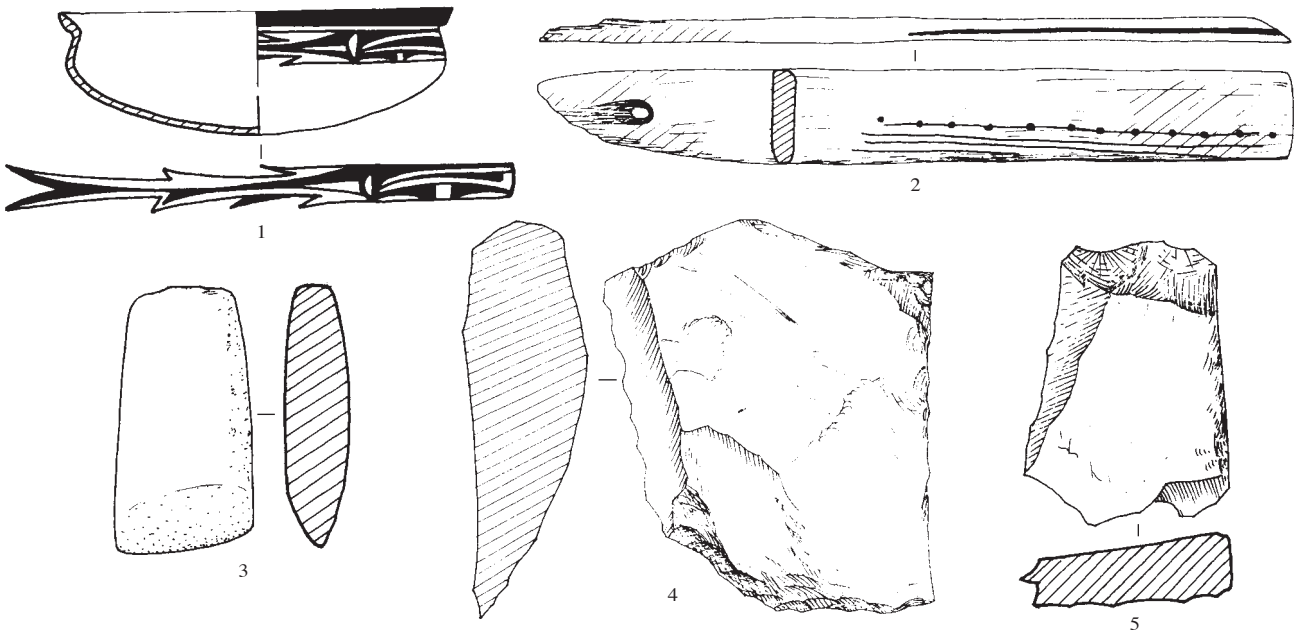


Fig. 8 Unearthed artifacts from House F360

1. ceramic basin with double rims (F360:14) 2. bone knife with microlithic blade (F360:9) 3. stone axe (F360:11) 4. millstone (F360:15) 5. stone saddle-quern (F360:13) (Scales: 1. 1/8; 2. 1/4; 3. 1/6; 4. 1/5; 5. 7/10)

knives with microlithic blades, millstones, and bone spades (Figs. 7 and 8).

F310 is a round-corner square semi-subterranean house with double rooms. The front room is 6.1 m from the north to the south, 5.6 m from the east to the west, and 0.4–0.6 m in depth. The ditch-like doorway, orientating 310 degrees on compass, is at the middle of the west wall. It is 1.8 m in length, 0.48 m in width, 0.25–0.65 m in depth and has two steps (height: 0.15–0.25 m) at its west end. Two small symmetric postholes (diameter: 0.12 m, depth: 0.7 m), parts of which are inside the walls, were discovered at the middle of the two side-walls of the doorway. Facing the doorway, there is a gourd-ladle-shaped hearth. It is 1.5 m in length, 1.2 m in width, 0.35 m in depth, and has a dark-gray hard bottom, brick-red hard walls, and a ventilating duct (length: 0.45 m, width: 0.4 m) at its west wall. Within the front room, there are three round-bottom postholes (diameter: 0.2–0.25 m, depth: 0.2 m) in the middle, three smaller ellipse-shaped ones (length: 0.15–0.2 m, width: 0.12 m, depth: 0.1 m) near the south corner, and two (diameter: 0.18 m, depth: 0.2 m) in the north part (Fig. 9).

The back room (originally was numbered F311) is at the northeast corner of the front room. It is 3.9 m from the north to the south, 3.6–3.85 m from the east to the west, and 0.5 m in depth. Its floor is 0.2 m lower than that of the front room. A shallow hearth (diameter: 0.8 m, depth: 0.1 m) with light-gray hard bottom and brick-red hard walls was discovered at the west middle of the room. Two big round-pointed-bottom postholes (diameter: 0.4–0.52 m, depth: 0.4 m) were found at the east middle and west middle of the room. The floor, the walls, and the doorway of the house all have smooth surfaces of straw-mud (about 0.11 m in thickness for the floor which has two layers, and 0.05 m in thickness for the walls).

Within the light-gray filling earth of the house, were found contracted mouth *bo*-bowls (Fig. 10), double rims basins (Fig. 11), flared rim basins (Figs. 12 and 13), ceramic files, stone adzes, bone awls, bone arrowheads, bone material and a few ceramic fragments.

3. Small houses. There are 15 relatively well-preserved ones, all of which have similar structure and smaller than 25 sq m.

F5 is a well-preserved square semi-subterranean house, which is 4.8 m from the north to the south, 4 m from the east to the west, and 0.58–0.76 m in depth. The ditch-like doorway, orientating 105 degrees on the compass, 1.6 m in length, 0.48–0.56 m in width and 0.26–0.55 m in depth, is at the middle of the east wall.



Fig. 11 Ceramic basin with double rims (F310:1)

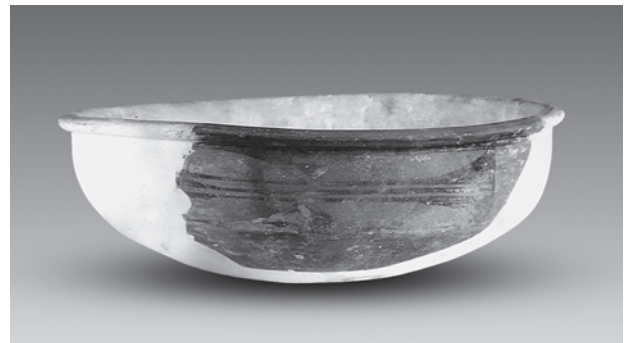


Fig. 12 Ceramic basin with flared rim (F310:2)



Fig. 13 Ceramic basin with flared rim (M310:5)

Two symmetric horizontal holes (diameter: 0.14–0.16 m, depth: 0.18–0.2 m) discovered at the middle bottom of the two side walls of the doorway indicate that there might have had a bank there. Outside the bank, there are three steps, each is 0.15–0.26 m in height and 0.25 m in length. The floor, the walls of the house and the doorway are all covered with straw-mud (about 0.04 m in thickness). There are remained marks of red-brown paints on the floor.

A gourd-ladle-shaped hearth is in the middle of the floor and facing the doorway. It is 1.05–1.15 m in mouth



Fig. 14 House F5 (from northwest to southeast)



Fig. 16 Pot with single rim (M1:3)



Fig. 15 Pot with double rims (M1:2)



Fig. 17 Burial M222 (from southeast to northwest)

diameter, 1 m in bottom diameter, 0.25 m in depth and has a triangle-section ventilating duct (length: 0.2 m, width: 0.26 m) at its east wall. The hard bottom of the hearth has two layers and in the color of dark-gray with black spots, the hard walls are in the color of brick-red. A sandy ware ceramic pot for keeping tinder was obliquely buried at the west of the hearth. To the 0.5 m west of the hearth there is a round bottom pit, which is 0.2 m in diameter, 0.15 m in depth, and was smoothed with straw-mud.

Six postholes were found in the middle of the house. There are other 13 latterly dug postholes of reinforcing-posts beside the walls at the northeast and northwest parts of the house. The three ones near the northeast

corner are bigger (diameter: 0.17–0.22 m, depth: 0.14–0.19 m), while other ones are smaller (diameter: 0.06–0.1 m, depth: 0.1 m) (Fig. 14).

One sandy ware ceramic pot and a stone knife were found within the soft gray-yellow filling earth of the house.

### III. Burials

The 20 burials of sub-phase I consist of 15 earthen shaft burials and five urn-burials. The former can be further divided into two types: the simple earthen shaft burial and the earthen shaft burial with a side niche.

1. Simple earthen shaft burials. There are eight of them, which are all in the shape of rectangular, and has

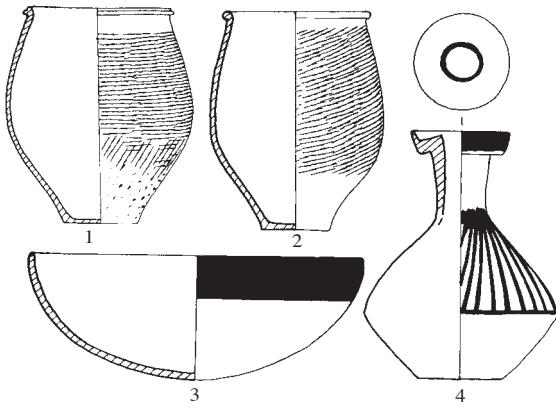


Fig. 18 Unearthed pottery from burial M222

1. pot with double rims (M222:3) 2. pot with single rim (M222:4) 3. *bo*-bowl (M222:1) 4. jar with narrow neck (M222:2) (Scales: 1. 1/10; 2. 7/10; others 1/6)

a length of 1.4–2.6 m, a width of 0.7–1.2 m, and a remaining depth around 0.3 m. No burial furniture was found in them. There are no skeletons in the burials M18 and M204. Burials M215 and M222 are secondary burials. The other four burials each has a skeleton in the extended supine position. Burial offerings were usually put beside the deceased, yet hair ornaments such as hair-pins and ivory hair binder were all found at the tops of the heads of the deceaseds. Jaws of pigs and deer were discovered near the feet of the deceaseds of M219 and M220. A complete skeleton of a dog was unearthed at the left side of the deceased in M224. There are some chicken bones in a sandy ware ceramic pot in M204.

M1 is a round-corner rectangular earthen shaft burial, which is 2 m in length, 1.2 m in width, and 0.35 m in depth. The adult male deceased in it is in the extended supine position. His burial offerings include a narrow-neck ceramic jar and two sandy ware ceramic pots (Figs. 15 and 16) at his left side, a bone hair-pin and a bone awl.

2. Earthen shaft burials with side niches. There are seven of them, each has a cube-shaped side niche at the left side to put burial offerings. M222, which is overlapped and broken by M215 and M219, might be earlier than others. It is 1.84 m in length, 0.78 m in width, 0.3 m in depth and has a side niche (length: 0.9 m, width: 0.6 m, depth: 0.3 m) at its east wall (Fig. 17). The bones of an adult male were piled in a mess in the middle of the tomb pit. Six ceramic vessels (Fig. 18), including one narrow neck jar, three color-painted *bo*-bowls and two sandy ware pots (Figs. 19–21) were found in the side niche.

3. Urn-burials. There are five of them, all of which have no tomb pits. The urn was just vertically put there



Fig. 19 Ceramic jar with narrow neck (M222:2)



Fig. 20 Ceramic *bo*-bowl (M222:1)



Fig. 21 Pot with single rim (M222:4)

(usually in an oblique position when unearthed) and covered with a *bo*-bowl, which has a hole at its bottom. The children bones in the urns are thin and disordered or even completely decayed.

#### IV. Summary

The sub-phase I remains at the Dadiwan site show some important characteristics of the early Yangshao Culture. All the houses are semi-subterranean, in the shape of square or rectangular, and each has a hearth. Low “earth beds” (earth platforms) were found in some big and middle-size houses. Adults were buried in rectangular earthen shaft burials, usually in the extended supine position, while children were put into urn burials. Round bottom *bo*-bowls, sandy ware pots, gourd-shaped jars, and narrow-neck jars are the main ceramic burial offerings. Red fine clay and sandy ware pottery were popular in that period. The main vessels include round bottom *bo*-bowls, double rims or flared rim basins, gourd-shaped-mouth pointed-bottom jars and *zeng*-steamers. Cord pattern is the most popular decoration on pottery, yet there are also some line patterns. Black wide band pattern (sometimes with curved symbols), fish pattern, and triangle pattern were painted on some pottery. Stone tools are usually finely polished and in regular shapes. Bone tools (including the characteristic bone knife with microlithic blade) are rich in types. In summary, the cultural style of the sub-phase I remains shares some significant similarities with that of the Shizhaocun 师照村 and Xishanping 西山坪 sites in Tianshui 天水, the second phase of the Jiangzhai 姜寨 site in Lintong 临潼 and the Shijia 史家 cemetery in Weinan 渭南, although there are some differences among them.

The sub-phase I settlement had been carefully planned. Houses, hearths, pits, burials, and kilns are surrounded by the ditch. In the centre of the settlement, are the public square and cemetery. Middle-size and small houses are in a sector-shaped area with a big house as the centre, while middle-size houses are usually sur-

rounded by several small houses. All the doors of the houses (except for the doors of some earlier houses such as F235, F255, F381, and F382) face the square. Earth beds and inner-wall posts were found in all big houses. This indicates that big houses might have been residences of the heads of the settlement and locations for public meeting and ritual practice.

The sub-phase I settlement is the first early Yangshao Culture settlement ever discovered in Gansu Province. It is another significant discovery after the finding of the Banpo 半坡, Jiangzhai 姜寨, and Beishouling 北首岭 sites for the study of social structure and the development of inner settlement patterns of the Yangshao Culture.

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