

Stone-Walled City-Site of the Lower Xiajiadian Culture at Sanzuodian in Chifeng City, Inner Mongolia

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The Sanzuodian site is located at Sanzuodian Village of Chutoulang Town in Songshan District, Chifeng City, lying on Dongzi Hill on the left bank of the Yinhe River, about 2.5km northwest of the town government and 40km apart from Chifeng City. In coordination with an item of irrigation works, the Inner Mongolian Institute of Cultural Relics and Archaeology carried out excavation on the site in June 2005 to November 2006. They discovered an intact stone-walled city-site of the Lower Xiajiadian culture.

A General Survey and Stratigraphical

Deposits of the Site

The site is distributed on the summit and southern slope of Dongzi Hill, at a maximum elevation of 730m, with the western side bordered by an above-river cliff, the northern side adjoining the hills on the eastern bank of the Yinhe River, and the southern and eastern sides adjacent to the alluvial plain in the ravine. It consists of two stone-walled areas situated side by side with the larger to the west of the smaller. The former sub-city has a sub-rectangular plan with a cliff on the west side, stone-walls and projected fortifications on the eastern and northern sides, and a long steep slope on the southern side. Its vestiges are distributed in the scope of over 140m from the summit to the bottom of the southern slope, occupying an area of about 10,000m² with the west-to-east length of about 140m extending from the cliff to the maximum width of the stone-walled district. The latter, i.e. the smaller sub-city, is close to the eastern side of the former and has a slightly rectangular plan, measuring 50m in length from the north to the south, 40m in width from the west to the east, and approximately 1,600m² in an total area. Its northern, eastern

and southern sides are surrounded by stone-walls with defensive protections, but on the western side, only a row of stones is elected to demarcate the two sub-cities. Through the two-year work, the excavators have revealed an area of over 9,000m², which covers an overwhelming majority of the larger sub-city and the whole of the smaller one. Across this area, 65 house-foundations, 49 cellars and ash-pits and remains of massive city-walls and defensive projections have been brought to light along with a large quantity of important objects (Figure 1).



Figure 1. Panoramic view of the site (aerial photo)

The cultural deposits on the site are rather thin, and can be divided into three layers for the major part. Some sections are low-lying land, with a fourth or even more strata occurring in the deposits. The hillside of the site has a comparatively steep terrain with stones scattered in disorder on the surface. It shows less damage caused by human activities, and building foundations are often revealed on the ground.

To take the section of the western wall in Square IVT0312 for example.

Stratum 1 It is a surface layer consisting of light yellow sandy soil with a small quantity of stone lumps, measures 3-16cm in thickness, and contains a few objects of late times.

Stratum 2 It consists of blackish-brown soil with a great quantity of stones, measures 5-40cm in thickness and contains a number of objects of the Lower Xiajiadian culture.

Stratum 3 It is a layer of gray soil. The thickness is unknown for the excavation did not reach its bottom. There are a lot of Lower Xiajiadian Culture objects, including pottery vessels, stone implements and bone artifacts.

Beneath the third stratum is bedrock or immature soil. The cultural remains are largely situated on this foundation.

Vestiges

The larger sub-city is in a good condition, with the city-walls, defensive projections and other various vestiges remaining very clear in shape, layout and building structure. The smaller sub-city is a little poor in condition,



Figure 2. Northern wall and projected fortification of the larger sub-city (photo from northeast to southwest)

but its vestiges are similar to those in the larger sub-city.

1. City-walls and defensive projections In the larger sub-city, a 140m long section of city wall has been revealed, and a section about 15m long below the southern slope remains unexcavated. Outside the city-walls, projected fortifications have been discovered 15. In building technique, different sections of city-walls show certain diversity. The northern wall is built of loess and covered with stones on both sides. The outer side is steep and measures 3.5-4m in remaining height, while the inner side is slightly higher than the ground (Figure 2). For the eastern wall, the stone covering is built on the outer side, adhering to the edge of the inner loess platform. This type of city-wall looks quite different from the shape of generally called city-walls. It makes the whole city resemble a high-raised platform. The so-called "city wall" is in fact a lofty stone revetment. Its outer structure is made of two or even three stone layers, forming a stone wall more than one meter in thickness, which inclines inward and gradually setbacks with an inclination of 70-80°. The projected fortifications are roughly U-shaped and massive in size, and consist largely of three circles of stones and occasionally of double circles. Their walls and those of the sub-city are bonded with the joints staggered, solid and compact, and are also battered from the bottom to the top. The central part of large-sized projections is filled with loess (Figure 3). Some projected fortifications have no layer division as the work was finished at one go; they look like a stone buttress. It is noteworthy that the intervals between projections are very short, only about

two to four meters. Moreover, between Projected Fortifications 6 and 7 is a stretch of stepped out hard ground: it might have been a passage. Correspondently in Projected Fortification 11, excavation revealed an opening, which must have been the entrance to the smaller sub-city.

2. Roads and the "pass-gate" Two north-to-south trunk roads were discovered in the larger sub-city. Of them the western one leads to the compound centered on House F3. In the south of the compound is a stone built "pass-gate," which sets back by 20-30cm from the flanking stone-

walls. It is structured in a peculiar method, all built up of this stones 3–6cm in thickness and less than 15cm in length in the staggered-joint bond. Its southern end is flanked by two door-heels placed on the ground, either a stone with a round pit, in which still remain clear traces of rotating rubbing. The gateway points roughly to the north and south, and measures 5.8m in length and 1.2–1.4m in width. The ground is paved with slab-stones, and traces of stepping remain clear on them. Within the city, west-to-east roads seem to have existed only in the south of the site. They must have been two judged by excavation results; the southern one has been badly damaged.

3. House-foundations The houses are largely round surface stone buildings and fall into the single-circle and double-circle types. The latter-type houses measure 7–10m in diameter each. The inner space is a living room and is surround by a “winding corridor,” which is often divided with partitions. Occasionally the outer stone-wall is partly built like a semi-circle. The single-circle houses are a little smaller in area, measuring 3–5m in diameter. The inside floor in both types of houses is covered with clay (or lime in some cases) and bears traces of fire use and pottery *li* tripods, jars, etc., but few remains of post-holes. It is generally formed of two and even three or four layers of coverings, and hard floor surface and fire-using traces occur also in the winding corridor. Although the whole house is inclined in accordance with the slope, the inside floor keeps roughly level. On the southern or southeastern side of double-circle houses, excavation often revealed stone steps with clear traces of stepping, which must be remains of the entrance to the inside of buildings. Some single-circle houses adjoin semi-circular buildings on the southern side, of which a few left over round-pitted stones that must have been door-heels.

House-foundation F27 has a circular plan and measures 2.54m in inside diameter, 0.4m in wall width and 0.42–0.46m in wall height. The interior is filled by grayish-brown loose soil about 10cm thick. Beneath it is a yellowish-white hard floor with

traces of stepping and a pottery *li* tripod, a jar and a number of shards on the surface. The house adjoins on the southern side a semi-circular building, which is about 3.65m long and 1.6–2.1m wide, and left over only a 0.1–0.2m high course of stonework. At the northwestern corner of this building, a round-pitted door-heel was found among the stones of the wall (Figure 4).

F60 has a round double-circle plan. The outer circle measures 6.9–7.14m in diameter and its wall is 0.32–0.5m in width and 0.12–0.96m in height. The northern wall has seriously fallen southward, which made the remains

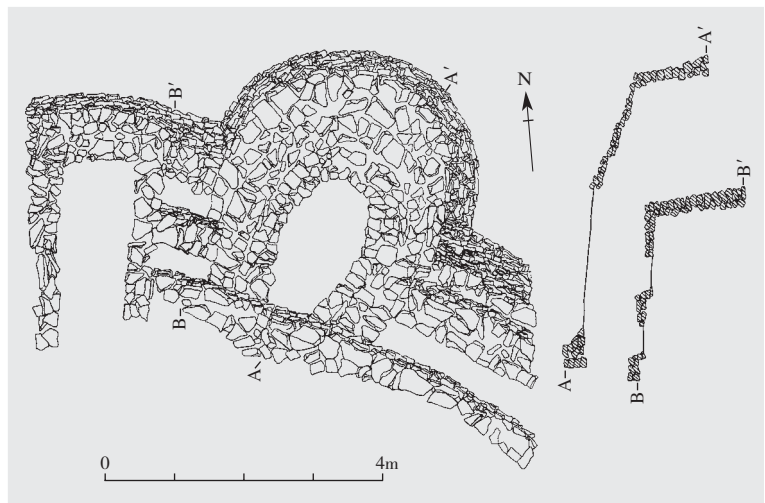


Figure 3. Plan and section of projected fortification 7 of the larger sub-city

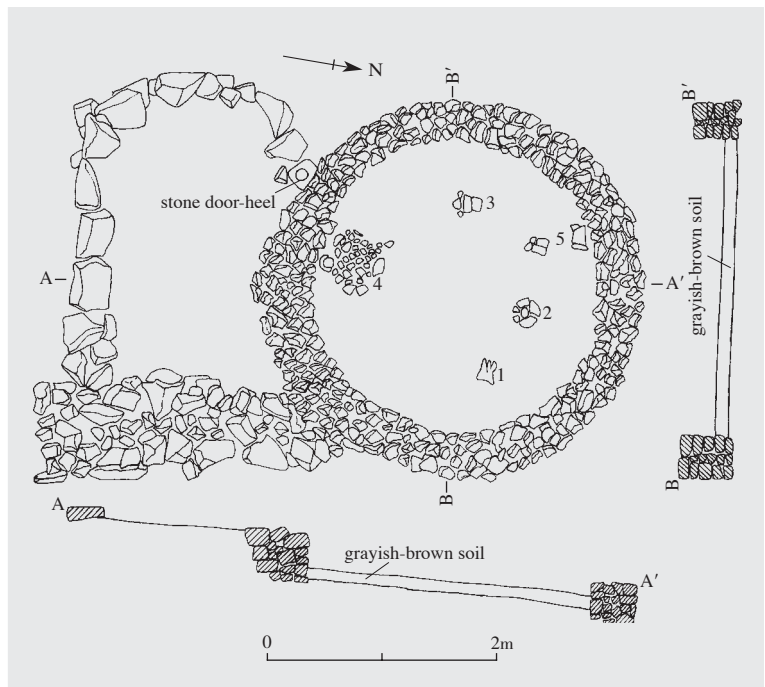


Figure 4. Plan and section of house-foundation F27

1. pottery *li* tripod 2, 3 and 5. shards 4. pottery jar

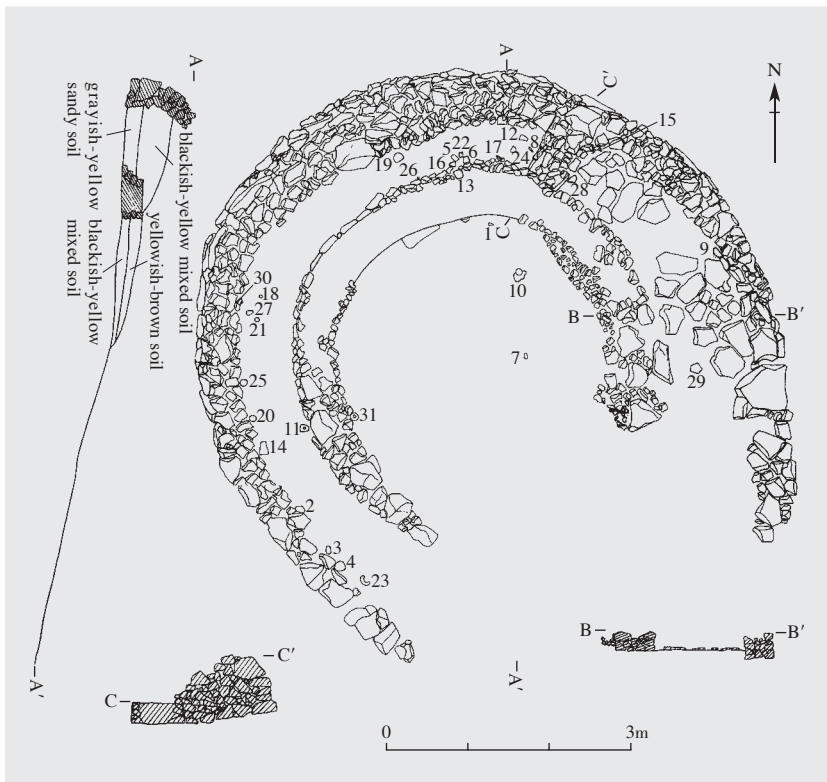


Figure 5. Plan and section of house-foundation F60

1. bone spoon 2, 5, 6, 12, 16, 18, 24, 27 and 30. stone axes 3. stone roller 4. stone disc 7. stone huang semi-circular ornament 8. bone awl 9, 19 and 25. stone discs 10. jar-shaped pottery ding tripod 11. stone yue battle-axe 13, 14 and 20. stone spades 15. pottery li tripod 17. bone artifact 21. stone ball 22. animal bone 23. stone ring 26. pottery bead 28. stone implement 29. grinding stone 31. round-pitted stone implement

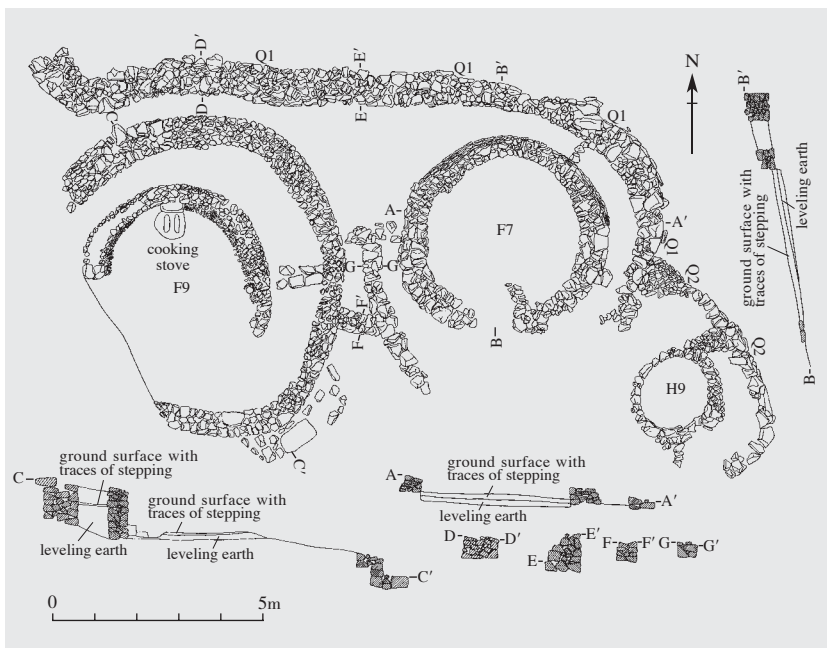


Figure 6. Plan and section of the compound formed of house-foundations F7 and F9 and ash-pit H9

as wide as 0.86m, far more than the real width of the original wall. The inner circle measures about 4.4m in diameter, 0.46–0.68m in wall width and 0.14–0.4m in wall height. The northern wall is built of earth and stone, while the southern one, of large stones. The main room has a diameter of about 3.7m and a hard yellow floor, which remains clear only in the center. The partition wall is about 0.82m long, 0.4–1.5m wide and 0.36–0.68m high. It divides the winding corridor into two sections, of which the western one measures 0.6–0.94m in width and left over no remains of the floor, and the eastern one is 0.84–1m wide and has a stone paved floor. In addition, the south-east of the outer-circle wall has an about 0.7m long section built of larger stones, which have even, smooth tops, join the stone-paved floor in the eastern corridor, and may represent the doorway of the house (Figure 5).

The cultural deposits inside the house can be divided in three layers. Stratum 1 consists of yellowish-brown soil with grayish spots that contain some black-fired earthen lumps. It was formed after the abandonment of the house and is distributed in the main room, thinning from the north to the south and measuring about 35cm in maximum thickness. The material relics include mainly pottery shards of the Lower Xiajiadian culture, and also a broken bone spoon and some fragments of animal bones. Stratum 2 is blackish-yellow mixed soil and spreads all over the winding corridor. The soil in the eastern corridor is blacker and extremely soft, and occurs as a 4–7cm layer distributed on the stone pavement. It contains only a small number of objects, of which there is a pottery *li* in the

corner between the partition and the adjacent outer-circle wall, on the even stone-paved floor. The soil in the western corridor is reddish with a very little red-burnt earth and measures about 32cm in maximum thickness. It is noticeable that this stratum yielded numbers of stone implements, including axes, discs, spades, balls and rollers. They are often placed in corners close to the inner- and outer-circle walls; of them the axes and spades are largely semi-finished products wrought by coarsely chopping and burnishing. Among the other objects are broken stone *huang* semi-circular ornaments and jar-shaped *ding* tripods. Stratum 3 is formed of grayish-yellow sandy soil. It is seen only in the western winding corridor and must have been spread for leveling out the floor.

It should be pointed out that the single-circle houses were generally the auxiliary buildings of double-circle houses, and the two types of houses along with cellars often formed a standard complex, which was linked and enclosed with stone walls and thus made into a higher-rank building unit: compound (Figure 6). Such compounds have been discovered more than 20 on the city-site. They often share the same compound wall between two units. Just these walls marked the numerous compounds distributed within the city from the higher to the lower in a terrace-like style.

4. Cellars and ash-pits The cellars are mostly round in plan with a vertical wall built of stones. Some of them are made with a steep natural cliff-side as a part of the wall. Usually the cellars are 1–2m in diameter, the large-sized are made hard-surfaced-bottomed, and one or two post-holes were discovered in some cases. The unearthed objects include mainly stone implements and pottery vessels. Moreover, excavation revealed in the city a small number of shallow earthen pits a little irregular in plan.

Ash-pit H35 is sub-round in plan with a diameter of 1.8–2.2m for the opening (including the wall) and of 1.4–1.56m for the bottom (excluding the wall) and with a depth of 0.42–0.58m. It has a stone-lined wall, of which the northern part has been inclined inward owing to the pressure of F40's outer wall that collapsed southward. In the pit is a 0.28–0.35m thick layer of loose brown soil, which contains a number of Lower Xiajiadian culture pottery shards. The bottom is leveled with grayish-yellow earth rather hard in texture. From there an inverted gray pottery *li* of clay ware was unearthed in association with a stone axe, a spade, a disc and four even- and smooth-surfaced natural stones (Figure 7).

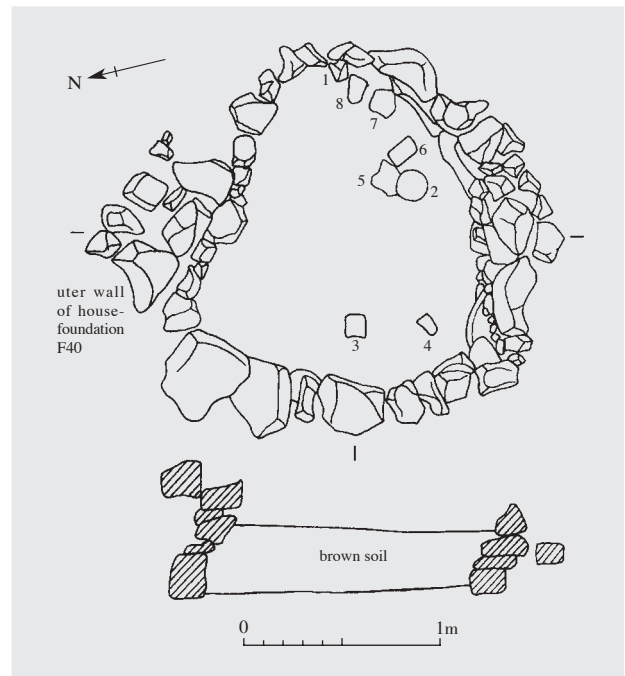


Figure 7. Plan and section of ash-pit H35

1. pottery *li* tripod 2. stone disc 3. stone spade 4. stone axe 5–8. natural stones

Objects

The unearthed objects include mainly pottery and stone artifacts, and also bone articles in a small number. Among the rest of important finds are pottery shards bearing incised marks, petroglyphs and carbonized grains. The pottery is largely gray vessels, which fall into sandy and clay wares. The former includes chiefly *li* tripods, *yan* steamers, jars, urns and jar-shaped *ding* tripods; and the latter, *li*, *zun* vases and *bo* bowls. These vessels are all common utensils of the Lower Xiajiadian culture, belonging to a later stage judged by their morphological features. They are decorated principally with cord-marks and those plus incised patterns, and also applied and impressed designs. Usually the vessels are placed in the room and the northern winding corridor except for a small number from cellars, ash-pits and cultural layers (Figures 8–12). The unearthed stone implements fall into the types of grinding stone, mortar, roller, axe, spade, knife and disc. Some mortars are simply chiseled in large-sized bedrocks. The grinding stones occur quite often. They are made even and smooth, bear a ground narrow groove in some cases, and are placed at stone-built walls or in disorderly stone heaps. The rest of stone implements are irregular in provenance though relatively often seen in cellars and the winding corridors of double-circle houses (Figure 13). The bone artifacts are awls, hairpins, oracle bones, etc. in a small number.



Figure 8. Pottery li tripod (F13:7)



Figure 12. Pottery jar (HIT0512:5)



Figure 9. Pottery li tripod (F25:3)



Figure 11. Pottery yan steamer (HIT0501:1)



Figure 10. Jar-shaped pottery ding tripod (H15:3)

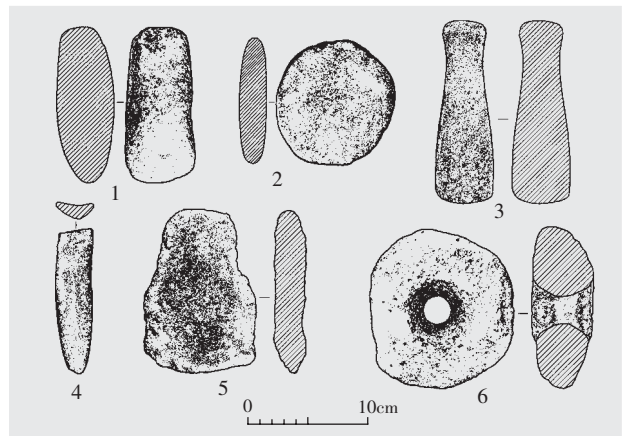


Figure 13. Unearthened stone implements

1. axe (winding corridor of F46:5)
2. disc (F20:1)
3. pestle (IVT0103:9)
4. knife (F62:4)
5. spade (IVT0707:1)
6. perforated implement (winding corridor of F46:3)

Conclusions

The Sanzuodian site is a typical mountain city-site of the Lower Xiajiadian culture. On the whole it has not been disturbed in later times, and its vestiges show no intricate superimposition and intrusion between each other, so it keeps its primitive state to the maximum extent. The complete revelation of the site undoubtedly added a batch of rich data to the settlement archaeology of the Bronze Age western Liaoning region.

Concerning the nature of this type of site, it was commonly believed them to have been fortified settlements, and recently some scholars put the new “theory of

sacrifice.” The present excavation and the surveys of the same type of site in adjacent areas inform that these sites are commonly built in the pattern of laying out a larger sub-city and a smaller one side by side. The unearthed objects and the building form in the city also prove the co-existence of the two sub-cities rather than their non-contemporaneousness. Thus the building pattern must have been an option of the then people in accordance with certain special consideration when they design their settlements. It must have reflected a cultural concept, which should be taken as a vital factor in interpretation of the function and nature of mountain city-sites in the Lower Xiajiadian culture.

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