## A Report of the 2002-year Excavation at the Taosi Walled Urban Center in Xiangfen, Shanxi

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## **Linfen Municipal Bureau of Cultural Property**

**Key words**: Taosi Culture walled settlement

In 2000, a segment of a fortified wall was discovered at the Taosi 陶寺 site in Xiangfen 襄汾 County, Shanxi 山西. In 2001, the investigation of the fortified wall

was ensued, and as result several segments were discovered. The follow-up survey, coring and excavation in 2002 conforms the existence of two walled enclosures of the early and middle phases respectively of the Taosi Culture. The 2002-year excavation was focused on the early-phase wall enclosure, interior dwellings, and refuse trenches, and the middle-phase cemetery.

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1. The early-phase wall enclosure is located in the northeastern part of the Taosi site, within Blocks I and IV of the site. What preserve of this enclosure are the southern segment of the western wall Q8, the northern wall Q3, the northern segment of the eastern wall Q4, the southern wall segments Q9-Q11. Q9 is linked with Q8, and Q10 with Q4. The majority of the western wall has been ruined by the Zhonglianggou 中梁 沟 River. The reconstructed enclosure is roughly rectangular, oriented 315 degrees. It is about 1000 m north-south, and 560 m east-west, and the entire perimeter is roughly 3,600 m, enclosing an area of 560,000 sq m (Fig. 1).

Segment Q8 of the western wall is known from coring to be about 274 m long, oriented northwest-southeast.

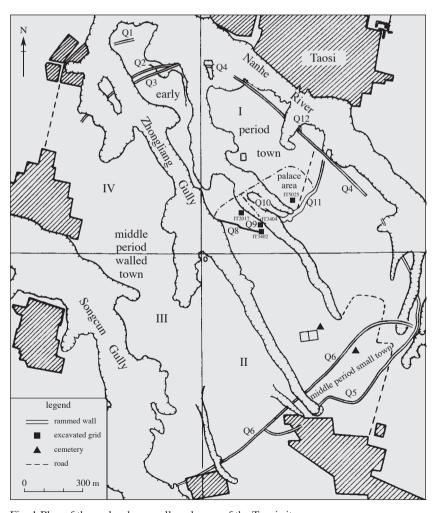


Fig. 1 Plan of the early-phase wall enclosure of the Taosi site Q2–Q6, Q8–Q11. rammed walls (Q1 is uncertain and Q7 unexcavated)

The joint of Segment Q8 and Segment Q9 of the southern wall was excavated. The wall in the excavation area is 10 m long, 4.25–6 m wide, and its extant height is 2.95 m maximum. The foundation of the wall is 4.25 m at the mouth and 2.10 m at the bottom, altogether 1.45 m deep. Layers of pounded earth are distinct, mostly 15 cm thick, and all of them slant from the two sides toward the middle. Ceramics from the wall are mostly grayish in color, and are decorated with rope and basket designs, which match those of the early phase of the Taosi Culture. The construction and use of Q8 are therefore dated to the early phase of the Taosi Culture, and whereas its abandonment to the late stage of the early phase (Figs. 2 and 3).

Segments Q9–Q11 of the southern wall is about 855 m long with slight bend, and 4–8 m wide, oriented north-

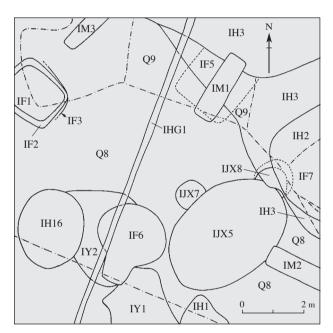


Fig. 2 Plan of Grid IT3402 of the Taosi site



Fig. 3 Grid IT3402Q8 of the Taosi site (photo taken from west to east)

east-southwest. The excavated portion of Segment Q9 is 5 m long and 1.55–6.05 m wide. It does not have any foundation, but it rests upon the slope of virgin soil inside it. It is 1.95 m thick and combined with a moat outside it to form the wall. It is constructed in sections, each of which is 1 m long. Layers of pounded earth are visible, and each is 5–25 cm thick. Ceramics contained in the wall are grayish and decorated with rope and basket designs, and appliqué of rolls. They represent stoves, urns, flat pitchers, jars, and *dou*-tureen  $\overline{\boxtimes}$ . All these characteristics are identified with the early phase of this culture. Q9 is also built upon a cultural layer of the early stage of the early phase. The wall was therefore constructed in the early phase of the Taosi Culture, and abandoned by the end of this phase (Figs. 4 and 5).

2. In the 2002-year excavation were exposed nine dwellings, six storage pits, thirty-nine trash pits, two trash ditches, five kilns, and two tombs.

Dwellings F9 and F10 are adjacent to each other and semi-subterranean pits. F9 is rounded square, 4.7 m long per side, and 22.09 sq m in dimension. Its basin is about 35 cm deep. Its floor is pounded hard and smooth, and

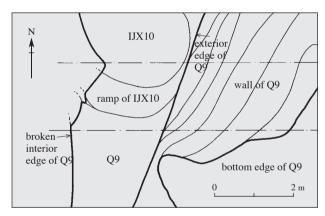


Fig. 4 Plan of grids IT3404-3504Q9 of the Taosi site



Fig. 5 Cross-section of grids IT3404–3504Q9 of the Taosi site (photo taken from south to north)

bears trace of firing. At the center there is an elliptic hearth sunken into the floor, 20 cm long and 20 cm deep. Three postholes are also found inside the building. F10 is likewise a rounded square semi-subterranean structure; its size is identical to F9. A large hearth is located at the center, rounded square, 55 cm long and 50 cm wide, and 8 cm deep. A smaller hearth is found in the southeastern corner, 50 cm long and 5 cm deep. The building has two postholes. F9 and F10 are both dug in the center of a large foundation FJT1 and they share one wall. The passageway that links them has been ruined and cannot be traced, but it is obvious that they were constructed and repaired together. It is likely that they belonged to one complex. The ground around the buildings shows heavy treading (Figs. 6 and 7).

The six storage pits (JX5–JX10) fall into two types. One type is circular or elliptic and equipped with a ramp. This includes JX5 (Fig. 8), JX6, JX9, and JX10. The other type is circular and expansive toward the bottom. It occurs to JX7 and JX8.

The thirty-nine trash pits (H1-H39) include twenty-

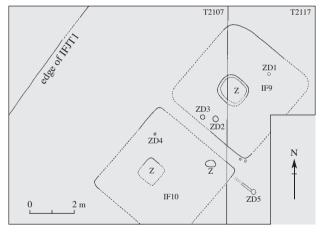


Fig. 6 Re-constructed plan of IF9, IF10 and IFJT1 of the Taosi site



Fig. 7 IF9 and IF10 of the Taosi site (photo taken from west to east)

one of the early phase, three of the middle phase, fifteen of the late phase. Their ground shapes are elliptic, circular, rounded square, and irregular.

Among the two trash ditches, HG8 is larger and irregular in shape, more than 20 m long, 2.0-7.0 m wide, and 2.6 m deep. Cultural deposit in this ditch falls into three layers. 31 clusters of human bones are also randomly dumped in five layers. Skulls are most numerous, and most of them carry trace of chopping. The victims are mostly youths; only one is of infant and one of an aged person. Four skulls only preserve the face side and look like masks. Some skulls carry a few pieces of neck vertebrae. Only a few are ribs, limbs, and pelvis bones. The ditch also yields ceramic *li*-tripods 鬲, *jia*tripods 斝, flat hu-vessels 壶, basins, jars, dou-tureens, and cups, as well as stone flakes and semi-products. At the bottom of the ditch lies a complete skeleton of a female of about 35 years old; a cow horn, 30 cm long, penetrates into its pelvis for 10 cm. The ditch is dated to the late phase of the Taosi Culture (Fig. 9).

3. Artifacts made of ceramic, stone, and bone are



Fig. 8 IJX5 of the Taosi site (photo taken from northeast to southwest)



Fig. 9 IHG8 ③ human bones of the Taosi site (photo taken from east to west)

Volume 6

found in large quantity in this excavation. They are presented here in three phases. Of the early phase there are ceramic artifacts such as stoves, jar-stove sets, jiatripods, ding-tripods 鼎, zeng-steamers 甑, flat huvessels, high jars, jars with rounded shoulders, jars with

one handle, open-mouthed jars, urns, *dou*-tureens, pans, bowls, trays, basins, and lids (Fig. 10). Stone artifacts of this phase include spades, axes, whetstones, knives, and arrowheads; a few jades are also found here. Of the middle phase, there are *li*-tripods, *ding*-tripods, *jia*-

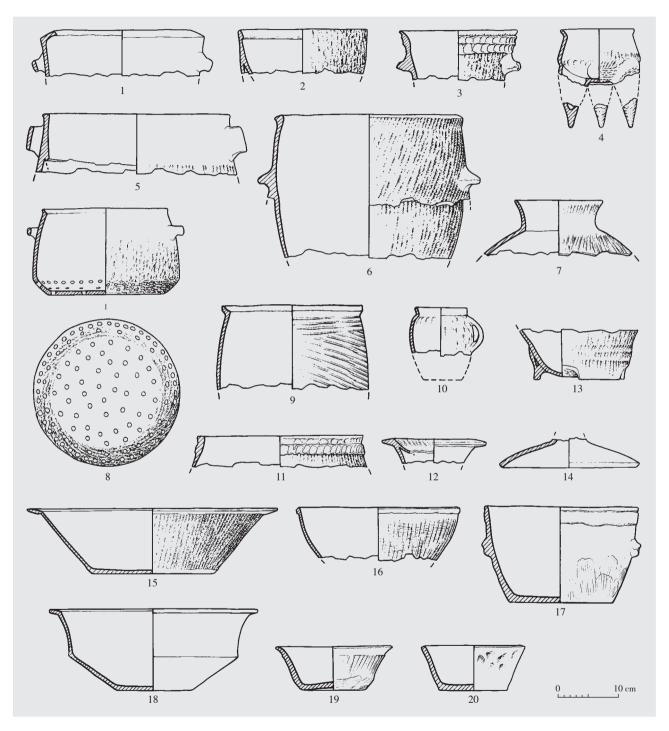


Fig. 10 The early phase ceramic objects of the Taosi site
1. stove (02IH3:3) 2, 3, 5, 6. jar-stove sets (02IH22:21, 02IT3402⑤:7, 02IH22:27, 02IH4:1) 4. *jia*-tripod (02IH26:10) 7. jar with rounded shoulder (02IT3402⑤:8) 8. *zeng*-steamer (02IH3:10) 9. high jar (02IFJT1:2) 10. jar with one handle (02IH3:11) 11, 13. urns (02IQ9:3, 02IH3:4) 12. *dou*-tureen (02IH22:25) 14. lid (02IH22:29) 15–18. basins (02IH3:9, 02IH10:1, 02IFJT1:5, 02IH22: 32) 19, 20. bowls (02IFJT1:6, 02IT3402 ⑥ C:9)

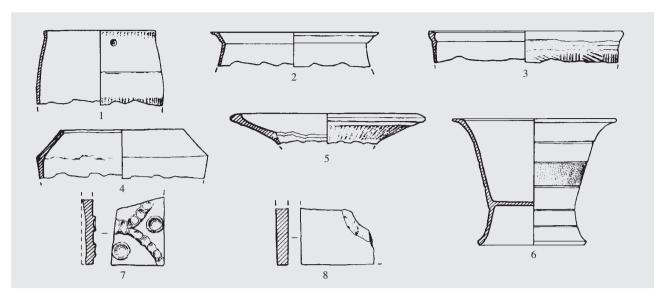


Fig. 11 The middle phase ceramic objects of the Taosi site

1. high jar (02IT5026 ⑤:3) 2. jar with ring foot (02IT5026 ④ A:3) 3. urn (02IT5026 ⑤:6) 4. urn with restrained mouth (02IT5026 ⑦:2) 5. dou-tureen (02IT5026 ⑦:1) 6. zun-vessel (02IT5026 ⑤:1) 7, 8. plaques (02IH42:127, 128) (scales: 1–6. 1/7; the rest 1/3)

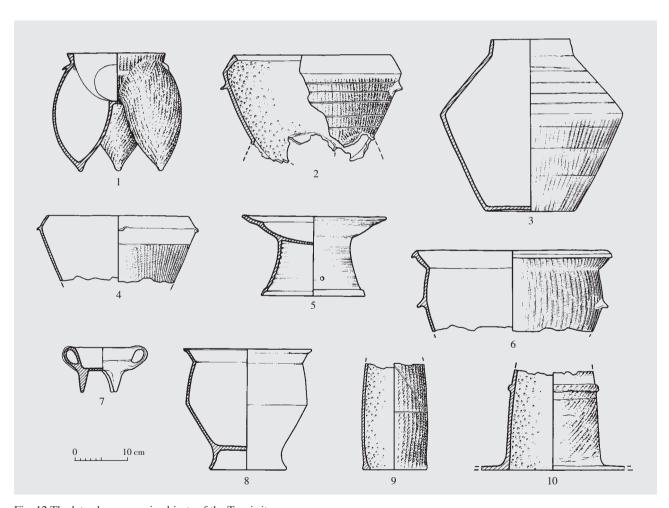


Fig. 12 The late phase ceramic objects of the Taosi site
1. li-tripod (02IH6:36) 2. jia-tripod 02IHG8:66) 3. jar with bent shoulder (02IH34:19) 4. jar with ring foot (02IHG8:74) 5. doutureen (02IH6:37) 6. deep body basin (02IH20:2) 7. cup (02IH6:11) 8. gui-tureen (02IH34:17) 9, 10. barrel-shaped objects
(02IHG8:67, 78)

Volume 6

tripods, flat *hu*-vessels, jars with angular shoulders, jars with ring foot, urns, *dou*-tureens, and lids. New vessel types such *as zun*-vessel 尊 and stamps appear in this phase (Fig. 11). Of the late phase there are *li*-tripods, *jia*-tripods, flat *hu*-vessels, jars, *dou*-tureens, basins, cups with three legs, *gui*-tureens, lids, drums, barrel-like objects. New types are barrel-like objects and stamps. The drums have only been found in tombs of the early phase in the past, but now they are also seen in the resi-

dential area (Fig. 12). Bone artifacts include arrowheads, drills, and needles. Among them arrowheads are most numerous; their sizes and forms are uniform, which indicate a certain degree of standardization (Fig. 13). Stone artifacts include knives, arrowheads, adzes, chisels, hammers, spades, whetstones, and rings. The large quantity of stone flakes and semi-products found in the ditch HG8 indicate a local stone workshop (Fig. 14).

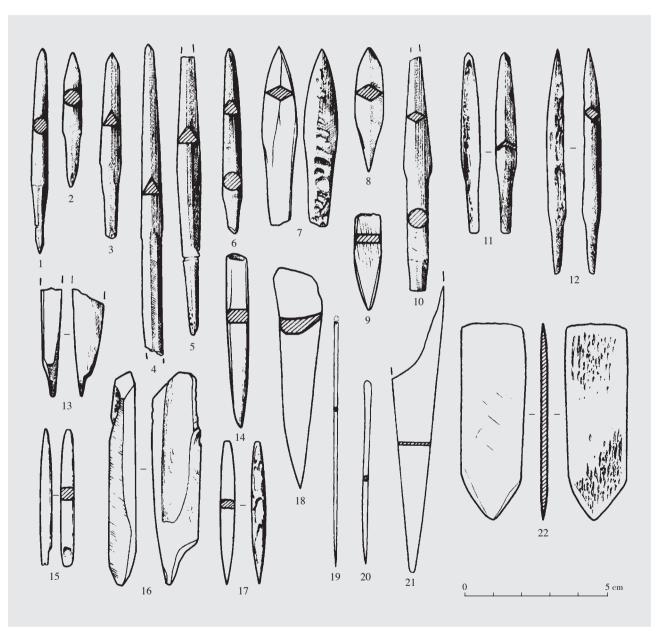


Fig. 13 The late phase bone artifacts of the Taosi site

1. type Aa arrowhead (02IHG8:45) 2. type Ab arrowhead (02IHG8:29) 3–6. type B arrowheads (02IHG8:26, 02IH34:8, 02IH34:12, 02IHG8:3) 7, 8. type CI arrowheads (02IHG8:2, 02IH34:17) 9. type B awl (02IHG8:9) 10, 11. type CII arrowheads (02IHG8:41, 02IH34:1) 12, 15. type D arrowheads (02IHG8:19, 02IH36:3) 13, 16. type A awls (02IHG8:16, 02IH36:5) 14, 18. type B awls (02IHG8:8, 02IT5126 ( A:1) 17. type C awl (02IHG8:11) 19, 20. needles (02IH34:14, 02IH34:2) 21, 22. knives (02IH33:1, 02IHG8:13)

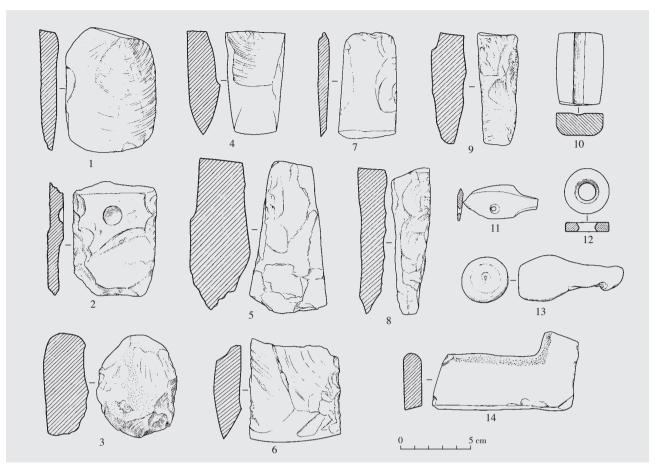


Fig. 14 The late phase stone artifacts of the Taosi site

1, 2. knives (Samples 445 and 446) 3, 5. hammers (Samples 466 and 467) 4, 7. adzes (02IHG8:1, 02IHG8:5) 6. spade (02IHG8:2) 8, 9. chisels (Samples 443 and 442) 10. whetstone (02IHG8:61) 11. arrowhead (02IH38:6) 12. ring (02IT34044:1) 13. male organ (02IT51263:2) 14. L-shaped artifact (02IHG8:62)

## II

The 2002-year excavation confirms the existence of the walled enclosure of the early phase, investigates into the construction process, and dates it to the early phase. All these results enrich our knowledge of the Taosi Culture. It appears that this culture arose together with walled enclosure, which supplies a unique example for the study of the evolution of Chinese civilization and walled settlements. The early- and middle-phase walled urban centers (560,000 sq m, 280,000 sq m respectively) correspond to the early and middle phase of the Taosi Culture; moreover, the discovery of a middle-phase elite cemetery in this season establishes a sequence that corresponds to the early- and middle-phase walled

enclosures. A picture of an early urban center thus emerges. The FJT1 foundation contains two dwellings (F9 and F10) that make a space up to 50 sq m. The trash pits around them yield rice, indicating that their occupants were not ordinary people but low elite. It has been argued that social stratification made its presence in the Taosi Culture on the basis of the sizes of tombs. The discovery of the 30 skulls, many of which bear trace of chopping, and most of which are youths, and among which one female was killed violently, strengthens this argument. The abandonment of the walled enclosure in the late phase, and the evidence such as fragments of pounded earth and whitish lime coat indicate that the urban center experienced a mass destruction.

Note: The original report, published in *Kaogu Xuebao* 考古学报 2005.3: 307–346, with 40 figures and 10 photos, is written by Yan Zhibin 严志斌 and He Nu 何驽. This summary is prepared by Yan Zhibin and English-translated by Zhang Liangren 张良仁.

Volume 6