

# Large-sized Rammed-earth Building Foundations of the Middle Taosi Culture Discovered on the Taosi City-site in Xiangfen County, Shanxi\*

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In 2007, authorized by the State Administration of Cultural Heritage, the Shanxi Archaeological Team, IA, CASS, in cooperation with the Shanxi Provincial Institute of Archaeology and the Linfen Municipal Bureau of Cultural Relics, implemented the plan of continuing the trial excavation of the large-sized rammed-earth building-foundation (designated IFJT3) in the palace quarter of Taosi site, a task at the second stage in the Project of Researching into the Origin of Chinese Civilization. For IFJT3, excavation in 2006 roughly clarified its northwestern corner and in the summer and autumn of 2007, its southwestern, northeastern and southeastern corners. Thus the boundaries, shape and size of IFJT3 in the palace quarter of the mid Taosi Culture have been found out on the whole. In addition, a rammed earth palace foundation with a clear column-network was discovered a little to the east of the center of IFJT3.

## I

IFJT3 is a well-preserved large-sized rammed earth building foundation. The foundation pit is roughly square in plan and measures 223 m in orientation, about 108m in length from the west

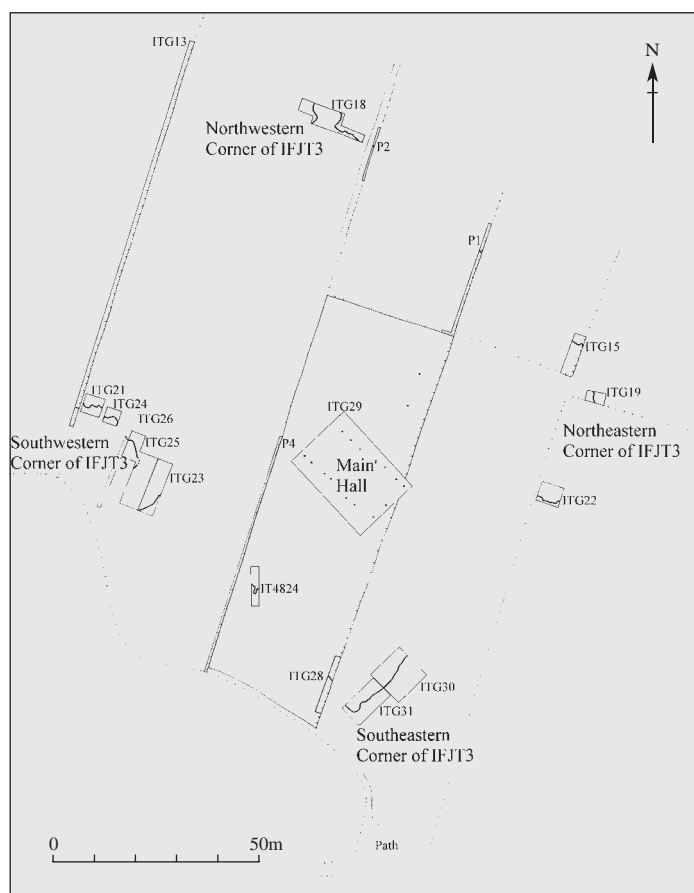


Figure 1. Plan of IFJT3

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to the east, and about 105m in width from the north to the south, occupying an area of approximately 11,340 sq m (Figure 1). Some parts of its edges are distinctly uneven owing to serious damage. In the pit is rammed earth, about 70cm in remaining thickness for some better-reserved plots. The platform base is built also by ramming earth in wooden formworks, with the earthen blocks poor-made in most cases.

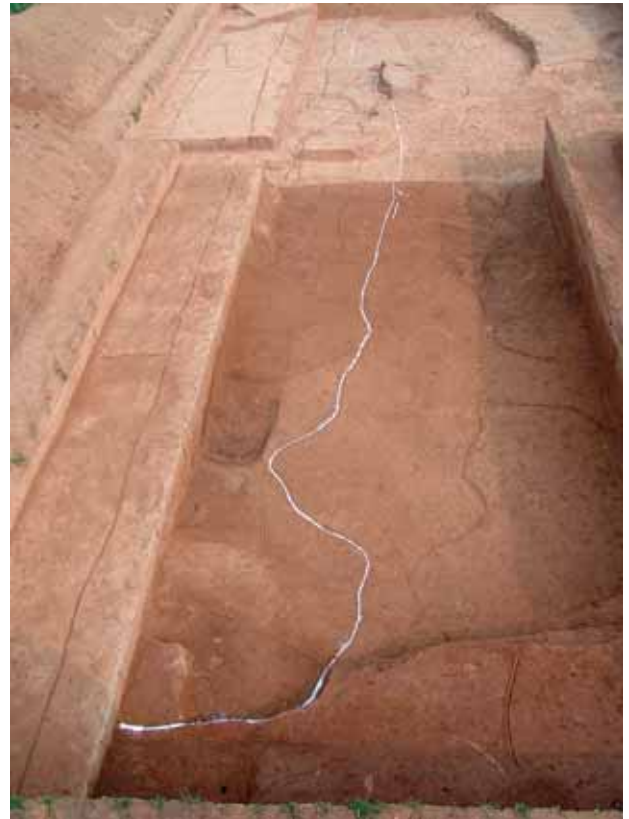
A rammed earth plot projects from the northeastern corner of IFJT3. Its edges extend westward and southward and must have joined the IFJT3's northwestern and southeastern corners respectively. As known from Excavation Trench ITG22 at the northeastern corner of IFJT3, the building foundation under discussion was intruded by ash pits H81 and H82 of late Taosi Culture, and the rammed earth contains pottery sherds of the mid Taosi Culture.

The southwestern corner was damaged so seriously that almost no remains have been left over except for the eastward-extending edge of the rammed-earth (Figure 2), which, nevertheless, has also become irregular due to the poor quality of the rammed earth and intrusions by late Taosi Culture strata and ash pits. The remains in Excavation Trench ITG24 show that ash pit H84 of the late Taosi Culture intruded IFJT3, and the potshards of mid Taosi Culture from the rammed earth affirms that IFJT3 should be also dated to mid Taosi Culture.

At the southwestern corner of IFJT3, there is a plot of rammed-earth projecting southwestwards. It measures approximately 100 sq m and stretches for about 20m from the southwestern corner (Figure 3). Is that the vestige of a ramp, an entrance or an auxiliary building? This waits for further research owing to the limitation that the discovered remains are only those of the foundation pit.

The better preserved part is the southeastern corner of IFJT3. It looks like an arc with the edge extending to the west and north and forming a clear turn, outside which is red raw soil (Figure 2). Excavation in Trenches ITG30 and ITG31 revealed clearly that the edge of eastern rammed earth is rather tidy in shape and rather good in condition though some sections have been damaged and have become somewhat saw-tooth, and that a plot of formwork-rammed earth occurs to the west of the edge line. The southeastern cor-

ner of the rammed earth foundation lies beneath layers of the late Taosi Culture. It contains potshards of the mid Taosi Culture and intruded mid Taosi layers and early Taosi ash pit H90, and so should be dated also to the mid Taosi Culture.



*Figure 2. Southeastern Corner of IFJT3 (Southwest to Northeast)*



*Figure 3. Projection from the southwestern corner of IFJT3 (Northeast to Southwest)*

## II

Another important discovery in 2007 field exploration is the remains of the main hall within IFJT3. It lies a little to the east of the center of IFJT3, comprises only a posthole network and faces to the due southwest, with an azimuth of 225°, parallel to that of IFJT3. The posthole network occupies an area of 286.7 sq m, i.e. 23.5m long (west-east) and 12.2m wide (north-south). The 18 postholes are arranged in three rows, of which seven in the southern row, three in the middle, and eight in the northern (Figure 4).

Most of the postholes are enclosed with larger pits, the former measuring largely 45–50cm in diameter, with the largest reaching 80cm, while the latter 50–80cm. The enclosed pits are usually filled with red burnt clay. The southern and northern rows are different in the interval between postholes. In the southern row, the intervals are alternate smaller (about 2.5m) and larger (about 5m) from the west to the east; in the northern row, the intervals are usually about 3m, except for two gaps (about

5m) in the middle. The middle row left no detailed information because only three postholes remained in this row. It is noteworthy that the northern and southern rows are not corresponding in the arrangement of postholes, but the larger middle interval in the northern row conforms roughly to those in the middle and southern rows (Figure 4). As known from selective excavations, the postholes are generally about 30–40cm in remaining depth and contain stone bases on the bottom. In some cases, stone blocks were found lining the postholes; they must have been fillings for well erecting the columns (Figure 5). This phenomenon is seldom seen in other sites of the same phase, and no traces of such a way have been recorded in the postholes of palace foundations on the Erlitou site.

The other finds include the fragment of a bronze object unearthed from the rammed earth of the hall. It has been preliminarily identified as a piece of arsenic bronze. The remaining rammed earth yielded also two incomplete human skeletons: one has been disturbed, the other (IM14) consists of only bones above the pelvis and wears a jade



*Figure 4. Main hall and pillar network of IFJT3 (Full View: Top is South)*



Figure 5. Cross-sectioned Posthole 10 (West to East)



Figure 6. Foundation-laying Pit IM14 in the rammed-earth plot in the main hall of IFJT3 (photo from southwest to northeast)



Figure 7. Red-inscribed shard of a pottery flask (ITG9H64 :5)



Figure 8. Stone Kitchen Knife on the Burned-clay Layer of the Auxiliary Foundation of IFJT3

bi-disc on an arm (Figure 6). They are not left over from a normal burial but might be remains of human victims in a foundation-laying ceremony. In ash pit ITG9H64, a shard of a late Taosi Culture flask with red script was unearthed (Figure 7). Within the auxiliary architecture foundation of IFJT3, a stone knife of the mid Taosi Culture was discovered on a layer of burnt clay (Figure 8).

### III

The results of excavation in 2007 are of great significance. They proved to a great extent the existence of a palace quarter and palace-type buildings in the Taosi

site. The discovery of the bronze fragment indicates that bronze vessels already began to be cast and used in the mid Taosi Culture, which has remarkable academic value in the studies on the metallurgy history and the course of civilization development. The discovery of the red script on the flask fragment affirms once more that the previously unearthed red-inscribed flask of the late Taosi Culture is absolutely not an isolated proof, and the definite verification of the use of writing in that period became more possible. In short, the present excavation provided an important basis and distinct clues for the complete uncovering of IFJT3.

Postscript: The original report, written by He Nu 何弩, Gao Jiangtao 高江涛 and Wang Xiaoyi 王晓毅, was published in *Kaogu* 考古 (Archaeology) 2008. 3: 3–6 with nine illustrations. The present version is prepared by He Nu and translated into English by Mo Runxian 莫润先.