

Architectural Foundation III of the Northern Wei Palace found at Han-Wei Luoyang City, Henan

Institute of Archaeology, Chinese Academy of Social Sciences and Nara National Research Institute for Cultural Properties, Japanese National Commission for Protection of Cultural Properties

Abstract

In 2009, the Sino-Japanese Joint Archaeological Team recovered the building foundation III in the south of the Northern Wei palace city. This foundation is located to the north of Changhe Gate and Building Foundation II and the due south of Taiji Hall. It is the main body of a hall-typed architecture consisting of the large-sized rammed-earth foundation, the rammed-earth partitions and column network composed of rammed-earth plinths and column pits. The side doors, the rammed-earth foundations of auxiliary buildings and the grounds on the southern and northern sides of the main body and the boulevard to its south comprised the architectural complex unit together. Referred to the stratigraphic relations, this building foundation is inferred to be constructed and mainly used in the Northern Wei Dynasty, and partly extended and used in the late phase of the Northern Dynasties.

Keywords: Han-Wei Luoyang City; imperial palaces-Northern Wei Dynasty.

Introduction

From April to June and from October to December, 2009, the joint archaeological team of the Institute of Archaeology of the Chinese Academy of Social Sciences and the Nara National Research Institute for Cultural Properties of the Japanese National Commission for Protection of Cultural Properties excavated a large rammed earthen foundation (Foundation III) located in the southern part of the walled Northern Wei palace city in the site of Han-Wei Luoyang City. This is the most important

discovery in the archaeology of Northern Wei imperial city since the 2008 discovery of Foundation II at the same site.

Relatively intensive archaeological reconnaissance had been conducted at the site of Han-Wei Luoyang City in the early 1960s. To further the archaeology of this fascinating site, Han-Wei Luoyang Team of the Institute of Archaeology, Chinese Academy of Social Sciences has been focusing on systematic and planned reconnaissance and excavations at the walled imperial city of Northern Wei situated in the Han-Wei Luoyang City since 1999. Important discoveries in recent years included the Changhe 阊阖 Gate and Foundation II. They threw light on the plan and architectural style of the imperial city and laid the foundation for the understanding of its organization and development. Excavations at Foundation III were steps further of the above works. They provided significant evidences for studying the development of imperial cities of the Three-Kingdoms through the Southern and Northern Dynasties Periods within the wider scope of the history of imperial capitals of ancient China.

Location and stratigraphy of Foundation III

Foundation III was located north of the Changhe Gate and Foundation II of the Northern Wei imperial city. The

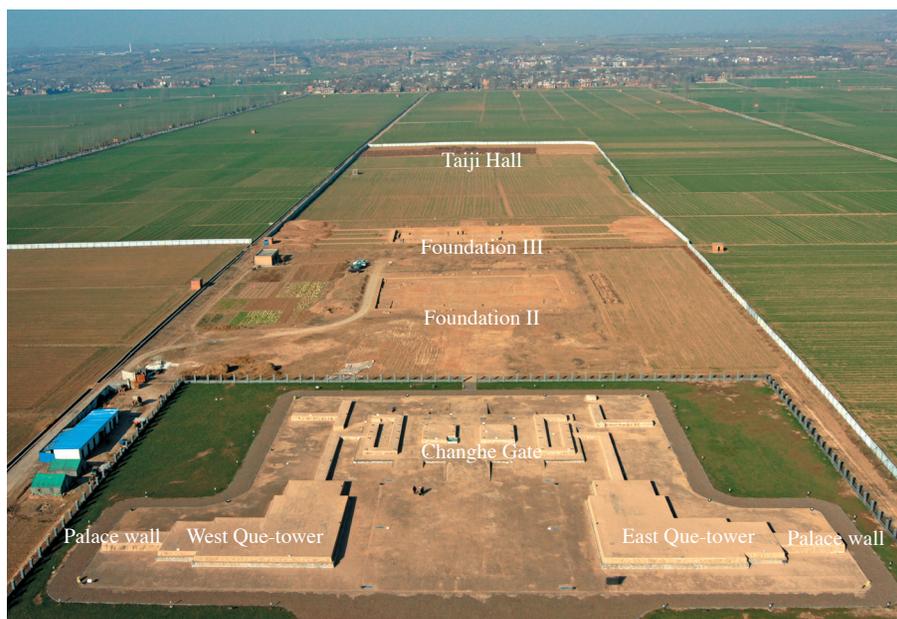


Figure 1 The location of architectural Foundation III of the Northern Wei palace in Han-Wei Luoyang City.

raised rammed earthen foundation of Foundation III was about 80m due north to Foundation II. The site of the Taiji Hall 太极殿, the largest structure within the imperial city, was located directly to its north (Figure 1). The spring and fall archaeological field seasons at Foundation III together revealed a total of about 1800sq m.

The surface of excavation area was covered by flat farmland. The stratigraphy was simple. Layer 1 was the cultivated soil of about 0.25m thick. Layer 2 was 0.1-0.3m of modern and contemporary accumulations containing sherds of blue-and-white porcelain and modern white porcelain. Layers 3 and 4 comprised of debris of the structure upon abandonment. They had been disturbed in varying degree. The cultural deposition distributed in the northern half of the excavation area was thicker than that of the southern half. Materials yielded from these two layers included Northern Wei polished tiles and lime plaster clods. Situated underneath Layer 4 were remnants of a large-scale rammed earthen foundation and its contemporary ground surface to the north and the south.

Foundation III

Foundation III was located in the south central part of the excavation area that measured 60m from east to west and 30m from north to south. The excavation revealed

the main structure and the subsidiary wing structures of Foundation III (Figure 2). The main structure was a large-scale hall style architecture erected on a raised earthen foundation on which a column framework was set. It had a side door on each of the east and west flanks of the building. The side doors opened to two north-protruding wing structures built on independent rammed earthen foundations. This is a new-found building plan that has never been encountered in the archaeology of Han-Wei Luoyang City. Compared to the Changhe Gate and Foundation II, the other excavated structures of the imperial city, Foundation III showed a distinct plan. Yet, it was built with the same construction techniques and structures. These characteristics, on the one hand, suggested the special position of Foundation III in the imperial city. On the other hand, they exhibited integrity with the general plan and were indicative that all these structures were constructed within a single construction campaign.

The main hall of Foundation III sat on a roughly rectangular raised rammed earthen foundation measured 36.4m east-west and 9m north-south. The top of the foundation, directly overlaid by layers 3 and 4, had been severely damaged. Because the present-day terrain was a gradient surface, the remaining foundation was almost even with the southern ground surface, and was 0.4–0.6m higher



Figure 2 Foundation III (top is north).

than the northern ground surface. Remains of brick linings were seen in two areas of the north foundation wall.

The excavation revealed that 48 column base pits were arranged in tidy lines on the raised rammed earthen foundation. They were organized into 14 rows, constituting a column framework shoring a grand hall structure. The framework was divided into one inner grid and two outer grids. The inner grid comprised of 10 east-west rows and four north-south columns, suggesting a three-bay deep and nine-bay wide partitioning. The east and west sides of the inner grid was flanked by 2 x 2 outer grids, forming side chambers of one-bay deep and two-bay wide. As a whole, the grand hall was partitioned into a thirteen-bay wide and one- to three-bay deep structure. The column base pits were not completely evenly spaced. With exceptions of the center units, the bays along the east-west line were 2.3–2.5m wide. The central bay, measured 4.9–5m from east to west, were the longest. The bays along the north-south line were 2.2–2.5m wide. Because of later disturbance, the openings of column base pits showed irregular rectangle shapes of varying size when they were discovered. In general, they measured 0.9m on one side. The column base pits were filled with disturbed materials consisting of large amount of polished tile sherds. A few column base pits were intruded by later occupations. The column base pits not only cut into the rammed earth foundation, they also cut into the reddish brown rammed earth partitioning walls and platforms.

Six rectangular reddish brown rammed earthen features were found located on the raised foundation. The rammed earth of these features was consistent in color and texture and their distribution showed certain patterns. They were very likely remains of planned partitioning walls and platforms of the main structure and built at the same

time with it. These features were built of fine and pure rammed earth with little inclusions. Their cross-sections showed that they cut into the raised foundation of the main structure. Among them, the four partitioning walls shared many characteristics. They had north-south orientation, measured 3.6–3.8m long and 2.3–2.5m wide, and 3–4m from each other. The two sizable earthen platforms were located on the east and west sides of the raised foundation. Both were rectangular features with east-west orientation that measured 7–8m long and 4.2m wide. They were cut into by several pits of later times. Because the partitioning walls and earthen platforms were all parts of the remaining raised foundation that suffered considerable disturbance, their original dimensions could not be determined. Nevertheless, their methods of construction were consistent with similar structures of the Changhe Gate and Foundation II of the Northern Wei imperial city. They only differed in dimension and spacing.

A pair of poorly-preserved side doors were found symmetrically distributed on the east and west flanks of the raised rammed earthen foundation. They were located between the main structure and the wing structures. The west side door was 2.8–3m wide. Remains of a ramp or stepped path were found to its north. The east side door was similar to the former. However, its northern half had been seriously disturbed and destroyed by later occupation.

Remains of an independent subsidiary structure that included a rammed earth foundation and ditches were found adjacent to the west of the west side door (Figure 3). This wing structure extended about 8m north of the main structure. It was connected to the main structure by the side door and short walls. Its overall plan could not be determined due to limited excavation and poor preservation. Remains of ditches were found located on the west and the south sides of the wing structure. Some lining bricks were found at the base of the ditches. The north-south running ditch was about 13.5m long. It had an opening about 1m wide and a base that measured 0.5–0.7m. Depositions of the ditches comprised of large amount of brick and tile fragments. The tile sherd assemblage comprised of polished flat tiles and cylindrical tiles diagnostic to Northern Wei. Subsurface coring indicated that a similar wing structure built of rammed earth was symmetrically distributed on the east side of the main structure. Future excavation will reveal its dimensions.



Figure 3 The subsidiary structure and drainage ditches to the west of Foundation III (NW–SE).



Figure 4 The “imperial boulevard” to the south of Foundation III (S–N).

Remains of a section of road surface of 7.9–8m wide were found on the center of the south side of the main hall foundation (Figure 4). The surface had been heavily disturbed. Shallow brick-lined ditches of 0.25–5m wide and 0.3m deep were found along both the right and the left sides of the road. Land survey indicated that this section of road was straightly on the same axis with the brick-lined road located in between the Changhe Gate and Foundation II of the imperial city. Their identical dimension and orientation suggested that they were different sections of the same imperial boulevard. The dates of its construction and using should not be later than Northern Wei. Occupation floors were found to the north and south sides of the main raised foundation. The south occupation floor had dark grey color with inclusions of reddish baked earthen nodules. The north occupation floor comprised of leveled rammed earth. Its surface had been hard-packed or processed.

The spatial relationship of the various features suggests that Foundation III was an integrated architectural unit. It comprised of a sizable rectangular raised rammed earth foundation, reddish brown partitioning walls and rammed earthen platforms, and a framework of column base pits. Together they formed the frame of a hall-style architecture. The side doors of the main structure, the foundations of symmetrical subsidiary buildings on its wings, the occupation floors to the north and south of the main structure, and the north-south running boulevard further defined its relationship with other structures of the imperial city.

Unearthed artifacts

Artifacts yielded from the Foundation III comprised mainly of architectural parts such as narrow bricks, flat roof tiles, cylindrical roof tiles, eaves tiles, beast-faced bricks, and roof ridge decorations. They also comprised of small amount of pottery wares, porcelain wares, and iron artifacts. Albeit large in number, bricks and tiles were mostly fragmented upon recovery. Polished tiles comprised the majority of the artifact assemblage. The various kinds of polished tiles and cylindrical tiles numbered to more than 13000 pieces. The brick assemblage comprised mainly of narrow bricks that numbered to more than 6000 pieces. Over 30 fragments of eave tiles had been recovered. The most popular pattern was lotus flower with bead rings. A few cloud pattern eave tiles were also found. Iron artifacts comprised of more than 20 iron architectural fittings and nails, and a few iron hoe fragments.

Conclusions

Foundation III had a complex chronology. Architectural elements recovered from the excavation comprised mainly of polished roof tiles diagnosed to Northern Wei and small number of tiles diagnosed to Han and Western Jin. They formed the basis for the determination of relative chronology. Together with the stratigraphic evidences, we tentatively argue that the structure was erected and mainly

occupied during the Northern Wei. The facility was partly modified and continued to be in use during the late Northern Dynasties. When did it first erect? Did it build on a previous structural foundation? These are questions needed to be investigated.

Foundation III was located directly to the north of Foundation II of the Northern Wei imperial city. The two grand structures were linked by a boulevard. Directly north of Foundation III was the site of the Taiji Hall, the largest structure of the imperial city. Based on the plan of Northern Wei Luoyang imperial city, we can establish that it was the third most significant structure situated on the main axis originated from the Changhe Gate. It was very likely linked to the architectural compound built around the Taiji Hall to the north. Its function, however, has to be determined after a complete survey of the imperial city.

The excavation of Foundation III is significant to the archaeological study of Northern Wei imperial city of the Han-Wei Luoyang City. First, it revealed the shape and organization of the main structure of Foundation III, and bracketed its dates of construction and occupation. Second, based on the location of Foundation III and its spatial relationship with other structures within the imperial city, we can determine that Foundation III was an important facility located on the main axis of the Northern Wei imperial city. It also showed that all the major structures located on the main axis were consistent in style and integrated in plan. Third, Foundation III was situated in between the boulevard running through the Changhe Gate, palace gate II, and eventually leading to the palatial complex built around the Taiji Hall, the core structures of the imperial city. It formed the most important buffering building for the palatial complex. This excavation was not only significant to the understanding of the spatial arrangement of the Northern Wei imperial city, it was also important to the study of the formation and development

of imperial city planning of ancient China.

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Postscript

The original report published in *Kaogu* 2010. 6: 3–6 with four illustrations was written by Qian Guoxiang 钱国祥, Guo Xiaotao 郭晓涛, Liu Tao 刘涛 and Xiao Huaiyan 肖淮雁. The abridged version is prepared by the first two authors and translated into English by Lee Yun Kuen 李润权.