

New Archaeological Discoveries South of the Hanyuan Hall at the Daming Palace of Tang Dynasty

The Xi'an Tang City Archaeology Team, IA, CASS

*Key words: Imperial Palaces-China-Tang Dynasty Hanyuan Hall Canals Bridges
Paths*

In order to implement the "Plan to Conserve the Imperial Paths at the Hanyuan Hall of the Daming Palace," the Xi'an City Government, from June to July of 2005, demolished all the buildings south of the Hanyuan Hall site, in an area measuring 650m long from north to south, and 400m wide from east to west.

To coordinate the conservation project, the Xi'an Tang City Archaeology Team surveyed and excavated the demolished area from August 2005 to June 2006. In addition to the essential information about southern gate or Danfeng Gate of the Daming Palace, discovered in earlier excavations and already published, there were more discoveries. Among them, the most important ones are remains of a canal, three bridges, and roads.

The Canal in Front of Hanyuan Hall

The canal is located 130m south of the first terrace of Hanyuan Hall, on the south side of the buffer zone's southern wall. The canal is about 400m long and runs from west to east. It extends beyond the boundaries of the buffer zone on both the eastern and western sides.

Parts of the canal are located directly under modern buildings. Several excavated sections reveal that the canal is 3.65 to 4m wide at the top, and extends 1.6m downward from the Tang surface. The side walls are relatively straight, and the canal is lined partially with bricks. The bottom of the canal is quite flat, with a thick deposit of black silt. The eastern part of the canal is shallower than the western part. From the cross section of the silt deposits, we conclude that the water flowed from east to west.

Bridge Remains

Three bridge foundations, intersecting the canal at equal

intervals, were found inside the canal.

A. The Central Bridge

It faces north toward the center of the Hanyuan Hall. Remaining holes of bridge piers indicate that the bridge runs 17m west to east in width, and 4.3m north to south in length. The seven rows of piers can be divided into three sections (Figure 1).

The northern section has three rows of piers. The northernmost row is built tightly against canal wall. Intervals between the piers are relatively wide, and the holes are quite large, measuring from 20 to 28cm in diameter. The other two rows were built south the northernmost row, with smaller piers very close to each other. The diameters of the holes for these piers are between 12 and 16cm. Two rectangular shaped foundation rocks were found between these two rows.

The middle section has only one row of piers, located in the center of the canal. The holes for these piers are quite large, measuring from 22 to 40cm in diameter.

The southern section has also three rows of piers, arranged the same way as those in the northern section. The row next to the canal wall has only four pier holes left, measuring from 11 to 16cm in diameter. The holes for the piers in the two rows next to southernmost row measure from 7 to 25cm in diameter.

B. The West Bridge

The west bridge faces the Western Audience Chamber of the Hanyuan Hall. The bridge is located 128m west of the Central Bridge. Remains of brick piers and pier holes were found, measuring 6.85m from west to east in width, and 4.65m from north to south in length. Four brick piers were built next to the canal walls, two on each side, opposite each other. The two brick piers found next to the north bank are 5.48m apart, and the

remains of the two piers are 0.73 and 1.45m in height. The two next to the south bank are 5.5m apart, with a remaining height of 0.4 and 0.45m respectively. A single row of piers stood on both sides of the bank,

with remaining holes are from 28 to 45cm in diameter (Figure 2).

C. The East Bridge

The east bridge faces the Eastern Audience Chamber



Figure 1. The Central Bridge across the Canal to the South of Hanyuan Hall (Top. South)



Figure 2. The West Bridge to the South of the Western Audience Chamber of Hanyuan Hall (West-East)

of the Hanyuan Hall. The bridge is located 129m east of the central bridge. The remains of the bridge lie under the south wall of the buffer zone; therefore, they were not excavated. The remaining bricks on the south bank of the canal indicate that the construction of the east bridge was similar to the west bridge.

Paths

A. Vehicle Path

It was found along the south bank of the canal, going west to east direction. The uncovered path is over 300m long and 15m wide. The surface is 15 to 32cm thick, with clear impressions of wheel ruts.

B. Pedestrian Path

The brick-paved pedestrian path is located south of the West Audience Chamber of the Hanyuan Hall, running south to north. On the south and north sides of the west bridge, the remains show clearly that the brick path and the bridge were connected. Based on stratification, the brick path can be divided into earlier and later phases.

The earlier brick path was divided into two sections, one to the south and one to the north of the bridge. In the north, the earlier path was buried under the later, and we excavated only a small portion of it. In the south section, the earlier path is well preserved parallel to the later path. We excavated a section 5.6m in length, and the exposed surface is 1.1m wide. The path was paved with mostly polished black bricks, interspersed with a few bricks of lotus motif, all square in shape. The edges

of the pathway were curbed with upright bricks.

The later brick pedestrian pathway was found only on the north bank of the canal. The remaining length is 28.5m, and the width is 1.2m. Most bricks from the path surface are gone; only a few foundation bricks remain. However, the upright bricks on the edge are partially preserved. The later pathway on the south of the canal was destroyed.

We excavated a small portion of the south section of the later pedestrian pathway, and found the earlier pedestrian pathway about 0.5m underneath.

Similar excavations were carried out south of the Eastern Audience Chamber at the same location where the brick pedestrian pathway was found in front of the Western Audience Chamber. However, the condition of the remains is really poor. A similar brick pathway linking the bridge to the Eastern Audience Chamber probably existed in the past.

4. Unearthed Artifacts

In the canal, we found various Tang artifacts, including bricks, tiles, rocks, shells, ceramic and porcelain objects, coins, iron nails, and an iron sword. The most numerous were bricks and tiles, including rectangular shaped bricks, plain square bricks, patterned square bricks, flat roof tiles, and eave-tiles with a lotus motif. Some bricks have carved characters. Two inscriptions have been read as “ Official Brick (*guan-zhuan* 官砖), ” and “ Kai [yuan] period, ninth [year], sixth month (721 CE), Official Brick ” (Figures 3–6).



Figure 3. Square Paving Brick with Lotus Motif (2006TCDYQ1 :2)



Figure 4. Square Paving Brick with Rosette Motif (2006TCDYQ1 :3)



Figure 5. Square Paving Brick with Honeysuckle Motif (2006TCDYQ1 :4)



Figure 6. Inscribed Brick unearthed from the Canal to the South of Hanyuan Hall (2006TCDYQ1 :10)

Conclusion

Based on a Qing scholar Xu Song's book, *Research on the Wards of the Two Capitals of the Tang Dynasty* (*Tang Liangjing chengfang kao* 唐两京城坊考), "the Dragon Head Canal, also known as Chan 泂 River Canal, was built in the third year of Kaihuang Era of the Sui Dynasty (583 CE). It was divided into two canals. The Eastern canal ran north, passed outside the Tonghua Gate, continued to the northeast corner of the city, and then turned west to the Dragon Head Pond inside the Eastern Interior Park. The surplus water passed under the Dismounting Bridge of the Daming Palace." On his *Map of the Han and Tang Capitals*, another Qing scholar, Wang Senwen, marked a canal going from west to east in front of the Hanyuan Hall and the ruins of three bridges with captions of "extant." The canal unearthed in 2005 is located in front of the Hanyuan Hall, running parallel with the building, and has the remains of three bridges. We believe that this canal is the branch canal of the Dragon Head Canal that ran into the Daming Palace. The East and West bridges are the ones where the officials had to get off their horses (*xiama*). The Central Bridge was reserved for the emperor.

Another canal found between the Hanyuan Hall and the Danfeng Gate in the 1950s and 1960s is not the Tang

Dynasty Dragon Head canal. Test excavations showed the excavated canal earlier destroyed a Tang road and ended not far from the axis of the Daming Palace. Artifacts found inside that canal belong to the Ming and Qing, or even later periods. All evidence shows that the canal excavated in the 1950s and 1960s was built during the Ming and Qing or even later period.

The brick pedestrian pathway found south of the audience halls matches the historical records. As the *Yiwei Zhi* (Treatises on Processions) in *Xin Tang Shu* indicates, "On court days, the civil and martial officials lined up in front of the two audience chambers; then two imperial inspectors came out and stood on the brick path in front of the two buildings. At dawn, after the roll call, the court gate opened, and the imperial inspectors led the officials in." In addition, two other books, the *Yu Hai* (vol. 70), and *Quan Tang Wen* (vol. 727) have similar records, indicating that there were brick paths in front of the audience chambers.

These new archaeological discoveries of the canal, with its bridges and pathways in front of the Hanyuan Hall are very important. They provide new information on the plans and architectural design of structures in front of the audience chambers at the Daming Palace and advance academic research on palace development and the rules for palace architecture in China. This new infor-

mation will greatly assist the project of conserving the Tang Dynasty Daming Palace.

References

Institute of Archaeology, CASS. 1959. *Tang Chang'an Daming Gong* 唐长安大明宫 (*Taming Kung of the T'ang Capital Ch'ang an*). Beijing: Kexue Chubanshe. pp. 59–62 (appendix and Illus. 3).

Ma, Dezhi 马得志. 1982. *Tang dai Chang'an yu Luoyang* 唐代长安与洛阳 (Cities of Chang'an and Luoyang in the Tang Dynasty). *Kaogu* 考古 (Archaeology) 6: 643 (Figure 2).

Xi'an Tang City Archaeological Team, IA, CASS. 2006. *Xi'an Shi Tang Chang'an Cheng Daming Gong Danfeng Men Yizhi de Fajue* 西安市唐长安城大明宫丹凤门遗址的发掘 (Danfeng Men Gate-site of Daming Gong Palace, Tang Chang'an City in Xi'an City). *Kaogu* 7: 43–9.

Postscript: The original article was published in *Kaogu* 考古 (Archaeology) 2007. 9: 3–6, with four illustrations. The authors are Gong Guoqiang 龚国强, He Suili 何岁利 and Li Chunlin 李春林. Gong Guoqiang rewrote the article. Translated into English by Suzanne Cahill and Ye Wa 叶娃.