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The Excavation of a *Que*-Gate Tower-Shaped Palace Foundation at the Site of Xanadu of the Yuan Dynasty in the Xilin Gol League, Inner Mongolia Autonomous Region

Inner Mongolia Normal University

Inner Mongolian Institute of Cultural Relics and Archaeology

Inner Mongolian Institute for Cultural Relics Conservation

The capital of the Yuan Dynasty, Xanadu, is located on the Jinlian-chuan Grasslands, 23 kilometers northwest of Shangduhe Town, in Shuluun Huh Banner [county-level administrative unit] in Xilin Gol League [prefecture-level administrative unit]. It borders the Longgang Mountains to the north, adjoins the Shandian River to the south, and meets open grassland to the east and the west. The site is composed of a palatial district, an imperial city and an outer city, containing remains of three layers of city walls, and occupies an area of 484,000 square meters (Figure 1).

In 2009, an archaeological team with members from Inner Mongolia Normal University, Inner Mongolian Institute of Cultural Relics and Archaeology, and Inner Mongolian Institute for Cultural Relics Conservation conducted an excavation of a large *que*-gate tower-shaped palace foundation inside

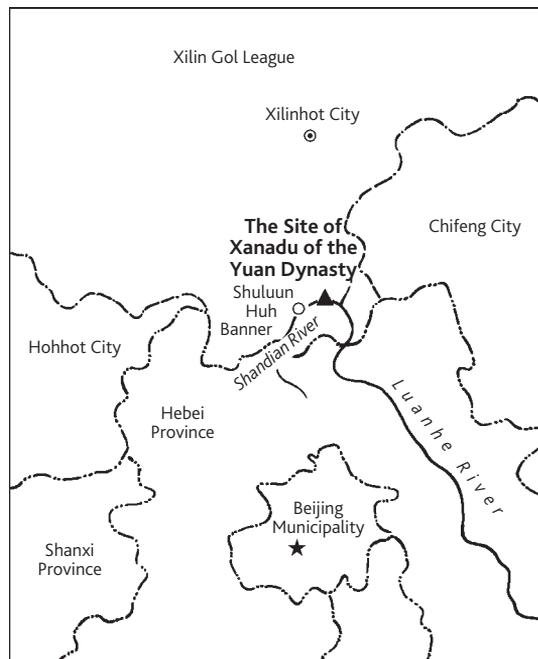
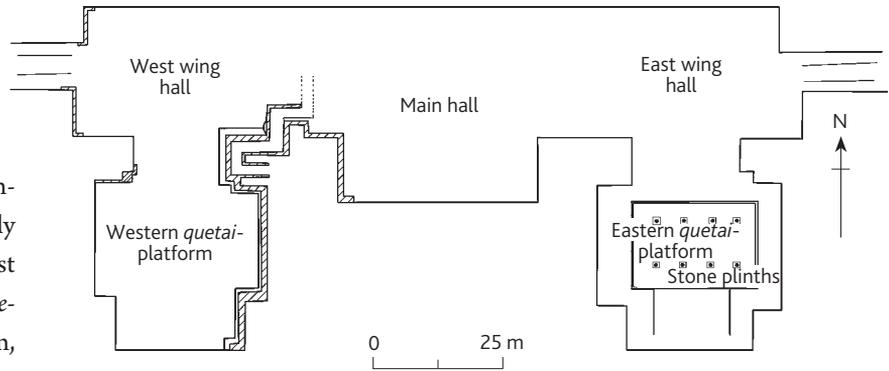


Figure 1: Location map of the site of Xanadu of the Yuan Dynasty



Figure 2: Plan view of the *que*-gate tower-shaped palace



the city ruins, and uncovered predominantly three sections: the east side of the western *que*-gate tower foundation, the western *mandao*-ramp and the front face of the eastern *que*-gate tower foundation. The details of the excavation findings are briefly described below.

QUE-GATE TOWER-SHAPED PALACE FOUNDATION

The large raised-platform structure and layout of the *que*-gate tower-shaped palace foundation are unique within the site of Xanadu, and the foundation is situated against the middle section of the northern palace district wall. With a plan view in the shape of the character 匚, the structure faces south and occupies an area of over 9,000 sq.m.

The *que*-gate tower-shaped palace consists of two parts: a building and a square. The structure comprises a main hall, wing halls, *quetai*-platforms, a *langdao*-covered walkway and a *mandao*-ramp that allows two-way access. The space in the center enclosed by the building structures is the square. The main hall located in the heart of the

structure is in the plan view shape of the character 匚; it measures 67 meters long and 40 m wide. The wing halls are situated on either side of the main hall; they are more or less in the plan view shape of a square, and measure approximately 25 m wide. The *quetai*-platforms are positioned in front of the wing halls and are connected to them by the *langdao*-covered walkways. They are in the plan view shape of the character 匚 and measure 16 m long and 24 m wide. The *mandao*-ramps are found on both sides of the main hall and form the shape of the character 之. Starting from the entrance, they ascend to the top of the palace foundation along the *langdao*-covered walkway and the foundation of the wing halls (Figure 2).



Figure 3: Western *quetai*-platform



Figure 4: Corner of the building foundation platform (western *quetai*-platform)

45 cm to 50 cm; they are partially inserted into the trench foundation and protrude from the ground surface by 10 cm. A groove joint approximately 5 cm deep is chiseled out on the upper part of the stones for brick placement.

EXCAVATION OF THE FOUNDATION

(A) Western *Quetai*-Platform

The surface of the western *quetai*-platform is in the plan view shape of the character 冂 and is situated west of the main hall with a north-south orientation. It is a large brick-enclosed rammed-earth platform construction and is connected on the north side to the wing hall through a *langdao*-covered walkway (Figure 3). The foundation of the *quetai*-platform consists of three parts: a trench foundation, a foundation and a platform. The trench foundation was constructed by excavating a 60-centimeter deep trench and building a rammed-earth layer inside the trench with two different types of raw materials. The lower level of the rammed-earth layer is built of wooden joists positioned 20 cm to 30 cm apart, and filled in with crushed bricks and rocks, forming a composite rammed-earth layer made of wood, bricks and rocks. The upper level, which completes the trench foundation, is a pure solid rammed-earth layer 30 cm thick that is more or less level with the original ground surface. The foundation sits above the trench foundation, and is a stone-enclosed rammed-earth layer. The stones enclosing the rammed earth are prepared in regular shapes; they are rough squares with sides measuring

45 cm to 50 cm; they are partially inserted into the trench foundation and protrude from the ground surface by 10 cm. It is called the golden edge. The palace platform sits above the foundation; the main body of the platform is made of brick-enclosed rammed earth; its profile is in the shape of a trapezoid with a base angle of 75 degrees (Figure 4). The platform consists of three parts: rammed earth, an inner brick wall and an outer brick wall. The rammed earth

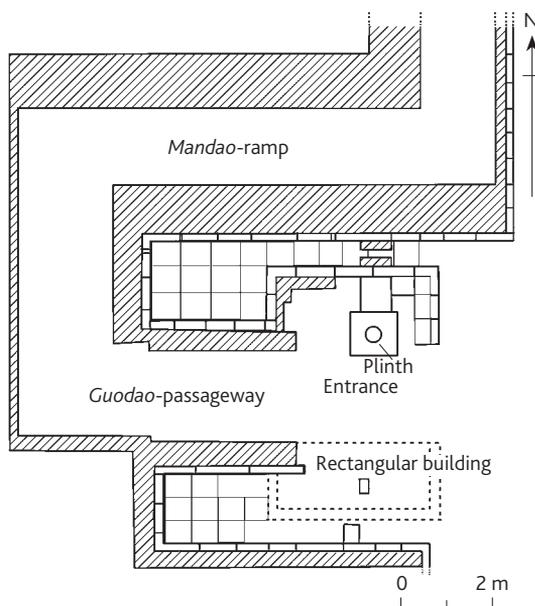


Figure 5: Plan view of the *mando*-ramp



is the main component of the platform and consists of layered solid black tessellated soil; each layer is about 10 m thick, and the layers are laid 5 cm apart. The rammed earth is stabilized with *yongding zhu*-permanent columns and *paicha zhu*-citygate jambs. Its section shows that the columns are positioned 2 m apart, and their diameter measures between 8 cm and 10 cm. The inner wall is appressed to the rammed earth with a pattern of staggered joints bonded with white lime mortar; the wall measures between 1 m and 2 m wide, with the beveled sections measuring 2 m wide and the nonbeveled sections measuring approximately 1 m wide. The dimensions of the bricks are the same: 18 cm long, 38 cm wide and 5 cm thick. The outer brick wall is pressed closely against the inner brick wall, and has a depth of only one brick. These are also called *luming zhuan*-burnished bricks; their main function is to decorate and form the outer wall. The *luming zhuan*-burnished bricks are all specially made polished bricks in the shape of right-angled trapezoids with whitened inclination planes. The outer wall is a dry stone wall without lime mortar; its surface is straight and smooth, making it look like a single integrated mass. Since the inner brick wall and the outer brick wall were built separately, a gap exists between the two walls, which has caused bricks on the outer wall of the platform to fall off.

(B) *Mandao*-Ramp

The *mandao*-ramp is shaped like the character 之; it is one of the major structures discovered during the excavation of the western *quetai*-platform, and is situated on the side of the main hall between the *quetai*-platform, the *langdao*-covered walkway and the wing hall. It is made of rammed earth enclosed by bricks and measures approximately 2 m wide. It consists of a *tadao*-outdoor staircase, a *guodao*-passageway and an entrance (Figures 5 and 6). The *tadao*-outdoor staircase climbs to the top of the palace platform, revolving around the perimeter of the *langdao*-covered walkway and the wing hall. The *guodao*-passageway is

roughly 3 m long, sloped, and is positioned between the *tadao*-outdoor staircase and the entrance. The entrance is a rectangular building foundation. The inner edge of the *tadao*-outdoor staircase abuts the foundation of the palace platform; the outer edge is made of gray bricks shaped and aligned in a saw-toothed brick edging design (Figure 7). The gray bricks are of varied shapes, forms and sizes. Two different layers can be distinguished based on the size and shape of the bricks. The top layer is built of special large polished bricks stacked in slanted layers. The bricks measure 60 cm long by 18 cm wide by 5 cm thick. Because of relatively severe damage, five layers of bricks are preserved at most. The construction of the bottom layer is the same as that of the palace foundation. Specially polished brick strips form the *xiangyan*-stringer [lit. “elephant eye”: on the outside face of the staircase, bricks or stone pieces are set to form concentric triangles – **Trans.**], which is composed of two symmetrically placed triangles on both sides of the *guodao*-passageway (Figure 8). The rectangular building foundation at the entrance was severely damaged, and only one layer of foundation stone and a few marble structural components remain. There is a square plinth at the bottom of this building foundation on which there is a round post hole; it is believed to have been used as a plinth to erect a *wangzhu*-balustrade post. The *guodao*-passageway, the entrance and the *tadao*-outdoor staircase form a 凵-shaped space that might have been designed to drain water that accumulated on the *mandao*-ramp. The floor is paved with square bricks. There was a partition wall near the entrance, but owing to severe damage, there remain only remnants of the wall, beneath which is a drainage ditch measuring roughly the width of a brick.

(C) The Surface of the Eastern *Quetai*-Platform

Only the surface of the eastern *quetai*-platform foundation was excavated. Since the surface has been



Figure 6: Entrance of the *mando*-ramp



Figure 7: Surface of the *mando*-ramp

severely damaged, the original structure on the platform has not been preserved; only the foundation remains (Figure 9). The plan view of the *quetai*-platform is shaped like the character 冂, and can be structurally divided into a *dian'ge*-multistoried grand building and a *mingtai*-radiant hall [aka *mingtang*, a high platform building where emperors proclaim policy and rituals – **Trans.**]. The area of the *dian'ge*-multistoried grand building is rectangular, measuring 20 m long

and 16 m wide. Based on the result of the excavations, it is evident that there was a *huilang*-corridor outside the *dian'ge*-multistoried grand building; since the damage is severe, however, only a few floor tiles remain. The profile of the outer wall is disfigured, but the foundation of the inner wall has been retained. The foundation is made of two layers of stone strips; the upper layer is a brick wall of indiscernible height. The foundation is 40 cm high and 20 cm wide. There are two rows of stone plinth inside the *dian'ge*-multistoried grand building, one in the north and one in the south. There are four plinths in each row, placed roughly 3 m apart. The plinth has the shape of an inverted bowl. The base of the plinth is a square with

sides measuring 80 cm. The thickness of the basin-shaped plinth is roughly 40 cm and its diameter 60 cm. The floor of the *dian'ge*-multistoried grand building is paved in two different patterns: a header bond pattern and a herringbone pattern. The surfaces of the paving bricks are worn and some of them are dented. It was discovered that the floor bricks in the northern part of the *dian'ge*-multistoried grand building were removed and piled into three square brick



platforms, which were likely niches for Buddha statues that were constructed when a Tibetan Buddhist Lama temple was built. The outside of the niches contains traces of vermilion clay wall and is decorated with *caca*-clay Buddhist ornaments. The *mingtai*-radiant hall, which is more severely damaged, is located in the southern part of the *dian'ge*-multistoried grand building, and has a remaining length of about 10 m and a remaining width of roughly 4 m. A partition wall separates the *mingtai*-radiant hall and the *dian'ge*-multistoried grand building, where there might have been a wooden structure (now nonexistent). What remains is only a 人-shaped foundation wall made of two opposing slanted bricks. Parts of the body of the outer wall of the *mingtai*-radi-

ant hall, which are constructed of two stretcher bond bricks, as well as herringbone pattern floor tiles, are also preserved; other parts of the structure are no longer discernible.

ARTIFACTS UNEARTHED

The artifacts unearthed mainly comprise structural components of the buildings, and are predomi-



Figure 8: Side of the *mandao*-ramp



Figure 9: Top surface of the eastern *quetai*-platform

nantly *liuli*-glazed components, followed by stone components and brick components. They are described as follows:

(A) *Liuli*-Glazed Components

These are mainly eave-end tiles, flat under tiles, dripstones, ridge beast ornaments and animal-head covers of junior corner beam ends, glazed in colors

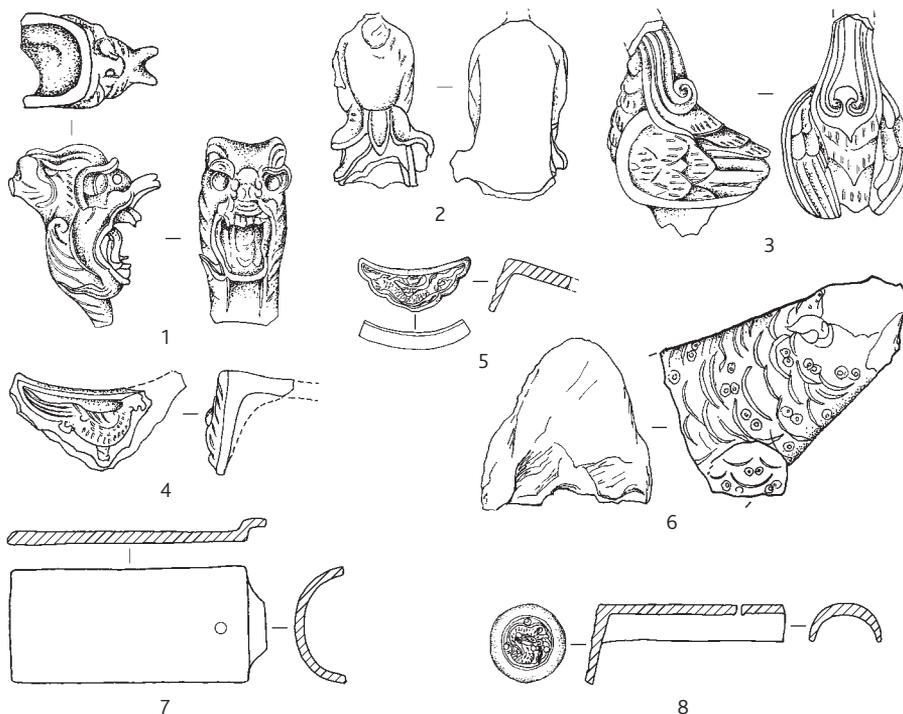


Figure 10: *Liuli*-glazed structural components
 ♦ 1. Dragon-shaped animal-head cover of a junior corner beam end (ZYM:10)
 ♦ 2. Figurine of an immortal ridge ornament (ZYM:11)
 ♦ 3. Bird figurine ridge ornament (ZYM:20)
 ♦ 4. Dripstone with Phoenix motif (ZYM:4)
 ♦ 5. Dripstone with dragon motif (ZYM:3)
 ♦ 6. Fish head ridge ornament (ZYM:7)
 ♦ 7. Flat under tile (ZYM:15) ♦ 8. Eave-end tile (ZYM:18) (scale 1:8)

such as blue, yellow, green and cerulean blue. The flat under tiles are glazed mostly in blue; secondary colors are yellow and green. The eave-stones are decorated with blue and yellow patterns in the shape of dragons or birds. The other animal-head covers of junior corner beam ends have multiple glaze colors, with rich forms and dynamic shapes.

Animal-head covers of junior corner beam ends (3 pieces): They are all dragon heads of similar styles made of fine red baked clay. The back has a securing hole. They have yellow, blue, white and black coloring. They are lifelike and dynamic. The eyes of Artifact ZYM:10 are protruding and have black glaze applied to them. The eye sockets are deep and glazed yellow. The horns are small in proportion, and are circular with blue and yellow glazes. The barbels are engraved as multiple ribbon-shaped grooves; the tongue is rolled downward and glazed yellow. The teeth are stout and glazed white. The horns are forked and warped, with yellow glaze applied to them. The remaining height measures 18 cm (Figure 10:1; Figures 11 and 30).



Figure 11: Animal-head cover of a junior corner beam end (ZYM:10)



Figure 12: Figurine of an immortal ridge ornament (ZYM:11)



Figure 13: Bird figurine ridge ornament (ZYM:20)

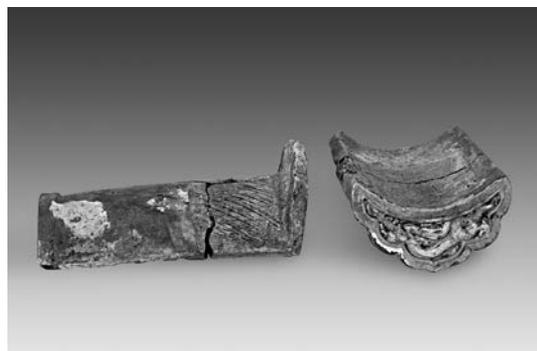


Figure 14: Dripstone with dragon motif (ZYM:3)



Figure 15: Flat under tile (ZYM:15)

Ridge beast ornaments (3 pieces): Red clay pottery, well made. Includes figurines of an immortal, a bird and a fish.

Figurine of an immortal (1 piece: ZYM:11): The head is missing. Modeled; finished with green glaze throughout; the outlines of the human body and the sash are sculpted; the garment is cinched at the waist and the lower portion is a lotus-patterned robe with long sleeves. The base of the piece is decorated with lotus patterns. The remaining height measures 18.7 cm (Figure 10:2 and Figure 12).

Bird figurine (1 piece: ZYM:20): The head and feet are missing. Molded; the motifs and the outline are engraved; the wings are tightly closed and glazed

with green and yellow. The remaining height measures 20 cm (Figure 10:3 and Figure 13).

Fish head (1 piece: ZYM:7): Damaged. Molded; the neck is stout and the cheeks are well and intricately sculpted. The body is glazed yellow and green, and the scales are bright and lifelike. The remaining length measures 28 cm (Figure 10:6 and Figure 31).

Eave-end tiles (5 pieces): Red clay pottery. Round, molded. All have the same shapes and forms with an encircling dragon motif (Figures 33 and 34). Artifact ZYM:18 has a narrow, rimless edge; the body of the dragon curls in an S shape with the head turned upward and the tail coiling naturally

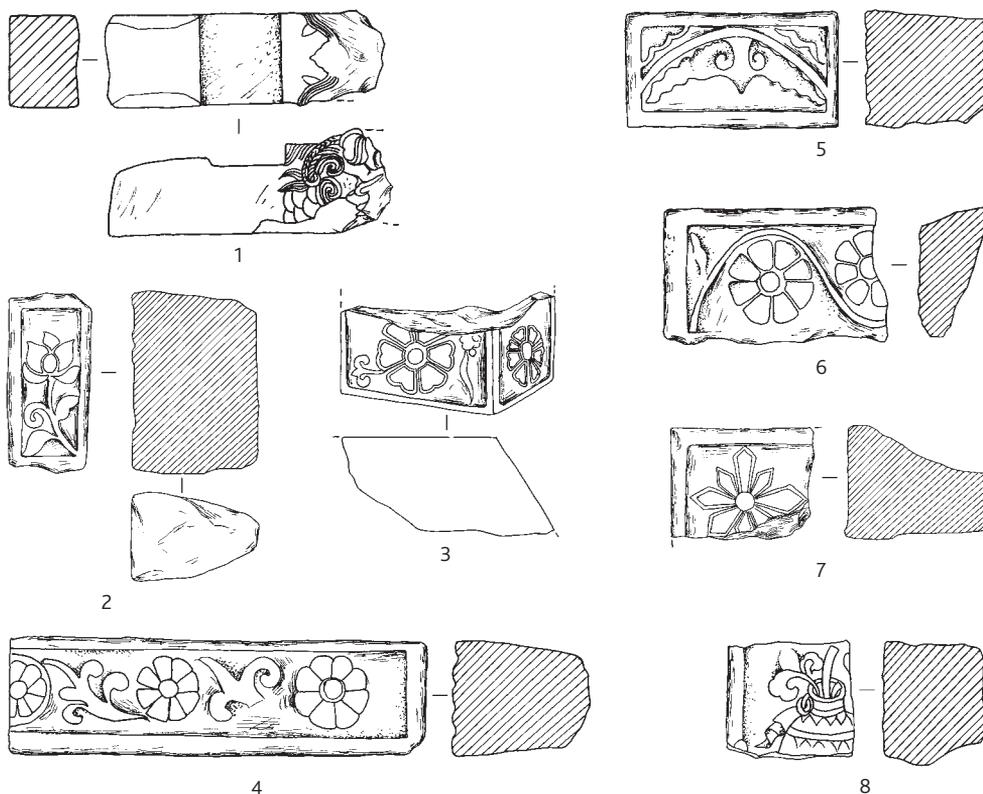


Figure 16: Stone structural components

◆ 1. Head of *chilong*-demon dragon (ZYM:8) ◆ 2. Type A stone plinth component (ZYM:30) ◆ 3. Corner stone (ZYM:37) ◆ 4, 6. Type B stone plinth components (ZYM:32, 36) ◆ 5. Type E stone plinth component (ZYM:33) ◆ 7. Type C stone plinth component (ZYM:34) ◆ 8. Type D stone plinth component (ZYM:31) (1 scaled 1:20; 2, 3 and 7 scaled 1:15; the rest 1:10)

to the top of the head. The body of the dragon is somewhat rounded, with shallow motifs; its body is covered with a scute and surrounded by cloud patterns. The dragon is glazed yellow, and the edge is glazed blue. The diameter of the face of the eave-end

tile is 8 cm and the full length of the eave-end tile is 22 cm (Figure 10:8 and Figure 32).

Dripstones (10 pieces): Red clay pottery. Crescent shape, molded (Figure 34). Most are damaged. They can be divided into types with dragon motifs and phoenix motifs.

Dripstones with dragon motifs (6 pieces): Artifact ZYM:3 has a flowing body intertwining with auspicious clouds. The body is glazed yellow and the edge is decorated with green *ruyi*-scepter-shaped floral patterns. Its remaining length measures 7 cm



Figure 17: White marble head of *chilong*-demon dragon (ZYM:8)



Figure 18:
Subtype Aa brick
with appliqué
(ZYM(2):65)
.....

and width 8 cm (Figure 10:5 and Figure 14). Artifact ZYM:92 has a wide but relatively short head; it has the shape of a crescent from the front; the outer edge is defined by a double lined motif and finished with a *ruyi*-

scepter-shaped floral trim. The dragon has a strong and curled body with a backward glance. The edge is decorated with auspicious clouds. The whole object is glazed yellow and blue. The dripstone measures 12.4 cm wide, 6 cm high and 21 cm long (Figure 35).

Dripstones with phoenix motifs (4 pieces): Artifact ZYM:4 has a phoenix that stands alone with its head raised. Its body is adorned with a net-like pattern resembling that of an ear of wheat, and the tail is proportionally large and glazed green. Its remaining length measures 8 cm and width 23 cm (Figure 10:4 and Figure 36).

Flat under tiles (5 pieces): Red clay pottery. Blue, yellow and green glazes are applied to the exterior, and the interior is plain. They are in the shape of a half crescent. There is a hole for securing. Artifact ZYM:15 is glazed green, measures 28 cm long and 13 cm wide (Figure 10:7 and Figure 15).

(B) Stone Components

Quite a number of the structural components unearthed from this excavation are made of stone. Most of them are made of yellow sandstone, and very

few are made of white marble. Different decorative motifs are carved on the front of these components.

Head of *chilong*-demon dragon (1 piece: ZYM:8): White marble. Rectangular; damaged head; a square groove is carved in the center. The carvings of the horns and barbels are fine and detailed. The length of the artifact measures 70 cm, width 23 cm and height 21 cm (Figure 16:1 and Figure 17).

Stone plinth components (6 pieces): Yellow sandstone. Different decorative motifs are carved in relief on the fronts; the other sides are slightly modified. These plinth components are in rectangu-

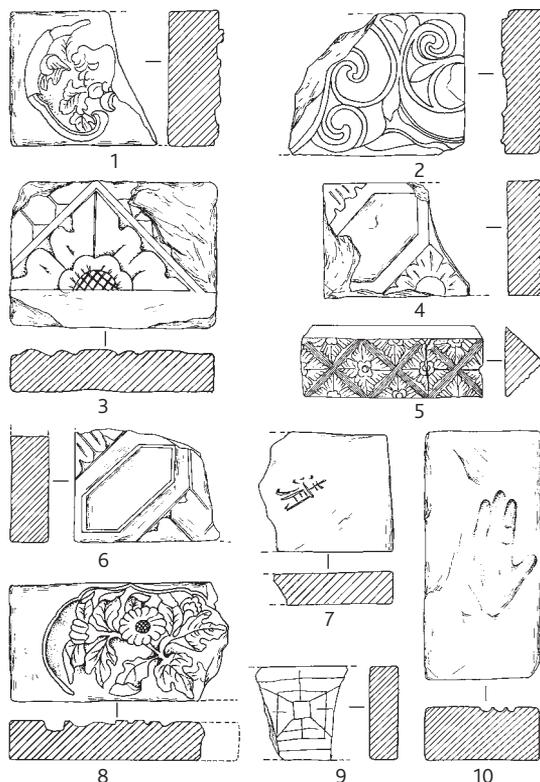


Figure 19: Brick carving structural components
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- ◆ 1. Type A mold-impressed brick (ZYM(2):39)
- ◆ 2. Type B mold-impressed brick (ZYM(2):40)
- ◆ 3. Type C mold-impressed brick (ZYM(2):1)
- ◆ 4, 6. Type D mold-impressed bricks (ZYM(2):21, 22)
- ◆ 5. Type E mold-impressed brick (ZYM(2):6) ◆ 7. Brick with engraved inscriptions (ZYM(2):25) ◆ 8. Type F mold-impressed brick (ZYM(2):5) ◆ 9. Brick with engraved chessboard pattern (ZYM(2):27) ◆ 10. Brick with hand imprint (ZYM(2):26) (scale 1:12)



Figure 20: Type A stone plinth component (ZYM:30)



Figure 21: Type B stone plinth component (ZYM:32)



Figure 22: Type C mold-impressed brick (ZYM(2):1)



Figure 23: Type D mold-impressed brick (ZYM(2):21)



Figure 24: Type E stone plinth component (ZYM:33)



Figure 25: Type F mold-impressed brick (ZYM(2):5)



Figure 26: Brick with engraved inscriptions (ZYM(2):25)

lar, square, triangular or other shapes. Five types can be classified based on the decorative motifs.

Type A (1 piece: ZYM:30): Rectangular with a curved triangular profile. A rectangular frame is carved on the front with leaves holding a peony in bloom. Its length measures 33 cm and width 15.5 cm (Figure 16:2 and Figure 20).

Type B (2 pieces): Artifact ZYM:32 is damaged, rectangular in shape. A quadrangular frame is carved on the front in which there are three free-standing chrysanthemums and curled leaf motifs engraved between the petals. The sides are modified, and the back is shaped in an arc. The remaining length measures 53 cm and width 15 cm (Figure 16:4 and Figure 21). Artifact ZYM:36 is damaged, triangular in shape. A quadrangular frame is carved on the front with interlocking chrysanthemums; the sides and the back are slightly modified. The remaining length mea-

Figure 28: Subtype Ac brick with appliqué (ZYM(2):23)

asures 27 cm and width 17 cm (Figure 16:6).

Type C (1 piece: ZYM:34): Severely damaged, rectangular in shape. A quadrangular frame is carved on the front, with a flower with petals in the shape of Buddhist streamers.

The sides are unmodified, and the back has been chiseled flat. The remaining length measures 27.6 cm and width 15 cm (Figure 16:7).

Type D (1 piece: ZYM:31): Damaged, square in shape. What remains on the front is a partial quad-

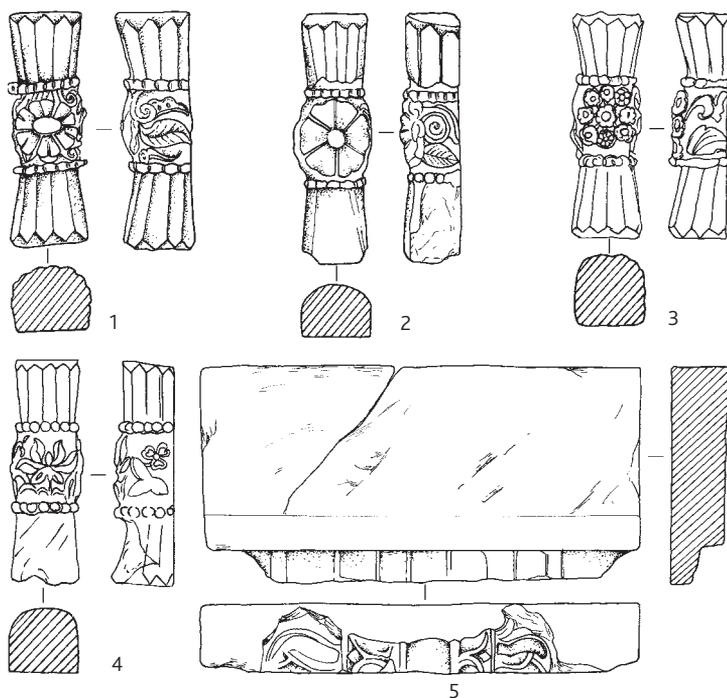


Figure 27: Bricks with appliqué

◆ 1. Subtype Aa (ZYM(2):65) ◆ 2. Subtype Ab (ZYM(2):61) ◆ 3. Subtype Ac (ZYM(2):23) ◆ 4. Subtype Ad (ZYM(2):64) ◆ 5. Type B (ZYM(2):24) (scale 1:8)

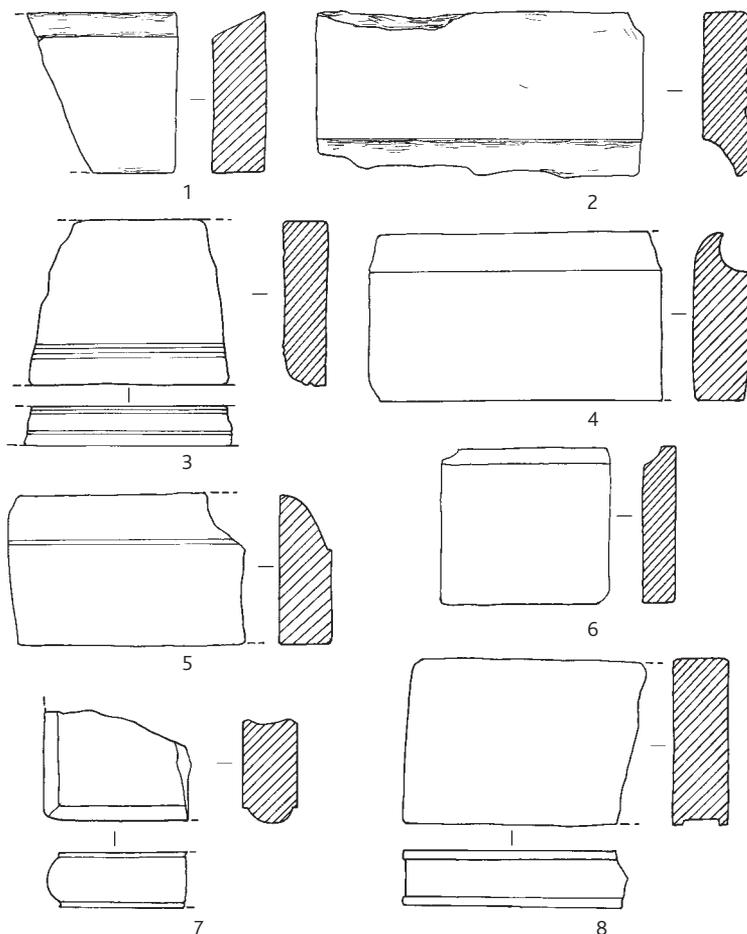


Figure 29: Long bricks

- ◆ 1. Type A (ZYM(2):35)
- ◆ 2. Subtype Ba (ZYM(2):38)
- ◆ 3. Subtype Bb (ZYM(2):51)
- ◆ 4. Subtype Bc (ZYM(2):52)
- ◆ 5. Subtype Bd (ZYM(2):53)
- ◆ 6. Subtype Be (ZYM(2):55)
- ◆ 7. Type C (ZYM(2):54)
- ◆ 8. Type D (ZYM(2):56) (scale 1:8)

ing motifs of chrysanthemums and leaves on the front and the sides. The back has a curved profile and is unmodified. The front width is 29 cm and the remaining height is 18 cm (Figure 16:3).

(C) Brick Carving Components

Brick carving components were the most commonly unearthed artifact. Several types of brick structural components, as well as brick structural components with various mold-impressed decorative patterns, were discovered.

angular frame in which there is a plum blossom *ping*-vase. Horizontal lines and triangular motifs are carved on the body of the *ping*-vase. There is an ear near the mouth of the *ping*-vase to which a silk ribbon is tied. Flowers are in the *ping*-vase. The sides and back of the artifact are unmodified. The remaining height measures 17 cm and width 12 cm (Figure 16:8).

Type E (1 piece: ZYM:33): Square in shape. A quadrangular frame is carved on the front, with animal head decorative motifs carved inside the frame. The animal looks like a gyrfalcon, with a fan-shaped head, long triangular beak, rounded eyes and feathers standing on end. Its length is 23 cm and width 14 cm (Figure 16:5 and Figure 24).

Corner stone (1 piece: ZYM:37): Yellow sandstone. Triangular prism, quadrangular frames enclos-

1. Mold-Impressed Bricks

All are made of gray clay pottery, in standardized shapes and forms. They were fired at a high temperature and have a hard texture. Floral and leaf-shaped motifs are mold-impressed on the front; the back is plain. The bricks can be classified into six types based on their decorative motifs.

Type A brick (1 piece: ZYM(2):39): Fragmented. A flower-shaped frame decorates the front side with a bas-relief Liliales pattern. The remaining length is 22 cm, width 20 cm and thickness 7.6 cm (Figure 19:1).

Type B brick (1 piece: ZYM(2):40): Fragmented. It is carved with swirly cloud relief. The remaining length is 26 cm, width 21.5 cm and thickness 5.4 cm to 6.8 cm (Figure 19:2).



Type C bricks (2 pieces): Fragmented. Artifact ZYM(2):1 has a triangular frame in relief with a sunflower and extended leaves. The remaining length is 30 cm, width 17 cm and thickness 5.6 cm (Figure 19:3 and Figure 22).

Type D bricks (2 pieces): Fragmented. Artifact ZYM(2):21 has a partial hexagon on the upper left side outlined by double lines, and a simple carving of a sun on the bottom right side. The remaining length is 31 cm, width 21.5 cm and thickness 6.5 cm (Figure 19:4 and Figure 23). Artifact ZYM(2):22 has a double-lined hexagon carved in the center and the rest of the space is filled with triangles, straight lines and leaf motifs. The remaining length is 22 cm, width 17 cm and thickness 5.6 cm (Figure 19:6).

Type E brick (1 piece: ZYM(2):6): Fragmented. It has a triangular profile. Two sides are plain, and a diamond-shaped netting pattern enclosing flowers and leaves is carved on the third side. The remaining length is 28 cm (Figure 19:5).

Type F (1 piece: ZYM(2):5): The outer frame is carved in the shape of a *ruyi*-scepter and encloses a depiction of luxuriant leaves and a chrysanthemum. The remaining length is 30 cm, thickness 5.6 cm and width 17 cm (Figure 19:8 and Figure 25).

2. Imprinted Bricks (not many)

Brick with hand imprint (1 piece: ZYM(2):26): It is elongated in shape. A hand imprint decorates the front; the other side is plain. Its length is 37 cm, width 17.6 cm and thickness 8 cm (Figure 19:10).

3. Engraved Bricks (not many)

Bricks with engraved inscriptions (3 pieces): Artifact ZYM(2):25 has the character 清 engraved on the front; the other side is plain. The remaining length is 18.6 cm, width 17.6 cm and thickness 4.8 cm (Figure 19:7 and Figure 26).

Brick with engraved chessboard pattern (1 piece: ZYM(2):27): Fragmented. The chessboard pattern is engraved on one side; the other side is plain. The

remaining length is 9.5 cm, width 14.2 cm and thickness 4.8 cm (Figure 19:9).

4. Bricks with Appliqué

Numerous bricks of this kind have been unearthed. They can be classified into two types based on their shapes and forms.

Type A (10 pieces): They are in the shape of a standardized semicircular prism. Appliqués showing complete plants and flowers are applied to the front, and appliqués of leaves and stems are affixed to the sides, forming a fairly complete pattern. The back is plain. There are four subtypes based on the kinds of flowers and plants.

Subtype Aa (2 pieces): Artifact ZYM(2):65 has a chrysanthemum appliqué affixed to the front; it is bordered by beaded-band appliqués on the top and bottom; appliqués of banana leaves are affixed to the sides. Its height is 25.6 cm and length 6 cm (Figure 18 and Figure 27:1).

Subtype Ab (1 piece: ZYM(2):61): A lotus appliqué is affixed to the front with beaded-band appliqués bordering the top and the bottom. Appliqués of lotus leaves and curled leaves are affixed to the sides. Its height is 27.4 cm and length 6 cm (Figure 27:2).

Subtype Ac (1 piece: ZYM(2):23): Appliqués of eight chrysanthemums in a bouquet are affixed to the front; they are bordered at the top and the bottom by a beaded-band appliqué. The sides are decorated with appliqué of swirly clouds. Its height is 25 cm and length 8 cm (Figure 27:3 and Figure 28).

Subtype Ad (1 piece: ZYM(2):64): The front is decorated with appliqués of peonies, and bordered at the top and bottom with a beaded-band appliqué; appliqués of leaves and stems are affixed to the sides. Its height is 25 cm and length 6.8 cm (Figure 27:4).

Type B (1 piece: ZYM(2):24): Long strip; appliqué of ribbon with a *ruyi*-scepter knot is affixed to the front. Its length is 50 cm, width 20.5 to 25 cm and thickness 7 cm (Figure 27:5).



Figure 30: Liuli-glazed animal-head cover of a junior corner beam end

5. Long Bricks

Most have a plain surface. The fronts of the bricks are polished into different design shapes. They can be classified into four types based on their shapes and forms.

Type A (1 piece: ZYM(2):35): Fragmented. Right-angled trapezoid brick. The remaining length is 19.5 cm (Figure 29:1).

Type B (5 pieces): Tongue-shaped, all fragmented. They can be subdivided into five subtypes based on the profile of the tongue.

Subtype Ba (1 piece: ZYM(2):38): Rectangular; the tongue is curved slightly inward; the tip of the tongue is beveled; and there is an impressed hand print on the front. Its length is 37 cm, width 18 cm and thickness 5.2 cm (Figure 29:2).



Figure 31: Fish head (ZYM:7)



Figure 32: Eave-end tile (ZYM:18)



Figure 33: Eave-end tiles (ZYM:16, 41, 18)

Subtype Bb (1 piece: ZYM(2):51): The tongue has a convex outline; a groove is incised on either side of the tongue; and the tip of the tongue is a flat head. The remaining length is 21 cm, width 18 cm and thickness 4 cm (Figure 29:3).

Subtype Bc (1 piece: ZYM(2):52): The tongue is curved upward into a crescent; the tip of the tongue is a curved point. Its length is 32.5 cm, width 18.5 cm and thickness 6 cm (Figure 29:4).

Subtype Bd (1 piece: ZYM(2):53): The tongue has a curved slant; the upper part tapers toward a leveled point. Its length is 27 cm, remaining width 18.5 cm and thickness 5.5 cm (Figure 29:5).

Subtype Be (1 piece: ZYM(2):55): The tongue is concave and has a flat-headed tip. Its length is 17.2 cm, width 17.5 cm and thickness 3.4 cm (Figure 29:6).

Type C (1 piece: ZYM(2):54): Fragmented. It is arched in the center and leveled out on the sides. Its remaining length is 16 cm, remaining width 11.6 cm and thickness 6 cm (Figure 29:7).

Type D (1 piece: ZYM(2):56): Fragmented. The middle is flat and slightly more depressed than the narrow flat edges on the sides. Its remaining length is 26 cm, width 18.2 cm and thickness 6 cm (Figure 29:8).

CONCLUSIONS

This *que*-gate tower-shaped excavated building, with its large, very unique and complete layout, is the



Figure 34: Combinations of eave-end tiles and dripstones

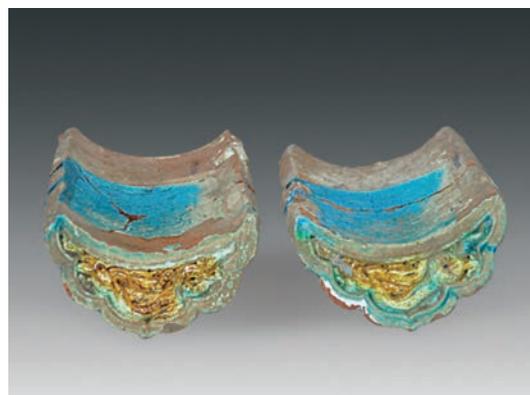


Figure 35: Dripstones with dragon motif (ZYM:85, 92)



Figure 36: Dripstone with phoenix motif (ZYM:4)

most well-preserved above-ground structure at the site of Xanadu of the Yuan Dynasty. It is also one of the most important discoveries in the history of archaeological investigations at the site of Xanadu of the

Yuan Dynasty. Its discovery is important for furthering research at the site of Xanadu of the Yuan Dynasty.

(A)

It clarifies the construction period of *que*-gate tower-shaped palace structure. The *History of Yuan* [*Yuan shi* 元史] records: “in the beginning, the khan commanded Bingzhong to locate potential areas in the east of Huanzhou Prefecture [*Zhou* 州] and north of the Luanhe River for building a city. It took three years to complete. It was named Kaiping”;^[1] in the first year, “construction began of the palace and its rooms”;^[2] in the second year, “the palatial district was restored”;^[3] finally, “the construction was completed in three years.”^[4] In the sixth year of the Xianzong reign period of Mongke Khan (1256 CE), Kublai commanded Liu Bingzhong to locate potential areas in the east of Huanzhou Prefecture and north of the Luanhe River for building a city. It took three years to complete and was named Kaiping. The excavation of the link between the city wall and the palace confirms that the northern wall of the palatial district and the foundation of the *que*-gate tower-shaped structure were built in the same period. Thus, it is possible to surmise that this *que*-gate tower-shaped structure was built between 1256 CE and 1258 CE, and is one of the earliest buildings built before Kublai Khan’s reign.

(B)

This building’s *que*-gate tower-shaped structure adopts the traditional structural style of the Central Plains and embodies, at the same time, rich regional characteristics and ethnic designs. It is a fine example of the fusion of the cultures of the Central Plains and the steppes. First, structurally speaking, it adopts an evidently traditional structural style of the Central Plains. As a large-scale imperial palace, this building’s *que*-gate tower-shaped structure is composed of a pavilion on either side of the main hall that extends to the front, creating a ring-shaped layout, manifest-

ing the structural characteristic of the Han Dynasty *que*-gate tower shape. This structural style is similar to the Hanyuan Hall in the Daming Palace in Xi’an and the Meridian Gate [i.e., *Wu men*] of the Forbidden City in Beijing.

Second, parts of the building’s structure embody regional characteristics and ethnic designs. The expansive square in front of the main hall and a reduced *mingtai*-radiant hall extending from the front of the *quetai*-platform are two such examples. This layout is different from the large steps in front of the Hanyuan Main Hall of Daming Palace as well as the open gate passageway under the Meridian Gate of the Forbidden City. It also differs from the flat design of the front ends of the Hanyuan Hall and the *quetai*-platform of the Meridian Gate. The *que*-gate tower-shaped structure of Xanadu of the Yuan Dynasty inherited the style of Han Dynasty structures, but there were drastic changes in parts of the structure due to regional differences. The *mandao*-ramp, in particular, was paved in a saw-toothed brick edging design and not the terraced style. The design allows vehicles and horses to travel more easily, which is why it is also called the *madao* [lit. “path for the horses”]; this would have been strongly connected to the pastoral way of life of the Mongols.

Lastly, based on the excavated structural remains, aside from the structural designs of flowers and plants, ridge beast ornaments, and yellow and green *liuli*-glazed components that are commonly noted in the traditional structures of the Central Plains, there are also many zoomorphic motifs and floral motifs favored by the nomadic people, as well as blue *liuli*-glazed tiles and white ornaments that demonstrate their preference for blue and white. The presentation of dual cultures on a single structure faithfully reflects the interaction between these peoples and their influence on one another. The distinct cultural elements at the site of Xanadu of the Yuan Dynasty provide important materials for studying how the cultures of the steppes and of the Central



Plains melded and clashed, for probing the heritage of ancient city building in the northern steppes, and for understanding the structural techniques and features of the early Yuan Dynasty.

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 - [3] See [2] above.
 - [4] See [2] above.
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