## Li Fei, Qian Cheng The Investigation and Trial Excavation of the Old Palace Relics Sites at Hailongtun



Fig. 1 Layout of the Old Palace





Plate A: Aerial Photograph of the Old Palace

Abstract: Hailongtun is one of the most famous Tusi relics sites of the Yang's Family in Bozhou. Among its buildings, the Old Palace, the largest building complex only next to the New Palace, was always thought to be the relics of the Southern Song Dynasty in the past. In the years between 2012-2015, a relatively thorough investigation and a trial excavation were carried out, which generally figured out the overall pattern of the complex and gained a preliminary understanding of its age and nature. The findings of the trial excavation prove that the main structure of the Old Palace was constructed during the Wanli Reign of the Ming Dynasty. It is Different from the New Palace, which is the Official Building of the Tusi, buildings in the Old Palace were used as barns, temples and other different nature. A few of the excavated articles were actually made during the Southern Song Dynasty, indicating that there might be relics made from that early time, but there is also the possibility that they were heritages passed down from the Southern Song Dynasty.

Key words: Hailongtun; the Old Palace; Tusi relics sites

Hailongtun was built in the 5th year of Baoyou Reign (1257) of the Song Dynasty and destroyed in the War of Bozhou in the 28th year of Wanli Reign (1600) of the Ming Dynasty. It is the most significant historical site reserved under the name Yang's Family in Bozhou. In July of 2015, Hailongtun was included in the World Cultural Heritage List. The Old Palaceis an old folk name for a long narrow ridge in the northeast of the quarry. It is juxtaposed with the New Palace and these two palaces are the largest groups of buildings in this ridge, about 120 m apart from each other. On both sides of the ridge are gullies, which reach the quarry in the South and the old mansion of Chen Liju in the north, covering an area of about 15,000 m<sup>2</sup> (Fig.1: Plate A). The word "old" here is used to serve as an opposition to the word "new", since the New Palace was used to be considered as the Ming Dynasty buildings and the Old Palace as the Song Dynasty buildings. But these appellations popular among folks are not recorded in any literature. The quarry in the South of the Old Palace is full of cornerstones, (also called "Sang Dun"), among folks it is also called "Sangdunping" in the neighboring regions there were thatched shed, with Bodhisattva in it, in front of the thatched shed stands a lamp-post. It is

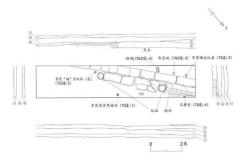


Fig.2 Plane Profile of TG2 and F35

rumored that Secretary Zhou Xicheng (1893-1926) once lived there in seclusion. The southern area of Chen's mansion was called "Xinmiao", there were also other temples, but without clear traces, the time of all these buildings are unknown to us. (Li Fei,2014: 130-131)

## INVESTIGATION AND THE PROCESS OF EXCAVATION In the

Fall of 1999, antiquarian carried out the first small-scale excavation of the Old Palace on the basis of the investigation results. At the northern end of the "Sangdunping" a 2\*5-metre ditch was laid, and relics such as imperial roof decoration, flat tiles, tile-ends, iron nails, iron plates (token-like), blue and white and coarse porcelain pots fragments were unearthed. Excavators speculate that the Old Palace was built in the Southern Song Dynasty, while the New Palace in the Wanli Reign of the Ming Dynasty.

From 2012 to 2014, when the wall around the New Palace was found out, we made a comprehensive reconnai-ssance of the Old Palace to determine whether there were similar relics, and then to roughly know the area of the Old Palace, but it is a pity that the results were unsatisfactory. However, seven groups of stone retaining walls were found on the edges of different platforms, some of which were well preserved while some badly damaged. There were steps in the center of the two stone retaining walls. Like the New Palace, the site was built on a platform that were mainly composed of stone retaining walls and terrace behind it. Based on the investigation results, 8 exploration ditches (TG1-TG5, TG42, TG43 and TG47) were laid on different platforms to excavate the relics. The results of the investigation and trial excavation indicate that there are at least five groups of buildings in the Old Palace (F34-F38; the number and type of relics are classified according to the standard of whole sites, which will not separately be explained in the following part). These groups of buildings extend from the southwest to the northeast, arranged along the ridge, and rising up step by step, but the directions are not entirely the same (Fig. 1).

Limited by the area of the trial excavation, the current understanding of the Old Palace is inevitably not comprehensive.

**LAYERED DEPOSITS** According to the 8 exploration ditches, the accumulations of the Old Palace is not com-plicated. The layered accumulations of early collapsed buildings is just under the topsoil and the strata disturbed by contemporary human activities under which are cornerstones, brick walls, paving bricks and other architectural relics. Of

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<sup>&</sup>lt;sup>1</sup> Hailongtun Investigation Group (written by Liu Shiye), Investigation Report of Hailongtun (not published), 1999.





Plate B: Stone platform and steps of the Old Palace

course, there are also some differences, for example, below the topsoil of TG43 is virgin soil, and no relics are unearthed. Taking TG2 as an example, the general situation of layered accumulations in the Old Palace will be explained (Fig.2).

The first layer: Topsoil. Light grey brown soil, loose. Thickness being 0.1-  $0.25\,\mathrm{m}$ .

The second layer: Modern and contemporary layered accumulation. Brown soil, denser, with more debris, unearthed brown-glazed and blue and white porcelain fragments, etc. Across the whole ditch, the northern part of the layer is thin and the South thick. Thickness being 0.1-0.4 m.

The third layer: Modern and contemporary layered accumulation. Grey and brown soil, loose, mixed with rubble, bricks and blue and white porcelain fragments, this kind of composition is only distributed in the north of the exploration ditch. Thickness being 0-0.3 m.

The fourth layer: The layered accumulations resulted from collapsed buildings. There are a large number of rubbles, lime soil and charcoal residue. Blue and white porcelain bowls, plates, cups, iron pots and bricks, tiles and other architectural components are unearthed. Thickness being 0.15-0.4 m.

F35 opens under the fourth layer, there were brick walls, cornerstones, paving bricks and other architectural relics. Underneath the paving bricks is the bedding soil, which is not necessary to be excavated.

**RELICS** The ridge at which the Old Palace is situated extends from southwest to northeast, high in southwest and low in northeast. This ridge looks like a ladder, forming a multi-leveled platform, which generally occupies the central position of complex. Through the investigation, we know that there were stone retaining walls on the edge of the 7-leveled platform, some of which with steps, however, a few stone platforms were scattered with fragmentary cornerstone, rubble, blue and white porcelain. Limited by the excavation restrictions, no large-scale exposure was carried out, here only some random trenches were exhibited. Taking the excavated relics and results into consideration, we can have a general understanding of the relics in the Old Palace (Fig. 1, Plate B).

Since what the trial ditch reveals are only a part, it needs to be combined with the exposed relics on earth for exploration so as to obtain a relatively comprehensive impression. The relics discovered are mainly architectural platforms, steps, building sites and so on. The discernible architectural

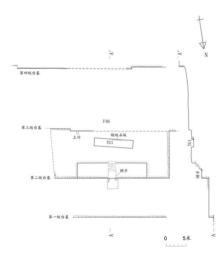


Fig.3 Plane Profile of the platforms from the first to the fourth

platforms have seven levels in total, which are composed of the stone retaining walls and the terraces at their back. They are located in the four places of Xinmiao (F36), Sangdunping (F35), Maopeng (F34 and F38) and Yu Jia Wu Ji (F37) respectively from north to south on which there are five building sites (F34-F38). For the convenience of narration, the author of this paper will give an introduction to them one by one according to the platforms.

XINMIAO (F36). In this place, there can be seen four levels of platforms which consist of four east-western direction stone retaining walls and the terraces at their back. They are raised in turn from north to south in a coherent direction (Fig. 3; Plate B-1 & 2).

The first platform: The first stone retaining wall on the southern part of Chen's House is constructed by regularly made marlite blocks. The outside is smooth and complete, with lime filling the gap and relatively good preservation. It is about 18 m long and 1.7 m high. Depth of the formed platform is approximately 10 m. This is the first platform and the direction is 15 degrees.

In front of this platform, there is another foundation whose depth is about 6 m. The northern margin of this foundation was built with irregular stones, most of which has collapsed and stays incoherent. The remaining length is 20 m and the remaining height is 1 meter. The western side of this foundation contains plenty of plat tile debris (Type B). Due to the irregularity of stones, we are not sure if it belongs to the relics in early times.

The second platform: It is preserved more completely. Composed of two levels of foundation, the surface is slightly presented with the "" shape. The front and two sides of the left and right are high—foundation constructed by regularly made huge marlite blocks, which is the second stone retaining wall. At its back end, there is a low stone wall which is 6 m long and 0.1 meter high. The formed second platform has a width of approximate 29.5 m, a depth of 13 m and the highest part is 4.4 m, with a direction of 18 degrees. The front central foundation is slightly low, with nearly 2 m above the ground, whose—width is 17.8 m and whose depth is 4 m. Foundation at the back is presented with a "" shape and higher than the former one by 2.6 m. In central part of the platform, there are steps, whose front part has been destroyed and whose back part is left with 5 remaining stone steps.

There is an E-W ditch (TG1) of 10\*2-metre at the center of the raised platform. The accumulations can be divided into four layers, among which

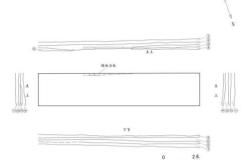


Fig. 4 Plane Profile of TG 1



Plate C: TG2, TG3 and the Relics inside

the third and the fourth ones were remains of collapsed buildings, containing the fragments of ridge bricks (type Fb), flat tiles (type B) and pieces of blue and white porcelain, iron and stones, etc. There is a layer of stone slabs paved on the ground which was found under the second layer of the north wall in the ditch. It is 2.5 m in length and 0.1-0.15 m in thickness, could be the ground of building (Fig. 4).

The third platform: With a distance of 10.5 m to the rear of the second platform, there is a fragmentary retaining wall built with regular marlite blocks, which is the third one Xinmiao. It is 34 m long and 0.2-1.2 m high. The third platform was shaped between the third and the fourth stone retaining walls as a terrace with a depth of 16 m. The direction is 15 degrees

The fourth platform: Behind the third stone retaining wall, the fourth one was built with regular marlite blocks and lime as the filler in the shape of an irregular "凸", only part of which remained in good shape. Its total length is 43 m and the highest point is 1.8 m. And the fourth platform is about 10 m in depth and the direction is 15 degrees. The rear end of it is about 3 m high without stone walls. Fragments of flat tiles (type B) can be seen occasionally on the profile of the earth steps.

At the relic site of Xinmiao, a N-S multi-layered architecture group, including the first to the fourth platform, was formed with the same direction around 15 degrees, whose size gradually enlarges with the increase of altitude. Although the specific layout of the architectures on the platform remains unclear due to the limited excavation, it is reasonable for us to consider the building group as a comparatively large relic site built on the connected multi-layered platform in the Old Palace according to the distribution of the relics, such as platforms, steps, ridge bricks and roofing tiles, etc. The temporary number of the relic site is F36.

SANGDUNPING (F35) A huge platform is formed between the fifth and sixth stone retaining wall (with central steps), which is the fifth platform and popularly known as "Sangdunping". It is the platform with the largest area and the flattest terrain in the Old Palace. The platform has a narrow east-west base, a width of about 70 m, a depth of 30 m, a total area of about 2,000 m<sup>2</sup> and a direction of 43 degrees. The fifth stone retaining wall is only found in the western section of a 70-meter-long earth step on the northern side of Sangdunping and it is made of regular processed stone slabs, with a residual length of 5 m and a height of 0.7 m. The remnants of the ground truss can be

seen locally, so it was presumed that most of them was destroyed in later stages.

Nearly 1 meter square stone was found in northwest of Sangdunping, on which there is a bowl size round hole, or it is a "Lamp Pole" sockets.

There are four ditches (TG2, TG42, TG43 and TG47) arranged on the platform to dissect the accumulations and remains in it. Among them, the ditch TG42 was made to clean up the central steps of the sixth stone retaining wall, so no relics are unearthed. TG43 is located in the northwest side of "Sangdunping", and there are no remains and relics. TG2 and TG47 are not far to the east of the trial-excavation ditch which was excavated in 1999 and important relics are found in both of them.

TG2 is on the north edge of Sangdunping, about "10\*2-metre E-W". Under the fourth platform, there is a row of neatly arranged building foundations, 8 m in length from east to west and with a layer of wall bricks on it. There are two octagonal cornerstones in the middle. The side length of the cornerstone is about 0.4 m and the distance between them is 4 m (the distance between the central points of the cornerstone). A small piece of "H"-shaped floor paved with rectangular bricks of 0.31 m long and 0.15 m wide is exposed in the north, and these bricks should be the floor tiles in the house (Fig. 2; Plate C-1). According to this, what emerges from the ditch is a part of the south end of the house and its main body is on the side of the stone retaining wall, most of it have been destroyed in later stages. TG47 is 7m east of TG2 and it is a 2\*2-metre (now in the current road) made to look for the road at that time. From the TG47, a small amount of iron nails, a large number of rubbles and porcelain fragments were unearthed, and its bottom was the floor paved with a large area of bricks. The two ditches should reveal the same house site, numbering F35. The direction of the restored house is 44 degrees, the width of which should be 5 rooms, the width of a single room is 4 m, and the depth is unknown.

Sangdunping, with the vast terrain, lies in the center of the Old Palace, and there should be more than one F35 house sites on it. More details remain to be revealed in the future.

MAOPENG (F34 AND F38) The platform behind the Sangdunping is called "Maopeng" in the local area. The sixth stone retaining wall here is well preserved, which is made of well-processed marlite blocks with a residual length of 41 m and a height of 1.8 m. The western section is slightly convex, and the eastern end turns southward with a residual length of about 10 m. There

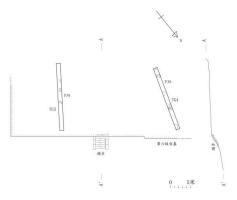


Fig. 5 Distribution map of the relics on the sixth platform

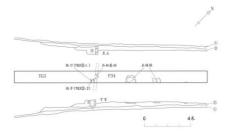


Fig. 6 Plane Profiles of TG 3 and F34

is step of seven stages in the center of the East-West stone retaining wall, and each stage is made up of two rectangular stones jointed by staggered joints. The stones vary in size, 0.8-1.5 m in length, 0.5 m in width and 0.3 m in thickness. The drooping belt stones (垂带石) on the both sides are made up of three stone jointed together, which are various in size, 0.66-1.36 m in length and 0.6 m in width. The triangular spaces (象眼石) both sides of the step are made up of three layers of stagger-jointed stones. There are three stones on the first layer, and it decreases progressively upward. The platform behind it has a depth of about 15 m and covers an area of about 1000 m². It is the sixth platform, the direction of which is 43 degree. There is a north-south ditch (TG3, TG4) on both the east and west sides of the platform, which is 16.5\*1-metre, about 25 m apart from each other (Fig. 5; Plate B-3).

TG3 is located on the eastern side of the platform, and its accumulations can be divided into three layers. A few potsherds were unearthed in the first two layers, under which ruins such as a stone ditch and cornerstones began to reveal themselves. Distributed only in the stone ditch, the third layer consists of grey brown soil and debris, including bricks and roofing tiles of different types, which were remains of a collapsed building. On the southern side of the trial ditch lies one part of a stone wall made of three layers of irregular stones. This incomplete wall, with a length of 1 m and a height of 0.7 m, is relatively smooth on the outer side where a gutter was formed, through which rainwater from the upper part of the southern end could be drained to both sides. Therefore, it is considered to be the cornerstone at the back end of the site. On the North there are 2 stone heaps of 0.1 m high, slightly circular, 0.9 m and 0.6 m respectively in diameter, with a distance of 2.3 m between them. They are inferred to have been plinths, but such construction is rarely seen in the New Palace complex. This site, marked as F34, is believed to have been a building with unclear structure. Its direction is about 60° (Fig 6; Plate C-2).

TG4 is situated on the west side of the platform, and its north end is 2 m from the edge of the sixth stone retaining wall. There are abundant relics unearthed in the ditch. The first and second layer consist of topsoil and remains of contemporary human activities, including some rubble and potsherds. A kiln site (Y4) was found below the first layer, which, breaking the second layer, should be one of later era.

It is small and might be used for charcoal burning. It hasn't been cleaned up. The third layer is the accumulation of collapsed buildings, where plenty of

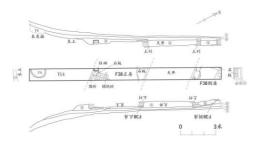


Fig. 7 Plane Profiles of TG 4 and F38



Plate D: TG4, TG5 and the relics inside

fragmented bricks, rubbles, tile-ends, ridge bricks, imperial roof decorations and potsherds were recovered. As a matter of fact, this layer is where the major relics begin to reveal themselves. The fourth layer contains yellow clay which is relatively dense and only distributed in the north end of the ditch. In it a few fragmented bricks and stones were found, and it might be bedding soil. Underneath it is virgin soil. There are also abundant traces in the ditch, with four parallel columns of cornerstones and some brick walls and paving brick floors on the same horizontal plane. The first column of the N-S-trending cornerstones is relatively flat on the south side, in the middle is a stone foundation, and on the north side is brick paved floor. The second column, on the contrary, is flat on the north and 4.75 m apart from the two outer edges of the first. The third one again has a flat south side, with a distance of 3.8 m between its two ends. The fourth column is slabs under a whole stone, which extend to the southwest corner in an irregular way. Judging from the regularity of the outward side of the foundations, the four columns of cornerstones should be the foundations of two buildings, forming a siheyuan composition (courtyard house), numbered F38. Among them, the first and second columns are listed as the front and back foundations of the F38 main house. The back walls of the main house and the indoor ground are all built with bricks. The depth of the house is 4.75 m, and the width is unknown. The third and fourth column together with the sixth stone retaining wall constitute the foundation of the opposite house, with the third column as the base of its back wall. Fine-Grained debris, such as bricks and stones are found in the fourth layer of accumulations between the third and fourth column of cornerstones doesn't contain roofing tiles, thus it should be bedding soil. The distance between the sixth stone retaining wall and southern side of the third column is 4.25 m, which is also the approximate depth of the backside building. The concavity between the second and third column should be a patio. This group of buildings were almost in the same direction with the platform. Besides the main building and backside building, there might be flanking rooms. However, due to the limited exposure of this area, it is still difficult to figure out the whole picture (Fig. 7; Plate D-1).

The two ditches excavated show that there are at least two groups of buildings on the sixth platform. The structure of F34 is uncertain for lack of sufficient proof, while that of F38 is clear, which is basically consistent with the direction of F35 on the Sangdunping.

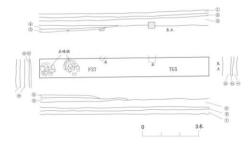


Fig.8 Plane Profiles of TG 5 and F37

"YU JIA WU JI" (F37) The seventh platform, located in the "Yu Jia Wu Ji" (the foundation of Yu's house), southwest comer of the Old Palace, is composed of three remanent stone retaining walls, forming an irregular "宀" in shape, with lower front and higher rear part. Built with irregular marlite blocks, most of them have collapsed, only some walls left, which are relatively low and rather rough. The front (north) stone retaining wall is about 1 meter high, the rear (south) one is 1.5 m high at most, both are residual about 40 m in length, the one on the right (east) is residual 23 m long and the platforem's width is about 28 m. There is a N-S ditch (TG5) of 9\*1-metre at the north of the second platform.

The accumulations in the TG5 can be divided into five layers. Scatters of relics were found in the first four layers, mainly fragments of porcelain and a small amount of rubble. Among them, the fourth layer consists of grey-brown clay with plenty of burnt soil particles while the fifth contains relatively pure yellowish-brown bedding soil. Under the fourth layer were two slightly circular cornerstone made of gravel, with a diameter of about 0.9 m and a distance of 1.3 m (center point) between each other. Sporadic rocks are scattered around. The site number of the building is F37, and the direction is about 70 degrees. There are no other building components except a small amount of rubble. The overall structure is also not clear because of the limited excavation (Fig. 8; Plate D-2).

"Yu Jia Wu Ji" is located in the southwest corner of the Old Palace, keeping a certain distance from other foundations. Its two platforms, uneven in height, the front one is lower than the rear one, are connected and in the same direction. However, the overall structure is not clear due to the destruction of the retaining walls. Its rough style seems to indicate that there was repeated construction and reinforcement in different periods. The fact that an additional cornerstone was put under F37's plinth, which also happens to Maopeng F34, but hardly seen in other buildings, makes it particularly interesting.

In addition, some stone pedestals have been excavated by local villagers in the terraced fields in front of the old mansion of Chen Liju, which were confirmed through investigations. They are small in number but large with a diameter of about 1 meter square. Sporadic stone pedestals are also found near Wang Wuzhi's old residence (formerly cultivated land), around which lots of fragments of porcelain can be found. Since no further work has been done, it

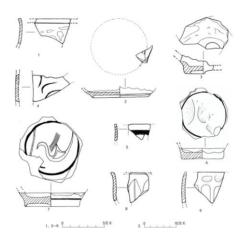


Fig.9 Celadon ware of the Southern Song Dynasty unearthed from the Old Palace

1-7. Hutian misty blue wares (TG14: 3; the Old Palace collection:10, TG473:31, TG 53:1, TG 13: 4; the Old Palace collection:17; the Old Palace collection:3 8-9. Longquan Celadon wares: The Old Palace collection 1; the Old Palace collection 2

remains to be confirmed but possibly the actual scope of the Old Palace may be larger than expected.

THE OVERALL LAYOUT Through investigation and trial excavation, the buildings in the Old Palace can be roughly divided into three groups according to the structure and direction of the platforms and the sites on them: (1) high-rise buildings constituted by the four platforms of Xinmiao (F36), where divided by three courtyards—gradually rise, steps appear in the middle of the front end, and the first platform became terrace between the step and the building. Its direction is about 15 degrees. (2) Sangdunping and Maopeng in the central area of the Old Palace, with spacious terrain and step-by-step connection between the two—platforms. F35 and F38 are similar in that both have some—cornerstones, some brick walls and paving floors with a direction the same as the platform, that is, between 42 and 44 degrees. (3) F34 and its southwestern F37 constitute the third group of buildings. They are about 80 m apart and on different platforms, but basically in the same direction, i.e. between 60~70 degrees. Both buildings bear the same features that they have cornerstones under the plinths, which is unique only to themselves.

The rear-end of the first group of buildings is about 3 m high with no footsteps, and the direction is different from that of the second group, which shows that the two groups are not on the same axis, and there should be no access to each other, thus further proves that F36 is relatively independent. Judging from the careful arrangement of space and platform, the second group of buildings should be the centerpiece of the Old Palace, where the relics unearthed are most abundant. Bricks, roofing tiles, tile-ends and other architectural materials show that the first two groups of buildings originated in the Ming Wanli period. The third group, however, has some unique characteristics that may be due to different times. F34 appears below the second layer, which is the accumulation formed by later human activities, insufficient as proof for the specific date. F37 appears below the fourth layer, which contains a large number of burnt soil particles and some few fragments of blue and white porcelains that belonged to the Ming dynasty, indicating that F37 appeared no later than the Ming. Meanwhile, a large number of the Ming dynasty architectural components such as bricks and tiles of different types were unearthed in the drainage ditch on the south side of F34, which further proves that the two should be built at the same time.

Compared with the New Palace, the overall layout of the buildings in the



Plate E: Celadon of Southern Song Dynasty unearthed from the Old Palace

Old Palace is loose in that there are no enclosed wall facilities, no unified or clear central axis, and the orientation of the houses varies with the terrain. These characteristics arise not because of being "old" and "new", but essentially due to different functions.

THE ARTIFACTS There are artifacts from most of the 8 trial ditches (TG1-TG5, TG42, TG43 and TG47) in the Old Palace except TG42 and TG43, with TG2, TG4 and TG47 being the most abundant sources. At the same time, some artifacts (labeled Old Palace Collection) are also collected on the surface or on earth steps within the scope of the Old Palace but off the trial excavation. Three categories of artifacts can be determined according to their materials, usage and chronology, namely, pottery, porcelain, stone and iron; building materials, household wares and weaponry; and artifacts of the Southern Song, the Ming and the Qing dynasties according. Most of them are artifacts of the late Ming dynasty (Longqing, Jiajing and Wanli periods), while those of the Southern Song and the Qing dynasties are fewer in number and exclusively porcelains. ARTIFACTS OF THE SOUTHERN SONG DYNASTY Only 9 pieces of celadon fragments were found, including 8 bowls and 1 plate, belonging to two kilns of Hutian and Longquan (Fig. 9; Plate E).

Hutian celadon: Seven pieces of celadon fragments were found, among which are 3 pieces of bowl bottom, 3 pieces of rim and belly fragments, and 1 piece of plate bottom, each belonging to an individual utensil.

The Old Palace Collection: 3 is the well of a bowl, it is characterized by gray-white body with blue-white glaze. Its foot ring and papillary underside are unglazed. The interior is incised with design of underglaze abstract phoenix. The residual height is 1.7 cm, with a foot diameter of 6 cm (Fig. 9-7; Plate E-1).

The Old Palace Collection: 17, also the well of a bowl, with gray-white body and blue-white glaze. The bottom of flattened foot is unglazed. Its residual height is 1.5 cm with a diameter of 5 cm (Fig. 9-6; Plate E-2).

TG47③: 31 is the well of a bowl, gray-white body with blue-white glaze. Comparatively thick, with broken ice cracks, partly green. Its foot ring is unglazed. There are indistinct incised and curved markings on the surface. The residual is 2 cm in height, 7.5 cm in foot diameter (Fig. 9-3; Plate E-3).

TG5③: 1, lower belly remnant of a bowl. it is darker bluish gray with white glaze. The inner belly is incised and curved with a residual height of 4.5 cm (Fig. 9-4; Plate E-6).

TG1③: 4, bowl rim fragment. it is gray-white body with blue-white glaze. It has flared mouth with square rim edge, which is unglazed and in purple. Its residual height is 2 cm (Fig. 9-5; Plate E-7).

TG1(4): 3, fragmented bowl rim. Gray-white body, with whitening darker bluish gray glaze and some broken ice cracks. Slight flared mouth. The outer edge of the rim is square with unglazed gray white. It is 2.9 cm in height (Fig. 9-1; Plate E-5).

The Old Palace Collection: 10, well of a plate. it is gray-white body with blue-white glaze. Only the foot ring is unglazed. Curved lines are incised at the inside bottom. It is residual 1.8 cm in height, with foot diameter about 14 cm (Fig. 9-2; Plate E-4).

Longquan celadon: Two pieces. Both are fragments of bowl rim with patterns of lotus petals at the outer side, their inside being flat.

The Old Palace Collection: 1, it is a shiny shard with dark grey-white body and thick darker bluish grey glaze. Its exterior edge of rim slightly rolls out and it is residual 3.5 cm in height (Fig. 9-8; Plate E-9).

The Old Palace Collection: 2, it has a gray-white body, its thick smooth glaze appears to be shiningly darker bluish grey. The mouth is slightly contracted. Its residual measures 3.6 cm in height (Fig. 9-9; Plate E-8).

The above nine celadon pieces, four from the ditch, and five from the farming soil near Wang Wuzhi's old residence, are all supposed to be relics of the Southern Song dynasty. However, the former was discovered in the Ming dynasty accumulations, while the latter ones were collected from the earth surface. Since no layer of Southern Song has been found in the Old Palace at present, possibly the aforementioned artifacts are handed down or left from Southern Song dynasty

Artifacts of the Ming Dynasty: The largest number of artifacts with varied types are identified produced in the Ming dynasty, including building materials, household utensils and weapons.

Building materials: There are bricks, roofing tiles, tile-end, ridge bricks, imperial roof decoration, iron nails and so on.

A certain number of bricks have been found in TG3 (F34), TG4 (F38), TG2 and TG47 (F35), which are rectangular type A bricks for wall and ground. The well-preserved bricks in F35 and F38 were put in their original state, while those disorderly piled up in each trench, totaling 27 pieces were collected. They are 27-33.5 cm long, 14-16.5 cm wide and 6.5-8.4 cm thick at a ratio of



Fig. 10 The rubbings of the tile-ends unearthed from the Old Palace

- 1. Drip tile, Type Ba (TG 3③: 11)
- 2. eaves tile, Type Ba (TG43: 16)
- 3. Roof tile end for the round tile, Type Bb (TG 43: 66)
- 4.Large ridge bricks with peony-binding decorative pattern, Type C (TG 4(3):57)

approximately 4:2:1. Among them, 25 are standard rectangular bricks (type Aa), and 3 are pillar-wrapping bricks (type Ab) with concave arc cut at one end of the bricks.

Of the 27 specimens collected, 24 were inscribed. Among them, 8 were inscribed with Chinese characters "初一号" and 16 were with "十六砖".

Roofing tiles: A certain amount of rubble was found in all the trenches, including round and flat tiles. They were all type B, no type A (the Southern Song dynasty) was found. Relatively complete specimens were small in number.

Flat tiles, 5 pieces. Discovered from TG2 (F35), TG3 (F34) and TG4 (F38), they are all type Ba small plates that underwent only one processing with natural rupture of inner wings after incision. TG2④: 21 is an intact grey brown piece. The wings are rough but the textile impression pattern is clear. It is 26.5 cm long, one end 19.5 cm wide, the other 22 cm wide, 1.8 cm thick and 5.5 cm high.

Round-shaped roof tiles, 3 pieces. They all come from TG4 (F38) and are Type Ba, i.e. two-wing tiles without second processing. TG4③: 48, broken. Grey brown. Its incomplete part is 27.5 cm long, while the head is 3 cm long, 13 cm wide, 2 cm thick and 6 cm high.

**Tile-ends:** Of the 48 pieces, most are plate tile-ends, only one for round tiles. They were collected from TG2 (F35), TG3 (F34) and TG4 (F38). Two of them were collected from Sandunping. They can be divided into two categories: eave tiles and drip tiles.

All 25 pieces are Type Ba drip tiles that featured large faces, with a design of six-petal lotus, whose leaves dancing upward from both sides are decorated with curly tendrils. TG3③: 11, its face and body are relatively intact. The 23 cm long wings underwent a second processing, with one end 16.5 cm and the other 19 cm in width, 1.6 cm thick, 5.5 cm high. Its face is 13.5 cm high, 21 cm wide and 1.5 cm thick (Fig. 10-1).

Eave tiles, 23 pieces. Among them, 22 are for type Ba plate eave tiles, i.e. six-petal-lotus-shaped eave tiles with tendrils curling to the left under the flowers, which are larger in face. There is 1 piece of type Bb round eave tile, which has a small pattern of six petals lotus encircled by a scroll.

TG4③: 16, a piece of eaves tile for flat tile with complete face but broken body. It is 16.5 cm high, 20 cm wide and 1.9 cm thick (Fig. 10-2).

TG43: 66, roof tile end for round tiles, with intact face but incomplete

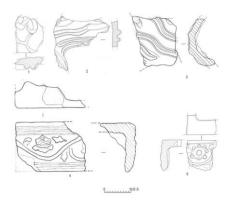


Fig.11 Imperial roof decorations and Ridge bricks unearthed from the Old Palace

- 1.Fragment of the foot of a diagonal imperial roof decoration(TG4③: 62)
- 2-3. Fragments of the tail of a diagonal imperial roof decoration (TG4③: 61, TG4③: 60)
- 4. Large ridge bricks with peony-binding decorative pattern, Type C (TG4③: 57)
- 5.Small ridge bricks with peony-binding decorative pattern, Type Fa (TG1③: 2)

body. It is 12 cm in diameter and 1.5 cm in thickness (Fig. 10-3).

**Ridge bricks:** Twelve pieces. They are all fragments from TG1 (F36), TG3 (F34) and TG4 (F38), where up to 8 pieces were exposed, the largest number from these sites. An additional one was found in Sangdunping. Except 2 incomplete pieces which are beyond recognition, the others are ridge bricks, namely large ridge bricks and small ones with peonies and twisted twigs, the former are for the main ridges, the latter for the diagonal ridges.

Large ridge bricks with peony-binding decorative pattern, 8 pieces, type C. TG4③: 57, incomplete. Grey brown. It is 18.8 cm high, 26 cm residual long and 9 cm residual wide (Fig. 11-4; Fig. 10-4).

Small ridge brickswith peony-binding decorative pattern, 2 pieces, type Fa. TG1③: 2, incomplete. Grey brown. It is residual 11 cm in height and length, 7.5 cm in width (Fig. 11-5).

Imperial roof decorations: Three pieces. Found in TG4, these fragments are decorative roofs of F38. They are roughly-made beasts on diagonal ridges (type Bc). The incomplete dragon beasts excavated in 1999 are actually roof decorations for F35, but the number and type remain unknown.<sup>1</sup>

TG4③: 62, fragment of a diagonal ridge beast with only some scales and claws remained. The grey brown residual piece is 14 cm in height, its length 11.5 cm, and its thickness 3 cm (Fig. 11-1).

TG4③: 60, incomplete tail of a diagonal ridge beast. Grey white. The beast's hair from the back neck to the tail are designed as bulgy edges, with lines carved to highlight the decorative effect. Only three bulgy edges remained. Its height, length, and thickness are 20, 17, 2.4 cm respectively (Fig. 11-3).

TG4③: 61, incomplete tail of a diagonal ridge beast. Grey white. There are still two bulgy edges. Its height, length, and thickness are 22.5, 20, 2.4 cm respectively (Fig. 11-2).

According to the colors, the three fragments belong to at least two individual items.

Iron nails: 27 pieces. They come from TG2 (F35), TG3 (F34), TG4 (F38) and TG47 (F35). They are all quadrilateral and conical, partially intact and mostly tile nails. Intact nails are (TG3③: 20) 13.3 cm in length and 0.95 cm in diameter, with head bending in the shape of "7".

It can be seen from the above that ridge bricks, tile-ends, imperial roof decorations and other building components were found in various building

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<sup>&</sup>lt;sup>1</sup> Hailongtun Investigation Group (written by Liu Shiye), Investigation Report of Hailongtun (not published), 1999.



Fig.12 Porcelains and and bronze wares unearthed from the Old Palace

- Underglaze blue bowl with the decorative design of red chicken (The Old Palace Collection: 4)
- 2. Bowl with design of overglaze red and green dragon and phoenix(TG24:20)
- Bowl with underglaze blue and overglaze red (TG47③: 30)
- 4. Plate with design of glazed peacock and green lotus petals (TG32): 2)
- 5-6. Bowls with design of overglaze red and green flowers (TG47③: 32, TG1②: 2)
- 7. Censer remnant (TG32: 1)
- 8.Bowl with underglaze blue and overglaze red design of fish (TG1③: 1)
- 9. Cup with design of underglaze blue and overglaze red flowers (TG43:29)
- 10. Cup with design of underglaze blue rabbit (TG473:5)
- 11. plate with design of underglaze blue sparrows on branches (TG47③: 16)
- 12. Bowl with design of underglaze blue flowers and fruits (TG4③: 41)
- 13. Zhuge (诸葛) Bowl (The Old Palace Collection: 20)
- 14. Copper shovel (TG14: 1)
- 15.Sauce with green glazed design of chrysanthemum petal (The Old Palace Collection: 19)
- 16. Dish with design of green peacock (TG473: 20)

sites (F34-F36, F38) other than F37, and F38 is inclusive of all types, indicating that the roofing decoration of the Old Palace is basically the same as that of the New Palace and the gatehouses of the Ming Dynasty. If the use of round roofing tiles reflects the building regulations to a certain extent (Liu Dake, 1993: 161,259), then F38 on the sixth platform should be regarded as a building of more importance in the Old Palace, with which the steps in the central platform form a significant contrast.

HOUSEHOLD WARES Household wares can be divided according to the materials, that is, porcelains, iron, copper and stone ware, most of which are ceramics.

Porcelains: According to its fineness, the porcelain remains can be divided into fine porcelain and coarse pottery. The bulk of the former consists of blue and white porcelain among others, and none of them is local product; the latter contains three or four categories, with considerable amount, mostly local products.

White porcelain, 19 pieces. Shards of bowls and dishes, they belong to at least 14 individual items. They were mostly collected from TG1④, TG2③, TG3②and TG47③, with one from the topsoil of Wang's vegetable garden. They are characterized by grey-white body and delicate white glaze, typical of Jingdezhen products.

Celadon, 3 pieces. Fragmented rims or belly of at least two bowls. They come from TG3② and TG47③. Gray-white body with blue-white glaze, they were also produced in Jingdezhen.

Green glazed porcelain (including peacock green glaze), 5 pieces. They are remnants of saucer, plate or incense burner, some of which can be restored. The glaze colors are slightly different. The three pieces in peacock green glaze are saucers or plates, while the other two in green enamel are a saucer and an incense burner.

TG3②: 2, a fragmented rim of plate with design of glazed peacock and green lotus petals. Gray-white body, irregular rim, its belly is incised with lotus petals. The residual height is 2 cm and the diameter unknown (Fig. 11-4). TG47③: 20, a dish with peacock green glaze. It has irregular rim and folded edge, foot ring and underside unglazed, with chrysanthemum petal shaped outer abdomen. The height is 1 cm, the diameter of the mouth and the foot is about 7 cm, and 3.8 cm respectively (Fig. 12-16). The Old Palace Collection: 19, a sauce with green glazed design of chrysanthemum petal, can be restored.



Plate F: Remains unearthed from the Old Palace

Collected in the gully in front of Y1, it features grayish white body with foot ring, water-chestnut-flower shaped mouth, chrysanthemum petal shaped abdomen, folded edge. It has unglazed the bottom of the foot ring and underside, and the lower bottom stamped the character "福" (meaning "fortune") as decoration. The height is 1.4 cm, the diameter is about 10 cm for the mouth, and 4 cm for the foot (Fig. 12-15). TG3②: 1, incomplete censer with gray and white body. Strictly speaking, it is green glazed pottery due to low firing temperature. Straight mouth with square edge, its belly is also straight. It is assumed to be a fragrance burner. The residual height is 2.3 cm, mouth diameter 9 cm, with a thickness of 0.6 cm (Fig. 12-7).

Colored porcelain, 7 pieces. There are three types: overglazed red and green, underglaze blue and red, underglaze blue and overglaze polychrome. They were collected from TG1, TG2, TG4 and TG47, and also one piece from the garden of Wang's residence. There are two kinds of utensils, namely cups and bowls, some of which can be restored.

TG24: 20, a bowl with design of overglaze red and green dragon and phoenix. Only 8 pieces of mouth edge and its belly remained. Rounded belly, slightly flared mouth. Both dragon and phoenix are painted in red and green on the outer belly but only part of the dragon's body can be distinguished. The caliber is about 11 cm (Fig. 12-2; Plate F-10). TG473: 32 is a bowl with design of overglaze red and green flowers. Although there are only two pieces of bowl rim left, this one is identical in design with the former one, only that flowers are painted on the outer belly (Fig. 12-5). TG12: 2 contains two shards of rim and belly of a bowl, which is similar to TG47③: 32 in style and design. The caliber is about 12 cm (Fig. 12-6). The Old Palace: 4 is an underglaze blue bowl with the decorative design of red chicken. Only one shard remained, it has straight belly and slightly flared mouth. A rooster is painted on the outer belly. The cocktail, wings and claws are painted in cobalt, and the rest is red. It is 4.5 cm high, 3.7 cm wide and 0.25 cm thick (Fig. 12-11; Plate F-8). TG4③: 29, remain of a cup with design of underglaze blue and overglaze red flowers. It can be restored. Ringed foot, straight belly, slightly flared mouth, red feathery decoration appears among blue pattern on the outer belly, slightly black. It is 4.7 cm high (Fig. 12-9). TG1 3: 1 is a bowl with underglaze blue and overglaze red design of fish, having only one piece left at the bottom. There are two circles of blue strings on the bottom of the outer belly, the fish with overglaze red on the inner bottom has only its tail left (Fig.

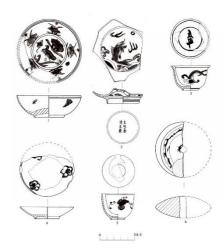


Fig.13 Blue and White Porcelain unearthed from the Old Palace

- 1.Blue and white porcelain bowl with design of lotus pond, and waterfowls (TG47③:12)
- 2.Blue and white porcelain bowl with designs of sea water and fish (TG47③:22)
- 3.Blue and white porcelain cup with the design of coiled dragons (TG47③:7)
- 4. Blue and white crude pottery dish (The Old Palace collection:18)
- 5.Blue and white porcelain cup with flower pattern (TG47③:6)
- 6. Blue and white crude pottery grinding wheel (The Old Palace collection:12)

12-8). TG47③: 30, a bowl with underglaze blue and overglaze red, having only one piece left along the mouth. Blue and white brocades are painted along the inside of the mouth, while its outer side is red (Fig. 12-3).

Blue and white porcelain. Except the above-mentioned porcelain with underglaze blue and red, overglaze polychrome and the blue-and-white coarse pottery mentioned below, the number of other porcelains is quite large. After a preliminary sorting out, 840 pieces of blue and white porcelains of the Ming dynasty were collected in the Old Palace, totaling 314 pieces of utensils, including 170 bowls, 90 plates, 53 cups and 1 Zhuge bowl, mainly tableware. Among them 32 pieces are fully repaired or repairable, including 9 bowls, 13 plates and 11 cups.

Bowls are divided into different types, including Aa, Ab, Bd, Db, Eb, Ec, Ee; plates, B, C, D; cups, A and B. The designs are inclusive of man and nature, such as lunar corona, chrysanthemum, peony, plum, orchid, grape, lotus, ginkgo, pine leaves, "福" (meaning "fortune"), "寿" (meaning "longevity"), "卍" (this swastika in Chinese culture is a Buddhist symbol, meaning "fortune"), dragon, horse, fish, crab, lion, rabbit, coiled dragon, grass insects, children play, mountain and water, eight trigrams, miscellaneous treasures, tree and stone railings, lotus pond, waterfowl etc. There are chronological years on the bottom of the two bowls, namely "大明嘉靖年制" (TG47③: 22) and "大明宣德年制" (TG4③: 41). The relatively intact or unique pieces will be introduced briefly as follows.

TG47③: 12 is a Type A blue and white porcelain bowl with design of lotus pond, and waterfowls, it has been completely restored. It has short unglazed foot ring, arc bottom, rounded belly, and straight mouth. Both sides of the bottom are glazed with double circles of blue and white, within which the inside bottom is painted with lotus branches and waterfowls. Lotus branches appeared also on the inner sides, while grass and insects on the outer sides. No inscriptions found, it is 3.4 cm high, 10.5 cm in mouth diameter and 4.9 cm in foot diameter (Fig. 13-1; Plate F-6). TG4③: 41 is a Type Bd blue and white bowl painted white flower and fruit that has already been in full restoration. With a height of 5.6 cm, its flared mouth is 11 cm and the foot ring 4.4 cm in diameter, its deep belly is wider at the lower part, with broken inner bottom. Within the blue and white double circles on the inner bottom are painted with fruit branches, while twisted flowers are on the outer wall, and the outer bottom is inscribed with the reign mark of six-character double lines

(大明宣德年制), which is not the really manufacturing time, it is a regard to early technology (Fig. 11-12; Plate F-12). TG47(3): 22, is remains of a bowl with designs of sea water and fish within blue and white double circles in its inner bottom, and the sea water design can be also seen outside near the bottom. The lower bottom is inscribed with the six-character double lines of "大明嘉 靖年制". The residual height is 2.5 cm and the foot diameter is 5.3 cm (Fig. 13-2). TG47③: 16, a fully repaired Type B plate with designs of sparrows on branches. low foot ring. The mouth is decorated with cross brocades along the inner side, and within the blue and white circle of the inner bottom remains branches design. The height is 2.2 cm, the mouth and the foot are 11.4 and 7 cm in diameter respectively (Fig. 12-11). TG47③: 6, a cup with blue and white flower pattern, fully restored. Type A, straight cup. Little unglazed foot ring, round lower belly, straight upper belly and mouth. The thin pieces have bright and smooth glaze. The outer is painted with incoherent twisted flower patterns. The height is 4.3 cm, the diam are 5.6 cm and 2.7 cm respectively (Fig. 13-5; Plate F-9). TG47③: 5, a completely repaired Type B cup with the design of a rabbit inside blue and white circle on its bottom, squatting and looking back. Its foot ring and lower bottom are unglazed. It has round lower belly and flared mouth, around which a blue and white single string is painted. The height is 3.6 cm, the diam are 6.5 cm and 2.5 cm (Fig.12-10; Plate F-13). TG47③: 7, a fully restored Type B flared-mouth cup with the design of coiled dragons. It has foot ring and round lower belly. Flowers with broken branches are painted on the inner bottom and two coiled dragons are painted on the outer. It is 4.1 cm high, 6.4 cm and 2.6 cm in mouth and foot diameter (Fig. 13-3). The Old Palace Collection: 20, shards of Zhuge (诸葛) Bowl with straight mouth. The belly is divided into two layers, hollow and glazed. The inner side is decorated with pine leaves. Its residual height is 4 cm, mouth diameter about 14 cm (Fig. 12-13; Plate F-5).

Coarse ceramics include three categories: blue glaze, brown glaze, and blue-and-white coarse pottery, the third of which were produced during the Qing dynasty and the Republic of China, thus out of discussion. The first two categories are unearthed in all layers. From the accompanying objects, the crude ceramics from beneath the third layer of each trial ditch can be identified as artifacts of the Ming dynasty, which are almost the same as those found on the surface. Therefore, except the blue and white ones, all the other groups of coarse ceramics are treated as relics of the Ming and introduced as follows.

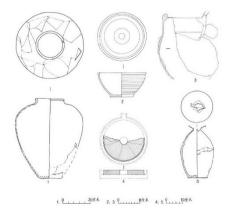


Fig.14 Household wares unearthed from the Old Palace

- Large coarse pottery pot with blue glaze (TG22:
   3)
- 2. Coarse green glazed bowl (the Old Palace Collection: 28)
- 3. Iron pot (TG24: 4)
- 4. Millstone (TG24: 6)
- 5. Coarse blue-glazed bottle (TG22: 1)

A total of 570 pieces of coarse ceramics of blue glaze and brown glaze were unearthed and collected, belonging to 68 individual items, including 48 pots, 1 vat, 4 pots, 1 bottle, 1 patra, 12 bowls and 1 spoon. This collection mainly contains large vessels, such as cans, vats, pots and bottles that are used to hold grain and wine. It is a useful supplement to fine ceramics of the same period.

TG2②: 3 is a fully restored large coarse pottery pot with blue glaze. It is characterized by flat bottom, globular body, broad shoulder, tall narrow neck, and rolled edge. Green glaze is applied both inside and outside, yellowing slightly, and circular pattern is stamped on the inner belly to strengthen the adhesion between mud strips. The height is 54.5 cm, the base diameter is 14 cm, the caliber is 18 cm, and the maximum abdominal diameter is 44 cm (Fig. 14-1). TG2②: 1 a fully restored coarse blue-glazed bottle, it is characterized by flat bottom, slender body, slanting shoulders, a waisted neck, and its edge is incomplete. Brownish green glaze is applied on the belly, its neck and bottom unglazed. The residual height is 29 cm, its base diameter 12 cm, the caliber 4 cm, and its maximum abdominal diameter is 20 cm (Fig. 14-5). The Old Palace Collection: 28 is a green glazed bowl, comparatively intact. Flat base, rounded body, its rolled edge slightly contracted except the bottom, the rest of its body is covered with green glaze, slightly yellowing. Such utensils can be used as bowls or covers of jars (Fig. 14-2).

Ironware: Only 2 iron pots can be ascertained as the Ming dynasty household ironware, which are all fragments from TG2 (4) and TG4 (3), accompanied by other relics of the same age. TG2(4): 4, only 3 pieces remain, with severe corrosion. Circular bottom, cambered body,, flared mouth, with handles. The residual height is 25 cm, the caliber 40 cm, its thickness 0.4 cm (Fig. 14-3; plate F-2).

Bronze ware: There is only one copper shovel, i.e. TG1④: 1, a slightly wide chisel-shaped copper bar with a blade at one end, forged from brass, thin, slightly curved, broken at the back end. The residual length is 15.4 cm, 1.2-2.3 cm in width, thickness 0.25 cm (Fig. 12-14; Plate F-3).

Stone ware: The only stone ware found is TG2 4:6, one piece of millstone. It is made of red sandstone, round, with shaft holes and regular shallow grooves chiseled on one side. The diameter is 33.8 cm and the thickness is 3.5 cm (Fig. 14-4; Plate F-1).

Weaponry: Only two spears and two knives were found.

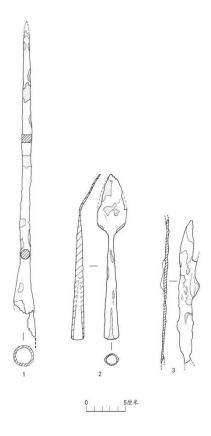


Fig.15 Weapons unearthed from the Old Palace

- 1. Type D iron spear (TG3:2)
- Type A iron spear (The Old Palace Collection: 8)
- 3. Type B iron knife (TG33:1)

TG3③: 2 is remnant of a Type D iron spear. Its blade is quadrilateral and it has a long socket, where there is residual wooden handle. the length of the remaining spear is 39 cm, the socket 13 cm, and that of the blade is 26 cm, while the widest part measures 1.5 cm (Fig. 14-1).

The Old Palace Collection: 8 is a Type A iron spear. It is characterized by leaf-shaped spearhead and slender socket. The length of the spear is 21 cm; the blade is 13.8 cm and its width is 3.5 cm (Fig. 15-2).

TG3③: 1, a Type B iron knife of straight handle. It is single-edged with straight back, arc edge, its head warping slightly upward. The residual length is 18.5 cm, width 2 cm and thickness 0.3 cm (Fig. 15-3). In the same layer, there are four iron fragments, which are very rusty and the widest measures 2.3 cm. they may also be fragments of a straight handle iron knife.

ARTIFACTS OF THE QING DYNASTY The identified artifacts of the Qing dynasty are all ceramics with a small number of approximately 30 pieces of various kinds, belonging to 19 different items. There are bowls, plates, dishes, spoons, grinding wheels and so on, with bowls as the majority, about 15 pieces. It can be roughly divided into two groups: one is blue-and-white coarse pottery; the other is blue-and-white porcelain with typical chronological characteristics. The blue-and-white coarse pottery are all found in the first two layers of the trial ditches, their glazes and shapes like those seen in the nearby kiln sites dated to the Republic of China.<sup>2</sup> Therefore, they should be products of the Qing dynasty or the Republic of China. As for the blue and white porcelain with decorations of ganoderma lucidum, camellia and Sanskrit, they are relics of the Qing dynasty. Most of them are fragments and only a few can be restored. Several examples are given as follows.

The Old Palace Collection: 18, it is a blue and white porcelain dish that has been fully restored. It was collected in Maopeng. It is a shallow wide-mouth dish with foot ring. Both its inside and outside bottoms are unglazed. The rest is glazed in grayish white while cobalt blue is applied to paint three flowers in its inner side. It is 1.8 cm high, 9 cm in mouth diameter and 4 cm in base diameter (Fig. 13-4; F-11).

The Old Palace Collection: 12 is a residual blue and white crude pottery grinding wheel, which can be restored. It was found in the vegetable garden of Wang's residence. It is cake-shaped, with thin margin and thick center, where there is a round pierce. It is incised with dark blue underglaze decorations

<sup>&</sup>lt;sup>2</sup> See findings of the investigation conducted at the Shagang Team of Gelao Village, Sanhe Town, Bozhou District on December 27, 2014.

which are difficult to distinguish its details. Grayish white glaze with ice cracks is galzed upside. The diameter is 9.6 cm and the thickness is 3.8 cm (Fig. 13-6; F-4). This piece is used to grind tea or medicinal materials, and should be matched with a ship-shaped groove, as the blue and white ship-shaped saucers found in the New Palace.

## SPECULATION ON THE DATE AND THE FUNCTIONS OF THE BUILDINGS Combining the relics with the records of related documents, we can have a preliminary understanding of the date and the nature of the relics in the Old Palace.

THE DATE At present, there are two kinds of relics in the Old Palace: stone platform and building remains. The materials and building methods of the first to sixth levels of the platform are the same as those of the New Palace and the passes and city walls in the Ming Dynasty, therefore they should be of the same date. The seventh platform is crudely built in a way, which suggests a possibility of construction and reinforcement in different periods.

Of the five building sites (F34-F38), four (F37 not included) were unearthed with building materials such as bricks, tiles, tile-ends, ridge bricks, animal imperial roof decoration. They are entirely identical with the relics in the New Palace and the passes in the Ming Dynasty with definite ages, indicating that these four buildings should be built in the Wanli Reign of the Ming Dynasty. The relics such as utensils and weapons found under the building collapse reflect the age of the building remains. Most of the blue and white porcelains with clear age information point to the Jiajing and Wanli periods of the Ming Dynasty, which correspond to the age of the building. It is clear that the buildings were destroyed in the 28th year of Wanli in Ming Dynasty (1600), so the age of the relics in the house should be no later than Wanli, and the relics before Wanli should be handed down.

Both F37 and F34 used cornerstones made up of gravel mounds, which were slightly special. The layer overlapped on them contained relics such as rubble, blue and white porcelain, which were accumulated in the Ming Dynasty. Therefore, the age of the houses was not later than that of the Ming Dynasty. As mentioned above, it is reasonable to think that F37, like F34, is also an architecture of Wanli period in the Ming Dynasty.

The relics unearthed in the Old Palace dated back to three dynasties: Song, Ming and Qing dynasties. The majority of them are from the Ming Dynasty, while there are few from the Song and Qing dynasties, which are mainly porcelain. The relics of the Southern Song Dynasty consist of nine pieces of celadon bowls and plates, all of which were unearthed in the accumulations of the Ming Dynasty or collected from the surface. At present, there are no corresponding relics found, nor the rubble of the Southern Song Dynasty (type A) and other relics found in the same period. A small number of relics from the Republic of China in the Qing Dynasty can roughly correspond to the word-of-mouth literature.

In short, all the platforms and house sites seen in the Old Palace should be the relics of the Wanli Period of the Ming Dynasty. A large number of Ming Dynasty relics unearthed in it reflect that the Ming Dynasty was the peak period of its activities. A small number of relics of the Southern Song Dynasty maybe handed down from generation to generation, nor does it exclude the possibility of relics of the Southern Song Dynasty.

POSSIBLE FUNCTIONS OF THE BUILDINGS The house sites in the Old Palace are relics of Wanli Period in the Ming Dynasty, so their relationship with the New Palace is not earlier or later, but should be buildings with different functions in the same period. At least the relics that have been exposed at present are the case. As the New Palace is the "Ya" (government office in feudal China), what kind of buildings should the Old Palace be? Possibly they are barracks, granaries and temples. However, there are few weapons unearthed in the Old Palace, so the possibility of military barracks can be ruled out.

Temple: Names of small places in the Old Palace such as "Xinmiao" (meaning new temple) and "Maopeng" (meaning thatched shed) are all related to temples, reflecting to a certain extent the fact that there were such buildings in the area, but the specific date is unknown. Sporadic records suggest that there may be other temples prior to Haichao Temple in Hailongtun.

"DONT'S Provided by the General for the People in Long Yantun" reads: "For the present, we have appointed a few officers to guard Long Yantun: a chief officer, an officer, an officer in charge of general affairs and a scribe to handle affairs; doorkeepers, warehouse keepers, household cleaners, general flag, small flag, sergeant, Miao military and surgeon, craftsmen, abbots and so on, each holding correspondent duties, and not leaving without authorization at any times." The term "abbot" refers to a Buddhist monk or Taoist priest who runs a Buddhist temple. As there were "abbots" who should not "leave without permission at any time," there must be Taoist or Buddhist temples in the Wanli

period. It can be testified by the historical writing that after the destruction of the Hailongtun at the 28<sup>th</sup> year of the Wanli period (1600), "there were 36 captives, including Monk Guangming". (Li Hualong, 2008: 112) In "Shu Zhong Guang Ji", Cao Xuequan (1574-1646) of the Ming Dynasty quoted the old records saying: Hailongtun is the fortress of Chief Yang. In the 30 miles north of the country, there was a great advantage on all sides. Later, there was a sideway. Nowadays, people do not know where to go. Therefore, according to the old legend, the former White Dragon Prince once lived there, and it is now the Bailong Temple." The same book also records: An Investigation to Historic Sites says, "There were Sanfu tomb beside Wangyu Tower in Zhao's family. According to the temple stele of Chief Yang's family, Sanfu are surnamed Zhao, from Poyang. At the beginning of Qianfu, there was the rebellion of Prince Bailong. Sanfu's father, who was a leader in the local militia, helped the Yangs to put down the rebellion." (Cao Xuequan, 1986: 249) Accordingly, the so-called "White Dragon Prince", born in the Tang Dynasty, had been in Hailongtun before Yang Duan reached Bozhou in the third year of Qianfu (876). There is no evidence that "Bailong Temple" is the newly built "Haichao Temple" after Hailongtun was destroyed. According to the local folklore, "White Dragon Prince" was a robber in Bozhou, and he lived in the area of the Old Palace.

The Records of Zunyin Daoguang period quotes Records of Qijiang County as follows: "Lu Yichong lived in Xianyuan Cave to practice Taoism. The Rebel Yang Yinglong in Bozhou wanted Taoist priests to set up altars to eradicate disasters in Hailongtun. And his way of distinguishing a true Taoist master was forcing them to hold sharp swords tightly in hands without getting hurt, claiming that the real master would not be killed. At the news, Yichong went to take the test, and the sharp edges all rolled up, thus he was chosen as a master (Zheng Zhen, 2013: 597)." This record shows that besides Buddhist temples, Taoist temple might also have been built in Hailongtun.

As for the location of these Buddhist temples and Taoist temples in Hailongtun in the Tusi era, they were most likely to be built in the Old Palace.

Granary: Under the rule of Tusi (meaning "chieftain", it is the system of appointing national minority hereditary headmen in the Yuan, Ming and Qing Dynasties), a considerable number of grain warehouses were once built in Hailongtun to store grain. According to "DONT'S Provided by the General for the People in Long Yantun", Yang Yinglong, the Tusi, took full account of grain reserves during the construction of Long Yantun, and assigned people to

transport grain to Long Yantun. They were given tickets, license to get in and out without any hindrance. And there is a special "granary keeper" responsible for guarding the granary. By the time the Battle of Bozhou broke out in an allout way, according to the estimate of Yang Yinqiu, Army Inspector of Guizhou, in *The Collection of Lingao Literature*, the grain stockpiled can support more than one year," which has been very considerable. Such a large quantity of grain requires a corresponding amount of granary for storage. How many granaries are built in Hailongtun? *A Comprehensive Book on Suppressing of the Rebellion in Bozhou* recorded as "the actual storage of rice in Hailongtun accounts for three or four thousand small and large barn rooms." (Li Hualong, 2008: 317)

The Old Palace is the largest building complex known at present besides the New Palace. Since the New Palace was the official place for the Tusi to work and live in, it is most likely that the granary was built in the Old Palace. Only here can there be space to meet the requirement of the "three or four thousand barns in size."

In addition to a large number of building components and a small number of weapons, the relics unearthed in the Old Palace are stone mills, iron pans, pots, bottles, bowls, plates, dishes and cups, which are mostly related to the storage, processing and consumption of grain. It is worth noting that the findness of the fine porcelain in the Old Palace seen in the limited excavation area is slightly lower than that in the New Palace, and no "high-grade goods" with identity symbols such as "official-style porcelain" have been seen, reflecting the fact that the status of the people living in the Old Palace is not high.

**SUMMARY** The Old Palace is the largest building complex in Hailongtun except the New Palace. Some relics are exposed to the surface, with a total area of about 15,000 m<sup>2</sup>. There were some opinions that the Old Palace was a relic of the Song Dynasty, but all the sites revealed at present turned out to be the relics of the Wanli Period of the Ming Dynasty. A small number of relics of the Southern Song Dynasty were found, all of which were pottery fragments unearthed in the late layer, which may be handed down from generation to generation, and did not rule out the possibility that there were relics of the Southern Song Dynasty.

There is no common closed wall, no unified central axis, slightly scattered, and more diverse sitting directions. Five houses can be divided into three

groups according to their sitting orientation: F36 (15°) located in Xinmiao; F35 and F38 (42°-44°) which are located on Sangdunping and Maopeng, F34 and F37 (60°-70°) located in the Maopeng and Yu Jia Wu Ji. Such a layout first reflects its different nature from the New Palace, and secondly, the use of buildings sitting in different directions may also be different. We tend to think that there may be temples (including Buddhist temples and Taoist temples), granaries and other buildings, but it is difficult to distinguish them carefully because of the limited excavation area. More in-depth understanding should be based on a wider revelation of the Old Palace in the future.

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