Roofing Materials and Spaces Hierarchy on Edo Castle, Honmaru Palace

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Abstract

Thatch, planks, shingles, barks and clay or copper tiles, a rich variety of materials has been used to cover the roofs of the buildings in traditional Japanese architecture. Most times the roofing material is associated with the building social status. A good example is the Shinto shrines that usually don't use clay tiles as roofing material.

In this paper, based on roof plans of the Edo Castle Honmaru Palace, we will see how different roofing materials were combined and used to hierarchically discriminate each space of the castle. The main document used for this study is Gohonmaru Gotenmuki Yane Ezu. Dating from 1860 this drawing shows the different roofing materials used on Honmaru Palace roofs.

According to former researches the different rooms and pavilions at Honmaru Palace were organized upon a north-south axis that divided the palace on east side, where the ceremonial rooms were, and west side where the kitchen, small offices and other service facilities were placed. There was also two east-west axis, that divided the palace on three parts, in order from north to south, the more private O-oku, living quarter of the shoguns wives, the Naka-oku, private quarters of the shogun, and the Omote, as the name suggests the official part of the castles where guest were received and ceremonies were held. Here we will see how each of these spaces was clearly identified by the roofing materials among other architectural and decorative elements.

Keywords: Edo Castle Honmaru Palace, Roofing Material, Traditional Japanese Architecture, Hierarchy

1. Introduction

Edo Castle was first built in 1606 and was the headquarters of the Tokugawa Shoguns. It was the center of autocratic centralized government for more than two hundred and fifty years. As an official Tokugawa residence, Honmaru Palace had complexes and opulent structures in which audiences were held and imperial messengers and foreign ambassadors received.

In this paper we will analyze the relation between the roof materials of the main structures of Edo castle: Honmaru Palace and its relation with the space under it. Based on drawings from the Honmaru palace reconstructions of 1845 and 1860 and researches done about how each room was used, our analysis method consists of comparing the roof plan with the floor plan, through which we will see the relation between the roof materials and the different spaces under it. The Honmaru Palace floor plan (fig.2) was drawn by the author based on the floor plan of the Koka (1845) reconstruction and the Man’en (1860) reconstruction of the Honmaru palace. The information about what kind of spaces existed in the palace and how those spaces were used is based on the vast published research works about Edo Castle and the Honmaru palace. For the different types of roofing materials the Gohonmaru Gotenmuki Yane Ezu (1860) was used.

2. Historical Context

After the Battle of Sekigahara in 1600, central authority fell to Tokugawa Ieyasu who received the title of shogun in 1603. The Tokugawa period, was based on the strict class hierarchy. A clear hierarchy of social ranks was set forth, and status differences between the Tokugawa shogun and the daimyos and among the various daimyos were established. People were classified according to occupation, and in this social class hierarchy system the warrior-caste of samurai was at the top, followed by farmers, artisans, and traders. The rules settle how each class should dress and build their homes, for example commoners were forbidden to construct a shoin. Architectural restrictions were very detailed. People were supposed to live in houses that
reflected their social status.

Edo Castle was composed of many buildings, built with the huge economical resources of the Tokugawa bakufu regime and by the best technicians with the latest building techniques of the time. However the buildings no longer survive there is many historical sources, such as the Kora family drawings, and varies research works done based on diaries and similar documents about the castle.

Almost all the buildings in the Edo castle complex were built in the shoin style. In this style the most important part of the residence was the Ohiroma, which was a formal reception hall.

There exist also an extant research work based on diaries, from which we can understand how the different spaces in the castle were used and what kind of changes they suffer during the Edo period.

3. Gohonmaru Goten muki Yane Ezu

This is the main document of this analysis. In this drawing we have the roof plan of the Omote and Naka-oku part of the Man’en period Honmaru palace. Different roofing materials are expressed by different colors, together with detailed specification about the size and type of the tiles (fig.2). Seven different kinds of roofing materials were used. There are two kinds of cupper tiles; two kinds of clay tiles, shingle and planks are also used (fig.3). The pavilions in red, basically the ones at the west side of the palace, have a cupper tile roof, with tiles of the concave and convex type with 1/7 of ken (1.8m) size. The Ohiroma also has a cupper-tiled roof, but its tiles are bigger than the used at the other pavilions, they have 1/5 of a ken size. The pavilions in blue, basically the ones on the east side of the palace, have a clay-tiled roof, with tiles of the concave and convex type. The Tozamurai and the Kitchen building have tiles bigger than the other clay tiled buildings, with 1/5 of a ken size. The No stages, represented in yellow, have a plank roof while the little teahouses, on the Naka-oku part and colored orange, have a shingled roof. In conclusion this drawing give us a precise idea of the roof typology and the roofing materials of the Man’en period Honmaru palace. This drawing has been recently repaired by the Tokyo Metropolitan Library, and is disposible on the library net portal.

4. Edo Castle spatial organization

The Honmaru palace was the main residence of the Shogun. It was composed of three parts: Omote, Naka-oku and Ooku. Omote was the most official part of the palace, reserved for ceremonies and receiving guests and women were not allowed to enter. Naka-oku was the shogun private quarters, where the Shogun spent most of his time. It was at the naka-oku that the Shogun worked and controlled the government. O-oku was the ladies quarters where the shogun wives and kids lived. In these quarters no men were allowed. The officials that worked at the Omote were not allowed in the
Naka-oku and vice-versa (fig.1).

The Omote main buildings were: Ohirma, Shiro-shoin, Kuro-shoin. The buildings were placed on zigzag like, progressing from south to north (fig.1). These building had a roof coverd of cooper tiles, similar in shape to the traditional hongawara clay tiles. The Ohirma tiles were bigger than the tiles used on the other pavilions. The Ohirma tiles had 1/5 of a ken sized while the tiles of the others pavilions were 1/7 ken size. Corridors and waiting rooms connected these buildings. The rooms reserved for the shodaimyou and shoyakunin when in the castle were located on the east side. Further east were the called small rooms (kobeya), which were the offices where the officials of the bakufu worked. The access to those rooms was made trough the gates called nandoguchi and nakanokuchi. The officials, who had a kobeya, except from officials from far countries, mainly were officials that had to be in the palace everyday. These buildings on the east side of the Honmaru -Omote palace had a roof covered with clay tiles. The roof of the Tozamurai (entrance hall) and the kitchen had distinct type of clay tiles, which were bigger than the other buildings, which were of 1/5 ken size.

Ohirma was the most important reception hall in the Honmaru Palace, Edo Castle. Among the pavilions composing the Omote the Ohirma had the highest position in the status rank, hierarchically, the Shiroshoin was the second in importance. Both rooms were not used for daily or trivial ceremonies. These rooms were kept for special occasions. On the contrary the Kuroshoin, Gozanoma and Gokyusoku were rooms used daily by the shogun, among these rooms the Kuroshoin was the one with the highest status.

The Matsunoroka or Pine Tree Corridor was the corridor that connected the Ohirma to the Shiroshoin. The corridor was situated on the west-south part of the Honmaru palace, along the inner garden between the Ohirma and Shiroshoin, across the garden from the Yanaginoma (fig.1). On the west side of the corridor, the side opposite to the garden, there were several rooms. The corridor had a cupper-tiled roof, apart from the rooms on the extreme south end of the corridor, which had a clay-tiled roof.

Along the corridor there were two very important rooms, the Shimoheya and the Gosankeheya or Kamihaya. These rooms were where high rank of daimyos sat during ceremonies and events. The roof of the corridor was covered with two different types of roofing materials, clay and cooper tiles. Different kinds of roofing materials were used to discriminate the spaces. Cupper tiles were used in hierarchically high ranked rooms roof while the clay tiles were used for hierarchically low ranked rooms.

In the Yanaginoma and Tsuginoma rooms sat Sotozama Daimyos of the rank four or lower, with their servants. Consequently this was not a room for hierarchically high status daimyos. It had a cupper-tiled roof.

The Shiroshoin together with the Kuroshoin were the Shogun’s guest’s rooms and were used mainly for audiences with the shogun. The Shiroshoin was used for more official audiences while the Kuroshoin was used for daily audiences, more trivial ones. The Shiroshoin and Kuroshoin both rooms had a cupper-tiled roof.

The Goyohoey was composed of two rooms, the Kamigoyoheya, which was the Roju’s office, and the Tsugigoyoheya that was the Wakatoshiyori’s office. These offices were situated on the borderlines of the Omote and the Naka-oku. Two different types of roofing materials were used. The rooms on the west side had a cupper-tiled roof while the rooms on the east side had a clay-tiled roof. The hierarchically high rooms, such as the Kamigoyoheya and the Zashiki had cupper-tiled hipped-gabled roofs. The intermediate rooms, as in the case of the Okugoyuhiitsu room or the Tsugigoyoheya room, had a cupper-tiled hipped roof. Rooms that were hierarchically low, as the Nakano, had a clay-tiled hipped roof.

The kobeya literally meant small room. Those were the office of the different departments and commissioners of the bakufu regime. Near the Nakanokuchi gate were the offices of the official that worked at the Omote part of the palace, such as the Zaikibugyo, Sakujibugyo, Kinbutsuhan, Kojuningumi, Koshogumi, Okukoshogumi, while near the Nandoguchi gate were the offices of the officials that worked near to the Naka-oku part of.

Fig.3. Gohonmaru Gohentn-muki Yanezu Roofing Materials specifications
the palace, such as the Sobashu, Wakatoshiyori, Sobayonin, Kanjonakanoma etc. Each of this rows
The Naka-oku was the shoguns private quarters. Here were located the shogun’s working office, living room and bedroom. The main rooms in the Naka-oku were the Gozanoma, Gokyusoku and the Gokozashiki. Apart from these rooms there were several services rooms, such as bath facilities, servants offices and even a No stage to entertain the Shogun.

The main characteristic of the Naka-oku was that in the contraire of the Omote part of the palace, the Nakaoku changed according to the shogun necessities. Every time a new Shogun took posse the Nakaoku plan was altered to better fit the new shogun life style.Here the main rooms, such as the Gozanoma, most on the west side had cupper tiled roof. The baths and other service space had clay tiled rooms, and the No stage was the only structure in the castle with plank roof.

3. Conclusions
Edo Castle Honmaru palace buildings had a complex roof form and floor plan. The roof material was related to the building social and historical context. The strict hierarchical system, the status differences between the daimyos and officials composing the government was expressed trough the roofing materials, sitting position and by the whole architectural details of the buildings themselves. The variety of roofing materials was great. In Honmaru palace buildings seven types of roofing materials were used. There were two kinds of concave-convex cupper tiles, a big type with 1/5 of a ken size and the smaller type with 1/7 ken size. Two kind of concave-convex type of clay tiles, a big type with 1/5 of a ken size and the traditional type with a 1/7 ken size. Cypress shingles (kokera) and planks (kunugi) for covering the roof were also used on specific buildings, such as the No stage.

The west side of the palace had the reception halls, in general the more important buildings. On the east side of the palace were the administrative spaces, such as offices (kobeya) and service space, kitchen, servants’ quarters etc. The rooms on the west side had cupper-tiled roof. Among them the cupper-tiled roof of the Ohiroma pavilion had the big type of cupper tiles. The rooms on the east side had clay-tiled roofs. Among these pavilions the Genkan, Tozamurai, Toranoma and Omote Daidokoro had the big type of clay tiles, distinguishing them from the other rooms.

In resume different roofing materials were used to differentiate the spaces. The hierarchically highest space, Ohiroma, had the big type of cupper tiles. The high and middle high rank of spaces, such as the Kuroshoin, was on the west side of the plan and had cupper tiled roof. The service spaces, on the east side of the palace had clay tiles. Here Tozamurai-Genkan and the Kitchen, had bigger clay tiles, differentiating them from hierarchically lower spaces with the roofing material. However there were structures in the Castle that did not participate to this hierarchical rank. These were mainly spaces for the entertainment and relax of the shogun, such as No stages and teahouses. The No stages had planked roofs while the teahouses had cypress-shingled roofs.

4. References
1 The Kora drawings for the Koka and Man’en reconstruction of Edo Castle can be found in great amount at the Tokyo National Museum and at the Tokyo Metropolitan Library.
2 Koka 2, (弘化2年) 1845 Reconstructions of Honmaru Palace after it had been destroyed by the Meireki fire.
3 Man’en (万延元年) 1860 Reconstruction of Honmaru Palace
5 「御本丸御殿向屋根絵図」, 616-01, Tokyo Metropolitan Library
6 Shoin style is a style of residential architecture, which reached maturity at the end of the sixteenth century, characterized by asymmetrical grouping of buildings in landscape setting, with interiors chambers furnished with tsuke-shoin, tatami mats, tokonoma and chigaidana.
7 Hirai Kyoshi and Ito Ryuichi, Edojo 1:Jokaku-Samurai Yoshiki Kozu shusei, Tokyo: Dainihon, 1992 p.239
8 Wild goose formation because the situation of the buildings looks like to the birds formation when flying side by side
9Fig 2: Gohonmaru Ohiroma Goyane Misutoriezu 「御本丸大広間御屋根水取絵図」 Doc. Number 6172-13, Tokyo Metropolitan Library
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