THE STRUCTURAL AND ARTISTIC RESEARCH OF CHINESE QING DYNASTY ROYAL BUILDING—DAZHENG HALL

PENG YE

ABSTRACT: Dazheng Hall is located at Shenyang imperial palace East Road, it is one of the most representative cultural relic of Chinese Qing Dynasty Manchu Royal buildings. It belongs to a different timber structured beam frame system, but its helmet roof is the unusual octagonal pavilion roof, and the structure of the beam and bucket arch are different from other traditional Chinese buildings. The decorations of the building are special and typical. During the beginning of Qing dynasty, Nuerhachi presided at building the Dazheng Hall which preserved the traditional cultural royal construct. The type of the building is open which has been carried on the tent-like, and the environment maintains the order of precedence as a hunting trip place, they all have remarkable aged and cultural characters. It is one of the only left ManQing Dynasty construct among a good many Chinese palace constructs. This article has tried to make a generalization study from many angles such as historical document and archeology, building environmental plan, technology of structure design and the art of decorative composition, etc.

KEYWORDS: Dazheng Hall  Shenyang Imperial palace  Qing Dynasty royal palace  Structural design  Architectural arts

1 INTRODUCTION

Dazheng Hall was first built in 1625. It is the typical example of the early Manchu Kaiserdom building in the northeast China. It constituted the national characteristic rich architectural composition with the periphery appurtenance combination. The construction structure and the style design and the construction environment retain the folk custom custom extremely the practical function, all remains in the present China and even the world cultural relic construction unique.

2 THE DAZHENG HALL IS NVZHENZHEN LOMBARDIC’S OFFICIAL CONSTRUCTION

Dazheng Hall is the earliest construction of Shen Yang Imperial Palace, while the whole Shen Yang Imperial Palace was constructed in year 1625-1783, endure for 158 years continuance. Dazheng Hall is the only topic building that Shen Yang Imperial Palace programmed first, is also be the building of the palace attic type of having obvious Qing Dynasty race characteristic which located in imperial palace east road. Therefore, Dazheng Hall became the building of the race of the original favor that reserved at the earliest stage, with the square of the open type, and eight ensign King pavilion office construction distributed in the square, really reflected the comprehension of building and its function of the king of Nvzhen lombardic before invaded the Shanhaiguan, the strengthen relation between the royal building and citizen building.

2.1 THE ORIGINS OF THE DAZHENG HALL

At the beginning of Dazheng Hall be named “big yamen”, the Manchu language said that “yamun”, established in the Tianming 11 years (in 1626), that is “every on fifth day collection having emperor relation and minister entered yamen one time ......Ordinary handle official bussiness work place . The institute, the folk custom of feast restrict the style and standard modality of congstruction. The space mete of Dazheng Hall occupied modelling stocky and massiness, constructs the constitution with eight ensign king pavilion office building square interactive the coordinated relations, is hardly peculiar in the world has the prairie style army corps lineup embattle function construct in ManQing dynasty, is also the out of the
ordinary imperial palace type symbolic model construction. Dazheng hall belongs to octagonal assemble the sharp type pavilion construction style, its helmet roof different with the ordinary foursquare accumulates the sharp type pavilion, being the tou-kung the construction constitute is specially, and has obvious Qing dynasty national characters. According to scholar Tongyue textual research: Dazheng hall is a rebuilt construction and its transplant the liao yang capital the main construction part that the octagonal assemble sharp roof. Get through 18 months assembling being completed. Liao yang capital is the Nvzhen lombardic Han king palace before they migrate to shenyang. Trace the ManQing original ancient city Hutu-Ala, whose the building of “Han king palace” and “yamen”, its all still follow tradition, natural, simple, capacious and exoteric, the country building and the citizen house are not have obvious boundary fix sign. whose building form and environment layout are keep the primitive convention, Whose abiding by the early phase of Manchuria rudiment country that be provided with building a characteristic. At the same keep to a circumscribed space or area.

2.2 TO SERVE AS EVIDENCE OF DAZHENG HALL HISTORY

Prove that according to the historical document and on-the-spot inspection: Contrast with the the later period Nvzhen lombardic inchoate programming for shengjing palace (now is shenyang palace Museum) construction group to the Nuer-Hachi kaiserdom where the Liaoyang ancient city “ Liao east regime capital yamen” locus Nvzhen lombardic architecture, that validate Ming dynasty write “ The whole Liao dynasty history picture and document” those bear the weight of passes relation of the Nvzhen lombardic architecture. The earliest smriti relation that Nvzhen lombardic capital, palace and chamber, overpass archaeology complementarity and “Man lombardic character old file” literature recordation, that by clear up the ancient city layout and construction, without exception differentiate in focus remarkable descenibility factor.

3 ENVIRONMENT LAYOUT AND BUILDING SPACE OF DAZHENG HALL

3.1 ENVIRONMENT LAYOUT OF THE DAZHENG HALL

The building space of Dazheng hall composited simple and clear, the main successor of the eight ensign local stratocracy government architecture sculpt. Dazheng hall locate at the axis of the center in the square, pavilion-style buildings on both sides of the subsidiary in turn to the external expansion, symmetrical arrangement of the formation of “\( \Lambda \)"-shaped layout, is the nomadic camp felt immobilized account type. In the meantime, both sides of the 10 King pavilions to point in the form of linear arrangement. The form in the space implies the radiation form, division of a defined space and field, making the visual sensory comfort and wid.

If standing in the square outside their front door as a starting point, you can directly feel the entire square and its subsidiary buildings are under the control of major policies and DazhengHall, on both sides of the king pavilion building with the major building Dazheng hall formation of a huge palace exclusive space, while the entire space is open and spacious, connectivity, construction aggregates. Careful observation is not difficult to find in the Dazheng Hall of the close quarters bound within and the space element to further reduce, but find outstanding expressional in the platform on both sides of the separation of the two stone lions south, this group of stone carving art of the modeling work, which enriches the Dazheng hall spatial level, but also makes the floor lifted higher to form, come into being artifice transition of the open space between the Dazheng hall and the square, the clever transition, constitutes a continuous construction combination.

Figure 1: Dazheng hall's airscape

3.2 BUILDING SPACE OF DAZHENG HALL

The combination of Chinese classical buildings group have a guide line is “ a unit of length for hundred is shape, a unit of length for thousand is vigour” interspace layout. This concept reflects the effect of the ancient building in space required by the basic predicable. scilicet, among the buildings group the contrast between the hypotaxis and contrast dialectic relationship. Concretely said, the “shape” and “vigour” constitutes a plane in space, including depth, width and elevations including height, and appreciation of those who position and distance, should follow the principle of such a spatial scale of control. The meaning of the principle are: partial or details of the spatial composition, the wonderful and the appreciation of detail often is the close to see and short particularity building. Moreover, collectivic or profile composing the space usually is far-sighted and lofty building that in order to outline vigour, run-through macroscopical recept on vision.

Field observations confirm: From the Dazheng Hall of the farthest distant point of view was observed that, with the observer the nearest and the furthest away from the Dazheng hall’s the colour is blue ensign king pavilion
office, the angle of view is 59.6 °, fits well with the human visual comfort, the maximum value of 60 °. The most distant Dazheng Hall of the level of political perspective was 8.16 °, slightly larger than the limit angle 6 ° visual angle. Dazheng hall building height 17.64 meters, 10 king pavilions height of 8.69 meters, it is obvious that the outbuildings height can be seen only a main of building height 1 / 2, which give prominence to Dazheng hall to center position and the absolute height command of the entire square building complex special effects. In addition, standing on the edge of the platform observing Dazheng hall, this distance is 20.53 meters, its level of angle of view is 45.48 °, vertical viewing angle of 26.17 °, this set of data show that the platform is absolutely necessarily essential outbuilding for supporting Dazheng hall architecture group. This is the best point of view of enjoy, you can feel the subsidiary king pavilion beleaguer around the Dazheng hall. The primary and secondary buildings defined the relationship between monarch Majesty's noble and humble understrapper refracted through the construction of the standard out, which is the particularity of the Chinese royal architecture.

Figure 2: Dazheng hall main view

Spatial scale of the grand, magnificent, Dazheng hall and the square of the distribution of subsidiary buildings, forming the principles of this vision lies in the design of space, reasonable use of the principles of science perspective. Concretely: The Hall of the Dazheng perspective the focus of the eight ensign king pavilion, on both sides of symmetrical rehearsal gradually increasing the distance between to form a radial outward expansion, both showing an inverted trapezoidal space. Dazheng hall’s position highness, and His Majesty's outbuildings contrast to constitute the membership of the primary and secondary relationships, effective communication of the concept of the feudal hierarchical social classes. The more close to the major political hall of this building from the more closely the composition of way, naturally on the fit of the "Λ"-shaped arrangement of the building combination. Although each building between East and West are in a level line, but in the north-south arrangement of the secret is gradually alienated from near by the location of individual buildings to inform its arm of the eight ensign king right and the central government's of lineal descent and the genus distance affinities.

4 THE BEAM OF THE DAZHENG HALL SYSTEM AND ASPACE STRUCTURE

Dazheng Hall is the Manchu royal building, larruping. The first, the base part of the Dazheng hall is stone platform is higher than the 1.7-meter XuMi station base, making the total construction carried to 21 meters high. The base four-stamp all have step, East and West side is 9 step, north is 12 step, the south is 15 step and of the middle of two groups have stone carving with dragon and cloud, the meaning is the road go through the platform for monarch only. The second, the elevation isn’t use traditional Ying-shan style, but assimilate Han Lombardic construction model, the selection save octagonal sharp brim superpose pointed assemble helmet roof style pavilion. This style of architecture in the Qing dynasty mode is extremely rareliness, is Nuer-Hachi of the eight ensign system and barback felt canopy type building be reluctant to leave objective reflection. Dazheng Hall of the load-bearing depend on circularity columniation, a total of up to 9 meter, pointing at the sky-line roof, sum to eight.. the columniation outer coloured drawing or pattern gold dragon, outer brim columniation at a distance from fan door, periphery assistant space and inter determinative space composing the imperial space and minister space. In order to architectural beauty of harmony and unity, the braring columniation leech on to configurable ornament composition, showing that the original space, rugged., tall, natural beauty, and in this form-to-edge width of 6.7 meters of the octagonal-shaped core space. The roof indoor along with outdoor sharp slope roof changes, flexible ceiling plane gradually rising from the four corners to center, culminating in the highest point of the roof with the peculiarity of the structure become a special decoration. Just like the gothic church dome fresco. From the Dazheng Hall outer brim corridor to the height point, that height in ture is 6.6 m, 9 m, 10.5 m, 12.5 m. Profile can be seen from the perspective of indoor and outdoor descending arranged in three space area, is 6.28 meters wide × 12.5-meter-high vertical in the nuclear space; 3.2 m wide × 9 meters high around the subsidiary space; and 1.6 m wide × 6.6 m-high outer space.

Figure 4: The roof of the Dazheng hall

The beams frame of the Dazheng hall structure is the outer brim columniation support to eaves outer columniation support the top eaves and eight inner
Dazheng Hall’s architectural decoration is distinctive. Unique one, vertical ridges in the department are equipped with Tartar who shaped architectural elements. Tartar people of different imaging features were to pull his arms like. 0.3 m in the Tartar people at the front, while a bronze sword Fang Ji Pantile inserted within the top of the hanging as a fixed Po copper chain, pray for building a solid long-term ding. Tartar of them wore a blue gown, the right to pay high tariff collar, waist Zhaixiu mouth, wearing a steeple hood, foot high-Yao leather boots, the Department of the typical Mongolian dress. Unique two, many of the dragons the National Palace Museum in Shenyang decoration, only see the two is a python pattern (four claw dragon) pattern, the rest are dragons. According to the provisions of Ming and Qing Dynasties, only the emperor was allowed to monopolize the use of Ipomoea dragon design pattern. The dragons in front of the Dazheng Hall’s sculpture is vivid, fierce and unusual has become the visual symbol for the construction. Unique three, Dazheng Hall and the surrounding buildings of subsidiary colors. Dazheng Hall of the main colors rich with warm brilliant red, yellow, blue, green in color, with the quiet elegance of the subsidiary king pavilion, in sharp contrast to color. Dazheng hall is a red pillars, doors and windows, yellow glazed tiles, green painted green, slate-gray and dark gray brick road, white fences and outbuildings white marble sculpture of a gray facade, but also have formed a strong chromatic aberration. The Outer of the Dazheng hall sculpture golden Dragon, cornices beast and his best description of sensationalism and the outbuildings to form cold-based minimalist bright colors. All the architectural color, including architectural elements painted and the detail of their emphasis on accessories, all in the main building for the portrayal of the object, while the remaining buildings are surrounded by Dazheng hall designed, simple and practical.

6 CONCLUSION

The Dazheng Hall is China's northeast last remaining ancient symbol of an independent body building, also the ancient chief executive, political, judicial, meetings, Banquet and other important events. Dazheng Hall's architectural style, is a nomadic, hunting and fishing people felt the architectural style of account-type conversion to the performance of brick-wood structure forms, but overall is still the architectural style of wooden structures. Construction helmet is yellow glazed tile roof laid mosaic of green cutting edge, yellow symbolizes the Han civilization and nomadic farming, fishing and hunting and other ethnic minorities green fusion of civilizations. Dazheng Hall of the interior affairs, inlaid with Mongolian and Tibetan Lamaism respected peoples and their Sanskrit smallpox, while Wai Yan doorpost is a pair of gold exploration circling Claw grab beads shaped sculpture Tenglong fully demonstrated to the north-east of national unity from the mixed integration of ideas. Hall is a major political Tibet, Mongolia, Manchu and many other ethnic architectural advantages of a Manchu royal pavilion-style architecture remaining examples.

REFERENCES