

Jingdezhen Plate on Technology

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Abstract. Jingdezhen dish of longgang ancient site architecture is a set design and practical, the nature and the humanities to show the unity of nature and landscape in the world. Ancient site construction mainly concentrated in its practical function, scientific JieGouMei, and the beauty of its unique material, this article mainly through the above several aspects to analyze the beauty of the dish of longgang ancient site architecture design technology.

Architecture is the perfect combination of art and technology. Building development largely depends on the development of architectural technology, architectural technology is to create new forms of power, is a major means of building use function, also is building new ideological trend of active factors. Construction technology of beauty, refers to the full use of every technology provides the possibility to deal with construction, and try to make art, or make the combination of technology and art both harmonious aesthetes Wang Chaowen once pointed out: "building aesthetic characteristics is mainly on the basis of the special material and technology to establish the form structure embodies the modelling of beauty.

The beauty of the ancient site construction technology shows the uniqueness of its construction technology. It can from its construction the use of functional, structural and material adequately.

1. The function of practical beauty

Function of beauty is human in the broad range of production time to create the beauty of a physical entity; Is intuitive form embodies beauty; Is also reflected by the construction materials and structure of the beauty. Function the technology in material goods the dominant. Especially in building more embodies the combination of functional and artistic. Ancient site construction of this functionality in the ceramic workshop, in the town of kiln, dwellings, ancestral hall and other buildings are fully reflected.





Figure 1, jade ITO patio photography

Figure 2, hall patio photography

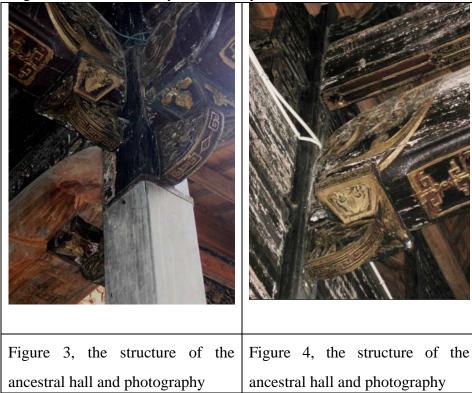
The ancient site of the residences and ancestral temple buildings, the central hall USES the atrium structure. Patio is the main part of the first hall, in addition to the courtyard has the function, such as lighting, ventilation, drainage or housing function extension and indispensable supplement. This kind of structure and courtyard TianJingShi there's a difference, patio is the internal space of the building itself, looking down from the sky, like to open a mouth of the well (see figure 1). The



patio groove depth for 30 centimeters commonly - 40 centimeters, some built column board around on the patio, known as "sinkhole" patio ditch. Because TianJingShi local-style dwelling houses of roof slope inward tilt, rain water flow to the patio, with "four water to hall" concept, nature constitutes the structure of "sinkhole" (see figure 2). Patio groove is made of high quality green flag to build more, patio also embodies the aesthetic characteristics of Chinese traditional thought nature round place. Beautiful patio these functions is building function. And as ceramic workshop building of the function of "stone" is a kind of bearing structure, because it is short to the wall bearing, the weight of the eaves is bound to fall as we, the function of the stone is the ability to strengthen we carry out the eaves, at the same time put on the roof beam, the weight of the step by step a step by step to the stigma, so as to reduce the force of the beam direct contact.

2. The scientific JieGouMei

JieGouMei contains support in the sense of building structure, the supporting structures to form, and provide the required to use a function space, therefore its structural system and structural form of building strength, stiffness, durability and stability factors.



Such as: the ancient site in the construction of the beams, dou Gong, posts, etc have no timber frame through artistic processing is to show wood mechanical properties and unreserved exposed, this constitutes the JieGouMei of its architecture. The roof structure is also rich and colorful. The ancient site of the ancestral temple architecture (see figure 3), the wall using the grid layer upon layer overlay, the superposition is strong strong and has a good sense of rhythm; Stone carvings and brick carvings of build by laying bricks or stones and building lintels collage into design, every part of the pattern of composition form is by the sizes of the stones and bricks of corresponding, this cohesion both showed a flat picture composition, and show a three-dimensional space. Between each block stone and stone, stone and brick on the structure of connect produce beautiful geometric patterns, it was shaped five-sided structure and embodies the formal beauty of lintel, is the structure of the full performance of beauty. Like: ancestral temple building hall adopts ChuanDouShi architecture and lifting beam frame, the combination of the workshop building adopts ChuanDouShi architecture, ChuanDouShi architecture is also called the "post", using small fir, fir straight and insect-resistant eat by moth, produced in the south, by columns, fang, dou fang, fiber, rosewood, etc. With wear fang penetrates each pillar of roof truss, each article tan directly on the



stigma, instead of bearing beam, the bent frame to fight between fang and fine son wearing each other, pull up, formed the overall framework. Workshop of this ChuanDouShi framework are even form the uniformity of the harmonious beauty, and to support the role of the roof.

3. The unique material

China will always referred to as the "xing" civil construction activities, visible "soil", and "wood" is one of the main building materials. Related to soil building materials "rammed earth", "adobe", and the "earth brick" and "natural stone"; Related to wood materials include all kinds of "wood", "bamboo", even "straw", "mud", etc., one of the material properties and soil and wood is "recycled". Masonry class building materials, though not easy to return to nature, because of its durability is strong, generally can be reused.

Construction of the ancient site construction technology is adjust measures to local conditions, local materials. Using local materials, plant, building materials, ceramics, etc., also is the local technology to build model. Local technology to build model is based on traditional social productivity construction technology, main is a kind of passive ecological adaptation technologies. In the aspect of building materials, local materials, technology, economy, and the combination of art. Such as Tibet local-style dwelling houses, mountain dwellings, with thick, stocky local stone to create simple, dignified, straightforward style of folk houses. The dai in yunnan, southwest minorities, such as using local abounds in bamboo, wood, etc, create graceful beautiful bamboo house, wooden diaojiao building etc. Characteristics. These come from the folk, embodies the working people living characteristic of construction technology, is one of the most ecological connotation of green building technologies. Jingdezhen ancient site construction is not exceptional also, for the use of building materials also reflected the artistic features of local local materials. This performance at the ancient site building material with other ancient buildings in addition to using the same beam structure of wood, stone and brick carving, grey model and also fully combined the jingdezhen ceramic materials for decoration use. Like the ancient site building brick and other building brick is not the same. Here is used to build by laying bricks or stones wall brick is jingdezhen brick, referred to as the brick kiln (see figure 5). Kiln room, rooms, houses, roads, Wells, walls and other widely used ceramics production industry "junk", brick kiln, sagger, pad cake, backfilling, etc. Formed jingdezhen ancient site construction unique aesthetic taste.



Figure 5, the kiln brick wall







Figure 6, sagger garbage can photography | Figure 7, garbage can photography

The ancient site of the building material beauty, on the other hand also reflected in the garbage can beautify the built environment (see figure 6). Plate of longgang environment elegant, quiet, not only in the ancient site and environment coordination, clean. The roadside garbage can also become a beautiful scenery line, bright because design and production of the material is different. Using ceramics, brick kiln, sagger, pad cake and backfilling materials for decoration and uniqueness. These details further shows the jingdezhen unique architectural environment design.

4. Garden of formal beauty

The ancient site of the building from the aesthetic appearance, its form mainly has beautiful line (see figure 8, 9), the graphic beauty (see figure 10, 11), shape beauty, light and shadow color beauty (see figure 12), and so on several aspects. Jingdezhen porcelain kiln in the long-term system of labor practice, in accordance with the law of form conforms to the features of beautiful shape the landscape shape, thereby further found out the regularity of formal beauty.





Figure 8 lines beautiful photography

Figure 9 line beauty photography

1, porcelain making process is the main theme to express the beauty of garden landscape of the ancient kiln, porcelain making is the center of gravity or key of space composition, also play a leading role, the rest of the sun pond and bask in billet just foil or foil effect. Such priorities, bring out the best in each other, can coexist in the composition of unity. So the whole ancient kiln



landscape composition and local should be subject to this problem.

2. Porcelain making craftsmen are often revolve around a porcelain making process as the main body and thus for the series of porcelain making activity, resulting in a symmetrical and balanced composition of porcelain manufacture. This is a composition law to express the beauty of landscape, it is a system of porcelain production line as the axis, forming around or up and down on the amount of equality. It is porcelain craftsmen in the long-term social practice activities, by itself, observation on the surrounding environment and the law of structure embodies the thing itself a way to comply with the rules of formal beauty exists (as shown in figure 10, 11).





Figure 10 equilibrium composition

Figure 11 equilibrium composition

The first, is in a memorial garden or greening of public buildings and classical garden before pairs of stone lions, locust tree, even the road on both sides of the street trees, flower beds, sculpture, and so on are used to take static symmetry to composition, especially in ancient kiln scenic spot to visit the roadmap to axis as the center, under the condition of relatively static, left, right or upper and lower symmetry form, in making porcelain craftsmen and tourists psychology is characterized by stable, solemn and rationality is one of the ancient kiln content to express the beauty of landscape.

The Secondly, as shown in figure 14 to sit in the bodhisattva as as the center, around the decoration is a vase, and as a balance in the triangle. This form tend to give visitors the feeling of psychological stability; And as (figure 13) on the ancient kiln porcelain making roadmap to asymmetric balanced layout from trees, scattered rocks, natural pools; To the whole garden green space, the layout of the scenic spot. Such a tiring system porcelain craftsmen and tourists, free and relaxed, lively, the feeling of change. Therefore ancient kiln scenic area is widely used in gardens recreation of natural style. In ancient kiln scenic composition form beauty, often also mean the center composition method is adopted, namely interesting emphasizes a view composition center, this is ancient kiln landscape setting the bank kiln kiln group, make bank kiln a tendency toward electromotive force, to obtain a new equilibrium.

5. Conclusion

to sum up, traditional jingdezhen porcelain making workshop is one thousand which is made porcelain culture and an important part of practical experience, jingdezhen ceramic culture exists in the whole ecological landscape pattern, reflecting the relationship between landscape pattern and ecological environment and its scale conversion, is in the air, the category, quantity, structure, and sequence of interactions, in which people constantly improve the mechanism of the ecological landscape, the laws of nature forms, realize ecological efficiency and social effectiveness are consistent, to achieve a high degree of unity of economic development and environmental protection. At the same time embodies the jingdezhen craftsmen fully adapt to the local natural environment and humane environment makes sustained jingdezhen special regional culture.



Jingdezhen in long-term production of porcelain manufacture practice, create the traditional handmade porcelain workshop. Either plane or space have been making full use of, sufficient to meet the hand round porcelain making production needs, reflected the wisdom of jingdezhen craftsmen.

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References

- [1] xiu-mei wu "system of inheritance and change: the republic of China jingdezhen porcelain development research, Beijing: guangming daily press, 2012.
- [2] various ge armoured with "design art ten speak" jinan: shandong pictorial publishing house, 2006.
- [3] liang sicheng "Chinese architecture" Beijing: China building industry press, 2005.
- [4] Dai Wu three "the well after the jinan: shandong pictorial publishing house, 2005.
- [5] Chang Huaisheng building environment psychology, Beijing: China building industry press, 1990.
- [6] Liu Duizhen "Chinese ancient architectural history" Beijing: China building press, 2001.
- [7] lixin li "the design of art research methods" nanjing: jiangsu phoenix publication medium group fine arts publishing house, 2010_{\circ}

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