Study on the Aesthetic Implication of Wooden Architecture of Dong Nationality

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Abstract
Traditional dwellings with high regional artistic expression, is an important carrier of China 's national culture, regional characteristics, ethnic customs. The wooden architecture of the Dong Nationality 's residential houses originated from the southern stilt-style architecture. Its unique construction technology is a treasure of national culture. Studying the aesthetic implication of Dong residential buildings will help people understand Dong culture more deeply. From the perspective of artistic aesthetics, this paper makes a detailed study of the dwellings of Dong people from five aspects: the environmental beauty of man-nature harmony, the beauty of building materials, the beauty of structure, the beauty of architectural skills and the beauty of culture. Hope to help readers understand the spiritual core of Dong culture, to better protect the Dong residential buildings wooden.

Keywords
Dong Nationality; Residential Buildings; Art Aesthetics; Construction Craftsmanship for Timber-framed Structures of Dong Nationality

1 Introduction

Habitation custom is one of the important material cultures of human beings. The habitation custom of each nation is closely related to its geographical environment, national changes and traditional culture. Dwellings across China are the most basic type of residential buildings. Dwellings refer to the living environment including houses, and thus expand outward.

The development of the Dong nationality has a long history and originated from the ancient ethnic groups in southern China. The Dong people are mainly distributed in the three provinces of Guangxi, Hunan and Guizhou. Due to the rich timber resources in these areas, the Dong people

have skillfully borrowed natural resources, thus forming a unique “love wood complex.” The wooden architecture of the Dong nationality 's residential houses originates from the Dong nationality's “wood-based” construction concept, which makes the settlement vernacular landscape and nature coexist in harmony [1]. Dong nationality wooden architecture has a very high scientific, aesthetic, historical research value, but also contains such a rich national cultural elements. This article from the perspective of artistic aesthetics, respectively from the environmental beauty of man-nature harmony, material beauty, structural beauty, architectural beauty, cultural beauty of the five aspects of the Dong nationality 's residential buildings detailed study. It is hoped that it will help protect the wooden buildings of the Dong people and understand the spiritual core of the Dong culture.

2 The Environmental Beauty of Man-Nature Harmony

In the long process of historical development, the Dong Nationality have always emphasized the idea of “harmony between man and nature”, emphasizing the harmonious coexistence of man and nature, man and environment, man and society, man and nature. In the way of “building blocks to make houses,” the Dong Nationality's houses embody the principles of respecting nature, conforming to nature and demanding a certain degree, thus forming a rural landscape with national characteristics. From the location of the Dong houses, it can be divided into four categories: flat dam type, valley type, ridge type, foothill type. Through the collection and collation of Dong villages, the conclusion is: four categories reflect the Dong Nationality's “local conditions” and “conform to nature” design ideas and aesthetic characteristics [2].

Most Dong stockades are close to the surrounding water system, and have the basic structure of facing south by mountains and rivers, which is conducive to the production and operation of traditional agricultural production, forestry, animal husbandry and fishery. This is consistent with the traditional Chinese fengshui theory, highlighting the “living and nature, heaven and humanity” the same idea. Dong villages surrounded by mountains and rivers, beautiful scenery, lush, ecological and environmental integration, forming a good spiritual space. This livable and beautiful environment, making the Dong Nationality in the survival and aesthetic reached a harmonious state [3]. This simple concept of indivisibility between man and nature has been well reflected in the village buildings of the Dong nationality. They have a clear concept of feng shui, pay great attention to the good and bad of the environment, to the layout of the village, recognize the natural ecological restrictions on the living environment, understand the good and bad of the environment is related to the fate of the villagers, the future fortune and misfortune, family prosperity and social security ; from the village buildings, drum tower layout, wind and rain bridge layout, etc., all reflect the “environmental beauty of man-nature harmony” idea.

3 Beauty of Materials

The beauty of materials is not the value of materials, but the beauty of service function. The Dong Nationality still retain the wooden structure of the ancient ethnic groups of hundreds of years and thousands of years ago. According to their own ideas, living habits and needs of life, they transform it into a village with reasonable layout, unique structure and self-sufficiency, which is integrated with the beautiful natural environment around them to form a perfect combination of nature and humanity.

Dong Nationality is located in the subtropical region, abundant rainfall, warm and humid climate, hot and humid summer, sunny winter. Because of the fog, there is little sunshine here, suitable for planting crops and trees. Rich forest resources here, fir is the most important necessities of life Dong Nationality. Due to the limitation of economic, technical and other factors, the ancients in order to create a suitable for the local climate of the house, it must be based on the local climate, the use of the underlying overhead structure of the Dong building, on the one hand can play a moisture-proof, avoid direct contact with the wet soil, on the other hand, the roof of the towering eaves and prominent hanging feet can also effectively prevent rainwater into the room, make it more suitable for the local climate ; the second is to increase the height of sight, increase lighting and ventilation. Local climate plays a decisive role in residential building technology and spatial modeling [4]. The Dong house building has obvious ethnic customs. The wood used is mostly cut down by the Dong people themselves. The simple treatment of the surface with tung oil basically does not need to be painted, and rarely painted to show the texture of the wood itself. Interior wood flooring, construction is simple, fast, revealing the texture of the logs, elegant and beautiful. The roof is made of cyan tiles, with local clay, integrated with the surrounding environment. The residential buildings of the Dong people generally adopt the construction technology of the primitive era, such as compaction with wooden boards, or interlayer technology, combined with bamboo vines and loess to form partitions or walls, which effectively block the humid weather of the mountain and make it have unique material texture. The production of the wall is also very simple. Generally, it is based on blue stone, slate, stone, etc., and some families use stone as tiles to give a unique feeling.

4 Aesthetics of Construction

The buildings of the Dong Nationality have adopted exquisite and scientific wooden structures. The ancestors of the Dong people have transformed them into the present stilt-style buildings according to their own needs, and their structures have been transformed to meet the various uses of the Dong Nationality.

The Dong nationality is a self-proclaimed “dry” ethnic group. “Dry” means to surround with

branches, stakes and other obstacles. “stilt-style buildings” is the “house” of the ancient Dong Nationality. After a long period of development, it has now become a unique “stilted building” of the Dong Nationality. Stilted building is a typical Dong folk house. This stilted house still maintains the traditional style of the ancient Yue people. Most of them are three or three storeys of the outer corridor building, used to store wood, feed, livestock ; the second floor is the place to live, with bedrooms, guest rooms, halls, kitchens, and a fire hall. There is an altar in the hall, with bedrooms and kitchens on both sides, and pig pens and cattle pens behind the cabin. Today 's Dong stilted buildings are all Chinese fir structures. The columns are made of wood and connected by mortise and tenon to form a whole frame. The first floor of the stilted building, which used to be mostly fence-like bamboo to maintain the surrounding wood, has now gradually evolved into a brick wall and a brick wall. This stilted building is different from the stilted buildings in other places. Its floor is not completely suspended, but one side is built directly on the ground. And Dong Nationality stilted floor residential, if the house floor and the ground is basically the same, then take a layer of overhead structure; if it is located on a hillside or riverside, because the foundation and the foundation are not on the same horizontal line, it should take the form of a stilted building, and the suspended part can be supported by wooden piles. Therefore, the stilted building of the Dong Nationality has both the structural characteristics of the stilt house and the form characteristics of the stilted building. From here, we can see that the unique stilted building-style stilt houses, not only to meet the residential terrain undulating topography, but also clearly show the unique regional characteristics of the Dong Nationality. Dong Nationality in the long-term production and life, their own values, ideals, moral beliefs and national spirit skillfully integrated together, forming a unique Dong architectural culture. For example, the Dong Nationality advocate stability, harmony, and standardized social rituals. Therefore, the Dong craftsmen follow the principle of balance and symmetry in modeling, and adopt a variety of combinations of compositions to form a proportionally coordinated, regular and perfect architectural modeling art.

The spatial order of Dong Nationality’s architecture is a cluster form developed from plane depth. The reason for this phenomenon, on the one hand, is due to the gravity limit of the building structure, on the other hand, it is also because of the Confucian’s thought. Even the pagoda that must be extended upwards has reduced its elevation on multiple horizontal lines. Due to the Confucian “neutralization” thought, the tone of its architectural art is “harmony”. Indoor closed indoor space combined, tortuous sense of hierarchy, soothing architectural rhythm and stable natural architectural design, so that people have a cordial, warm and comfortable aesthetic psychology.

5 The Beauty of Architectural Technique

The construction techniques of Dong Nationality wooden architecture include both practical and spiritual values. Its architectural form is mainly in the form of wooden frames such as Beam lift

type, Cross-bucket type and Well dry type. The construction of wooden buildings of the Dong people does not require drawings. Only by craftsmen using artisans and bamboo sticks as the main tools and other auxiliary tools can form a complete set of architectural methods. We call this method real-scale construction [5]. When the Dong carpenters build houses, they can accurately locate and measure only by a ruler. After several craftsmen communicate with each other, they have a construction plan. The villagers work together, and self-made saws, axes, planers, drills appear on the scene. One piece of wood becomes square and round, one piece of wood becomes uniform in size, and one piece of wood becomes strong and firm. Dong Nationality settlement wooden buildings are mostly upper and lower penetrating through the overall framework of the Cross-bucket type system, the use of “overall vertical” structure. The stilted building wood structure has good seismic capacity, convenient construction, flexible space layout and detachable characteristics. The wooden structure houses of Dong nationality are based on mortise-tenon joint. Mortise and tenon joint is a common process of ancient Chinese wood structure. It is characterized by simple geometric form of mortise and tenon joint. Mortise and tenon joint structure is used to strengthen wood structure without carving, which fully demonstrates the civilization and wisdom of ancient China. Whether it is the construction of drum tower, wind and rain bridge, or residential buildings, from the construction site selection, construction, column, beam to completion, people have to hold a variety of blessing ceremony, Dong villagers collective participation, which in turn reflects the Dong people attach importance to unity, seeking the value of cohesion.

6 The Beauty of Culture

There is a rule in the architecture of the Dong Nationality that it is built around the drum tower, like a spider web, which is radial. The drum tower is a unique folk building of the Dong nationality. It is a symbol of national unity and national spirit. Surrounded by Dong Nationality drama building, wind and rain building, drum floor, etc., constitute the center of social and cultural activities, is the heart of dong village. Whenever there is a major event, the village people will gather here to discuss, or every New Year 's Day, the village people will wear Chinese clothes, playing here, singing and dancing, massive momentum. In order to meet the special needs of villagers at the entrance and tail of the village, many villages have built wooden village gates at the head and tail of the village to meet the special needs of villagers to send guests and make friends with songs. The gates of the village are different in shape, some like archways, some like pavilions, some like promenades, and some like flower bridges, which embellish the Dong villages. This unique public building, although not residential, is indispensable for the Dong Nationality with residential houses as the main body. Dong Nationality’s house, usually to find qualified elders to inspect the foundation, it is best flat terrain, mountains, sitting north toward the south, well-ventilated place. Dong Nationality build houses, usually to find experienced elders to see the foundation, the best is a flat terrain, surrounded by mountains, sitting north facing south, good ventilation. Things toward the house are rare. Tra-

ditional building materials are fir, pine, bamboo, thatched, brick, lime and so on. In recent years, some places began to use new building materials such as steel, cement, paint, tile, glass, etc.

In addition to residential construction techniques and rituals, the decoration, layout and daily living customs of the Dong traditional houses reflect profound traditional ethnic culture. The stilted building of the Dong nationality mostly adopts Chinese fir. It usually has two or three floors, with partial buildings at both ends. It is cantilevered layer by layer from the bottom to the top, forming a small appearance. As the Dong settlements are mostly mountainous and rainy and humid climate, in order to prevent the invasion of moisture, poisonous snakes and insects, the bottom of the many empty people, only used to raise poultry, placement of firewood, placing tools and heavy objects. The second floor is the main use layer, which is the place where the Dong family eats and lives. It is composed of halls, corridors, bedrooms and so on. Interior bedroom, outsiders are generally not inside. The outside of the bedroom is a hall with a fire pond. The whole family cooks and bakes here. It is spacious and bright, with sufficient light and good ventilation. The family mostly does manual work and rest here. It is also a place to receive guests. The other side of the hall is a wide corridor connected to it. There is a half-height railing outside the corridor, and a large row of benches are built in. The family often rest here, and this is also the place where the Dong daughters dress up. The third floor is the attic floor, which is spacious and ventilated and dry. It mainly stores grain or stacks sundries. Some people 's homes will be divided and arranged to separate one or two rooms for children. The unique stilted house of the Dong nationality is not only suitable for the local warm and humid rainy climate and the undulating geographical environment of the mountainous area, but also has a very beautiful appearance [6].

7 Conclusion

Dong residential buildings are bred in the fertile soil of traditional culture. It is a kind of national architecture with profound cultural heritage. In addition, Dong architecture can be said to be a living fossil of the ancient architectural culture and technology of the Central Plains in some aspects. Row after row of stilted buildings around the majestic drum tower, wind and rain bridge in the stream on the head of the dragon, the village pavilion, mountain streams and rivers reflect each other, forming a unique village landscape style. They fully reflect the simple and natural spirit of Dong people, showing the exquisite architectural techniques and unique aesthetic taste of Dong people. This provides a valuable reference for the study of architecture, ethnic folklore, art aesthetics and other fields. Dong dwellings are an important part of Dong traditional architecture, a great contribution of Dong Nationality to China 's architectural culture, and a treasure of China 's national culture. When we proceed from the perspective of artistic aesthetics, combined with the surrounding mountains and fields, we can see that the Dong settlement buildings composed of individual buildings, and the humanistic features and regional artistic expressions formed by them complement each other, which deepens people 's perception of nature and provides an excellent example for the study of

architectural art aesthetics.

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