Research on Inheritance and Application of Traditional Architectural Elements in Rural Architectural Design

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Abstract: Under the influence of the general trend of globalization, the exchange and sharing of information has become increasingly frequent, and the cultural influences between different regions and the regionality of buildings seem to be weakened accordingly. There is nothing wrong with the idea of pursuing industrialization, efficiency, modular building development forms and new technologies, and simple antique buildings also have conflicts with modern lifestyles. Based on the basic concept of traditional architecture, combined with case analysis of the practical application of traditional architectural elements in traditional rural architecture, it promotes the sound development of modern rural architecture.

Keywords: traditional architectural elements, beautiful rural construction, inheritance and application

1. Introduction

Beautiful countryside is an important carrier of rural culture, and the essence of rural revitalization is to return to the countryside. The 19th National Congress of the Communist Party of China officially wrote the "Rural Revitalization Strategy" into the Party Constitution, and the construction of beautiful villages has become an important part of the grand plan of building a beautiful China and creating an ecological civilization. However, due to the rapid development of economy and culture, urban architectural elements began to influence rural architecture. On the one hand, a large number of shoddy "foreign buildings" have appeared in traditional ancient villages; on the other hand, the traditional buildings after renovation are seriously lacking in local characteristics, and few residents go there, which leads to serious hollowing of the buildings. Therefore, how to revitalize the countryside through design, rebuild the aesthetic system of rural architecture, and let the countryside find cultural self-confidence is a difficult issue in the construction of a beautiful countryside.

The beauty of the countryside is the regional beauty created by the unique natural environment and rural life. In the construction of beautiful villages, the unique architectural style of traditional buildings can reflect the spiritual outlook of a village and even the cultural heritage of a nation. The in-depth exploration, reference and inheritance of aesthetic elements in traditional buildings can enable modern buildings to have richer aesthetic forms, which is of great significance to modern architectural design practice activities.

2. Main features of traditional architecture

Traditional architectural culture is a complex element system, each part of the overall construction of functionally interdependent, are structurally interconnected. Compared with modern construction projects, Chinese traditional buildings have very distinctive features, which are mainly manifested in the following aspects:

2.1 Group layout

Traditional buildings are good at borrowing the concepts of neighborhoods, alleys, and courtyards in the courtyard system, paying attention to spatial rhythm on the basis of satisfying functions, and creating courtyard spaces with group aggregation and a sense of belonging. The traditional building groups are

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laid out overall along the longitudinal axis and the horizontal axis. The left and right sides of the central axis are arranged symmetrically or evenly, and the courtyard is used as a unit to expand horizontally, with doorways, corridors, and walls. These divide the whole building into several but interconnected courtyards.

2.2 Natural materials

"Do what you can" in traditional Chinese thought summarizes the ecological thought of making full use of local resources, seeking truth and being pragmatic in Chinese tradition. Most of the building materials such as wood and stone are directly taken from nature, and have the ecological properties of taking and using nature. At the same time, the ecological nature of traditional building materials is also reflected in the level of sustainable use. Traditional local materials can be directly used in production activities after simple processing, which is also a concrete manifestation of the ecological adaptability and practical connotation of traditional building materials.

2.3 Aesthetics of traditional building decoration

Architectural decoration elements usually refer to the specific parts of the exterior or interior space that beautify the building. The decorative elements with good meanings enhance the overall visual beauty of the building to a certain extent, give people a strong visual impact, and broaden the extended vitality of the building. Traditional architecture pays special attention to this aspect. Craftsmen decorate structures, cornices and furniture by hand-carving and painting, which mainly focus on mythological stories or realistic content. The unique decorative patterns also bear the special aesthetic function of architectural art, demonstrating the profound cultural connotation of traditional architecture.

3. Case study of traditional architectural elements in rural architectural design

3.1 The organic combination and contrast of the "Old Winery Reconstruction" rural architectural group

In the design work "Old Winery Reconstruction" located in Qingyuan Village, Dayi County (Figure 1), it is designed to face the dilapidated red brick and wood structure winery and auxiliary rooms, fermentation tanks, and abandoned distillation tanks and other facilities and equipment. The team put forward the design idea of "light intervention and localization", and planned the overall architectural layout more rationally on the premise of preserving the original buildings. The auxiliary building on the west side has been transformed into the daily activities and office space of the Maker Academy; As an extension of the leisure reception space of the main building, the auxiliary building on the east side was transformed into a reception cafe; The auxiliary rooms on the south side are used as supporting spaces such as kitchens, toilets, and storage rooms.

Under the organic combination and contrast of the architectural groups, the transformed overall building becomes an independent but connected part, showing the relationship of multiple changes and progressive layer by layer, reflecting the depth and breadth of ancient architectural planning and design.



Figure 1: The old winery reconstruction

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3.2 "Bamboo Art Village" The multiple functions of the external surface of the building

With the development of new technologies and new materials, the emergence of new building materials such as steel structure, concrete, and glass redefines the building structure and fundamentally liberates the structural load-bearing function of the outer skin of the building.

Located in the Bamboo Art Village in Daoming Town, the village is simple and rustic, is a typical representative of Tianfu Linpan, and has a strong original intangible cultural heritage-bamboo weaving. In the overall architectural design, the bamboo forest is used as the prototype, and the topological shape-finding technique is used in combination with the different functional requirements of the building. The the local traditional small blue tile roof (Figure 2) and bamboo mold concrete wall(Figure 3) are used for the surface decoration to give the village an architectural style with contemporary aesthetic connotation, forming a skin form with rhythm and texture, making the building perfectly compatible with nature.

As the first business card of Bamboo Art Village, Bamboo Art Village will periodically carry out special activities. The production, processing and consumption of bamboo weaving are fully displayed and taught here. Not limited to tradition to look back, but also show the open attitude about the future.



Figure 2: The blue tile roof



Figure 3: The bamboo mold concrete wall

3.3 The obedience of the architectural aesthetics concept to nature in the "Exhibition Center of Agricultural Science Base"

There are many specific architectural element symbols in traditional architectural design in China, and these symbols can reflect traditional cultural information to a certain extent.

When designing the Exhibition Center of Agricultural Science Base (Figure 4), the designer did not

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adopt a simple "usage doctrine" style of imitation tradition, but conducted in-depth research and analysis on the characteristics of its stilt style architecture. The most important elements are extracted and modernized in the design process. The ground floor is elevated as an open planting exhibition space, the facade of the second-story building is composed of glass curtain walls and steel structural rods, and its construction form has been consciously designed with aesthetics.



Figure 4: The exhibition center of agricultural science base

Architecture is the product of the times and the carrier of human thought and culture. German architect Gropius believes that true tradition is the product of continuous advancement. Its essence is movement. Research is not static and stagnant. Tradition should push people forward. Breaking the current uniformity of architectural design, drawing inspiration from traditional architecture and historical culture in different regions, and enhancing the ornamental and artistic features of buildings on the premise of satisfying the use of building functions, so that modern buildings present a more colorful aesthetic form

4. The enlightenment of the application of traditional architectural elements to the construction of beautiful villages

With the continuous development and change of social economy and technology, the lifestyle of rural people has also given birth to new living space needs, and the spatial form is constantly changing. The space of traditional buildings will inevitably not meet the needs of contemporary villagers. How to carry out the transformation of rural architecture in the pace of the times is particularly important. Inheriting and promoting traditional Chinese culture is the responsibility and obligation of every citizen. The use of traditional architectural elements should be combined with the characteristics of the current era and be improved or optimized with new ideas and methods. Relying on the innovation of traditional architectural culture to express the humanistic emotion of the village, design modern buildings with national characteristics that meet the characteristics of the times and the diverse needs.

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