

# Research on the application status and countermeasures of traditional architectural elements in architectural environment design

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**Abstract.** Traditional architectural elements carry our excellent traditional culture, contain rich connotation, and are the valuable wealth of modern architectural environment design research and reference. However, the application of traditional architectural elements in the architectural environment design has some problems, such as homogenization and does not reflect the connotation of traditional architectural elements. The effective integration of traditional architectural elements and architectural environment design is of great significance to the development, inheritance of traditional architectural elements and the development of architectural environment design engineering. On the basis of understanding the design characteristics of the architectural environment art, this paper analyzes the current situation of the traditional architectural elements in the architectural environment design, and puts forward the countermeasures to effectively integrate the traditional architectural elements and the architectural environment design. In order to combine the traditional architectural elements with the development needs and use functions of architectural environment design in the new era, enrich the connotation of architecture and improve the artistic aesthetic level of architectural environment design.

## 1 Introduction

The influence of foreign architectural concepts has had a certain impact on traditional Chinese architectural culture in China's architectural environment art design, failing to reflect the value between the inheritance of current ethnic culture and modern architectural culture. To address this issue, attention should be paid to promoting the inclusiveness of traditional architectural culture, using traditional architectural elements to flexibly apply in modern architectural structure, spatial layout, structural design, decorative techniques, etc., and using the cultural heritage of traditional architecture to meet the diverse needs of current architectural environment art design. Traditional architectural elements are rich and colorful, is an indispensable part of the architectural environment design, with high application value. In order to fully reflect the traditional architectural elements, designers need to constantly improve their cultural connotation and cultivation, and to have a deep understanding of the connotation of the traditional architectural elements. At the same time, designers should have a pioneering spirit, actively integrate the traditional culture into the modern architectural environment design elements, and create excellent buildings with harmonious coexistence with them. Future architectural design should actively use the traditional architectural elements to open the development road of environmental architectural design, so that the traditional architectural elements can continue to develop.

## 2 Characteristics of architectural environment art design

### 2.1 Integrity

Due to significant cultural differences in traditional architectural design, it indicates that traditional architecture combines a large number of diverse cultural attributes, and the characteristics of cultural differences vary significantly due to regional differences.

There are certain differences between it and other building facilities, especially in the elements of building management, style, and decorative design; This cultural difference cannot be imitated by competitors in market competition, based on existing data In order to improve the overall aesthetic feeling of the architectural environment art design project and bring good visual effect to people, we should take into consideration and focus on the overall and local design of the building<sup>[1]</sup>. People's first impression of architecture often determines whether to continue to look closely at the architecture and deepen their cognition of the architecture<sup>[2]</sup>. Therefore, we should pay attention to the overall design of architectural environmental art. Therefore, in the artistic design of the architectural environment, we should pay attention to the overall atmosphere of the architectural environment, consider the architectural

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conception in an all-round way, master the structure of the building carefully, and make the most appropriate design.

## **2.2 The attention of personality design**

At present, China's personalized design in the creation of architectural environment art is still in the initial stage, and the conceptual design of all levels of architectural environment design is not perfect, and some architectural environment designers have not mastered the method of how to combine environment and engineering<sup>[3]</sup>. However, environmental architectural design needs to pay attention to the coordination of engineering and environment, realize the unity of architecture and environment, and improve the overall harmony of the building environment<sup>[4]</sup>. Under the impetus of the development boom of the construction industry, the architectural design concept is constantly updated. In architectural design, we should pay attention to the architectural function design, to meet the current people's needs for architectural functions, to show the design level of designers through the use of artistic elements, to ensure the consistency of the building and the environment<sup>[5]</sup>. With the diversification of art, the environmental architectural design develops from the direction of diversification and realizes the harmonious development of the architectural environment art design<sup>[6]</sup>.

## **3 The application status of traditional architectural elements in architectural environment design**

### **3.1 Outdated design concept and single design means**

The concept of architectural environment art design will be updated with the development of the society<sup>[7]</sup>. At present, China attaches great importance to the inheritance of traditional culture, so the architectural environment design will focus on exploring how to use the traditional architectural elements for the architectural environment art design, so as to make the architectural environment more beautiful and achieve the purpose of inheriting and innovating the traditional excellent culture<sup>[8]</sup>. However, some architectural environment art designers do not take the initiative to update the design concept, still use the old design concept, or blindly pursue the western architectural design style, resulting in the design method is too simple, difficult to meet, should be the social people to the more diversified use of building needs<sup>[9]</sup>. In some buildings, designers can keep up with the development of The Times, but lack their own thinking<sup>[10]</sup>. They mechanically adapt the traditional architectural elements into the design scheme, so that the traditional architectural elements are not fully applied, and the architectural environment design lacks characteristics.

### **3.2 Insufficient use of traditional architectural elements**

Designers do not pay enough attention to the integration of traditional architectural elements into architectural environment art design, and few traditional architectural elements are reflected in the design scheme of architectural environment art. Therefore, the modern buildings are very rare to reflect the traditional architectural elements<sup>[11]</sup>. Once the few buildings with the traditional elements are destroyed, they will hinder the inheritance and development of China's traditional culture. For example, Fujian Tulou and Anhui Hongcun are both representatives of traditional architecture in China<sup>[12]</sup>. However, local residents have a low understanding of architecture and do not protect them as a key traditional culture, which leads to the destruction of such precious cultural heritage<sup>[13]</sup>. In some areas, the thinking mode of the personnel of the architectural environment art designers is relatively old<sup>[14]</sup>. In the architectural environment design, there is no reasonable use of traditional architectural elements, which makes the use of traditional architectural elements in the architectural environment design less and less, which is not conducive to the inheritance of traditional excellent culture<sup>[15]</sup>.

## **4 Application countermeasures of traditional architectural elements in architectural environment design**

There is no doubt that traditional architecture is the earliest cultural heritage of human beings, and the renewal and iteration of architectural forms reflects the development of human society. Integrating traditional architectural elements into the architectural environment art design, reasonable use of traditional architectural elements, innovating the architectural environment design, providing new ideas for the architectural environment design, at the same time plays an important role in inheriting China's excellent culture, so that the excellent traditional culture can get new development.

### **4.1 Simulation of traditional architectural elements in the architectural environment design**

Simulation construction can generate the traditional elements that architectural designers want to apply, which can be directly applied in the architectural environment design. Because the simulation is convenient and easy to build, it is favored by designers. Designers can simulate building design elements used in a variety of design scenarios, such as interior display design, with lasting appeal objects reasonable layout, can increase the culture of the environment, the overall environment style will not produce greater influence, let people get a new feeling, at the same time also can resonate with the Chinese excellent traditional culture<sup>[16]</sup>. In addition, in the architectural environment design, designers use the architectural design needs in advance, analyze the differences between the new building and the traditional construction, in the specific practice, appropriately integrate the traditional architectural elements, improve the humanity of the building, and meet the

needs of users. Color is the basis of all art design, but also an important part of the architectural environment art. The collocation of architectural color affects the overall effect of architectural design. Color has the function of transmitting emotion. The use of color in Chinese traditional architecture is very rich, including black, bright red, vermilion, yellow, white, gray, purple and so on<sup>[17]</sup>. Different colors represent different meanings, such as bright red means festive; purple means noble; white. Designers can simulate the construction of different colors to build buildings, use them in the architectural environment art design, use traditional architectural color elements to enrich the cultural connotation of the building, innovate the architectural art design, and show the unique cultural and artistic style of the region. Designers can choose colors according to the needs of the design building. For example, office buildings can choose colors with low purity and sedate. Entertainment-based places can use rich colors to highlight the theme of "entertainment", which has an important impact on people's inner emotions.

#### **4.2 Abstract expression of traditional architectural elements**

Traditional architectural elements can be used in the architectural environment art design, innovative architectural environment art design. Designers can use information technology to express the traditional architectural elements, refine and process the traditional architectural elements that want to be used in the art design of architectural environment, simplify appropriately on the basis of not affecting the original connotation, enrich the expression form of architectural elements, and optimize the visual image of the architectural environment design method. Designers can use metaphorical techniques to express traditional architectural elements, add traditional architectural elements in the design process, retain the characteristics of traditional architectural elements, and integrate traditional architectural elements into the architectural environment design in an abstract form, which is conducive to the recombination of traditional elements<sup>[18]</sup>. The style of traditional architectural elements will not be seriously affected, but is presented to the public in a new form. This way improves the visual image of the architectural environment design scheme, and improves the design level of the architectural environment design. For example, when using the decorative patterns of traditional buildings, it is necessary to consider that different regions and different ethnic groups have different ethnic decorative patterns, which contain different cultural connotations. It is precisely because of the wide sources of traditional architectural elements that the traditional architectural decoration patterns are very rich. The decorative patterns used in Chinese traditional Tujia buildings are very diverse, including Han, money, bat, dragon and phoenix. The common decorative patterns of traditional Tibetan architecture include Dapeng, dragon, lion and so on. The Dong people often use traditional decorative patterns including gourd, copper coins, fish feet and so on<sup>[19]</sup>. All ethnic groups will use the historical legends handed down by the means of carving as the decorative patterns of the building to increase the

flexibility of the building. In the process of architectural environment design, designers can simplify and redesign the traditional national architectural decorative patterns, and retain the representative elements of the traditional decorative patterns while innovating the decorative patterns. In the process of architectural environment design, animals and plants can be fully used, using carving, painting and other forms in the environmental design, fully showing the artistic charm of traditional decorative patterns.

#### **4.3 Strengthen the integration of traditional architectural elements and modern design**

In the new development stage, in order to enrich the artistic connotation of architectural environment, to strengthen the integration of traditional architectural elements and modern architecture is the inevitable trend of architectural design. Traditional architectural elements and modern architectural environment design are interdependent, so attention should be paid to the integration of traditional architectural elements in architectural environment design, improve the cultural connotation of architectural environment design, and promote the development of modern architecture in China. After determining the main design tone of the design of the architectural environment, traditional architectural elements can be added to highlight the Chinese architectural style and make the building show a new form<sup>[20]</sup>. The expression of the meaning of traditional culture in regional ancient architectural culture is based on the design and expression of symbolic symbols. The transition from culture itself to architectural culture requires a process of thinking transformation, which involves the transformation of consciousness, thinking, and expression methods. The expression of traditional culture in regional ancient architectural culture is generally divided into two levels. One is the extensional level, which expresses the explicit cultural factors in regional traditional culture. With the help of pattern patterns that can directly express the connotation of traditional culture or architectural intentions with distinct symbolic features, the architectural complex can directly let viewers understand the architectural connotation in the form of visual impact or sensation. Designers can add traditional architectural elements to the main body of the building and the landscape design to make the building more elegant. The courtyard design inside the building adds the breath of nature to the building and improves the comfort of the living environment of the building. For example, the Mawei Ship Administration Book Bureau of Fuzhou City, Fujian Province, fully shows the modern design techniques, creating a multi-functional space for people, which can be read, leisure and entertainment. The shipbuilding parts of Mawei Ship Political Book Company add many traditional architectural elements, using bamboo as decorative materials to make bamboo walls, which perfectly integrate with modern architecture to add historical and cultural atmosphere<sup>[21]</sup>. Italian square in the design process using more traditional architectural elements, join the altar in the design of the center of the square, into different Roman column, innovation in the

form of ancient Roman column, at the same time after simple processing, simplify the form of Roman column, the Roman column at the same time reflects the traditional Roman column connotation and modern style, make the design works more novel.

## 5 Conclusion

To sum up, China's traditional architecture has a long history of development, rich traditional architectural culture, and traditional architectural elements are an important part of traditional architecture. Modern architectural environment design lacks cultural connotation, and traditional architectural elements provide new design ideas for modern architectural environment design. Integrating traditional architectural elements into architectural design can not only innovate the architectural design form and add the cultural connotation of modern architecture, but also achieve the purpose of inheriting traditional culture by applying traditional architectural elements. Designers can keep the main characteristics of the traditional architectural elements at the appropriate simplified, make traditional architectural elements better fusion in modern architectural environment design, enhance the design level of architectural environment design in China, make modern architecture bearing the traditional culture, optimize the architectural environment design, promote the development of architectural environment art design in China.

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