

Natural Elements Are Integrated into the Artistic Expression of Contemporary Architectural Design

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Abstract: The purpose of this paper is to explore the artistic expression of natural elements in contemporary architectural design, and to explore how to integrate natural elements into architectural design by analyzing the application of natural elements in architectural design, so as to achieve the harmonious symbiosis between architecture and nature. This paper first expounds the importance of natural elements in architectural design, then analyzes the application methods of natural elements in architectural design, and finally discusses the artistic expression of natural elements in contemporary architectural design.

Keywords: Natural elements; Contemporary architectural design; Artistic expression

In today's society, with the advancement of science and technology and people's increasing attention to the natural environment, natural elements have gradually become an important element in contemporary architectural design. The purpose of this paper is to explore the artistic expression of natural elements in contemporary architectural design, analyze their specific application and aesthetic value in architecture, and their role in building green and sustainable buildings. Through research, we hope to provide new ideas and inspiration for contemporary architectural design and promote the sustainable development of the architectural industry.

1. Classification and characteristics of natural elements

1.1 Classification of natural elements

Natural elements can be divided into the following categories:

- (1) Terrain: including mountains, hills, plains, rivers, lakes, etc. These elements can provide the foundation and support for the building, as well as create a unique visual effect for the building.
- (2) Climate: including temperature, humidity, wind, rain, sunshine, etc. These elements have an important impact on the comfort and energy efficiency of the building, and are important factors for architects to consider when designing.
- (3) Plants: including trees, grass, flowers, etc. Plants can provide shade, landscaping, and air purification for buildings, as well as create comfortable outdoor spaces for buildings.
- (4) Animals: including birds, insects, fish, etc. Animals can create a vivid landscape for a building, as well as provide an ecological balance for a building.
- (5) Hydrology: including oceans, rivers, lakes, etc. Hydrology can provide water for a building and can also create a unique landscape for a building.

1.2 Characteristics of natural elements

- (1) Diversity: Natural elements are rich in diversity and can offer a variety of possibilities for architecture.
- (2) Dynamics: Natural elements are dynamic, they change over time, which also requires architects to consider the dynamics of these elements when designing.
- (3) Regionality: Natural elements are regional, and different regions have different natural elements, which also requires architects to consider regionality when designing.
- (4) Ecology: Natural elements are ecological, and they can interact with other elements to form an ecosystem.
- (5) Aesthetic: Natural elements are aesthetic, and they can create a unique aesthetic for architecture.

Natural elements are an important part of building design, they can add beauty to buildings, and they can also improve the sus-

tainability and comfort of buildings ^[1].

2. The expression of natural elements in contemporary architectural design

2.1 Form imitation

Many contemporary buildings imitate natural forms such as leaves, flowers, mountains, water streams, etc., to create a unique architectural style. For example, the Sydney Opera House mimics the shape of a sailboat, and the Chicago Spiral Tower imitates the shape of a spiral, creating a harmonious and symbiotic architectural space by mimicking the form of nature, integrating the building with the natural environment. In terms of layout, it imitates the natural spatial layout, such as caves, valleys, forests, etc., to create a rich architectural space. Sydney's Central Park, for example, mimics the spatial layout of a forest, creating a variety of architectural spaces through staggered buildings and rich plant configurations. Form imitation is an important way to express natural elements in contemporary architectural design, which integrates natural elements into architectural forms, spatial layouts and building materials to create a harmonious and symbiotic architectural space.

2.2 Material selection

By choosing materials with natural properties, designers can integrate elements such as form, texture and color of the building with the natural environment to create a unique artistic effect. Here are some common expressions of natural elements:

(1) Wood: Wood is a common natural building material with a warm, natural texture. In architectural design, wood can be used for walls, floors, furniture, and other parts to create a warm and comfortable atmosphere. Wood also has good sound insulation and thermal insulation properties, which is in line with the concept of green building.

(2) Stone: Stone is an ancient building material that has the characteristics of being strong and durable. In architectural design, stone can be used for exterior walls, floors, columns and other parts to create a solemn and magnificent architectural image. It also has good weather resistance and durability and can withstand wind and rain erosion.

(3) Glass: Glass is a transparent building material with a light, transparent texture. It can be used for windows, doors, roofs, etc., to create a transparent and bright atmosphere. It also has good lighting and ventilation performance, which is in line with the concept of energy-saving buildings.

(4) Plants: Plants are a vivid natural element with vitality and a sense of dynamics. Plants can be used for indoor and outdoor greening, creating a vibrant space atmosphere. At the same time, plants also have good air purification and noise reduction properties, which is in line with the concept of healthy buildings.

(5) Water: Water is a flowing natural element with a soft, serene texture. Water can be used in fountains, pools, water features, etc., to create a tranquil and harmonious atmosphere in the space. At the same time, water also has good landscape and ecological properties, which is in line with the concept of ecological architecture.

2.3 Spatial layout

Spatial layout is the core of architectural design, which determines the form, sense of space and function of the building. The integration of natural elements makes the spatial layout more harmonious and comfortable, and also enhances the artistic expression of the building. For example, elements such as natural light, ventilation, and landscaping can be incorporated into the building design to make the building space more natural and comfortable. At the same time, building materials and structural technologies can also be used to make the building space closer to nature, such as the use of natural materials such as wood and stone, as well as the use of green building technologies. Focus on the harmony and unity of natural elements. For example, natural elements can be combined with architectural functions to make architectural spaces more humane. Natural elements can be used to create an architectural atmosphere, such as light, color, and materials to shape the atmosphere of the architectural space ^[2]. Focus on the innovative expression of natural elements. For example, natural elements can be combined with modern technology to make architectural spaces more intelligent. Natural elements can be used to create unique architectural forms, such as topography, climate, and landscape.

3. The artistic value of natural elements in contemporary architectural design

3.1 Reflect the characteristics of regional culture

Regional cultural characteristics are an integral part of architectural design, reflecting the history, culture, customs and lifestyle of a region. The use of natural elements can well reflect this regional cultural characteristics. For example, in some regions with strong regional cultural characteristics, such as the Jiangnan water towns in China, a large amount of water elements are often used in architectural design. These water elements can not only make the building more beautiful, but also reflect the characteristics of the water town in the south of the Yangtze River. In some areas with desert culture, some sand elements may be used in the architectural

design to reflect the characteristics of desert culture. The use of natural elements can also reflect the climatic characteristics of a region. For example, in some tropical regions, some plant elements, such as tropical plants, may be used in the architectural design to reflect the characteristics of the tropical climate. In some cold regions, some ice and snow elements may be used in the architectural design to reflect the characteristics of cold climates.

3.2 Enhance the aesthetics of the building

The artistic value of natural elements in contemporary architectural design is mainly reflected in the following aspects:

(1) Innovative design: Natural elements can bring new inspiration and innovation to contemporary architectural design. For example, architectural designs that mimic natural forms, such as roofs that mimic leaves, interiors that mimic water flows, can bring a unique artistic aesthetic to a building.

(2) Enhance the aesthetics of the building: Natural elements can enhance the aesthetics of the building through their unique colors, textures, forms, etc. For example, the use of natural materials such as natural stone, wood, etc., as building materials, can bring out natural beauty and texture. The integration of natural elements can also make the building more harmonious with the surrounding environment and enhance the overall aesthetic of the building.

(3) Enhance the interaction between the building and the environment: The integration of natural elements can make the building interact more closely with the environment. For example, the use of renewable energy sources such as solar and wind energy can make buildings more environmentally friendly and sustainable. The integration of natural elements can also make the building more adaptable to the surrounding environment, improving the comfort and practicality of the building.

(4) Reflect the cultural connotation: Natural elements can reflect the cultural connotation and historical background of a region. For example, the use of local natural materials and elements can reflect the character and cultural traditions of a region. The integration of natural elements can also make the building more local and recognizable.

(5) Enhance the value of the building: The integration of natural elements can make the building more artistic and historical value. For example, some innovative and artistic architectural designs, such as Gaudí's organic architectural design, can enhance the artistic and historical value of buildings through the integration of natural elements.

3.3 Enhance the harmony between the building and the environment

As a space for human life, it is essential for architecture to coexist in harmony with its surroundings. The use of natural elements in architectural design can be carried out in a variety of ways. For example, in architectural forming, natural forms and lines can be borrowed to harmonize the building with the surrounding natural environment. In addition, in the selection of building materials, environmentally friendly and renewable materials can be preferred to reduce the impact on the environment. In terms of layout and functional design, local natural conditions, such as wind direction, lighting, etc., can also be fully considered to achieve the best match between the building and the environment^[3]. Enhance the harmony between the building and the environment by creating continuity between indoor and outdoor spaces. For example, the outdoor natural landscape can be introduced into the interior by setting up indoor courtyards, skylights, etc., so that the indoor space is more open and transparent. It can also be cleverly designed to make the indoor space and the outdoor space echo each other to create a more harmonious space atmosphere.

4. Conclusion

In contemporary architectural design, the integration of natural elements is an important means of artistic expression. The use of natural elements not only creates a harmonious and comfortable spatial environment, but also enhances the sustainability and ecological value of the building. In conclusion, the integration of natural elements into the artistic expression of contemporary architectural design is a design concept of great significance. It not only enriches the artistic expression of architecture, but also promotes the sustainable development of the construction industry. In the future architectural design, we should continue to explore the use of natural elements to create a more harmonious and comfortable space environment, and contribute to the improvement of human living quality.

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