

# Application of Natural Landscape in Modern Public Interior Design

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**Abstract:** Indoor natural landscape design needed to have landscape function and ecological function as an organic part of ecological architecture. The article focuses on the application of natural landscapes in modern public interior design. Summarized the research foundation of indoor landscape design theory. It was proposed that the natural landscape should follow the principle that the indoor landscape and the architectural space were reasonable, the scale of the landscape should match the space in the modern public interior design. The design and application of natural landscape were analyzed by taking the interior space of the Bank of China Building, hotel and dining restaurant as examples.

## 1. Introduction

As a metaphor for the outdoor landscape, the indoor natural landscape provides a pleasant and far-reaching space for people in the room to feel completely different from the artificial space around people[1]. Viewers who enter the indoor space with the theme of natural landscape from the artificial environment will use it as an alternative to the external space to obtain psychological and physiological satisfaction[2]. The industrial revolution brought innovations in building materials and building structures, and glass and steel structures began to emerge. Improvements in the interior heating system of the 19th century and the use of light-transmissive materials made plants an important decoration for Victorian homes. Since the 1960s, indoor natural landscapes, especially plant landscapes, have become the subject of use[3]. The rise of the Portman atrium shared space in the late 1960s led to the development of landscape-themed interior design in large-scale spaces[4]. Since the 1980s, the practice of green architecture has provided another idea for indoor natural landscapes.

## 2. The Theoretical Basis of Indoor Natural Landscape Design

The interior natural landscape design appears relatively late as an independent design category. In the West, this discipline extends from the field of greenhouse plants, combining the emergence of large-span, glass and other architectural forms, as well as the development of indoor mechanical ventilation, lighting, and irrigation technologies. In general, the indoor natural landscape design in the existing materials mostly refers to its technical means, and there is no systematic design theory system guidance[5].

Natural landscape is the eternal theme of Chinese traditional aesthetics. In terms of its form, it can be divided into physical aesthetic objects and abstract aesthetic objects[6]. In the case of an aesthetic object of the entity, it refers to the natural landscape outside the building. The person's point of view is based on the inside of the house, and the natural landscape of the visual observation object is outside the house. In the relationship between traditional Chinese architecture and landscape, the main object of aesthetics is always the environment around the building, and the building itself exists as an accessory to the environment[7]. In many cases, it provides a place for viewing the environment, a viewpoint. The environmental landscape around the building mostly refers to the natural landscape.

Landscape ecology is an emerging interdisciplinary subject that has flourished since the 1970s. Landscape ecology organically combines the study of the relationship between structure and function in ecology and the study of human-land interaction processes in geography, forming a concept of landscape evolution dominated by patterns and processes at different spatial and temporal scales and

human interaction. Theoretical framework[8].

### 3. Application of Natural Landscape Design in Modern Public Interior Space

#### 3.1 Design Principles

The ratio between the indoor landscape and the architectural space is something that the designer should pay attention to. At the same time, as another scale standard, people also participate in the evaluation of the indoor landscape design scale in the height direction. Modern indoor natural plants are the main landscape elements, benefiting water, bathing cloth and rock[9]. Due to the height of the water and rocky landscapes, it can be designed as needed. The plant landscape has its regularity in plant height due to the physiological conditions of the plant itself, so it needs to be selected and controlled. While paying attention to the height, we must also consider the size of the plant's demand for light and make a reasonable match.

In design. The type of space on which the landscape depends largely determines the way the landscape is clothed. The scale of the landscape should match the space, and the design form of the landscape should also echo the surrounding architectural environment.[10] Usually the linear space is combined with the traffic space. Therefore, landscape organizations often need to work closely with transportation organizations. In a large-span building. Due to the large ratio of area to height. The whole space gives a flat feeling. In this space, the spatial region can be further defined by tall plants with a strong geometrical form. Moreover, the canopy of the plant forms another height level in the height direction, which improves the spatial feeling of the people under the plant, and adds the detailed scale experience of people in the open space to the low-rise large space building, and also through the cloth. Natural landscape. Increasing the ground height difference and organizing traffic through the landscape area make the Wentong streamline rich and varied. In plant planting, it can be combined with the spatial level of the landscape through the combination of trees, shrubs and herbs.

#### 3.2 Spatial scale and proportional design

The proportional relationship between indoor landscape and architectural space is a problem that designers should pay attention to. At the same time, as another scale standard, people also participate in the evaluation of indoor landscape design scale. In the range of 3 meters high, it is usually a high level of office and residential buildings. This kind of space generally illuminates on one side of the window, and needs to be supplemented with artificial lighting. The indoor brightness is low and the space height is limited, which is not suitable for fixed planting. In such a spatial scale, pots with a height of 1.2 to 1.8 meters are more suitable for individual appreciation. See Figure 1 for a tea restaurant design, using potted plants to enrich the landscape. It is also possible to use a flower trough to separate the indoor space, and it is suitable to plant a shade-tolerant foliage plant with a plant height of 0.4 m or less. If you organize small indoor landscapes, landscapes with dry landscape types, or highly abstracted or even symbolized plant landscapes are appropriate. Small drip landscapes can also be used in this type of space.



Fig.1. Tea Restaurant Landscape Design

In the range of 6 meters, there are usually building types such as halls, restaurants, and sunrooms. The space is more abundant and the lighting conditions are subject to specific conditions. If the top relies entirely on artificial lighting, indoor illumination will be difficult to meet the needs of indoor plant growth, and partial fill light is required. In this type of indoor space, potted plants are still the main natural ornamental objects. The height of potted plants is between 1.5 and 3.0 meters, and the

branches and leaves of plants are better. The waterscape is dominated by dripping or running water. The scale of the stone landscape is within the scope of large bonsai. It is not advisable to make large-scale waterscapes and rocky landscapes.



Fig.2. Hotel interior space design

In the 9-meter-high range (7.8-10.0 m), it usually includes transportation building waiting rooms, commercial building shared space, high-rise building aerial landscape platform, hotel lobby, Four Seasons Hall and other building types, as shown in Figure 2, hotel space indoor. The design adopts a large number of lights, and the plants are both high and hierarchical. In such a space, at least one of the general enclosures is transparent, so the illuminance is better, and the fixed planting of the plants can be considered. In this type of space, large plant heights can reach 4.5-6.0 meters, and 2-3 levels of plant height can be considered. Static water and rocky landscapes can be seen, but it is more appropriate to use small stacked water with stone views. In the high range of the skillful layer, the surface of the enclosure (including the top surface) is more transparent, more illuminating, and has a larger spatial range, which is suitable for a larger indoor group natural landscape. In this type of space, large plant heights can reach 9.0-11.0 meters, and can be considered in combination with Joe, Irrigation and Grass. Medium-sized static water and rocky landscapes can be seen. Above the floor height, it is usually an atrium space with a skylight or an independent large space building. In the natural landscape design of such building spaces, there must be tall plants as the focus of spatial vision. The level of plant configuration can be relatively rich, and the ground can even be divided by height differences, showing the level of the landscape. There can be a large area of static water and rocky landscapes.

### 3.3 Simulated nature

There are two types of forms in the interior landscape of the indoor landscape: figuratively simulating nature and abstracting the nature. The imagery simulation of nature seeks to imitate the original form of nature and reduce artifacts. Plants do not pursue the neat shape after pruning, but try to maintain the natural state, and the plant species are diversified. The indoor vegetation simulates the natural state, and the combination of Joe, irrigation and grass, and sparseness, form plant communities and create the feeling of indoor forest. In the indoor simulation, natural requirements for indoor horticultural technology are very high, not only in the selection of plant species, but also on planting soil, lighting conditions, irrigation and fertilization, air humidity, pest control, and later management and protection. This type of indoor landscape design must be combined with the building property management when the indoor gardening technology reaches a certain level, and the continued investment in the later period can ensure the completion of the design and the landscape of the building during use. Keep the situation.

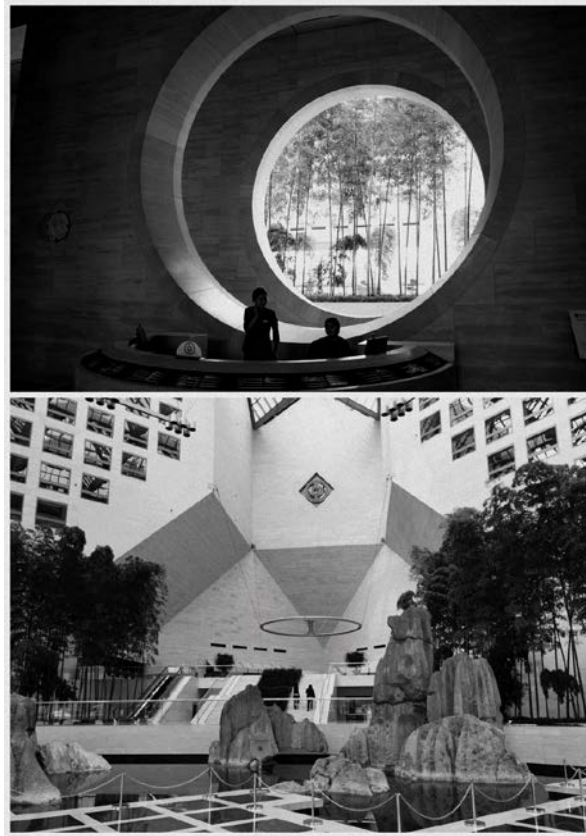


Fig.3. Interior Design of Bank of China Building

Symbolizing the landscape elements, but not pursuing what it means, but only as a natural symbol in the interior space of the building, this design has been abandoned. Pure natural elements can be highlighted in the new and powerful space of geometric form. Moving the garden symbol into the room is also a design approach. The interior of the Bank of China Building in Chang'an Street, Beijing, designed by Mr. Bei Xingming, is shown in Figure 3. It not only applies the landscape elements such as bamboo and lake stone commonly used in traditional Chinese gardens, but also successfully displays the image of the round door in the garden. Moved indoors, see picture. And draw on the traditional methods of facing the landscape in Chinese gardens, enrich the level of space, and extend the depth of field.

#### 4. Conclusion

The progress made in building technology is no longer at the expense of the environment, but to provide a better living environment for people. Based on summarizing the theory and principles of natural landscape design in indoor space, the paper analyzes the application of natural landscape. The indoor natural landscape should not be just satisfied with the viewing effect. Instead, it should be linked to green buildings. It has a real ecological effect indoors. Although the indoor natural landscape is still only in the stage setting design that satisfies the visual effect. However, the combination of design and nature, design and ecology is the development trend of indoor natural landscape design, and also an integral part of the ecological building indoor environment.

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