

Art of Objects in the Environment

--Research on Ecological Design and Environmental Sculpture

Yue Cao

Graduate University of Mongolian, PhD Candidate at Graduate University of Mongolian, China

Abstract

The integration of ecological design and environmental sculpture represents an innovative design concept that aims to combine ecological protection with sculptural art to create a harmonious, natural, and beautiful public space. This design philosophy not only improves the quality of life but also promotes the protection and sustainable development of the ecological environment. Therefore, under the concept of sustainable development, achieving a harmonious and beautiful ecological environment requires the perfect integration of ecological design and environmental sculpture, thereby creating art within the environment that earns wider appreciation and recognition.

Keywords

Ecological Design; Environmental Sculpture; Ecological Environment.

1. Introduction

With the rapid development of social economy and the continuous improvement of people's quality of life, there are higher demands for ecological environment and urban construction. To construct harmonious, beautiful, and natural public spaces and to improve the quality of life and production, it is necessary to integrate art and technology, as well as urban construction and environmental protection, ultimately achieving harmonious coexistence between humans and nature.

2. Overview of Ecological Design and Environmental Sculpture

2.1. Ecological Design

Ecological design is based on ecological principles and natural environments, using modern technological means to scientifically and reasonably plan, design, and manage the human living environment. Its goal is to meet human needs while protecting and improving the natural environment. In landscape design, ecological design emphasizes harmonious coexistence between humans and nature. It leverages natural resources and advantages to create comfortable, healthy, and beautiful public spaces. Additionally, ecological design focuses on the sustainable use of resources, emphasizing environmental protection and improvement during the design process, ultimately achieving harmonious coexistence between humans and nature.

2.2. Environmental Sculpture

Environmental sculpture is a form of public art that integrates with the surrounding environment, using sculptural art to express human spirit, cultural connotations, and the beauty of nature. The design and creation of environmental sculpture emphasize integration with the surrounding environment, using the form and content of sculpture to express regional characteristics and cultural heritage. The design of environmental sculpture must consider the needs and feelings of people and harmonize with the surrounding environment, utilizing various materials and techniques to create unique visual effects and artistic atmospheres.

3. Paths to Integrate Ecological Design and Environmental Sculpture

3.1. Design Based on Natural Environment

The integration of ecological design and environmental sculpture requires designing based on the natural environment to reflect the art of objects in the environment and gain more recognition and appreciation. Firstly, terrain is a crucial element in landscape design, directly influencing the visual effects and spatial sense of the landscape. The design process can protect and utilize the terrain to achieve integration with the natural environment. For example, utilizing the ups and downs of the terrain to create layered landscape effects or using the width and narrowness of the terrain to create pleasant walkways and resting areas. Secondly, based on hydrological conditions, designers can create fresh and comfortable environments and unique landscape effects. For example, actively using rivers and lakes to create streams, fountains, and waterfalls or using local hydrological conditions to design corresponding waterfront and water-viewing spaces. Thirdly, actively incorporating plant elements to create pleasant green spaces and seasonally distinct landscapes, ensuring close integration of artificial and natural environments. Designers can use the staggered heights of plants to create layered green spaces or use the seasonal changes of plants to create seasonally distinct landscapes. Fourthly, combining local climatic conditions to achieve close integration of ecological design and environmental sculpture, thereby improving the quality of life and production. Designers can use large trees for shade in hot summers to create pleasant resting areas or use sunlight in cold winters to create warm spaces, meeting people's different needs.

3.2. Use Renewable Materials for Creation

In the integration of ecological design and environmental sculpture, it is essential to actively use renewable materials for creation, reducing the consumption of natural resources, decreasing environmental pollution, and improving the quality of life and production. Firstly, designers should actively use waste materials, achieving the recycling and reuse of various waste materials, and apply them to landscape design and public art creation. For example, reprocessing discarded wood, bricks, and stones into sculptures, walls, and seats; reusing discarded glass and ceramics to create unique decorations and artworks. Secondly, using renewable plant materials to create unique public spaces, creating comfortable, fresh, and natural ecological or landscape environments. In practical design, designers should actively use branches, leaves, grass, and other plant materials to complete the design of unique landscape installations and public artworks. They can also use bamboo, rattan, and other plant materials in seat, railing, and decoration design to reflect the art of objects in the environment. Thirdly, designers should keep pace with technological advancements, actively applying modern information technology to material development and utilization. For example, using 3D printing technology to create complex shapes and structures that traditional materials like metal and plastic cannot achieve, or applying biotechnology to the development of sustainable biological materials, thereby reducing the consumption of natural resources and environmental pollution, improving creation efficiency and work quality.

3.3. Create Interactive Experience Spaces

To bring people closer to nature, understand nature, and protect nature, creating interactive experience spaces in the integration of ecological design and environmental sculpture is essential to achieve the combination of art and technology. Firstly, designers should actively apply interactive installations, leveraging modern technology, integrating their artistic creativity, and allowing people to interact with public spaces. For example, using sensors and cameras to dynamically capture people's movements and sounds, creating unique interactive effects through data analysis and processing. These interactive installations can help the public deeply understand the characteristics and functions of public spaces and promote

communication and interaction among people. Secondly, creating natural experience areas helps people understand the natural environment and ecological conditions, thereby improving their quality of life and production. Designers should appropriately set up wildlife viewing areas, wetland conservation areas, forest adventure areas, and other natural experience areas in public space design to allow people to observe and understand the organisms and ecological chains in the natural environment closely. Thirdly, actively creating game interaction areas promotes interaction and communication among people. For example, setting up outdoor rock climbing and water rafting activities helps people appreciate the beauty and charm of public spaces through games.

4. Conclusion:

In summary, the integration of ecological design and environmental sculpture can reflect the art of objects in the environment, injecting more vitality and energy into ecological or landscape environments. Therefore, in future practical work, it is necessary to design based on the natural environment, use renewable materials for creation, and create interactive experience spaces to achieve a deep integration of both.

References

- [1] Han, S. Artistic Creation of Ecological Environmental Sculpture in Urban Public Spaces: A Review of "Environmental Sculpture Design" [J]. Environmental Engineering, 2021, 39(01): 215.
- [2] Liu, Y. Discussion and Suggestions on the Ecological Trend of Contemporary Urban Environmental Sculpture [J]. Modern Communication, 2021(07): 27.
- [3] Sun, B., & Hua, F. On Landscape Design Combining Natural Ecological Beauty and Sculpture [J]. Times Literature (Second Half of the Month), 2021(03): 163-164.
- [4] Lü Guang. Analysis of Landscape Sculpture Design Strategies Based on Urban Image Communication. Shoe Craft and Design, 2022, 2(20): 149-151.
- [5] Xie Shutao. Key Discussion on Sculpture Design in Art Landscape. Shoe Craft and Design, 2021, 1(21): 107-109.

Name: Cao Yue

Date of Birth: May 4, 1987

Gender: Male

Ethnicity: Han

Place of Birth: Zigong, Sichuan

Graduate University of Mongolian

PhD Candidate at Graduate University of Mongolian

Research Interests: Landscape Sculpture, Intangible Cultural Heritage Research, Folk Culture Research