Discussion on Ecological idea in Environmental Art Design

jun xie
Jingdezhen Ceramic Institute 333000

Key words: environmental art design; ecological theory; protection

Abstract: the current environmental conditions are not optimistic for greenhouse effect, ozone depletion, acid rain and other problems severely destroy ecological balance, pollute green environment. Thus, there is no time to delay doing a good job of environmental art design. There is a dialectical and unification relationship between ecological idea and environmental art design. Integrating ecological idea in environmental art design is the basis of maintaining ecological balance. This paper will discuss the ecological idea in the environmental art design and put forward personal suggestions.

Environmental art design is the effective integration of three different concepts of environment, art and design. Environment therein mainly refers to the natural conditions and social conditions where human beings live; the coverage area of art is relatively wide, mainly referring to three aspects. The first aspect is a kind of social ideology which reflects social life and is more typical than reality by way of shaping images; the second one is to be used to compare creative modes; the last one is to refer in particular that shapes are unique and graceful. Design means that in accordance with certain requirements, formulate drawings and schemes in advance for some work. Ecological idea originates from ecology, integrating ecology idea in environmental art design to conform to the requirements of maintaining ecological balance and protect green environment. This paper will give a brief discussion on the definition of environmental art design, analyze the connotation of ecological idea and ecology and discuss measures to merge ecological idea with environmental art design from three aspects including designing green building, comprehensively managing environmental problems and establish civilized city by combining with garden art.

I. Definition of Environmental Art Design

Generally, environmental art design integrates the advantages of environment, art and design. In environmental art design, the element “environment” refers to the natural and social conditions where human beings live; art means to create beautiful environment through combining with social living elements and blend in creative ideas; design means that in accordance with the requirements of Environmental Protection Act, formulate drawings and schemes in advance for environmental protection work. Narrowly, environmental art design refers in particular that taking natural environment as a foothold, comprehensively deal with building design, communal facilities and artificial green belts, reasonably plan indoor layout of buildings and promote the harmony between building design, communal facilities, artificial green belts and natural environment.

II. Connotation of Ecological Idea and Ecology

Ecological idea originates from ecology which mainly studies the mutual relationship between creatures and their environment and can be divided into physiological ecology, behavioral ecology, geneecology, community ecology, paleoecology and applied ecology. The emphasis of the physiological ecology is to study the relationship between a biont and physical and chemical features of its environment; the behavioral ecology studies various behaviors which the biont react to environment; the geneecology chiefly studies various processes of fauna and flora population distribution and reproduction; the community ecology studies the organization and function of fauna and flora population; the paleoecology is the ecology that studies fossil species; the applied ecology is to apply the principles of ecology to the management of crops or fauna and flora...
population. The major idea of ecology is to promote the harmonious development of human life and external environment system.

The ecological idea in environmental art design is to reasonably plan space environment, deploy all kinds of resources, stick to energy conservation and emission reduction, solve various kinds of environment pollution problems and promote harmony between human being and nature and sustainable development on the basis of maintaining ecological balance and ensuring human’s life quality.

III. Measures of Blending Ecological Idea in Environmental Art Design

(1) Design environmental protection buildings. Many new environment pollution problems breed during the development of constructional engineering. Glass, concrete, coating and all kinds of metal materials often carry plenty of hazardous substances which can easily cause air pollution, light pollution and poisonous gas radiation. And construction waste accumulation is also an environment problem that cannot be ignored. Successfully blending ecological idea in environmental art design requires designing green and civilized environmental protection buildings, using pollution-free building materials, reasonably planning internal space layout of the buildings, keeping indoor good atmospheric conditions and lighting conditions so as to comprehensively take advantage of wind energy, solar energy and other natural resources, installing energy saving lamp with subdued light, avoiding using color glass and glass curtain wall and solving light pollution problem. Secondly, reasonably design indoor plant landscape and reduce discharge of benzene, carbon dioxide and other hazardous substances. Moreover, timely clear up construction waste and promote waste resources recovery, thus, realize the goal of energy conservation and emission reduction.

(2) Comprehensively manage environment problems. Currently, greenhouse effect, ozone depletion and acid rain are three main factors that threaten green environment and ecological balance. Greenhouse effect mainly refers the phenomenon of intensive warming trend in the earth surface and under the atmosphere layer along with the increase of carbon dioxide and some kind of other gas content in the atmosphere. This phenomenon will give rise to global warming, rapid melting of glaciers in the north and south poles, sea level rising, abnormal climate change, drought and flood disasters aggravation and even lead coastal cities to face the threat of being submerged. Depletion of ozone layer (also called ozonosphere) is caused by large amount of emission of chlorofluorocarbon and other contaminants. Destroy of ozone layer causes constant increase of skin cancer and cataract patients and mass reduction of crop production and threatens life safety of roes and cellular algae organisms. Acid rain which is a kind of rainfall containing sulfuric acid of high concentration and nitric acid can not only contaminate water resource and cause death of aquatic life but also result in reduction of crop production and corrode constructional engineering.

To build green and civilized environment and to blend ecological idea in environmental art design require comprehensively managing environment problems. The root cause of ozone layer depletion and precipitation acidification is large amount of emission of carbon dioxide, chlorofluorocarbon, sulfur dioxide, nitric oxide and other contaminations. Therefore, we should stick to the development idea of energy conservation and emission reduction, reduce emission amount of carbon dioxide, chlorofluorocarbon, sulfur dioxide, nitric oxide and other harmful gases and reasonably exploit new energy, such as nuclear energy, solar energy, hydraulic energy, wind energy and other clean and pollution-free natural resources. However, climate change and ecological imbalance result in destroy of a lot of forest land area and increasing severity of desertification. Thus, we should try to protect forest resource. On one hand, scientifically plant trees and enlarge forest land area; on the other hand, protect well current forest resource, maintain precious forest and realize virtuous circle of natural environment.

Meanwhile, implementation of ecological idea in environmental art design requires quickening construction of natural reserve to effectively protect ecosystem, biosphere and habitats of rare animals. Natural reserve refers to the nature area that is representative natural environment, ecological systems, habitats of rare animals, important water resource zone, etc. protected and
divided by a county to maintain ecological balance and protect natural environment and natural resources, mainly including ecological preservation area, biosphere reserve, specific natural target reserve, natural park, forest park, sea park, remnants of glaciation, hot spring, no cutting zone, prohibited grazing zone, prohibited fishing zone, etc. The area size of natural reserve is the ruler of weighing ecological environment construction and development level of natural reservation course of a country. The natural reserve area of our country is relatively small; thus, construction scale of natural reserve must be enlarged.

(III) **Combine with garden art and establish civilized cities.** City gardening is the symbol of city civilization. Penetration of ecological idea in environmental art design needs to combine with garden art, purify city air quality and establish civilized, harmonious and beautiful modern city. When designing gardens, not only need to cultivate different plants and trees in different colors in accordance with growth characteristic and visual effect of plants but also need to reasonably distribute garden architectures to create pavilions and terraces, halls and corridors, fountains and rockeries with unique aesthetic taste so as to coordinate it with surrounding space environment.

**Conclusion:**
To sum up, environmental art design is the effective integration of three different kinds of concepts of environment, art and design. Narrow environmental art design refers in particular that taking natural environment as a foothold, comprehensively deal with building design, communal facilities and artificial green belts, reasonably plan indoor layout of buildings and promote the harmony between building design, communal facilities, artificial green belts and natural environment. However, ecological idea in environmental art design is to carry out a series of environmental protection work to keep harmony between human and nature on the basis of maintaining ecological balance and ensuring human’s life quality. There is a dialectical and unification and interdependent relationship between environmental art design and ecological idea. Integrating ecological idea in environmental art design requires designing environmental protection buildings, comprehensively managing environment problems, establishing civilized city and fully do well environmental protection work.

**References:**