

Analysis of Furniture Design Strategy Based on Ecological Aesthetics Conception

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Abstract- Ecological aesthetics is a subject that developed by low carbon movement because of the world-wide crisis. This paper incorporated the ideas of ecological aesthetics into furniture design and explained the furniture design strategy based on ecological aesthetics from the aspects of furniture's material selection, modeling, function and structure in detail. The exploration of this will enrich furniture design strategy and provide scientific guidance for future furniture design. It will also determine the ecological aesthetic orientation of future furniture design, which can expect the harmonious intergrowth of human and nature.

Key Words- Ecological Aesthetics, Furniture Design Strategy, Material, Modeling, Function, Structure

1 INTRODUCTION

Since the mankind entered the modern society, economy is developing rapidly vigorously. With the continuous development and innovation of economy and technology, humans began to know conquer nature, transform nature. In the process of taking full advantage of natural resources, productive forces and human civilization both have made remarkable strides. However, over a long period of interaction, the relationship between human and nature has been difficult. The ever-increasing ecological issues make the reflection on human behavior a necessity. And ecological problems have become increasingly serious at the same time. So we have to reflect our human behavior ecological aesthetics emerge as the times require [1]. Ecological aesthetics develop the relationship between human and nature to aesthetics height from pure green low carbon theory, and ecological aesthetic become a branch of aesthetics. This paper will put the ecological aesthetics into furniture design, and analyze the design strategy from four aspects: material, shape, function, structure, so that the design of the furniture can combine ecological attributes and aesthetic value.

2 ECOLOGICAL AESTHETICS

Ecological aesthetics is not the simple superposition of ecology and aesthetics, but the two disciplines are compatible about the problems between man and nature. It is not independent aesthetic form but essential attribute of beauty. It is an indispensable element to a variety of aesthetic forms as well as a harmonious coexistence relationship based on dynamic balance between human, nature and environment [2]. In fact, the content of ecological aesthetics and Chinese ancient "harmony" has different approaches but equally satisfactory results of the wonderful. Ecological aesthetics has such ideas developed, it is also the ingenious combination of Chinese traditional aesthetics and Western Aesthetics [3]. In terms of the current academic world, the substance of value of ecological

aesthetics includes eco-existence beauty, eco-nature beauty, eco-authenticity beauty, eco-ideal beauty and the ecological dimension of aesthetic judgment presented by professor Fanren Li along with the beauty of ecological function, beauty of ecological order, beauty of ecological meteorology and beauty of ecological personality suggested by professor Yongcheng Ceng [4]. The author thinks that it is necessary and important to take ecological aesthetics into furniture design to extend its design strategy.

3 DESIGN STRATEGY

3.1 Strategy of Material Selection

Material is the first element of design furniture, and the choice of materials has become the first step of furniture design. Choose a material means choosing a process of art, and deciding a relationship with the environment. The selection of raw material plays a decisive role in balancing the input and output in the furniture system and realizing the ecology. The selection of furniture materials, therefore, must be strict and cautious. In the ecological aesthetic conception, the selection of raw materials will be more serious and exquisite. The selected material should be required for ecological environmental protection, and can reflect the beauty of nature. The furniture made of those materials can bring the viewers or users the ecological aesthetic enjoyment. Figure 1 is a set of rough wood furniture design, rough wood furniture is a kind of furniture branches, bamboo, shrubs, or other waste material without any kind of processing [5]. Rough wood originates from the nature, and is the best gift to mankind. Its unique colorful texture owns a strong presence of beauty. The furniture made of it reflects the low carbon environmental protection as well as the desire of human to keep close touch with nature. Therefore, under the concept of ecological aesthetics material selection strategy is based on the original ecological, not only reflecting the beauty of nature, but also the ecological beauty. Make the persons retrospect themselves deeply as well as enjoy nature, make people respect nature and protect the natural true existence, make them feel the natural broad and embrace the nature instinctively.

3.2 Strategy of Modeling

Furniture design is to create the perfect shape, based on the economic and practical as well as the trend of fashion. Its

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form must conform to the laws of aesthetics, to make full use of point, line, surface, body, color, texture, lighting and other factors, using diversity methods of aesthetic to satisfy people's psychological beauty [6]. The author thinks, furniture design under the influence of ecological aesthetic concepts is to advocate nature. Nature is full of vitality, in



Fig.1 Rough Wood Furniture



Fig.2 Bambi Chair

which automatically creates a kind of intuition and translates it into furniture through people. Make the audience concern the natural ecology from the inner place in the process of feeling the nature charm. Then they can more cherish and protect nature practically. As shown in Figure 2, Bambi chair, designed by Takeshi Sawada from Japan, spotted fur cushion, artificial foot and antlers, horns, horns backrest, designers put a part of nature -- animal characteristic elements to furniture products perfectly, firmly hold the eyes. Designers do not only for the purpose of appearance, inspiring the viewer and users to care about nature, protect nature and feel the designer's intention, which contains the educational wishes.

3.3 Strategy of Function

Based on the functional strategies under the concept of ecological aesthetics, furniture designing should meet the basic use function as well as owing psychological function and mental function. That is to emphasize "flexible functionalism". Under the influence of this idea, the furniture's using function, belonging to the second level, is the auxiliary function. Cultural and spiritual functions are the key point in designing. Such as bamboo in Chinese bamboo culture, bamboo hollow represent very modest

character; born with knot, is the symbol of conducting and nobility of character; its branches bend but don't break, is the principles of being in people with soft in the band [7]. The use of bamboo in furniture design is to inherit the traditional Chinese bamboo culture. It is also in line with the life modern concept of pursuing humanity and returning to nature life style. Figure 3 is "meditation" series designed by Sun Yanfei. These combine group chair and pier bamboo wood and stone, creating a peaceful way of life in the hustle and bustle city life. The bamboo is ecological environmental protection, simple but generosity, which is not only meet the material needs of people, but also meet the needs of cultural function, environmental function and aesthetic function of people to create furniture. Figure 4 is the "vein Association" designed by Zhang Yinghong from the Central Academy of Arts. The whole piece made with vines, upward growing vines show the vitality of life and beauty. This works wants to create an atmosphere of natural regression, expressing the natural yearning, reflecting the meaning of existence, closing the distance of heart and nature, heart and life, giving people the sense of beauty in spirit. These two works are not only strong and durable, but also save resources and are conducive to the recovery. The reflection deep concern to people as well as to the environment, and realize the unity of humanity designing and ecological designing based on the functionalism. This method will become the new development trend of functionalism in the new era [8]. So in the functional designing it is important to arouse users' highly cultural and emotional resonance, and to pay attention to the human inner place and spiritual pleasure care.



Fig.3 "meditation" series



Fig.4 "vein Association"

3.4 Strategy of Structure

Structure refers to the furniture made and connection

between components refers to a kind of organization system that furniture designed based on function and material properties. It can be understood as the style after connecting [9]. Furniture structure design strategies under the concept of ecological aesthetics should be consistent with requirements of the ecological beauty of technology. The author thinks that the ecological beauty of technology whether modern or ancient technology can be applied into the furniture designing, as long as it is filled with wisdom, has advantages of novel design, apply the natural law of flexibly, can realize the person's target create a pleasant aesthetic experience and is appreciated by people. Figure 5 is a piece of cabinet furniture old ship wood. Designers use traditional technology mortise and tenon structure. Without any metal components, like nature itself -- highest quality, only from a distance has been able to feel the natural atmosphere. Come up with the material, the old ship wood is powerful after the tempering of nature. Its colorful texture make the old ship wood with rough temperament and strong sense of art, which is the result of multiplying in days and months by nature, and is also very close to nature. In short, the most important point of the furniture structure designing strategies under ecological aesthetics is that designing structure exists in the form of technology and can obtain the ecological aesthetic capacity, ecological appealing and ecological aesthetic values, as well as has the advantages of combining the scientific technology mental and culture.



Fig.5 Cabinet furniture of old ship wood

4 CONCLUSION

This paper discusses the furniture designing from four aspects of furniture materials, shape, function, structure of furniture design strategy based on the ecological aesthetic concepts. Its aim is to enhance the ecological property and aesthetic value of furniture. First of all the selection of material should meet the original ecological material, as well as let viewers and users experience the beauty of nature, respect the intrinsic value of nature, and can reflect profoundly; secondly, furniture modeling not only is a simple use of natural elements, but furniture functionality and appearance make the person generate spiritual resonance of ecological protection; furthermore furniture cultural function and spiritual function while own the basic using function; finally, furniture design strategy should be based on the ecological beauty of technology, exist with technology form, and be beneficial to improve the

ecological aesthetic capacity, ecological appealing and ecological aesthetic value. In short, this research hope that it can help people form a correct ecological aesthetics, to provide theoretical guidance for the furniture designing under the concept of ecological aesthetics, more hope that under the guidance of this theory to design furniture to symbiotic human and human, human and nature, human and social harmony.

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