Application of Green Design Concept in the Intelligent System of Interior Art Design under the Information Technology Environment

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Abstract:Based on the information technology environment, this paper studies the application of the green design concept in the interior design intelligent system. First, it introduces the connotation and basic characteristics of the green design concept, and then elaborates on the four perspectives of space layout, decoration materials, furniture selection, and ventilation and lighting. The specific application of green design concept in interior design. After use, it can be recycled and reused, implement the concept of sustainable development, and establish a scientific ecological awareness; ventilation design and natural lighting, as well as a comfortable thermal environment should be fully considered in the interior design process; environmentally friendly materials are used to ensure indoor health It is safe, and the original ecological materials can be used to make the interior more environmentally friendly and artistic.

Keywords: Green Design Concept, Intelligent System, Interior Art Design, Information Technology

1. INTRODUCTION

Green design is mainly to save resources, establish a harmonious relationship between nature and people, and promote the realization of the vision of sustainable Therefore, when designing development. modern environmental art, designers need to convert traditional design standards and make scientific and reasonable use of various resources. In addition, the viewpoints of high-end consumption and luxurious decoration in traditional design concepts should also be resisted, and the design theme should be transformed into simplicity and health. Aesthetic characteristics are important attributes that cannot be ignored in design. When applying green design concepts, some ecological aesthetic elements need to be utilized. At this stage, with the continuous improvement of people's living standards, people's awareness of environmental protection has also increased, and they have gradually paid attention to the conservation of resources and the rationality of resource utilization, and the concept of environmental protection has gradually integrated into people's production with the development of the times in life [1-6].

Therefore, environmental art design should also introduce the concept of green design, and pay attention to the rational use of aesthetic elements, to ensure that ecology and aesthetics can achieve perfect integration. From the history of human development, it can be seen that development needs to follow the laws of natural development. Only then can we guarantee long-term stable progress. 2. In the green design concept, the relationship between man and nature is more prominent, and green is applied to specific realities. Humans need to rely on the natural environment in their survival, and the natural environment is also an important foundation for human survival and development. Therefore, the green design concept emphasizes the need to protect nature as the basic goal, ensure the integrity of the natural environment, follow the laws of natural development, and achieve harmonious development. In addition, designers in the green design

concept need to implement specific environmental protection measures based on actual conditions, reflect the characteristics of the environment, and complete the harmony between the green design concept and the ecological environment. When designing, designers can focus on the integration of the style of the construction project with the current climate characteristics, folk customs, and cultural atmosphere, and apply the green design concept to it without affecting these factors to reflect the specific environmental protection effect [7-14].

The concept of green interior design is first of all a design idea, and its focus is on "green", that is, in terms of interior design, it takes into account the residents' green living needs, and creates a healthy, green and comfortable living environment for residents. Designers usually start from Starting from the aspects of environmental protection, energy saving, pollution-free, nature, etc., green and natural decorative materials are selected to carry out the overall and detailed design of the interior. In a narrow sense, green design refers to the use of green technology to design industrial products. In a broad sense, green design extends from product manufacturing to related product packaging, publicity, management and other links, as well as the green service awareness and green culture of the whole society. Consciousness etc. According to the requirements of green design, apply the green design concept to interior design. Designers should use natural resources reasonably and efficiently during the construction, decoration, use and destruction of the interior environment, and minimize the impact on the environment. It is best It can produce positive effects, protect the environment, and create a healthy, safe, comfortable, energy-saving, environmentally friendly, and "people-oriented" indoor environment. With the continuous changes of the times, our lives are changing with each passing day. Industry is a double-edged sword. Although it makes our lives more convenient, it also destroys the environment on which we live [15-21].

Now we gradually understand this truth, we not only need the convenience of life, but also the beauty of the environment. General Secretary Xi said, "Green water and green mountains are golden mountains and silver mountains." In the past few years, we have begun to pay attention to protecting the environment, and the country has promulgated various laws and regulations to promote environmental protection. Energy saving and emission reduction is a very important part. Saving energy and reducing emissions is reflected in the design to reduce energy consumption and use less materials to maximize the effect. With the constant changes of the times, our lives are changing with each passing day. Industry is a double-edged sword [22-24].

2. THE PROPOSED METHODOLOGY

2.1 The Green Design Concept

In the design of indoor storage space, the green design concept is mainly embodied in two aspects. First, the storage space will be reasonably allocated according to the size of the storage object. Generally speaking, the space size of different storage areas in the room is different, and the living habits of residents are also different. In addition, the items that need to be stored are also different. The designer will consider the actual space conditions and combine the characteristics of the stored items. The overall plan is to maximize the utilization of indoor storage space.

The reasonable organization and design of indoor space can meet the requirements of natural lighting and ventilation to the greatest extent, and create a green and environmentally friendly physical environment that is suitable for living. It is the foundation of green interior design. Other designs such as decoration materials, furniture selection, ventilation and lighting Design and so on must rely on the layout of the interior space. The design of the interior space layout must be systematically planned and designed, and relevant factors must be fully considered to lay the foundation for further refinement of the interior space. Design needs to be people-The oriented. Our lives are constantly improving. requirements for living space are also increasing. In the past, people only needed to live, but now they need to live well. Therefore, the design of space needs to show care for people. In the process of design, we need to uphold the principle of comfort, not only need to combine the concept of green design, but also to keep people comfortable.

For example, if we need to design an interior, we need to reduce the noise transmission in the room. Through the choice of materials, the light in the space is suitable and the people living in it feel comfortable. This not only achieves a green design, but also It is also a design that meets the needs of householders. In the current modern environmental art design work, people are the main foundation of green design. Therefore, green design needs to pay attention to the principle of safety. As people's requirements for the quality of life in the living environment increase, a comfortable environment is one of the main requirements for people to live in. In traditional design work, designers need to pay attention to the overall planning and use requirements, thus ignoring the importance of living comfort. Therefore, contemporary environmental art design needs to pay more attention to safety and comfort. Try to use environmentally friendly materials to reduce environmental pollution and harm to the human body, and adhere to the people-oriented approach, taking into account the comfort of the environment.

2.2 The Interior Art Design

First of all, from the perspective of daylighting, in the interior design stage, the housing already has a basic structure, so it can only be designed from the perspective of increasing the amount of daylighting. Designers usually use the method to increase the number of windows, or change the position of the windows, or use transparent glass and roof decoration materials to maximize the lighting effect of the house.

Specific to the design of the interior space, it requires the residence to sit north facing south, lower the height of the windows facing south, and raise the windows facing north appropriately, so that the interior design is more in line with the basic principles of aerodynamics. Free flow indoors, ventilation and lighting are more effective and convenient, while increasing the indoor permeability, reducing the dependence on air conditioning and fluorescent lamps, to achieve the effect of warm in winter and cool in summer. The kitchen and bathroom should be arranged on the north or northwest side of the living room, and make full use of the draft in the space design and the installation of doors and windows to reduce the interference of oil fume or irritating gas on the living room or bedroom. With the continuous advancement of science and technology, many environmentally-friendly materials have appeared today. Therefore, we need to apply these environmentally-friendly materials reasonably in environmental art design, so that the design not only has a sense of the times, but also reflects the concept of green and environmental protection.

Nowadays, the Internet is also constantly developing. Using the Internet to obtain information is a means we must learn. Designers can obtain the latest design ideas through the Internet. For example, when designing interiors, we can make full use of environmentally friendly materials to improve the lighting of the room. Through the reasonable distribution of materials, we can introduce sunlight into the room, increase the indoor light, scientifically use sunlight, reduce the use of electric lights, and save up resources. As the staff of modern environmental art design, it is necessary to judge the content and effect of the design. Therefore, when designing, it is necessary for more staff to stand from the perspective of users, taking into account the real feelings of users, so as to ensure that the work involved is more comfortable and humane and can provide a safe and comfortable environment for use, thereby producing a sense of pleasure.

2.3 The Application of Green Design Concept in Intelligent System of Interior Art Design

Green decorative materials are an essential part of the green design concept. In order to achieve a green effect, the designer will reduce the use of high-polluting and high-energyconsuming materials as much as possible, and will choose new decorative materials that meet environmental protection standards, healthy and green, and carry out environmental protection and economic aspects of decorative materials. balance. In order to reduce the mutual interference between the spaces, the space can be divided into functional areas, such as dynamic and static partitions, dry and wet partitions, and so on. In order to open up more space, based on the principle of practicality, different functional spaces can be isolated by the height difference of the space design. For example, a showcase can be cut out on the wall of the restaurant, and the upper part can be used as a display area. The lower part can be used as a storage area to beautify the room and expand the scope of indoor space utilization.

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The rational use of these factors in the environmental design process is conducive to improving the artistic sense of the space and making the overall effect of the design work satisfactory. The overall planning of plants and dual landscape artistic water source protection barriers creates an elegant art space close to nature. When planning and processing multiple elements in the design process, our goal is to improve the effect of environmental art design, but also to realize the concept of natural and environmental protection. Therefore, the green design concept must be fully reflected in the design. People-oriented is the foundation, and the protection of nature is the requirement. Only in this way can the design be full of artistic and practical value. Therefore, the good thermal insulation performance makes people feel better in the room, and can also age and empty; use, thereby reducing the consumption of resources and energy. With the current development of science and technology, heat preservation and heat insulation materials have been developed, and reasonable use is indeed effective for indoor heat loops.

3. CONCLUSIONS

Whether it is work or life, most of our day is spent in large or small rooms. The health of the room is directly related to the health of each of us. The green design concept provides a specific methodology for creating an energy-saving, environmentally friendly, comfortable and healthy indoor space. What we need to do is to continuously improve environmental awareness, and deal with the space layout, decoration materials, furniture selection, ventilation and lighting in the interior design. Relationship, minimize damage to the environment and save energy. Using modern technology to turn waste into treasure, we may live a healthier and more comfortable life while saving living costs.

4. REFERENCES

[1]Han Qi. Research on the application of green design concepts in environmental art design[J]. Architectural Engineering Technology and Design, 2018, 000(036):992.

[2] Sun Jialu. Analysis of Green Design Concept in Interior Art Design[J]. Building Materials and Decoration, 2019(20):2.

[3] Wang Zilin. Research on the Application of Green Design Concept in Modern Interior Design[J]. Family Life Guide, 2019(05):77-77.

[4] Wang Guangyang, Fu Lin, Hu Yinxia. Application of Green Design Concept in Interior Art Design[J]. Literary Life-Literary Theory, 2019, 000(012): 62.

[5] Liu Tianyi. Research on interior art design of green design concept[J]. Artwork Jian, 2020(2).

[6] Guo Jun. The application of green design concept in modern environmental art design[J]. China Interior Decoration World, 2020, 000(007):185.

[7] Zhu Wenting. The application of green design concepts in contemporary environmental art design[J]. Modern Economic Information, 2019(10):1.

[8] Deng Daidan. Research on the Application of Green Design Concept in Environmental Art Design[J]. Green Building Materials, 2018(6): 2.

[9] Xie Lijun, Shen Yiqi. The application of green design concepts in interior design[J]. 2021(2017-12):25-26.

[10] Xiong Chang. Application of Green Design Concept in Modern Environmental Art Design[J]. Charming China, 2018.

[11] He Hui. Research on the Application of Green Ecological Design Concept in Interior Design[J]. Grand View of Art, 2019(20):1.

[12] Zhou Xidong. The application of green design concept in modern environmental art design[J]. Artwork Jian, 2020.

[13] Li Mengxi. Application of Green Design Concept in Environmental Art Design[J]. Engineering Technology Development, 2020, 1(1):81-82.

[14] Ma Lihua. The practical application of green design concepts in modern environmental art design[J]. Tomorrow's Fashion, 2018(21):1.

[15] Cao Ming, Deng Liwen. Talking about the application of green design concept in indoor environment [J]. Furniture and Interior Decoration, 2018(3): 2.

[16] Wang Shili. On the application of green design concepts in interior design[J]. Juye, 2019(4): 2.

[17] Chen Zehong. Research on the application of green design concepts in interior design[J]. Architectural Engineering Technology and Design, 2018.

[18] Xiaoqing Yu. Ecological concept and its application in indoor environmental art design[J]. Smart City Application, 2019, 2(2).

[19] Wang Huazhong. Controllable seismic exploration method based on customized reflection wavelet[J]. Geophysical Prospecting for Petroleum, 2020, 59(5):12.

[20] Guo Guangyu. Application of Green Design Concept in Interior Design[J]. Art Technology, 2018(11):1.

[21] Yang Jieyu. Talking about the application of green design concept in modern environmental art design[J]. Decoration World, 2019, 000(016):187.

[22] Wu Defang. Application analysis of green design concept in interior design[J]. Artwork Jian, 2019(4X): 2.

[23] Pan Yi. Application of Green Design Concept in Interior Design[J]. New Materials New Decoration, 2020, 2(18):2.

[24] Chen Yingying. Analysis of the application of green design concepts in interior design[J]. Juye, 2020(10): 2.