

Research on the Application of Green Design Concept in Apparel Design

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Abstract: Green design is a worldwide trend and a new goal advocated and pursued by human beings. Green concept is a kind of design idea of apparel industry rising in recent years, and its main idea is to save the raw materials of clothing, to use the environmentally friendly raw materials in the apparel design, and to reduce the damage to the energy and environment on the basis of ensuring the quality of clothing. With the maturity of the green concept, green elements also continue to appear in a variety of apparel products. Based on the author's study and practical experience, this paper first analyzes the emergence of the concept of green environmental protection, then discusses the significance of the concept of green apparel design, and finally puts forward the concrete application strategy of the concept of green design in modern apparel design.

1. Introduction

Green design, also called ecological design, is a kind of design that focuses on the environmental properties of the product at the beginning of the design. Apparel products should meet the specific requirements of environmental protection in the whole life cycle, and they also should be harmless or do minimal harm to human survival. Furthermore, the resources of apparel products should be highly utilized, and the energy consumption should be lowest. The harmonious relationship between human beings and nature is regarded as a severe test of the century, and it is precisely the reason why green ecological clothing is put forward in time as a new concept of apparel fashion[1]. It mainly includes the green advocacy of clothing fabrics and accessories and the ecological way of wearing, furthermore, it introduces the ecological idea into the apparel design, advocates the consumption and use of ecological clothing, and prolongs the "timeliness" of clothing wear, and this concept will become an important selling point in the future clothing market definitely. At present, the ecological clothing that has been developed and listed in the world has various functions such as deodorization, sterilization, anti-inflammation, anti-ultraviolet, anti-radiation, anti-itching, heat-blocking and the promotion of human micro-circulation. Although many products are still in their infancy, the design and consumption of ecological clothing will become the mainstream of the future market. With the increasing attention of domestic and foreign markets to ecological products, green products will become the future direction of apparel industry[2].

2. The Emergence of the Green Environmental Protection Concept

Nowadays, environmental problems have become a worldwide topic. Many countries have enacted environmental protection laws to strengthen environmental protection and call for the protection of our planet. What is more, artists are warning society with their works. Victor Papanek, an American theoretical designer, argues that the greatest function of design is not to create commercial value, but to be an element in the process of appropriate social change. He believes that people should seriously think about the limited use of the earth's resources and serve the protection of the earth's environment. However, the "advertising design" and "industrial design" are the chief culprits of advocating people to consume excessively. Faced with social accountability, designers have to rethink, so "green design" came into being. Introducing the concept of green and environmental protection into the fashion and wearing "green" become the new fashion for apparel designers. Designers re-examine their works, regard resources conservation and environmental protection as their purpose, and make efforts to be people-oriented and friendly to the environment,

therefore, they can develop new apparel products to meet the need of the times. Environmental protection, leisure and health have become the most fashionable and lasting fashion theme in the 21st century.

3. Significance of the Green Apparel Design Concept

3.1 Catering to the people's need for a healthy ecological environment

In the long history of design, industrial design created a modern way of life for human beings, but also caused great damage to the ecological balance of the earth. People are living on the earth trampled by "civilization and development", facing the industrial waste water discharged into rivers, and breathing the thick smoke in the chimneys of factories and the exhaust gas of cars filled with the whole air. From 2013 to 2014, the haze, which has plagued the Chinese people, gave us a taste of the harmful effects of environmental damage. The concept of "green and environmental protection" is getting more and more attention. The idea of "green design" in apparel design caters to people's demand for healthy ecological environment.

3.2 Leading the scientific and healthy lifestyle

The proposed green design concept lets people have no choice but to rethink that how to realize the interdependence between human beings and nature, how to achieve the sustainable development of the green ecology, and what are the destructive effects of the original lifestyle on the ecological environment. As a result, people should change the original lifestyle[3]. For instance, people should put an end to the extravagance and waste caused by the so-called identity display and the wanton killing of animals because of fur wearing, cut down industrial production for so-called rapid development without considering the ecological environment, and reduce vehicle exhaust emissions by taking green travel as far as possible. We believe that as long as we adhere to a healthy and green lifestyle, our ecological environment will be improved.

3.3 Providing a new field for apparel design and research on new fabrics

The shortage of resources, the environmental pollution caused by the production process, and the waste produced by used clothes have aroused the desire of designers to study the future trend of apparel development, therefore, they change the original design ideas and consider how to design clothes that are both environmentally friendly and fashionable on the premise of protecting the environment and reducing energy consumption. Researchers devote themselves to develop new fabrics, such as the corn fiber, an alternative in order to reduce oil consumption, the bamboo fibre and the soybean fiber that are healthy and comfortable, and these new fabrics are popular and have aroused strong concern. If an apparel company wants to stand firm in the market, it must make efforts to study the amenity and safety of fabric[4].

4. Concrete Application Strategy of Green Design idea in Modern Apparel Design

4.1 Natural style can be used in green apparel design

With the development of civilization and natural consciousness of human society, social production pays more and more attention to the people-oriented concept, attaches great importance to humanized standards in the design of apparel products, and emphasizes the healthy elements and natural attributes of apparel products, so that it can reflect the human pursuit to return to nature. In fact, the main needs of contemporary consumers for clothing have changed from the original bright and exaggerated aesthetic concept to the pursuit of simple and natural design requirements. Consumers begin to focus on remolding the attributes of clothing products, and pay attention to excavating the harmonious relationship between human beings and nature[5]. The naturalistic green fashion design needs the fashion designers to have a natural feeling close to the original state, so that the clothing works can reflect the nostalgic, simple, rural and natural style, and can also reflect the life pursuit of people in modern society to dream the soul to return to the nature and to be

integrated with nature perfectly. Naturalistic green clothing design generally adopts the simple and natural design language, and mainly uses the beach color, glacier color, forest color, sky color and other inherent colors in clothing colors, therefore, the apparel products can show the interdependence between human beings and nature. While in the selection of fabrics, designers can adopt the raw cotton, raw silk and animal hair that are completely natural and are not handled manually in order to reflect the tranquil beauty of nature.

4.2 Simple style can be used in green apparel design

The greatest feature of the apparel industry is its emphasis on popularity, which makes it easy for society to base its prosperity on excessive waste, and at the same time, the popularity also leads to the short life cycle of apparel products and increases the environmental load to a certain extent. However, the apparel design feature of cherishing natural resources of the concise style is precisely the resistance and negation of the original excessive waste and luxury fashion design. It advocates avoiding the temporary and epidemic concise design in order to prolong the life cycle of apparel products effectively. Concise design concept is an important part of green ecological design. It attaches importance to the environmental protection, hopes to give full play to the maximum benefit of clothing design with the least resources, and emphasizes the conservation and recycling of waste. It requires the fashion designer to start from the classical design philosophy, use the design concept of "less is beauty" in the materials selection, appearance design and color collocation, and win by small that is to get more overall aesthetic power with the least resources. In the process of green clothing design, we should emphasize quality rather than quantity, practicability rather than decoration, and we also should advocate using the least material to give play to greater economic benefit and to show reasonable and simple overall style of clothing [6].

4.3 Environmental protection style can be used in green apparel design

Nowadays, with the tide of environmentalism sweeping the world, people pay more and more attention to the concept of environmental protection and the sustainable development of society. Therefore, environmentalism can also be used in green apparel design, and the style of environmentalist apparel design is also reflected in the development and utilization of new materials. In essence, environmentalism in green apparel design mainly emphasizes the recycling and utilization of waste, and uses waste as the main material of apparel production for the creation of clothing art design, so as to minimize the damage to the natural environment, while actively using and developing environmentally friendly clothing materials is the main goal of apparel environmentalism style. This idea of environmentalism advocates the conservation and reuse of waste[7]. At the same time, the environmentalist design style also supports apparel products to use environmentally friendly materials directly to design and interpret fashion, and encourages products to use imitation fur fabrics instead of animal genuine fur, therefore, the products express the desire of modern fashion designers to protect the environment and also open up the new space for modern clothing market development.

4.4 Ragged design style can be used in green apparel design

The ragged design style is also called the poor design style or the shabby design style. It is a natural exposition of frugality, and it shows that fashion designers cherish natural resources. The ragged design style is actually a "saving of thought" that makes people deliberately re-observe and reexamine old objects, and innovate with existing resources, furthermore, it advocates young people reprocessing used clothes and creating their own fashions through creativity and handwork. It not only rekindles inspiration, but more importantly, upsets the blind and fast lifestyle of the past. In the process of production and use of clothing, the purpose of saving is realized. For the design itself, some time inspiration and breath can also be obtained from the old clothes, so that the "new clothes" after the transformation have a special texture that is entirely brought out of the time of the old clothes that some new clothes do not have. From the perspective of green fashion designers, every outmoded apparel has the potential to be fashionable and trendy, and it will show brilliance as long as integrated with different elements through creativity.

5. Summary

Green design is a worldwide trend and a goal advocated and pursued by human beings in the 21st century. Green apparel design promotes the development of human beings, improves the environment, meets the needs of sustainable development, and makes our lives healthier. Realizing the current environmental crisis, establishing the environmental protection awareness and protecting the green ecology are the consciousness that every designer must have. We should break the narrow perspective of traditional design and set up new ideas, new thinking and new ways, so as to design more perfect clothes under the guidance of the green environmental protection concept.

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