The Enlightenment of Nordic Emotional Design on Product Design

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Abstract: Nordic design pays attention to emotional design, people-oriented, simple use, pay attention to the culture of the nation and modern industrial production, not only pay attention to functional requirements, more emphasis on design to human spiritual satisfaction and sustenance. Nordic emotional design gives us in the future in product design, from the form of product color material to pay attention to the user's emotional needs. The emotional design of Northern Europe has a lot worth learning from Chinese product design. Nordic design focuses on people-oriented, starting from the whole process of people using products. Pay attention to the recycling of materials in the product design and the simple form and mass production. Analyze the development trend of emotional design and explore the enlightenment of Nordic emotional design on Chinese product design.

Keywords: Emotional Design, Product Design, Nordic Design, People-Oriented

1. Nordic Style

1.1. Concept Analysis of the Nordic Style

Scandinavian design refers to the design of Nordic countries in Norway, Denmark, Sweden, Finland and Iceland, the biggest development characteristic is "simple", pay attention to humanism, practical, simple, give a person as comfortable psychological feeling as the natural environment of spring breeze [1]. Nordic design not only meets the functional requirements of design, but also emphasizes the sustenance of design. Different from the cold mechanized production in some countries of modernist design, the Nordic design emphasizes human touch and the harmony between man and nature. It fully reflects the Nordic people's love and pursuit of life.

1.2. The Formation of the Nordic Design Style

The style of Nordic design is formed. Due to the cold climate in northern Europe, this climate needs the Nordic people to be full of ritual and warmth of home life, so that the Nordic people began to pay attention to the research of the structure of home environment design and industrial product design [1]. Nordic region, with high climate and cold forest coverage rate, rich wood resources, wood is close to nature, so wood is widely used in the Nordic design of interior design and product design. Wooden product design gives people a comfortable and warm feeling. For example, the cantilever wood chair is a model of Nordic wooden home design, the wooden furniture used is light and has toughness, in addition, the natural texture of wood materials and soft color have natural decorative, making the product more kind and warm feeling.

In Nordic culture, people highly praise the concept of product design, with "use as long as possible" as the creed. Practical and environmental protection make people feel warm and satisfied.

2. Application Research of Nordic Affective Design in Product Design

2.1. Concept and Connotation of Emotional Design

The meaning of emotion is defined in the category of psychology as: "A special reaction attitude to objective reality." Emotion is mainly the sensory and visual feeling of sensitive things and the operation of the brain. Human subjective consciousness exists in the experience of things, the operation plan of
things and a change of attitude towards things [2].

The concept of emotional design is a concept derived from emotional cognition from it to the design category. The so-called product "emotional design" contains the spiritual function on the premise of ensuring the basic functions of the product, that is, the product transmits certain information that meets the needs of users, so as to stimulate the positive feelings of users. [1]'s emotional products seem to "speak", which can make people be attracted at the first time, and have the impulse to interact with them. Emotionality often becomes an important factor for the ultimate consumers to buy.

2.2. People-oriented Design Pursuit

"People-oriented is an important embodiment of today's social progress. The emergence of people-oriented care makes the design bright, and its function is a prominent symbol." [3] Therefore, they attach great importance to the creation of a warm family atmosphere. While emphasizing the comfort of the home environment, they inject special emotional factors into the furniture design, and their detailed design is more delicate and delicate. [4] fully shows that it designs for the general population and serves the daily life of the public, so the Nordic design pursues a "considerate" design. Nordic design focuses on being people-oriented, meeting the fundamental needs and interests of human beings. On the one hand, it integrates the love of life and great closeness into the design; on the other hand, it has made great achievements in ergonomics, ecological theory, environmental psychology and other aspects, creating scientific and comfortable excellent design, and creating romance and rationality in every work.

In the social development, the people-oriented concept is paying more and more attention, and functionality is the most prominent symbol in the design. To evaluate the design of a daily necessities depends on whether it has good functions and the good form and the pollution to the environment, and whether it has emotional standards, forming a new development trend of product design.

2.3. Simple and Diversified Fashion Design

Because the natural environment in northern Europe is relatively bad and resources are relatively scarce, many designers will pay attention to environmental protection when designing products, and try to be the most simple design. [5] IKEA as a Nordic design representative company, most of the IKEA products are simple and small to watches, plates, furniture, kitchen utensils, all the products are based on the simple design style. Most of IKEA's products are "simple but not simple". In order to effectively make up for the boredom caused by this simple shape, IKEA adopts diversified fashion forms in the process of production and sales. On the one hand, IKEA provides more solutions for users when choosing goods. IKEA both produces and sells in the mall, which can both experience and retail, providing users with more space for choice. In the fashion processing of products, some users like retro style products, and some users like fashionable products. In the process of product design, designers boldly combine traditional and modern products, and produce different forms of products, to provide more choice space for different users, so as to promote consumption. This diversified mode of production is also one of the factors in IKEA's success.

2.4. The Embodiment of the Emotional Design in the Material and Form

Northern Europe is rich in high quality oak and birch and other furniture design main materials, used in the design to these high quality wood can show a kind of warmth, simple and primitive beauty, which makes the Nordic design has elegant and comfortable, simple and simple, smooth curve characteristics. Sweden has a fashionable style; Finland has a natural and simple style; Norway has a simple and solemn style. In the product design, different materials can express different emotions, such as steel bars and glass, which can express the sense of science and technology, and wood can show the feeling of natural simplicity. The products made with these materials are more warm and soft, and give people a feeling of being close to nature. Alto likes to use wood in designing products. Alto believes that each wood has its own spirituality, from which the texture and texture color are a rich expression of emotion. Alto's classic work is a curved armchair, abandoned the international main furniture cold steel material, and used the birch bending molding, in this design can not see edges and hard edges, make the armrest to chair leg natural transition, full of classic beauty, created with wood as the second chair, show the natural gentle beauty, its profound influence on the design style of northern Europe. Furniture designed by Alto is still produced and sold today and is an example of success in modern furniture.
Morphology is an important form of expression of design. When people observe a product, they mainly influence the psychological experience through the shape and proportion of the product. Nordic design is known as the "emotional functionalism" and different from the principle of "form obeying function". The Nordic functionalism is integrated into the organic form, making the Nordic design feel close to nature. Jacobson's egg chair looks like a broken shell egg, very elegant personality. Such classic design still has extraordinary charm today, swan chair is the embodiment of fashionable life concept and taste, these two chairs match up very perfect, no matter put in the sitting room, bedroom, study, or public commercial space is very have individual character. He let the armrest and the back of the chair form a smooth outline, looking like holding an egg. The seat cushion and back sponge make the chair easily deformed; the elastic surface of the whole chair is comfortable and secure. The seemingly simple design includes an extremely thoughtful and creative design, seeking to fully realize its functions in a concise form. It is already a model of Nordic design. Form is somehow the most important medium of communication between design and the audience, and people begin to talk to it at first sight, or happy, or humorous, or painful. All things is in the expression of form, so form is the design language that can most arouse people's emotional resonance, and it is also an important expression aspect of emotional design.

2.5. Emotional Design of the Lifestyle

The embodiment of emotional design in life products is that "the essence of design is to solve the problems that people face. "Design is ubiquitous and ubiquitous in life. Jacobson's Swan Chair, it is an elegant chair with swan-like curves like swan-like petals. As modern society changes with each passing day, people enjoy the convenience of science and technology while also under the pressure of life and work. These pressures come from not only physically, but more psychologically. Design is closely related to people's lives. Care is not only reflected in the physiological level but also cares for people's emotional needs. Nordic design not only pays attention to the relief of user psychological pressure and the adjustment of mood, but also is imperceptibly changing people's way of life.

At IKEA, consumers get an "experiential" way of shopping. Without salesmen to closely follow, consumers can experience and choose goods. The IKEA guide line will guide you to the shopping route, and the label of the product will tell you the description and price of the product. Of course, if you need to ask about the guide product, the guide will be very willing to help you. The design of [3] IKEA home reflects the concept of human design from the aspects of material, color, the relationship between form and environment. It reflects the nature and warmth of the Nordic design. IKEA's products adopt modular design ideas, and reflect the design of environmental system matching methods. Consumer users are positioned as the urban middle class and the most personal interest. The design style and store space of IKEA home show people not only home products, but more importantly, a comfortable lifestyle, which is also what people need today. The emotion of [6] product design not only relies on the external form, color, material and other elements, but also can make the use of technical skills for the emotional performance.[7] emotional design of Northern Europe is reflected in the relationship of color coordination; users feel the natural atmosphere when using the product; modular mass production and user assembly; and detailed demand size relationship of convenient volume of product storage space. The products in Northern Europe generally have the characteristics of practicality and artistry, so as to show the beauty of product design, not only to meet people's daily life adaptation needs, but also to meet people's emotional needs. Therefore, it can be seen that the Nordic design is a design model combining with modern mass production based on the profound cultural tradition of its own nation.

Therefore, the emotional design must be based on the details of daily life, to truly solve the problems in life. The details of daily life are the inspiration of designer design, which comes from life. Emotional design solves people's emotional needs and psychological needs. Only by observing the details of life and analyzing the process completely, the design inspiration source in life can be current affairs and news, their problems in daily life, which is also something that a product designer should pay attention to in real time. The design concept of emotional design should also be that Chinese product design should be carried forward, and to create more for the needs of most people's design is a successful design.
3. The Enlightenment of Nordic Emotional Design to Product Design

3.1. Methods of Emotional Design in Product Design

Emotional product design is purposeful and consciously stimulate some emotion when using the product, pay more attention to the psychological influence of people when using the product, and follow the principle of emotion first. On the basis of meeting people's emotional needs, it should bring people a higher aesthetic experience and give them a rich emotional connotation. Make people achieve emotional resonance when using the product, so that consumers can maximize the emotional experience when using the product.

Emotional design from the purpose of self-centered design concept, which is also the development direction of future design. This emotional design is also reflected in the story, material, color, and other carriers to reflect. However, consumers can intuitively feel the emotional value given by the product.

The future design must also be a user-centered design. The products separated from human purposes must not have a suitable product context. The emotional design will also improve the product sales, so that users can feel the society's care for them [8].

3.2. Inspiration of Nordic Emotional Design on Chinese Product Design

Emotional design is the development trend of design. Western and other European and American countries have advantages in this respect due to the early design development. However, due to the development of China's economic development, the progress of science and technology and the advantages of a populous country, China has more and more high-quality talents. Chinese culture has a long time and far-reaching history, and countless materials can be used in design. However, Chinese design style is still in the exploration stage, and it has not widely used Chinese traditional elements in modern design to carry forward traditional Chinese culture. [9] because emotional design can bring higher value added products, has certain economic benefits, so in product design when the product designer's creativity and emotion together, can bring consumers a good use experience, but also for the product use safety, health, environmental protection to provide guarantee [10] and do people-oriented, but also consider the product design materials, color, form and other aspects, comprehensively considering the human-product-environment trinity is the aspect that China should consider in the product design.

4. Brief Summary

We are in a stage of high-quality development. The rapid development of economy and technology has brought profound changes to our society. Economic globalization has enabled the continuous penetration and integration of Chinese and Western cultures. Emotional design is the direction of design development. Nordic emotional design has a lot worth learning from for Chinese product design. Nordic design focuses on people-oriented, starting from the whole process of people using products. In the recycling of materials and simple product shape can be mass production and the release of natural biological forms design. Therefore, paying deep attention to people and their needs and settling down to study solutions is the starting point of our design innovation. From the success of Nordic design it is not difficult to find that perfect design not only need novel creativity, complete knowledge structure and other professional knowledge is indispensable is "emotional" input, only the real needs of "people" in the first design can be quickly accepted by the public, better reflect the Chinese traditional cultural connotation of the original, excellent Chinese product design [9].

References