

The Reflective Level in Emotional Design

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Abstract

The three levels of instinct, behavior and reflection in emotional design guide and play a role in each other, and play a vital role in the process of industrial design research. Among them, the reflection layer is not easy to be noticed, but it plays a role in guiding the development of the entire design work. This article will conduct an in-depth interpretation and summary of the existing literature, analyze and explore the image expression of different types of specific product reflection layers, and flexibly extend it to related industrial product design.

Keywords

Emotional Design; Reflection Level; Industrial Product Design.

1. Introduction

With the continuous progress of modern technology and the continuous improvement of economic consumption, the development of industrial design is no longer limited to satisfying functional needs. Consumers and designers are also constantly paying attention to the extension of products in addition to functional attributes. Cultural attributes and aesthetic attributes[1].

2. Emotional Design and Reflection Level

Relevant research organizations refer to "emotional design" as "Kensus Engineering" and have "Kensus Engineering Society". This title is widely proposed and applied in Japan, South Korea and other places, and European academic circles also accept "Kensus Engineering". Related concepts. In our country, the engineering academia refers to "perceptual engineering" as "perceptual image or perceptual intention." Scholars from the School of Art and Design adopt the term "emotional design" and apply it to design[2].

Donald A. Norman divides emotional design into three levels: instinct level, behavior level, and reflection level. Emotional design is applied to industrial product design. Among them, the instinct level is the appearance of the product; the behavior level represents the interest and use efficiency brought to consumers during the use of the product; the reflection level is realized as the designer designing the product The expression of the consumer's Self-image, the narrative of the product, and the symbolic symbol of the product.

The level of instinct, the level of behavior, and the level of reflection are intertwined and integrated, and they do not exist independently[4]. Emotional design can arouse people's interest in the color, shape or material of the product at the instinctive level, and bring the fun and efficiency of use to consumers through functionality or ease of use at the behavioral level. Levels can arouse consumers and deep-seated emotions through brand effects or cultural attributes. Emotional design can work on different levels at the same time.

3. The Reflective Level of Emotional Design

Emotional products can allow users to have a certain habit or a certain sense of dependence in the process of use. This kind of thing that can catch the user may be a color, a shape, a material, or It can be a kind of rule made. Successful product design can not only use products to solve problems, but also bring a certain life interest and even life insights to users in terms of services. Then I think this is a successful reflective product design.

Successful product design needs to do the following at the level of reflection:

3.1. Consumer Self-image Expression

The mass production of industrial products can greatly reduce the production cost of the product, and can also greatly improve its production efficiency. But things always have two sides: mass production of industrial products saves costs and improves production efficiency, while also reducing product personalized design, which is difficult to meet the needs of some high consumers. On the premise of meeting the basic functional requirements of products, people need more personalized designs of products to show their social status or aesthetic taste, and others can infer the aesthetics, personality, or aesthetics of the product owner through the personalized products they use. Status status.

The basis of emotional design is human-oriented, which is a kind of humanized design. Some interesting usage rules or obstacles are set in the product design process. Users can overcome obstacles by exploring, discovering and learning these rules, and bring users to the product. A certain taste of life. Grasping the user's psychological needs will help increase the user's stickiness to the product, or loyalty to the product. Satisfying the psychological needs of users is a very important point in product design.

Desktop trash cans tend to take up too much space on an already cramped and messy table. When cleaning and storing the inherently small desktop space, cleaning tools are needed, and tools are also needed. Clean for cleanliness; for storage and storage, designers not only solve problems but also solve problems. Instead, we must start from the expression of Self-image and design products that are more in line with consumer needs.

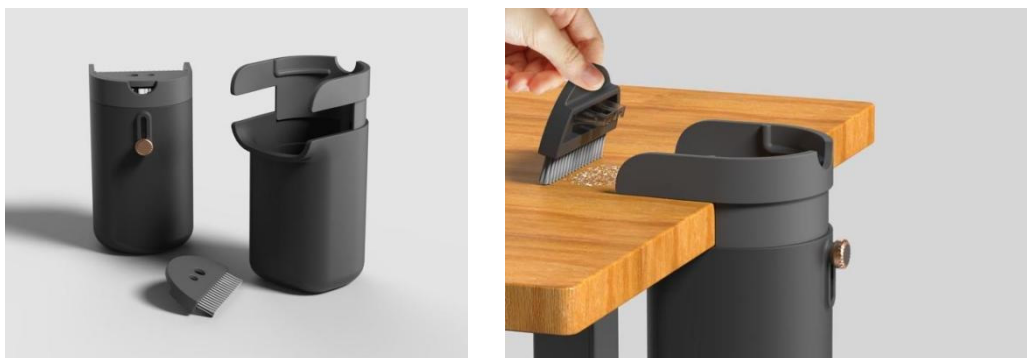


Figure 1. "Clamping Basket"

As shown in Figure 1, Korean designer Jiang Chengwan solved these two problems with a single product "clamping basket". On the basis of not occupying the desktop space, the "clamping basket" is designed to install the product on the edge of the table body, through the brush that comes with the product, clean the desktop dust and debris, the small brush can be placed on the trash can and equipped with a pencil sharpener Function. The design of "clip basket" captures the psychological needs of users who prefer cleanliness but rejects complicated cleaning. Starting from the expression of consumers' personality, preferences and lifestyle, products that are more in line with consumer needs are designed.

3.2. Narrative of the Product

The so-called narrative of a product is a design method that uses the product as a cultural symbol and draws on the techniques of narratology to create a design method[5], and completes a story telling through the product itself, the method of use, and the process of use. Narrative interpretation can display products more vividly and stimulate consumers' strong and lasting emotions. Compared with traditional design methods, products designed through narrative interpretation methods can maintain longer use time and emotional retention.

Memories can arouse powerful and lasting emotions. People usually associate objects with certain special memories or associations, so that objects have special meanings. Evoke the past through objects and think of a special moment in memory. People rely on such objects with special meanings, but in reality they are attached to the meanings and emotions represented by the objects. The same is true for the design of products. The memories that reflect life experiences are designed as cultural symbols through products. Stimulate consumers' strong and lasting emotions.



Figure 2. MUJI CD player

The Japanese designer Naoto Fukasawa's CD player performed a narrative interpretation of the product, connecting the exposed music CD and the fan page of the wall-mounted electric fan. The player removes the cover, hangs the switch line directly, and turns on the music by simply pulling it. This switch method is much like the switch of a light or an electric fan when you were a child. It was originally conceived from the 1999 "No Thoughts" campaign. The design of the MUJI CD player completes a storytelling through the use of the product, and finds the product design plan in the common feeling and memory of people.

3.3. Product Symbol

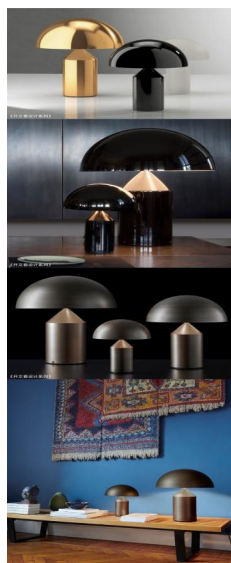


Figure 3. Collection Atollo

The essence of product symbol lies in meaning, and there is no symbol without meaning. The information transmitted by the product symbol is the content of the symbol meaning level, that is, the "referred" of the symbol [6].

"In human social life, all biological needs must be transformed into cultural needs." This is what the cultural anthropologist Malinlovsky once put forward. The needs of culture appear on the product through symbols as the carrier, constructing a future cultural concept and lifestyle.

The famous Italian Atolo series lamps are regarded as one of the design symbols in the world. It was designed by Vic Magistrati in 1977 and was awarded the Copaso Dolo Prize in 1979. It has become the permanent collection of many design museums around the world. It is the object of reference for industrial designers and has become Part of the family furniture that people love.

4. The Three Levels Work Together

The reflective level of feedback in emotional design is mainly the emotion that the product brings to people and the happiness that the product brings to people, highlighting the joy of human-computer interaction. The most obvious example is the souvenir. The value of souvenirs lies in their rich emotional memories, and each souvenir will arouse an unforgettable memory experience. Brand-name products have long built a trusting emotional relationship with consumers. The works of famous designers are rare and expensive. Owning these works has become a symbol of prestige and status. The design works satisfy consumers' self-identity and show off their individuality. These are the reflection levels at work. More often, the taste of a product does not just stay on one level, but works on three levels together.

5. Summary

The essence of product design is people-oriented and serving needs. Reflective design methods contribute to product design innovation, thereby improving product market competitiveness and consumer service experience. In emotional design, reflective design methods have a wide range of applications, and consumers have a good service experience. In emotional design, successful design lies in the complementation of the three dimensions of instinct, behavior, and reflection, and none of them are indispensable.

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