

# Application Research of Emotional Design in Modern Product Design

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**Keywords:** Emotional design, Consumer, Aesthetic, Dual resonance.

**Abstract:** With the development of economy and society, consumers pay more attention to product design and emotional input while paying attention to product use functions. Among them, the purpose of emotional design is people-oriented and inject more emotions into the products so that the designed products can not only meet the needs of consumers, but also meet the psychological and emotional needs of these groups. Therefore, this paper first analyzes the relevant theories of emotionalization, and on this basis, explores its application advantages and strategies in modern products to arouse the dual resonance of consumers' memories and emotions.

## 1. Research background

### 1.1 Literature review

In recent years, emotional design products have received more and more attention from the design community. Designers have also incorporated personal emotions into their designs, applying interesting and human factors to their products. The designed products not only meet the needs of most consumers, but also meet their needs for emotional design of products. Some scholars have pointed out that products meet various requirements in people's daily life, while designers are the founders of various products. Products with emotional design are the embellishment and supplement of people's boring life. Only by satisfying consumers' needs and catering to consumer psychology, this product has value (Zhang, 2010). Another expert pointed out that in today's material life is extremely rich, ordinary products can not meet the aesthetic needs of consumers, and their demand for humanization and fun of products is also increasing. Studies have shown that people's feelings are rational and emotional. The general product design can only satisfy the consumers' rational emotions, but if the designer injects their own emotions into the products, the designed products can touch the emotional emotions of the people ( Xiang, 2015). Only when perceptual emotion becomes the dominant factor affecting people, the product realizes its own value, and consumers will use this value to satisfy their own needs and stimulate consumption (Qi, 2014). Therefore, with the continuous advancement of science and technology, more and more products with emotions have begun to be popular. Such as the unique design of household products in terms of shape, color, color, etc., to convey the warmth of customers and stimulate the emotional feelings of consumers. While the product is full of imagination, creativity and appeal, emotional design is also very important (Wang, 2016). Based on this, many designers and related experts have proposed an important method of product design, namely, designing emotional products, which is also an emerging design idea to stimulate consumers' emotional emotions.

### 1.2 Purposes of research

Product technology and the functions it provides are factors in the success of the product. However, more successful products tend to focus on emotions, in addition to satisfying people's physiological needs, but also to meet people's psychological needs. These products provide psychological comfort to consumers while creating a comfortable and safe living environment. The ultimate goal of product design is to solve the relationship between people and things. If the designer integrates personal emotions into the design process, the product is no longer a simple item, but a product with emotional color, which is more likely to cause people's emotions. resonance. The ultimate goal of product emotional design is to create a product that is enjoyable and enjoyable, to

give people an inner aesthetic experience, and to make life full of fun and enjoyment.

## **2. An overview of the revelent theory of product emotional design**

### **2.1 Theoretical analysis of the content of emotional design**

Emotional design was proposed by the famous American cognitive psychologist Donald Norman, that is, product design must not only ensure the use of the product, but also give it emotional connotation, so that the product can meet the psychological needs of consumers (Guo, 2018) . In this era of “customer is God”, product design must respect and meet all the needs of consumers, that is, designers need to design products with emotions. Therefore, the emotional design concept has become the mainstream of product design, which can touch people's inner feelings and encourage them to accept such products. Today, the “people-oriented” design concept is prevalent, and the proportion of emotional factors in product design is increasing. The latest research shows that for consumers, rational thinking only plays a supporting role, and the final purchase right is determined by emotional emotions (Lu , 2015). Although people's rational thinking is greater than perceptual thinking, in the face of emotions, including in the face of products with emotional design, people still choose emotional emotions. Because the brain is uncontrolled when faced with what you like, therefore, in the face of products with emotional design, consumers should not only consider the use of such products, but also consider it. Give people a sense of pleasure and satisfaction. This is a function that ordinary products do not have. Therefore, in today's rapid economic and social development, consumers pay more attention to the connotation of products, but not inherent. Designers must also adhere to the “people-oriented” design philosophy, all based on the user, let customers happy, let life become a happy thing.

### **2.2 The internal relationship between emotional design and demand application**

American psychologist Maslow divides human needs from low to high into five levels, namely, physical needs, security needs, social needs, respectful needs, and self-fulfilling needs (Li, 2013). In the content of hierarchical demand cognition, the five needs of people need to rise step by step, and people's needs for products are also increasing with the development of economy and society. When human beings are in the physiological needs stage, their demand for products only stays in the warmth and practical aspects. There is no money and no energy to pay attention to whether the products have emotional design and whether they can meet their psychological needs. In the self-realization stage, with the improvement of people's living standards and the improvement of comprehensive quality, the requirements for product design are more and more diversified. They are no longer satisfied with the functions of the products themselves, but on the basis of complete functions. Can meet their psychological needs. Therefore, in this era of consumer-led, it is more important to produce products that conform to consumers, and emotional design is designed with this need in mind. According to consumers' general reflection, products that are enjoyed by people in aesthetics can make people work and live better, and it is easy to make people feel dependent on products (Wang, 2017). Emotionally designed products can bring people closer to each other and get people closer and closer through the product. Therefore, any designer who pays attention to emotional needs hopes that their products can bring pleasure to others and stimulate consumption.

## **3. The application advantages and strategies of emotional design in modern products**

### **3.1 Application advantages**

#### 1) The functional advantage

Modern products include not only aerospace technology, but also products in everyday life, such as home products, children's toys and computer technology. The 21st century home products emphasize simplicity and practicality, and simplicity is not simple. Therefore, designers should understand the functional needs of consumers when designing modern home products. For example, the design of the table, before it, not only is huge, but also takes up a lot of space, the design does

not meet the aesthetic needs of consumers, just as a tool for eating. With the progress of the times, people's demand for tables is getting less and less, but this does not affect people's purchasing power for the table. The modern table emphasizes invisibility, which not only satisfies people's basic needs, but also does not lose beauty. The designer incorporates emotional factors in the design, so that the designed furniture brings both visual and psychological enjoyment.

## 2) The shape advantage

Modeling is an indispensable aspect of product design, involving many aspects such as aesthetics. Different shapes of products can cause emotional changes in associations, memories, etc. Therefore, when designing a product, designers must understand the market demand and understand the consumer psychology in order to design an influential product. For example, the sofa is an indispensable household product in our daily life. If the office worker can relax on the sofa, it will be very comfortable. At this time, the design of the sofa is particularly important, and the designer can design different sofas according to the needs of different consumers. If the consumer lives alone, the sofa can be designed to be surrounded by a sense of warmth in an empty room.



Figure 1. Sofa with Emotional Design

Figure 1 is a sofa with an emotional design that takes into account the needs of the user. As shown in the picture, the enclosed sofa can enhance communication with family members and enjoy the security of a small space. Therefore, works with emotional design are often more popular.

## 2) The material advantage

Material advantages can awaken people's senses, stimulate people's vision, and then produce emotional changes. For example, the original research institute chose white cloth when designing sheets for the hospital, so that the hospital can create a soft and warm feeling for the patient to feel at home. Although the white cloth is easy to be dirty, as long as it is cleaned in time, the patient can have a certain degree of trust in the cleanliness of the hospital and the sanitation. Therefore, the designer's original research and development in the comprehensive consideration of the needs of patients, starting from their own, from the perspective of the patient to think about the problem, only to get this design.

### 3.2 Application strategy

#### 1) Emotional design

Designers must adhere to the “people-oriented” concept in design, stimulate the senses of consumers through the elements of modeling, color, materials, etc., thus triggering a positive emotional experience. The spider shape juicer designed by the designer Philippe Starck is a very strong work. It is designed according to a certain cartoon shape, adding the designer's own emotions, making the juicer interesting, so much so that Consumers get varying degrees of emotional pleasure and spiritual enjoyment.

#### 2) Practical design

Modern design should first focus on practicality, followed by emotional and psychological satisfaction. The design of the modern table incorporates this design concept, which not only meets the basic needs of people, but also provides visual enjoyment. It is not only small in size, but also beautiful in appearance. It is a new type of table designed in the bed, which can be operated by electronic buttons when needed. This invisible design mainly highlights the practicality of the table, but at the same time satisfies the psychological needs of the user, that is, the consumer can get

spiritual comfort.

### 3) Human design

The essence of modern design lies in its pursuit of humanity. As a well-known designer puts it, “the standard of good design lies in the attention paid to people in designing products and putting people first.” As a must-have item for people's lives, sofas are also the most dependent household products in daily life. Therefore, the design of modern sofas should put humanity standards first, and let users feel the warmth and feel of home as much as possible. To the designer's good intentions.

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