

The Research of Industrial Design Based on the Old People's Emotion

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ABSTRACT: The old people are a special group of our society. With the development's rapid of our society is faster and faster, how to meet the need of the old emotion so as to make their life better has becoming the very focal point of our society. Therefore, the research of industrial design based on the old people's emotion emphasis the feeling they have when they are using the product. And it also emphasizes the emotion that is conveyed by the product, and bring care and love to the old, so that make them feel the concern given to them by the industrial design.

KEYWORD: Industrial design; The old; Emotional; Analysis

1 INTRODUCTION

With the speed of the aging society is increasing very fast, and that our country's financial is not so developed yet, the problems which are brought by the aging society is very serious. And the solution of these problems can just directly influence the development of our country. They need the happiness and care brought by the industrial design, and let them feel they are concerned and won't be alone anymore from the bottom of their hearts. So that they can be more passionate to life and really enjoy it. And the aim of the industrial emotional design just meets their need. It emphasis the emotional experience and the needs of costumers. And it regards the old as the center, and emphasis their feelings and the emotion needs in their heart, so that make them never feel abandoned by the society, and spend their remaining years in comfort.

2 THE OLD PEOPLE'S EMOTIONAL ANALYSIS

The old belong to the special group of social groups. The point of emotional design for old people is that, while industrial designing products make the old feel the ease of using, it should also contain lots of emotion. Emotional plays a very vital role in the industrial products designing for the old. Adding emotion to industrial designing products allows these products not just bring satisfaction to users, but also, let them become living and emotional communicators with old people's soul. Products are

not just industrial products anymore, but more importantly, indispensable friends aside old people, friends that can always be there for them. Moreover, designers should also treat these industrial products as human. To be friends of the old, designers should start thinking from the aspects of psychological condition of the old and design products that can meet their wishes and emotional needs. Functions and materials of the products don't need to be that outstanding, but the affinity of the products can reduce the gap between products and the old. The humanly care we're delivering through these products can fashion their lives, meet their psychological needs, help them to blend in the rapidly changing life and make their lives energetic and colorful.

3 THE CHARACTERISTICS AND PRINCIPLES OF PRODUCT DESIGN FOR OLD PEOPLE'S EMOTION

3.1 *The characteristics of product design for old people's emotion*

With the constant development of high-technology, however, the old people's physical and mental condition is suffering from the risk of a double dip recession. As a result, based on the emotional design characteristics of the old people, firstly we must understand their psychological characteristics and requirements, which can make the industrial design products more suitable and targeted for the old people. The psychological characteristic of old people mainly includes two aspects: cognitive

psychology and emotion, which are both influential to the emotional design of the products.

First of all, to analyze from the aspects of cognitive psychology, the psychological change of old people mainly has the following several aspects: memory, thinking, and intelligence. First, for the memory of old people, the memory of the past begin to be clear, while the things happened recently or newly studied are forgot very quickly, and the ability of storing memory becomes poor, which brings inconvenience for the elderly. Secondly, thinking ability of old people. Many old people can no longer think the way they think when they were young and their thinking ability gradually presents a trend of recession. People abroad once studied the difference of adult's thinking in different ages through a large number of experiments. It is found that the flexibility of thinking and the ability of reasoning are significantly decreased when people grow old. At the same time, the time required of thinking and the mistakes appeared during the process are increasing with the age [1]. Thirdly, as for the intelligence, it is also decreasing as the age grows.

What is more, analyzing from the aspects of emotion, many elderly people without children living with them, cannot enjoy the happy moment, so they are more prone to negative. The decline of body function and resistance is also very vulnerable to diseases. With the growth of the age, the time to participate in collective activity is significantly reduced. All of these make it easier to produce the feeling of disappointment, loneliness, self-abused, depression and other emotions.

3.2 *The principles of the old people's emotional characteristic about designing products*

For The principle of the old people's emotional industry product designs, the first thing is to make them feel warm and moving its appearance. In addition, fully considering the psychological factors of the elder can make a person happy and more like it. Based on the features of the product form design and the industrial design, making the elders feel love and caring about the function of designs and letting them feel warm and comfortable, in the process of using the product have a good sense of a comfortable and good experience.

Secondly, in terms of the use of the products, paying attention to the design of convenience is also essential. We design the product is to make their life more convenient and pleasant. Elder people often have a fear of about high-tech products, because they are not familiar to them. So, we must let the olds familiar to the existing industrial products when designing. And we choose the familiar operation interface for the olds, and avoid unnecessary redundant information and function. In the terms of the material we choose the surface texture which can

help the olds grip and make them interest in studying step by step to, and then slowly guide the old people to learn to use it, and so on.

Finally, the olds often feel lonely, depressed and disappointment, for a variety of reasons, but they also want to have a colorful life in the bottom of the heart. In the old industrial design, applicator elements such as form and color to add some products freshness and a sense of humor and make the products have affinity for the olds. When the old use the products, they will feel wonderful. When they not use, the products will also drown their loss. The products not only are the simple things, but also can meet the emotional needs of the olds.

4 THE EMOTIONAL MANIFESTATIONS OF INDUSTRIAL DESIGN PRODUCTS ABOUT THE OLD

Communication between people is through language to achieve, but communication between objects and people is through the form of objects, colors, materials, etc. to convey. They are not only the carriers of information and a tool to achieve information storage and memory, but also the material meaning to express thoughts and feelings. The process of people buying and using the product is the process of interpretation the "language". Therefore, grasping the language of the product, letting the product speak, and conveying information that gives rise to an intuitive feeling, emotional psychological reactions, such as taste and physiology, which can dig deep emotion, emotional communication between human-machine [2]. Under the current background, according to the demand characteristics of the olds, if the product has a good affinity with strong emotional factors ,that will allow the olds to feel pleases and love it, the distance between the products and the olds will be closer and closer because of the emotional. Therefore, become the emotional design of industrial design products must have the characteristics of the old. The forms of emotional design are mainly reflected in the following aspects:

4.1 *The form*

When it comes to industrial design products, we are confirmed that it is their exterior that gives us the first impression. Therefore, exterior of the products is an essential aspect to expound design concept. When creating the function of the products, people create their exterior shape as the same time, which is bound to show its character vividly as they are living from now on. As we know, the exterior of product consist of point, line, plane, volume, and once these basic elements are given abundant message, forming

specific symbol, they constitute products' language [3].

The exterior add emotional elements to various products, so as the old people's products. The old, who are no longer enthusiastic about newfangled exterior as youth, put emphasis on handy, elegant, and well-accepted shape instead of complex and luxury shape. Detailed, old in intellectual prefer elegant and cultured products, which can present their life quality and advanced identity, such as Ming Dynasty furniture, which is famous for its concise exterior, meticulous process, graceful texture, matching their identity and present their quality of life. As for the old in the working places, they care about products' cost performance, preferring highly cost effective and practical product according to their life experience, such as strong and durable electroplating seats. as for the old in peasant class, they love products nearing by nature just like themselves which has simple shape such as solid wood furniture created by natural wood, pure and fresh.

4.2 The color

Contemporary American visual art psychologist Bluemo said: "Colors evoke emotions, express feelings, and even affect our normal psychological feelings." Human's sense of the color is the most direct, intense, and impressive. Kandinsky thinks color is one of the most direct impacts on heart, color is the keys, the eyes are hammer, and the mind is stretched strings of a harp, full color through the visual path to the heart touched by the strings of emotions [4]. As a result, the color of the product is one of the most intuitive form, directly contact with people's psychological feeling, through the performance of color to the transmission of the information needed to strengthen communication and coordination with the emotional needs of the consumers, making consumers to take an interest in the product design, and making them have purchasing behavior.

As for the old, the expression of color is extraordinarily important for the elderly, over bright-colored color is not suitable for the elderly, and also does not conform to their psychological and emotional expression. For older people who is optimistic and enterprising, appropriate chooses the orange and white color. For the old people who are stable or have the connotation, adopts more elegant natural tonal, such as brown match white, can have a simple, generous, elegant atmosphere. For the elderly who is knowledgeable, the combination of cream-colored and lilac, with elegant and attractive temperament. So for the different types of the aged, the choice of the color is particularly important, which is the key to reflect emotional expression. Shown in Fig.1.



Fig.1 The design of elderly mobile phone

4.3 The material

Material is the performance element that reflects the product intrinsic quality. If an industrial product with skilled, innovative and rich colors designed has rough material, we will not call it the best product, which let we sigh for it and let us feel very uncomfortable. Industrial design has frequent contact with human. Material is good or not can directly impact people's psychological reaction on industrial products, which shows the importance of material on industrial design. Material itself is not emotional. Its emotions come from people's felling generated from it, which named texture felling. Texture felling is a sense of the character of material from people's perspective, including skin texture, lines, color, luster, transparency, luminous intensity, the photometric performance, etc. Different sense gives people different feelings, which enhance the affinity between products and people and the interaction with people [5]. Shown in Fig.2.



Fig.2 The design of elderly stair railing

The selection of material in industrial design is also important. When people touch the product, the first feeling is the material of products whether accord with intention and whether can be accepted by ourselves. The material quality directly embodies the communication between products and people, embodies a kind of humanistic care.

5 SUMMARY

For the product designed for old people, it should not only embody convenience, easy-operate and easy-understanding but also fit the old people's emotion and psychology, which let them pay more attention to the emotional characteristics of the product and the emotional expression.

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