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## Study on product appearance design based on brand identification

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### ABSTRACT

The research theory of product appearance design based on brand identification was brought forward earlier in foreign countries, and a systematic and mature theory was formed in the market competition earlier. Compared with the foreign product appearance design, the product appearance design lacks the systematicness in our country, leading that the product appearance design in our country fails to form a unique brand by the product appearance design, even although there are unique creative ideas within sometimes. This study takes the product appearance design based on brand identification as the task to put forward a systematic product appearance design system theory and describe the application of the design system by the appearance design of mobile phone products of Apple Inc. The market statistics report in 2014 shows that the mobile phone of Apple Inc has accounted for 17.3% in the market of our country at present, its market share ranks the third; the international market share is 15.3%, the market share also ranks the third. It can be observed from the actual example that the annual appearance design completes the brand identification of Apple Inc. The systematic appearance design method can bring about good application effect.

### KEYWORDS

Brand identification, Appearance design.



## INTRODUCTION

In 1950s, the German designers put forward the concept of shaping the product brand by means of systematic product appearance design, this design concept became the mainstream design idea for the foreign product appearance design, although the domestic product appearance design highlights sometimes, however, most of the product appearance design still lacks systematic design idea to enable that the domestic product cannot form the brand identification in the market competition by the product appearance design. This difference can be reflected in mobile phones, auto industry, domestic appliance and other industries. Strengthening the product appearance design research of our country is significant for forming the product brand identification of our country in the market competition.

So-called brand identification is to create a product stigma in fact, emphasizing the characteristics, culture, positioning of the product in a certain way, the people can associate the meaning behind the brand as long as think of the brand. With the fiercer and fiercer market competition, the manufacturer may deepen the cognition of the consumers to the product, improve the recognition of the consumers to the product and strengthen the purchasing viscosity of the consumers to the product by means of shaping brand image. But the product appearance design is an important way to shape product brand, this research takes the product appearance design of Apple Inc as a living example to explain in detail the application method of completing the brand identification by the product appearance design.

### MEANING OF PRODUCT APPEARANCE DESIGN IN THE CONCEPT OF BRAND IDENTIFICATION

#### Establishment of brand identification concept

As a whole, a branded product carries the following meanings: value, refers to the special value possessed by the product itself, which is the reason why the consumers are willing to buy the product; individuality, refers that the product need is required to reflect the personality and taste of the consumers themselves; symbol, is a certain unique meaning of the product itself; product, is the own function of the product, and is the reason why the consumers are willing to buy the products at first; definition, the consumers may make an accurate positioning to the product when seeing it; culture, unique culture implied behind the product.

The brand identification is generally completed in the following ways: set up the brand for the product, namely, create a unique stigma for the product to let the people understand the production scope, value, experience and range of the consumers of the product when seeing it; the brand of the organization, mean that the people can associate the manufacturer of the product once seeing the product and strengthen the cognition to the product brand by understanding the manufacturer; spokesperson of the product, the own temperament and taste of the spokesperson of the product can further emphasize the brand of the product, visual image of the product, that is the brand image given to the people by the appearance design.

#### Shaping of product appearance design

If the procedure of setting up of the brand identification is described, the building method refers to: setting up of the brand identification → brand visualization → spreading of the brand visualization → recognition of the consumers to brand visualization → consumer identifying the brand. Among them, the brand visualization is required to be completed by product appearance design and acts as the bridge for brand identification and identifying the brand, thus the important significance of the product appearance design to setting up product brand can be reflected.

#### Method for product appearance design

If the brand identification is served as the purpose of the product appearance design, the product appearance design must express the idea to be endowed to the product brand by appearance design to let the consumers generate consuming desires immediately according to their own demand though the product appearance design. The contents the product appearance design needs to express are as shown in Figure 1:

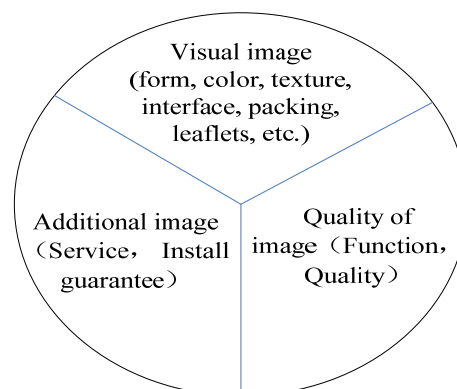


Figure 1 : The contents the product appearance design needs to express

The core of the product appearance design is quality image, as long as feeling the quality guarantee of the product from appearance, the consumers can produce the consuming intention; secondly, visual image, the product gives the psychological suggestion to the consumers by the point, line, plane, texture and color, to let the consumers set up a preliminary brand image through visual image; finally, attached image, if the consumers can further feel the unusual brand image of the product from the wispy attached image, the brand image in their heart may become more outstanding. These three points make the brand visualization in hierarchical ways, the brand with visualization may generate the effect of brand identification in the consumers' hearts after being spread and recognized by the consumers.

## **PRODUCT APPEARANCE DESIGN SYSTEM OF BRAND IDENTIFICATION**

### **Understand the consuming demand of the consumers**

The psychologist, Masco puts forward that the human's demand is hierarchical, the hierarchy is the demand of self-realization, demand of beauty, need of cognition, esteem needs, needs of affiliation and love, security needs and physiological needs, and this psychological theory has been widely accepted by the psychologists, therefore we can find by taking the psychological theory as the basis, that the consumers may consider to buy the product when the product appearance can satisfy the needs of the consumers. In order to explain the purchasing demand of the consumers to the product, now take the investigation of a consumer to the value of expectation of mobile phones as an example to explain. 13 males and 17 females are selected randomly for the investigation, the investigation objects are office staff aged from 25 to 40, to let them select the images of the mobile phones in their hearts by means of questionnaire. The tested persons can select the adjectives of mobile phones looked forward in their own mind from them, and the consumers can select limitless adjectives, however, they are advised to select about 15 adjectives, the high-frequency adjectives selected by the tested persons are as follows: beautiful, clean, creative, light and handy, personalized, simple and technical. If design the product appearance by the expectation of the consumers, the consuming desires of consumers may be strengthened.

### **Master the aesthetic taste of the consumers**

After understanding the consuming demand of the consumers, the product design shall be shaped an aesthetic taste by visual image to let the consumers feel that the product can meet their demand through the appearance image of the product. This aesthetic taste can be created by the following elements:

#### **(1) Form elements**

The form elements include the shaping of points, lines, planes and bodies. The product can convey a style and taste from its own appearance. Through the investigation, the consumers generally believe that several geometrical morphologies represent the following aesthetic styles, the geometrical morphologies and association of aesthetic styles are as shown in TABLE 1:

**TABLE 1 : Relationship between the geometrical morphologies and aesthetic styles in the hearts of consumers**

<b>Organic shapes represent warm color, geometrical morphologies represent cold color;</b>
Curve types represent warm color, linear types represent cold color;
The bulgy shapes denote warmth, invaginated shape denote cold;
The shapes with angles denote hardness, shape without angles denote softness;
Flat shapes denote softness; vertical shapes denote hardness;
The fine denotes softness; the coarse denotes hardness;
Frivolous and foxy sense denotes softness; sense of stability denotes hardness;

#### **(2) Elements of colors**

In the heart of people, the color can also reflect the styles and beauty-appreciation, in order to understand the opinions of the consumers to color, the psychologists thin the association of various elements of color in the hearts of the consumers, the results of thinning are as shown in TABLE 2:

#### **(3) Elements of material**

The texture can convey an effect of skin texture, the skin texture can generate a psychological suggestion to people, and people may generate feelings of touch, feelings of product positioning to the product according to the texture. For example, the common texture and psychological association of the people are as shown in TABLE 3:

**TABLE 2 : Association of colors and aesthetic styles**

Color	Age and sex			
	Youth (male)	Youth (female)	Agedness (male)	Agedness (female)
White	Cleanliness, sacredness	Clearness, purity	Pure white, trueness	Pure white, mystery
Grey	Dismalness, desperation	Dismalness, melancholy	Dilapidation, ordinary	Stillness, death
Black	Death, vigorousness	Sorriness, solidity	Life, seriousness	Dismalness, aloofness
Red	Enthusiasm, reform	Enthusiasm, danger	Vehemence, profaneness	Vehemence, childish
Orange	Restlesswith anxiety, pitifulness	Profaneness, tenderness	Mellifluence, lucidity	Delight, gorgeous
Tawny	Elegance, simple and unsophisticated	Elegance, stillness	Elegance, solidity	Simple and unsophisticated, simple but elegant
Yellow	Simplicity, vixenish	Simplicity, hope	Luminosity, simplicity	Luminosity, lucidity
Yellow green	Youth, peace	Youth, freshness	Freshness, saltation jumping	Freshness, hope
Green	Eternity, freshness	Peace, dream	Profound and lasting	Hope justice
Blue	Limitless, dream	Eternity, sensibility	Aloofness, fickle	Calmness, long-standing
Purple	Nobility, simple and unsophisticated	Grace, dignity	Simple and unsophisticated, graceful	Dignity, negativity

**TABLE 3 : Association of aesthetic styles given to people by different textures**

Texture	Association of aesthetic styles
Wood	Natural, harmonious, geniality, classical, manual, warm, rough, sensibility
Metal	Artificial, hard, smooth, nous, overcautious, modern, technical, indifference, nice and cool, unwieldy;
Glass	Elegant, bright, smooth, fashion, clean, neat, harmonious, free, exquisite, lively;
Plastics	Artificial, light and handy, fine and smooth, gorgeous, elegant, nous;
Leather	Soft, sensitivity, romantic, artificial, warm;
Ceramics	Grace, bright, fashion, neat, exquisite, nice and cool;
Rubber	Artificial, vulgar, gloomy, constraint, unwieldy, primness

**(4) Elements of weight**

The element of weight is an important element for product appearance design. For example, people expresses the feeling of weight of the product when talking about the adjectives, such as small, heavy, light and sedate. Meanwhile, that whether the product is of balance and stability are also contained in the elements of weight, the requirement of balance and stability is different for different products, product appearance design shall reflect this characteristic. The simplicity and complexity of the product are also reflected in the elements of weight, if the degree of simplicity and complexity of the product can appropriately meet the needs of the consumers, the product appearance design can also meet the needs of the consumers.

**(5) Elements of space**

The space design includes the steepness and gradualness, empty and fact, deviation to left and deviation to right, same and back direction of product appearance design, which make the consumers to form an impression. For example, the people may associate the liberality and luxury from the airy space in hearts, associate the uneasiness and stinginess from the narrow space; and associate the leisure and comfort from the gradualness, associate the tension and stimulation from the flatness; if the parts commonly used for product appearance design are placed at the left, the people may feel smoothly; if the special space pattern can be designed for special consuming groups, then this design may be favorably received by the special consuming groups.

**Realize the psychological expectation of the consumers**

The consumers may produce a special expectation to the products in hearts when using a product, if the product appearance design can meet the expectation of the consumers by an additional design, the consumers will feel that the manufacturer of the product treat them with heart, and can remember the product accordingly, the service of the additional design has shaped a brand of a product.

## ACTUAL EXAMPLES FOR PRODUCT APPEARANCE DESIGN SHAPING THE BRAND IDENTIFICATION

In order to explain that the product appearance can achieve a brand, now the mobile phones of Apple Inc are taken as the examples. The statistics report in 2014 shows that the market share of the mobile phones of Apple Inc in our country is 17.3% at present, its market share ranks the third; the international market share ranks 15.3%, the market share also ranks the third. In fact, there is not advantage for the cost-performance ratio of mobile phones of Apple Inc compared with other mobile phones, about RMB 6 000 price of each new type mobile phone makes many consumers stand in awe before, however though their prices are extremely expensive, many consumers are still willing to select the mobile phones of Apple Inc, the reason why they choose the mobile phones of Apple Inc is that they like the appearance of the mobile phones of Apple Inc very much, and think they are using the mobile phones of Apple Inc with great facility. This example can show that excellent product appearance design is able to form a brand. What is shown in Figure 2 is the appearance design drawings of three kinds of products of Apple Inc, respectively iPhone 5, iPhone 5c and iPhone 5s, they belong to the same series, and the appearance designs are basically very similar, but the effects shown are different, now the method of the product appearance design shaping the brand is explained:



**Figure 2 : The appearance design drawings of three kinds of products of apple inc, respectively iPhone 5, iPhone 5c and iPhone 5s**

### Overall shape design

From Figure 2, the basic shapes of the three kinds of mobile phones are:

Front—the front appearance is the primitive with regular square, arc streamline is shown at the corner, the overall round dial operating button is designed to be clean and neat.

Side—the side curve is the transitionally round and smooth, to make it look very stable for consumers, and its thickness is designed to be ultrathin and ultra-light.

Top—the top is elliptical, the top button is designed to be round.

Back—the back is integrally round and smooth plane with large radian.

Colors—in addition to traditional black and white, iPhone 5 is designed with rose red, glitter purple and bright yellow and iPhone 5c series are provided with other various colors, iPhone 5s is provided with another luxury gold color. From the color design, it has three colors, including high clarity, low clarity and contrast of brightness, its color design can not only meets graceful taste of the product, but also meets the various needs of the consumers as much as possible.

Texture—its texture is matte finishing.

### Special aesthetic design

These three kinds of mobile phones correspond to different levels of consuming groups, and the design aimed at consuming groups can also be reflected in the appearance design of the products.

iPhone 5 of Apple Inc is the type the earliest developed, aiming at the fashion type consuming groups from its shape designs, firstly, it is adopted with aluminum fuselage design in numbers of mobile phones to provide the mobile phones with 4 inches large display screen, meanwhile, it is the lightest and thinnest in the numbers of mobile phones. Moreover, it is adopted with the current extremely advanced 8 megapixel camera, meanwhile the lens cover is florid and luxury sapphire crystal glass cover, and built-in camera is adopted with current quite advanced HD Face Time technology, and it is designed with advanced Lightning interface, and equipped with Ear Pod earphone. And its appearance design is adopted with multiple bran-new and first technologies, from the designs, it can shape the fashion sense of the product. And this fashion sense can match with its overall shape design, to obtain great brand effect. Then mobile phones are sold out immediately when the mobile phones of Apple Inc are pushed out in those years.

The basic configuration of iPhone 5c of Apple Inc does not defers from that of iPhone 5, the only difference is that its case is designed to be not aluminum texture, but selected with plastics, and its color breaks through the rose red, glitter purple and bright yellow beyond the white, and is provided with multiple colors, one shown in the figure is sky blue. Due to reducing of case outcome, the price is reduced by about 30%, from the selection of this texture; its consuming groups are

consumers of midrange mobile phones. However, this kind of mobile phones is not liked by the consumers. Because the consumers say that they may wish to buy the mobile phones of Apple Inc at high price is because they want to buy the perfect appearance design and hand feeling and experience from Apple Inc, they are not willing to reduce the quality requirement of the product just for paying a little money, if they are willing to choose midrange mobile phones, they will not select the mobile phones of Apple Inc.

The configuration of iPhone 5S of Apple Inc is the same with the iPhone 5, the only difference is that the iPhone 5S is added with a luxury gold color, to highlight luxury styles, which reflects its consuming groups are fashionable, high-end consuming groups. Meanwhile its Home key is self-equipped with fingerprint memory, the consumers do not need input the password again, and can enter the user interface just by comparing the fingerprint. Its convenient design can better meet the needs of consumers.

### Special function design

The reason why Apple Inc is accepted by the users, it's because the extremely intimate design. For instance, take iPhone 5 as an example, the connecting wire interface and earphone jack are all designed underneath, the design can make consumers place the phones into various mobile phone shells and covers more easily. The consumers ever used the iPhone 5 all consider that the touch sense of the screen is better than that of other mobile phones, which is because it is adopted with the unique technology—Retina screen display of Apple Inc, this screen display is electrode layer, it does not need to put the touch screen and the electrode screen together. This setting makes consumers think that the sensitivity of its screen is highest, the touch sense is the most comfortable, and the display is slightest. The function seems not the most important can strengthen the experience of the consumers, in their hearts, mobile phones, service quality of Apple Inc can make they trust.

## CONCLUSION

We can observe from the concept of brand identification that the product appearance design is the bridge of concept of brand identification and experience of the consumers, through the reasonable product appearance design, the consumers can feel the philosophy set up by product brand, and identify the product from numbers of products, the common selection of the consumers may form the effect of brand identification in the market competition finally. This study has obtained the system of product appearance design under the purpose based on brand identification, and has explained the effectiveness of the application of the product appearance design system by the appearance design of mobile phones of Apple Inc. this study has described a set of product appearance design system from the angle of theory, and has stated the importance of the system design by appearance design system of Apple Inc., however, the appearance designs of most product in our country lack the systematicness. In the process of the study, means of investigation and research have been used to explain the demand of consumers for mobile phones, for many reasons, investigation is just conducted simply to 30 office staffs. Because of sales statistics of two kinds of computers with different appearance design, sale of only one emporium is made rough statistics, this investigation method is not comprehensive enough, and the investigation content is a little inadequate.

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