# Research on Originality of Visual Illusion in Packaging Design

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Abstract—Packaging design is primarily a kind of artistic form that focuses on visual phenomenon. While as a kind of special form of visual phenomenon, visual illusion provides packaging design with broader creative space. It is easy to use visual illusion in packaging design to attract consumers' attention, highlight characters of products, which have good functions of sales promotion.

Keywords—visual illusion; packaging design; originality

#### I. Introduction

With rapid development of economy, people's consumption level improves continuously, great changes have happened in their consumption psychology and they have higher demands for packaging of products. Packaging design not only has the functions such as protect products and provide convenience for transportation, but also pays more attention to additional value of packaging and fully embodies new trends of people's consumption in new era. Therefore, designers need to find new language of design to promote new images of packaging design. As a form of visual expression, visual illusion is scientifically and reasonably used in packaging design, which can attract consumers' attention, make packaging design become richer and more colorful, raise brand images and enhance brand competitiveness.

## II. INTRODUCTION TO VISUAL ILLUSION

Arnheim once said that everything created by great artists is a new vision. In this world, all things well-known by people have appearance that people have never seen before. This novel appearance doesn't distort and betray nature of these things, but uses gripping novelty and enlightening way to anew explain old truth. While this kind of novelty is a kind of new visual image brought by visual illusion for people.

Visual illusion refers to the false judgment and perception formed because of experientialism or improper references when people observe objects. The phenomenon of visual illusion generally exists in our daily life. People's visual sense is often influenced by visual illusion. Because packaging design is a kind of visual culture, it is also inevitably affected by visual illusion. So it appears to be very important to look into visual illusion, scientifically and

reasonably apply visual illusion to works of packaging design.

## III. APPLICATION OF VISUAL ILLUSION IN PACKAGING DESIGN

As a kind of special form of visual expression, visual illusion is formed because of complicated and various reasons. Its influences on packaging design exist in everywhere, which is inevitable. Therefore, reasonably using visual illusion in packaging design helps to improve the originality and interest of works, enhance quality of products and popularity of brands, which have good functions of sales promotion.

# A. Application of Visual Illusion in Container Modeling of Packaging Design

In real life, because of the influences of aspects such as environments and lights, changes of psychology and physiology of human and different ideas of human toward things, different visual images is formed, for example: for line segments with the same length, if we add different arrows to both ends, it will make people have the illusion that the lengths of the two line segments are different.

Container modeling of packaging design is an important part in packaging design. The influence caused by visual illusion is bigger. Reasonably apply visual illusion to container modeling, scientifically use visual illusion to design creative container modeling. In the design of container modeling, we should break traditional thinking patterns and excavate new ways of design to give people a kind of new visual perception and increase the creativity of works. For example: When designing a square container, we should consider the influences caused by visual illusion, purposefully reduce the width of container, make the width and height of design reach unanimity in visual sense to eliminate the bad influences brought by visual illusion for us.

In container modeling of packaging design, there are some designing methods to break visual illusion, for example: for the front of box-type container, people mainly adopt vertical bars or vertical patterns to strengthen the stereoscopic feeling of container; for containers of women' cosmetics, people often adopt the shape of vertical curve to present a kind of dynamic beauty and show the flexibility of products. For men' cosmetics, in order to embody virile style

of men, they often use the form of regular cube to give people forceful feelings. People use the modeling of filleted corner in packaging modeling of some containers, which generates a kind of light and handy feelings and make the containers seem to be mellow and full.

# B. Application of Visual Illusion in Graphics of Packaging Design

There are a wide range of graphics of visual illusion, and we can inject new vitality to packaging through applying graphics of visual illusion to packaging design. In packaging design, the graphics of visual illusion that is widely used include graphics of visual illusion that the graphics and bottom reverse, graphics of visual illusion of contradiction, and graphics of visual illusion that has closing phenomenon, etc.

Graphics of visual illusion that the graphics and bottom reverse mainly makes use of the replacement of graphics and bottom, use graphics to emphasize the bottom and use bottom to foil the graphics. The graphics is the theme and more conspicuous and people can see the whole contour at the first sight, but the bottom is the auxiliary and it is not easy for people to find. After reversing the graphics and the bottom, both of them can attract people's attention. By this time, the graphics and the bottom are at the same position, foil and depend on each other. Not a single one can be omitted. It can produce the effects of virtual-real synthesis and mutual supplement and give us refreshing feelings and add interest to the picture.

Graphics of visual illusion of contradiction is imaginary, mainly use false perspective technique to change twodimensional figure into dynamic three-dimensional figure in stereo form. It mainly uses conversion of central point in human vision and automatically form a dynamic picture in people's mind. These pictures are impossible to exist in real life, but when we see paradoxical figures in the plane, even though they have conflicts with figures in real life, they still present in the plan, and with some factors of people's eyes, they still confirm the existence of paradoxical figures in three-dimensional space. The creation forms of paradoxical figures are diversified. Its main characteristic is to pursue visual change. We can diverge our thinking, break the shackles of thoughts, look for ways of converse thinking that break the routine in the process of designing, put familiar objects into unreasonable spatial order and with the help of illogical thinking to break through the original meaning of objects and make the works more intriguing.

Graphics of visual illusion that has closing phenomenon exist in incomplete visual graphics. Because people transfer information through retina and make objective analysis and judgment through experientialism of themselves, the mind can find objects that conform to graphics in memory and eyes will automatically supplement the missing parts to form a closed and complete figure in our visual sense. For incomplete phenomenon in graphic design, the vision will supplement automatically. This kind of technique is often used in design.

# C. Application of Visual Illusion in Color of Packaging Design

Color is an important element in packaging design. It has strong visual emotional appeal and expressive force in packaging design. The special sensibility of people's vision for color decides the important value of color in packaging design. Color design shall give full play to the artistic charm of color. Designers should fully understand characteristics of color, grasp people's psychological laws to appreciate color and reasonably use color to beautify our life. They express designing ideas through color. Visual illusion caused by colors plays an irreplaceable role in packaging design.

Visual illusion caused by colors is the distorted intuition for external things and produces under certain conditions. This kind of distortion has fixed tendency and cannot be overcome by subjective efforts. If skillfully using it in design, we can not only avoid the negative influences of misconception phenomenon, but also take full advantage of visual illusion to increase appeal of artistic works.

Giving full play to the charm of visual illusion of color in packaging design needs to grasp basic laws of visual illusion of color. Under certain conditions, people have a kind of intuition that doesn't conform to objective things. This intuition has fixed tendency and rules. Skillfully using this kind of phenomenon can bring more vitality to works of packaging, arouse the resonance of the consumer for packaging products and their desire to buy products and then reach good purposes of sales promotion.

We often use the following several visual illusions caused by color in packaging design:

## 1) Visual illusion related to color and temperature.

People often add some associations of themselves after seeing colors. For example, in China, the red color stands for festival events and happiness. During the time of major festivals, we often can see red color. Red color gives us warm feeling, while blue and green are cold colors and bring us cold feeling. At the same time, blue color often make us associate the sea, and blue sky gives us a kind of cool and peaceful feeling. So people often adopt blue color in packaging related to science and technology, which symbolizes the preciseness of science and technology.

## 2) Visual illusion related to color and weight.

For the same object, we will have different sense of weight after we paint different colors on it. The white color lets us think of white clouds in the sky and gives us light feeling, while the black color will give us a kind of heavy and sinking feeling. Such as the example that is often mentioned by us: which one is heavier, ten catties of cotton or ten catties of iron? People will naturally think ten catties of iron is heavier, because the color of iron gives us a kind of depressive and heavy feeling. In reality, both of them are ten catties, so the weights are the same.

### 3) Visual illusion related to color and area.

The color gives us feelings of expansion or contraction. Warm colors give us the feeling of visual expansion and cold colors bring us the feeling of contraction. If we compare the red block and black block that have the same area, we will

sensuously think that the red block is bigger than black block. Goethe points out in Discussion on the Science of Color that, "For two dots with the same area, the black dot on white background is one fifth smaller than white dot on black background." Take the flag of France as another example, the proportion of red, white and blue is 35 to 33 to 37, but we feel that the areas of the three colors are the same.

#### 4) Visual illusion related to color and taste.

The sensory illusion of color can create different feeling of taste. This kind of illusion is produced because of people's psychological association. Most of the saffron yellow and pink stand for foods that taste fragrant and sweet, while taupe and black often stand for bitter taste. We associate red color with pepper and and foods with spicy taste. The packaging of light blue gives people a kind of pure feeling, and it's often applied in the packaging of mineral water and cosmetics.

It is necessary to scientifically and reasonably use visual illusion of color in packaging design. Visual illusion of color helps to increase the expressive force of packaging design and has good effects of sales promotion. Therefore, only by looking into the psychological feelings of people brought by colors can we give full play to the implied function of colors in packaging design, improve the quality of products, establish good enterprises, enhance popularity of brands and increase the competitiveness of brands.

# IV. THE ENLIGHTENMENT THAT VISUAL ILLUSION HAS ON PACKAGING DESIGN

People form fixed model for familiar things in visual sense and this fixed model reduces people's excited degrees of visual experience and decreases the stimulating effects. It is extremely easy for people to neglect it. Therefore, in packaging design, we should break the fixed model and use another kind of new designing language to prompt great changes of people's visual impression, arouse their sensual interests to form relatively strong visual impacts. For example, for a familiar thing, if people adjust the illusion for parts of it, break the fixed model in visual sense and use some techniques of visual illusion, then it will produce a kind of new visual effect and form works that have unique artistic beauty. This kind of visual form goes against people's consistent ways of thinking on the original basis and runs in the opposite direction with universal way of thinking of people. It makes people find unreasonable places through experientialism and arouses people's thinking. This kind of visual illusion will not bore us, on the contrary, it lets people accept this deception with pleasure, enjoy the process of being deceived. At the same time, it brings us new and different experience.

Packaging design is the creative activity of people, the main purpose is to meet the requirements of our material, spiritual and cultural life and enhance the quality of modern life. The packaging of products transfers a kind of psychological feeling to us through our visual sense and influences people's thoughts. It appears that packaging design leads people's aesthetic value-orientation and has attracted consumers' intensive attention.

The creative process of packaging design is the process to use visual images to design and create. In this process, the images of visual illusion do not conform to real things and then it will have impact on people's visual system. Designers seize this characteristic to design and create, attract people's attention for products and reach good effects of sales promotion. Adding the phenomenon of visual illusion into works of packaging design helps designers to expand their thoughts, break the routine thinking pattem, design and create from the overall perspective and stimulate their potential designing ability.

#### V. CONCLUSION

With improvements of people's living standards, continuous changes of consumption psychology, they have higher and higher requirements for packaging of commodities. Packaging design of commodities has become the product that integrates culture, art and science, and it puts forward higher requirements for designers. Designers should break the shackles of ideas, convert way of thinking, refer to theories of visual illusion and combine characters and brand images of packaged goods to create unique, creative and excellent works of packaging design.

In order to meet people's requirements, designers continuously look for creative language that can reflect characters of products. It is a good choice to add visual illusion to designing works. Designers should make full use of visual illusion to produce strong visual effects. The application of visual illusion will make designing works full of wisdom and cause thinking. At the same time, it can establish a pleasant spiritual and visual communication between consumers and it. The originality of visual illusion has various kinds and strong practicality and forms of artistic presentation, breaks the unromantic feelings brought by ordinary packaging design and shows the dynamic three-dimensional effects, which make people experience the aesthetic feelings brought by packaging when they use these products.

#### REFERENCES

- Arnheim Rudolph, Visual Thinking [M], Beijing: Guangming Daily Press, 1987
- [2] Thurston Kalach, Illusion and Visual Arts [M], Shanghai: People's Fine Arts Publishing House, 1986
- [3] Zhang Fuchang. Application of Visual Illusion on Design [M], Beijing: Light Industry Press, 1983
- [4] Cao Fang, Theory of Visual Communication Design [M], Nanjing: Jiangsu Fine Arts Publishing House, 2005
- [5] (UK) E.H. Gombrich, Art and Illusion [M], Changsha: Hunan Science and Technology Press, 2006
- [6] Wang Qi, Research on Application of Color Visual Illusion on Graphic Desig [M], Shanghai: Journal of Shanghai Jiaotong University, 2008 (1)
- [7] Wang Anxia, Visual Design of Packaging Image [M], Nanjing: Southeast University Press, 2006