# Analysis on Tactile Field in Current Graphic Vision Design

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**Abstract.** In graphic design, good tactile perception and visual impact are two major components. For each graphic designer, how to present tactile perception and visual impact in graphic design perfectly is their pursuit of goals. This paper mainly discusses the specific application of tactile field in the current graphic design so as to provide some help for graphic design workers.

# Introduction

With the constant development of Chinese economy, gradual improvement of the living standard of people and higher and higher requirements of people for aesthetics, this brings new challenges to current graphic design workers to a certain extent. Each graphic designer wants to present the best part in their works in front of people in the design process. However, good tactile perception and visual impact are essential in an excellent graphic design work. Therefore, to make people deeply impressed with their works, how to apply tactile perception better to graphic design is a problem to be solved by current graphic design workers.

### Meaning of tactile sensory perception

#### Meaning of tactile perception

For each of us, tactile sense is one of the important constituent parts of sensory system. Our tactile sense might be active or passive. In our daily life, we can perceive the surface of different materials and life of animals etc. through our tactile sense. However, while we are touching other things, other things are also touching us. Therefore, tactile sense is mutual.

# Meaning of perception in graphic design

Generally speaking, vision can convey not only contents such as graph, color, shape and text, but also character, material, process and texture. Therefore, in graphic design, graphic design workers need to convey contents to be expressed to viewers through tactile sense and perception. Tactile perception in graphic design actually means that viewers are allowed to obtain more information about the work through different tactile feelings formed by various different material surfaces and texture. During graphic design, designers differentiate their design by processing the same material with different techniques or using different materials, thus allowing viewers to obtain more contents of the work while strengthening the transitivity of work. Graphic design involves not only the application of tactile sense and vision, but also the application of smell. Its essence is the same as tactile sense, i.e. giving materials a different taste so as to strengthen the stereoscopic sensation. For graphic design workers, it is very important to give audiences strong visual impact and tactile perception in their works.

#### Relationship of perceptions such as tactile sense and vision

# Generation of tactile sense and vision

Different combinations of image or feeling are an activity of information reconstruction carried out by graphic designers in the brain of audiences. The construction process is the whole process of realizing transmission stimulation through various channels. Generally speaking, the stimulation produced by tactile sense, vision, auditory sense and smell and the combination of various sensory perceptions in different ways realizes the reproduction of feelings in the mind of audiences: such reproduction formed in our brain is "impression" we often mention.

Therefore, for us, judging new things through tactile sense and vision can make us have a strong curiosity and impel us to touch new things, or make us have strong repulsion and warn us of staying away from such things. For example, when facing thistles and thorns, people are unwilling to get close to them. As the first information that thistles and thorns convey to people is that they might hurt people, they need to stay away from them. When seeing little soft hands of newborn babies, we want to touch them. The main reason is that our brain has formed a group of judgment symbols from things touched in the past, thus inducing and restraining our behaviors.

#### Forms presented by tactile sense in graphic design

In graphic design, tactile sense presents two different forms. Let's talk about the first form. The first form presented by tactile sense in graphic design is caused by the texture of different materials. Many materials can be used in graphic design, including smooth, soft, rough and hard materials. Graphic designers establish allure and rapport with viewers through tactile sense presented by texture of different materials.

The second form presented by tactile sense in graphic design is further innovation based on the first form. During graphic design, graphic designers should not only consider the material to be used in work, but also design texture elements of the material on the packaging bag of goods in the form of imitation, thus allowing people to recognize graphic design at the first time. Generally, such recognition method is realized through tactile sense possessed by the package.

Such graphic design method can strengthen audiences' sense of identity for identification. For example, during the design of packaging of orange beverage, it is necessary to imitate the pericarp of fresh orange vividly on the packaging paper of beverage, thus allowing consumers to judge the relevant information and properties of the commodity at the first time after seeing this commodity and establishing a strong tactile sense and vision. Consumers can judge that this commodity is fresh orange juice rather than grape juice very soon through this strong tactile sense and vision. With this graphic design method, graphic designers can establish identity and recognition relation with consumers effectively and accurately to a certain extent. Therefore, such innovation-type design method has certain representativeness in the process of integrating tactile sense and vision into packaging design.

#### Perceptual information such as tactile sense and smell

Feeling is the manifestation of individual properties of objective things that human brain directly acts on sensory organs as well as a perceptual manifestation. Each person is not simply an aggregation of all receiving organs of sensualism, but also can derive various images according to the memory of people touched in the brain as a regenerating unit of sensitive memory. Generally, the image appearing in human brain again is a grand picture formed by mutual penetration and association of regeneration memory and sensory stimulation. This is also the goal pursued by all graphic designers.

#### How tactile sense assist the application of vision in graphic design

#### Functionality of tactile sense in design

In graphic design, to provide guarantee for smooth visual movement, when using various visual elements, it is required to control them within the scope of capacity possessed by perception. Generally speaking, the object carried by vision must be visible. Visual information possessed in the work must have a strong manifestation force. Meanwhile, visual language implied in graphic design work must be easy-to-understand and the information conveyed should be understood by viewers. Meanwhile, it is required to create a corresponding visual environment. Only in this way can viewers understand the work better. Various information means that a special sensory kingdom is created through the work besides the application of various production carriers and carrier materials such as text, type setting and graphic color. Only in this way can viewers realize the intention of designers in person.

#### Specific means for guiding tactile sense and vision into design

When designing the packaging of commodities, graphic designers can start with packaging material and apply real texture closely related to product information to the packaging of commodities. According to the current status of commodity packaging design, this method is widely used and is a relatively traditional method which has a good effect.

Graphic designers can apply imitation to graphic design and imitate product features with conventional packaging materials such as glass, plastics or paper so as to realize real manifestation in tactile sense and visual effect. With this imitation method in graphic design, designers can convey commodity information to consumers to a certain extent and establish a good communication bridge with consumers, thus effectively strengthening consumers' sense of identity to products.

In graphic design, printing technology can also be used to realize the imitation of visual effect manifested by certain texture. With this method, designers can integrate the concept of tactile sense and vision into packaging design very well. In the process of buying commodities, consumers can see the visual information conveyed by commodity packaging and have a rough understanding of the basic information of commodities. After obtaining the basic identity, consumers start to judge the demand of buying this commodity in the brain and buy this commodity. For example, chocolates are often packaged with paper box, on the surface of which striped texture effect will be printed. The visual effect conveyed by this packing box is relatively sweet and warm. After seeing this commodity, consumers will obtain commodity information through its external packaging. Thus, the design effect of appetency of commodity packaging is realized. Through the comparison of this design method and two design methods above, we find that this design method has significant difference. In commodity packaging design, this design method only has tactile sense and vision, but also has real tactile sense to a certain extent. Therefore, different techniques of expression added in graphic design bring different feelings to consumers.

#### Status of other perceptions such as tactile sense in graphic design

In the discussion above, it is easy to find that, though other perceptions such as tactile sense and smell can assist plane image and help it convey information better in graphic design, tactile sense always plays an auxiliary role in graphic design. Generally speaking, not all graphic designs can use tactile sense to realize visual communication of the work. For example, though Kenyahara used the method of imitation to convey product information to audiences as much as possible when designing the packaging bag of orange beverage, I think that his concept in the design of packaging bag of orange beverage. In our real life, beverage packing box is generally produced with the method of low-cost and batch production. From this perspective, the concept of Kenyahara cannot be applied in practical production very well.

Though the application of tactile sense in work has certain limitations in graphic design, it has certain exploratory significance. It can lead students to make constant explorations and discoveries in design and seek a method of using tactile sense in graphic design better. Only in this way can they move farther and farther on the path of design.

#### Conclusion

In conclusion, with the constant development and progress of the society and gradually improvement of people's aesthetic consciousness, graphic design field faces both challenges and development opportunities. Therefore, each graphic designer should make deeper explorations and seek the best way to reflect tactile sense perception and visual impact in design works perfectly while constantly studying and innovating and understanding and mastering the knowledge learnt. Only in this way can they design better works, satisfy demands of customers and realize constant development and expansion of graphic design industry.

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