

COLOR PSYCHOLOGY IN DESIGN

By Barbara S. K. Wong

The logo for Shine 21, featuring the text "Shine 21" in a white sans-serif font with a red dot above the "i", and the website address "www.shine-21.com" in a smaller white font below it, all set against a black rectangular background.

Color expresses something by itself. Let's say I have to paint an autumn landscape with yellow leaves on the trees. If I see it as a symphony in yellow, does it matter whether the yellow that I use is the same as the yellow of the leaves? No it doesn't.

----- Van Gogh

Van Gogh discovered that color has power of expressing emotion, although Paul Gauguin was the first to recognize it, they both use color to express their emotions radically and successfully. Artists use color to express their feelings and emotions and not only by observing and just paint what it is looked like. Because color exists in the mind and it can create subjective and objective impression. Color can stimulate our thoughts and emotions and we response to different colors in different ways since human being responses to color biologically and psychologically. In the following, I will discuss what color psychology is and how it affects us in culture and associations, and how it relates to our senses, as well as how they influence our choice of colors, therefore, it helps us in using colors in design and marketing effectively.

What is Color Psychology?

As we know in physical world, there are no colors. Colors are only light waves of different wavelengths that are reflected from the objects. Our human eyes have the ability to distinguish among hundreds of such bands of wavelengths as they are received by the sensory cells (cones) of the retina. Therefore, seeing colors is our own perception and it is a subjective experience. In other words, perception of colors is affected by factors such as personality, mood, emotion, age and gender, as well as our social and cultural background. That is why different individuals perceive color in a different way.

Color psychology is a field of study devoted to analyzing the effects of color on human behavior and feeling. Study of the psychology of color is complicated by the different symbolic meanings of colors in different cultures. For example, in western cultures, bride wears white to signify pure and innocent; whereas in the eastern cultures, for example China, brides wear red for it represents happiness and fortunate.

Psychological Effects of Colors

According to Carl Jung, deep down in human's psyche is collective unconscious where there are content of archetypes --- the original pattern or model from which other things of the same kind are made. Those are the foundation images that are developed and formed from our ancestors through thousands of years. Color is a part of our psychological and biological heritage therefore sometimes we response to color in certain way, for example, we think that red is hot and blue is cool, these are found to be universal responses.

But color is also quite personal since each individual has his/her own personality and the preferences of color are diverse. As Jung also mentioned about the extrovert and introvert type of personality and it is found that these types of personality have dissimilar color preferences: the extroverted personality type has a greater tendency toward more intensive stimulation, so they are enjoyed more in colorful surroundings, while introverted personality type of people are more favor lower degree of stimulation, and lower intensity of color are preferred.

Color can also affected by culture and social trends, which means the meaning of color is not the same across different cultures and period of time. Since we are living in different societies and the meanings of colors are formed by myths, values, beliefs, religions, social customs, as well as geographical and historical background of that society. For instance, green has religion significance in Islam and the cloak of the prophet was green so it is also a symbol of hope. But in China, the proverb 'wearing green hat' means the husband has an unfaithful wife. Moreover, culture also influences the preferences of color, for example, the Japanese like gentle colors of water, sky and wood; whereas the Mexican people prefer vivid color theme.

On the other hand, the preferences of color also changes through time. Color changes are said to reflect the Zeitgeist --- the spirit of the time; people tend to prefer certain color according to the economic, social change, and mood of that particular time. For example, in the 1960s, psychedelic colors were popular since it echoed the optimistic spirit of that era; while in the war time and in time of regression, people tend to wear low intensity colors which mirrors the gloomy mood of the difficult years.

Color Association

Color symbolism is a learned behavior but it has associative power that it affects how we perceive a color and the mood or emotion that is produced by it; for example, red can convey excitement and romantic mood, green always help to promote relaxation, and

brown is the cozy color that is always creating stable and comfortable atmosphere. Given that color symbolism is learned, some colors can convey universal messages while others may vary by ethnicity, cultural, or socioeconomic background.

As color symbolism is playing an important part of human life, understanding the symbolism of color is vital in various fields, such as fashion, products, advertising and interior. It can help the designers and marketers to produce certain mood and conveying messages to the consumers.

(Attached are the color attribute of red, orange, yellow, green, blue, purple, white, black and gray)

Color and Senses

Color is also found considerably affecting our other senses --- hear, taste, smell and touch, etc. in Gestalt psychology the entire organism is looked upon as a unity that the center for processing sensory information are linked to each other, leading to a chain of reactions. Here are some examples to show how color affects to other senses:

- ***Perception of Temperature***

The color of a room will affect the perception of temperature. In an experiment a group of people was placed in a red-orange painted room for some time and another group of people was in a blue-green painted room, the temperature of the two rooms were the same. It was found that most people in the red-orange room felt warm and the people in the blue-green room felt cooler. Therefore it is useful in interior design where the location and use of energy is also being considered. For example, it can use cool tone in room that is facing west so as to make the occupant feels cooler and it can also a way of saving energy.

- ***Perception of Noise and Sound***

Color also has an effect on the perception of noise and sound. Studies showed that the bright warm colors are associated with loudness and the opposite for cool colors. It may be because people mentally connect a loud red with one of high saturation and the high saturated hues are usually considered to be high-pitched and shrill sounds. These findings are particularly useful in interior decoration for different settings such as clubs and restaurants.

- ***Association of Odor and Taste***

Some studies also found that colors are associated with smell and taste. For instance,

pink is associated with sweetish, yellow is sour, orange is strong, and green is sour and juicy. It is also found that pink, lavender, pale yellow and green have pleasant smell. Hence, we can find most candles are in pink packaging. On the other hand, blue is found to be an appetite suppressant so it is avoid using it in restaurant or food packaging. However, it is a good choice to use for weight-loss plan, for example, blue plate or blue light in refrigerator will definitely work.

Color Psychology in Commercial Areas

As we know that color psychology has great influence on how we see colors and the likeliness of colors. Moreover, colors can also influence the subjective appreciation of the quality of goods or the perception of an advertising message. Hence designers and marketers can use color psychology to add value to the products and services and to increase sales. There are numerous examples that color psychology can be applied to interior, product, fashion and textiles design in numbers of ways that achieve favorable result. The followings are two examples to show how color psychology works in design and marketing:

In Product and Packaging Design

Color has significant impact on product attribute, and it plays a larger role in the success of a product than the performance of the product itself. If the color is unappealing to the consumers, it would fail miserably in the market even though it performs very well. It is particularly true in food and beverage products where the taste and favor are important. As mentioned about, color will affect our perception of taste and smell, so it is evident that deep brown or red is more preferable in coffee bean packaging because these colors associated with richness and strong flavor.

In Interior Design

In interior design, color also plays an important role. Color can define space, indicate function, suggest temperature, influence moods and project personality in the environment. For instance, light value colors bring happiness and suggest eternal love and peace, it can be used in active room to lift up spirit and also reduce stress.

Moreover, color symbolism can also help to create corporate image in its logos, stationary, and corporate offices. In corporate offices, the creation of good company-client is important and the use of colors, such as warmer hues that can display a friendly and personable manner, are especially good choice in the reception area to build goodwill of the company.

Conclusion

We have learned that color psychology has a larger part to play in design and marketing. However, we should always bear in mind that color marketing is not a simple process that color conveys different messages to different groups of people. We should always take precaution when using colors in different settings. To comprehend the meaning of colors and its emotional influence is critical to determine the success of a product or a design.

Author

Barbara Wong is founder and CEO of Shine 21, a design and branding consultancy firm bases in Hong Kong providing brand consulting, creative design, trend forecasting and marketing services for consumer product and service companies.

Published on January 15, 2009

Copyright © 2008-2009 Shine 21

All Rights Reserved.