

# Emotional "Gray": Emotional Analysis of Morandi Color System in Web Design

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**Abstract:** Color can directly convey the emotions of creators. In the network era, new aesthetic concepts will guide designers to redefine the operation of color emotion. Morandi color system has a unique style and a very wide way of applications. In the digital age, as the web page is the first window for the audience to receive information, it is increasingly important to integrate the appropriate color emotional hint than the direct transmission of text or picture information. Through analyzing the emotional transmission of Morandi color system in web design, this work analyzed the emotional connotation of Morandi color in web design combined with the color emotional application, and explored the reasonable emotional application of Morandi color system in web design.

## 1. Overview of Concepts Related to Morandi Color System and Color Emotion

### 1.1 Generation and visual effects of the Morandi color system

Morandi color system mainly refers to gray colors with low saturation and lightness. It is a summary of a set of color rules based on the color scheme of Morandi's color blending. In his paintings, gray is added in proportion to each color, so viewers can feel that the overall luster of the painting is dimmed and the contrast is not obvious. In Morandi's still life works, such as *The Bottle*, subtle variations of these shades of gray can often be seen (Fig. 1). Morandi's grays are largely influenced by the oxidation discoloration of the frescoes. During the Renaissance, Giotto, Masaccio, Francesca and other masters have reached the acme of perfection in the fresco painting, and after hundreds of years, most of the colors were no longer as bright and gorgeous as before. In Morandi's mid and late niche still life works, it is easy to relate this gray tone to the tones in his paintings (Fig. 2).



Fig. 1 One of the paintings in Morandi's *Bottle* series (Source: <http://pinterest.com>)



Fig. 2 Giotto frescoes *The Ascension of John, the Gospel Writer* (Source: Pictured in the Cappella Peruzzi; Photograph: Peng Cheng)

Low saturation colors lack visual "aggression", reducing the impact of color on the viewer's mood. In Morandi's paintings, colors convey little emotions. Compared with his contemporary painter Piet Mondrian's *The Composition of Red, Yellow and Blue*, Mo's paintings reveal a comfortable, harmonious, and peaceful visual feeling, with a strong emotional serenity and appeasement. This gray tone is harmonized by several colors in proportion, so that the cone cells of the eyeball are in a balanced working state when observing the painting. Due to the weak visual impact and low publicity of color emotion, it gives the viewers a sense of comfort both physically and psychologically.

### 1.2 Emotional language of color

Marx believes that "the sense of color is the most popular form of the general aesthetic sense", and this kind of color sense is the humanistic cognition, which corresponds to both the natural and artificial colors. Colors connect people's senses and affect people's emotional reception and expression all the time. In the process of people's active transformation of the world, the cognition and application of color also promote the development of color and become a color civilization. This kind of civilization can convey emotions through concrete forms. Therefore, human association, aesthetics, habits and many other factors have endowed color with a kind of emotional language.

The historic architect Le Corbusier believes that the color is meant to evoke an essential feeling, not a description. Ms. Yurio Seki, a modern Japanese designer, believes that the color is the most powerful element that can show the mood and emotion, and that it is the key to determining the first impression or mood such as "happiness", "rationality" and "cold" (Excerpted from *Principles of Color Design*, 2009). Obviously, in the context of creators through the ages, color is not an ornament and decoration, but an emotional link with the viewers. As an important element in the sensory world, color can clearly and intuitively express the emotional connotation and deep inner thoughts of the color creator.

### 1.3 Emotional expression of the Morandi color system

From a physical point of view, color is composed of light waves of different lengths and does not have the function of emotional expression itself. The deeper connotation is added through the design and application of the user. Morandi's gray tone refers to the second or third color of the color, which is mixed with less than three colors to change the purity and lightness, giving another gray tone, known as the Morandi color system. The characteristic of this color system is contrast weak without strong visual stimulation, which gives the object a sense of urgency.

Morandi once explained his concept of painting: "What we can see in this objective world is never as real as what we see and understand. Things exist, but they have no inner meaning of their own, no meaning that we attach to them". That is why Morandi's colored bottles and jars are not bright, since the gray tone itself is a "discharm" of Morandi himself to the sensory world, observing the visual form world in a pure way.

## 2. The Application of Morandi Color Emotion in Web Design

### 2.1 Color perception

Through color adaptation phenomenon, it can be learned that the best time for color perception is between 5 and 10 seconds. If people watch a certain color for a long time, its purity and saturation will be greatly weakened. Bright colors especially stimulate the cerebral cortex, so some designers choose to use the strong colors in various colors to emphasize the products in order to make the audience receive the visual impact in the first time. If this color is too frequently applied and overused, it will make the color perception of the viewer drops greatly, and even produce visual fatigue and tired mood.

The viewer's perception of color is linked with the viewer's emotion. By analyzing the principle of color adaptation phenomenon, it can well guide the "degree" of color application in web design. Web designers should understand the characteristics of color adaptation before the design, so as to achieve the desired effect. The Morandi color system is a range of neutral gray that has less visual stimulation and psychological impact on the viewers compared to colors with higher saturation and purity. In the color collocation of general web design, it is possible to use Morandi color in the background of the web page to reduce visual stimulation, and add brilliant color embellishment to the prominent objects of the theme to increase freshness (Fig. 3). This colour collocation can enable web pages to produce a sense of priority and order, and weaken emotional fluctuations to some extent.

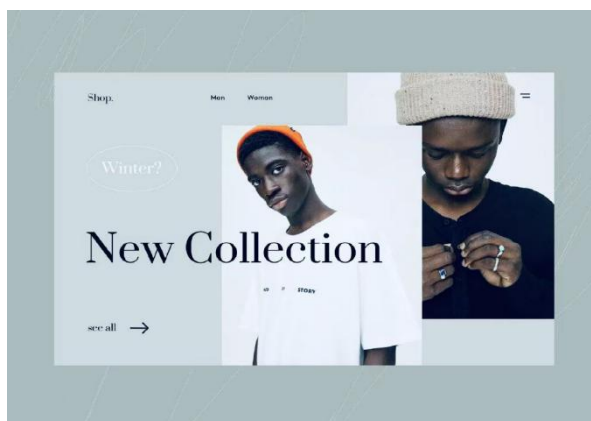


Fig. 3 Morandi Color Web Design (Source: <http://pinterest.com>)

### 2.2 Color association

Color association refers to the psychological process of other things associated with the human visual organs under the stimulation of various factors such as the external color, light and the environment. In this activity, people unconsciously associate color perception with the past visual experience, thus forming a new emotional concept or body shape experience.

Van Gogh's paintings have many color associations. Due to the input of his subjective consciousness, colors have a more emotional effect in the paintings. In Van Gogh's painting *Night Cafe*, he said, "I want to show that the cafe is a place of depravity, insanity, or crime. Therefore, I choose light red, blood red and harsh green to form sharp contrast".

People's color association is omni-directional, including the color temperature, soft, weight, pleasure and depression, rich and simplicity, exquisite and thick. Similarly, the Morandi color system will make the viewers have a color association. The use of Morandi color in the webpage will make viewers feel a sense of primitive and advanced, unconsciously immersed in a stable and quiet space and time atmosphere since it does not have strong color contrast, heavy color or jump color. Additionally, the gray color does not have strong emotional tendencies, but a sense of stability. Color association is influenced by color essential attribute, subjective feeling, creative intention and external factors. Understanding and mastering the association of color is of great benefit to the creator's works. Understanding and analyzing the association of different groups of people to a certain color has great reference value to the creators.

## 2.3 Color symbol

When a color is associated with things it associates with, and shows a special meaning, and is recognized and spread by the society, therefore, the color endows these things with symbolic meaning. In ancient China, yellow was a symbol of imperial power because it represents the color of the earth; however, in the West, red represents holy love because it represents the blood of Christ on the day of martyrdom. Therefore, the color symbol needs a certain communication power, influence and cultural accumulation, which is not only a humanistic phenomenon, but also a symbolic form of social consciousness.

In the spread of contemporary popular culture, the Morandi color system has the preliminary conditions to become a symbol. As well known to the public, Tiffany blue, Burgundy red, and Klein blue have now become a socially recognized special color because of their certain influence and public awareness. Morandi color system is the first to bring harmony and balance to the vision, presenting a pure feeling of peace and harmony. Thus, using a series of low-saturation gray colors in the web design is easy to remind the viewers of Morandi's *Bottle* series of paintings. The tone is peaceful, and the light and dark relations are soft, such as the harmonious and comfortable static beauty reflected in the painting works. Colors are associated with the things they associate with, so that the viewers, under the active operation of the function of imagination, can generate a socially recognized interlocking relationship.

## 2.4 Color implication

In visual art, color implication has become an important means for artists and designers to exert their ideas and emotions. In the web design, the color design of the website first needs to serve the material attribute characteristics of the product itself and the inner implication contained in the color itself. In web design, color can produce time misjudgment, which is a very effective implication, referring to the color's confusing effect on people's mental sense of time. In the warm color-based space atmosphere, people will have a short experience of practice, which is disguised to extend the viewer's visual stay time feeling; on the contrary, in the cold tone environment, people will have a psychological feeling of a relatively long-time span. Morandi color system is composed of gray with subtle changes in color, which can be combined into a warm or cold color, and this gray tone will largely eliminate the time illusion of color, so that the page has a warm and cold atmosphere at the same time, and can unload the psychological hint and visual burden imposed on the viewer.

Additionally, from the perspective of the complexity of color, using a single color to shorten the perception of time can increase the viewing time of the web visitor. On the contrary, the more colorful the page, the faster the viewer's perception of time and shorten the time spent on it. The application of Morandi color system enables the viewers to keep the impression of gray in their mind as long as possible in the shortest time, and Morandi gray is integrated into one color under the human visual mechanism due to subtle changes in tone. Therefore, the use of large area of monochrome also makes the viewers stay on it for a long time, and enhances the emotional impact and visual impact of the web page.

## 3. Emotional Implications of Morandi Color in Web Design

### 3.1 Humanistic care

In the contemporary era where material has reached a certain level, humanity has become the focus of discussion in this era, and the embodiment of humanistic concept and spirit can strengthen the sense of respect and care between people. American designer Prose said, people always think that design has three dimensions: aesthetics, technology and economy, but the fourth dimension is more important: human nature (excerpted from Chen Hongjun: *Modern Design History*, 2005). For the purpose of the design, the designer must make clear that it is equally important for the design to meet the psychological and physiological needs of the audience, so that the design can fully adapt to the physiological structure of the audience and also achieve spiritual enrichment.

In the fast-paced modern life, people often bear greater mental stress. Morandi color system has faded colors that give an object its true appearance. Harmonious and peaceful emotions are quietly released to convey the pure and simple emotional connotation. In the contemporary web design, humanized design has become a mainstream. The humanized design highlights the features of the website, but also makes it emotional and aesthetic. The color of Morandi satisfies the contemporary people's pursuit of simplicity and reduces the distance with the audience emotionally.

### 3.2 Respective needs

In the book *Emotional Design*, the author Norman divides emotions into three progressive levels: instinct, behavior and reflection. Reflective design is at the third level, which means that the audience gets emotional satisfaction from the design products through high-level thinking activities. Various symbols and elements can not only make the works achieve the embodiment of self-value, but also make the recipients of the works produce dependent emotions and become the carrier of emotions. The reflection of emotion is the association and reflection generated in the viewer's head after seeing the work, which is usually associated with the guidance or connotation of the design work.

The application of Morandi color system in web design is the future trend and breakthrough of web page color matching design, which should be reflected in the deep concepts. Arnheim believes that the emotion in art is completely beyond the requirements of utilitarianism. For instance, the Morandi color system is not just a series of gray combinations, but also allows every web visitor to enjoy a harmonious visual feast. Additionally, the sense of accomplishment and tranquility of the Morandi color system also dispels part of the anxiety of the fast-paced Internet era, making the viewers get the return of the original senses.

## 4. Conclusions

Modern design often ignores the emotional needs of the viewers and overemphasizes the function orientation. In order to create a design with emotions, the emotional design of color will be paid more attention by more designers. In the network era, the new aesthetic concept will guide designers to redefine the operation of color emotion. The Morandi color is widely known for its quiet, peaceful and subtle gray colors, while the combination of the Morandi color and the web design gives it even more emotional language. In the web design, the simple information listing can no longer meet the inner needs of contemporary people. In order to guide people's visual tendency, it is necessary to dialysis the transmission of color emotion in design.

The influence of color on human emotion is obvious. Analyzing the connotation of color emotion can make the design more scientific and standardized. Therefore, it is also the practical significance and future trend of the study of color emotion to learn and master the deep connotation of color, rationally use the laws of color, closely connect color emotion and design and promote it to a new height.

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