Color Inside the Lines—Does Gender Matter in Color Selection for Web Design?

Exploring the meaning of color, its perception by gender, and how it can be used in design is crucial to building an effective website.

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Color is one of the most powerful forms of communication. It can stimulate, depress, persuade, soothe, create anxiety, increase appetite, and evoke feelings of warmth or coolness. However, every person sees and experiences color differently. Therefore, selecting a color palette in web design is a challenging task. To complicate matters, the same color can elicit vastly different reactions between gender groups. Exploring the meaning of color, its perception by gender, and how it can be used in design is crucial to building an effective website.

How is Color Defined?

A scientist will explain that color is the way the brain interprets the electromagnetic radiation of a wavelength between 350 and 750 nanometers. The different wavelengths are seen as different colors (Johansson, online). An artist may define color by its composition and refer to a color wheel organized by hue. A web designer may delve into an explanation of RGB and others may simply define color by the way each makes them feel.

The truth is, color is subjective. Similar to music and art—or to senses like hearing or smell—the definition of color is in the eye of the beholder. For the purposes of this article, color is a communication tool—an element, of sorts.

Why is the definition of color important? It isn't, really. However, realizing that different people perceive color in different ways is integral in understanding the dynamic structure of design. A user's feeling about color, while often subconscious, is the first point-of-reaction to design. Before anyone notices the content of a site, they will see the colors. Some people will love the colors they see; others will not. The goal of good design is to select as non-offensive a palette as possible without reverting to a bland façade that appeals to no one (Carter, online). Data from color perception research should be considered carefully when selecting a palette for any website design.

Coloring outside the lines could be dangerous—Being aware of color perception and gender is crucial to good design—whether that's on the web, in publications, or in other design.
Does Gender Make a Difference?

Hundreds of factors contribute to an individual's perception of color. Color perception being biased by gender is intriguing because gender is one of the few factors that will also be included in every other factor, whether it's environmental, cultural, prejudicial, etc. Although the majority of research deals with color in interior environments—not specifically online—the results can still be considered when selecting a color palette for web design.

Color and gender has been studied as early as the 1890s and continues today. At first, the color spectrum was presented to both male and female subjects and color “harmony” was examined. Largely, balance in colors (relational or complementary) was more pleasing to women than men. In the ‘30s and ‘40s, researchers discovered that certain colors have different hierarchy between men and women. For example, men prefer blue to red and women red to blue (Khouw, online).

Later, the effects of interior environments were researched. A group of men and women were placed in two rooms—one painted gray, the other colorful. Pulse and EEGs were recorded as well as the individuals’ emotional feelings. The gray room increased the pulse rate of both groups. However, the men had more stress reactions than the women, they became more bored, and could not achieve the same degree of mental relaxation as women in the gray room (Khouw, online).

In other studies, men and women were asked to list the names of all the colors they could think of. Women listed a significantly higher number than men. Another study asked college students to identify the colors of 21 color chips. Again, women recognized more elaborate colors than did men (Khouw, online). Although these results can be attributed to a difference in the socialization of men and women, it should be noted that the two studies occurred in Nepal and the United States, respectively, by different researchers.

In the ‘90s, additional studies of gender and color revealed that women are more likely to have a favorite color. In addition, women were found to prefer soft colors and men responded to a brighter palette. It was postulated that men are more tolerant to the use of achromatic (non-relational) colors than women (Khouw, online).

Retail stores and packaging designers have certainly jumped on board with most of the theories mentioned. Think about packaging of personal items such as deodorant and toothpaste. Men and women buy each item. However, deodorant is targeted to specific gender groups while toothpaste’s packaging follows gender-neutral color choices. For example, Secret is packaged in baby blue and pink tubing, while Right Guard is in shades of black, gray, and bright green or blue. Crest Toothpaste, however, is packaged in bold primary colors. Retail chains follow this same strategy in their store design.
What Does This Mean to Web Design?

Although more research is advised in the area of gender, color preference, and digital spaces, a few basic ideas can be gleaned and transported to good web-design strategy. Color is one of the first communication tools that a user will notice on a website. Besides evoking an immediate visceral reaction, color creates a mood and (literally) “colors” what you are saying (Carter, online). Product, brand, and message all must be considered when making color choices but audience is perhaps the most important target goal. Since gender is part of audience, ignoring it could be potentially damaging.

The following are a few tips to consider when creating a gender-neutral color palette for website design:

- Use strong contrasts between any background color and the overlying text
- Keep the backgrounds behind text solid and plain
- Use one dominant color in headings and borders (bright tones are better)
- Provide visual interest with contrast colors (complementary or closely related to the dominant)
- Select colors that closely relate to primary or secondary colors when possible
- Stay away from neon, pastel, and anything too dark, discordant, or unusual
- Stay in browser friendly fields

What about specific colors? Fortunately, that is still a choice of the designer. However, being mindful of how different people perceive and respond to color choices is sometimes more important than personal preferences. Keeping current with the latest research on color will help designers create better websites.

References


Suggested Readings
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