

Emotional Impact of Colors Using Web-Design

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Abstract - With the boom of internet, especially among the masses, brought with it unprecedented opportunities. As more and more people began to use the internet, the more kinds of people also began to operate it. These of course include the website designers. One only needs to take a look at the Facebook page from the 2004s to the page of 2020. The website designers have not been napping away, for it is not hidden that these niche of experts have become one of the top grossing job careers. But in such a competitive market, with maybe thousands of website designed for a common purpose: what sets them apart? Among a lot many things, is the use of the color palette to attract the attention of the end user and further raise the required subconscious emotions. Hence, it is understood that this is the study of the human psychology in response to computer technology.

Key Words: Color, Psychology, Website, Design, Computer

1. INTRODUCTION

The human psychology is a well-researched niche of study. But even so, no one has even come close to claim that he's has researched all of the behavioural and mental aspects of human psych, for indeed it is not so easy to chart it. The web designers have to code the website they intend to design all the while trying their best to make it appealing to the end user.

There are a lot of things which may strike you as a "good" website; the highly detailed images, the extremely fluid navigation, the special attention to detail, or just the amazing selection of colors.

2. EFFECTS OF COLOR ON PSYCHOLOGY

Color extracts emotional response from us: When our eyes take in a color, they communicate with a region of the brain known as the hypothalamus, which in turn sends a cascade of signals to the pituitary gland, on to the endocrine system, and then to the thyroid glands. The thyroid glands signal the release of hormones, which cause fluctuation in mood, emotion, and resulting behavior^[1]. Arguably, all this stuff happens on subconscious level.

3. COLOR THEORY

It is The interaction of colors in a design through complementation, contrast, and vibrancy^[2]. Or in simpler terms: Color Theory is the science of how color affects humans.

The specific manner of complementation of colors i.e., the choosing of colors on the opposite side of the spectrum, as can be seen in the Fig. 1^[3] gives a great look of vibrancy to the product. The contrast refers to making the text easily readable, which is achieved by using dark-colored texts on light backgrounds.



Fig -1: The Color Wheel

4. EMOTIONAL IMPACT OF COLORS USING WEB DESIGN

It is usually not paid attention to the fact that colors stimulate a specific response from visitors. Some of the ways in which websites are used for the benefit to convert customers are:

1. A website with good color choices make the customer linger on their sites longer. On the other hand, wrong choices will ultimately fail to catch the good attention of the visitor.
2. The color choices send a message of the brand philosophy and the level of sophistication the website-owning company wants to display.
3. Color palette encourage visitors to buy the product, albeit subconsciously, that is portrayed on their site.

In summary, the way you choose to color the tab, sidebar, navigation bar, menu list, background chunks and the main page in general sends the desired signal to the intended recipient. We have tried to demonstrate the effective use of background and font color contrast in Fig. 2 and Fig. 3, the study which is of utmost importance in blog and information related websites.

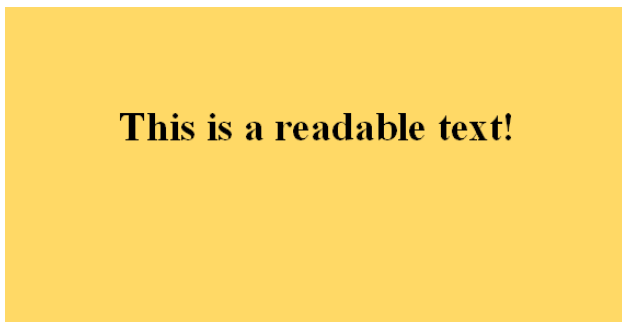


Fig -2: Example of Good Color Combination.

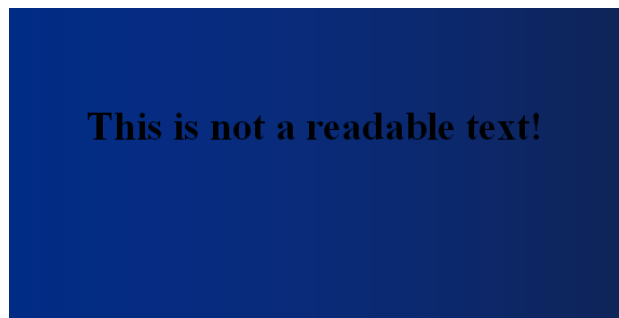


Fig -3: Example of Bad Color Combination.

5. REAL WORLD EXAMPLES

A. RED

Red is used to draw emergency attention to something, warn from something and to create excitement. Did you ever wonder the reason warning boards and the stop signal is red in color? It is very popular on fast food websites!



Fig -4: Example of a Red Color Website^[4]

B. Orange

Orange color can be engaging and playful. It is also used to highlight important buttons to improve conversion rates.

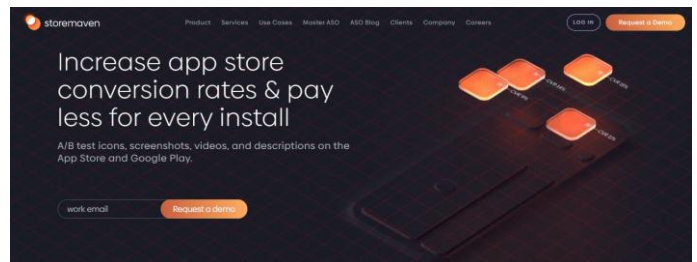


Fig -5: Example of an Orange Color Website^[5].

C. YELLOW

Yellow is of the most energetic of colors, without the urgency of the red. It is heavily used in sign buttons and also used to bring high contrast in with light colors. It screams for attention!

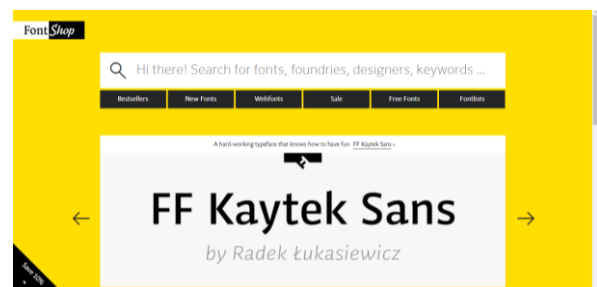


Fig -6: Example of a Yellow Color Website^[6].

D. GREEN

It is truly a relaxing color with a shift towards environment and nature. It is best complemented with brown. It is known for its calming properties.



Fig -7: Example of a Green Color Website^[7].

E. BLUE

Blue is used to gain trust of the visitors. It is used by a lot many social media sites, maybe in with an aim of portraying dependability and strength.



Fig -8: Example of a Blue Color Website^[8]

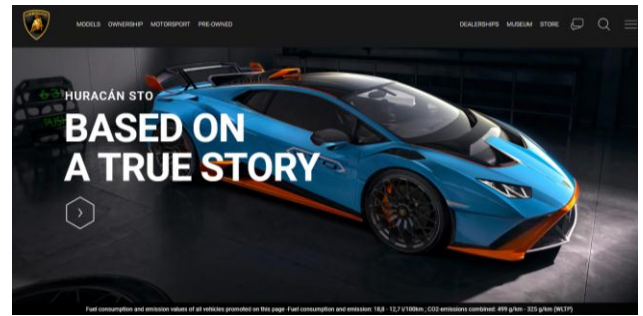


Fig -11: Example of a Black Color Website^[11].

F. PURPLE

It is a color associated with royalty and romance.



Fig -9: Example of a Purple Color Website^[9].

G. PINK

Pink color is often targeted towards female audience and girl products.

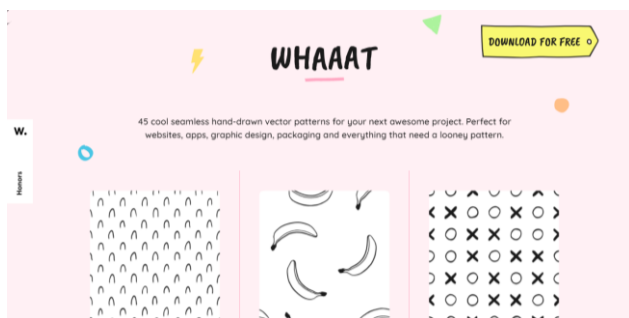


Fig -10: Example of a Pink Color Website^[10].

H. BLACK

Black is very much associated with luxury and minimalist sense. Great for mystery and expensive products.

I. WHITE

Mostly used with dark black for an extremely minimalist look, it is associated with peace and calmness (as well), and also a no-hassle color solution. Just look at the Google homepage!



Fig -12: Example of a White Color Website^[12].

6. RESEARCH TO THAT EFFECT

All these combinations are worth to study, for:

- 85% of (surveyed) consumers state that color is the primary influencer of purchase choices,
- Color increases brand recognition by about 80%!
- 42% of online users base their approval of a website on overall design by-itself,
- 52% of such users do not return to the site because of its poor color palette^[13].

Also, Colors are to be chosen mainly according to these criteria:

- 1) *Main Colors*: The 75% of your website color.
- 2) *Pop Colors*: to highlight attention grabbing buttons.
- 3) *Neutral Colors*: The colors used sparingly for the background and empty space^[14].

Becoming unbalanced in the aforementioned criteria can result in a website design that is too overwhelming. Also, it is important to be specific with colors when targeting either men or women. Fig. 13 sheds some details on this point^[15].

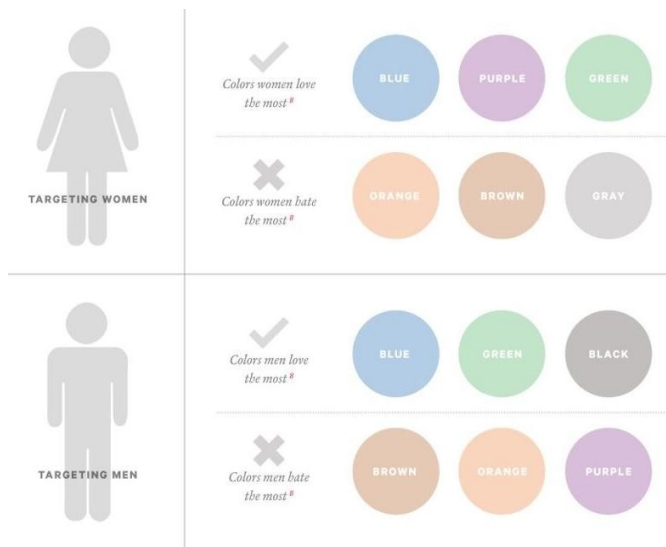


Fig -13: Data of Color Choices Between Genders.

The key areas to be considerate while applying the color mania (specially) are the background hues, banners, buttons, headlines, borders, and pop-ups^[16].

In a Magister thesis by Gabriel Nordeborn, he says, "Overall, however, the present study did not reveal any statistically reliable differences between either the ratings or the effectiveness of the website by website color. Nonetheless, the present study did reveal a statistically reliable interaction between color, gender and ratings. This interaction indicates that females and males differed in how the red website was rated."^[17]

7. CONCLUSION

Color theory is a topic with a lot of depth, and even the basics are a lot to digest at once. At the least, next time you visit a website, observe the color scheme and decode what they are trying to make you feel.

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