

genetic modification of plants brings more efficiency. The production of these fatty acids by means of algae requires higher costs and investments [4].

RESULTS: So, we found that Omega-3 polyunsaturated fatty acids are essential fatty acids, since the body is not able to produce them on their own. In this regard, it is vitally important for us to include in our daily diet of omega-3 products to get all these extremely important and useful compounds.

REFERENCES

1. Bays H.E. (2007) Safety considerations with omega-3 fatty acid therapy. *Am. J. Cardiol.*, 99(6A): 35C–43C.
2. Duda M.K., O'Shea K.M., Stanley W.C. (2009) Omega-3 polyunsaturated fatty acid supplementation for the treatment of heart failure: mechanisms and clinical potential. *Cardiovasc. Res.*, 84(1): 33–41.
3. Kris-Etherton P.M., Harris W.S., Appel L.J.; American Heart Association. Nutrition Committee (2002) Fish consumption, fish oil, omega-3 fatty acids, and cardiovascular disease. *Circulation*, 106(21): 2747–2757.
4. Lavie C.J., Milani R.V., Mehra M.R., Ventura H.O. (2009) Omega-3 polyunsaturated fatty acids and cardiovascular diseases. *J. Am. Coll. Cardiol.*, 54(7): 585–594.

Семикіна Наталія Сергіївна

Київський національний університет технологій та дизайну

(м. Київ)

Науковий керівник – к.культ. Чернець М.О.

COLOR AS THE MAIN ELEMENT OF DESIGN

Of all the Elements of Design, color is probably the most challenging to understand. We have to learn a little science to fully understand the nature of color. Color has three main properties: hue, value and intensity. Why should you care about

color? If someone handed you the keys to your dream car, for free, your head would explode with excitement, right? Of course! But what if the car was painted in your most-hated hue? Or each panel was a different color entirely? Or if the interior mixed lime green and construction yellow? You might be a little less excited, right? Colors have meaning. They impart a tone and emotional impact just like fonts do, and that makes them a powerful design tool. So we will speak about color and secret of it.

What is color? Color originates from a light source, that is either view directly or as reflected light. Daylight or white light contains light waves for all colors. There is no color with out light! The absence of light is complete darkness or black. The mixture of all visible light is white light. White light is made up of all the colors in the rainbow. Water droplets in the air act like a prism does when light passes through. It organizes random color light waves into the order of their wave length. We see that organized pattern as a rainbow. These colors are always in the same order and are called the Color Spectrum. When organized in order around a circle; the colorspectrum is called a Color Wheel.

How do we see color? In order to see color there must be light and there must also be color receptors, such as eyes. We see colored light or light reflected off objects. So why do we see some things as red and other things as blue. The answer is that when light waves strike an object they are either absorbed or reflected by the object. The reflected light waves mixed in varying proportions are what we see as different colors.

Types of colors

Primary Colors. Primary colors are red, blue and yellow. These three colors are the most basic colors on the color wheel. They cannot be made from any other colors but all other colors on the color wheel are made from them. They are commonly used together to attract attention, such as children's products or at a circus.

Secondary Colors. Secondary colors are green, orange and purple. They are formed by mixing equal amounts of the two primary colors that are beside them on the color wheel. For example, green is made from mixing blue and yellow. They can be used together to create a nicely balanced color scheme.

Tertiary Colors. Tertiary colors are blue-green, yellow-green, yellow-orange, red-orange, red-purple and blue-purple. They are formed by mixing a primary color and a secondary color together. For example, blue-green is made from mixing blue and green. Tertiary colors help create a wider color palette.

Also there are:

- Tints and Shades.
- Analogous Colors.
- Complementary Colors
- Split Complementary Colors
- Tetradic Colors
- Color psychology

Choosing a color for your logo can actually be more complex than you think. It goes way beyond just picking your favorite color, and the decision should be taken seriously with some thought behind it. Did you know that 80% of consumers believe that color increases brand recognition? Along with 85% say that color is the primary reason they decide to purchase a particular product, pretty amazing! It is even said that consumers may vividly recall the colors associated with your brand, but vaguely recall the actual logo itself. Therefore it is very important to consider the emotions certain colors evoke in order to get the right message across to your customer base. The psychology of colors is a science, where colors can send certain messages to the consumer without you even realizing it. Let's take a look:

Passionate and impulsive personalities like red color. Blue is the color balanced and cool people. Yellow people love fun and energetic. Green is the color of harmonious and sincere personalities. Purple is the color of mysteries, it is often choose a creative individual, and people with well developed intuition. A person's favorite color can tell a lot about him.

Red is a very powerful color, that attracts attention. It is often used for sales and discounts because it lends itself to a sense of urgency. It is often used for restaurants and fast food establishments because studies have shown that it stimulates appetite.

Be wary though when using red, depending on the shade and your company, red can come off as aggressive, and if that is not the message you want to portray then you may want to use a lighter shade or stay away altogether.

It is no surprise that orange pulls some of the same emotions that red and yellow do, since it is a combination of the two. Orange is eye-catching, and evokes a cheery feeling. Orange encourages one to take action, that is why it is often times used on sites as the primary color for call to action buttons.

Yellow denotes feelings of happiness and cheer. It has strong ties to sunshine, and everyone feels a certain sense of joy on a sunny day! Yellow is very noticeable and eye-catching. Yellow is a great secondary color due to this fact, for instance McDonald's, John Deere, and Subway use it in this manner.

Blue is a very popular color to use, and it often denotes masculinity. It also is a color that people tend to trust, the reason why Visa, Chase, and other financial institutions use it. Another interesting fact about blue is that it is linked to increased productivity.

Green lends itself to nature, since it is associated to grass and trees. It is also a very wholesome color and is often used to denote health. Companies that have strong ties to nature and a healthy lifestyle use green in their logos. Green is also the color money which could be why Land Rover uses it in their logo.

Purple is an interesting color, it lends itself to money and success because of it's ties to royalty. There are numerous beauty and anti-aging products that use purple as their primary color. It is often times listed as a favorite color of women, but never with men, which could be a main contributing factor as why Lifetime would use it in their logo.

White can be a tricky color, it basically appears like there is nothing there, and not many people want that. However white along with light grays lend themselves to balance and a sense of calmness. Apple one of the largest and most successful companies has made white their calling card. The contemporary design of their website has been mimicked by many with their use of white and light grays. I had a difficult time finding any primary white logos besides Apple, Ghost was fitting

because of their name, and the others you just can't see!

Black is a color that is not cheery or happy, but it is a powerful color and it lends itself to luxury. It even has a certain sense of mystery. There are many high end jewelry and purse companies that use black as their primary color.

Described above semantic palette can become the basis for any decent graphic design. As each paint carries a set of the encoded information which will be perceived subsequently by a brain of the consumer, at work it is important to define, what information you want to inform to the client before that will pass to conscious studying of advertizing materials, as well as than you will win it.

In order for the user's brain to be able to concentrate and quickly process all your "secret information", no more than three colors should be used in the finished design. Try to emphasize the point.

Psychology of color is quite a young science, but its fruits have already proven their effectiveness in the market of goods and services, so do not neglect it. But do not forget that, first of all, the image should be pleasant to the eye and indicate the good taste inherent to its carrier, only under this condition the embedded characters will work for you.

REFERENCES

1. Colour Science: Concepts and Methods, Quantitative Data and Formulae / Wyszecki, Günther; Stiles, W.S. (1982)
2. Basic Color Terms: Their Universality and Evolution/ Berlin, B. and Kay, P.
3. Introduction to light : the physics of light, vision, and color/ Waldman, Gary (2002)
4. Principles of Color Technology/ R.S. Berns 012-01-05 at the Wayback Machine., 3rd Ed., Wiley, New York (2001).
5. Color red in web-based knowledge testing/ Gnambs, Timo; Appel, Markus; Batinic, Bernad (2010)