

Opponent-process theory of color vision

Psychology



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Opponent-process theory of color vision Affiliation: Describe 3

demonstrations that support the opponent-process theory of color vision.

This theory by Ewald Hering explains through a proposition that retina comprises of sensory receptors which detect colors based on their arrangements which is usually in pairs of red and green, black and white and yellow and blue. When one set of pair is stimulated, then the other opposing pair is inhibited (Pastorino and Doyle-Portillo, 2012).

One of the demonstrations of this is the afterimage. When one stares for long one particular color and then switches to a white area, the opposing color of the stared at color will be seen. For example if one was staring at a blue color, then effect will be seeing color yellow because the receptors of the blue color will have been desensitized temporarily.

The other demonstration of this theory is lateral inhibition or more commonly “ simultaneous contrast.” This demonstration deals with color contrasts and shadows. An example of this is where two similar shades of color grey appear lighter or darker when put in a lighter or darker background (when in a darker background, the grey will appear lighter and when in a lighter background, it will appear darker). This happens because of the illumination behind the color which makes a lighter background appear darker.

Lastly, there is the visualizing colors demonstration which states that individuals visualize colors easily when they are from different sets. This is because the receptors find it hard to visualize an object which uses two colors of the same set since the same receptors are being used and hence making it hard to see both colors of the same set next to one another (Goldstein, 2010).

References

<https://assignbuster.com/opponent-process-theory-of-color-vision/>

Goldstein, E. B. (2010). *Sensation and perception* (8th Ed.). Belmont: Wadsworth.

Pastorino, E. E. and Doyle-Portillo, S. M. (2012). *What Is Psychology? Essentials*. New York: Cengage Learning.