Do you see what i see

Business

There is one question that drives everyone bonkers. That question is: “ Do colors look the same to me and you or are they different?” An example of this so it is more clear would be, is my blue your blue or is my blue your red? There are some theories that I will talk about later on as you keep reading. My main goal of this paper is to provide you information on color perception and how the theories are alike and how they differ. Within the last couple of years there has been studies on color perception, one of those studies was: “ There was a study done on monkeys that suggests color perception emerges in our brains in response to our outside of the world experiences, but this process occurs according in a random pattern.

Like color-blind people and most mammals, male squirrel monkeys have only two types of color-sensitive cone cells in their eyes: green-sensitive cones and blue-sensitive cones. Lacking additional information that would be picked up by a third, red-sensitive cone, the monkeys can only perceive the wavelengths we call “ blue” and “ yellow;” to them, “ red” and “ green” wavelengths appear neutral, and the monkeys cannot find red or green dots in a grey background,” (Wolchover). That’s only one case that they have studied, later in the study they would inject a virus into the monkeys cells, the virus would make it so they could see the red and green dots amid the gray background. With the virus changing their genes they could see all different colors, to my knowledge they did not have a neutral color they could not see. Another way our perception could be altered or different from person to person, is the way our eyes are put together.

In other words the anatomy of our eyes. Our human eyes are all equipped with or should be equipped with a variety of optical components such as the

cornea, iris, pupil, aqueous, vitreous humor, variable focus lens, and last not but least the retina. These components work together to form images or projections of objects that fall into the line of vision of each eye. When the object is observed, it’s first focused through the convex cornea and lens elements, projecting an inverted image on the surface of the retina, a multi-layered membrane that contains millions and millions of light-sensitive cells. In order to reach the retina, the light rays focused by the cornea must continuously cross the aqueous humor, the crystalline lens, and the gelatinous vitreous body, and the vascular and neuronal layers of the retina before the photosensitive out segments of the cone and the rod cells.

These sensory cells detect and translate the image into a series of electrical signals that are sent to our brains, (Spring, Fellers, Davidson). Some more theories that could potentially explain or give us a better understanding of color perception. The first theory is the trichromatic theory, which was first proposed by Thomas Young in 1802, but research was furthered by a man who’s last name is Helmholtz in 1866. The trichromatic theory was mainly based on a color mixing experiment and suggests that a combination of three channels explain color discrimination functions. The only problem with this theory is that it fails to account for the four main colours: red, blue, green and yellow. Also it fails to fully explain colour discrimination functions, (Kalloniatis, Luu).

The next theory is the opponent colour theory, which was first proposed in 1872 by a man by the name of Hering. At that point in time, it was the rival theory to the trichromatic theory. Works Cited Kalloniatis, Michael, and

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