

Color Defectiveness: A Personal Account

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Recently it was brought to my attention that as a person with defective color vision I perceive the world in a slightly different way. Further, it was suggested, such a difference in perception could lead to significant social consequences. If this is so, then according to the University of Alabama Medical School in Birmingham, one out of every 12 males and one out of every 200 females live with the social effects of their color defect. Yet the psychological literature on the phenomenon is practically nonexistent. For this reason I will attempt to recall my own experiences with this perceptual anomaly.

Before starting, I should make it clear that I am color blind only in the sense that I find certain hues of different colors, the extreme ends of the red and green spectrums, to be indistinguishable from other colors. It is important to realize that the severity of defect ranges from mild cases, such as my own, to complete lack of color perception. I cannot speak of the consequences for the latter, but I suspect that they are quite different from those of the former, much as the consequences of poor hearing differ from those of total deafness. In either case a person with a distortion of perception is aware of the percept regardless of his knowledge or lack of knowledge of his impairment, while

the person lacking the percept entirely has no concept of it and is more likely to have his impairment noticed and brought to his attention sooner.

Even as a young child I can remember experiencing small but annoying problems. In grammar school I used only basic colors of crayons long after my classmates were showing off boxes of 164 shades. At home I relied on my younger sister (who grew up to be the only artistic member of the family) to tell me which color was appropriate for trees, grass, bushes, and the like. Eventually each of my three sisters declared their coloring books off limits to me due to my strange combinations of colors. Not surprisingly, art was my least favorite subject in school.

I was late in learning to pick out my own clothes in the mornings. Color coordination was a mystery of the highest order. Eventually I learned to memorize which shirt went with each pair of trousers, a system which I still use. Folding the laundry, a common chore at my home, became a particularly aversive event when I switched from white socks to solid colors. My father wore the patterned socks popular in the fifties and early sixties, so matching socks had previously presented no problem. However, the proper pairing of solid colors which differed only slightly in hue required a great deal of effort and concentration. After several months of frustrating attempts, I gave up the endeavor entirely and wore only boots. In this way I was able to use whichever two socks I happened to grab, be

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they red, green, or purple.

Buying clothes has always been another tedious task. Until college this was always worked out in conjunction with a sister. Oddly enough I was always encouraged to make the selections. After several suggestions and sisterly vetoes a suitable ensemble might be obtained. Why it was more suitable than my first suggestion I hadn't the vaguest notion. In the end I found myself with a wardrobe of exclusively blues and browns.

All of these problems can be classified as minor nuisances and are not considered to be particularly abnormal. Thus, no one including myself suspected that I might have problems with my color vision. Instead it was assumed, quite logically, that I had poor taste in clothes, didn't like coloring, hated doing laundry, and thought that boots were neat. Certainly all four statements were true. While it would be foolish to say that had I been born with great sensitivity to color I would enjoy folding clothes, I believe it is safe to assume that my visual anomaly has had something to do with each statement.

Despite the fact that I received annual eye examinations beginning at an early age, my color defectiveness was not diagnosed or at least not pointed out to me or my family until I received my physical examination for entering college. I was examined by a young physician doing his internship in family medicine in the office of my family doctor.

The examination proceeded routinely until I was given the standard colored dot test for color blindness. At this point, the intern and I were both unable to determine which numbers were written on certain sheets. I had had difficulties with this test in the past and assumed it was normal. It was after several moments of debate between the intern and myself that the doctor was called in to consult. To our mutual surprise he diagnosed us both as mildly red-green color blind.

Although my mild handicap is easily allowed for, there are certain problems of which I must be aware. The color of a green traffic light is not clear to me and in city driving is often lost in the sea of white street lights and neon signs. It can be quite startling for a yellow light to appear out of thin air. By cueing on position rather than color this

problem is alleviated to some degree. Moreover, a recent change by some cities to a sculptures gas filament which gives off a glaring yellowish light has also made this easier on me. The yellow tint distinguishes street lights from the green traffic signal. While I have trouble telling green from white, I see yellows very well. This allows me to spot a green light in the middle of yellowish lights much quicker than I could spot it in the middle of white lights.

Clothing still presents a problem. I generally make sure I have the company of a female (they are much less likely to be color blind than men) when shopping. Although this is probably not necessary, I have learned not to trust my own judgement in such matters and feel more comfortable when given a second opinion. Another problem with clothing is that I frequently find that women expect me to remember what their clothing looks like according to its color. This talent completely escapes me. Generally in this situation I am asked to state a preference, based on memory, as to which outfit I like best or is most appropriate for an occasion. Since I have little confidence in my ability to correctly label the colors, I find it best to simply state that I like them both and encourage my friend to trust her own judgement. In this way I am honest and do not have to admit to my ignorance, which is generally taken as an insult.

In short, I've found my mild case of color blindness to be in no way a major handicap. I do believe that it has played a role in the development of certain of my likes and dislikes, certain aspects of my self concept and more directly if less importantly, the way I shod my feet. It is worth noting that recent trends in education towards color coding learning materials could possibly have a negative effect on students with similar handicaps. What is truly interesting is that an extensive search through the literature reveals that very little has been written on the social effects of color defectiveness. John Dalton first investigated color blindness in the beginning of the 19th century. A color defective himself, Dalton was concerned mostly with the causes and

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different types of defectiveness. This trend in investigation has continued to the present day. One pertinent article is written by Professor C.R. Snyder of the University of Kansas. In his article Snyder tells of his experiences growing up with monochromatic vision. He also notes some early childhood frustration but found that this was relieved when he was properly diagnosed upon entering grammar school. Additionally, some attention has been paid to the effect of faulty color perception on the work of various artists. Yet, to my knowledge, a systematic investigation of the social consequences of this problem has never been made.

While the problem may not have an overwhelming importance in itself, such an investigation could lend insights into the problems faced by persons afflicted with major perceptual aberrations. While the effects of my impairment have been minor, they are surprisingly varied. Imagine the difficulties of the person whose perceptions are distorted through brain damage or mental illness. It appears that an understanding of what sorts of difficulties perceptual anomalies entail and in what ways people are able to best cope with them is an area worthy of more careful study.

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