

James F. Doherty Memorial Scholarship: Essay

The first experience of light is the most traumatic. It is the transition from warmth and darkness to confusion and noise and brazen, burning lights; a transmutation from nine months of comfort and familiarity into the sudden, blinding unknown. Artificial yellow light blares from all directions, mercilessly inundating eyes accustomed to hazy bleakness. The experience overwhelms all senses: strange people clad in scrubs frantically bark at one another; large hands probe, conducting various tests; a gasp is heard with a sudden intake of air as lungs expand, a feeling strange and unnatural, evoking sharp cries, projections of all that is unpleasant and frightening about this new world. But soon the noises fade, the people disappear, and the cries diminish. The warmth from before appears once again, though somewhat different, now in the form of softness and skin and coos of love. And though the lights do not fade, eyes manage to close, breathing—now natural and comforting—slows, and sleep is found in the tender arms of one familiar and loving.

Soon, these eyes grow accustomed to the light, and begin to recognize shapes and objects. This is a tree, that is the sun, there drift clouds in the never-ending sky. Each of these has a color: leaves are green, the sun is yellow, the sky is blue. These eyes can detect color through photoreceptors within them called cones, allowing for full color vision. And to the eyes, nothing can be more captivating than color. Colors infuse life and feelings into otherwise dull or inanimate forms. Take trees, for example. In the summertime, a tree's leaves project an inviting, luscious green, enticing onlookers to absorb the refreshing air and clement weather. However, autumn's crisp and dying leaves, whose vibrant shades initially charm, warn of the oncoming bitterness of winter. The sky produces a similar effect. Happiness is harder to find on mornings hanging with dreary gray clouds, while it pervades in bright blue afternoons.

Thus, colors are visible emotions, every shade a different feeling. However, as beautiful as they are, colors also serve practical, unromantic purposes. In the natural world, male animals, like the peacock, usually appear more flamboyant and colorful than females, as bright colorings indicate strong, healthy genes, thus giving males better chances at attracting mates. In addition, highly-poisonous animals and plants often sport vibrant hues, whereas their unarmful

counterparts have dull, earthy colorings. Similarly, modern human society associates colors with warnings or signals: red means stop, green means go.

Another example of the ways in which colors are used daily lies in medication. Today, most people take some type of prescription drug regularly, and usually know some distinguishing characteristics of their medications. They know the shapes, sizes, and colors of their prescription medications, as well as of over-the-counter drugs. Benadryl is pink, Aleve is blue. Synthroid pills are small and colorful, potassium chloride tablets are huge and white. Each time a person refills a prescription, he or she expects to see the same type of pills in the vial. Seeing a blue tablet instead of a white tablet would surely alarm a patient. Therefore, coloring in pharmaceuticals is extremely important, not only for patients but for pharmacists, whose job it is to recognize and differentiate between medications. As a pharmacy technician and pharmacy major, it is my responsibility to learn these defining traits so as to not make mistakes while doing my job.

As a chemist at Penn Color, Mr. Doherty surely understood the importance of color—not only in pharmaceuticals, but in all aspects of life. His eyes would have been trained to appreciate different hues. As a scientist, he surely would have known how the eyes work, about cones and how their function related to his work. Color was his career, and I am sure his passion for it was evident in all that he did.

But Mr. Doherty was not a single-minded being. He was a Renaissance man. He enjoyed all types of learning, not only about science but about languages, history, and literature. His interests colored his life, made him vibrant. I believe that I am somewhat similar to Mr. Doherty. Although his career was in the sciences, he did not stop learning about the liberal arts, and endeavored to become a well-rounded and well-educated individual. Similarly, though I hope to enter the science field as a pharmacist, I also intend to nurture my love for literature and writing.

Without the brain, the eyes would be nothing. Eyes alone cannot detect colors or process images; all information in the eyes is transmitted to the brain, where light rays and pigments are translated into images and colors. This is true for both colors and for reading. Together, the eyes and the brain can transform mere scratches into letters and words: into language. Remarkably,

people communicate through this system of scribbles, applying tremendous meaning to such simple marks. Extremely complex words and meanings can come from a jumbling of scratchings, can inspire feelings of love or hate simply by rearranging the pattern of letters. In this way, colors and words are similar: both overflow with emotion, holding immense powers of influence. Think of it this way: during World War II, Adolf Hitler managed to persuade hundreds of thousands of people that the Jewish people were somehow “unclean.” Using only words and red flags with black emblems, he persuaded many people to do terrible, terrible things. When coupled, two extremely influential forces can produce hauntingly powerful effects.

I have always been captivated by words. I could always be caught with a book in my arms, eyes thirstily absorbing the words, the story. Eventually, I would begin to write my own stories, and began thinking of creating a career out of this passion. But soon I found my heart split into two parts: one claimed by words, the other by science. So while I aim to one day hang a diploma for a Pharm.D upon my wall, I also hope to place my own published novel upon my bookshelf. Mr. Doherty is a fantastic example that this, in fact, is possible: that surrendering one passion for another is unnecessary. After all, the eyes are built to transmit not just one but many different types of light to the brain, in forms of both color and words.

But some day, the eyes will grow tired of sending light signals to the brain. They will weary of reading, of seeing the colors of this world. Eventually, the eyes will close for their final time upon this earth, will again embrace the surrounding darkness from before birth. Upon awakening, the eyes will open to magnificent colors undetectable by human cones, overwhelmed once again by light, to begin a new life.