

Assignment No. 7: Simultaneous Contrast- Make a Single Color Appear as Two Different Colors

Art 213 - Color Theory, Spring 2020, East Los Angeles College

Professor: Christine Frerichs (frericcj@laccd.edu)

Student: Edward Locke (edwardnlocke2020iphone@gmail.com)

Date of Submission: Monday, June 8, 2020

This assignment is to make a single color appear as two different colors by altering its surroundings, with two strong examples. Adobe Photoshop tools have been used. The images have been created on 11 inches by 14 inches white background, in CMWK Mode at 300 DPI resolution. This digital experiment has been conducted with close observation and repetition.

The theory behind how to make one single color appear as two different colors, when placed against background with different colors, has been explained in Professor Christine Frerichs' *Section IV (Weeks 8 and 9) - Simultaneous Contrast* PDF lecture notes. They include:

- (1) The theory of "Successive Contrast" developed by Goethe and Chevreul, which states that particularly in two-dimensional work, every color used will be affected by what is next to it. Colors are never seen in isolation. The word Successive here means one thing following another. If one stares at one color for some time and then looks away, the next thing that follows is that one "sees" its complement as a colored glow.
- (2) The theory of Simultaneous Contrast identified by Michel Eugène Chevreul, which states that "Two colors, side by side, interact with one another and change our perception accordingly. [...] The word simultaneous refers to things occurring at the same time. Simultaneous contrast refers to the manner in which the colors of two different objects affect each other. The effect is more noticeable when shared between objects of complementary color. Since we rarely see colors in isolation, simultaneous contrast affects our sense of the color that we see."

The first principal color and its different background: Pastel Magenta from the Pastel folder of the Window → Swatch menu (*Figure 1*), against two background colors based on Light Violet in the Light folder and Pure Red Orange in the Pure folder, with adjustments using the Image → Adjustment → Color Balance ... menu.

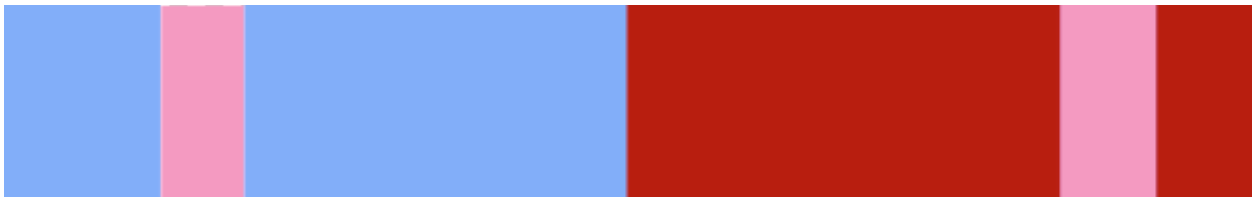


As shown above, the Pastel Magenta swatch on the left is against the Light Violet background which possesses "blueishness" and subdue the blue in the PM swatch, making it

appear reddish by illusion. The Pastel Magenta swatch on the right is against the Pure Red Orange background which possesses “reddishness” and subdue the red in the PM swatch, making it appear blueish by illusion.



As shown above, the Light Violet background on the left now becomes much more blueish (by adding Cyan and Blue in the Image→Adjustments→Color Balance menu’ slider), and the Pastel Magenta appears more reddish by illusion. The Pure Red Orange on the right now becomes more redder (by adding Red and Magenta in the Image→Adjustments→Color Balance ... menu’s slider), and subdue the red in the PM swatch, making it appear more blueish by illusion.



As shown above, the Light Violet background on the left now becomes much lighter, and the Pastel Magenta appears darker by illusion. The Pure Red Orange on the right now becomes darker and making the PM swatch appear lighter by illusion. The values of the background colors have been changed with the Image→Adjustments→Brightness/Contrasts... menu).

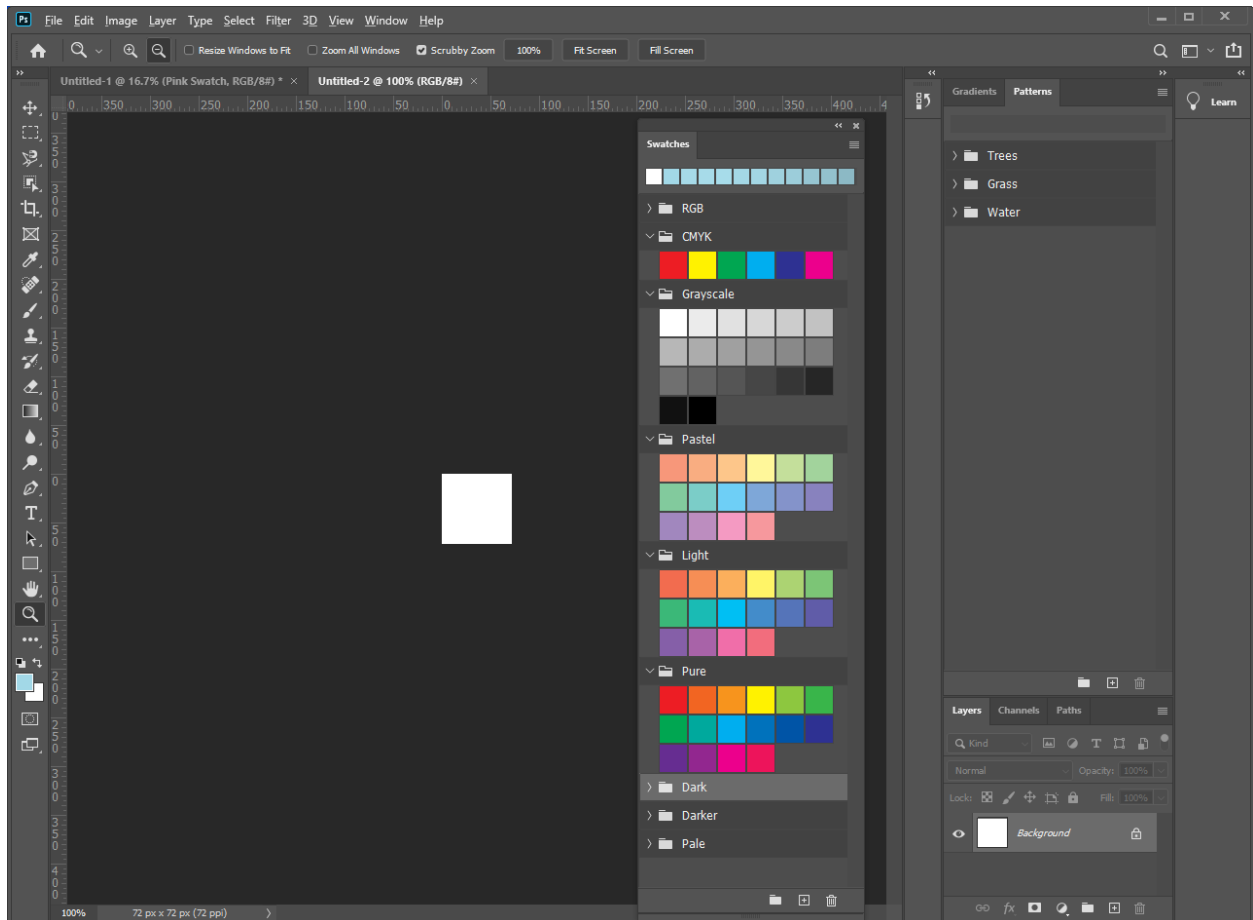


Figure 1. The Swatch menu and its folders.

The second principal color and its different background: Light Yellow Orange from the Light folder of the Swatch menu has been selected as the single color, Pure Yellow and Pure Red from the Pure folder of the Swatch menu have been selected as background colors.



As shown above, the Light Yellow Orange swatch on the left is against the Pure Yellow background which possesses pure “yellowness” and subdue the yellow in the LYO swatch, making it appear more reddish by illusion. The Light Yellow Orange swatch on the right is against the Pure Red background which possesses pure “reddishness” and subdue the red in the LYO swatch, making it appear more yellowish by illusion.

The above examples show us that the perception of colors are not based on the attributes of the particular color alone, but rather on its placement in the surrounding colors.