# Assignment No. 8: Simultaneous Contrast Make Two Different Colors Appear as the Same Color 

Art 213 - Color Theory, Spring 2020, East Los Angeles College<br>Professor: Christine Frerichs (frericcj@laccd.edu)<br>Student: Edward Locke (edwardnlocke2020iphone@gmail.com)

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This assignment is to make two different colors appear as the same color by altering their surroundings. This experiment requires close observation and repetition. It is done in Adobe Photoshop, using similar tools as in assignment 7, i.e., the Window $\rightarrow$ Swatch menu, the Image $\rightarrow$ Adjustment $\rightarrow$ Brightness/Contrasts $\ldots$ and Image $\rightarrow$ Adjustment $\rightarrow$ Colar Balance $\ldots$ menus. The goal is to produce one strong example with two color swatches. After I have completed the above swatch example, I used those same four colors to create a 5 inches x 5 inches composition of free-flowing organic background pattern with stars and hearts on top. This composition ONLY includes the four colors used in the swatches. The goal of this composition is to demonstrate again how to make two different colors appear as the same color, based on the other two colors placed near them.

The theory behind how to make the two colors appear as the same color has been explained in Professor Christine Frerich's Section IV (Weeks 8 and 9) Simultaneous Contrast PDF file. They include, like in the Assignment No. 7, the following:
(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."


As shown above, the two swatches selected are Light Violet Magenta and Light Magenta from the Light folder of the Swatch menu. The background colors are Light Green and Light Red Orange from the same menu, with adjustments in hue and value made with the Image $\rightarrow$ Adjustments $\rightarrow$ Color Balance $\ldots$ and Inage $\rightarrow$ Adjustments $\rightarrow$ Brightness/Contrasts $\ldots$ menu. The reasons for the selection of the background swatches are: (1) use Light Green to add red (complement of green) to the neighboring Light Violet Magenta; and (2) use Light Red Orange to add blue (complement of orange) to the neighboring Light Magenta swatch. These supposedly could narrow down the appearance of the two foreground colors, i.e., Light Violet Magenta and Light Magenta.


As shown above, after a series of adjustments of hues of the two background colors with the Image $\rightarrow$ Adjustments $\rightarrow$ Color Balance ... menu, the two swatches now on the foreground, i.e., Light Violet Magenta and Light Magenta appear fairly as similar colors. These adjustments include:

For the Light Red Orange background swatch:

1. C+100 (twice) in the Image $\rightarrow$ Adjustments $\rightarrow$ Color Balance $\qquad$ menu
2. $\mathrm{C}-63$ and $\mathrm{B}+100$ in the Image $\rightarrow$ Adjustments $\rightarrow$ Color Balance $\ldots$ menu
3. Y-42 and G+100 in the Image $\rightarrow$ Adjustments $\rightarrow$ Color Balance $\ldots$. menu
4. $\mathrm{R}+12, \mathrm{G}+79$ and $\mathrm{Y}+12$ in the Image $\rightarrow$ Adjustments $\rightarrow$ Color Balance $\ldots$ menu

For the Light Green background swatch

1. B+100 (twice) in the Image $\rightarrow$ Adjustments $\rightarrow$ Color Balance ... menu
2. Brightness -89 in the Image $\rightarrow$ Adjustments $\rightarrow$ Brightness/Contrasts ... menu

The four final swatches have been used to create a pattern, where the Light Magenta stars and Light Violet hearts appear to have similar colors, as shown below.


