

# Deconstructing Color

## Assignment | Project Due & Critique 1.16

- Using a tripod, shoot 3 different exposures of a scene in color, changing at least one element in each exposure.
  - For example, cars moving on a freeway. A person moving to a new position for each shot. Experiment with overlapping or not overlapping the changing element of your shots.
- In Adobe Photoshop CC, use the Channel Mixer adjustment layer to create a new document using only the color information from one channel for each exposure.
  - Example: Exposure 1 will be the Red channel, Exposure 2 will be the Green channel, Exposure 3 will be the Blue channel.
- Create 'Color Screens' of each channel's complement (ex. RGB to CMY).
- Composite the three screens to form a new color image. Use the move tool & blending modes to help improve registration.
  - The area where your subject(s) move from each exposure will reveal the color of the channel's screens (CMY).
- Supply the instructor with 2 unique final composite images in print and psd format.

## Goals

- To achieve a better understanding of the different color modes and how they produce color.
- To review working with Layers and Channels, plus various other settings and palettes in Photoshop.
- To create a dynamic composition considering the elements of composition at your disposal.
- Hint: Images that show movement will be more interesting when composited.

## Requirements

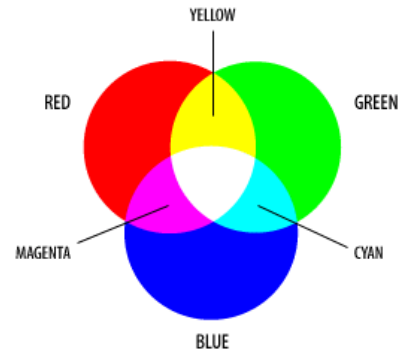
- You must shoot with a tripod.
- All photography must be new and shot for this class.

## Grading Considerations

- Foremost, how well did you follow the instructions?
- Did you use a tripod?
- Have you used composition creatively to present your subject matter?

# Deconstructing Color Tutorial

If you'd like to experiment with assembling the composites before our second class, go right ahead! It may help you realize if you have shot the assignment correctly, or how you might reshoot for more interesting results. However, please be advised that we will go through this tutorial in class, in its entirety. So all you need to do is show up with the photos you have taken (not yet composited).



1. Using a tripod, shoot 3 different photos of each composition in color.

- Select two of your best composition sets (of three) to work with.  
Note that **two final compositions** are due for this assignment. These should each be unique compositions, not variations of the same scene.
- For each set name its three photos Red.psd, Green.psd, and Blue.psd, respectively.
- Complete the following instructions for each set. See below for an example 'set' of photos.



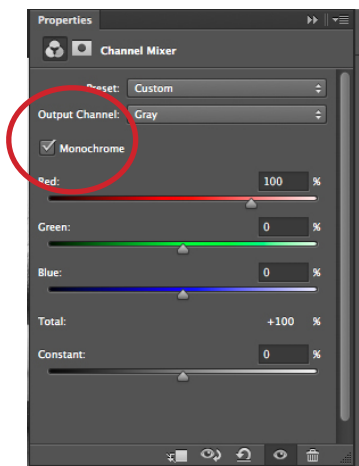
Red.psd



Green.psd



Blue.psd



*TIP: when choosing which file will be which color channel, note that the Blue screen will be best visible over a white background and may not show up well on a dark background, so choose accordingly.*

2. Using Adobe Photoshop, create a new document using only the color information from one channel – *Red, Green or Blue* – for each exposure.

**(R) Open your first photo, Red.psd**

- Go to Layer > New Adjustment Layer > Channel Mixer.
- In the Properties palette, **check the Monochrome** box near the top.
- Adjust the sliders so that Red=100%, Green=0%, and Blue=0%.

- Note the detail revealed in only the red channel of your composition.
  - Select OK, save your file and minimize its window, leaving it open.
- Repeat the same procedure with the other files, extracting a difference source channel from each.

**(G) Open your second photo, Green.psd.**

- Go to Layer > New Adjustment Layer > Channel Mixer.
- In the Properties palette, check the Monochrome box.
- Adjust the sliders so that Red=0%, Green=100%, and Blue=0%.
- Note the detail revealed in only the green channel of your composition.
- Select OK, save your file and minimize its window, leaving it open.

**(B) Open your third photo, Blue.psd**

- Go to Layer > New Adjustment Layer > Channel Mixer.
- In the Properties palette, check the Monochrome box.
- Adjust the sliders so that Red=0%, Green=0%, and Blue=100%.
- Note the detail revealed in only the blue channel of your composition.
- Select OK, save your file and minimize its window, leaving it open.

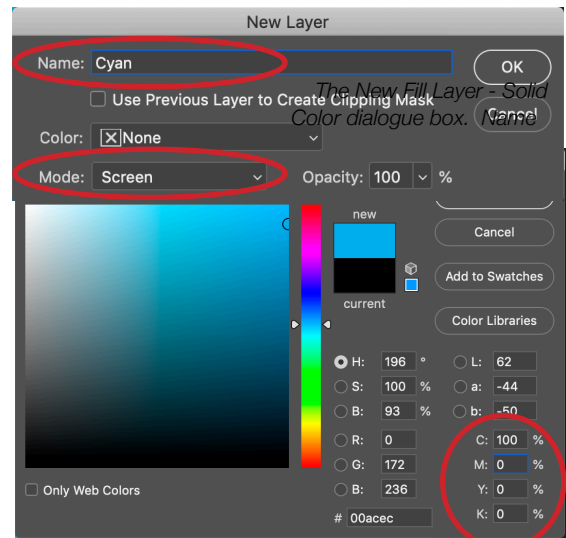
3. Create 'Color Screens' of each channel's complement (CMY).

**(C) Select Red.psd and create a Cyan screen.**

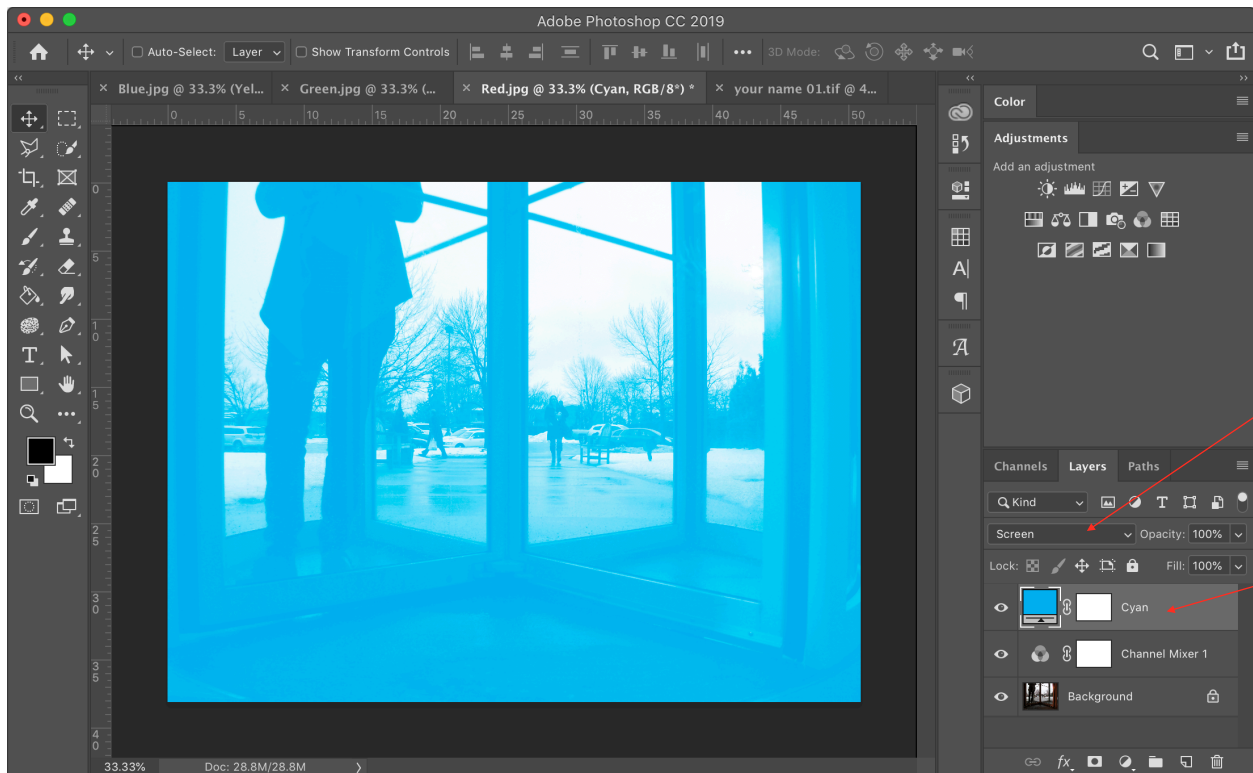
*Cyan is the opposite of Red.*

- Create a New Fill Layer. In the menu, select **Layer > New Fill Layer > Solid Color**. Name this layer **Cyan** and set the Mode to **Screen**.
- The Color Picker will pop up, allowing you to select the color of the fill layer. Set the CMYK color values to **C=100 M=0 Y=0 K=0**.
- You have now produced the equivalent of the cyan dye layer in a conventional color photo print or the cyan ink image on a printing press.

Save the file and leave it open.



*The Color Picker palette. Set the CMYK values (circled) to **C=100 M=0 Y=0 K=0***



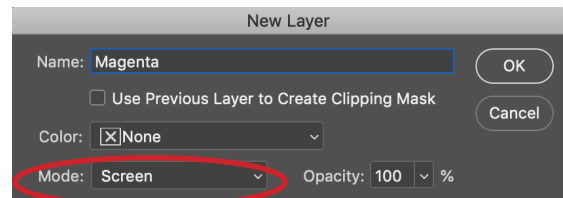
Layer Blending Mode is set to Screen when the fill layer is selected.

New Cyan fill layer

**(M) Select Green.psd and create a Magenta screen.**

*Magenta is the opposite of Green.*

- Create a New Fill Layer. In the menu, select **Layer > New Fill Layer > Solid Color**. Name this layer *Magenta* and set the Mode to *Screen*.
- The Color Picker will pop up, allowing you to select the color of the fill layer. Set the CMYK color values to **C=0 M=100 Y=0 K=0**.
- You have now produced the equivalent of the magenta dye layer in a conventional color photo print or the magenta ink image on a printing press. Save the file and leave it open.



**(Y) Select Blue.psd and create a Yellow screen.**

*Yellow is the opposite of Blue.*

- Create a New Fill Layer. In the menu, select **Layer > New Fill Layer > Solid Color**. Name this layer *Yellow* and set the Mode to *Screen*.
- The Color Picker will pop up, allowing you to select the color of the fill layer. Set the CMYK color values to **C=0 M=0 Y=100 K=0**.
- You have now produced the equivalent of the yellow dye layer in a conventional color photo print or the yellow ink image on a printing press. Save the file and leave it open.

**4. Composite the three screens to form a new color image.**

First, determine what size your document is so that you may create a new document to composite your new screens.

- Select any of the three documents (R, G or B) and go to the menu **Image>Image Size** to see your current dimensions and resolution.
- Write the pixel dimensions here: Width: \_\_\_\_\_ pixels Height: \_\_\_\_\_ pixels.  
Select OK.

- Go to File>New and insert the pixel dimensions you just wrote down. Set the resolution to 300.  
*Note: dimensions for this file are not provided because they will vary student to student based on your camera and the settings used.*
- Choose File>Save As... and name it *your name 01.psd* (ex. *carrie\_williams 01.psd*).  
Leave the file open.

### Select the Red.psd file and copy your cyan screen to the your name 01.psd file

- Go to the menu Select>All. *(The shortcut is Control+A (PC) or Command+A (Mac))*
- Select Edit>Copy Merged. *(The shortcut is Shift+Control+C (PC) or Shift+Command+C (Mac))*  
This copies everything that is visible in the document, provided you have a selected visible layer.
- Now, select the new document *your\_name01.psd*.
- Select Edit>Paste. *(The shortcut is Control+V (PC) or Command+V (Mac))*
- Rename the pasted layer to be 'Cyan.'

### Select the Green.psd file and copy your magenta screen to your\_name01.psd file

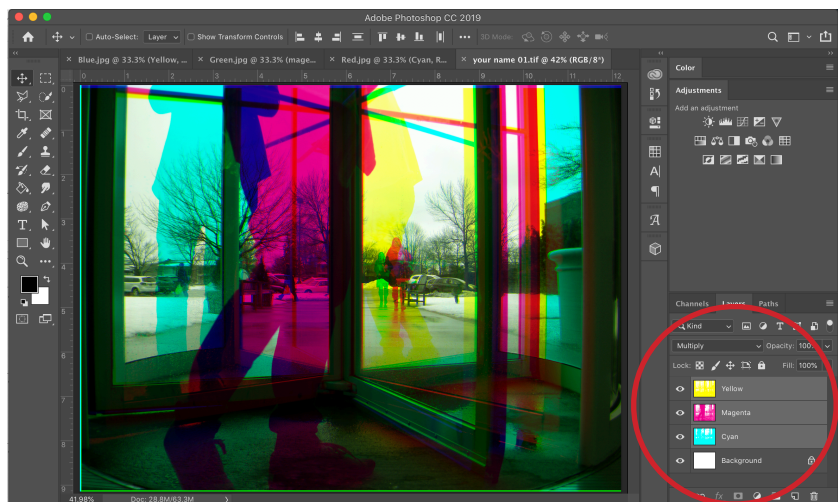
- Select>All.
- Select Edit>Copy Merged.
- Select the your\_name01.psd file
- Select Edit>Paste
- Rename the pasted layer to be 'Magenta.'

### Select the Blue.psd file and copy your yellow screen to your\_name01.psd file

- Select>All
- Select Edit>Copy Merged
- Select the your\_name01.psd file
- Select Edit>Paste
- Rename the pasted layer to be 'Yellow.'

### Select the your\_name01.psd file and adjust the layer blending modes

- Select all the layers in the file (Cyan, Yellow and Magenta) and set their blending modes to Multiply.



5. Your image should now be in color!

- Try turning the layer visibility on and off to view how the screens form color. Note that any parts of the image that are not perfectly lined up will show color only from its respective screen. If you have movement or changes within your photo, this will reveal an interesting effect!

#### 6. Improving registration

- Turn of the top layer and select the Move tool.
- Select the middle layer and zoom in to 100 percent. Go to View>100%. The shortcut is Command+1 (Mac) or Control+1 (PC).
- Select the Move Tool. It's the first tool at the top that looks like an arrow. Use the arrow keys to nudge the until they appear to line up.
- Repeat this process for the top layer.
- You can crop the image to remove any unaligned edges if desired.
- Repeat this entire process for your second final composition, naming the second composition your\_name02.psd.

7. Supply the instructor with 2 final composite images. Both final images should be completely different, not variations of each other. See below for an example.

- Print a hard copy of your compositions using the lab printer or your home printer.
- Supply the instructor with one print of each composition in a protective sheet.
- Turn in your digital composite files to the Assignments>Carrie>Advanced Digital>Deconstructing Color

#### Student 1

*Final 2 files submitted*



#### Student 2

*Final 2 files submitted*

