

CPS Beginners Class 2/11/2016

Converting Colour images to Monochrome or Black and White.

Note: Not all images lend themselves to really good conversion to B&W. The original images should ideally have a large tonal range or as some photographers refer to as the tonal values. This means that starting at the shadow or dark areas there should be a range of dark through mid to highlights present in the image. Furthermore, some colours jar with each other in a colour image. So these may lend themselves to be better represented in mono.

For this workflow I will be using Photoshop as it has become the standard for most photographers and will eventually be your choice of photo editing software. Other software packages are also available and for the most part do much the same as PS.

Procedure:

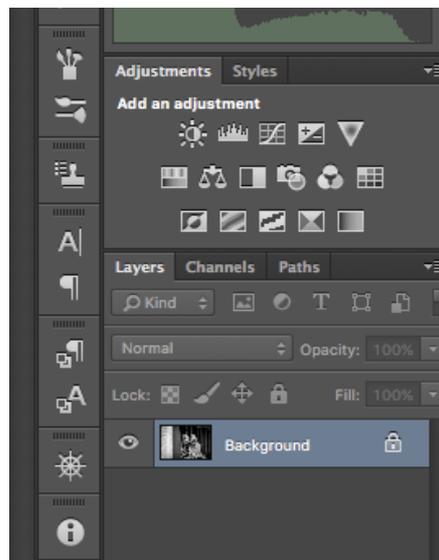
Method 1.

Choose a suitable image giving the range of tonality that you think you require for a pleasing result.

Most people might go straight to the top menu and choose IMAGE > MODE > GRAYSCALE which will change the colour profile and you will lose a lot of pixel information. Don't do this.

One of the more successful methods is to use the adjustment layers, which can be found in in the Adjustment layers palette on the RHS. (See Fig 1)

Figure 1



Drag you mouse over the icons to select the B&W over. Clicking on the icon representing Black and White (the box half in black and half in white) will call out a properties panel allowing you control over the range of colours, together with more options.

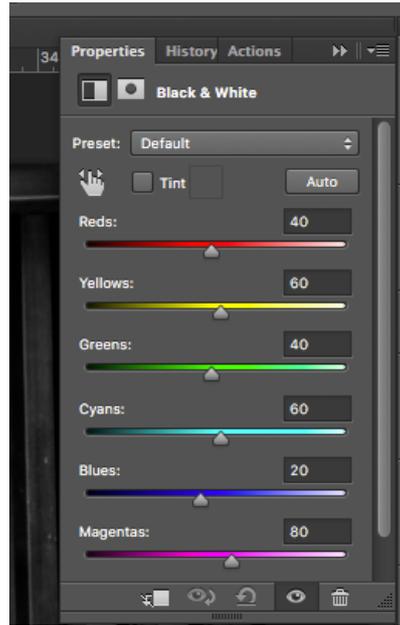


Figure 2

Here you will see a group of sliders representing the intensity of the various colour channels and by moving these you will be given varying values of these channels as represented in a mono image. Remember that the colour profile of the original image is maintained in this method.

Next move the sliders gradually to increase or decrease the intensity of the various channels in your image. When you are satisfied with the result close the property palette and notice that it is now save as a new layer in your layers palette on RHS of screen.

Method 2

Using Channel Mixer

Using the Channel Mixer tool to convert images to black and white is one of the oldest tricks in the Photoshop book. The principal reason it has remained such a well loved technique is that it allows you to easily emulate the way black and white film and the accompanying lens filters reduce or emphasize various colour wave lengths. To use the Channel Mixer navigate to Layer -> New Adjustment Layer -> Channel Mixer. This will create a new non-destructive adjustment layer over your current image as well as open up the Channel Mixer—as seen in the screenshot.

You can use the Channel Mixer manually or you can use the presets. When Adobe noticed how much people were using the Channel Mixer to recreate the look of black and white photos, they started including presets that automatically tweak the channels to emulate black and white film with an infrared filter and various color filters (like red, green, and yellow). You'll find all those under the Preset drop down menu.

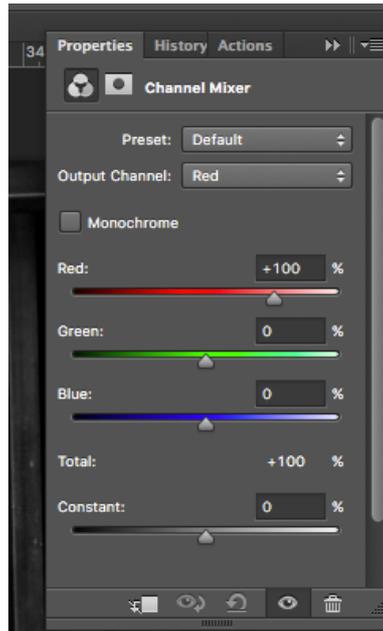


Figure 3

In order to have more consistent results with your digital workflow, it's important to understand the basics of how camera filters work. When you place a red filter, for example, on a camera the resulting image will *lighten* the colour associated with the filter (and adjacent colours on the colour spectrum) and *darken* colours opposite to it on the colour spectrum. So a red filter will make red (and to a lesser degree orange, yellow, and magenta) appear lighter while making greens and blues darker. Armed with that knowledge, we can easily predict what will happen when we use the Black and White with Red Filter preset.

Method 3

Gradient Map.

When you have time to tinker, it's a lot of fun to use the previous two techniques. But let's say you're stuck for time and you want to convert some photos quickly to black and white, but at a higher quality than simply desaturating them would provide.

In such a case, it's a perfect time to speed up your workflow with a few little shortcuts. The first shortcut is to use the Gradient Map to respectfully dump the colour values of your photo while preserving the contrast and richness of your image. To do so, navigate to Layer -> New Adjustment Layer -> Gradient Map. Once you create the layer, you'll have a black and white image similar to the one. As far as colour to black and white conversions go, it's not bad (and it's certainly better than just dumping the colour values completely by converting your base image to grayscale). It does, however, lack a certain punchiness. We can remedy that by quickly adding in another layer.

Right click on the Gradient Map layer we just made and select Duplicate. Your image will become a little more intense as the effect of the Gradient Map is enhanced. It's fairly subtle, but you might be happy with that tiny bit of extra punch. We're going to take things step further.

At the top of the layers window, where it says “Normal” in a drop down menu (next to Opacity), pull the menu down and select “Overlay”. You’ll end up with a very intense black and white image like this:



Figure 4