

Photoshop Session 3

This time we will continue to explore corrections to parts of an image. We will use layer masks and some of the selection tools.

Blurring a Background

This is a technique that I showed at the last meeting. If you have an image that would benefit by blurring the background this works well but some care is required. First select an image. Make a duplicate layer and with that layer selected, bring down the Filter menu and select Gaussian Blur. The usual OK for the layer name is fine. A window will open with a slider that will let you adjust the amount of blur. Adjust ONLY for the background. Ignore what it does to the main subject because we are going to fix that in the next step. After getting the blur to your taste, click OK. Now at the bottom of the Layers Window click on the mask, what looks like a square with a circle inside. A layer mask will appear on your blur layer. Now select BLACK for a foreground color and select a soft edged brush, sized to what will work to “paint over” the subject. Set the opacity of the brush to 100% and be sure to select the layer mask for the duplicate layer (click on it). Now carefully paint over the subject, being careful not to paint the background that you want to remain blurred. You are making the blurred layer transparent where you paint with black and leaving it opaque where you do not paint. The background (sharp) layer shows through so the subject is sharp. If you slip and make some area of the background too sharp you can switch the foreground color to black and go over the area of the background that you accidentally uncovered, hiding it again. You may have to use a sharper edged and small brush in some areas of the work.

Stitching Images Together

Using a tripod it is not hard to take a panoramic photo. Rotate the camera via the tripod head without changing the tilt. Be sure to overlap the images by 25 to 30%. Now open both images in Photoshop. Increase the canvas size of one of them to accommodate the second image. There is a little trick to this that I will show you. A little diagram lets you select the “Anchor point” for the canvas increase. If you are adding image to the RIGHT, select the center anchor point on the left by clicking on it. Then double the WIDTH of the canvas and you will find the first image remains to the left and there is room for the second image. Select the window with the second image and create a duplicate layer. You can’t move the original Background layer. Select the move tool (looks like a diagonal arrow with a + sign next to it) and drag the second image over to the space provided on the first. It won’t look like it is going to the right place, but drag it over and release the mouse button. Change the opacity of the second image to 50% so you can see through it a bit. Now with the move tool drag the second image into register with the first. When you are happy with the image, increase the opacity to 100% again. You still have two images on two layers. You must flatten the image to get them together onto one image, which then can be cropped to take care of edges that are out of alignment a bit. Then the image can be manipulated with filters or saved as is. Of course you can do this with any number of images that overlap.

We will use an image that I restored recently. It is a scan of an 11 by 14 print which won’t fit my scanner so it had to be scanned in two parts. We’ll put the parts together.

Black and White conversion

There are several ways to convert a color image to black and white. The simplest and least effective is to open a Hue/Saturation adjustment layer and slide the saturation down to zero, all the way to the left. This usually results in a pretty flat looking black and white image. A much more controlled way is to use the Channel Mixer. Get an image into photoshop and make a duplicate layer since the channel mixer will alter the layer on which it works. Now pull down the Image menu and select Adjustments and then Channel Mixer. Check the box that says Monochrome and the image will be in black and white.

Now notice three sliders, one each for each of the three color images that make up the image. Generally the RED image has the best contrast so the mixer comes up with red set at 100% and green and blue set at 0. You can experiment with the sliders. Try to have the sum of the three numbers come out 100. That is, back the RED off to 80 and run the Green up to 20 etc. If the black and white image is dark overall, you can set the sum greater than 100. There is also an “overall” slider that you can use to adjust the brightness of the image. In general it is better to adjust by moving the three color image sliders. You can set Red and Green each to 100 and Blue to -100, which makes blue things darker etc. If you mix the red and green images it is a bit like using a yellow filter when taking the black and white photo. It will darken the blue sky and lighten yellow things. When you have an image you like just click OK and you can then save a black and white image. Using the channel mixer gives you much more control over the image than just running the saturation to zero.

Incidentally, if you go to the Layers window and select the “Channels” tab you will see the three color images (in black and white) that make up the composite color image. If you turn off two of the channels by clicking on the EYE icon, you can see each channel individually. This might help you decide how to mix the images with the channel mixer.

Combining Two Images

We will start with the image of the chapel with a pure white sky (almost) and show how to make a selection using the color. Since what we are going to do will change the image layer, create a duplicate layer. Pull down the Select Menu. Now from that menu select Color Range. A window will open. Select the leftmost eyedropper and click somewhere in the white sky. You will see an image of the selection in white. Not all of the sky will be selected. Select the eyedropper with the + sign. Now click on the left side of the sky area where a little blue shows. Repeat until all of the sky is selected. Note that the sky showing through the tree is also selected. Now select the “Invert” box in the selection and click OK. This will select everything BUT the sky.

Now get the browser window back and double click on the file “skysource.jpg”. move it toward the bottom of the screen when it appears. Select the chapel image again and pull down the image menu. Select Adjustments and then Levels. We are not using a layer here because that causes a problem with the selection. We needed to make the selection before brightening the image to keep the selection from including some bright parts of the chapel. Brighten the image to taste. Move the rightmost triangle to the left a bit and the center triangle also to the left to brighten the hills and grass.

Now select the move tool, the diagonal arrow with the + sign. Drag the selected part of the chapel image onto the skysource image and let go of the mouse button. Now select the skysource image and use the move tool to move the image to the desired location. The selected portion of the image will cover the foreground of skysource leaving just the nice sky showing behind the chapel and hills. Now flatten the image and you can save it. Note that there is a bit of a halo around the chapel image at the sky line. Experiment with feathering the selection a bit before moving it. Select menu, Feather. Set the feathering to 2 to 5 pixels and try another time.

You can use this technique to move an object from one image to another. There are several ways to select parts of an image, all hard for someone like me with no artistic talent! These include a freehand drawing method and a “magnetic” method in which the selection line tends to “stick” to a portion of the image that has some contrast with the adjacent area. You will have to experiment with these in order to find out more about them, or read one of the many books on Photoshop that cover various ways to select part of an image. I tend to limit my selections to simple things, or use a layer mask and paint with a soft brush. Another way to accomplish what we just did would be to drag the entire chapel image over the entire skysource image and use a layer mask on the chapel layer, painting with black to hide the white sky and reveal the nice sky underneath. This might eliminate the halo, but it is very difficult in the area of sky showing through the trees. If not done very carefully it will leave a halo if you don’t paint close enough to the area below the sky line, or will obliterate part of the hill and reveal sky. Either looks bad. Image changes like this require time and care to pull them off successfully!

Something we did not have to worry about here is relative size of the images. If you move an object from one image to another you first select it then you might have to scale the image. You can scale an image by using the Image menu, Transform, and then select Scale. Again if you do this you will want to work on a duplicate layer and not destroy the original image. Now you can drag a handle to make the image larger or smaller. It is easiest when you do this to start with two images that are the same size. Then scaling done on the source image will carry directly to the image into which you want to add the item.