

Combining Pictures

The other day my wife received a picture as an email attachment from her cousin. It was a photo of her cousin's niece, at a college graduation party. It reminded her of her cousin when she graduated from high school. So she asked me to do my Photoshop thing so we could compare the "girls" side by side. I found that the exercise was a little more complex than I thought, in that I had to deal with the image size and resolution between two totally dissimilar pictures. That is the reason for this memo. It is often not quite as simple as you think.

The Initial Pictures

My wife had a wallet size photo of her cousin, Lilli. It was approximately 2 inches by 3 inches. So I scanned it in with my flatbed scanner set to 600 dots per inch.



It was a good black and white photo. The other picture of the niece, Alana, was in color

and was the jpg file that was attached to the email.



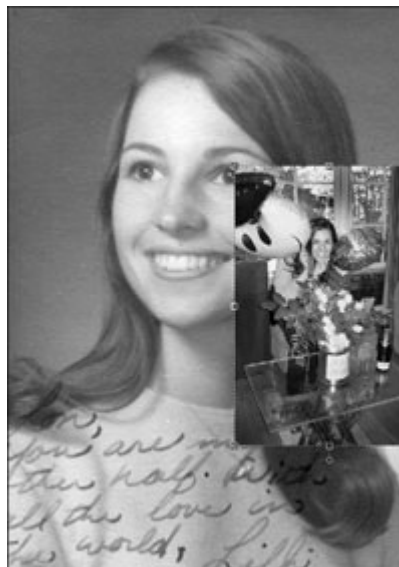
So my wife said, "Just put Lilli's and Alana's photos side-by-side and make them the same size." Now that doesn't sound too hard, does it? The fun began.

Image Size and Resolution

Lilli's file photo was 2.1 in x 2.95 in at 600 pixels per inch (ppi). Alana's file photo was 8.3 in x 12.3 in at 72 ppi. If I pulled them up side-by-side on my monitor in Photoshop Elements I could easily adjust the sizes so they looked like this picture below. This is a screen shot of my monitor.



My wife said, "Now make their heads the same size and put them together." That was where the challenge came in. I got a real shock when I tried to combine the pictures. I selected the Move Tool, and clicked and drug the color photo into the "smaller" wallet size photo. This is a screen shot of the result.



When Photoshop Elements combined the images, it converted the color image into black and white AND it changed the resolution of the color image to 600 ppi (the same as the black and white). At that resolution, the "larger" color photo is actually much smaller than the original wallet sized black

and white. So the lesson learned is that the photos need to be the same resolution to match them up in a meaningful way.

Combining the Photos

The photos are combined using the following steps:

- set the crop tool to 2.1 x 3 inches (the size of the black and white image)
- crop the color image to the young woman's head
- determine the resolution of the cropped image
- resize the black and white to the resolution of the cropped image
- make a new image canvas of approximately 5 x 4 inches (color, RGB, white canvas)
- drag the resized b&w and the cropped color image onto the new canvas

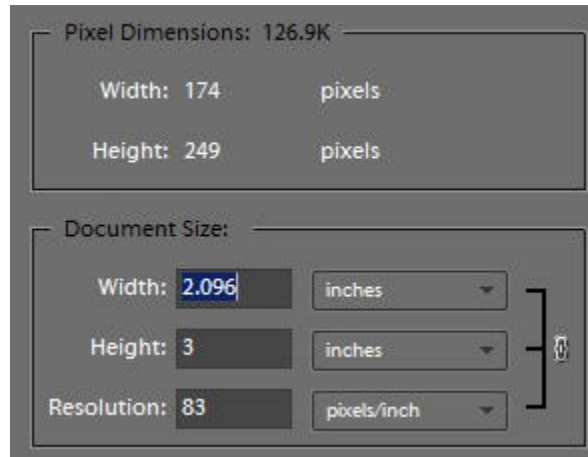
I will show the screen shots of the tools I used to make this happen. I set the crop tool to 2.1 in wide by 3 in high, with the Resolution entry left blank.



I cropped the image of the young woman so it was more of just her facial features.

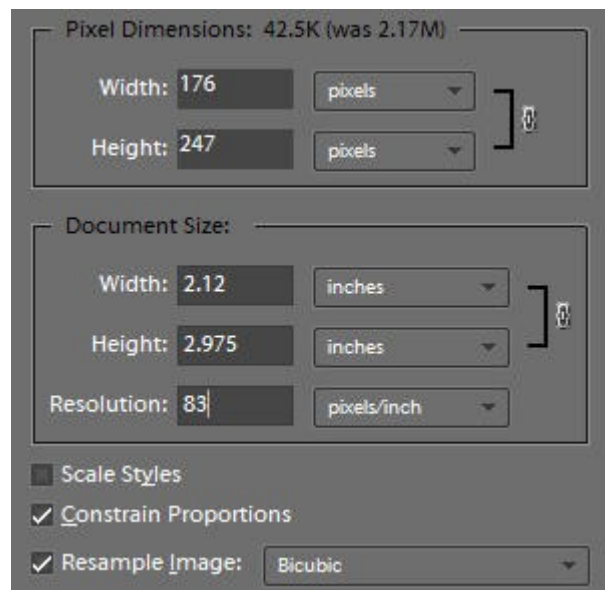


The image resolution of the resulting cropped image, of 83 ppi, was found by opening Image > Resize > Image Size for this cropped picture.



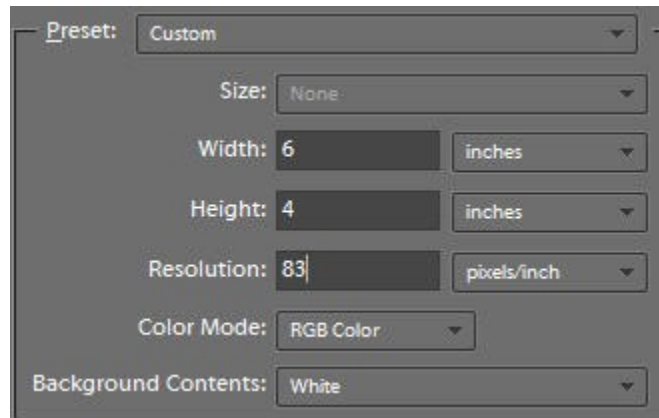
I did not do any further adjustments to the color image, except to note the resolution.

Then I took the black and white photo, and selected Image > Resize > Image Size from the menu. I needed to have Photoshop Elements resample the image while maintaining the image size. So I put a check mark beside Resample Image (the Bicubic resampling algorithm works well for most images), and entered 83 into the Resolution box. Then I clicked Ok.



If you do this on your own computer, DO NOT BE SHOCKED. The image on the screen will immediately shrink to a very small size as a part of the resampling process. No problem. Grab your Zoom Tool and click on the image to bring it back to the larger appearing image. The image is still 2.1 by 3 inches if printed.

To combine the images so they are side-by-side, select File > New and make the dimensions 5 inches wide by 4 inches high. Make the canvas white, RGB color, and choose 83 ppi for the resolution. You will have a white canvas on your screen.



Now, select the Move Tool and click and drag the lower resolution black and white onto the canvas. Do the same dragging with the head shot of the color image. The images will come into the new image file on separate layers. You can use the Move Tool to move the images around until they are side by side. This image is the final result of what I achieved.



I printed the joint image out on a sheet of paper and showed it to my wife. She said "That's what I mean. See how much alike they are? I knew you could do it." They look like two young, attractive women to me. I will leave the comparisons up to my wife.

jdurrett@gmail.com