A Simple Recipe

for

Photo Editing

by Seth Madell

Doña Ana Photography Club

March 2019

A Simple Recipe for Photo Editing

Photo editing doesn't need to be complicated. After all, the goal of editing is largely to enhance the photo we've taken - bring out its strengths. We want our photos to portray the scene we remember (even if we choose to enhance that scene beyond the reality of what was there).

Forget about whether you shoot Raw or JPG. For our purposes, let's assume you're shooting JPG and just want to keep things simple. All those folks who swear they never shoot anything but Raw - let them. They're already committed to long and complicated editing sessions for every photo. Let's keep to the basics.

The Six C's of Editing

Okay, I made this up. And some of the C's are a stretch (Candles? really?) But it's a good way to remember what needs to be done. You can do all of these steps, in order or otherwise, and most of them are entirely optional. Do as many as you want, and just stop when you like what you see on the screen. Here goes:

Copy

If you're starting with a JPG file, chances are you might do something that will alter the file ("destructive editing"). So, make a backup copy of the original before you even start. Just copy the JPG file into a "Backup Originals" folder and leave them alone. You can always go back to the original if you completely mess up the file you're editing.

Crop

This step involves (i) straightening out the photo; and (ii) getting rid of unnecessary stuff at the edges. There's really nothing more distracting than a photo that's tilted just a little bit. Don't you just want to push that horizon up so that it's level? Also, cropping involves getting rid of parts of the photo that don't make it better. Don't be afraid to eliminate the stuff that's just not important.

Color

Correcting white balance is critical. Usually it's fairly easy. But colors that are "off" are instantly noticeable - and not in a good way.

Candles

Correcting exposure lets you keep the details in the shadows and not have large patches of pure white, blown-out sky.

Contrast

Increasing the contrast is a great way to make photos noticeable and memorable. Do this sparingly, since glaring, super-saturated, unrealistic colors just look fake.

Clarity

Sharpening is the last thing to do. Sharpening gives the impression of focus and detail (although you can never really get a blurred photo back to sharp focus). Also remember to be sparing with sharpening, since it's a really easy way to make photos look unrealistic and fake.

Above: Police officers in Times Square, New York City
*Right: Two young boys playing in the Las Cruces Plaza fountain*

Let's take this one step at a time. First, here are two photos that we'll edit. We've copied them from our camera into a folder on our computer called "Originals."

1) Copy

First of all, never ever edit your photos while they're still on the card from your camera. Copy the files from your camera card into a folder on your computer hard drive.

Also, it's bad practice to use your computer to erase your camera SD card. Put the SD card back into your camera and format the card, using whatever method your camera requires. Usually, it can be done through the camera's menus, or by pushing 2 or more buttons on the camera at the same time.

Back to your hard drive. Having copied your photos into a folder on your hard drive, you should now make a second folder (call it "Backup Copies" or something similar) and simply make duplicates of all your original photos by copying them (not just moving them) into the second folder. Now you've got a backup in case you screw up the photo(s) while you're editing.
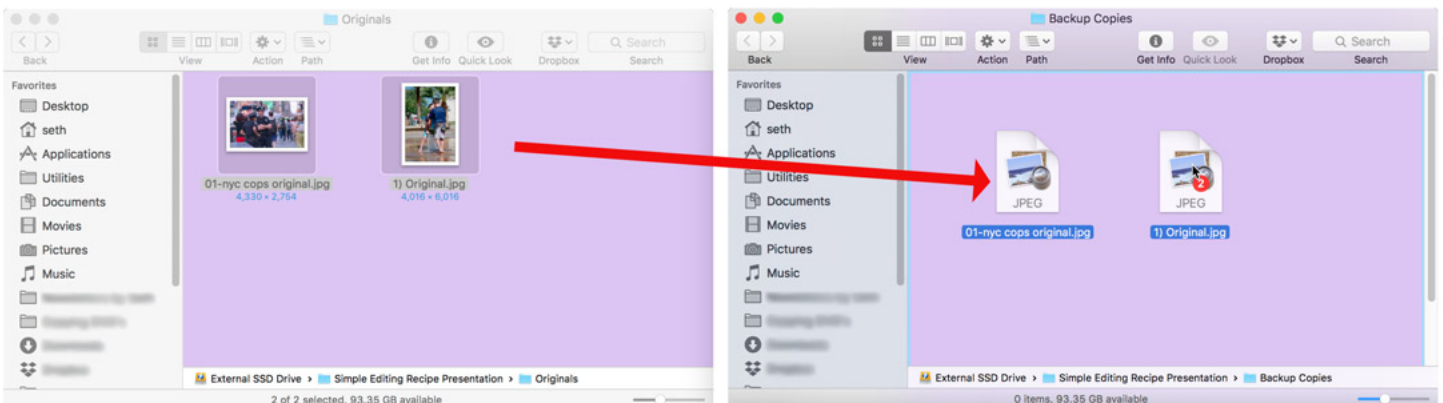

Step One - Make backup copies in a second folder

With that one simple step, you have backup copies that you should now hold on to. You can go back to an original if you edit your original photo, overwrite that photo, and don't like the end result. You can also perform a second edit next year (or 5 years from now) when your skills are better and you know you can come up with a nicer looking photo.

2) Crop

Cropping actually includes two things – cropping and rotating. Rotating is done so that the photo is not tilted. For instance, when you took that beautiful photo of the sunset you were holding your camera slightly unevenly. Now, your horizon is tilted. Since the whole point of a sunset is its interaction with the horizon, your tilted picture just looks wrong. Straighten it! The same thing can happen when you take a photo of a building, a statue, or some other subject that should be vertical but isn't. Not every building can be the Leaning Tower of Pisa – most of them stand straight and vertical. Having them tilted is immediately disconcerting.

So, first things first – rotate your photos to get the tilt off them.
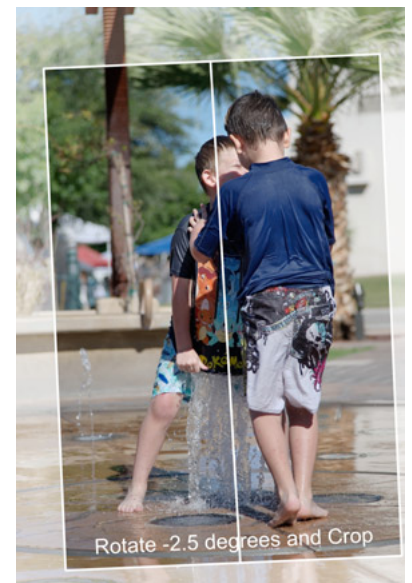
The next thing to do is to crop the photo so that the subject remains prominent and so that any other extraneous stuff is removed. This is also the time to decide on the "aspect ratio" of the photo you will end up with. Will it be 3:2 (which is probably the way the camera took it)? Will you crop it to a square? Will you create a 16:9 photo (this is the same aspect ratio as a wide screen television, and tends to be a nice crop for landscapes)?

Cropping also lets you apply some of the "rules" of composition, such as the "rule of thirds," the golden spiral, and so forth. This is also the time to look at the symmetry of your photo, which your crop can accentuate, and the leading lines that your photo may contain. You may also want to break the rules, cropping a photo to put the subject smack dab in the center.

*Here are our 2 photos, with straightening and cropping carried out.*

3) Color

Step 3 (Color) and Step 4 (Candles) can be done in either order, since adjusting the exposure, shadows, and highlights can often affect the color and saturation at the same time. Also, some adjustments will affect not only color and exposure, but will affect contrast as well.

Correcting the color in our photos means making the photo look natural, without any undesired color cast. The color of everything in the photos we take is based on the color of the light. That may be "daylight" for an outside picture, "flash" for a picture taken with a speedlight, or "fluorescent" for a photo taken under office lighting. Each of these types of lighting has a different color, and an object lit by those types of lighting will look different because of those lighting colors.

In most cases, correcting the color in our photos means correcting the "White Balance" – telling our software what color the light was that was illuminating all of the objects in the photo. Maybe your camera was set for "Daylight" but you took a picture indoors. Maybe, with that same Daylight setting, you took a photo at "Golden Hour," when the sunlight is much more orange.

Most photo editing software will allow you to adjust the "white balance" of the photo by correcting the color of the light that was shining on it. This allows us to add more blue, or more yellow, to the photo. In many software packages, we can also adjust the "tint" by adding more magenta or more green.

Also, many software packages have a way to choose an area of the photo that represents something neutral. This may be shaped like an eyedropper, an arrow, or simply a crosshair. The idea is to click on something that we know is neutral (white, black, or ideally grey). Even though this object may not appear grey in the photo, knowing it actually IS grey lets the software correct the lighting to make the object appear grey. In the process, everything else in the photo is also corrected to allow the correct colors to be displayed.
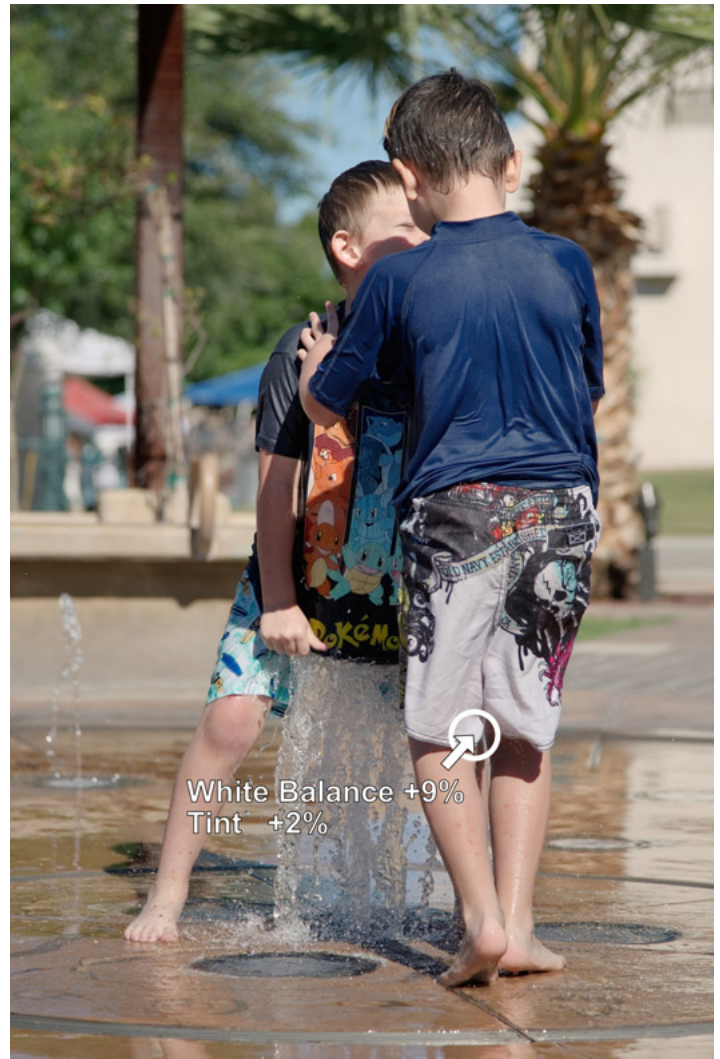
Color Correction of the boys at the fountain.
Note the subtle difference in coloration by clicking on the bottom portion of the foreground boy's shorts.

White Balance +9%
Tint +2%

Color Correction of the Times Square police officers.
An area of the male officer's grey duty belt was clicked to set an area of neutral coloration.

Set White Balance (+10)
Tint (+10)

4) Candles

OK, "candles" is a stretch, but I needed something that started with C. Really, this step is the correction of exposure. It's where you make sure that your lightest areas are not blown out (pure white, without any detail) and your darkest areas are not completely crushed (pure black, again without any detail) unless you want them to be. It's also where you can adjust the transition of black to white, by setting the middle greys of the picture.

Neither of our sample photos has any severe exposure problems, so let's look at some others. And, let's look at a few different ways to deal with over- and under-exposure.

The easiest adjustment to make is simply to adjust the exposure. Your software may include a slider to adjust Exposure (most software will include this). Consider this picture of a church in Bermuda. The original is under-exposed. Using the "Exposure" slider to increase the exposure restores the correct lighting to the photo.
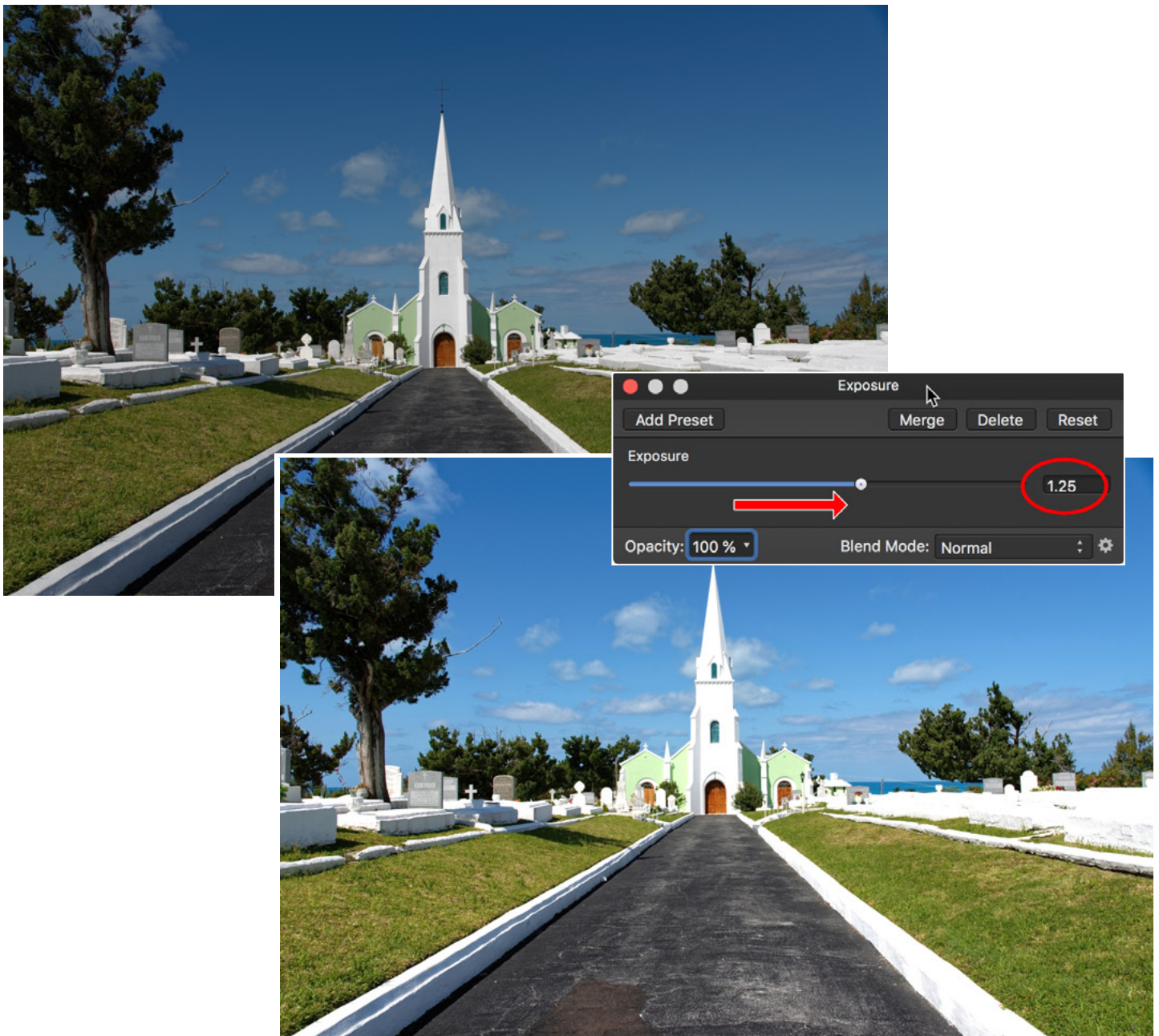
Another adjustment to the lighting is to try to bring out detail in the very dark and the very light portions of the photo. (This is an area where shooting in Raw will really help, since shadows and highlights are much, much more easily tinkered with in a Raw file. But... we're working on JPG's here, so let's try.)

Your software probably has sliders for "Shadows and Highlights." Each software package shows them differently, but the gist is the same. Increasing the "strength" of the shadows brings out more detail in the dark areas by making them a bit lighter. Increasing the strength of the highlights also brings out more detail in the light areas. A truly crushed black or blown out white, with no detail captured by the camera, cannot be saved; but the Shadows and Highlights feature of your software can make the lighting of your photo so much better.
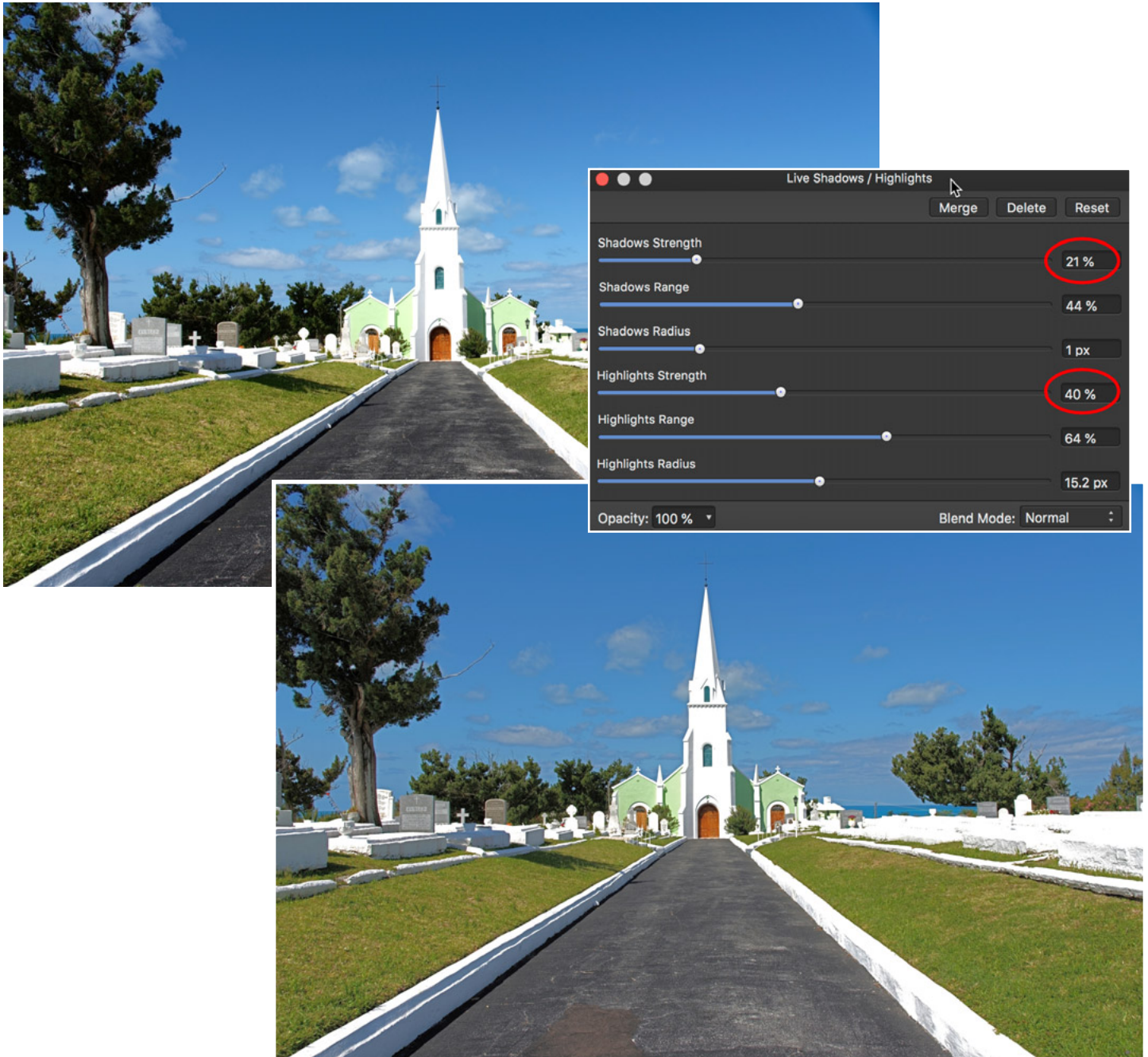

The top, left photo is the Bermuda church after correcting the Exposure.
The bottom, right photo shows the effect of (i) lightening the Shadows, and (ii) darkening the Highlights.
It is subtle, but look at the detail recovered in the path and in the trees.

5) Contrast

Increasing the contrast in your photo makes it "pop." Plain and simple, increased contrast makes photos much more enjoyable to look at. Remember, however, that it's easy to go overboard. Sometimes, what looks good in the first go-around should really be scaled back for a better image. Often, a good rule of thumb is to increase contrast to the point where it looks really great, then back the slider(s) off at least 25-50%.

Contrast can be increased in a variety of ways, The easiest is with the "Contrast" slider (naturally). This is a somewhat less-than-subtle method for increasing contrast, but is often all that you really need. Often, this slider is grouped with a "Brightness" slider. Let's go back to our boys at the fountain. Shown below is the cropped version of the photo, and also another version with the brightness and contrast increased just a bit.
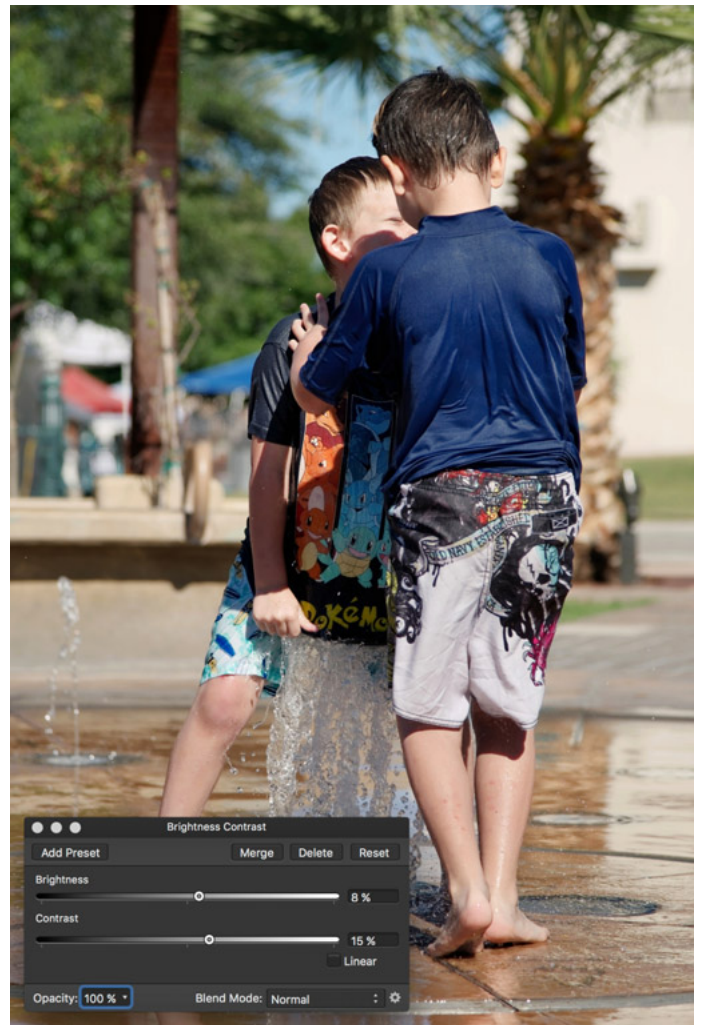
Using the "Brightness and Contrast" adjustment, the photo on the right is (again) subtly better than the one on the left, and there is more "pop" to it because of the increase in brightness and contrast.

Another way to increase contrast is by using the "Levels" adjustment. This adjustment is usually accompanied by a Histogram for the photo, showing the distribution of Dark and Light pixels. Sometimes, you may notice that the histogram is positioned to one side, leaving the very dark or the very light tones un-populated by your photo's pixels. You can adjust the photo by making the lightest pixels brighter (bring the white point slider to the left, closer to the right edge of the histogram). You can adjust the photo by making the darkest pixels darker (bring the black point slider to the right, closer to the left edge of the histogram). You can also adjust the transition from dark to light by moving the grey point, or Gamma, slider to the right (making the midtones darker) or to the left (making the midtones lighter).

Here is a photo of Bryce Canyon in which we've used a Levels adjustment to make the darkest areas even darker, the brightest areas even brighter, and the midtones (Gamma) a bit darker as well.
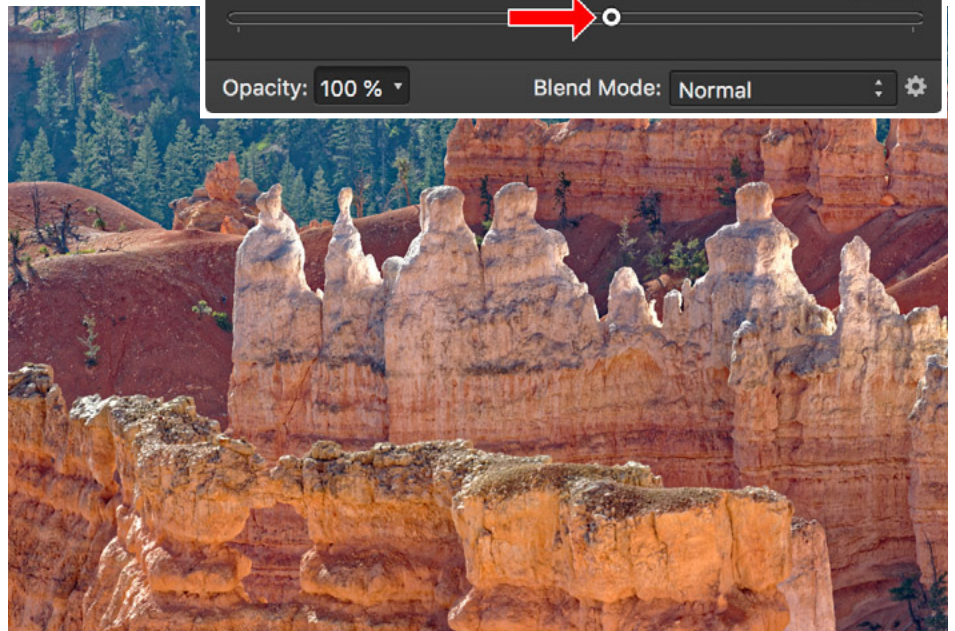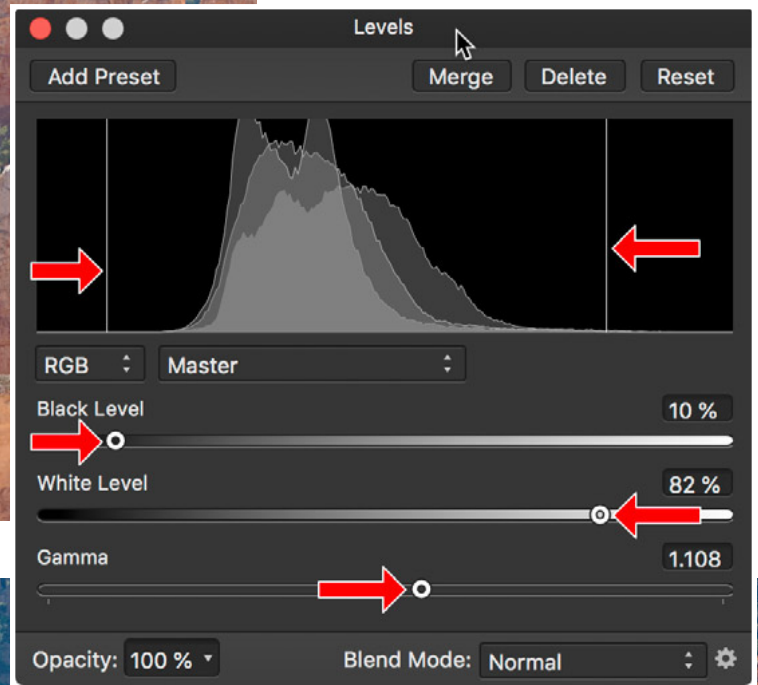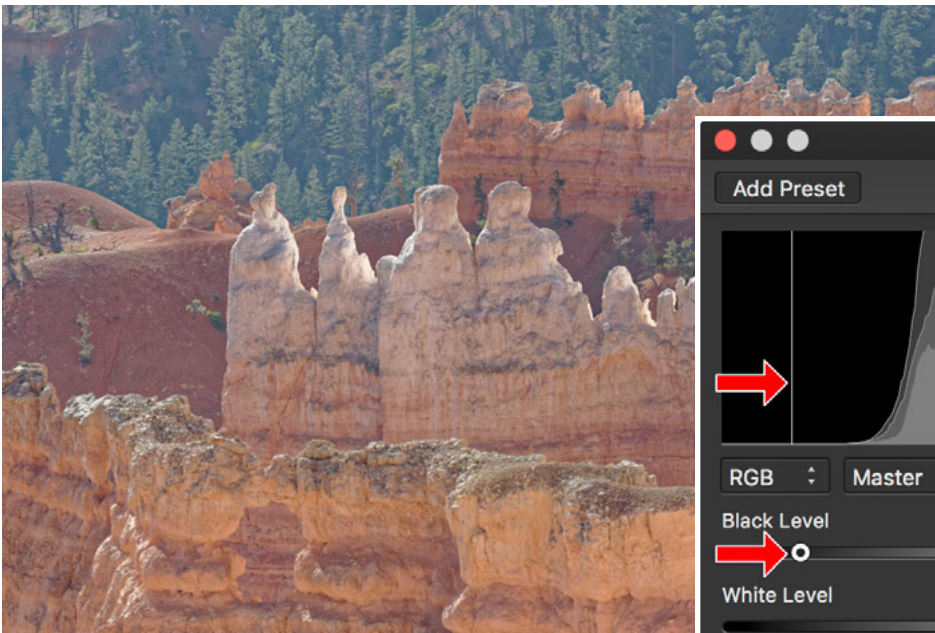
The most powerful (and also the most complicated) way to increase contrast is by using the "Curves" adjustment. Curves is similar to Levels, but allows for finer control. Curves is almost always shown along with a histogram, but the histogram has a diagonal line superimposed.

The left side of the graph represents the darkest pixels in the photo, and the right side of the graph represents the lightest pixels. The "x axis" is the tone (light or dark) of the photo before the adjustment is applied. The "y axis" is the tone of the photo after the adjustment is applied. The x axis is sometimes called "input" and the y axis is called "output."

Although Curves is extremely powerful, the simplest way to use it is to drag the left and right portions of the line inward to meet the borders of the Histogram (just like we did with the Levels sliders). Then, grab the line toward the dark end and drag it down slightly; grab the line toward the light end and drag it up slightly. This creates what is called an "S Curve" and is a great way to create increased contrast.

Check out our NYC police officers - before and after the Curves adjustment.

6) Clarity

Just about every photo benefits from some sharpening. Really, it should be a conscious decision if you don't do it. Occasionally, you might want to avoid sharpening a soft focus portrait, or a high key landscape. In most cases, though, photos benefit from this last step.

And sharpening should always be the last thing you do. Because sharpening alters the edge pixels throughout your photo, you should always leave it to last.

In general, the various methods of sharpening all do the same thing – they find edges where there is a difference in lightness, and then accentuate that difference. The increased contrast at edges is what gives photos that sharpened look. It's also really easy to go too far. An over-sharpened photo is easy to spot, and it just looks fake. Don't do it – back those sliders off!

The most common way to sharpen a photo is by using the "Unsharp Mask" method. Usually, this means setting a Radius and an Amount. The "radius" slider increases the size of the contrasting border, and the "amount" slider increases the degree of contrast introduced. In general, keep the radius down and play with the Amount slider to get a sense of increased sharpness. Try to avoid drifting from the "realistic" zone into the "obvious fake" zone.

Check out a detail from the NYC Police Officer photo - before (left) and after (right) sharpening.
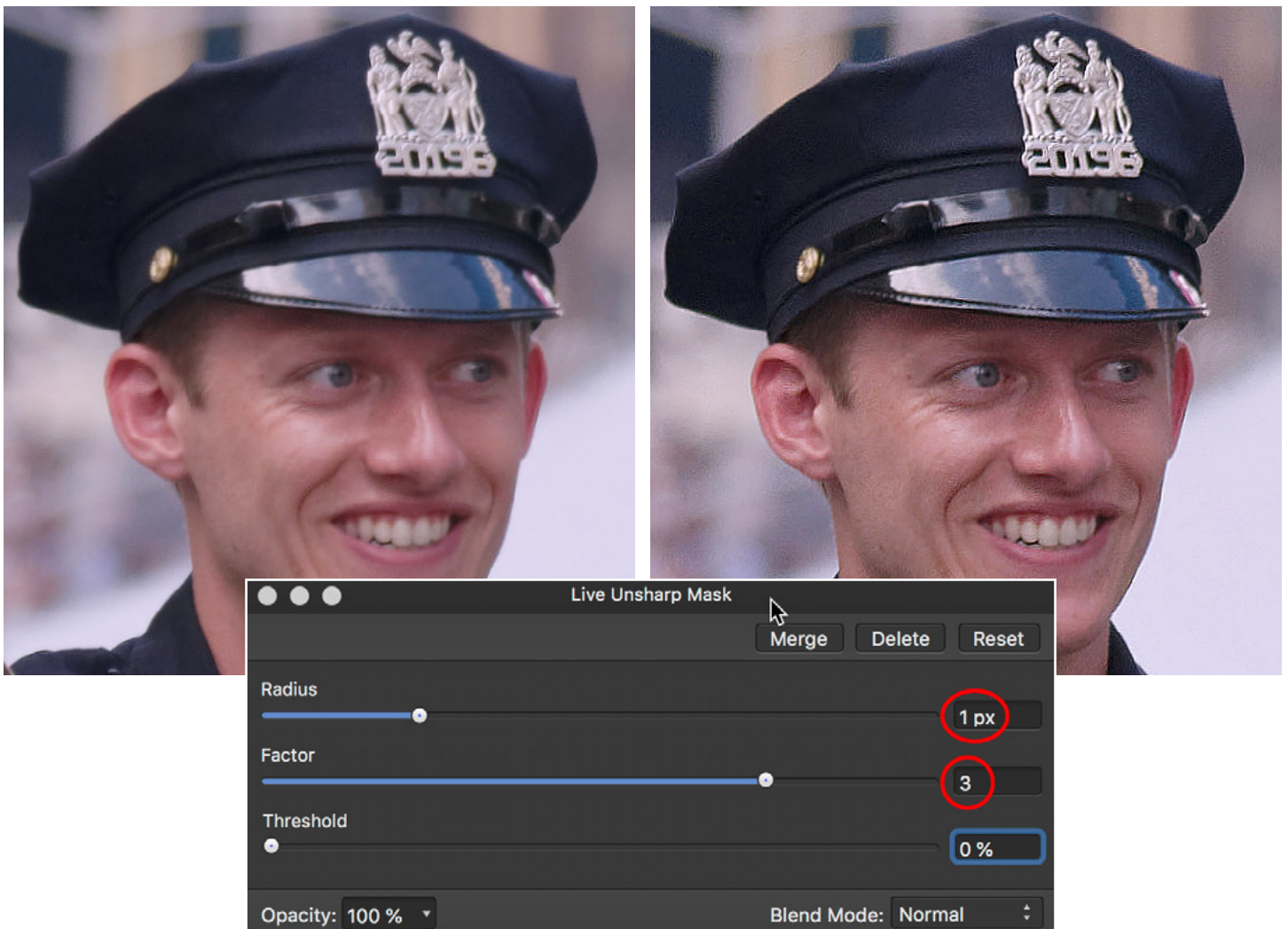
What NOT To Do...

Don't overdo the Saturation of your photo's colors.

Don't increase Brightness and Contrast too far.

Don't Sharpen too much.

[Really, who's going to fall for that?]