

# Developing Photos That “Pop”

## *Fixing Contrast and Tone Problems*

### **Part 4: Using the Shadow/Highlight Command**

© 2004, Glenn E. Mitchell II, Ph.D. of The Light’s Right Studio, <http://www.thelightsrightstudio.com>

Ever taken an image where the highlights are too bright or the shadows are too dark? The Shadow/Highlight command is one of the new features in Photoshop CS. It is an extremely helpful tool for restoring details to underexposed or overexposed photos. It can be a real timesaver, too. You can often restore your shadows and highlights faster with Shadow/Highlight command than traditional methods, like Curves adjustment layers.

I want to be careful not to overstate the point and leave you with the impression that Shadow/Highlight command is some sort of magical tool. There are limits to the wonders it can work on an image. If there is detail remaining in your image, the sophisticated image manipulations performed by the Shadow/Highlight command can likely find it and restore at least some of it. But if your image is too severely underexposed or overexposed, important detail will be lost permanently.

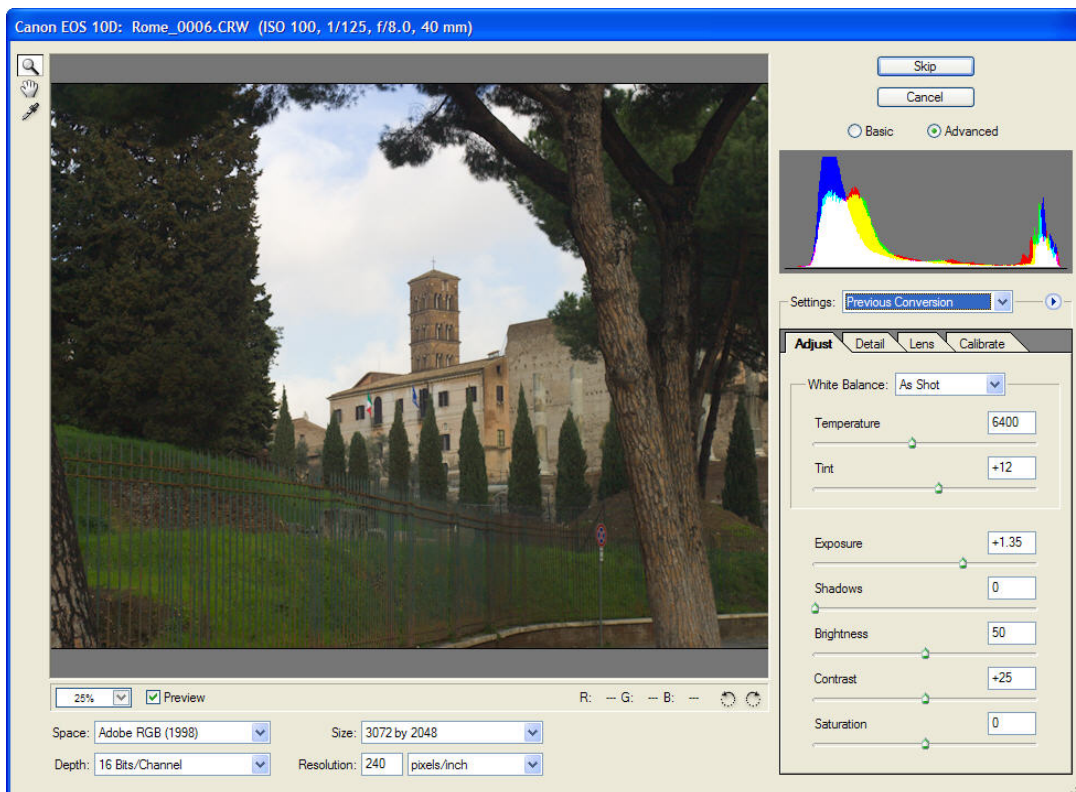
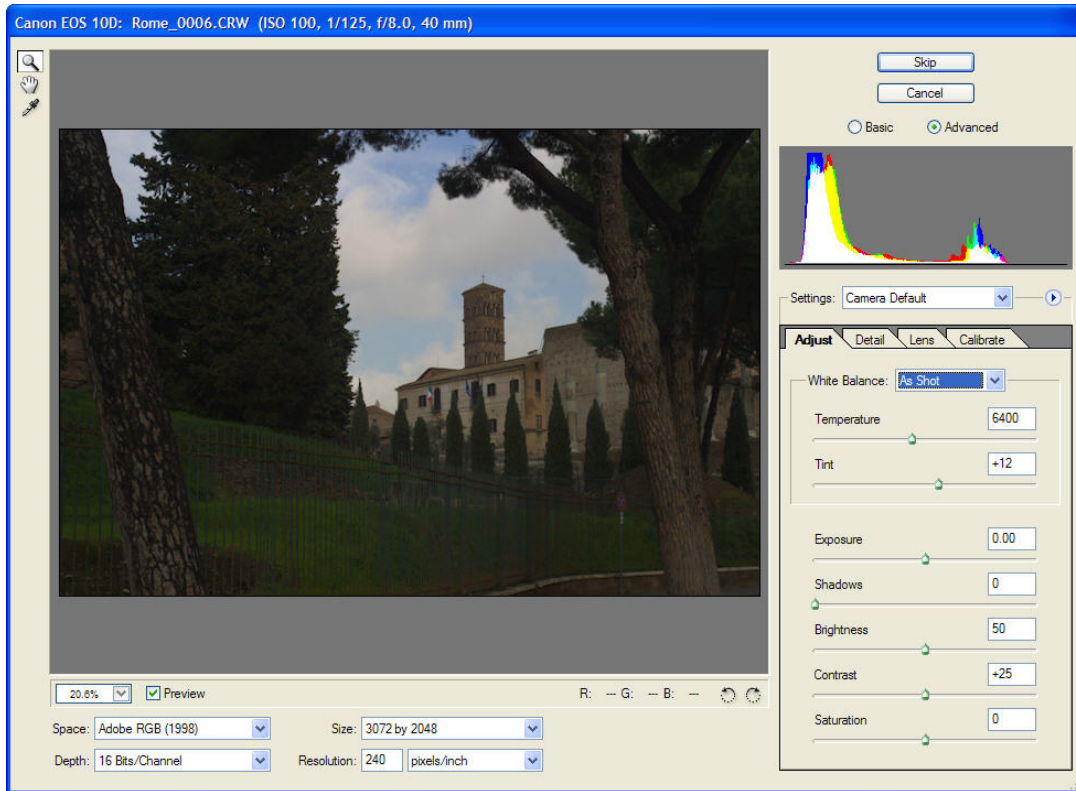
You need to use care with the Shadow/Highlight tool. It can finesse a lot of information from the shadows and highlights, but if you get aggressive or careless with the settings, your image can lose detail and become blurry, halos can develop around the edges, and you can even get color shifts.

### **Using the Shadow/Highlight Command**

**Figure 1a** is an image from Rome, Italy. I took the shot near the Roman Coliseum, just outside the Roman Forum. It was a high contrast image. I was standing in the shadows and did not “Expose to the Right.” The result was a 1 1/3 stop underexposure.

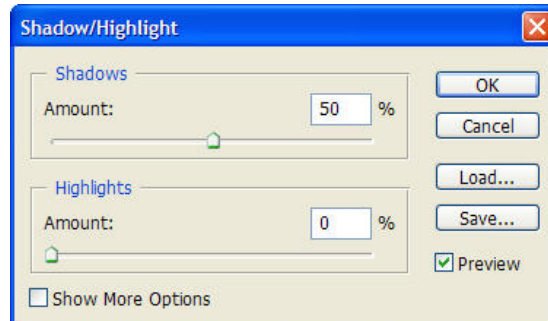
A quick look at the image convinced me that there was plenty of shadow detail. The histogram was also clear about those muted shadows; the underexposure did not cause the shadows to clip or clump. Important shadow detail was not permanently lost.

“Always fix the most important problem first,” is a helpful mantra for photo retouching. I started by fixing the underexposure with the Adobe Camera RAW II Exposure slider. I increased the exposure by the equivalent of +1 1/3 stops. (**Figure 1b.**) The exposure boost was a significant improvement. It brightened the image but still left some headroom for editing in Photoshop.



**Figures 1a and 1b.** An underexposed image from just outside the Roman Forum. Adding 1 1/3 stops to the Exposure slider brightens the image.

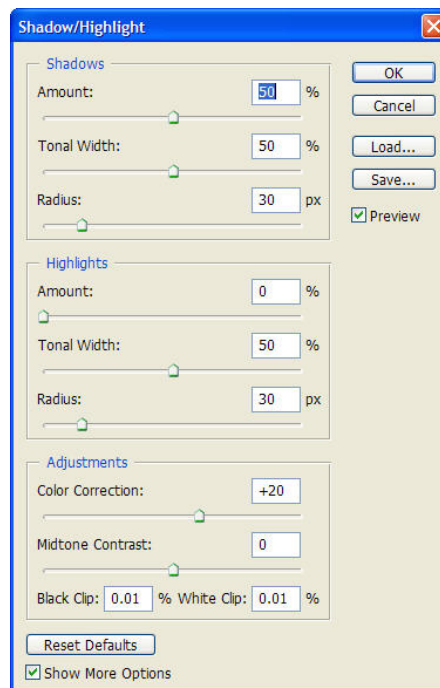
The first time you open the Shadow/Highlight command (Image | Adjust | Shadow/Highlight), all you see is a couple of sliders: Shadows Amount and Highlights Amount. Don't even bother adjusting just these two sliders at this point, unless you want to make a mess of your image. Start by checking the box labeled "Show More Options."



**Figure 2.** The basic version of the Shadow/Highlight command.

You need the extra settings revealed by the "Show More Options" checkbox to avoid softening the image, adding halos, and causing color shifts. You can adjust both the shadows and the highlights or just the shadows or just the highlights.

The appearance of the image will likely change when you invoke Image | Adjust | Shadow/Highlight. By default, the Shadow/Highlight command brightens the shadows. The default settings are appropriate for silhouetted images resulting from backlighting, so it is important you know how to refine adjustments for each image.



**Figure 3.** The advanced version of the Shadow/Highlight command.

The “Amount” sliders control how large a correction to apply. A large Amount setting for Shadows will considerably lighten shadows. A large Amount setting for Highlights will heavily darken highlights.

It is best to avoid wholesale adjustments of the Amount sliders, especially the Amount slider for Shadows. When you pull out detail from the dark areas of an image, some of the detail is likely to be in the form of noise.

The "Tonal Width" sliders adjust the range of pixel values that are included in the adjustment. A low Tonal Width value for Shadows would include only the very darkest shadow pixels. A low Tonal Width value for Highlights would include only the very brightest highlight pixels.

The "Radius" sliders adjust the local neighborhood of pixels affected by the other two adjustments. This is different from Tonal Width. Radius determines which pixels to affect by their relative location rather than their luminosity (*i.e.*, brightness/darkness). Get the Radius setting wrong and you can wind up with a wide halo of lighter/darker pixels around your subject or soften image details.

It is best to work with either the shadows or the highlights in isolation. Make sure the “Preview” box is checked. That way, you can see the effect of your adjustments as you make them.

I suggest you start with a Radius setting of 50-100. Set the Amount to 0. Use a low Tonal Width. Watch what happens as you pull the Tonal Width slider. If you are working with shadows, only the darkest shadows should be affected with a low Tonal Width. If there are no dark shadows, the adjustment may have little/no effect until you increase the Tonal Width setting.

If you get over-enthusiastic with lightening shadows, you will likely develop a halo around the subject. You can reduce the halo with the Radius slider, but that adjustment has a cost, too. You can lose image detail. So avoid being too aggressive with the Amount sliders and reserve the Radius sliders for tweaking image details. You really need to be careful about all three settings, and that will take some trial-and-error as you finesse them.

If your image loses detail and becomes blurry in places, then that usually means your Radius setting is too low. Try increasing it. Carefully!

Color Correction adjusts for loss of saturation that can result from your tonal corrections. With grayscale images, instead of a Color Correction slider, you will instead see a Brightness slider.

Color Correction only affects pixels that change as a result of the settings for the Shadows sliders and the Highlights sliders. I suggest you leave this setting low. Something like the default, which is +20. The effect is mild at that setting. If you need a

more significant saturation boost, add a Hue/Saturation adjustment layer when you finish with the Shadow/Highlight command.

Midtone Contrast does what it says. It adds contrast to the midtones by making those midtones darker than 50% gray even darker and those midtone pixels lighter than 50% gray even lighter. You can use it to restore contrast lost during Shadows or Highlights adjustments. I suggest you use a Curves adjustment layer with an “S” curve or pull the Gamma slider on a Levels adjustment layer for adjusting the midtones, if you find you need more than a slight contrast boost.

The Black and White clip settings adjust how many values clip from either end of the dynamic range of your image. The clipping values can be used to add contrast. Again, I suggest you adjust the white point and black point in a Levels adjustment layer. Typically, you should do that before you invoke the Highlight/Shadow command. You get the best results with the Shadow/Highlight command after you have made your major tonal adjustments.

### **On the Way to the Forum**



**Figure 4.** The image before invoking the Shadow/Highlight command.

**Figure 4** is the image prior to adjustments with the Shadows/Highlights command. I mentioned earlier, the exposure was boosted in Adobe Camera Raw II (+1 1/3 stops). Once the image was loaded into Photoshop, I applied a round of capture sharpening. I

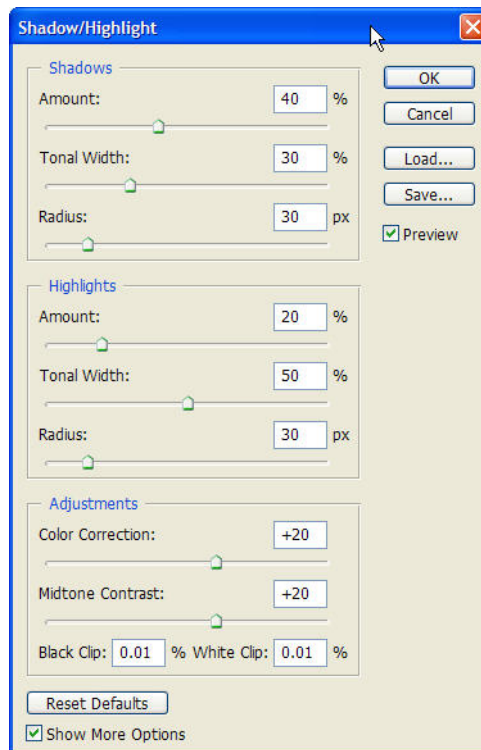
used the Highpass Filter capture sharpening action from the TLR Sharpening Toolkit. The capture sharpening action uses an edge sharpening technique and advanced blending techniques to protect highlights and shadows and also surfaces during capture sharpening. You can download this comprehensive set of sharpening actions from The Light's Right Studio site:

<http://www.thelightsrightstudio.com/DigitalDarkroom/PhotoshopTools/TLRSharpeningToolkit.htm>

The shadows in **Figure 4** need more help than the highlights. So I began my adjustments with the shadows. I zoomed the image to 100% and watched the details on the conifer trees and the bark on the nearby trees as I adjusted the Shadows sliders.

The Shadow/Highlight command is not available as an adjustment layer. My preference is to work on layers when practical, so I created a new layer and merged all of the visible layers into the new layer. (Alt-ctrl-shift-n-e on the PC, option-command-shift-n-e on the Mac.) You consume more RAM with a merged layer than you would with an adjustment layer, but at least you get the benefits of working on a layer with this maneuver.

The sky could also benefit from a tweak to the Highlights sliders. Reducing the highlights a touch would add some contrast between the blue sky and the cloud.



**Figure 5.** Shadows and Highlights adjustments to lighten the shadows and add some body to the clouds for the image in **Figure 4**. Midtone contrast is tweaked a little, too.

I wanted to lighten the shadows. I also wanted the resulting photo to remain high contrast. The default settings in **Figure 3** brightened the image a bit much for my taste.



**Figure 6.** The result of applying the default Shadow/Highlight settings to the image in **Figure 4**.

I made a smaller adjustment to the shadows, reducing the Amount from 50 to 40 and the Tonal Width from 50 to 30. The Radius setting remained at the default of 30. The default Highlights settings do not adjust the highlights at all (Amount = 0). I increased Amount to 20, which increased contrast in the sky. I also made a small adjustment to Midtone Contrast (+20). The result appears in **Figure 7**. The photo has a lot more detail in the shadows. More contrast in the skies. Yet, it remains a high contrast image.



**Figure 7.** The same image of the Roman Forum after adjustment with the Shadow/Highlight command.

## **Concluding Remarks**

The Shadow/Highlight command is a useful tool for adjusting shadows from backlighting or washed out features from improper fill flash. It can also be a useful part of your repertoire for correcting tonal problems, like my underexposure of a scene near the Roman Forum.

The Shadow/Highlight command requires some practice. One of the common questions that I hear on Photoshop forums is, “What sort of settings should I use for . . .” You can substitute Levels, Curves, Shadow/Highlight, Unsharp Mask, etc. The simple answer is that there are no typical settings. First, each image is different. Second, each photographer is different. Different effects require different settings. Different image details require different settings.

Rather than offering a set of canned slider settings, I offer the following advice:

- (1) *Work on the shadows and highlights separately.* I’m not suggesting you invoke the Shadow/Highlight command twice. I’m suggesting you work on obtaining pleasing settings for the shadows or the highlights first, then switch to adjusting the other. Start with whichever needs the most help.

- (2) *It is best to avoid wholesale adjustments of the Amount sliders, especially the Amount slider for Shadows. When you pull out detail from the dark areas of an image, some of the detail is likely to be in the form of noise.*
- (3) *Start with a Radius setting of around 50 (the default). Set the Amount to 0. Then watch what happens as you pull the Tonal Width slider. If there are no dark shadows (or bright highlights, if you're adjusting the highlights), the adjustment may have little/no effect until you increase the Tonal Width setting.*
- (4) *If you get over-enthusiastic with lightening shadows, you will likely develop a halo around the subject. You can reduce the halo with the Radius slider, but be careful: you can soften image details.*
- (5) *If your image loses detail and becomes blurry in places, then that usually means your Radius setting is too low. Try increasing it.*

Experiment with several images. See what settings work best for a particular image and what happens when you get over-enthusiastic with your Shadow/Highlight settings. Trust your creative judgment and use the settings that give you the result you want.