Shadow/Highlight Command

A new feature in CS is the Shadow/Highlight command found under "Image-Adjust" menu. The initial uses according to Adobe are to deal with backlit images or those that have been washed out. What's unique about this function is that it uses surrounding pixels within the image to base its corrections upon.

As seen in figure 1, the dialog is broken down into three parts (be sure the "Show More Options" check box is on). The first two areas of the dialog (Shadows and then Highlights) behave the same way but obviously affect different parts of the tone scale. The sliders work much like those found in the Unsharp Mask filter where Amount controls the degree of correction ranging from zero (no correction) to 100%. Tonal Width sets the amount of pixels that are modified within a tonal range being affected and works directly with the Amount slider. Radius controls a range of neighboring pixels to be affected within the tonal width so think of this as a way of controlling a feather or falloff of the resulting tonal tweak.

The easiest way to see how this new tool functions is to test it on a 64-step gradient that runs from shadow (0) to highlight (255). To create such a file, do the following:

- 1. Create a new document (a few megs is ideal. I made a file that was 2000x1000 pixels, RGB.
- 2. Set the foreground and background color to default (Black and White) by clicking on the "D" key
- 3. Select the Gradient tool in the tool palette (G key)
- 4. Hold down the shift key and drag the gradient tool from left to right inside the document to produce a gradient.
- 5. Select "Image-Mode-Posterize" and enter 64 in the dialog and click OK. You should have a step wedge with 64 steps from black to white.

To illustrate how the sliders operate on an image set two "Amount" sliders to zero. We will work with just the Shadow slider but keep in mind you can try this on the Highlight sliders to see how they affect the image. Also, have the Info palette open and set to sample size to 3x3.

With the Shadow "Amount" slider at zero and the "Tonal Width" set at a default of 50% and "Radius" set to a default of 30%, toggle the "Preview" checkbox on and off. You'll see that the image doesn't change since both "Amount" sliders are set to zero.

		New	
Name:	Name: Untitled-1		ОК
Preset: Custom			Cancel
Width:	2000	pixels	Save Preset
Height:	1000	pixels	Delete Preset)
Resolution:	300	pixels/inch	
Color Mode:	RGB Color	🕈 🛛 8 bit	
Background Contents:	White 🛟		Image Size:
Advanced			5.72M
Color Profile: Working RGB: Adobe RGB (1998)			0
Pixel Aspect Ratio:	Square 🛟		

New Document Dialog in CS



Left is the default foreground/background colors.

Below is the Gradient set for black to white.



SLOWLY move the Shadow "Amount" slider from zero to 100% and notice how the shadow AND midtones areas (from about 190 down) lighten yet the very last step (zero) remains unchanged!

Set the "Tonal Width" to zero and once again, slowly move the "Amount" slider up to 100%. You'll see that the "Tonal Width"

slider controls a range of what tones get affected by the "Amount" slider. With the "Amount" slider at 100% and "Tonal Width" set to zero, a larger portion of darker tones (from about 30 to 7) get far lighter in tone while values below about 30 get affected but far less so. Slowly move the "Tonal Width" slider from zero to 100% and see how this all expands through out the rest of the tone scale. With a setting of 100%/ 84%/30px, a huge amount of the scale is all falling within the 185/ 187 range.

Alt/Option click on the "Cancel" button to reset the sliders to default. Now start moving the "Radius" slider starting from zero and moving to 100%. It seems to update the image much slower (takes more processing). Its also a very subtle effect. Use this to "fine tune" what areas already affected with "Amount/Tonal Width." Where this control will come in handy (and will be easier to see on a "real" image" is in cases where someone might be backlite and you want to limit just the person getting lighter without the background showing too much of an effect.

The Adjustment sliders (Color Correction and Midtone Contrast)



are for fine-tuning the effects after using the other sliders discussed. Should colors shifts due to increases or decreases of density, the "Color Correction" slider comes in handy. This slider is more akin to a saturation slider. To see this in action, move the "Shadow/Tonal Width" and "Radius" sliders to max setting and zoom into the gradient a few hundred percent. You should see some color noise in the transitions between tones when the "Color Correction" slider is set to +100 and these transitions will become totally neutral when you lower the slider (the default of zero does a pretty good job). When working with true color images, this slider will help produce a more seamless job should colors get ugly due to the other adjustments to the image.

The "Midtone Contrast" affects midtones as the name implies. You can move this slider and see how it affects Midtone contrast. Useful when trying to adjust the various controls to bring out detail without producing an artificial looking adjustment.

The clipping fields at the bottom of the dialog allow users to decide how much black or white should and should not be affected by the sliders. The defaults are a very good starting point. To see how they work, alt/option click on the Cancel button to reset all the sliders. In the "Black Clip" field type

the number 10 and watch what happens to the shadow tones. Now type 2. You can see how these fields can further limit what tones get affected with the sliders. Note that no matter what the settings, pure black (zero) and white (255) are always retained. Clipping can be used to produce a more radical alteration to tones near pure shadow and highlight values but never pure white or black.

Lastly, keep in mind that any settings can be saved and reloaded for future use.

Note that CS ships with a very



the tools work, experiment with this file, which is found in the

"Samples" folder.

