SHARPENING With Lightroom

By Sean McCormack

If you come from any peer group of photographers, one subject is always in vogue, and that's the sharpness of a photograph. In certain circles, it can almost be the mantra of the group. Having a sharp photograph is good practice for the photographer, but it's not the be-all and end-all. As Ansel Adams said, "There is nothing worse than a sharp image of a fuzzy concept." Now he didn't say that we shouldn't care about sharpness, but rather that we should care about our photo first. Sharpness is great for enhancing a good photo, but it can't save an out-of-focus one.

Before we talk about techniques for sharpening images, let's talk a little about sharpening. As with a knife, the process of sharpening refines an edge. With a photograph, this sharpness helps draw our eye to the focal point. In the case of portraits, this is usually the eyes of the subject. With landscape images, the whole image needs to be sharp and other compositional tools lead the viewer through the photo. That's not to say that this is the only way, but it's generally true.

Our eye is attracted to this sharpness and will favor looking at better-defined parts before examining less-sharp areas of a photo. To make the most of this, we should make a practice of getting the best photo in camera—properly defining our focal point using depth of field and a suitable shutter speed to freeze motion.

Shooting RAW will give the most options for the final image, especially where sharpening is concerned. The main reason is that if the sharpening is baked into the file (as with a JPEG), then it's very hard to recover from too much in-camera sharpening. If you prefer to shoot JPEGs, then you should leave sharpening low or off to allow better control later.

Sharpening works by increasing the contrast along the edges of things in your photo. It does this by adding areas of light and dark to the edges in the photo. Oversharpening can produce a halo where a very light edge can be seen next to a dark one. It's very noticeable on photos with strong contrast between the sky and land, for example. Strong sharpening also sharpens things that detract from a photo, rather than enhance; for example, open sky can become banded and skin pores can become unflattering. Sharpening the face of a weathered old man can really make a photo pop, but try the same look on a lady and the image will fail to impress (especially the lady!).

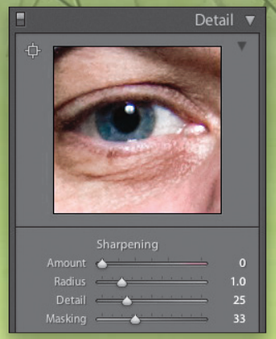
Lightroom allows us to sharpen our images in three ways: on the whole photo through the Detail panel in the Develop module; locally on the photo via the Adjustment Brush; and with output sharpening in the Print and Web modules, and through export. You can also increase apparent sharpness using the Clarity slider (and with an Adjustment Brush).

Sharpening in Lightroom essentially takes the route recommended by the late Bruce Fraser: capture sharpening, creative sharpening, and output sharpening.

Capture sharpening

The process of digital capture actually blurs the image. The reason for this is to prevent jagged lines from appearing in the photo and to prevent digital artifacting from occurring. Because of this, it's a good idea to add a little global sharpening to the image to bring back detail lost in the capture process. This is normally done early in the process with pixel editors such as Photoshop, but it's not as critical in Lightroom because the order of processing is defined by the program, rather than the user.

The Detail panel



Our first point of contact with Lightroom sharpening is the Detail panel in the Develop module. Before using this panel, you should have corrected the image for color, exposure, and tone.

To see the results of your work, you need to zoom into the image at 1:1. This is because Lightroom doesn't apply sharpening (or noise reduction) at any other view; it would slow Lightroom down; and the preview would be inaccurate. So press the Z key to zoom into the shot, click 1:1 in the Navigator panel, or drag the Zoom slider in the Toolbar. (If you don't see the Zoom slider, click the down-facing arrow on the right and choose Zoom.)

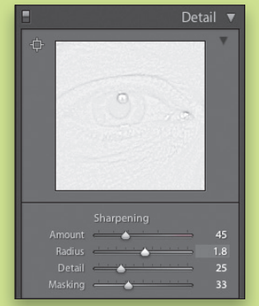
Amount is the first slider in the Sharpening section. It might seem obvious that this controls how much is applied, but it does a little more. Rather than go from 0–100, it goes from 0–150. The reason is that from 0–100, Lightroom has safeguards in place to help protect your image, but from 101–150, all bets are off and you can seriously mangle your photo. As with all tools, excessive use can lead to an adverse effect, especially when mixed with the other sliders, but occasionally it can yield interesting creative results.

RAW files default to 25 on the Amount slider, while JPEG and TIFF files are at 0. The 25 isn't an arbitrary number, but it's what Adobe thinks is a good starting point for the average RAW file.

If you hold down the Option (PC: Alt) key while using the slider, the preview will become black and white, showing the Luminance channel of the image (i.e., the tones rather than the colors), which is the aspect of the image Lightroom sharpening works on. You can click the icon at the top left of the Detail panel preview then click this on the part of the image you want to preview.

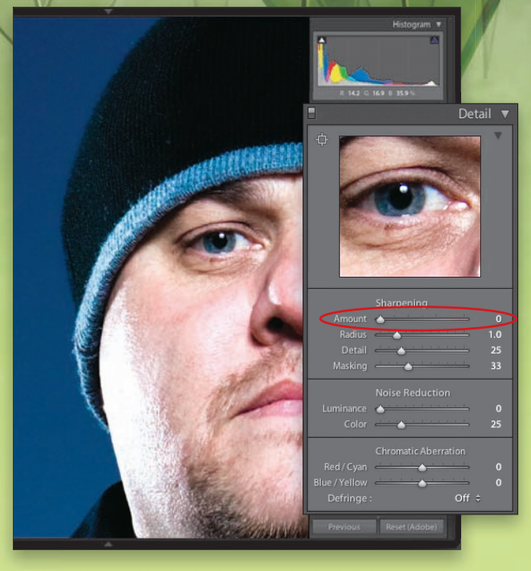
Radius controls the area around the edge that's affected by the Amount slider. It runs from 0.5 to 3.0 pixels, with a default of 1.0. Increasing the value increases the area sharpened. Because this is hard to see exactly, Adobe provided another tool to help us see what's happening. As with Amount, you can hold down the Option (PC: Alt) key while sliding to preview what you're affecting. The preview is gray, showing the sharpening in black and white.

Detail suppresses the halos normally associated with sharpening. At 0 it has the most suppression, while at 100 it no longer suppresses the halos. This suppression does affect detail in the image, so you have to balance between the detail and halos. Again holding down the Option (PC: Alt) key will give you a preview similar to Radius, allowing you to see the effect of the Detail slider as you use it.



The Radius slider with the Option (PC: Alt) key held down

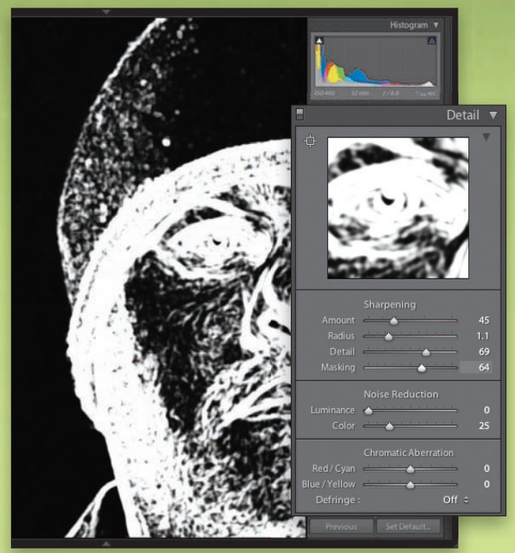
The Detail slider with the Option (PC: Alt) key held down



The Amount slider in Sharpening showing both the zero (top) and full (bottom) amounts

Masking defines what areas of the image are affected by the sharpening. The default is 0, which means the whole image is sharpened; at 100, only the most defined edges of the image are sharpened. This is great because you can decide how much of the image gets sharpened. You've probably guessed by now that holding down the Option (PC: Alt) key while sliding will preview the mask. The mask initially appears all white at 0. As you slide to the right, more and more black areas will appear. Only the white areas are affected by the other sharpening controls.

Masking is great for avoiding sharpening skies and skin, or anything with continuous tone. In the Photoshop world, this kind of sharpening is referred to as edge sharpening, and is a little more long-winded than just moving a slider.



Masking slider with the Option (PC: Alt) key held down

As you can see, sharpening in the Detail panel is both powerful and refineable. The use of the Option (PC: Alt) key makes it even easier and takes a lot of the guesswork out of sharpening. These global tools allow you to sharpen to your own taste, while overcoming some of the side effects of the digital-capture process.

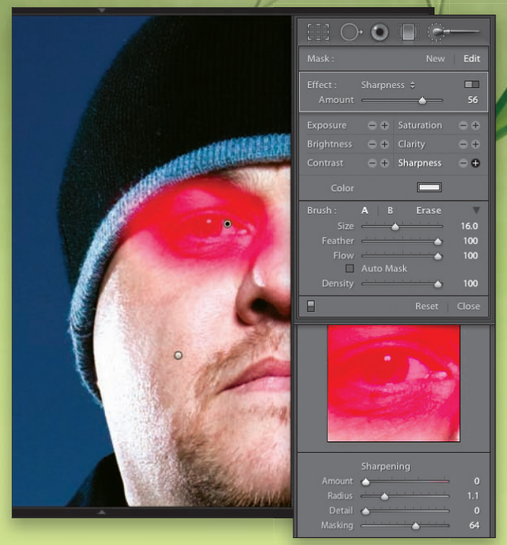
Creative sharpening

The next available phase of sharpening is that of creative sharpening. In this phase you can work on individual aspects of the images, introducing extra sharpening as you see fit. Using a portrait as an example, you could work on the eyes to really make them the focus of the photo.

The Adjustment Brush

The Adjustment Brush (K) is situated at the right of the toolbox below the Histogram. Click on the brush to open its panel where you can make local adjustments on the image, including Exposure, Brightness, Contrast, Saturation, Clarity, Color, and our main interest, Sharpness.

Unlike Amount in the Detail panel, Sharpness goes from –100 to 100 with the brush, so you can actually remove sharpness to a certain extent. To use the brush, simply click the plus sign (+) beside Sharpness (if you see more than one slider, click the Show Effects icon below the word Edit to switch to this view), and start painting onto the photo where you want to sharpen. Once you're sure that the effect is what you want, you can press O to see the mask of the area being sharpened. You may find it easier to paint the mask instead of the sharpness. Once you've finished painting, press O again to remove the mask view and see your work. If you think there's too little or too much sharpening, move the Sharpness slider until you're happy with it. If you make a mistake, you can hold down the Option (PC: Alt) key and erase the mask. Alternatively you can select the Erase Brush.



The Sharpness Adjustment Brush, with the mask visible

You can also have different areas with different amounts of sharpening. Simply click the word New to create a new pin. (If you can't see the pin, press H to show and hide it.) This creates a new brush for you to work with, allowing you total control. To edit any brush, simply click the pin. Once the center of the pin is black, you can then edit the mask.

When you've finished, you can think about where the image is going to end up, be it on the Web or printed. Lightroom helps takes care of the process, giving us correct sharpening whatever our output.

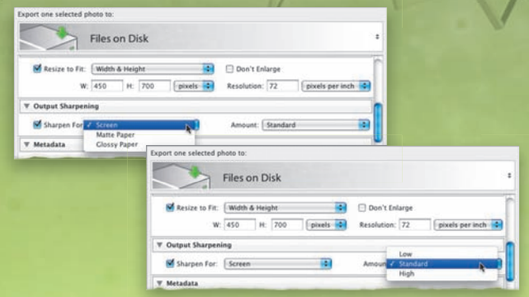
Output sharpening

Different media require different amounts of sharpening. Images reduced in size for Web viewing need different sharpening than those printed on glossy paper. Matte paper requires even more sharpening. Having to keep multiple copies of a photo based on the final output would be tedious at best. Fortunately, Lightroom has output sharpening controls built in, meaning you can always get Web images and prints looking the way you want.

Bruce Fraser was mentioned earlier, and a lot of his sharpening work went into a commercial product from PixelGenius called PhotoKit Sharpener. PixelGenius put a great deal of research into output sharpening and came up with settings that worked consistently for a given output. These findings are incorporated into Lightroom.

You can make use of this sharpening in a number of places, such as the Print and Web modules, but the most comprehensive view is in the Export dialog (File>Export). Output Sharpening is normally just below Image Sizing in the dialog (some plug-in developers may opt not to include it). To activate Output Sharpening, click the Sharpen for checkbox. The next option is the media type: Screen, Matte Paper, or Glossy Paper. These settings are increasingly more sharp, as required by the media. Screen is used for computer or Web applications, while Matte and Glossy are used for the paper you're printing on. Finally, you can choose Low, Standard, or High Sharpening to taste.

The Print Module only allows a choice of Matte or Glossy, while the Web module automatically chooses Screen. Both allow a choice of Low, Standard, or High amounts.



The Output Sharpening section of Export showing the media and strength options

Apparent sharpness

Along with the obvious sharpening tools, there's another tool that affects the apparent sharpness of a photo—Clarity. Clarity can be used as a global tool in the Basic panel, or as an Adjustment Brush in the same fashion as described for sharpening.

So what's Clarity? When it was being developed, Clarity was called Punch, and that's what it does—adds punch to a photo. As the tool developed, its range went from 0 to 100 to –100 to 100, meaning you could negate the effect. This negative Clarity gives a glow to the image. Effectively, Clarity increases or decreases the midtone contrast in an image. In Photoshop, a similar effect is to use Unsharp Mask with a high Radius and a small Amount. For local adjustments, it can be beneficial to use Sharpness and Clarity together, enhancing the work that Sharpness can do by itself.

The Adjustment Brush showing all sliders, with a mix of Sharpness and Clarity

Alternate methods

Besides using Lightroom itself to sharpen, you can also use Photoshop with droplets, Lightroom plug-ins such as Nik Sharpener Pro, or even third-party plug-ins like PixelGenius PhotoKit Sharpener in Photoshop. The key issue to remember with these is that they all work on rendered versions of your file and not on the original file.

Droplets

While not intending to be a full-featured tutorial on droplets, the essence of droplets is to create an action in Photoshop that includes all the steps you need to sharpen, save, and close your image. Choose File>Automate>Create Droplet. Set up the droplet (e.g., select the correct action and suppress warnings, etc.) and save it to a suitable location.

Open the Export dialog and go to the Post-Processing section. Click on the After Export drop-down menu and choose Open in Other Application. A new option will appear called Application. Click Choose, navigate to your droplet, and select it. Alternatively, use the Go to Export Actions Folder Now option and copy the droplet into the folder that appears. Then restart Export.

When you run a batch export with the droplet, Lightroom will then send each photo to it for processing.

Plug-ins

Using a plug-in like Nik Sharpener Pro can give you a lot more control over your sharpening. As a fully featured sharpening tool integrated with Lightroom, you can create rendered versions of your file, which are then sharpened in Nik, and the results are stored in your library.

External plug-ins

You can also use Photoshop plug-ins as part of the droplet process, allowing you to use products like PhotoKit Sharpener with Lightroom. By clicking Add to Catalog when exporting, Lightroom will also manage these rendered photos.

As you've seen, Lightroom provides fantastic control over sharpening within the program, but also allows you to use external programs to achieve your preferred sharpening. ■

SEAN MCCORMACK

A final before and after showing the results of sharpening. The settings have more detail to add a gritty look, while masking helps keep the sky smooth.

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Sean McCormack is based in the rather wet city of Galway on the west coast of Ireland. (When it's sunny, it's the best place in the world.) He's the author of Photoshop Lightroom 2 Made Easy *and runs Lightroom-Blog.com, an independent blog about Lightroom. He also develops Web galleries and plug-ins for Lightroom.*