



### CHAPTER 1

# **Getting Grounded**

s you read through this book, you'll learn about the tools and techniques that form the basic photographic postproduction workflow. By the end of the book, you'll not only have an understanding of workflow in general, you'll have a fully functioning workflow of your own. A workflow you can trust to organize, edit, and output your photos. Before you begin, though, it's prudent to take a moment to get grounded in basic concepts.

## What Is Workflow?

When I worked in film labs, I never heard pro photographer clients mention the word "workflow." That's because most photographers who used our lab didn't concern themselves with their postproduction needs. We took care of it for them. Our clients would bring their film negatives to us, like the 35mm film shown in Figure 1-1, and we created finely tuned finished images.

For those of us working in the lab, the way customer orders moved through the lab was extremely important. Our system for processing and printing was efficient and reliable. All orders began in the Order Write-Up Department, where they were entered into a computerized tracking system. All finished orders completed their trip in the Shipping Department, where they were sent out for delivery. Between those two departments, orders were sent through various Processing, Printing, and Finishing departments. As with most businesses, time is money in a production environment so orders needed to proceed through the lab as quickly as possible.



FIGURE 1-1
Before digital, most photographers took their film to a lab for processing and printing.

The system we used to manage this process is called *workflow*. Ours was designed to ensure the lab produced consistent results for every customer order. Those results needed to uphold our reputation for high quality and attention to detail. For us, the perfect workflow needed to accommodate both the demands of our professional clientele and the efficiency necessary to make a profit.

Today, most digital photographers manage their own workflow for organizing, editing, and outputting their photos. Being in charge is truly liberating because it enables you to create the images you like, rather than hoping a lab will see the image the way you do.

# Comparing Lightroom and Photoshop

For the last several years, Photoshop has dominated digital photographic postproduction. It's an amazing program that can be used to do just about anything to a digital image. Photoshop has changed the world for photographers. It's also changed the world of web designers, video editors, medical researchers, and 3D animators. Photoshop is an incredibly powerful program but this power leads to overwhelming complexity, particularly for new users.

## Deconstructing Photoshop

Photoshop provides almost every possible editing tool in its countless panels and hundreds of menu commands. Imagine walking into your local home-improvement store and asking for one of every tool in the store and then placing the tools into the biggest toolbox you can find. Once you roll that sucker into your garage you'll have every tool you could ever possibly need. The problem is knowing where to find the tool you want when you want it, and then figuring out how to use it after you've found it.

For today's photographers, the two most important parts of Photoshop aren't really in Photoshop: Adobe Bridge and Adobe Camera Raw. These two programs are automatically installed with Photoshop.



FIGURE 1-2

Adobe Bridge is a powerful file browser used with other Adobe design products. Before digital, most photographers took their film to a lab for processing and printing.

#### Adobe Bridge

Adobe Bridge, shown in Figure 1-2, is a powerful file browser, designed to help you see and manage your image files. It's named Bridge because it can be used with other Adobe design applications and functions as a bridge among those programs. Bridge is used to import and organize photos, as well as output them for all sorts of uses, from e-mail to printing.

Bridge first appeared in Photoshop CS. With every new version, it grew more powerful and so quickly became one of the most popular file browsers among photographers. We used it to sort and rank photos and to perform searches. Bridge made it possible to find specific photos in ways that had never been possible in Photoshop.

#### Adobe Camera Raw

The other key program that comes with Photoshop is Adobe Camera Raw (ACR). This program is designed specifically to work on RAW files. (I describe RAW files in Chapter 2.) For now, the important thing to know is that a RAW file cannot be opened directly in Photoshop. It must go through a process to convert its data to a format that Photoshop understands. Because there are lots of tools and options in RAW conversion programs, each has its own workflow.

Adobe Camera Raw (shown in Figure 1-3) has a row of tools at the top-left and several stacked panels on the right. You can use these tools to adjust important aspects of an image before converting it for Photoshop. When the process is handled correctly, adjustments such as basic tone and color are handled during RAW conversion on the derivative file before it opens in Photoshop.

ACR has grown more powerful with every update. As the number of photographers shooting RAW has increased, ACR has become the most widely used conversion program. Over time, photographers shifted their basic Photoshop workflow toward using Bridge and ACR to do everything needed with most images. When a special image needed heavy lifting, we'd use Photoshop for the full treatment.

#### Pixels versus metadata

Because Photoshop was introduced before cameras could capture images in the RAW format, it was designed to edit photos by altering their pixels. If special procedures aren't followed, any image editing becomes permanent when you close a file. For example, if you change a color photo to black-and-white and close the file, you can't restore the photo's color. This type of editing is described as *destructive*, because pixels are permanently changed.

Metadata literally means data about data. Metadata is a system of recording and organizing information. For example, when I take a photo, my camera embeds information about the photo in the RAW file, such as the time of day created, the camera settings used, and in some cases GPS data regarding the location of the photo.



FIGURE 1-3
Adobe Camera Raw (ACR) is one of the most popular RAW processing programs.

When you edit RAW files using a RAW converter program such as ACR or Lightroom, all your changes are recorded as metadata. If you change a color photo to black-and-white, that change is recorded as a set of metadata instructions. No pixels are altered. The metadata instructions can be changed during future editing or completely removed at any time, returning the photo to its original state. This *nondestructive* editing creates a huge amount of flexibility, particularly when you're first learning. Because ACR uses metadata to track changes, editing files is much more flexible and forgiving than Photoshop.

## Adobe Lightroom is born

Because photographers were mostly using Bridge and ACR, Adobe decided it made sense to combine them. That's how Adobe Lightroom was born. Lightroom is a combination of Bridge

and ACR, rearranged in a unified workspace. Lightroom has the organizational power of Bridge (and more) coupled with the editing power of ACR.

#### \* NOTE

Lightroom also recognizes and works with non-RAW file formats, including JPEG, TIFF, PNG, and most movie files.

Lightroom gave Adobe a chance to rethink the editing process. The workspace was modularized to keep things simple. The finished software was just what photographers were asking for, so it didn't take long for Lightroom to take the photographic world by storm.

## Finding the Balance of Power

Lightroom has become the main organizational and editing tool for today's digital photographers. Some use it for every step of their workflow. For example, when I photograph a bicycle race, such as that in Figure 1-4, I use Lightroom's Library module to sort through hundreds of photos to identify the top 30 to 40 images. I then use the Develop module to make the photos look great. Finally, I use the Web module to upload the finished files to a web gallery where I share them with the world. For this workflow, it's Lightroom all the way.

Workflow for other types of photography isn't always as clear-cut. A portrait photographer can use Lightroom for most of his or her workflow, but the photographer will eventually hit the



FIGURE 1-4
Lightroom was the only program I needed to process photos from this bicycle race.

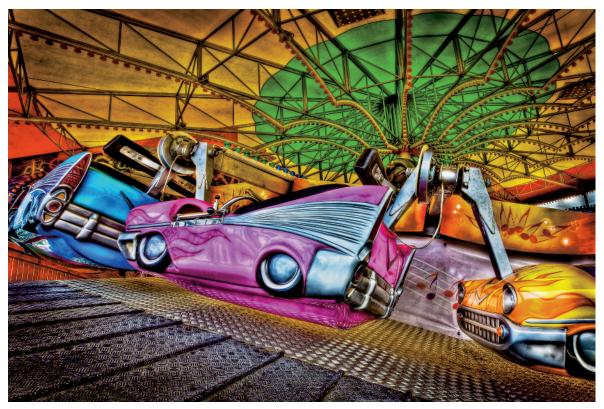


FIGURE 1-5
This fine-art image required using a plugin to get this look.

ceiling of Lightroom's potential. For example, it isn't possible to do what's called a *head-swap* in Lightroom, where you copy a head from one photo and paste it to another to improve the expression. This type of compositing requires the full power of Photoshop.

Lightroom also lacks sophisticated retouching. Lightroom's Spot Removal tool improves with every new release, but it doesn't come close to what's possible in Photoshop. High-end portrait photographers couldn't survive without Photoshop's powerful retouching tools, but they don't always use Photoshop for their entire postproduction workflow: A full-blown Photoshop workflow is clunky next to the smoothness of a Lightroom workflow.

When I create fine-art images like the one in Figure 1-5, I usually shoot for and process *high-dynamic-range* (HDR) images, and my requirements extend beyond Photoshop's considerable capabilities. To get the look I'm after, I need to use external programs called plugins. (HDR and plugins are described in Chapter 14.) Whether I use Photoshop or a plugin, I always begin and finish with Lightroom. It's the central hub of my workflow. Sometimes it completely satisfies my needs. Other times I require the power of Photoshop or a specialized plugin.



FIGURE 1-6

The buildings look great in this evening shot of Seattle, but smoke from a nearby forest fire removed some of the dimension from the sky.

For a simple, complete workflow, it's necessary to find the right blend of Lightroom and Photoshop. The power of Lightroom lies in its relative simplicity and the flexibility it offers with nondestructive editing. Photoshop's power is in its sophisticated tool set. The trick is finding the proper balance of power between Lightroom and Photoshop for your editing needs.

# Solving Problems

Another important concept to image editing is really about solving problems. When I'm working on a photo, I evaluate the image to identify what's not working visually. Then I find the best way to manage the problems I find. If I don't like the color in a photo, I change it. If an area is too dark, I lighten it. If there's something odd along the edge when cropping a photo, I find



FIGURE 1-7
The sky looks better after darkening in Lightroom, but the light on the buildings doesn't look natural.

a way to minimize it. Throughout the editing process, I continually look for problems to be solved. If one problem's solution creates another problem, I deal with it. When all problems have been solved, the editing process is complete and the photo is ready for output.

The photo at the beginning of this chapter of downtown Seattle in the moonlight is a good example of problem solving. It was shot as the sun was setting to the right of the frame. Figure 1-6 shows an early version of the image after basic Lightroom adjustments.

I was pleased with the reflections on the buildings, but the sky didn't appeal to me. Usually, Mount Rainier is just visible in the distance. This particular day, there was a forest fire on the other side of Puget Sound. The smoke in the sky yielded a dull blue that lacked the dimension I wanted.

Figure 1-7 shows the photo after additional work in Lightroom to darken the sky. The modified sky was working, but the light on the buildings didn't seem natural anymore. It was

most noticeable on the building with the green top on the right. Two days after the shoot, I was back home editing the photo and pondering this problem. I decided the buildings needed a light source in the sky behind them — the moon. I was in luck because a full moon was just rising. I went outside, photographed it, and used Photoshop to composite it and a light glow around it to the image. After I made the changes and did a few more small tweaks in Lightroom, I finally felt the image was complete because I had solved all the problems I was seeing in the image.

I entered the completed image in the 2012 Professional Photographers of America Western Regional Photo Competition in California. It won best of show and was the only image out of several hundred to receive a perfect score of 100 points.

The bottom line: Think of your postproduction workflow as a problem-solving process. Yes, it's important to create the best in-camera images possible. But there's always something that can be done to make them better. It's just a matter of learning to see the problems and knowing how to solve them.

