

In memory of David Hitchcock, 1966-2013. A talented photographer and one of the finest people I've ever known. I miss you, my friend.

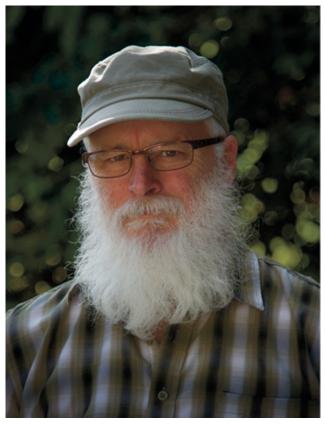


Photo by Julia Fitzgerald

About the Author

Mark Fitzgerald cut his "photographic teeth" in the professional photo-lab business, working for one of the largest independent labs in the U.S. It was an environment rich with talented people willing to share everything they knew (and sometimes their camera gear) with a young photographer. In 1999, as the real possibilities of digital photography began to emerge, Mark left the lab business and devoted two years to exploring digital photography. He became an Adobe Certified Photoshop Expert and has been one for the last ten years.

Now Mark specializes in helping all sorts of photographers, ranging from established professionals to people who are just finding their passion for photography. Mark is adjunct faculty at the Portland Art Institute and teaches regularly at Newspace Center for Photography. He also specializes in private training, where he helps individual photographers solve their technical and creative problems.

In addition to being a sought-after teacher, Mark is also an active photographer. While in the lab business, he also worked as a freelance commercial photographer, photographing a range of subjects from model headshots and album covers to team photos of the San Antonio Spurs. Today, Mark's focus in on fine-art photography. His photos have won awards on the local and international levels and hung in many galleries. Mark is on the National Council of the Professional Photographers of America, and is currently president of the Portland Metropolitan Photographers Association in Portland, Oregon, where he lives with his wife, three dogs, and a cat named Chester. To learn more about Mark, visit www.ddroom.com.

Other Wiley titles by Mark Fitzgerald are *Adobe Photoshop Lightroom and Photoshop Workflow Bible, Adobe Photoshop CS4 after the Shoot,* and *Adobe CS5 Restoration and Retouching for Digital Photographers Only.*

Introduction



hotography should be fun. But it isn't when you aren't satisfied with your photos or you can't even find them in the first place. I know how frustrating and stressful digital photography postproduction can be because I specialize in helping photographers manage today's complex workflow tools. I've sat beside countless photographers who are feeling the same stress and frustration you may feel with your workflow. I know the postproduction process can seem like an impossible maze. I also know that when someone shows you a simple path through a maze, the maze vanishes and only the path remains. My intention in writing *Zen of Postproduction* is to guide you through the photographic postproduction maze and reveal a path that works for you and your images.

About me

As someone who's made his living in the world of photography for many years, I've had the benefit of experiencing both the traditional and digital darkrooms. In the early days, I worked in large photo labs helping professional photographers get the most from their film negatives and slides. I left the lab industry just as the digital revolution was beginning to impact photography. I dedicated myself to learning new technologies that were turning the photo world upside down. After two years of intense self-learning and discovery, I began helping other photographers learn the skills they needed to create the kinds of images they wanted. That was 12 years ago.

Now, I'm a photographer who teaches other photographers to master today's postproduction tools. I teach classes and workshops and meet with photographers for private training on an almost daily basis. Portland, Oregon, has a rich photography culture, and I'm fortunate to be part of it. I get to meet all sorts of interesting and talented photographers — from full-time pros to retired folks who are finally finding time to indulge their artistic

passions. I've taught many of these photographers, and I've also learned from them. Although some call me a master, I know there is always more to learn about making great images.

What's in this book?

Because Lightroom is at the center of the modern photographer's workflow, much of this book is devoted to explaining how to use Lightroom to organize, edit, and output photos. Many photographers can accomplish everything they desire from their postproduction using only Lightroom. However, Lightroom does have limitations in certain situations, such as retouching, so it's necessary for some photographers to have a working knowledge of Photoshop. The central focus of *Zen of Postproduction* is on using Lightroom to create a simple workflow that every photographer can use. Additional chapters cover important Photoshop features that some photographers need to complete their postproduction workflow.

I begin by describing a few basic concepts in Chapter 1 and then jump straight into Lightroom in Chapter 2 by describing important Lightroom concepts, as well as preferences and general Tips about using the Lightroom workspace. In Chapter 3. I show you how to import new and existing photos guickly and efficiently. Chapters 4 and 5 detail methods for getting organized, including colored labels, collections, and the all-important keywords. Chapters 6 and 7 move into editing photos by describing basic and advanced methods for adjusting tone and color. Then Chapters 8 and 9 take you deeper into Lightroom's Develop module and its powerful tools and techniques. Chapter 10 begins the transition to the Photoshop section of the book by describing best practices for moving photos back and forth between Lightroom and Photoshop. Chapters 11 through 14 cover key Photoshop tools and techniques, such as masking and retouching, for readers who need special tools to complete their workflows. Chapter 15 surveys over

a dozen plugins (third-party programs) that can be used with Lightroom instead of Photoshop, or in addition to it. Printing and exporting files for a range of uses are covered in Chapter 16. The final chapter, Chapter 17, covers Lightroom's Book, Slideshow, and Web modules, as well as the Publish Services feature so that you'll be able to share your photos with just about anyone on the planet.

Tip

I recommend you use the latest version of Lightroom to get the most from this book. However, it isn't necessary to have the latest version of Photoshop to accomplish much of what I describe in the Photoshop chapters. Photoshop CS4 or later will work for most of what I describe.

Naturally, it isn't possible to describe every interesting aspect of the software programs described in this book. As a teacher, I know it's important to focus on the core elements necessary to creating a solid foundation. Once you have that, you have the confidence to shape the workflow that fits your needs. My intention when I set out to write this book was to give you everything you need to build that workflow and tell you about it in a way that's easy to understand.

Who should read this book?

Most of the students I interact with fall into one of two categories: photographers new to postproduction, and those who have a workflow but aren't sure if it's the most suitable for their particular needs. This book is designed to help both types of photographers. It details a postproduction workflow from start to finish. You don't need prior knowledge of the programs to benefit from reading and using it. If you are familiar with these programs, it could be a bonus and speed up the learning process. But I strongly recommend that you take the time to read each chapter. I know from my own learning process that it's often that little gem of information

you stumble across that opens doors conceptually as well as practically.

This book covers Lightroom, Photoshop, and a few plugins. But all these programs aren't necessary to build a successful postproduction workflow. If you are new to digital photography, I suggest you concentrate on the Lightroom chapters. When you're comfortable with Lightroom, begin to explore possibilities offered by other programs. You may find, as many photographers do, that Lightroom is all you need to create the type of images you like.

Getting the most from this book

This book starts at the beginning of the postproduction workflow and finishes at the end. I recommend you follow that path by working through the chapters sequentially to get the most from the material. Then use the book as a reference when you need to review a tool or technique.

When learning new software it helps to be familiar with your computer and its operating system. If you're just beginning to learn to use a computer, I strongly urge you to take a few classes on system basics for your platform (Mac or Windows) before focusing on learning specific software. This will help to drastically speed the learning process for other programs and ensure you get the most from a book like this one.

Learning digital postproduction is like learning to play an instrument: It's important to understand basic concepts and to practice, practice, practice. To get the most from this book, I suggest you follow along with your own images to practice what you read. When I describe a technique, experiment with your own images. Take as long as you need to explore and understand the concept. Then move to the next section. There is no hurry.

Conventions used in this book

I wrote this book using a Mac, so all screenshots are from the Mac versions of the software. If you're using a Windows PC, your screens will look a bit different, but the important elements will be present. Most of the menus are identical on both platforms, which really helps. When they differ significantly, I point it out. Note that I use the > character to indicate steps within a menu command, such as "choose File > Edit" to mean to choose Edit from the File menu.

Keyboard shortcuts are an important element for streamlining a workflow, but I don't stress them here because there are hundreds between Lightroom and Photoshop. With that said, I will point out some of the more useful shortcuts by listing them when I first introduce common tools and commands. The keyword will be listed in parentheses like this: "the Graduated Filter tool (shortcut: M)." When keyboard shortcuts are different for Mac and Windows, I list the Mac version first to be consistent with the screenshots. They are followed by the Windows version. For example, press Command+T or Ctrl+T to hide and reveal the toolbar.

Tip

If you want a complete listing of all Lightroom shortcuts, follow this Adobe link:

http://helpx.adobe.com/lightroom/help/keyboard-shortcuts.html.

Products mentioned in this book

I mention some useful products in this book, particularly in the chapter on plugins. I want you to know I am not sponsored by any of these companies. I have been an Adobe Certified Photoshop Expert for almost ten years, but I don't work for Adobe or receive any compensation from the company. (I don't even get free software!) The only reason I mention any product is because I use it or I know other photographers who do and I think knowing about it will make your postproduction experience better.

Getting into the flow

Photographic postproduction has the unfortunate name: workflow. It's not really that bad, but the "work" part makes it sound like a job. Even if it is your job, it's better to focus on the "flow" part of the word. When you gain proficiency with the tools and techniques I describe in this book, your editing sessions flow freely. You gain the confidence to try different tools and explore images in new ways.

You begin to develop what I call a "conscious workflow" where you are in the moment every step of the way, exploring the options for the image in front of you. Being in this flow is one of the greatest joys in my life. It's the thing that keeps me seated in front of my computer display for hours on end.

My hope is that *Zen of Postproduction* helps take the stress out of your workflow so you can feel what it's like to be in the flow and experience its joy while creating amazing images from your photos.

Please review this book

If you are like me, you depend on reader reviews when purchasing books. If you find this book useful, please take a few minutes to review it online so that others can be helped by it, too.

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.

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.

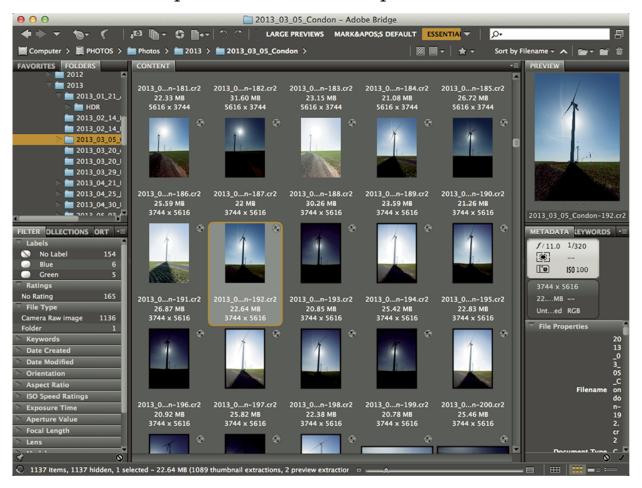


Figure 1-2
Adobe Bridge is a powerful file browser used with other
Adobe design products. Before digital, most photographers
took their film to a lab for processing and printing.

Adobe 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.

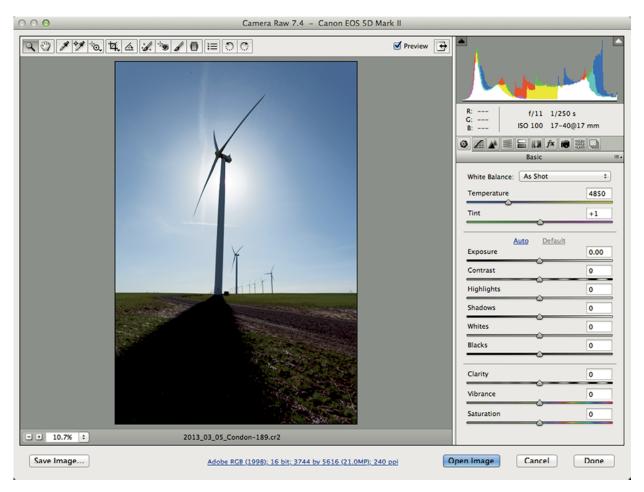


Figure 1-3 Adobe Camera Raw (ACR) is one of the most popular RAW processing programs.

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.

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 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.



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

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 <u>Chapter 14</u>.) 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.

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.



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

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 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.



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.

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.

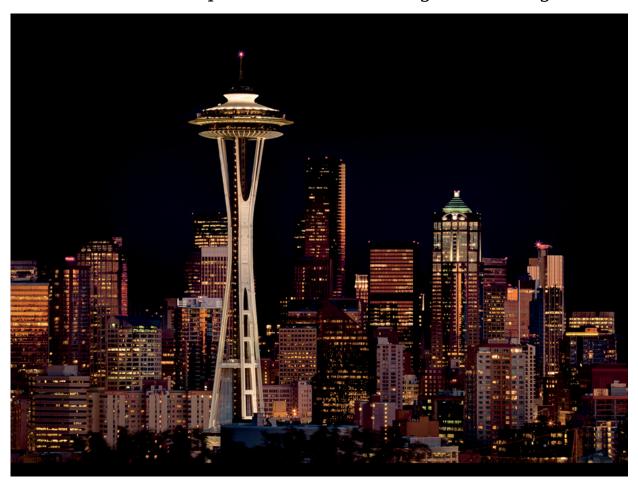


Figure 1-7
The sky looks better after darkening in Lightroom, but the light on the buildings doesn't look natural.

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.

Chapter 2

Finding Comfort with Lightroom



ightroom is the gateway to a stress-free workflow. It may not seem like it when you first open the program, but after you find a comfort level with Lightroom, you'll be amazed at what you can do with it. My intention with this book is to help you find that comfort level so you are free to focus on the creative process instead of feeling lost and not knowing what to do next.

Lightroom as Your Personal Photo Lab

Lightroom is designed to accomplish three primary functions: image organization, image processing, and image output. Figure 2-1 shows Lightroom's Module Picker, located at the upper-right of the screen, listing the seven modules. The modules are designed to help with specific tasks as images move through your workflow.

Although there are seven modules, they are used for three purposes: organization, developing, and output. The Library and Map modules are used to organize photos. Develop is used to perfect photos so they look great. The Book, Slideshow, Print, and Web modules are used to output photos in various forms so they can be shared with the world.

Library | Develop | Map | Book | Slideshow | Print | Web

Figure 2-1 Use Lightroom's Module Picker to select a module for organizing, editing, or outputting your photos.

Back before digital, I worked at a large photo lab that served demanding professional photographers. In the lab, we had a compartmentalized workflow. Employees in the Receiving Department greeted customers, entered their orders in our tracking system, and then sorted the orders for production. Orders then moved to the Production

Department, where trained technicians produced highquality processing and printing. After orders were complete, they moved to the Shipping Department for delivery via a shipping service or one of our drivers. This compartmentalized workflow enabled us to focus on each customer order systematically and efficiently.

Lightroom functions in much the same way. It's your personal photo lab. Instead of employees managing customer orders, you are managing your photos. When you import new photos to Lightroom, you organize and sort the images using the Library module. Photos that you want to improve are moved to the Develop module where you can professionally adjust and process photos individually or in groups. You then send the processed photos to the appropriate output module for delivery as slideshows, prints, or in web galleries. After you learn the process, you'll be as comfortable in Lightroom as I was in the lab.

Working with Catalogs

Only photos imported to Lightroom are visible in its catalog. This system is very efficient but can lead to big problems if you don't properly manage photos in the catalog. Understanding the catalog concept will ensure that Lightroom always knows where your photos are and spare you hours of frustration.

Finding your catalog

When you install Lightroom, it creates a catalog file. The catalog is stored by default in the Lightroom folder in the Pictures folder (on the Mac) or My Pictures folder (in Windows), as shown in Figure 2-2. In the figure, the catalog is Lightroom 5 Catalog.lrcat. The .lrcat suffix indicates the file is a Lightroom catalog. You can choose to store the catalog in a different location. I suggest leaving the catalog in its default location so that if you have a problem with Lightroom and need help, your catalog can easily be found.



Figure 2-2
By default, the Lightroom folder is stored in the Pictures folder (Mac) or My Pictures folder (Windows). The file with the .lrcat extension is the Lightroom catalog.

It's like the catalog at your public library

Most people are familiar with the library card catalog. In the old days, it sat near the side of the main room and was filled with cards for each book in the library. Today, most card catalogs are digital, which makes it easier to perform searches for books and other publications.

No matter if the card catalog in the public library is paper or digital, it exists for one purpose: to contain information about the library's books, such as publish date, author info, literary genre, and shelf location in the library. This is similar to the purpose of Lightroom's catalog. It has an entry for every photo you've imported from your photo library. These entries contain information about the photos, such as exposure information, keyword tags, colored labels and stars, and location on your hard drive.

Just as the books in the library are stored on real shelves, your photo files are stored in virtual shelves called *folders*, as shown in Figure 2-3. These folders are arranged on your hard drive, usually in other folders. The important analogy to understand is this: In the public library, books are stored on the shelf and information about them is stored in the