The Way of the Digital Photographer

Harold Davis

Walking the Photoshop post-production
path to more creative photography

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Dedication

For all those who seek to tread a path less traveled.

The beginner's mind is the mind of compassion.

—Shunryu Suzuki

Contents

Introduction

Your digital camera probably resembles a film camera in both appearance and basic functionality. Like a film camera, your digital camera has a lens with aperture and shutter controls that can be used to decide how much light penetrates into the body of the camera for each shot.

But that's where the similarities between film and digital cameras end. Despite the similarity in appearance of the hardware device used to make the exposures, digital photography is an entirely new medium compared to film photography.

Historically, chemical properties of film and developing were used to record light that entered the camera. Today with a digital camera, the light is captured as a digital signal by a sensor. Digital signal data recorded by the sensor can be processed by the computer in your camera. More powerfully, and here's where the fun really begins, image data saved by your camera can be processed on a standalone computer after you upload your files.

People don't fully understand this new digital medium that consists of the camera-computer partnership. They're still hooked on the fact that their handheld computer with a lens (a.k.a. a digital single-lens-reflex, or DSLR) looks like a good old-fashioned film camera—and if it looks like one, it must work like one. Not so. For those who get over this misunderstanding, the door is wide open for experimentation and new approaches.

Digital *is* different. Very different.

◀ *Looking at the bright red poppies from my garden, I envisioned an image that best showed off their bright color and translucency. To accomplish the first goal, I knew I needed to combine the red flowers with another color that would complement them. So I purchased some blue irises from a supermarket. To accomplish the second goal, I shot the flowers straight down on a light box, combining the different exposures as layers in Photoshop. The finished image is much along the lines of what I saw in my mind's eye when I pre-visualized it. In this case, the road from pre-visualization to final image took planning, work, and time—and I feel the results warrant the effort.*

50mm macro lens, eight exposures at shutter speeds ranging from 1/30 of a second to 4 seconds; each exposure at f/11 and ISO 100, tripod mounted; exposures combined in Photoshop.

One of the main goals of *The Way of the Digital Photographer* is to show you how to take advantage of this difference to enrich your own work.

With digital photography, it is my contention that your computer, and the image-processing software that runs on it, is an integral part of the image-creation process. It may be even more important as a creative tool than the camera itself.

You can easily see this difference when you use your iPhone camera, where more than half the fun is processing camera-phone images through a variety of image-manipulation apps.

To make the most of the creative potential of digital photography, you need to understand what can be done in post-processing and how post-production techniques should inform both your photographic choices and your overall workflow.

▶ *On my way to teach a workshop session on the eastern slope of the Sierra Nevada Mountains in California, the world seemed veiled in clouds. At one vista point, I decided to stop and just wait awhile so that I could get a sense of the weather and its movements. In the hopes that the vista might clear, I took out my gear and set it up.*

As I watched the scene, the distant basins and peaks of the Panamint Range were invisible, hidden in a dense swirl of fog and cloud.

But then, for a brief instant, the clouds lifted, and I was able to peer through my lens at range after range of valleys filled with low-hanging clouds, lit by the light of the sun. Thankfully, I was ready to go. A few seconds after I clicked the shutter, the view was gone.

In post-production, I worked to enhance the sense that sunlight was streaming through a clouded landscape that a moment before had been completely overcast.

300mm, 1/160 of a second at f/6.3 and ISO 320, handheld.
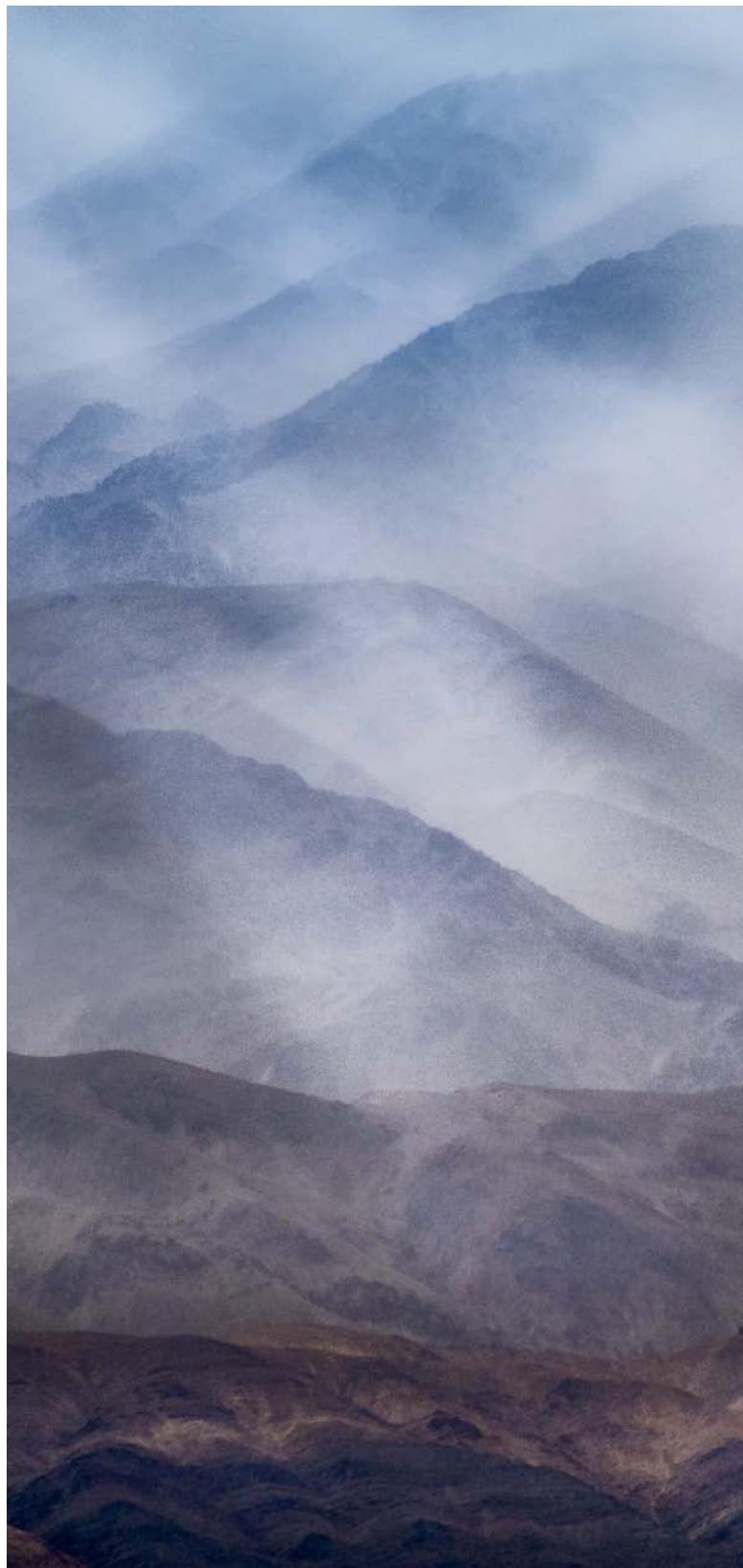
In *The Way of the Digital Photographer*, you'll discover how to effectively use several of the post-processing techniques that I use to create the final versions of my own imagery.

These techniques are presented as case studies in the context of actual examples, so you can understand what each step does. More important, I want you to gain insight into how the techniques and steps involved can inform your choices when you make a photo and in your post-production workflow. (For a discussion of workflow and to understand how best to adapt your workflow to the digital world, turn to page 107.)

With great power comes great responsibility. Today's digital photographers can control every pixel, every color, every shape, and every form in their processed imagery.

This means that it is no longer enough—if it ever was—to justify a creative photo because the scene in front of the camera was "like that." This excuse harks back to the idea that a film camera captures "reality"—and, indeed, that capturing reality should be a primary goal of photography.

◀ *Driving across the great Central Valley of California on my way to Yosemite, a fierce wind kicked up dust and limited visibility. As I drove farther, I noticed that the hazy light was selectively clearing, and sunshine was starting to shine through. I stopped my car at a long row of trees, pulled out my camera, and snapped this photo. Right after the shutter clicked, the wind started up and the dust closed in again.*

62mm, 1/160 of a second at f/11 and ISO 200, handheld.

Whether the scene is "like that" or not, the digital photographer is an omniscient ruler of each and every image and pixel—completely responsible for final appearances. By the way, this doesn't absolve the journalistic or documentary photographer from the responsibilities of honest presentation that journalism should imply.

Don't be fooled by the apparent resemblance of a digital photo to an old-fashioned photo, or to the verisimilitude of a digital photo to "real life."

Both resemblances can be used to good effect—for instance, to create a willing suspension of disbelief in the viewer.

The underlying structure of a digital photograph is different from that of an analog photo in many ways—and, as I've noted, completely susceptible to manipulation both at the pixel level and using the tools of a digital painter.

Digital photography and post-production techniques that are used to inform one another—how you take a photograph with an idea or pre-visualization in mind, knowing what you can do to it later in post-production—are the basis of this new digital medium. If you can see a photograph in your mind's eye *before* you take it and know *how* you can process it later to achieve

Image captions, sensor size, and focal lengths

I want you to know the backstory behind every image in this book. This information is an important part of *The Way of the Digital Photographer*, and is included in each image caption. Along with the stories about the photos, I've also noted the complete exposure data.

Where I used a prime lens—one with a fixed focal length—it is written as, for example, *105mm macro lens*. Otherwise, the designation in millimeters (mm) refers to the focal length I used in shooting the image with a zoom lens, for example, *18mm*.

Not all sensors are created equal, and in particular they vary in size. The smaller the sensor, the closer a given focal length lens brings you to your subject. For example, if a sensor has half the area of another sensor, then a given focal length lens will bring you twice as close when placed on a camera with the smaller sensor.

Since different cameras have different sized sensors, it is not possible to have a uniform vocabulary of lens focal lengths. So people compare focal lengths to their 35mm film equivalent by adjusting for the sensor size.

To make the comparison with 35mm film focal lengths, you need to know the ratio of your sensor to a frame of 35mm film, which is called the *focal-length equivalency*. Unless otherwise noted, the photos in this book were created using Nikon DSLRs with a 1.5 times 35mm focal-length equivalency. To find out how the focal lengths I used compare with 35mm focal lengths, simply multiply my focal lengths by 1.5.

If your sensor has a different size than mine, to compare lens focal lengths with the shots in this book, you need to know the focal-length equivalency factor of your sensor. Check your camera manual for this information.

◄ *I composed this photo to show a framed sequence of diminishing doorways, each door smaller than the previous one. Maximum depth-of-field, achieved by stopping down the lens to its smallest possible aperture (f/22), ensured that all the doors were in focus. I wanted the image to show an apparently infinite progression, so I composited larger and smaller versions of the original photo to create an extension of the line of the doors.*

95mm, 10 seconds at f/22 and ISO 100, tripod mounted; photo composited two times with itself in Photoshop.

your vision, then *nothing* can hold your imagery back. Truly, the sky's the limit!

Technique without heart is banal and useless. I've found in the workshops I give that many people come to digital photography precisely because they enjoy—and are good at—working with technology. Indeed, perhaps these folks work in technology-related industries.

But even if you are a technocrat it is important not to lose the creative aspects of digital photography. Often the people who start with digital photography because they are comfortable with the gear find some resistance to fully engaging their creative powers. They may be more comfortable with measuring pixels and navigating software than with conveying emotion.

If this describes you, be of good cheer. Provided that you approach image making in the spirit that anything is possible, you may be amazed by what you can achieve.

Along with the post-production case studies in *The Way of the Digital Photographer*, you will find thoughts and exercises, presented as *Meditations*. These Meditations will help you with the conceptual and emotional side of digital photography and also guide you in pre-visualizing your photographs with the idea of post-production in mind.

As you walk down the path of the digital photographer, you will find that photography is about your creative vision and your notions about art. Digital photography is also a way to show others your very personal view of the world. By combining your pre-visualization with your photography and appropriate post-production techniques, you can fully render *anything* you can imagine.

Harold Davis

Berkeley, California

Meditations

An important aspect of *The Way of the Digital of Photographer* is the Meditations. These are sporadic exercises intended to help you understand the concepts I am explaining. The idea is for you to frame the tools and techniques in your own terms so you can draw your own road map for becoming a more powerful and creative digital photographer.

▶ *While I enjoy photographing nature a great deal, I also have fun in the studio shooting models. In fact, nothing makes a session of model photography work better than when everyone is having fun—both model and photographer. That's why Kelly, the model shown in this photograph, is one of my favorites. She's got a wonderful sense of mischief and always has a great time in front of the camera.*

I shot a series of photos of Kelly on the satin covered chaise longue using very controlled studio lighting. I wanted to be very careful about shadows and how her face was lit.

Back in my studio, I looked over the photo shoot and decided I wanted to do something in post-processing that would create a photo reminiscent of 19th-century model painting. Looking through my photo files, I found a sunset that I added to the background. Then, I gently brushed in a subtle canvas-like texture.

The addition of these overlays helps transform the image of Kelly away from a standard studio pose of a glamour model and closer to an image that seems more artistic and painterly.

Model: 36mm, 1/160 of a second at f/5.6 and ISO 200, handheld; Sunset: 200mm, 1/2500 of a second at f/20 and ISO 200, handheld; photos combined in Photoshop; overlay texture applied in Photoshop (to find out more about textures, turn to page 175).

Photoshop prejudices

Adobe Photoshop is a monster. Okay, from my viewpoint it is a friendly monster that has been very good to me. I don't want you to be scared of the monster—you can think of Photoshop maybe as a kind of artistic "cookie monster"—and I want you to understand some things about the Photoshop techniques that are shown in this book. So here's what you need to know about Photoshop and the way I teach before getting started with *The Way of the Digital Photographer*:

1. I am not interested in the latest and greatest features of Photoshop. There are plenty of other writers out there who can tell you about Photoshop's bells and whistles—you won't find that here.

2. Every post-processing example in this book is based upon the single concept that underlies Photoshop. That concept is *layers*, explained starting on page 33. If you are not going to use layers, then you may not need Photoshop at all. A program such as Adobe Lightroom is probably sufficient for your needs because the underlying capability that Photoshop possesses and Lightroom lacks is the ability to handle layers. On the other hand, if you don't learn to work with layers, you are missing much of the point of the digital post-processing revolution.

3. Besides layers, *The Way of the Digital Photographer* will show you how to work with two other Photoshop primitives: layer masks and blending modes—and that's about it for Photoshop techniques. This book isn't about giving encyclopedic coverage of the Photoshop working environment, menus, panels, or even the Photoshop adjustments related to photography. There are plenty of books out there that already do that, so why reinvent the wheel? I'd rather show you something that you *won't* find anywhere else, and that *will* revolutionize your image making.

4. I can't emphasize strongly enough that you don't need the latest and greatest version of Photoshop to accomplish the techniques shown in this book. It all comes down to the ability to work with layers, and layers have been a feature since Photoshop 3.0. The appearance and location of controls will vary slightly between versions of Photoshop, but the functionality is essentially the same. Note also that most of the ideas shown in this book can be implemented in a number of layer-capable image manipulation programs that are much less expensive than Photoshop (or even free). These options include Photoshop Elements (which is much less costly than Photoshop itself, and will do everything shown in this book except LAB color manipulation), Corel Photo-Paint, and GIMP (Gnu Image Manipulation Program), which is free to download.

5. Speaking of ideas, I want you to use *The Way of the Digital Photographer* as primarily an idea book. While I do show you the specific steps I used to accomplish particular results in post-processing, this is not a cookbook, and there are often a number of alternative ways to accomplish the same results. The key thing is to understand the concepts and what you can do after you've taken the photo—so that these concepts can influence your photography and how you go about making creative images in the first place.

Photoshop CC

Photoshop's most recent version incorporates the ideas of cloud computing, hence the new name "Photoshop CC" (Creative Cloud).

Photoshop CC has many new and interesting features that can help the digital photographer on their creative path. However, as I stated in point one above, I'm not interested in the latest and greatest bells and whistles. My goal is to help

you create great images no matter what version of Photoshop you are using.

You *don't* need Photoshop CC in order to work with the ideas and creative techniques found in *The Way of the Digital Photographer*.

The default Photoshop CC interface looks very much like Lightroom, with its dark gray and black features as shown below.

This is the dark default color scheme for Photoshop CC.

I prefer to work with a lighter color scheme that looks very much like previous versions of Photoshop.
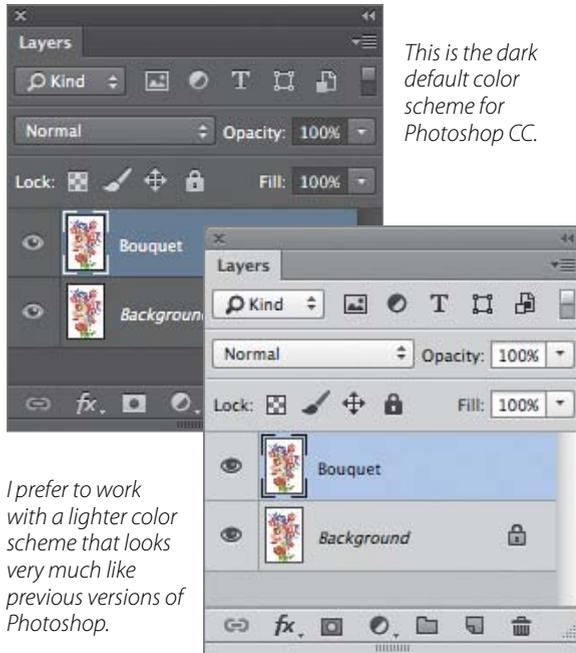
When I work in Photoshop, I prefer to work with a lighter color scheme, such as the light gray one shown above.

First off, I think it is easier to see and I find it less distracting. Also, previous versions of Photoshop use essentially these colors. So the lighter scheme shown throughout this book will probably look pretty familiar.

If you would like to change your color scheme to something lighter, choose Photoshop ► Preferences ► Interface (Mac) or File ► Preferences ► Interface (Windows).

On the Interface panel of the Preferences dialog in the Appearance area, use the drop-down list boxes to change the program's colors (below). Once you find a color scheme that works for you, click OK to save your preferences.

Make sure to open images as windows, not tabs

Recent releases of Photoshop have a default setting that makes the creative techniques found here—such as multi-RAW processing and hand-HDR—extremely and unnecessarily difficult. This feature opens images in Photoshop as tabs, not as separate floating windows. Make sure you set your images to open as windows not tabs.

Choose Photoshop ► Preferences ► Interface (Mac) or File ► Preferences ► Interface (Windows) to open the Interface panel of the Preferences dialog. In the Options area, uncheck Open Documents as Tabs. Click OK to save your setting.

Select a color scheme using the Standard Screen Mode drop-down list box.

Make sure that Open Documents as Tabs is unchecked.
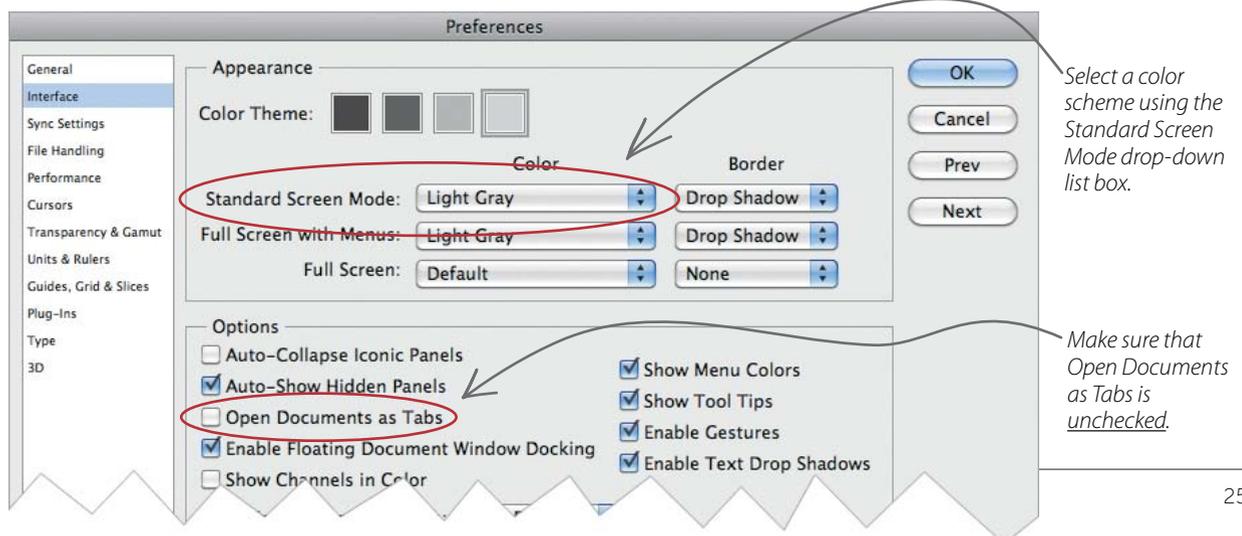
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