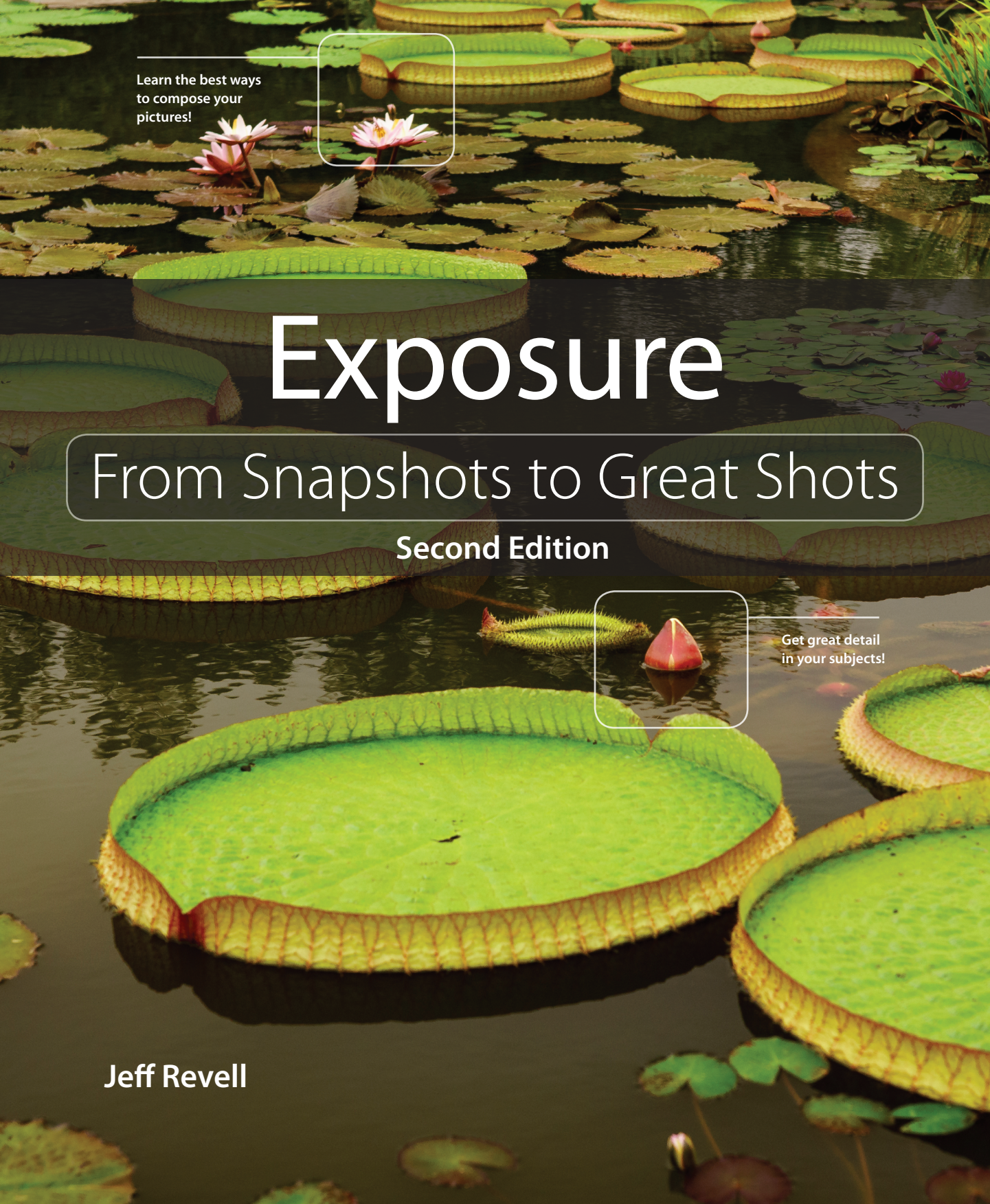
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Exposure
From Snapshots to Great Shots
Second Edition
Get great detail in your subjects!
Jeff Revell

Exposure: From Snapshots to Great Shots

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Exposure: From Snapshots to Great Shots

Jeff Revell

Peachpit Press

Exposure: From Snapshots to Great Shots, Second Edition
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Dedication

For Mom and Dad—thanks for everything!

Acknowledgments

Most of the books that I write tend to have a shelf life based on the camera that it is based on. The reality is that cameras don't last forever and there will always be a "next big thing" right around the corner. But that's the beauty of this book. Cameras come and go but the principles of photography have remained unchanged for almost 200 years, which means that this book will continue to be relevant for the foreseeable future. That being said, even the sturdiest of houses needs a fresh coat of paint every now and then, which is why I appreciate the good folks at Peachpit allowing me to give it a little bit of a refresh. A big thank you to Peachpit and my editor Ted for seeing the value of this book and allowing me the opportunity to spruce it up and update it to ensure that it remains a valuable resource for years to come.

Contents

Introduction

I have written quite a few camera-specific books in the *From Snapshot to Great Shots* series. Unfortunately, I can't write one for every camera out there, but what I can and did do is take all of the great information from those other books and place it into this book. If you already own one of my camera-specific books, you might want to take a pass on this one since it will seem very familiar. If, however, you don't have one of the earlier books, then this one is for you.

I have tried my best to give everyone reading this book a good foundation of photographic knowledge and then build on it in order to create better photographs. If you still aren't sure if this book is for you, read the Q&A on the following pages.

Q: Does the material in this book apply to any camera?

A: You will probably take away some good stuff no matter what camera you have, but to get the most benefit you need something that will let you take control. The automatic modes are okay but most of the material in this book is geared towards taking control over specific camera functions such as shutter speed and ISO. To really get the most out of the book you will need something like a digital SLR or, at the very least, an advanced point-and-shoot.

Q: Is every camera feature going to be covered?

A: Nope, just the ones I felt you need to know about in order to start taking great photos. It would be pretty difficult for me to cover every possible feature in every camera (actually it would be nearly impossible). What I did want to cover was how to harness general camera functions and photographic principles to truly benefit your photography.

There may be times in the book where I mention a camera function that might not have the same name for your specific camera, like the Shutter Priority mode. If you have a Canon, you have the same shooting mode; it's just referred to as Time Value (Tv). The function, however, is the same for all cameras. I tried to be as generic as possible but you may still have to do a little investigating to associate your camera's terminology with that used in the book.

Q: So if I already own a camera manual, why do I need this book?

A: The manual does a pretty good job of telling you how to use a feature or turn it on in the menus, but it doesn't necessarily tell you why and when you should use it. If you really want to improve your photography, you need to know the whys and whens to put all of those great camera features to use at the right time. To that extent, the manual just isn't going to cut it. It is, however, a great resource on the camera's specific features. You should use it like a companion to this book.

Q: What can I expect to learn from this book?

A: Hopefully, you will learn how to take great photographs. My goal, and the reason the book is laid out the way it is, is to help you understand the basics of photography and all the elements that you need to really start creating great images. From there, you can begin to utilize your knowledge of exposure as it relates to different situations and scenarios. By using the features of your camera and this book, you will learn about aperture, shutter speed, ISO, lens selection, depth of field, and many other photographic concepts. You will also find plenty of large full-page photos that include captions, shooting data, and callouts so you can see how all of the photography fundamentals come together to make great images. All the while, you will be learning how your camera works and how to apply its functions and features to your photography.

Q: What are the assignments all about?

A: At the end of most of the chapters, you will find shooting assignments, where I give you some suggestions on how to apply the lessons of the chapter to help reinforce everything you just learned. Let's face it—using the camera is much more fun than reading about it, so the assignments are a way of taking a little break after each chapter and having some fun.

Q: Should I read the book straight through or can I skip around from chapter to chapter?

A: Here's the easy answer: yes and no. No, because the first four chapters give you the basic foundation that you need to know for creating proper exposures. These are the building blocks for making photographs with your camera. After that, yes, you can move around the book as you see fit because the later chapters are written to stand on their own as guides to specific types of photography or shooting situations. So you can bounce from portraits to shooting landscapes and then maybe to a little action photography. It's all about your needs and how you want to address them. Or, you can read it straight through. The choice is up to you.

Q: Is that it?

A: One last thought before you dive into the first chapter. My goal in writing this book has been to give you a resource that you can turn to for creating great photographs with your digital SLR. Take some time to learn the basics and then put them to use. Photography, like most things, takes time to master and requires practice. I have been a photographer for more than 25 years and I'm still learning. Always remember, it's not the camera but the person using it who makes beautiful photographs. Have fun, make mistakes, and then learn from them. In no time, I'm sure you will transition from a person who takes snapshots to a photographer who makes great shots.

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ISO 200 • 1/125 sec. • f/5.6 • 50mm lens

4

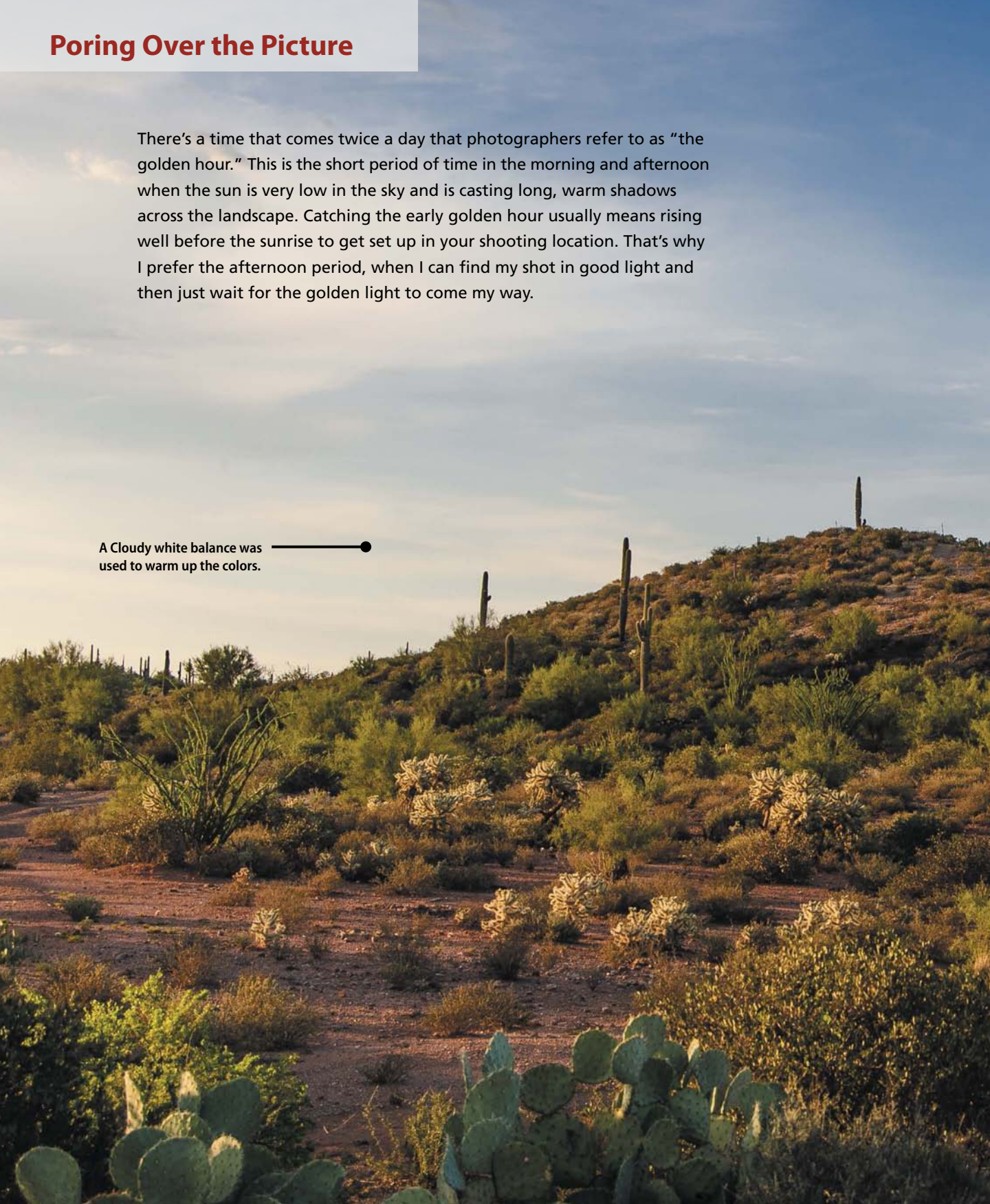
See the Light

Understanding the Properties of Light and How to Use It

Understanding light is one of the most important skills in photography, but it's also one of the most overlooked subjects. After all, light touches on every aspect of exposure, from ISO to lens aperture to shutter speed to white balance. It doesn't matter if you are working with natural or artificial light; in order to get great images, you need to have a basic understanding of not only the characteristics of light, but also how to take advantage of them.

Poring Over the Picture

There's a time that comes twice a day that photographers refer to as "the golden hour." This is the short period of time in the morning and afternoon when the sun is very low in the sky and is casting long, warm shadows across the landscape. Catching the early golden hour usually means rising well before the sunrise to get set up in your shooting location. That's why I prefer the afternoon period, when I can find my shot in good light and then just wait for the golden light to come my way.



A Cloudy white balance was used to warm up the colors.


The bright afternoon sun allowed me to use a low ISO for maximum quality.
I used the large cactus as the anchor point for the foreground.
I achieved depth in the image by composing it such that I have elements in the foreground, middle ground, and background of the scene.
ISO 100 • 1/160 sec. • f/6.3 • 38mm lens

Poring Over the Picture

Although I don't like shooting in the midday sun, there are times when you don't have much choice. Sometimes it can make for some very harsh lighting that is not flattering to your subject, but I found it to actually be helpful when photographing this statue at the Holocaust Memorial in Miami. The harsh light helps to add some contrast and definition to the hand and figures on the arm.

The clouds and building add depth to the image.


The bright sun made it easy to use a very low ISO setting.
I used a classic rule-of-thirds composition to position the hand in relation to the background elements.
A Daylight white balance rendered accurate colors.
ISO 50 • 1/320 sec. • f/8 • 110mm lens

Types of Light

Before we start trying to use the light, we should take a look at the various types of light that you will deal with when making images. Knowing the type of light will help you control your white balance, but it will also give you an indication of the quality of the light.

Daylight

Because the sun passes through the Earth's atmosphere, you will find that daylight can be one of the most varied light sources you ever encounter. It can range in color temperature and intensity based on several factors. First off, there is the time of day that you are taking the photos; the color of light is very different at sunrise than it is at midday. There is also a difference in the intensity of the light. Midday sun can be very harsh, creating hard-edged shadows (**Figure** 4.1). The shadows that occur after sunrise and before sunset are usually longer and add more definition, especially to a landscape (**Figure 4.2**).

Figure 4.1
The midday sun can be some of the harshest and most direct light to shoot in, but sometimes it is your only option.
ISO 400 • 1/800 sec. • f/14 • 24mm lens

Figure 4.2
Sunrise, with the light coming in low from the horizon, provides some beautiful light across the landscape.
ISO 100 • 1/250 sec. • f/5.3 • 70mm lens

This can also lead to extreme exposure variances between light and dark areas. This is known as *contrast*. Having a lot of contrast means that you will often have to compromise your exposure in some way or another. If you shoot just before sunrise or just after sunset, you can capture beautiful light without all the really dark shadows (**Figure 4.3**).

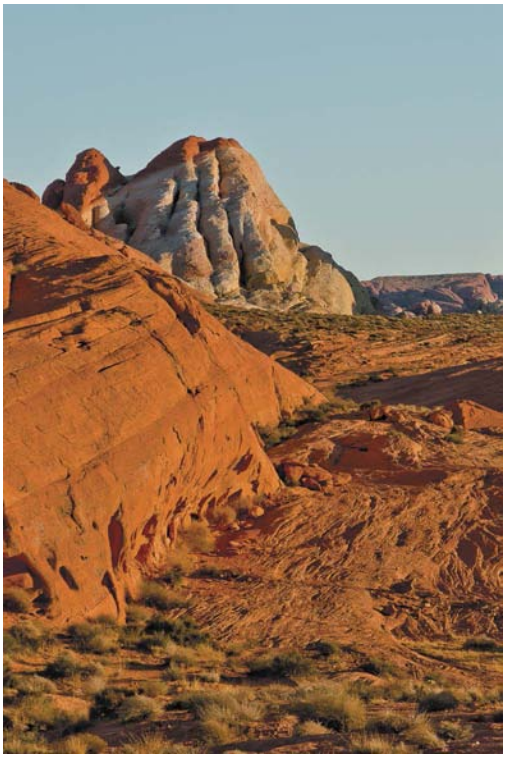


Figure 4.3
The long shadows and warm light of sunset help add depth to the scene.
ISO 400 • 1/160 sec. • f/8 • 70mm lens

One of my favorite times to shoot outdoors is during overcast conditions. Actually, let me clarify. If I am shooting landscape images that will include the sky, overcast is not my favorite, but if I'm shooting a portrait or anything else during the day, it will most likely look better under a little cloud cover. This is because the cloud layer is acting like a large diffuser, which spreads out the sunlight and produces much softer shadows and less contrast in the image (**Figure 4.4**).

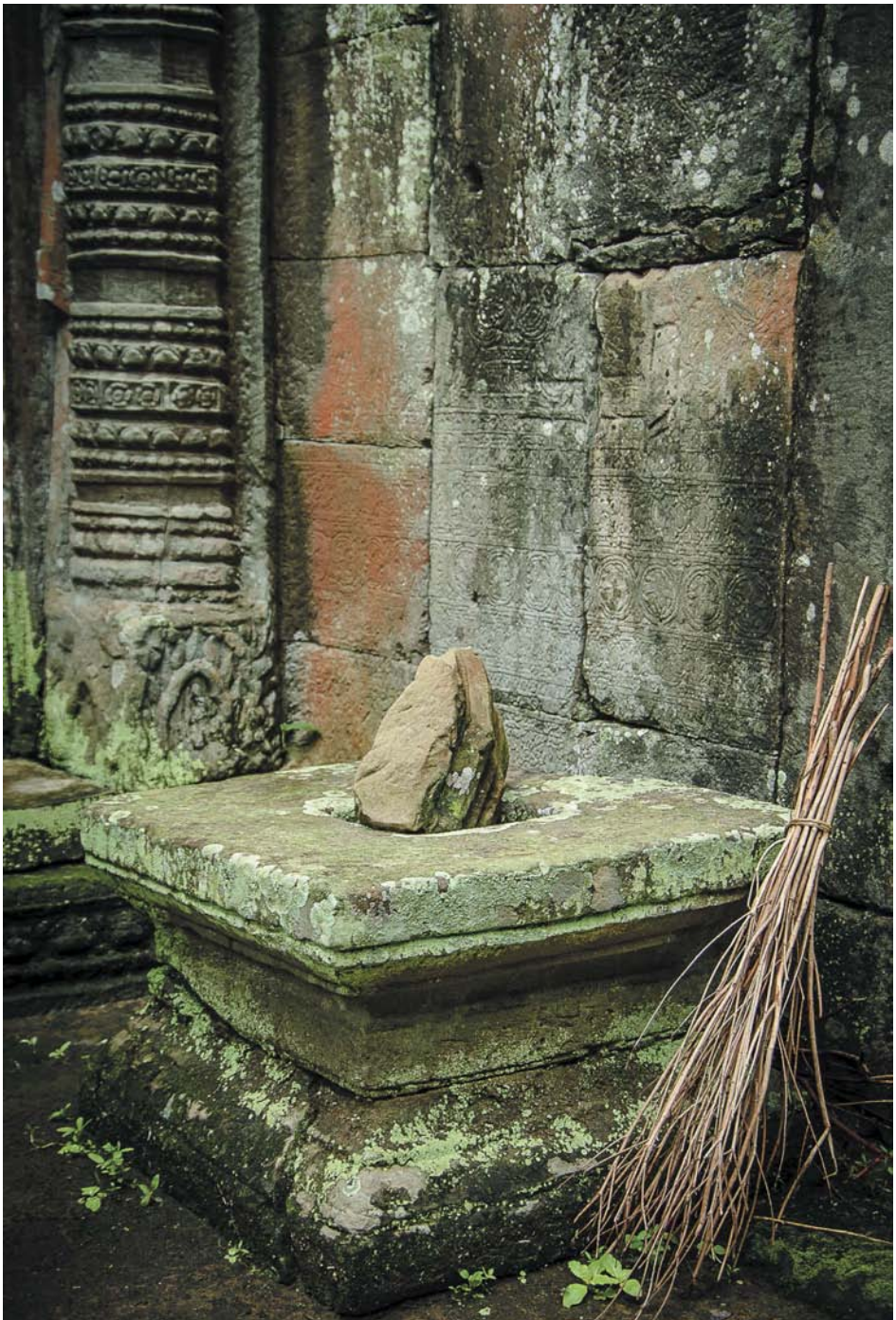


Figure 4.4
An overcast sky will help to soften shadows.

ISO 200 • 1/200 sec. • f/5 • 32mm lens

Fluorescent

With more and more people turning from wasteful incandescent light bulbs to the more energy-efficient fluorescent option, it is more likely than not that you will be shooting under this light source. It used to be that fluorescent bulbs would give off a cool, greenish color cast but now you can find fluorescent bulbs that are balanced for daylight for the home or even for use in a photo studio. As a light source in general, fluorescent bulbs are not that bad to shoot with. They offer a nice bright light that is fairly diffuse, which means lower contrast (**Figure 4.5**). The one thing you will want to do when using them is to either use the Fluorescent white balance setting on your camera or create a custom white balance setting. Creating a custom white balance is probably the best approach, because the color temperature of the bulb can vary greatly depending on whether or not it is daylight-balanced.

Figure 4.5
With the proper white balance, you can get some nice, even lighting from a fluorescent light source.
ISO 5000 • 1/400 sec. • f/5.6 • 85mm lens

Shooting with cool lights

There was a time when you would avoid fluorescent lights when photographing people. They generally had a very greenish hue and tended to make people look pale and kind of sickly. But those days are long gone, thanks to cool fluorescent lights. They are called "cool" because they don't throw off the huge amounts of heat that traditional tungsten and quartz lights do. These new cool lights usually come in compact bulb configurations, and there is an abundance of available lighting fixtures that let you use multiple lights in a softbox to create beautiful soft light (**Figure 4.6**).

The great thing about shooting portraits with these lights is that they are WYSIWYG, or What You See Is What You Get. Unlike a flash, these lights are constantly on and instantly show you how your lights are interacting with the subject so you don't have to use a modeling light or take photos and reconfigure, as you do with a hotshoe flash/softbox configuration. The other cool thing about these lights is the color temperature. They are usually cooler in color temperature than traditional fluorescent lights and are usually balanced for a daylight white balance.

Figure 4.6
Using a cool fluorescent softbox lets you put some soft, beautiful light on your subject.

ISO 800 • 1/60 sec. • f/6.3 • 230mm lens

Incandescent

When shooting under incandescent lighting, you will find that the light has an orange-yellow color cast. It can also be a much harsher light source since most of the light is emanating from a small point (the bulb). Of course, shooting with the correct white balance is the easiest way to overcome the color issues. Just be sure to preview your results (**Figure 4.7**).

Figure 4.7 **There are all sorts of artificial lights on the Vegas strip. This scene was captured with a Tungsten white balance setting.**

ISO 1600 • 1/60 sec. • f/5 • 18mm lens

Flash

We will cover flash more extensively in Chapter 8, but I think it's important to mention here. Flash can be a photographer's best friend because it is a reliable, predictable, controllable light source that is very close in color temperature to daylight. This means that it can be used to fill in shadows while shooting in daylight conditions without worrying about mixing different color temperatures. The same can't be said for most of the other artificial light sources (with the exception of daylight-balanced fluorescents).

Flash can also be made to take on different characteristics, which can make the quality of light either very harsh and contrasty, or very soft and flat. This can be done through the use of diffusion materials or other methods to create a larger apparent light source (such as shooting your flash through a diffuser or a softbox). You can also color the light coming from a flash using gels, which allows you to match another light source's color or create a special effect (**Figure 4.8**).

Figure 4.8 **A flash fired through a softbox close to the subject provides the main light for this image. Another flash is used to provide "fill light," which lightens the shadows on the left side of his face. Finally, a small flash with a blue gel is used to illuminate the background.**

ISO 200 • 1/250 sec. • f/4.5 • 85mm lens

Quality of Light

When speaking about the quality of any particular light, we usually talk in terms of "hard light"—which usually is coming from a small, single spot or source—and "soft light," which is more diffuse and seems to come from multiple directions.

Hard Light

Examples of hard light might be the sun, which is a small light source that creates hard light and shadows, or a flash that is pointed directly at your subject without passing through any diffusion material. Hard light is usually very directional and, due to this fact, the shadows that are created by it are very hard-edged. Another characteristic of hard light is that there are very few midtone values separating the highlights from the shadows (**Figure 4.9**).

Figure 4.9
Midday sun is a perfect example of hard, directional light that creates dark shadows and lots of contrast.
ISO 50 • 1/320 sec. • f/8 • 110mm lens

Soft Light

An overcast day is a perfect example of soft light, where the sun has to penetrate through a cloud layer. The cloud is spreading the light, making it come from multiple angles instead of a small, single point. This is also called diffusion; the light spreads out and creates much softer shadows. (It may actually appear to eliminate shadows altogether.) It also helps to create much more defined midtones because there is a smoother transition from the bright to dark areas (**Figure 4.10**).

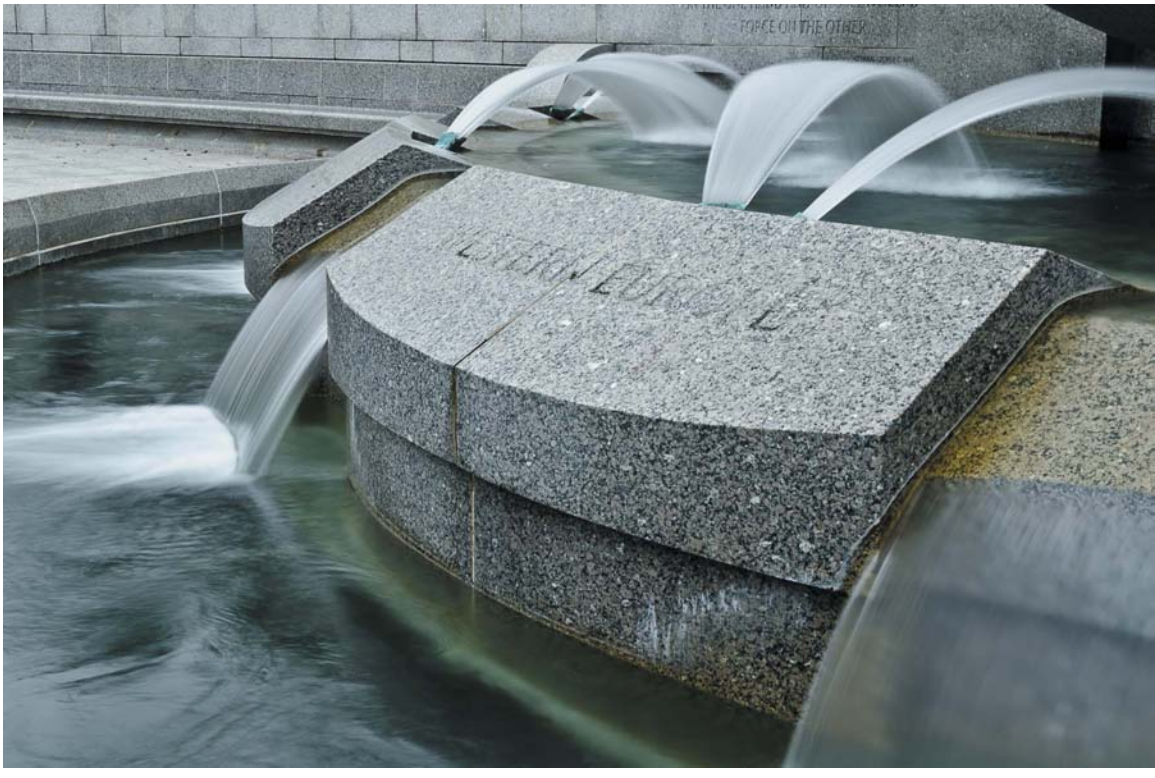


Figure 4.10
An overcast sky creates a soft, multi-directional light that creates a lot of smooth tones and no hard-edged shadows.

ISO 100 • 1 sec. • f/25 • 35mm lens

When it comes to light, size does matter

The smaller a light source is in comparison to the subject, the harder the light will be. That means that a small flash head or even the sun will create dark shadows and lots of contrast. If you want to soften things up a bit, try making the light source larger. You can accomplish this by diffusing the light by passing it through a translucent material, or perhaps by using an umbrella. If you are using a flash on your camera, try bouncing it off a wall or ceiling. Before the light reaches your subject, it will hit that surface and spread out, making it bigger and therefore softer.

For outside solutions, try working in open shade or even overcast conditions. Shade and clouds disperse direct sunlight, making the light fall on your subject from all over, not just from one direction. This is the same as having a larger light source.

Direction of Light

Light not only has the characteristics of being harder or softer, diffuse or sharp, but it also has a directional quality that you can use to enhance or your subject and, therefore, your images. There are typically three directions that we look at when discussing the direction of light.

Front Lighting

Front lighting typically comes from a source that is behind the photographer and shining directly onto the subject. One of the characteristics of this type of lighting is that it tends to flatten out your subject. It's kind of like putting your subject on a copy machine where everything is evenly illuminated. It does, however, offer a very well lit and defined subject (**Figure 4.11**).

Figure 4.11
When the light is coming from directly in front of the subject, there is less shadow and a flattening of details.
ISO 100 • 1/1250 sec. • f/4 • 200mm lens

Side Lighting

If you really want to define the three-dimensional characteristics of your subject, the best possible light to use as a main light is side lighting. Side lighting will enhance any contour detail by creating shadows and highlights, giving a three-dimensional quality to the scene. This is why a lot of portrait lighting or landscape lighting is done with the light coming from a side direction (**Figure 4.12**).

Figure 4.12
The late afternoon sun was crossing in from the left of the frame, creating shadows and highlights that define the contours of the landscape and the cactus.

ISO 100 • 1/160 sec. • f/6.3 • 38mm lens

Back Lighting

The best light to use for separating your subject from a background is, of course, back light. Unfortunately, back lighting provides little illumination on the front of your subject—which is what your camera is pointing at—but it does an excellent job of separating the subject from the background and giving a three-dimensional feeling to the shot.

Usually, a back lighting technique is used to enhance a silhouette or to provide a little separation in combination with other light sources. Typically, I'll use this kind of light if I'm shooting a person in bright daylight. I might actually put the sun behind them, then use a flash to fill in the shadows on the subject's face. That way, I have my separation using the back light from the sun, and I have an excellent light coming from my camera angle to define the face. Best of all, I don't have bright sunlight shining into my subject's eyes and making him squint. I get the best of all the characteristics of direction and quality of light (**Figure 4.13**).

Figure 4.13 **By positioning myself so that the bright sun is behind my subjects, I can get a good rim of light to separate them from the background while using a flash to add a little light back into their faces.**

ISO 200 • 1/250 sec. • f/8 • 48mm lens

Chapter 4 Assignments

Now that you know what light looks like in photographic terms, it's time to start looking for those different qualities of light and discovering how they apply to your photography.

The color of light

Set you camera's white balance to Daylight and try shooting in as many different light sources as possible. Compare the results so that you get a good idea of the qualities of each type of light source.

Hard vs. soft

Find a willing volunteer, have them stand out in the direct sun, and take their picture. Then look for a shady spot and take another. Compare the quality of the light from both photos.

Directional light

As long as you have a volunteer hanging around, have them stand facing the sun and take a shot. Next, have them turn so that the light is coming from the side and take another shot. Finally, have them turn so the sun is at their back. Of course, you will need to rotate your position as well to take advantage of the different directional light.

Share your results with the book's Flickr group!
Join the group here: flickr.com/groups/exposure_fromsnapshotstogreatshots

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