



# DIRECTION & QUALITY OF LIGHT

NEIL VAN NIEKERK

YOUR KEY TO  
BETTER PORTRAIT  
PHOTOGRAPHY  
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Author photo by Blonnie Brooks ([www.blonnie.com](http://www.blonnie.com)).

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To see more of Neil van Niekerk's work, visit [www.neilvn.com/tangents](http://www.neilvn.com/tangents), [www.oneperfectmoment.com](http://www.oneperfectmoment.com), or [www.facebook.com/neilvn.photography](http://www.facebook.com/neilvn.photography).

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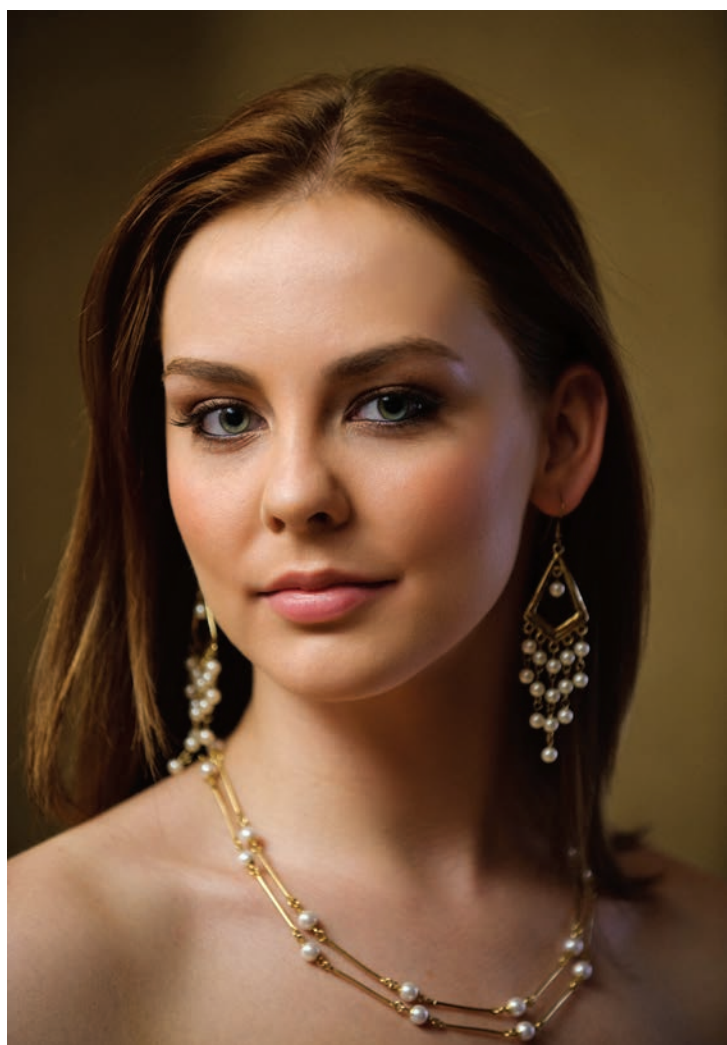
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# FOREWORD

BY TODD LAFFLER

**T**he latest and greatest camera bodies, the highest ISOs, the widest apertures, the most megapixels—none of these things amount to a hill of beans if you are not harnessing the single most important aspect of photography: light. After all, the word “photography” itself literally means “writing with light.” Whether it’s existing light, light you generate yourself, or a combination of the two, if you don’t understand how to effectively use light to best suit your subject or creative goal, you are merely shooting in the dark!

THE MOST IMPORTANT PIECE OF  
GEAR ALREADY RESIDES INSIDE  
YOUR HEAD; IT’S YOUR BRAIN.

Actually, shooting in the dark is not a bad place to start. I remember taking a drawing class in art school where we laid down a dark layer of charcoal onto a white piece of paper until it was completely covered. Then we used an eraser to “draw” with, pulling out the lighter areas of the subject. Sometimes I try to approach photography in this same way; I start with black, or as little light as possible, then add only the direction and quality of light I need to achieve

my desired effect. Ironically, a successful result is sometimes dependent on what you *don’t* light.

What you are holding in your hands right now is, in my opinion, much more valuable than any piece of hardware you could ever buy. Mindlessly throwing money into purchasing gear in the hopes that the next “big thing” will make you a better photographer is simply frivolous. The most important piece of gear already resides inside your head; it’s your brain. Arming your mind with practical information about both the direction and quality of light will, I believe, advance your photography tenfold.

I applaud you for tackling this often perplexing yet always crucial element of photography. You will be rewarded with a new sense of confidence and empowerment once you are able to understand light on a deeper level. Don’t be afraid of the light. Walk toward it, shape it, embrace it, and make it do your bidding—not the other way around!



# INTRODUCTION

I was asked the following question in an interview: “Is there one simple thing you can tell us that would improve our flash photography instantly if we were to do it?” My answer came from a simple realization that took me years to really grasp: it is all about the direction and the quality of the light. Whether you use natural light, on-camera flash, off-camera flash, multiple-light setups, or video light, it all comes down to exactly that: the direction and the quality of the light. Once you recognize this aspect of photography and lighting, then the door is wide open for you to be able to comfortably use any light source.

LIGHTING IN PHOTOGRAPHY  
IS ALL ABOUT THE DIRECTION  
AND THE QUALITY OF THE LIGHT.

This book was originally intended to be about multiple off-camera flash. It just seemed like the natural progression from my previous two books, which first covered on-camera flash, then off-camera flash. However, when I started collecting material, I paused on a question: why do we need multiple off-camera flashguns? It’s not just to show off how cool we are at juggling the light from multiple sources (although it is

quite something to set up a bunch of lights). The real reason we use multiple lights is to solve some kind of lighting problem that we couldn’t fix with only a single light or simply by moving the subject into different light.

The extension of that idea led to the theme of this book: problem-solving when we have a difficult lighting scenario, or improving a scenario that is perhaps a touch too bland. However, the problem-solving technique doesn’t necessarily rely on multiple flashguns. The technique may be as simple as refining the subject’s pose or guiding the subject toward more flattering light. Alternately, we could add on-camera flash, or use off-camera flash, or progress to using multiple light sources.

This brings us right back to my opening comment. Lighting in photography is all about the direction and the quality of the light.

As creative and inquisitive photographers, we should not stop at just one specific approach. It’s more fun and more of a challenge to try various ways of using light. This journey we are on as photographers becomes an engaging adventure if we’re constantly learning and mastering new techniques.

So here we are. Let’s have fun!

## ABOUT THIS BOOK

The overall theme of this book is problem-solving and the thought process behind improving our results in various situations. As such, the techniques are presented in a straight-forward manner. The approach here is not to dazzle you with a mastery of complicated lighting setups, but rather to help you develop a skill-set that is usable in many different scenarios. We adapt.

**Equipment.** Although I do at times briefly mention the equipment that I used for a particular shot, this is not a book that relies on specific equipment. Generally, the equipment is of lesser concern than the techniques. However, using high-ISO capable cameras and f/2.8 zooms will make it easier to blend available light and flash.

**Structure.** I've tried to keep a logical progression through the book, but it isn't possible to present all the material simultaneously for complete understanding. There might be some aspects which are only explained in a later chapter that might have been brought in earlier—but it all unfolds by the end and hopefully makes sense as a coherent whole.

**Terminology.** The following abbreviations are used:

BFT: Black Foamie Thing (to flag the flash)

EV: Exposure value

FEC: Flash exposure compensation

HSS: High speed flash sync

TTL: Through-the-lens metered flash

WB: White balance

## ABOUT THE TITLE

When the theme for this book started to crystallize for me, I was still stuck for a name. So I asked readers of the Tangents blog for title suggestions. A large number of the people who replied agreed that *Direction of Light* was the most appropriate title. Matthew Finnigan was the first to support this idea. David de Fortier suggested *Seeing the Light*; Trev, the stalwart of the Tangents forum, expanded on that with *Seeing the Light, Using the Light*. A big thank you goes out to all the readers of the Tangents blog. Your continued conversation, questions, and suggestions have been a constant motivation to keep going and expand the web site even further. Without you, there wouldn't have been any of these books, either. So, thank you for your support!

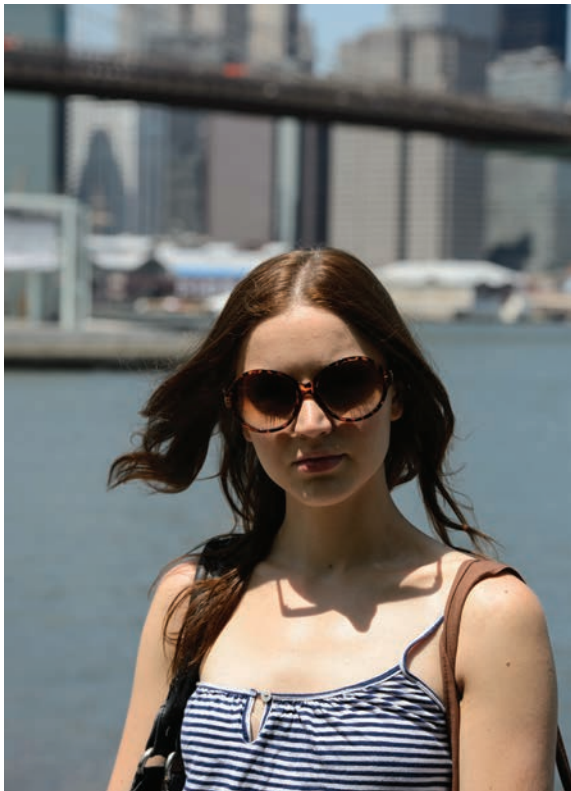
# 1. DIRECTION AND QUALITY OF LIGHT: THE BASICS

## GOOD LIGHT? BAD LIGHT?

Photography is such a wide field, and tastes and styles differ so much, that it is difficult to quantify exactly what makes light “good” or “bad.” To a certain extent, it is up to the photographer and the viewer of the image to decide what they like and what they don’t like.

In a bold move, for the first image in this book I’d like to offer **plate 1-1**—which isn’t a good photograph by any measure. It is a snapshot taken with no consideration for composition or lighting. The photograph captures neither a time, nor a mood,

**Plate 1-1. BAD!** A snapshot taken with no consideration to composition, lighting, or mood. ( $\frac{1}{250}$  second, f/8, 100 ISO, 70–200mm f/2.8 lens; available light)



**Plate 1-2. BETTER!** This image is slightly better, but the model’s eyes are shrouded in shadow. A posing change (or some additional light) could have improved the image. ( $\frac{1}{250}$  second, f/5.6, 200 ISO, 70–200mm f/2.8 lens; available light)





THE COMPOSITION IS  
IMPROVED AND THE  
LIGHT IS SOFTER, SO  
THE SHADOWS ARE  
NOT HARSH.

nor a moment. And it certainly isn't flattering. As such, any photographer would have to agree that this image just does not work on any level.

**Plate 1-2** is slightly better; the composition is improved and the light is softer, so the shadows are not harsh. However, model Anelisa was posed with no regard to the direction that the light was falling on her. As a result, her eyes are shrouded. The effect of the lighting could have been improved by directing her gaze toward the light coming in from the camera's right hand side. Adding light (either from a reflector or off-camera flash) would also have worked.

**Plate 1-3** was taken in Times Square at night, where it is flooded with light from the billboards. While the light here isn't directional per se, it opened up Anelisa's features and there are catchlights in her eyes. With the rich colors, soft light, and the slight wind creating movement in her hair, this photograph is a flattering portrait.

**Plate 1-3. GOOD!** Open shadows and nice catchlights make this a flattering portrait. (1/250 second, f/1.6, 800 ISO, 85mm f/1.4 lens; available light only)





**Plate 1-4.** Lighting is subjective. This image doesn't follow the "rules" of lighting, but there's still something about it that I find appealing. That makes it a successful portrait. ( $\frac{1}{200}$  second, f/1.6, 800 ISO, 85mm f/1.4 lens; available light only)

**Plate 1-4** doesn't follow any of the traditional rules of lighting; there is no main light or fill light, and there are no catchlights in her eyes—in fact, her eyes are slightly shaded. A critique guided by traditional sensibilities might fault it for that. However, there is a mood to this photograph that I find quite appealing—and that's not a factor we should discount. When considering the quality of the light, we should be guided by a few personal measures, rather than by possibly restrictive, hard-and-fast rules of photographic lighting. When evaluating the light, ask yourself: Does the light flatter my subject? Is there a certain mood or feeling that is portrayed? Does the photograph have impact? Is it appealing in some way? If these criteria are met, then you are on your way to creating successful images.

DOES THE LIGHT  
FLATTER MY  
SUBJECT? IS THERE  
A CERTAIN MOOD  
OR FEELING THAT IS  
PORTRAYED?

## QUALITY OF LIGHT

While “good” or “bad” certainly sound like terms we’d use to discuss light’s “quality,” when photographers talk about the quality of light, that’s not the differentiation we’re making. What we’re actually talking about is whether a given light source produces smooth, gradual transitions between the highlights and shadows (soft light) or sharp, abrupt transitions between these two tonal areas (hard light). Soft lighting (such as light from a softbox) is generally more forgiving than hard lighting (such as from an unmodified flash). However, each type of lighting has its place.

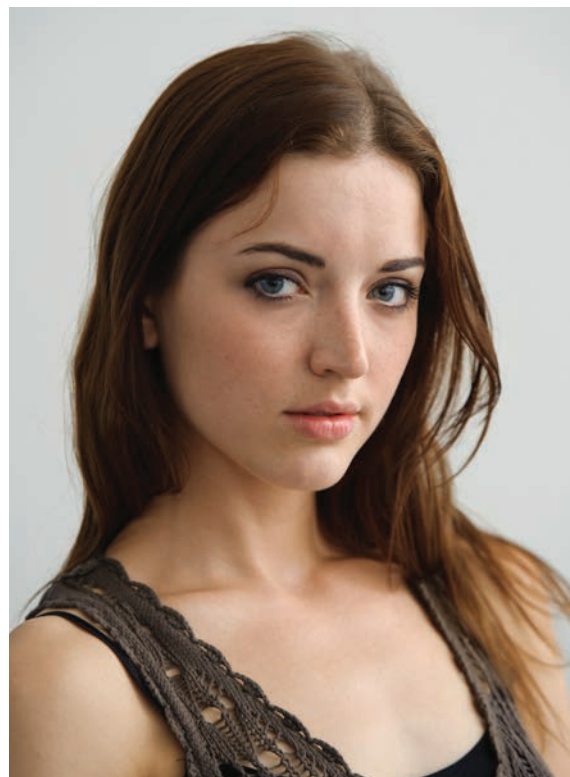
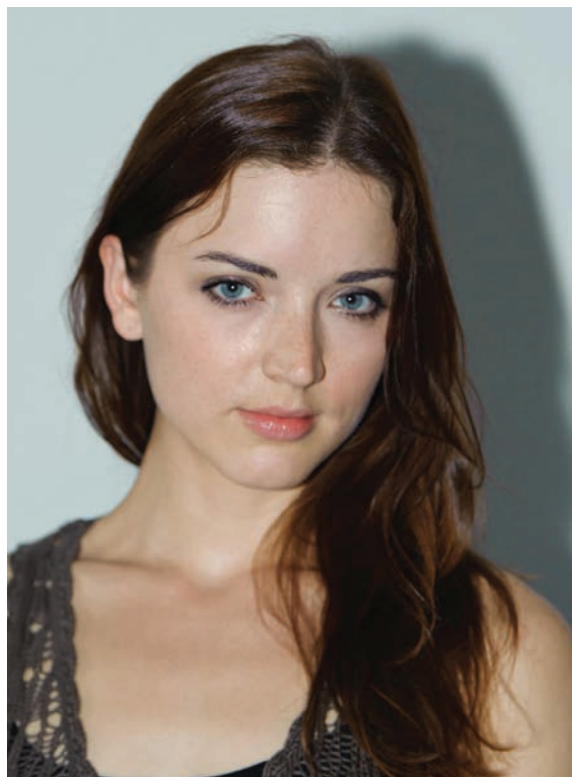
**The Larger the Light Source, the Softer the Light.** One of the main principles in lighting is that the larger your light source (in relation to your subject), the softer the light is. This concept is at the very heart of why we bounce flash or modify flash (techniques we’ll

be looking at in subsequent chapters): we are simply trying to create a larger, and thereby softer, light source. The size of the flash head is small, so the direct light from it can appear quite harsh. However, the moment you bounce that flash off a large surface, or fit it with a large modifier, you have softer light. You have created a much larger light source.

**Plate 1-5** shows a portrait of Anelisa shot with direct, on-camera flash. Since the camera was held vertically, there are tell-tale sideways shadows, which are very unappealing. The direct flash (as the main source of light) also caused specular reflections on her skin. Although her eyes are clearly lit, it just isn’t a flattering or interesting portrait.

Bouncing the flash off a wall (and ceiling) to the right of the camera (**plate 1-6**) yielded light that is far more flattering and far more subtle. The gradient of light falling across her

**Plate 1-5.** Lit with direct, on-camera flash (with the camera in the vertical position) resulted in harsh shadows that just aren’t flattering.



**Plate 1-6.** Bouncing the flash off a wall/ceiling to camera right transformed the light completely. Using the large surface of the wall as the main light resulted in a softer, more appealing look.



cheek also helped create a more three-dimensional effect to the portrait. The contours of her face and upper body are attractively revealed through the interplay of light and shade.

## THE DIRECTION OF LIGHT

**Short Lighting and Broad Lighting.** There are two main lighting approaches used in portraiture. In short lighting, the main light source falls on the side of the face that is turned away from the camera; the “short” side of the face has more light. In broad lighting, the main light source falls on the side of the face that is turned toward the camera; the “broad” side of the face has more light.

To explain the two lighting types, let’s have a look at two photographs (**plates 1-7** and **1-8**). Because the placement of the light is more easily understood with a pull-back shot (**plate 1-9**), I opted to explain this concept using portraits lit by off-camera flash. However, the core concept is the same for any kind of light. As we will see in chapter 6, you can easily achieve short lighting

**Plate 1-7 (left).** Short lighting. ( $1/200$  second,  $f/7.1$ , 100 ISO, 70–200mm  $f/2.8$  lens; manual off-camera flash with a softbox)

**Plate 1-8 (right).** Broad lighting. ( $1/200$  second,  $f/7.1$ , 100 ISO, 70–200mm  $f/2.8$  lens; manual off-camera flash with a softbox)





**Plate 1-9.** A pull-back shot to show the placement of the light.

even with on-camera bounce flash. Of course, with studio photography you can finesse this to a greater degree.

Achieving short lighting and broad lighting has to do with both the position of the light and how your subject is posed in relation to the light. With location portraits, I aim toward getting short lighting on my subjects; it is more dramatic and flattering. Look at the gradient of light on Anelisa's cheek in **plate 1-7**. This kind of lighting helps create a nearly three-dimensional look to your images.

I prefer to have the light come over the shoulder rather than hitting my subject squarely on the chest, which would create a large highlight there. For these photographs, therefore, I directed Anelisa in how she should turn her body and her face in relation to the light. Alternately, I could have moved my light to the other side of her. Either approach will produce the desired result. As we'll see throughout this book, sometimes one option is easier than the other.





**Positioning a Soft Light Source.** A softbox is a very forgiving light source, so you have a fair amount of play when it comes to the height and angle you use. In fact, the larger your light source is, the more forgiving it is in terms of placement. In comparison, if you use direct off-camera flash without diffusion (as we will see in the next image sequence), you will need to be more precise in your placement of the light. The same consideration goes for using a video light for your portrait lighting.

A softbox is generally placed at about a 30 or 45 degree angle to camera left or right. The light is also typically about 30 degrees above the subject's head. This puts enough light on the eyes of the subject and directs it at an angle that makes visual sense

**Plate 1-10.** Flash was added to the ambient light during a session with Licet and Daniel. (1/200 second, f/6.3, 800 ISO, 70–200mm f/2.8 lens; manual off-camera flash)



(with the light coming in from higher than the subject's view). Essentially, you want to make sure that the cone of light coming from the softbox hits your subject's head and shoulders.

Let's look at an example. During a photo session with Licet and Daniel (**plate 1-10**), a softbox was needed to light the couple in a flattering way. When combining an off-camera light source with ambient lighting, as in this example, you want to position your light in such a way that the light strikes from a sensible angle relative to the subjects and the angle of the existing light (**plate 1-11**). Generally, what I look for is that the light opens the features that are in shade. I also want some light on the subject's eyes, without a heavy shadow under the brow.

**Plate 1-11.** A pull-back shot to show the placement of the light.







**Plate 1-12 (facing page).**

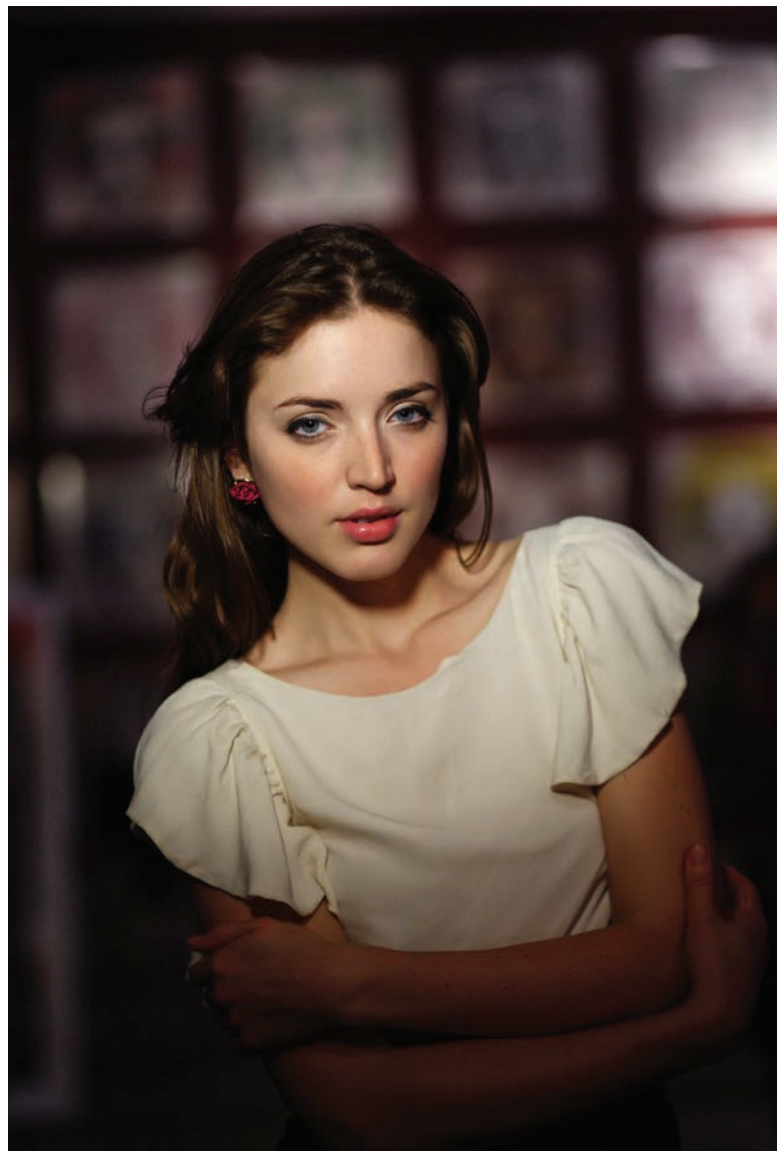
Molly was lit with a bare flash held almost directly over the camera. ( $\frac{1}{250}$  second, f/11, 200 ISO, 24-70mm f/2.8 lens; manual off-camera flash with a softbox)

**Positioning a Hard Light Source.** Ultimately, our objective is to create light that is flattering or interesting. Controlling the direction of the light is critical to achieving this objective. In that way, many different kinds of light sources can each be used in much the same way. With a hard light source though, we have to take greater care in how we position our subject and light in relation to each other.

In **plate 1-12**, Molly was lit with a bare flash used off-camera on a monopod. Since she was looking away from the camera and I wanted more even light on her face, the flash was held nearly directly overhead from me. I gave verbal instructions to both the model and my assistant (holding the light) to get the lighting effect I wanted.

I created the next sequence of examples (**plates 1-13 through 1-17**) using a video light. Because it's a small light source, the

**Plate 1-13. GOOD!** The video light is positioned so that the nose's shadow falls under the nose. ( $\frac{1}{200}$  second, f/1.8, 800 ISO, 85mm f/1.8 lens; Litepanels MicroPro LED video light)

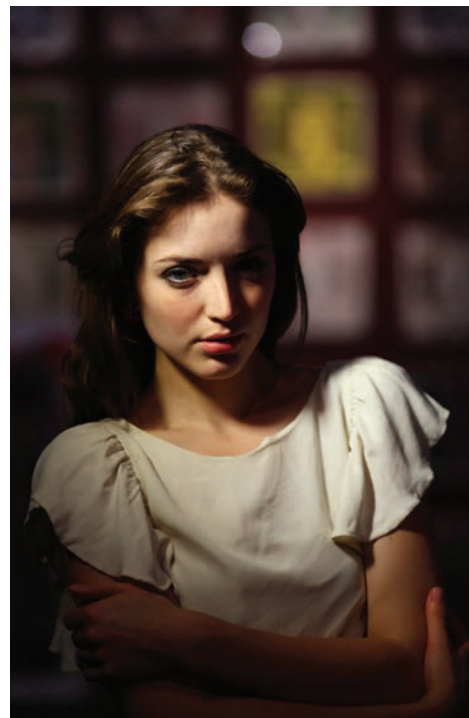




**Plate 1-14. BAD!** The light was at too great an angle to the subject and too low.



**Plate 1-15. BAD!** The light was at the right height but aimed too low.



**Plate 1-16. BAD!** The light was too high, causing unflattering shadows on her eyes.

video light is pretty unforgiving—especially when compared to how easy it is to get beautiful results with a large softbox. As you’ll see, the use of small light sources makes mistakes all the more obvious. In order to design successful portraits, small light sources need to be positioned with very specific intent.

My starting point for using a video light is to look at how the shadow it produces falls under the nose of my subject. I usually direct the person holding the light to follow the movement of the subject and keep the nose’s shadow *under the nose* as much as possible (**plate 1-13**).

Of course, this is only a starting point in placing the light. You should look for other interesting ways of using the light that suit how your subject is posed. (And don’t forget to look for those serendipitous moments when a happenstance change in the assistant’s or subject’s position results in an unexpectedly great image!)

AS YOU’LL SEE,  
USING A SMALL LIGHT  
MAKES MISTAKES  
ALL THE MORE  
OBVIOUS.



In **plate 1-14**, the light came in at too great an angle to her face. As a result, the shadow of her nose falls across her cheek. The light here also created a weird pattern on the side of her mouth. The light was also held too low; it needed to be higher.

In **plate 1-15**, the light was at the correct height but it was aimed too low, lighting up her arms and chest more than her face. The sweet spot of the light needs to be either aimed at her face or feathered upward, so that the edge of the light catches her face.

In **plate 1-16**, the video light was held too high, creating unflattering shadows under her eyebrows.

**Plate 1-17. GOOD!** Flattering light can come from any light source, but the direction of the light is always a major consideration. (1/200 second, f/2.8, 1000 ISO, 70–200mm f/2.8 lens; Litepanels MicroPro LED video light)



## 2. WORKING WITH AVAILABLE LIGHT

I often use flash or additional light to enhance the available light. However, I first look to see whether it's possible to use *only* the available light. That's so much simpler. When you have control over the shooting scenario and your subject, the way you use the light should be a conscious decision. "Using the light" shouldn't mean "just going along with the light."

THE WAY YOU USE  
THE LIGHT SHOULD  
BE A CONSCIOUS  
DECISION.



**Plate 2-1. BAD!** In this pose, the overhead lighting is unflattering on Shawna's face. ( $\frac{1}{125}$  second, f/4, 800 ISO, 70-200mm f/2.8 lens)



**Plate 2-2. GOOD!** A refined pose resulted in a more appealing lighting effect. ( $1/125$  second, f/4, 800 ISO, 70–200mm f/2.8 lens)

## **MATCH THE POSE TO THE LIGHTING**

**Plates 2-1** and **2-2**, photos of Shawna, illustrate the fundamental idea in this book. Before you press the shutter button, you first need to consider the direction and quality of the light you have or are creating. You then need to adapt either your lighting or your way of shooting to complement the subject. This consideration of lighting remains the same, regardless of what light source is being used.

In these photos, the overhead light came from an incandescent spotlight in the ceiling of a hotel lobby. Having Shawna look directly at the camera with no consideration of the lighting created an unattractive photo (**plate 2-1**). The uneven lighting



on her face is not flattering. To correct the problem, I needed either to bring in additional lighting, such as a video light, or—as I did in this case—to pose her so that the light fell onto her face in a more flattering way. I needed to get more light onto her face so that her eyes were not completely in shade.

With just a slight shift in her pose, I achieved my goal (**plate 2-2**). Now, there's a sense of drama, a little bit of mystery—and we have a photograph that captures the beauty and personality of the model. This is all because I simply considered the available light and examined its direction and quality in relation to how I posed my subject.

I used exactly the same approach for **plate 2-3**, a portrait of Rachel on her wedding day. I had shot a few portraits of her in the hotel room where she was preparing for her wedding, but I wanted to add some variety. After scouting around, I found this bright wallpaper and thought that it would make for an intriguing backdrop. From there, it was just a question of lighting.

**Plate 2-4** is a pull-back shot that shows the setting. I really prefer to get as simple a background as possible in order to minimize

## RAW IS A MUST

In postproduction, the info in the RAW file revealed that I shot this at a white balance of 3250K, making the shot too warm. A simple adjustment to the RAW file gave me the right color balance. I point this out to emphasize that it is essential to shoot in RAW. It isn't possible to make large adjustments to the exposure, white balance, and contrast of an image shot in JPEG format.



**Plate 2-3 (facing page).** A portrait of Rachel on her wedding day. ( $1/100$  second, f/2.8, 1600 ISO, 70–200mm f/2.8 lens)

**Plate 2-4 (left).** A pull-back shot showing the setting for Rachel's bridal portrait.





distractions. A fast f/2.8 telephoto zoom lens was essential here to compress the perspective and eliminate background clutter. The large fluorescent panels above her provided soft lighting, but (in terms of its direction) the light was also top-heavy. For that reason, it was important to adjust Rachel's gaze slightly upward until there were no shadows under her eyebrows. The result was clean, flattering light. This specific approach helps define a style of simplicity and elegance.

All of this brings us to a crucial point: using available light is not a random thing. As you saw in the previous examples, I directed the posing and gaze of each subject to have the light fall on them from a direction that was flattering.

In the first example, I dealt with a small, incandescent, overhead light source that produced hard light. In the second example, I had a flood of even, overhead light. Though the light sources were different, the approach was consistent.

## FIND THE OPTIMAL SUBJECT POSITION

The composition of the bridal portraits of Jennifer is supremely simple and uncluttered (**plates 2-5** and **2-6**). The receding lines lead your eye toward her. The way I posed her was also straightforward yet elegant. One thing to note is that I directed her to “pop” her front knee sideways; this creates a slimming effect on anyone. Conversely, popping the rear knee forward creates the impression of a larger shape.

For these photographs, I used only the available light—not even fill flash. However, the location where I posed Jennifer was carefully selected. I stood her near the entrance to a row of trees, just past the first tree. **Plate 2-7** might explain it better. Positioning her here ensured that the light would come primarily from the front and be very soft. Because of the branches overhead, most of the overhead light was blocked. This immediately reduced the chance of heavy shadows under her eyes. The light now came from a specific, desirable angle.

By having her stand in this spot, I basically mimicked the lighting effect of a massive softbox in the studio—one that was placed 45 degrees or so above the subject. By controlling her

I BASICALLY  
MIMICKED THE  
LIGHTING EFFECT  
OF A MASSIVE  
SOFTBOX IN  
THE STUDIO.

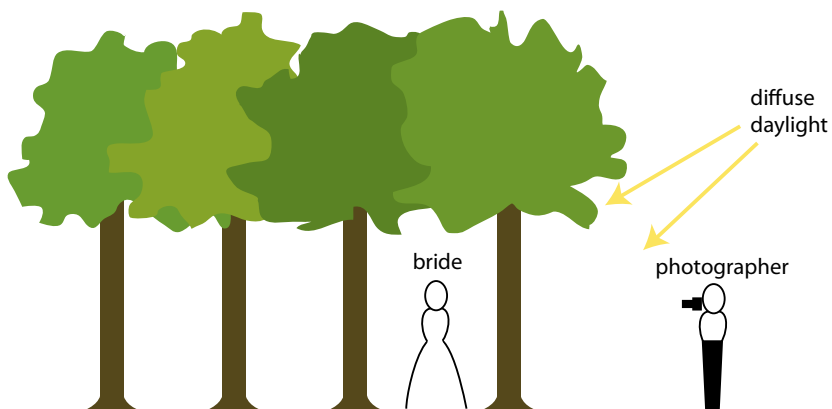




**Plates 2-5 and 2-6.** For these available light portraits, the selection of Jennifer's position was critical to the successful lighting. ( $1/250$  second,  $f/3.5$ , 400 ISO, 70–200mm  $f/2.8$  lens)



**Plate 2-7.** The position of Jennifer for plates 2-5 and 2-6.



placement in the scene, I was also controlling the direction from which most of the light would come. The same idea would work if you posed your subject in a doorway, for example.

If the background had permitted it, I could also have moved to the side and had a more directional quality to the light. Remember, if you change your position relative to the light and your subject, the light changes completely! We'll come back to this concept through the course of this book. I used the histogram of my camera to determine correct exposure. We'll cover this in chapter 3.

I photographed Ekaterina (**plate 2-8**) using available light only, positioning her so the light had to come in at a flattering angle. I posed her against the doorway under the canopy of a building, so the soft light entered the frame mostly from 30 to 45 degrees above her, providing a natural softbox effect. In fact, this is the mental shortcut I take most often when working with available

IF YOU CHANGE YOUR  
POSITION RELATIVE  
TO THE LIGHT AND  
YOUR SUBJECT, THE  
LIGHT CHANGES  
COMPLETELY!



**Plate 2-8.** An available-light portrait of Ekaterina against a doorway, under a building canopy. ( $1/320$  second, f/3.2, 400 ISO, 70–200mm f/2.8 lens)



**Plate 2-9.** An available-light portrait of Anelisa under an awning. ( $\frac{1}{400}$  second, f/2, 100 ISO, 85mm f/1.8 lens)



THIS PRODUCED  
AN INTERESTING  
AND FLATTERING  
LIGHTING PATTERN  
ON HER FACE.

light. I ask myself, “Where do I want my light to come from? Where would I place my softbox if I were working in a studio?”

Let’s look at another example. **Plate 2-9**, an image of Anelisa, shows my typical approach to working with the available light. Because she was posed under an awning, there was little light coming from above. This “forced” the light to fall on her from a flattering angle. By positioning her so that the available light came in from an angle, I mimicked the look of lighting from a large softbox placed to the side.

In this case, I also adjusted the model’s position in relation to the light for a different effect. With Anelisa leaning to the side, I asked her to lift her chin a little and move her head toward the side where the majority of the light was coming from. This produced an interesting and flattering lighting pattern on her face. The light came in over her shoulder, illuminating the far side of her face. Again, this is called short lighting.

## DIRECTION OF LIGHT AND CHOICE OF BACKGROUND

When working with a subject, we have the opportunity to control at least a few aspects to make the final photograph more successful. I take care to position myself and my subject so that the background is complementary, or at least neutral. I normally try to avoid a background that is cluttered and will distract the viewer's attention.

When working in an urban environment, this can be challenging—but the various elements in the frame still need to work together to make the image successful. Some street photographers have a genius for pulling disparate elements in the frame together to make their images fresh and striking. They achieve a balance even when the frame is busy.

Let's look at an example of a session shot on a city street. **Plate 2-10** shows how the wider street scene looked for my portrait of Catherine. From all that clutter in the background, I recognized that with a longer focal length I could use the repetitive pattern of the shop-fronts as a defocused background. I then composed tightly with a 70–200mm f/2.8 zoom.

The lighting in the final photograph (**plate 2-11**) is all available light—no flash. I noticed that the awning we were working under blocked the light from above. This meant the light would not be top-heavy, but would mostly be coming in from an angle. From there, I only had to pose my model so that her shoulder and face were pointed toward the light. The way her head was positioned created the short lighting pattern.

We can now work toward recognizing these situations and using the resulting light patterns to achieve flattering light.

I NORMALLY  
TRY TO AVOID A  
BACKGROUND  
THAT IS CLUTTERED  
AND WILL DISTRACT  
THE VIEWER'S  
ATTENTION.



**Plate 2-10 (left).** Here's the wider street scene used as the background for my portrait of Catherine.

**Plate 2-11 (facing page).** The final image of Catherine. ( $\frac{1}{160}$  second, f/2.8, 640 ISO, 70–200mm f/2.8 lens)





Reinforcing the ideas covered so far, we're going to look for that intersection where everything comes together:

1. Direction of light
2. Choice of background
3. Subject position
4. Camera position

So what happens if there's still room for improvement in your natural-light portrait after you've gone as far as you can with those four controls? That's when it's time to modify or augment the light.

### ADD A REFLECTOR

One of the easiest ways to manipulate available light, without having to use additional light sources, is with a reflector—as seen in **plate 2-12**.

While a reflector is often used for a bit of fill light on a subject, here the light from the reflector became the main source of light. I had my assistant hold up a white reflector to bounce some light directly onto the model, Johannie. This created the tightly focused area of light on just her face and the upper part of her body. Light that is reflected from the sun like this can be fairly harsh, so I made sure that my model didn't have to look directly into the reflected light. I also had my assistant throw the light onto her for very short moments, during which I'd shoot a burst of images.

Notice the change in color balance across the model's body. Her face was lit by sunlight, while the rest of her body was in the shade. To keep the color balance identical across her face and body, I would have needed two different white balance settings—which, of course, is impossible to accomplish in-camera. But I like the effect here; it helps direct attention to her. (However, even though I used the lens at a very wide aperture, the way the background area is rendered is intrusive because of the harsh *bokeh* from this particular lens. A smoother look would have been better.)

I HAD MY ASSISTANT  
HOLD UP A WHITE  
REFLECTOR TO  
BOUNCE SOME LIGHT  
DIRECTLY ONTO  
THE MODEL.

**Plate 2-12.** The final image of Johannie. ( $\frac{1}{4000}$  second, f/1.4, 200 ISO, 50mm f/1.4 lens)







**Plate 2-13 (above).** The final image of Elmira. ( $\frac{1}{100}$  second, f/1.4, 3200 ISO, 35mm f/1.4 lens)



**Plate 2-14 (left).** A pull-back shot for the image of Elmira.



## EVEN WITH HIGH ISO SETTINGS, YOU NEED GOOD LIGHT

I SCOUTED AROUND  
UNTIL I FOUND  
A PLACE WHERE  
THE LIGHT FELL  
ON ELMIRA IN A  
FLATTERING WAY.

When I photographed Elmira in Grand Central Station, I had to deal with low light levels. I was using the Canon 5D Mark III, which has incredible high-ISO noise performance. I was also using the Canon EF 35mm f/1.4L lens, which allowed me to shoot at a wide aperture. Even with the combination of high ISO and wide apertures, however, I still had to consider my light. I wanted flattering light (**plate 2-13**). Therefore, I posed Elmira turned toward a light source so that the light would come in from an angle over her shoulder (**plate 2-14**). With the fluorescent light coming through the frosted glass on the door, I knew I had a large light source. In using it, I purposely controlled the available light falling on her. Again, this has to be a conscious choice.

The same idea was applied in **plate 2-15**. I scouted around until I found a place where the light fell on Elmira in a flattering way. It is important not to become complacent—even with cameras that perform well in low light. You still need to carefully consider the direction and quality of your lighting.

**Plate 2-15.** Another image of Elmira from Grand Central Station. ( $\frac{1}{80}$  second, f/1.6, 3200 ISO, 35mm f/1.4 lens)



# 3. EXPOSURE METERING

Taking an exposure reading with your camera is, at one level, as simple as pointing your camera at the scene and zeroing the exposure meter needle by adjusting the shutter speed, aperture, and ISO controls. However, it also gets more complex and interesting than that. While it isn't possible in the scope of this book to thoroughly cover the topic of exposure metering, it is essential that we understand the necessity of selective metering—and, also, how to interpret the histogram.

## YOUR CAMERA'S BUILT-IN EXPOSURE METER

With in-camera exposure metering, the important thing to remember is that your camera's meter reads the light reflected from the scene at which you are pointing your camera. Therefore, the tonal values, whether light or dark, will have a direct bearing on what your camera's meter tells you. To understand how much light is falling on your subject, you often have to interpret the reading you get from your camera's meter.

Looking at **plate 3-1** of Anelisa, you will see she is wearing a white top and posed against a dark background. In an image like this, the white areas and darker areas will most likely balance each other out when metering. Chances are really good that most modern cameras with evaluative/matrix metering would get a properly exposed image for this scene.

The moment your composition changes to include large areas that are much brighter or darker than “average,” though, the exposure your in-camera meter sets will be off. In those cases, you need to control your exposure settings. You can most easily

IN AN IMAGE LIKE THIS,  
THE WHITE AREAS AND  
DARKER AREAS WILL  
MOST LIKELY BALANCE  
EACH OTHER OUT.

**Plate 3-1.** Anelisa in a white top against a dark background. ( $\frac{1}{250}$  second, f/4, 400 ISO, 24–70mm f/2.8 lens)



IN THIS MODE, YOUR  
EXPOSURES WILL  
BE CONSISTENT  
AND WON'T BE  
AFFECTED BY YOUR  
COMPOSITION.

do this by shooting in manual exposure mode. In this mode, your exposures will be consistent and won't be affected by your composition. This is important! We want consistency in exposure.

To get to correct (ambient) exposure, you can do either of several things:

1. Meter selectively with your camera's built-in meter.
2. If your subject is wearing white, use the camera's histogram.
3. Use a hand-held meter. This is nearly infallible.

So there are several techniques you can use to get to correct exposures. Let's look at them in detail.



## SELECTIVE EXPOSURE METERING WITH THE HISTOGRAM

The key to achieving good and consistent exposure is determining the *actual* subject in the scene that you're photographing and then exposing for that subject. Just as you determine what you want to focus your camera on, you also need to decide what subject (or area of the subject) you want to expose correctly.

This is exactly what I did with **plate 3-2**. For a scene like this, using one of your camera's automatic modes (like aperture priority or program) will fail you. Even with evaluative/matrix metering, your camera will meter for the entire scene, not just your subject. It will measure the brightness values of all the different areas of the frame, then use its metering algorithms to try to get to the best compromise exposure it can. However, it is still guessing at what you're actually trying to do.



**Plate 3-2.** Final portrait of Anelisa. ( $\frac{1}{400}$  second, f/4, 400 ISO, 70–200mm f/2.8 lens; available light only)



**Plate 3-3.** A pull-back shot of the scene around Anelisa. ( $\frac{1}{400}$  second, f/4, 400 ISO, 70–200mm f/2.8 lens; available light only)

## CONTROL THE BACKGROUND

The pull-back shot from my shoot with Anelisa (**plate 3-3**) shows what a visual mess the background was. In terms of exposure, the strip of bright sunlight on the road behind Anelisa also presented a problem. When photographing location portraits, I like to eliminate distracting elements by shooting with a fast telephoto zoom. The shallow depth of field works to my advantage and the longer focal length compresses the image so that the background isn't a sweeping vista anymore. Instead, it's a narrower view that I can control with my own position.

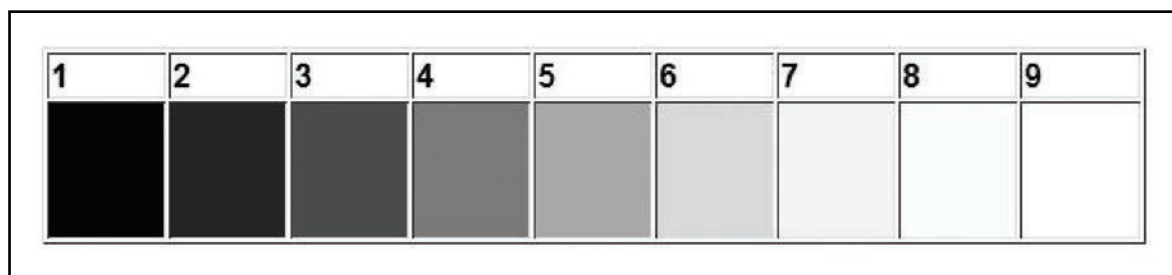
**Plate 3-4.** A tonal scale. The in-camera meter attempts to expose to middle gray (5).

For this scene, selective metering with my camera's built-in meter got me to the correct exposure. However, I couldn't just blindly follow the meter; simply zeroing the meter's needle would not have given me the correct exposure in a scenario like this. Assuming you're metering specifically off your subject (and not letting the scene/background brightness affect your exposure metering), then:

1. When your subject is predominantly composed of darker tones, your camera will overexpose it. The camera will compensate by either slowing down the shutter speed or increasing the size of the aperture, attempting to expose for these tones to be middle gray (**plate 3-4**).
2. When your subject is predominantly composed of brighter tones, your camera will underexpose it. The camera will compensate by either speeding up the shutter speed or decreasing the size of the aperture, attempting to expose for these tones to be middle gray.

Because the camera's light meter tries to expose everything as a midtone, it is critical to interpret the meter's reading based on the specific tonal value that you are metering. When your subject is wearing white, using the histogram as an interpretive tool for a selective meter reading is helpful for determining the correct exposure settings. Let's look at how that works.

Since Anelisa was wearing a white dress, I zoomed in closely, so that *only* her white dress filled the frame (**plate 3-5**). I mostly use my camera's evaluative/matrix metering mode, so I didn't





**Plate 3-5.** I zoomed in closely so Anelisa's white dress filled the frame.



**Plate 3-6.** The histogram for my shot of Anelisa's white dress.

want to include areas that were overly bright, such as the sunlit road behind her. (Alternately, I could have spot-metered.)

If I zeroed my metering on this white tone, it would be underexposed; my camera would want to expose it to be middle gray. Therefore, looking at my camera's meter in the viewfinder, I pushed up the exposure by adjusting my shutter speed/aperture/ISO combination to the point where my meter said I was over by +1.7 stops. (*Note:* The correct adjustment could be anywhere between 1 and 2 stops, depending on the specific camera model. This is something you will have to figure out for your camera.)

After making this adjustment, my test shot displayed the histogram seen in **plate 3-6**. This placed the white tonal value right on the edge of the histogram. As a result, the white dress appears white (not gray) in my final image. Furthermore, because I based my exposure on my subject, rather than the brighter background, the exposure for my subject was also correct.

Let's look at another example—this time with a bride. From a technical point of view, photographing a bride in her dress can be a challenge, depending on the lighting. When I was creating a bridal portrait of Jill, the background had darker areas toward

IF I ZEROED MY  
METERING ON  
THIS WHITE TONE,  
IT WOULD BE  
UNDEREXPOSED.



the bottom and brighter areas toward the top (including the very bright sky). The striking bride, of course, wore white.

**Plate 3-7** shows what happens with the camera set to aperture priority mode and left to calculate the exposure on its own. The bright areas in the frame fooled the camera's meter into underexposing the subject. This is a big problem. Again, you need to expose correctly for your *subject*, not for the *entire frame*.

The simplest way for me to get an accurate exposure, whether I am using available light only (as in this shot) or adding manual flash, is to use the histogram. Here, I wanted to expose correctly for the bride's white dress because this was the brightest area in which I wanted to capture detail.

However, not every part of the dress was at the same tonal level; the area of the dress at the bottom of the frame was darker than the bodice. There was also some rim lighting where the edges of the dress were much brighter than the bodice. Without additional lighting to even it all out, there was no way to capture *all* of the dress at the same tonal levels. This meant I had to decide which part of the dress I wanted to capture and place correctly as the brightest relevant tone (white with detail). I chose the top-most part of the dress, which was in the same quality and intensity of light as on Jill's face.

I then pointed my camera at only the brightest part of my subject and zoomed in tight to exclude everything but the area of

THE BRIGHT AREAS  
IN THE FRAME  
FOOLED THE  
CAMERA'S METER INTO  
UNDEREXPOSING  
THE SUBJECT.

**Plate 3-7.** In aperture priority mode, the bright background tricked the camera into underexposing my subject.



the white dress that I wanted to meter (alternately, I could have spot-metered this area). I took a selective exposure of her dress, then adjusted the exposure settings so this area would fall at the right edge of the histogram—meaning it would be the brightest detail captured.

Exposing for the subject meant that, in the final capture (**plate 3-8**), the background was overly bright and lost detail. However, this doesn't particularly concern me here; I'm not a landscape photographer, I'm a portrait and wedding photographer. Therefore, my human subject is all-important and the background is secondary. The background is merely context—something interesting to place my subject against. There was also some detail lost in the veil. When this occurs, I can usually pull back a fair amount of detail from the RAW file using the local exposure correction brush in Adobe Camera Raw or Lightroom.

THE BACKGROUND  
IS MERELY CONTEXT—  
SOMETHING  
INTERESTING TO  
PLACE MY SUBJECT  
AGAINST.



**Plate 3-8.** Selective metering resulted in a better exposure on the subject. Detail in the overly bright areas was selectively restored in during postproduction of the RAW file. ( $1/250$  second,  $f/3.2$ , 200 ISO, 70–200mm  $f/2.8$  lens; available light only)

# 4. FLASH ESSENTIALS

SO WHAT ARE  
THE BEST SETTINGS  
FOR FLASH WITH  
AVAILABLE LIGHT?

In the previous section, we looked at exposure metering for available light. Now let's gradually step into adding flash. As we do, you'll see that the same decision-making process takes place. However, there are some additional technical considerations to take into account. We'll look at those in this chapter, then move on to consider flash applications in later chapters.

## TWO SCENARIOS

So what are the best settings for flash with available light? First, you need to understand that there is a whole range of ways in which we can balance these two light sources, but there are two primary scenarios:

1. Correctly exposing the ambient and adding just a touch of flash as the fill light.
2. Underexposing the ambient light and adding a lot of flash as the main light.

There are, of course, also numerous possibilities in between those two scenarios—and no one possibility is more “correct” than any of the others. For simplicity of explanation though, it is helpful to consider the two extremes. This will make it easier to figure out a variety of scenarios where you need to mix some flash with the available light.

## TWO EXPOSURES

The key to combining flash and available light is that you have to consider the flash exposure and the ambient exposure as



two separate events. This is because the two kinds of light are inherently different. While ambient light is continuous, flash is nearly instantaneous—around  $\frac{1}{2000}$  second, depending on the design of the flash and how the flash pulse itself is controlled. This is very important because it means you can use different controls to approach the exposure of the two kinds of light.

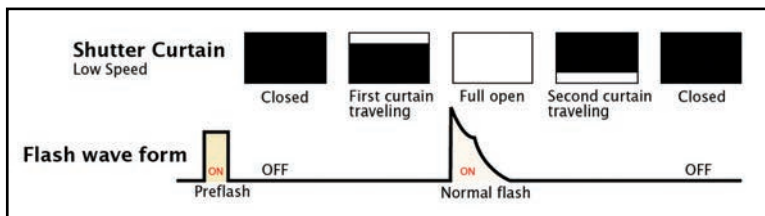
## MAXIMUM FLASH SYNC SPEED

One of the important controls to consider is the shutter speed. The shutter consists of two curtains that open and close, revealing the sensor to the light that enters the camera through the lens. The shorter the shutter speed, the narrower the gap between these two curtains will be.

Because the flash burst is nearly instantaneous, you need to choose a shutter speed at which the gap between the curtains is large enough to leave the entire sensor area completely clear (**plate 4-1**). This ensures that it can be properly exposed by the quick burst of flash. The shortest shutter speed at which the first curtain has just stopped moving and the second curtain hasn't moved yet (*i.e.*, the entire sensor is exposed) is called the maximum flash sync speed.

Let's look at two images taken with flash to see what happens when you exceed the maximum flash sync speed. **Plate 4-2** was taken at  $\frac{1}{250}$  second at  $f/5.6$  and 400 ISO, using manual flash triggered by Pocket Wizards. **Plate 4-3** was taken at  $\frac{1}{400}$  second, which was  $\frac{2}{3}$  stop over the camera's maximum flash sync speed. You can clearly see that the exposure is uneven, since the shutter curtain blocked the flash's light from hitting the bottom half of the frame. Notice, however, that the ambient light (because it is continuous) wasn't affected by this—except for being recorded as, overall, slightly darker in the second image.

ONE OF THE  
IMPORTANT  
CONTROLS TO  
CONSIDER IS THE  
SHUTTER SPEED.



**Plate 4-1.** The burst of flash must be synchronized with the movement of the shutter curtains to create a proper exposure.

**Plate 4-2.** At or below the camera's flash sync speed, the entire frame is evenly exposed by the flash.



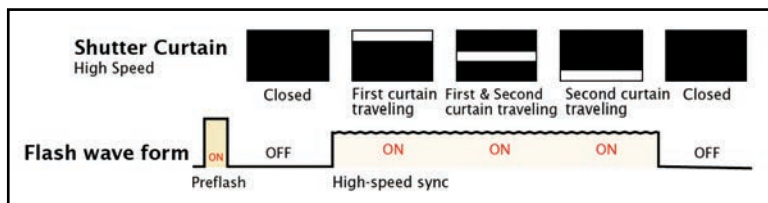
**Plate 4-3.** When the camera's flash sync speed is exceeded, the frame is not evenly exposed by the flash.



The maximum flash sync speed varies slightly for different camera makes and models, but is usually in the range of  $\frac{1}{200}$  or  $\frac{1}{250}$  second. If you go higher than that, you get a dark area in the frame where the light from the flash has been blocked. Fortunately, on-camera flash units automatically prevent your camera from exceeding the maximum flash sync speed. There's a ceiling there—unless you go to high-speed flash sync mode.

## HIGH-SPEED FLASH SYNC (HSS)

With high-speed flash sync (or, as Nikon calls it, Auto FP [auto focal plane mode]) the flash's output is released as a rapid series



**Plate 4-4.** Instead of the energy from the flash being released as that near-instantaneous burst of light, in HSS mode it is released as rapid pulses of light so it appears continuous for a brief period.

of light pulses rather than a single short burst of light. The flash is now effectively a continuous light source operating over a very short duration (**plate 4-4**). This means you can set your shutter speed much higher than the maximum flash sync speed. It's truly an amazing bit of engineering.

There's one drawback, though: this change from a high-energy, near-instantaneous burst of light (normal flash) to a short period of continuous light (HSS) entails a loss of around 2 stops of light from the flash. If you think about it, this makes sense—after all, some of the light from the flash will just hit the shutter curtains, not the actual sensor. So, while the higher shutter speed brings the ambient exposure down, it brings the effective flash power down more quickly than it affects the ambient light. Therefore you wouldn't immediately use HSS in very bright light if you were trying to overpower the sun with flash. In chapter 7, we'll look at some images created using HSS.

When it using flash in bright light, the sweet spot is at the maximum flash sync speed. So high-speed flash sync shouldn't just be a default way of working flash, but it's something you use when you need a faster shutter speed and/or a wider aperture.

## MANUAL FLASH

With manual flash, you control the light output by adjusting the flashgun's settings in fractions of the maximum possible output (*e.g.*,  $\frac{1}{2}$  power,  $\frac{1}{16}$  power). The absolute value of any full or fractional power setting will vary from flashgun to flashgun, since each model and make of flashgun has a different maximum power. The good thing about working with manual flash is that the amount of light emitted by the flash is constant for every exposure—neither the flashgun nor the camera exerts any control over the intensity or duration of the pulse of light from the flash unit.

HIGH-SPEED  
FLASH SYNC  
SHOULDN'T JUST  
BE A DEFAULT WAY OF  
WORKING FLASH . . .



With manual flash, there are four variables by which you can control the exposure of your subject. You (not the camera) have to control these four variables in relation to each other.

1. The actual output of the flash (as a ratio of full power)
2. The distance from the flash to the subject
3. The aperture setting
4. The ISO setting

Manual flash exposure is most easily measured using a handheld flash meter, but you can also use the histogram as explained in chapter 3.

## TTL FLASH

WITH TTL FLASH, THE  
FLASH EXPOSURE IS  
AN AUTOMATICALLY  
CONTROLLED  
FLASH BURST.

The second way to control flash exposure is as an automatically controlled flash burst. With this approach, the flash output can be controlled either by the flashgun itself (usually called automatic flash) or by the camera in conjunction with the camera's metering system. This approach is usually called TTL flash, because the camera measures as the amount of light coming "through the lens" (hence, TTL).

With TTL flash, the camera instructs the flash to give out more light for a smaller aperture or less light for a wider aperture. The same thing happens for a change in ISO or distance. When the camera's meter determines that more or less light is needed, it makes the adjustment automatically. Because the flash setting is calculated for each shot, this can result in different exposure levels from frame to frame—an important contrast from the consistent output of manual flash.

Since the camera will automatically compensate for any change in aperture, ISO, or distance, the only way to adjust the output level of TTL flash is via the flash exposure compensation (FEC) settings. Of course, you must still remain within the flash's capabilities to be able to get the correct exposure.

Using TTL flash is often quite simple. To create **plate 4-5**, I underexposed slightly for the ambient light—maybe  $\frac{2}{3}$  stop. Then I let the TTL flash, diffused by a softbox, pick up the

difference in exposure. I dialed down the FEC to  $-1\text{EV}$ , not because the flash was fill flash but because the darker tones in the scene fooled the automatic metering. (Again, TTL is an automatic metering mode.) I had to override the flash exposure using the FEC settings to expose the subject properly.



**Plate 4-5.** I used FEC to override the settings chosen by the automatic metering, which was tricked by this darker scene. ( $1/200$  second,  $f/4$ , 200 ISO, 70–200mm  $f/2.8$  lens; off-camera TTL flash with FEC at  $-1\text{EV}$ )

# 5. ADD FILL FLASH

## START WITH THE AMBIENT EXPOSURE

As noted at the start of chapter 4, when we talk about fill flash we're usually describing a scenario where our ambient exposure is correct and we're just lifting the shadows with a hint of flash. For the best fill flash settings, then, you have to think in terms of your ambient exposure first and foremost. That is your starting

YOU HAVE TO THINK  
IN TERMS OF YOUR  
AMBIENT EXPOSURE  
FIRST AND FOREMOST.

**Plate 5-1.** Bounce flash enhanced the ambient exposure, opening up the shadows on Scott's face. ( $1/60$  second, f/4.5, 800 ISO, 24–70mm f/2.8 lens; TTL bounce flash with FEC at -1EV)





point. From there, you can add a touch of fill flash to open up the shadow areas and reduce the contrast.

For **plate 5-1**, my ambient exposure for the couple, Allison and Scott, was correct. But because Scott was facing away from the light streaming in through the archway, his face was shaded. The solution was adding fill flash with my on-camera flash.

Since I shoot in TTL mode most of the time when shooting on the move, for fill flash I simply dial down my FEC to around -1EV or -3EV, adjusted to taste. In this instance, I was at -1EV.

Even though we were shooting outside (at Bethesda Fountain in New York City's Central Park), there were architectural surfaces around us. Therefore, I swiveled my flash around and bounced it into the area above and behind me for soft, diffused light that perfectly augmented the available light. (More on bounce flash in chapter 6.)

I SWIVELED MY  
FLASH AROUND AND  
BOUNCED IT INTO  
THE AREA ABOVE AND  
BEHIND ME FOR SOFT,  
DIFFUSED LIGHT.

## ON-CAMERA TTL FILL FLASH

For my photo session with Renee and David (**plates 5-2** through **5-6**), I didn't have an assistant to hold a softbox. Therefore, I relied on direct, on-camera fill flash where necessary—and on careful positioning of the couple to control the light. Positioning the couple in an area where the light didn't come from above ensured that the light falling on them was quite flattering and not top-heavy. Since this main source of light was already fairly

**Plates 5-2 and 5-3.** TTL fill flash at different FEC settings. (1/250 second, f/4, 640 ISO, 70-200mm f/2.8 lens; TTL flash with FEC at -1EV [left] and -3EV [right])





**Plates 5-4 and 5-5.** Portraits with TTL fill flash. ( $1/500$  second,  $f/4$ , 800 ISO, 70–200mm  $f/2.8$  lens; TTL flash with FEC at  $-2\text{EV}$ )



even, I added flash just for fill. I wasn't trying to fix a problem (like harsh contrast) by adding on-camera flash; the flash was just used to help with the contrast and give the images a bit of snap.

In **plates 5-2** and **5-3**, I used different amounts of FEC for more pronounced or more subtle fill. The on-camera flash was direct and unmodified, so the flash shadow can be seen with close scrutiny. If this is something you want to avoid, then use a diffuser, such as a mini-softbox, over your on-camera flash. This will definitely help. If you needed even more control over the light, you'd want to switch to off-camera flash. Having an assistant to hold an off-camera light really makes it easier, since you have more choice over where to place your subject. (See chapter 7 for off-camera flash techniques.)

However, for simplicity—and so I can work more quickly than when using off-camera flash—I most often work with on-camera TTL fill flash. In **plates 5-4** and **5-5**, examples from the same



session, I used TTL fill flash. If I had used manual flash for these images, I would have approached the addition of fill flash in a similar way. I would have set my manual flash to give me 2 or 3 stops less exposure than the aperture I was using. For example, if I were shooting at  $f/5.6$ , then I would set my manual flash to give me only  $f/2.8$  or  $f/2$  worth of flash exposure—for that specific ISO.

Very often, fill flash won't be necessary. You need to recognize this—or even specifically work toward this objective. When a photograph's intention is more about the mood or some gesture (rather than someone's expression), then fill flash may not be needed. For example, in **plate 5-6** I didn't use flash. Even if I had wanted to use it, the distance would have been too great for it to have made a significant difference. When you use only available light, careful positioning of your subject and close consideration of the direction of the available light is essential.



**Plate 5-6 (above).** When the mood or gesture is the point of the image, fill flash is less necessary. ( $1/250$  second,  $f/4$ , 640 ISO, 70–200mm  $f/2.8$  lens; ambient light only)



**Plate 5-7 (left).** Off-camera TTL fill flash added in midday sun. ( $1/250$  second,  $f/5.6$ , 200 ISO, 70–200mm  $f/2.8$  lens; off-camera TTL flash with FEC at -1EV)





### **OFF-CAMERA TTL FILL FLASH**

Nicholas, the adorable boy seen in **plate 5-7**, looked at the camera briefly because I was singing to him. Kids are devious little creatures; they know when you're calling them and will purposely ignore you, so you have to be crafty when trying to get their attention. You also have to be ready for the moment—and shoot a lot. Sometimes, that decisive moment is to be found in the edit.

In this case, the photo session was at midday with the sun high overhead. We're often told that shooting with the sun directly

overhead isn't the best idea for portraiture. However, there are ways of working with hard sunlight and still getting great images. The simplest way is to have your subjects turn their backs to the sun. This way, they are effectively in open shade with the sunlight providing rim light. This does mean carefully positioning your subject in relation to the light, and positioning yourself in relation to your subject, the light, and the background.

For my portrait of Nicholas, I knew I wanted some out-of-focus color in the background, so I positioned myself to use a red shrub and defocused highlights behind my subject. I set up a 24x24-inch softbox on a light stand to my left.

Because I knew that this little guy and his sister would be moving around, I decided to shoot in TTL mode. Remember: one of the controls for *manual* flash exposure is the distance between the light and the subject—so with the kids scooting all over, my flash exposures could have varied quite a bit. Using TTL flash, I was able to let the automatic flash technology compensate for the constant distance changes.

Normally, when using flash for a mere touch of fill, I would work with the flash set to around -3EV so the flash is less noticeable. In this case, however, I was using a softbox so I knew my light would appear soft and appealing even at a higher FEC setting.

My exposure was set so that the available light on Nicholas was nearly at the correct exposure. The TTL flash then made up for the difference to give me a correct exposure, thereby opening up his shaded face. The technique is simple—and the results look great.

USING TTL FLASH,  
I WAS ABLE TO LET  
THE AUTOMATIC  
FLASH TECHNOLOGY  
COMPENSATE FOR  
THE CONSTANT  
DISTANCE CHANGES.

### KEEP IT STEADY

When shooting vertical portraits, I use my left hand to support the lens and my right hand to hold the camera's grip, positioning my right hand above the camera. This is better than the "hand under" way of holding a camera, where your right hand is supporting everything and your right forefinger is tripping the shutter. That way of holding the camera just seems like an invitation for camera shake.

# 6. ON-CAMERA BOUNCE FLASH

**O**ur objective when using flash, even with an on-camera flash, is to make the light from the flash appear as natural as possible—or at the very least, not to make it obvious that flash was used. Ideally, we will seamlessly blend it with the available light. While that may not always be possible, it should always be what we are striving for. In using flash wisely, we are primarily concerned with the direction of the light from our flash, followed closely by the amount of flash in relation to our ambient light, and the color from our flash in relation to the ambient light (see chapter 9 for more on this).

With this in mind, on-camera bounce flash photography might be the easiest option to get beautiful light on your subjects. When working in a place where you can bounce flash, then it is quite possible to get nearly studio-quality lighting from an on-camera flash. A consistent approach can guarantee a successful portrait, with nice light and a pleasant background.

ON-CAMERA BOUNCE  
FLASH MIGHT BE THE  
EASIEST OPTION TO  
GET BEAUTIFUL LIGHT  
ON YOUR SUBJECTS.

## WHY BOUNCE THE FLASH?

**Softer Light.** The size of the front of the flash head is small, hence the direct light from it is quite harsh. The moment you bounce flash off a nearby surface (a wall, ceiling, or reflector) you have softer light because you have created a much larger light source. Effectively, the area you're bouncing your flash off now becomes the light source—and the larger the light source, the softer the light.

**More Directional Light.** Direct flash is, for the most part, the least attractive way to use flash. Anytime our subject can see our flashtube (or light modifier), there will be direct flash on them.



When you bounce the flash, the position of the bounce surface (rather than the on-camera flash) will determine the direction of the light on the subject. Indoors, you can bounce the light off walls and other surfaces to make it fall on your subject from a better angle. Even outdoors you can look for surfaces to bounce the flash off—or have a helper hold up a reflector so you can bounce flash off it.

## BOUNCE ANGLE

When photographers first start using their flashguns swivelled out of the directly forward position, they often move the flash head to point 45 or 90 degrees upward. The idea here is to bounce flash off the ceiling. Even though, in most cases, this is an improvement over using the flashgun pointing directly forward, it is not ideal. You can improve on this.

If you consider how studio lights are set up, you'll rarely see a main light placed directly above the subject's head. Top lighting just isn't as flattering as light from an angle to the subject. So why would you want to bounce your flash onto the ceiling directly above your subject? Light coming in from the side—such as flash bounced onto a wall or flash bounced at a backward angle onto the ceiling—gives depth to the image and creates modeling on the subject's face. Let's look at some examples.

## INDOOR PORTRAITS

**Direction of the Flash.** **Plate 6-1**, an image of model Noreen, shows how it is possible to get light from an on-camera flash that closely emulates studio portrait lighting. By being very specific where and how you bounce your flash, you can get short lighting (see chapter 1) with your on-camera flash.

My bounce flash technique hinges on the idea of bouncing the flash toward the area where I want my light to come from. I don't think of my flash as being my light source anymore. Instead, the bounce surface (a wall or any other area I bounce my flash off) becomes a kind of softbox—a huge area giving me more diffuse light—and since it comes from an off-camera direction, it's not only soft light, it's also directional light.

### **Plate 6-1 (facing page).**

Bounce flash was used to emulate studio portrait lighting. ( $1/100$  second, f/3.2, 1250 ISO, 70–200mm f/2.8 lens; bounce TTL flash with FEC at 0EV)

TOP LIGHTING JUST  
ISN'T AS FLATTERING  
AS LIGHT FROM  
AN ANGLE TO THE  
SUBJECT.





**Plate 6-2.** The Black Foamie Thing ([www.neilvn.com/tangents/about/black-foamie-thing/](http://www.neilvn.com/tangents/about/black-foamie-thing/)).



**Plate 6-3.** The Spinlight 360 ([www.neilvn.com/tangents/about/spinlight-360/](http://www.neilvn.com/tangents/about/spinlight-360/)).

**Flag the Flash.** When bouncing my flash to the side of my subject like this, I am still aiming my flash slightly toward my subject. Therefore, to remove the chance of direct flash on her, I flag the flash. This blocks the direct flash (light from the camera's point of view) from hitting my subject.

For flagging, my device of choice is the Black Foamie Thing. This is simply a piece of thin black foam I bought from an art-supply store and cut to size (**plate 6-2**). I keep the piece of black foam fastened to my flash with two hair bands that I stole from my daughter. Yes, it's low-tech—but it's simple and it works! For a more elegant on-camera flash modifier than the BFT, there is the Spinlight 360. This does very much the same thing, but

FOR FLAGGING,  
MY DEVICE OF CHOICE  
IS THE BLACK  
FOAMIE THING.



I NEEDED TO  
ELIMINATE  
EVERYTHING  
UNWANTED IN  
THE FRAME AND  
CHOOSE A SPECIFIC  
BACKGROUND.

with more flexibility because it offers an additional bounce card option (**plate 6-3**).

**Control the Background.** The next image sequence was created with Shawna, a model I frequently work with when I visit Las Vegas. Her portraits were taken in a hotel room, using just the on-camera flash as lighting. **Plate 6-4** shows the cluttered background against which we were working.

This presented some challenges. First, to create a clean, flattering portrait, I needed to eliminate everything unwanted in the frame and choose a specific background. Second, I needed to balance the exposure levels on the background and on my subject. Let's take a systematic look at the thought process at work here.

*1. Find Your Background.* One thing I'm particular about is that my background should be complementary, or at least non-intrusive (**plate 6-5**). A fast telephoto zoom is an indispensable lens for compressing the perspective when shooting a portrait. In this case, I crouched slightly to avoid including the bland rooftop areas and to frame Shawna against the out-of-focus "New York"

**Plate 6-4.** Shawna in the hotel room.





**Plate 6-5.** First, find your background. Here, it was the simulated New York City skyline outside the window of my Las Vegas hotel.

skyline in Las Vegas. The colors and shapes aren't intrusive; they help give the final photograph even more color. (The turquoise tint here is due to the coloration of the windows at the MGM Grand hotel.)

2. *Meter the Background.* You'll want to base your exposure on the ambient-light exposure of the background. I generally don't want the background to blow out completely (though there can be situations where that *is* the goal), nor do I want the background to be too dark. In this case, I metered for the background, zeroing the exposure meter in my camera while aiming the camera at the background. In manual mode, I set my camera to  $\frac{1}{250}$  second at f/4 and 800 ISO.

3. *Add Light to Your Subject.* If, at this exposure level, your subject is underexposed, you can then choose to elevate the subject exposure by adding light, such as flash. In this case, I added bounce flash to light my subject. She would have been severely underexposed without this additional light.

Shooting with my camera in manual mode anchored my ambient exposure. This meant I could change my position and find the composition I wanted. It also allowed me to position my on-camera flash's bounce direction as I needed. The camera automatically adjusted the TTL flash exposure to give me the correct flash exposure—letting me concentrate on the final image rather than making constant tweaks to my flash setting.

## TTL FOLLOWS YOUR CAMERA SETTINGS

If I hadn't based my exposure specifically off the background, but had instead chosen random settings, the TTL flash exposure would *still* have given me a correct exposure for my subject. This is important to understand: the TTL flash exposure will follow your camera settings. Your camera will instruct the flash to give enough light for a correct exposure (or at least what the camera deems to be correct). This means that you'll get a correct TTL flash exposure for a variety of camera settings. This is another important thing to grasp about TTL flash: you can change your settings and still get the same flash exposure. Look at **plate 6-7** in contrast to **plate 6-6**. At a wider aperture and slower shutter speed setting, the subject in **plate 6-7** is still correct but the background is too overexposed for my liking.



With this approach, I can use the FEC settings to add a little bit of flash (for fill light) or to add more flash if I need it to balance the available light. Or, if the available light is poor, I can underexpose for it and just let the flash give me a proper exposure. That's what I did for my final image here (**plate 6-6**); the bounce flash wasn't mere fill flash, it was the main light source.

I also posed Shawna so that her shoulder was pointed toward the light and her head was tilted in the direction of the light. This let me get (or at least approximate) short lighting.

**Plate 6-6 (right).** The subject (bounce flash) and background (ambient) exposure levels are balanced in this portrait of Shawna. ( $1/250$  second,  $f/4$ , 800 ISO, 70–200mm  $f/2.8$  lens; bounce TTL flash with FEC at 0EV)



**Plate 6-7.** TTL flash follows your camera settings. Here, my camera settings resulted in a too-bright background (but my subject was still well-exposed by the flash). ( $1/80$  second,  $f/3.2$ , 800 ISO, 70–200mm  $f/2.8$  lens; bounce TTL flash with FEC at 0EV)





## OUTDOOR PORTRAITS

When doing evening portraits of a bride and groom as part of your wedding coverage, there's ever-present pressure for you to deliver your best. The only opportunity to whisk the couple away for a few minutes is during dinner, when the party is at a lull. For these portraits, you have even less time than for those made earlier on in the day—and there's the added challenge of holding the attention of the couple, who are eager to get back to their guests at the reception.

I usually scout a few places beforehand, getting a clear idea of what I want. When setting out with the couple, I rely on bounce flash and on video light (see chapter 10 for more on this). There isn't always time for setting up off-camera flash. You need to move quickly and still get the shots.

For this wedding, I wanted to capture a specific portrait of the couple with the exterior of the venue as a backdrop (**plate 6-8**). I would normally have used video light here, but I decided that I wanted the compression from a longer lens like the 70–200mm f/2.8. I also wanted to show a fair amount of the venue—and with that kind of wider view, anyone holding up a video light for me would have been in the shot. The solution was to get flash on my subjects.

Fortunately, I had part of the building to bounce my flash off. In **plate 6-9**, you'll notice that I bounced my flash off an area above the main entrance area of the venue. Because I had the flash's head pointed partly towards the couple, however, I still had to flag my flash. The BFT to the rescue! As always, the

I USUALLY SCOUT  
A FEW PLACES  
BEFOREHAND,  
GETTING A CLEAR  
IDEA OF WHAT I WANT.



**Plate 6-8 (facing page).** A wedding portrait with the exterior of the reception venue in the background. (1/60 second, f/2.8, 1600 ISO, 70–200mm f/2.8 lens; bounce TTL flash with FEC at +1 EV)

**Plate 6-9 (left).** A quick grab-shot with my 24–70mm lens.





idea when using the BFT to flag my flash is to block any flash from falling directly on my subject. Here, this let me create soft, indirect light that lit the couple from a nice angle—similar to using an off-camera softbox. Of course, in this case, I had to be at fairly extreme settings on my camera to make that work.

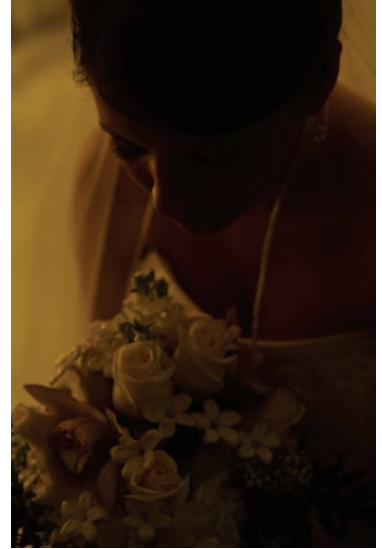
Bouncing your flash entails a loss of power. It produces nice lighting, but it isn't an efficient way of using your flash's output. Consequently, you won't be able to bounce flash at low ISO settings (or small apertures), or in daylight, or in any other circumstances where the ambient light is strong. Doing so would require settings where your flash simply isn't powerful enough. In a situation like that, you're better off using off-camera flash. Here, though, with a flexible idea of what is possible in bouncing on-camera flash, I was able to work quickly to get an image that really looks good.

## MIMICKING WINDOW LIGHT

**Plate 6-10** is a classic shot of a beautiful bride, Jennifer, lit by soft window light. But what you really see here is on-camera bounce flash, not window light. My flash was pointing directly to my left, and slightly toward the bride. The BFT prevented any direct light from falling on her. The wall that I bounced my light off became my light source. Because the bounce surface was a large area and positioned to the side, it gives the appearance of soft window light. A little sweetening of the image in Photoshop gave me the final photograph. For comparison, look at **plate 6-11**; for this shot, I disabled my flash to show what the ambient light levels looked like at the same camera settings.

### **Plate 6-10 (facing page).**

Bounce flash was used to simulate window light. ( $1/60$  second, f/1.8, 800 ISO, 85mm f/1.4 lens; bounce TTL flash with FEC at +1 EV)



**Plate 6-11.** The same scene and subject without bounce flash. ( $1/60$  second, f/1.8, 800 ISO, 85mm f/1.4 lens; available light only)





# 7. OFF-CAMERA FLASH

## OFF-CAMERA FLASH VS. DIRECT ON-CAMERA FLASH

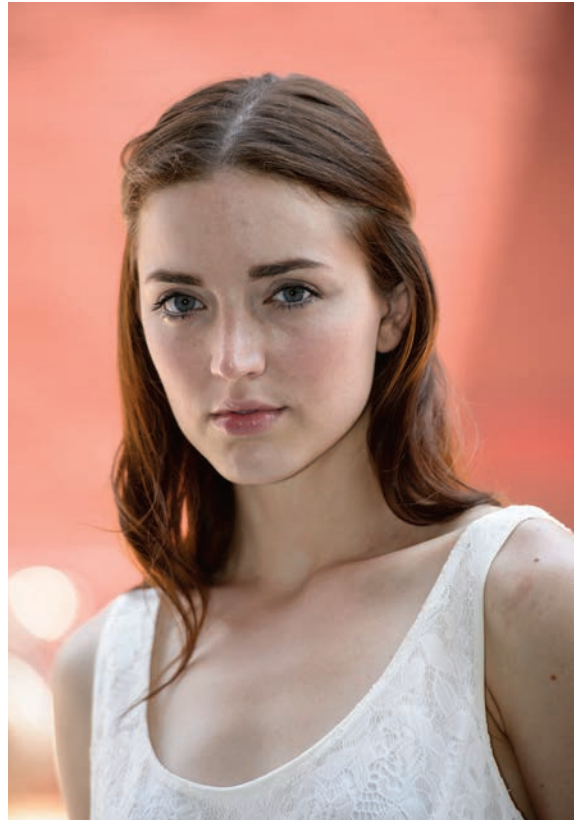
In chapter 6, we saw how good on-camera flash can look when the light is bounced—with some careful consideration given to the direction of the light. But the question inevitably arises: what if there is nothing to bounce off? With flash, we have two options: using direct on-camera flash or switching to off-camera flash. **Plates 7-1** through **7-3** show the results of this decision.

For **plate 7-1**, I posed Anelisa in an area where the ambient light on her was quite uneven, leaving her eyes shaded. The

**Plate 7-1.** Anelisa in uneven available light. ( $1/200$  second, f/2.8, 200 ISO, 70–200mm f/2.8 lens; available light only)



**Plate 7-2.** On-axis flash produced a flat, unappealing look. ( $1/200$  second, f/4, 200 ISO, 70–200mm f/2.8 lens; direct, on-camera TTL flash)



**Plate 7-3.** Off-camera flash in a softbox yielded a much more flattering portrait. ( $1/200$  second, f/4, 200 ISO, 70-200mm f/2.8 lens; off-camera TTL flash in a softbox)



THERE IS NOW A NICE  
INTERPLAY BETWEEN  
LIGHT AND SHADOW  
ON ANELISA'S FACE.

exposure is correct, but the light isn't flattering. For **plates 7-2** and **7-3**, I underexposed the ambient light by 1 stop, so that the effect of the flash could be seen more easily. **Plate 7-2** shows the typical result from direct on-camera flash, where the flash is dominant. There is a tell-tale hard shadow under her chin and we can see specular reflections on her skin. The on-axis flash also produced flat light that isn't dynamic. **Plate 7-3** was created with an off-camera flash in a double-baffled softbox placed to camera left. Because the light was now coming from a different angle than the camera's point of view, the effect is more dynamic; there is now a nice interplay between light and shadow on Anelisa's face. I think we can all agree that the diffused off-camera flash clearly produces better results and a more flattering look.



## DIRECTIONAL LIGHT

As we've seen throughout the book so far, light that is directional is usually more interesting because it gives our subjects form and shape. The interaction of light and shadow is what gives our photographs a three-dimensional effect. We can get directional light by posing our subjects in a specific way in relation to the available light or with directional bounce flash. But the easiest and most predictable way of getting directional light is with off-camera flash—whether it's direct (undiffused) or modified (diffused with an umbrella, softbox, etc.).

## GREAT LIGHTING—ANYWHERE, ANYTIME

For **plate 7-4**, a promotional photograph of a band, I used just the available light in the train station. I had the band members positioned so that they were turned into the light streaming through the high windows.

Working like this can give excellent results, but it makes you dependent on finding great light and using it effectively—which, in turn, limits your compositional and background choices. This is where the use of off-camera flash is liberating. With off-camera flash, you can position your subjects wherever you like, then add great light. For this reason, off-camera flash is very often a more practical choice.

By using off-camera flash, you are assured that the lighting will be flattering and interesting. That's taken care of. This frees you up to concentrate on interacting with your subjects and designing an effective composition in any location you choose. For **plate 7-5** the lighting setup was supremely simple. **Plate 7-6** shows where

### IT'S NOT ABOUT THE GEAR

I won't be going into hardware choices here, because I strongly believe that once we understand the underlying techniques, the equipment matters less. Even though the gear available to us constantly changes as technology improves, the fundamental techniques for how we use light remain constant. So let's focus on that.



**Plate 7-4.** Shooting with available light makes you dependent on finding good light. (1/50 second, f/8, 800 ISO, 24–70mm f/2.8 lens; available light only)



**Plate 7-5.** Adding off-camera flash liberates you to use any location. ( $\frac{1}{200}$  second, f/5, 800 ISO, 24–70mm f/2.8 lens; off-camera TTL with FEC at  $-1\text{EV}$ )



**Plate 7-6 (left).** The lighting setup for plate 7-5.

**Plate 7-7 (right).** The same setup as in plate 7-5, but with the flash disabled. ( $\frac{1}{200}$  second, f/5, 800 ISO, 24–70mm f/2.8 lens; available light only)



I placed the light and the overall setup for the image. As you can see, it required only very basic and portable gear—a light-stand, a shoot-through umbrella, and a radio transmitter to trip the flash (in this case, the PocketWizard TT5).

**Plate 7-7** is a comparison image from the same sequence, but with the flash disabled. Note the uneven light and the shadows under the subjects' eyes.



**Plate 7-8.** Exposing for the sky made the street scene go completely dark. ( $\frac{1}{250}$  second, f/11, 200 ISO, 24–70mm f/2.8 lens; ambient light only)



**Plate 7-9.** Simply adding flash illuminated Alex in a sea of black—the background makes no sense. ( $\frac{1}{250}$  second, f/11, 200 ISO, 24–70mm f/2.8 lens; off-camera manual flash)

## MANUAL FLASH ON LOCATION

With on-location flash photography, you nearly always start off by figuring out what you want to do in relation to the available light. You may need fill flash only, or the flash may need to do the “heavy lifting” and expose correctly for the subject in relation to the available light on the background.

When you have a subject in (relative) shade and need to figure out the flash exposure, you first need to decide what part of the background is important. Often, you can’t expose correctly for *all* the background areas, so you have to choose which part to use and position the subject/camera in relation to that. That area will provide the basis for your ambient light exposure setting.

Let’s run through that thought-process using an image of Alex. The background for this series of images was a street scene in Manhattan. However, if I exposed for the sky, the street went completely dark (**plate 7-8**). Since I couldn’t expose correctly for *both* the sky and the street scene; I had to decide which element of the background would be exposed correctly, then add flash to expose my subject. Unfortunately, simply adding flash to the current composition to expose correctly for Alex left me with an image that didn’t make sense (**plate 7-9**). She was lost in a pool of black surroundings.

Positioning myself so that I could shoot at an upward angle and use the sky as my background made much more sense (**plate**

OFTEN, YOU CAN’T  
EXPOSE CORRECTLY  
FOR ALL THE  
BACKGROUND  
AREAS.





**Plate 7-10.** Changing my camera angle to include more of the sky improved the background immensely. ( $\frac{1}{250}$  second, f/16, 200 ISO, 24–70mm f/2.8 lens; ambient light only)



**Plate 7-11.** The setup for this shot.

**Plate 7-12.** Adding manual flash completed this image of Alex. ( $\frac{1}{250}$  second, f/16, 200 ISO, 24–70mm f/2.8 lens; off-camera manual flash)

7-10). I also dropped my exposure to really saturate the sky. There is no specific “correct” exposure here for the sky; I simply chose how I wanted the sky to appear by manipulating my exposure settings. Adding manual off-camera flash to this mix immediately gave the final image a dramatic look (**plate 7-12**). **Plate 7-11**, a pull-back shot, shows the position of the light.



So how did I meter this shot to balance the background and the manual flash? Here's a step-by-step look at the process:

1. I decided on the aperture I wanted to use, based on what I wanted to do with the background.
2. Since I was shooting in bright light, a low ISO was the best option and gave me the best image quality. Since I already knew I would be shooting at a fairly small aperture, I didn't need to bump up the ISO.
3. I decided to shoot at the maximum flash sync speed, giving me the most flash range at my aperture setting.
4. I decided to use manual flash, meaning the aperture and ISO were fixed values in this scenario. That left the distance and power of the flash as the other variable controls.
5. Knowing I needed to get an output of  $f/16$  at 200 ISO from the flash, I placed a Quantum T4D in a softbox and set it to full manual output. Essentially, the power setting for the flash was decided for me by the bright sky.
6. Finally, I used a light meter to measure the flash's output, adjusting the position of the softbox closer and closer to the subject until it read  $f/16$ . (Remember: the distance we're concerned about here is the distance from the light to the subject, not from the photographer to the subject!)

SO HOW DID I  
METER THIS SHOT  
TO BALANCE THE  
BACKGROUND AND  
THE MANUAL FLASH?

At this point, all of my settings for a proper flash exposure were correct in relation to the chosen background. All I had to worry about was directing the model and nailing the composition.

## TTL FLASH ON LOCATION

**Plate 7-13**, an image of Amy, is a straight-forward location portrait using off-camera flash. It is ideal for an overview of how easy the ambient and TTL flash metering is for off-camera flash. The basic approach was to expose for the ambient light in the background,

**Plate 7-13.** A simple location portrait of Amy. ( $1/500$  second, f/2.8, 200 ISO, 70–200mm f/2.8 lens; off-camera TTL flash with FEC set to +0.7EV)



DECIDE ON YOUR  
BACKGROUND AND  
THEN DETERMINE  
HOW YOU WANT TO  
EXPPOSE IT.

making sure my subject was somewhat underexposed. I then added off-camera flash with a softbox. Let's look at this process in more detail, though.

The first step was metering the available light. In this scenario, there were two main areas in the background that I could have chosen to expose for: the brighter sky area and the less-bright tree area. Because of the difference in the lighting, it was not possible to expose for both of those areas correctly; I had to pick just one. When designing your composition, it is always important to decide specifically on your background and then determine how you want to expose it.

In this case, I chose to expose for the trees in the background. This meant my model would not be underexposed to a great



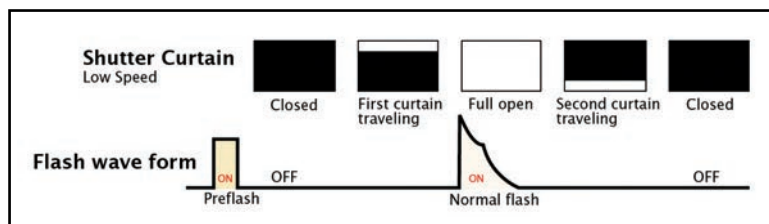
extent (as she would have been if I had exposed for the very bright sky area). That meant it was easy to bring the subject exposure up to the desired levels using off-camera flash. Choosing the trees as my background meant that the brighter sky area would blow out, so I made sure that this was a relatively small portion of the background in my final composition. My main background area was the patch of out-of-focus trees. Again, you have to be calculating when choosing the background for your photos.

Having decided on the trees as my background, I metered by looking at the camera's display while eliminating the bright sky areas from the frame. Then, I dialed my settings in manual exposure mode to anchor the exposure, ensuring that no composition adjustments I might make would affect the camera settings. I purposely chose to overexpose a bit with this image, taking the exposure  $\frac{2}{3}$  stop up from the zero point shown on my camera's built-in meter. Why  $\frac{2}{3}$  stop? Because that's how I wanted it. In a sense, there is a no "correct" exposure for the background in this specific scenario. You could choose to make it bright and airy with pastel tones or to underexpose it for a moodier, darker look. It's your choice as the photographer.

The next step was to meter for the flash. However, the surprising truth is that I *didn't* meter for the flash—because you can't really meter for TTL flash. You have to rely on the technology. That's the beauty of using TTL flash; you can largely rely on the technology to get you there. Using the metering circuitry in the camera, the flash exposure is calculated based on a pre-flash that the flash emits just before the actual pulse of light that produces the proper exposure (**plate 7-14**).

With TTL flash, you just need to check your camera's LCD display to decide whether you like the flash exposure, then dial the FEC down or up to get the desired exposure for the next

YOU HAVE TO BE  
CALCULATING WHEN  
CHOOSING THE  
BACKGROUND FOR  
YOUR PHOTOS.



**Plate 7-14.** A short pre-flash is used to determine the correct flash settings by the TTL metering.

**Plate 7-15 (left).** Ambient light only. ( $\frac{1}{320}$  second, f/2.8, 200 ISO)

**Plate 7-16 (right).** With TTL flash. ( $\frac{1}{320}$  second, f/2.8, 200 ISO)



**Plate 7-17 (left).** Ambient light only. ( $\frac{1}{500}$  second, f/2.8, 200 ISO)

**Plate 7-18 (right).** With TTL flash. ( $\frac{1}{500}$  second, f/2.8, 200 ISO)



sequence of images. For a situation where you need to work fast, this makes TTL flash very easy to use. But for a situation where you need numerous photographs that are consistently exposed, you will have much more to do in postproduction than if you had shot with manual flash (which is completely consistent from frame to frame; see chapter 4).

**Plates 7-16 and 7-18** show the results of changing my settings between shots. **Plates 7-15 and 7-17**, show the coordinating ambient-only exposures. There's not a large change in the ambient exposure (just  $\frac{2}{3}$  stop), but it still shows how the TTL

flash exposure picked up the slack and gave me a correct overall exposure for the model. The TTL flash simply followed the camera settings. It's simplicity itself.

The key point I want to emphasize is how easy it is to use off-camera flash—especially with TTL. Being able to rely on the TTL flash technology to give you the correct flash exposure lets you be less concerned about fussing with specific settings and devote more of your attention to the other essential elements of the final photograph—things like directing the model, composing the shot, and determining the best direction and quality for the light.

The easiest starting point for placing the off-camera flash is about 30 degrees up from your subject's eyes and about 30 to 45 degrees off to the side. For the previous image sequence, a softbox was positioned to camera left. By positioning your softbox like this, you get great light that isn't too dramatic—but there's still enough of a gradient to the shadows that it will enhance the form and shape of your subject.

You would get similar results with an unmodified off-camera flash in the same position, but the light would be less soft. Direct off-camera flash has a harder look with sharper shadows. This can look really good, but a softbox is easier to use since it is more forgiving in terms of placement.

A SOFTBOX IS EASIER  
TO USE SINCE IT IS  
MORE FORGIVING  
IN TERMS OF  
PLACEMENT THAN  
DIRECT FLASH.

## HIGH-SPEED FLASH SYNC (HSS)

As you may have guessed from the shutter speeds, which exceed the normal range of maximum flash sync speeds, **plates 7-13** and **7-15** through **7-18** were created using HSS. As noted in chapter 4, there's a loss of power/range/efficiency from your flash when you go in to this mode. In this case, though, the softbox was close enough to the model that I still got a correct exposure. Had I shot at a smaller aperture or been working at the extreme range of what the flash was capable of putting out, I would definitely have seen underexposure. That is the key to working with HSS: use your softbox close to your subject, or use direct (undiffused) flash.

**Plate 7-19**, a fun image of Aleona, was also created using HSS. To capture her in mid-air, I needed a fast shutter speed

**Plate 7-19 (right).** Choosing a fast enough shutter speed to freeze Aleona in mid-air meant switching to HSS. ( $1/1000$  second, f/4, 800 ISO, 24–70mm f/2.8 lens; off-camera TTL flash with FEC at +0.3EV)





to effectively freeze the movement. Fortunately, my flash in a softbox was close enough to Aleona that I was able to get a good flash exposure on her—even at the high shutter speed. I did remove the one baffle from the softbox to increase the amount of light that the softbox would be capable of producing.

So here's a quick overview of when you would use HSS in your off-camera flash photography:

1. When you need a shallow depth of field (wide aperture), *or*
2. When you need a fast shutter speed, *and*
3. When you have flash power to spare.

That about sums it up! Use HSS when you truly need the higher shutter speed or shallower depth of field—and when you can afford the subsequent loss in power.

## **DIRECTION OF LIGHT VS. YOUR POSITION**

Ulorin Vex is a model with such striking looks that I jumped at the chance to photograph her. What is most interesting about **plates 7-20** and **7-21** is that they were both created using exactly the same lighting. This brings us to a key concept with light—one that is true whether you use available light, off-camera flash, or even when you control the direction of your bounce flash: you can change the direction of the light by changing your own position.

For both images, Ulorin Vex remained in the same spot, only rotating her pose to follow the camera as I moved. The light is so dramatically different because I changed my position—and that, in turn, entirely changed the direction of light. (*Note:* While I kept the flash to the same output, I did have to change my aperture as I changed my position.)

These photographs are from a sequence we did in the passage outside of a hotel room. The lighting was surprisingly simple, but I had to improvise with the limited space we had. For the main light, I used a single flash bounced into the exit stairwell on that floor. I propped the door open with my camera bag. I bounced

YOU CAN CHANGE THE  
DIRECTION OF THE  
LIGHT BY CHANGING  
YOUR OWN POSITION.



**Plate 7-20.** The model posed with her back to the wall. ( $1/80$  second,  $f/4$ , 400 ISO, 24–70mm  $f/2.8$  lens; off-camera manual flash)



**Plate 7-21.** As the camera changed position, the model turned with it—but the light remained in the same position as in the previous image. ( $1/80$  second,  $f/5$ , 400 ISO, 24–70mm  $f/2.8$  lens; off-camera manual flash)

**Plate 7-22.** The setup for these images.







**Plate 7-23 (facing page).** Positioning myself so the wallpaper glare was right behind the model gave me a look close to lighting with a ring flash. ( $\frac{1}{80}$  second, f/5, 400 ISO, 24–70mm f/2.8 lens; off-camera manual flash)

I TRIED TO POSITION  
MYSELF SO THAT  
THE GLARE SPOT  
WAS DIRECTLY  
BEHIND HER.

my flash into the left of that area, behind the wall and out of the model's line of sight. I wanted to make the light streaming through that doorway as diffuse as possible, minimizing the potential for hot-spots.

In this instance, the flash was controlled via a PocketWizard FlexTT5 on which the flash was mounted. The output of this flash was controlled in manual mode via the FlexTT5 and AC3 ZoneController on the camera. It was very simple. Any manual flash on a light stand would have worked, as well.

In **plate 7-23**, another image from this series, I love the way the light glares off the wallpaper, creating an effect that looks somewhat like the image was shot with a ring flash. To capture this look, I tried to position myself so that the glare spot was directly behind her, producing that kind of halo.

Hopefully, this will convince you that you don't need complex lighting to get striking results. The setting where you photograph can also be quite simple. From there, it is up to you as the photographer to add lighting that complements your subject and/or the idea you want to communicate in your images.

## FEATHERING THE LIGHT

Comparing **plates 7-24** and **7-25**, you should notice two things immediately. First, the sky is brighter in **plate 7-24**. Second, the grass in front of the group is more lit in **plate 7-25**. In other words, in **plate 7-24**, the accent is more on the guys, since the grass in front of them is less well lit.

Both images were lit by a single off-camera flash in a softbox. An on-camera flash was set to master (to trigger the off-camera flash) but its output was disabled, so it didn't add to the final exposure. Only the slaved flash in the softbox was lighting the group. In my initial test images, the subjects were blown out because of the predominantly darker tones in the image, so I had to pull down the TTL's FEC setting to -2EV.

Now, let's return to our two initial observations about these images. Looking at **plate 7-24**, the sky is brighter because I dropped the shutter speed from  $\frac{1}{50}$  second to  $\frac{1}{25}$  second (the setting used for **plate 7-25**). I did this because I wanted more







**Plate 7-24 (facing page, top).** The sky is brighter in this image. ( $1/25$  second, f/5.6, 800 ISO, 24–70mm f/2.8 lens; off-camera TTL flash with FEC at -2EV)

**Plate 7-25 (facing page, bottom).** The grass is brighter in this image. ( $1/50$  second, f/5.6, 800 ISO, 24–70mm f/2.8 lens; off-camera TTL flash with FEC at -2EV)

of the color in the early evening sky to register. This is a classic example of dragging the shutter to allow more ambient light in.

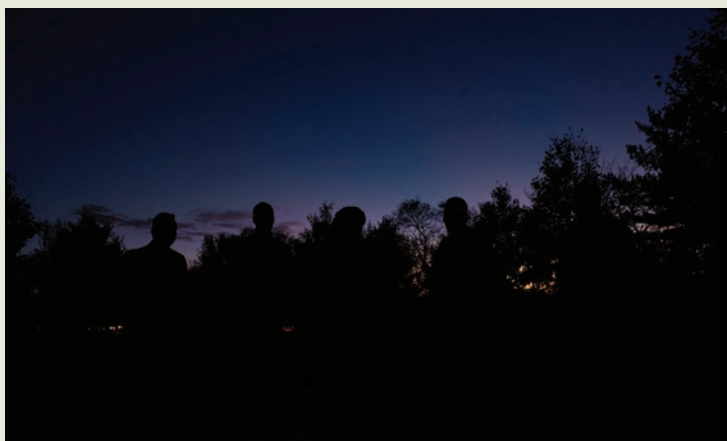
The way the light falls off in **plate 7-24** was also intentional. **Plate 7-25** was actually shot *first*, but I felt the ground was overlit and was taking attention away from the guys. To correct for this, I directed my assistant to tilt the softbox upward for the next shot. Tilting the softbox so that the central area was pointing up, instead of directly at the guys, resulted in less light spill on the ground. (I still got enough light on the groomsmen, though, since the TTL flash exposure maintained the correct exposure based on the FEC that I set.) Directing the light away from your subject like this—using just the edges of the cone of light—is called “feathering” the light. You can do this to control the way the light spills or to adjust how the light spreads across your subject.

For these images, the softbox was placed to camera left, above and a little behind the camera position. The light falloff was

### NO CAMERA-SHAKE WORRIES

Despite the long shutter speed, there was no reason to worry about camera shake or subject movement. In fact, I could have pulled my shutter speed down even more, if I had wanted to. Flash is a near-instantaneous burst of light that will freeze most average movement—whether of the subject or the camera. As long as the subject’s ambient exposure is at least 3 stops below the ambient light level (without the flash, they would be completely underexposed), you simply won’t notice any camera/subject movement.

**Plate 7-26.** This image was taken less than two minutes after the previous ones, and you can see that the sky was already a bit darker. It gives you an idea, though, of just how dark it was at the camera settings used. Without flash, it’s black; nothing registers but the sky.



gradual because the distance from the groom to the groomsmen behind him wasn't much of a jump relative to their mutual distances from the softbox. When the distance ratio isn't too extreme, the light falloff isn't too noticeable.

## OFF-CAMERA BOUNCE FLASH

**Colorful Portrait in a Lobby.** During a photo session with model Ulorin Vex, we worked in the foyer area of a hotel. When I saw the bench and wall shown in **plates 7-27 and 7-28**, I knew that it would work as a simple backdrop—but with colors that would pop. The pose was mostly Ulorin Vex's idea; she is supremely professional and easy to photograph, bringing so much to the photo session. All I needed to provide was gentle fine-tuning for the positioning of her hands and legs. I wanted a nearly symmetrical image, with her posture just slightly breaking up the symmetry.

In lighting this, I went for a super-simple setup, bouncing an off-camera flash into the ceiling and away from her. The light in the lobby was predominantly incandescent, so I added a 1/2 CTS gel on my flash (more on this in chapter 9). Looking at some test shots without flash, I saw that very little of the ambient light registered, so it wouldn't have made much of difference. Still, it makes more sense to keep the flash as close as possible to the color balance of the predominant ambient light source.



**Plates 7-27 and 7-28 (above and facing page).** Ulorin Vex was photographed in the lobby area of a nightclub. (1/80 second, f/3.2, 640 ISO, 70–200mm f/2.8 lens; off-camera bounce flash)

**Plate 7-29.** A pull-back shot showing the lighting setup.











**Plate 7-30 (facing page, top).** A high-key maternity portrait created in the couple's bedroom using off-camera bounce flash. ( $\frac{1}{250}$  second, f/4, 800 ISO, 70–200mm f/2.8 lens; TTL off-camera bounce flash)

**Plate 7-31 (facing page, bottom).** For comparison, the same image with the flash disabled. ( $\frac{1}{250}$  second, f/4, 800 ISO, 70–200mm f/2.8 lens; available light only)

THE COUPLE WAS MY  
SUBJECT, NOT THE  
OUT-OF-FOCUS AREA  
BEHIND THEM.

**High-Key Portrait in a Bedroom.** Part of what makes wedding photography so rewarding is keeping contact with clients over the years. Maternity photo sessions, baby photos, and children's portraits are all part of many couples' lives after the wedding. If we're fortunate as photographers, we remain part of their lives, too.

So it was with great pleasure that I had a maternity photo session with Renee and David. For this particular photograph (**plate 7-30**), I used a flash on the floor behind their bed, aiming it up at the ceiling to flood the room with light. The reflected flash spilled around David and Renee, wrapping them in soft light. Everything behind them, including the curtains, was overexposed—and that was the intention; the couple was my subject, not the out-of-focus area behind them. I wanted the look of high-key lighting.

The flash behind them on the floor was the only additional light that I used here (**plate 7-31** shows how the scene looked with it disabled). The flash was controlled by an on-camera PocketWizard FlexTT5 radio transceiver, which controlled the FlexTT5 on the slaved TTL flash. TTL flash is fairly unpredictable in how it will behave with a backlit shot like this. Normally, rim lighting is best controlled as a manual flash, since the camera can't really meter for it. However, in this scenario there was a mix of dark tonal areas and brighter tonal areas, so the TTL flash did very well in giving me correct exposure.

Regarding the camera settings, I knew these settings would underexpose the available light. I didn't specifically meter for it. Then, I let the TTL flash technology take care of the exposure. That's the beauty of TTL; it will follow your settings. That's the technical *implementation* of the photograph.

The artistic *intent* was to capture a simple, tender portrait of a dad-to-be. These things, the intent and the implementation, go hand-in-hand to create a photograph that works. By simplifying my composition to include only David and his baby-daughter-to-be, the connection between them was highlighted. The lighting was merely a supplement.

## OFF-CAMERA FLASH AS WINDOW LIGHT

For another part of my photo session with Ulorin Vex, we worked in a hotel room. Photographing inside the room, I initially tried to shoot with the window light only. However, I hit a small snag: the indirect light through the window kept changing as clouds moved in and out. Instead of try to change my settings continually to match the light, I decided to use flash to mimic window light, and thereby get a consistent look and exposure level.

**Plate 7-32** shows the quality of light I was after: soft, directional light that still added a sense of drama. The light in the photo is mostly flash, with just a bit of ambient. It took a few adjustments, though, to get to a point where I really liked the look.

The next sequence shows where we started. In these test shots (**plates 7-33** and **7-34**), you can see the table and clutter in the background before we moved it out of the way. What is also immediately noticeable is that the exposures here are different—even though my camera remained at the same settings for both images. The available light in **plate 7-34** looked good, but it was too inconsistent for a sequence of images. I would rather concentrate on the subject than have the rhythm of the photo session be broken up by constant exposure adjustments.

I then mimicked the window light by placing an off-camera flash in the window frame (**plate 7-35**). The flash pointed up toward the window, bouncing off the glass pane directly opposite her. I had the flash-head zoomed wide. The result was a flood of light into the room. I guess this would have looked like window light on a sunny day, but it just wasn't the feeling I wanted.

**Plate 7-32 (facing page).**

Ulorin Vex was photographed using flash to simulate window light. ( $\frac{1}{250}$  second, f/5.6, 800 ISO, 24–70mm f/2.8 lens; manual off-camera bounce flash)

**Plates 7-33 (left) and 7-34**

**(right).** The available light changed from frame to frame. ( $\frac{1}{200}$  second, f/4, 640 ISO, 24–70mm f/2.8 lens; available light only)









**Plate 7-35.** Adding bounce flash gave me a consistent exposure level, but not the look I wanted. ( $1/250$  second, f/5.6, 800 ISO, 24–70mm f/2.8 lens; manual off-camera bounce flash)

The next step was the “big adjustment” that made all the difference. I moved the light to the left in the window frame and rotated the flash so it pointed more to the left (**plate 7-36**). Now, the light bounced off the glass toward the top of the window pane. Yes, even though I was pointing the flash outward, enough light bounced off the glass to make the difference. The direction of the light was exactly what I was after. I also zoomed the flash head to a tighter angle to make the swathe of light less broad. I wanted the light to accentuate Ulorin Vex’s face.

The manual off-camera flash was controlled via a PocketWizard FlexTT5 transceiver on which the flash was mounted. The output of this flash could be controlled as manual flash via the FlexTT5



**Plate 7-36.** Changing the direction of the bounce, and narrowing the beam, resulted in a big improvement. ( $1/250$  second, f/5.6, 800 ISO, 24–70mm f/2.8 lens; manual off-camera bounce flash)





**Plates 7-37 and 7-38 (above and right).** Final images from my session with Ulorin Vex. ( $\frac{1}{250}$  second, f/5.6, 800 ISO, 24–70mm f/2.8 lens; manual off-camera bounce flash)



**Plate 7-39.** The same scene without flash. ( $\frac{1}{250}$  second, f/5.6, 800 ISO, 24–70mm f/2.8 lens; available light only)



and AC3 ZoneController on the camera. **Plates 7-32, 7-37, and 7-38** show the final results. **Plate 7-39** is a comparison that was shot without flash. It convincingly shows that bouncing the flash off the glass had the desired effect.

As photographers, we need to visualize what we want to achieve with our lighting and work toward it by figuring out



where we need to place our light(s). If you compare this shoot to the previous one with Ulorin Vex (**plates 7-20 through 7-23**) you can see that each lighting setup was actually quite simple. In this, and the other examples in this chapter, a simple flash offered unexpectedly good results. You just need to put some thought into where you want to go with the lighting.

To close this chapter, let's look at a couple more ways we can implement off-camera flash in our wedding and portrait photography.

## AVAILABLE LIGHT WITH FLASH RIM LIGHTING

Whatever kind of light you're using—available light, flash, video light, etc.—you need to take a moment and observe it. Where does the light come from? What is the quality of the light? Again, these are questions you need to ask yourself for *every* photograph you create (that's why I keep coming back to them over and over again!). Let's look at a couple of location shoots where I added

**Plate 7-40 (top left).** The scene and lighting to camera left.

**Plate 7-41 (bottom left).** The scene and lighting to camera right.

**Plate 7-42 (below right).** Alex was posed with her face turned toward the brighter of the two light sources. ( $\frac{1}{100}$  second, f/3.5, 800 ISO, 24–70mm f/2.8 lens; available light only)





**Plate 7-43.** A softbox was added for rim lighting on Alex's hat and shoulder.

off-camera flash, walking through the thought process step by step.

Working under part of the Highline in Manhattan, the available light was “forced” to come into the scene from two directions. To my left was the brightest part of the sky, which was slightly overcast (**plate 7-40**). This acted like a massive softbox—just like you might use during a studio session. To my right (and slightly behind me) was another large light source, but this area of the sky was less bright in comparison (**plate 7-41**).

Turning Alex's face slightly to camera left made the brighter source of available light work as the main light; the less intense light from camera right worked as the fill. Looking closely at Alex's face in **plate 7-42** you can see the interplay between the two light sources; one side of her face is more brightly lit than the other. Notice that this created short lighting (the side of her face turned away from the camera is more lit than the part of her face turned toward the camera). The light looks good—and the







**Plates 7-44 and 7-45 (facing page).** A kiss of light from an off-camera softbox improved the separation between Alex and the background. ( $\frac{1}{100}$  second, f/3.5, 800 ISO, 24–70mm f/2.8 lens; available light enhanced with off-camera flash in a softbox)

background is a complementary warm color. I still felt there was room for improvement, though.

To give some separation from the background, I decided to add a bit of flash for a hair-light effect. I used a Quantum flash in a softbox, with the flash's power turned all the way down to  $\frac{1}{32}$  power. The radio transmitters were the manual-only PocketWizard Plus II transceivers. You can see the placement of the softbox in **plate 7-43**. I asked that the softbox be feathered away from me so that just the edge of its light spilled onto Alex's beret and shoulders (**plates 7-44 and 7-45**).

When creating location photography, I evaluate the existing light, then ask myself whether I could improve it with flash (or a video light). Does it need something more to make it even better? If so, what do I need to add? This is based on an iterative thought process, each step taking me closer to my objective, rather than a compelling desire to use every flash that I own. In fact, when I add flash it's frequently just enough to enhance the available light.

That was my approach at a retro-futuristic cyberpunk shoot-out arranged by Hudson Valley Click. At this session, I had the pleasure of photographing Karyn in full-body paint (by NY Body Art). In **plates 7-46 through 7-48**, the majority of the light on Karyn was from the late afternoon light streaming through the

**Plate 7-46.** A pull-back shot showing the windows and the position of the flash for my shoot with Karyn.







**Plates 7-47 (facing page) and 7-48 (right).** A splash of light from an off-camera flash enhanced the available light in these images of Karyn. ( $1/40$  second, f/3.5, 1600 ISO, 70–200mm f/2.8 lens; available light enhanced with off-camera flash)



THE ADDITION OF THIS  
LIGHT REALLY HELPED  
ETCH HER OUTLINE  
AGAINST THE OUT-OF-  
FOCUS BACKGROUND.

windows of the unused factory. I posed her into the light and then added a Canon 600EX-RT for a splash of rim light and a subtle hot-spot behind her (**plates 7-47 and 7-48**). The flash was controlled by an on-camera Canon 600EX-RT as the master. I had the output of the master flash disabled so it didn't put any light on the subject. The addition of this light really helped etch her outline against the out-of-focus background. The dust in the area also produced a slight halo effect around her body.

This is the kind of setup where just using the built-in optical wireless system of a flash like the Canon 580EXII would have been a problem, because the flash was just a bit out of line-of-sight. This meant I needed to use radio transmitters of some kind—which generally implies more cables, connectors, cradles, batteries, and flash settings. Fortunately, the Canon 600EX-RT Speedlites have built-in radio transmitters, making them much easier to set up and control.



# 8. MULTIPLE FLASH

## WHY USE MULTIPLE FLASH?

For most of the examples so far in this book, we have relied on a single additional light source—either for simplicity (such as when using on-camera bounce flash) or because we had an existing light source to use as the main light.

We've looked at several examples where subjects were positioned with their backs to the sun (or other ambient light source). This approach produces some form of rim light to enhance the separation between the subject and background. However, sometimes there simply is no ambient light to light the background or give that rim-light effect. In that case, it makes sense to use an additional light source in your setup. To provide the desired separation, you might place a second flash (or other light source) to illuminate the background or to add rim light to the subject. You might even decide to do both, adding one light on the background and positioning another for rim lighting on the subject.

SOMETIMES THERE  
SIMPLY IS NO AMBIENT  
LIGHT TO LIGHT THE  
BACKGROUND OR  
GIVE THAT RIM-LIGHT  
EFFECT.

A different reason to use another light in addition to the main light is when more fill is needed. If the main light is too contrasty, bounce flash or a flash in softbox can help to open up the shadows for a more appealing look.

Therefore, in setting up multiple flashes, you need to consider which of the following lights are needed:

1. Main light
2. Fill light
3. Background light
4. Rim light

The decision you make will have to be based on the specific shooting scenario in which you find yourself shooting. Some situations might need all four types of lighting added to the scene. Others might just need one additional light—whether to act as fill, or rim light, or as background light.

## START SIMPLY

The key to using multiple flashes successfully is to start as simply as possible, with just one light. Then, and only then, should you add other lights, one by one, as necessary. It's a mistake to approach every situation as if it needed *all* the lighting you have at your disposal. The only reason to use additional light sources is if it actually helps you create more dynamic lighting or lets you fix a problem in the scenario. In the rest of this chapter, we will look at various examples of multiple flash lighting in practice—and how the decision was made to use specific lights.

## INDOOR PORTRAITS

**Manual or TTL?** With Shawna as a model, I set up a photo session in one of the numerous lobbies of a Las Vegas hotel. Since the ambient light levels in this area were very low, I decided to rely on a multiple flash setup to create interesting light (**plate 8-1**). To control the flash units, I used a few PocketWizard FlexTT5 radio transmitters. The FlexTT5 on my camera also had an AC3 controller piggy-backing on it. **Plate 8-2** shows the basic setup.

SINCE THE AMBIENT  
LIGHT LEVELS  
WERE VERY LOW, I  
DECIDED TO RELY ON  
A MULTIPLE FLASH  
SETUP.

My main light (to camera left) was a flash inside a small Lastolite Ezybox. I initially had this set to TTL, but I changed it to manual output early on during the shoot because the background flash was affecting my TTL metering too much, leading to erratic exposures. When you find that you have to ride your TTL flash too much via FEC, it just becomes simpler to switch to manual flash.

The rim light was from a flash on a stand directly behind Shawna. This had to be set to manual flash, since the camera can't effectively meter a light in this position.

The background light was a flash on a monopod behind the frosted glass; this was held up by my assistant. To avoid a hot-spot



**Plate 8-1.** Shawna was photographed in the lobby of a Las Vegas hotel. ( $1/250$  second,  $f/5.6$ , 800 ISO, 24–70mm  $f/2.8$  lens; multiple off-camera flash units)



**Plate 8-2.** A snapshot showing the position of the rim light, my own position (as well as my oh-so-graceful way of posing a model), and the main light in the softbox.

on the glass, the flash had to be held off to the side, out of the frame. The background light's power was dialed in by checking the exposure on my camera's LCD preview. It wasn't something I could meter for with a handheld meter, since the background was a frosted glass pane that was lit up from behind with a flash. This is the beauty of digital photography; I simply chimped until I liked what I saw on the back of my camera.



**Plate 8-3.** I disabled the main light to create a silhouette effect. ( $1/250$  second, f/5.6, 800 ISO, 24–70mm f/2.8 lens; multiple off-camera flash units)

MANUAL FLASH  
ABSOLUTELY MAKES  
MORE SENSE IF  
YOU'RE SHOOTING  
IN ONE PARTICULAR  
SPOT WITH A SPECIFIC  
SETUP.



In the end, I had all three flash units set to manual. Simplicity is key—especially for a static setup like this. I am happy to use TTL flash when I need to work fast. In that case, the technology helps me get to a correct exposure more quickly. However, manual flash absolutely makes more sense if you're shooting in one particular spot with a specific setup. It gives you consistency in exposure that TTL flash doesn't. TTL flash, like any automatic metering mode, can be influenced by the subject's clothing, the brightness of the background, and the composition of the image.

For **plate 8-3**, I disabled the main light to get a silhouette effect. The two flashes that were enabled were the flash behind

Shawna (for a rim-light effect) and the flash on the frosted glass pane (to light up the background).

**Hollywood Glamour.** For this portrait of Natalie and Chris (**plate 8-4**), I wanted to create something dramatic—something reminiscent of the old Hollywood-style glamour portraits. The classic Hollywood portraits, as done by the masters, were lit with Fresnel spotlights, which are continuous lights. I decided to create some of that same mood using a few flash units.

I have a distinct preference for soft lighting, but if you look at the way the old Hollywood masters (George Hurrell, C. S. Bull, Laszlo Willinger, etc.) lit their classic portraits of movie stars, there are distinct shadows. They had a dramatic approach that made specific use of light and shade. To approximate this light quality, I used a small softbox, the 8.6-inch Lastolite Ezybox. I placed it on a light stand to camera left, fairly close to Natalie and Chris. I also wanted to accentuate their faces, with distinct light falloff toward the bottom of the frame. To accomplish this, I feathered the softbox upward and away from Natalie so that only the edge of the light from the softbox caught her face. The flash was set to manual output and triggered with a PocketWizard FlexTT5 transceiver.

From there, the lighting setup was similar to what I used with the photo session with Shawna (see **plates 8-1** and **8-2**). The rim light on Chris was created with a direct flash. From the direction of the light you can see that this was wasn't directly behind Chris, but more off to the side. This produced the highlights in his hair and the rim light on his clothing, separating him from the darker background. This flash, set on a light stand, was in manual mode and controlled with a FlexTT5 transceiver.

To keep the dark wooden paneling in the background from falling completely into blackness, I lifted the exposure there with a flash shining directly on it. This flash, controlled with another FlexTT5 unit, was also set to manual output. I had it zoomed to 28mm and turned away from Chris's back.

Because it was so dark in this lounge area, I used a Nikon SB-900 as a master on top of the FlexTT5 mounted on the camera. This gave me the autofocus-assist from the SB-900.

**Plate 8-4 (facing page).**

Feathering the main light helped me create the look I wanted in this portrait of Natalie and Chris. (1/250 second, f/5.6, 800 ISO, 24–70mm f/2.8 lens; multiple off-camera flash units)

I WANTED TO  
ACCENTUATE THEIR  
FACES, WITH DISTINCT  
LIGHT FALLOFF  
TOWARD THE BOTTOM  
OF THE FRAME.







**Plate 8-5 (facing page, top).** Robert Wyatt photographed at the Steinway offices. ( $1/200$  second, f/8, 400 ISO, 24–70mm f/2.8 lens; multiple off-camera flash units)

**Plate 8-6 (facing page, bottom).** The lighting setup for plate 8-5.

I WANTED MY  
MAIN LIGHT TO BE  
SOFT BUT STILL  
CONCENTRATED ON  
MY SUBJECT.

**One Location, Several Options.** I had the opportunity to photograph pianist Robert Wyatt at the Steinway offices in New York City. Here, I've included two examples of the setups I created for his session using three Nikon SB-900 Speedlights. These were fired by PocketWizard FlexTT5 transceivers controlled by a FlexTT5 and a master flash used on-camera. Being able to change the power of each flash from my camera made the shoot easier. Also, it makes me look so much more in control (and cool!) in front of a client when I'm not running around, hurriedly adjusting my flash units' individual outputs throughout the session.

For these portraits, all of the flash units were set to manual output. Because black surfaces, such as the tuxedo and piano, were so predominant in the final composition of the portraits, this was the only practical approach. Using TTL flash would have made my job much more difficult, requiring constant FEC adjustment for each flash as I changed my compositions.

Let's start by looking at **plates 8-5** and **8-6**. The light to camera right was a flash that was bounced into the large room. This flash was there simply to lift the overall contrast. By increasing this flash's power, I could open up the shadows; by reducing it, I could increase the overall contrast. This light was set to around  $1/4$  power for most of the shoot, but I did vary it at times, taking it down to  $1/8$  power and even up to full power for some photos. I controlled this as group C.

The light to camera left was a flash in a 24-inch Lastolite Ezybox. It was there to add soft fill on the subject. It was set to around  $1/8$  power. I controlled this as group B.

I wanted my main light to be soft but still concentrated on my subject so that it didn't light up too much of the surroundings.

## POWER SETTINGS

Some makes of flash triggers actually allow you to change the individual power settings of your flash units directly from a trigger in the camera's hot shoe. This is much easier (and more elegant) than having to manually adjust each flash wherever it happens to be positioned in the room.



**Plate 8-7.** An alternate look from the same session. ( $1/200$  second, f/8, 400 ISO, 24–70mm f/2.8 lens; multiple off-camera flash units)



**Plate 8-8.** Out of sight here (to camera right) is the flash that bounced light into the rest of the room to help control the contrast.



## IT'S NOT OVER UNTIL IT'S OVER

After the photo session was already done, we ended up making a final image (**plate 8-9**) as we were leaving. I was immediately drawn to the symmetry of the architecture and the lavish foyer below. The pose and framing were deliberately centered to take advantage of this background. For the lighting setup, I quickly pulled out a softbox and used it as the main light to camera left. This was all that I needed to create a simple portrait in this location.



**Plate 8-9.** This image was created at the end of the session, as we were leaving the Steinway offices. ( $1/40$  second,  $f/4$ , 800 ISO, 24–70mm  $f/2.8$  lens; off-camera TTL flash with FEC at  $-1\text{EV}$ )

THIS GAVE A SOFT  
LOOK, BUT THE GRID  
MORE NARROWLY  
DIRECTED THE LIGHT.

An umbrella or a large softbox would have produced too wide a swath of light. Instead, I used a gridded softbox. This gave a soft look, but the grid more narrowly directed the light.

For **plate 8-7**, I changed the subject's pose and my camera position, but the lighting setup remained fairly similar (**plate 8-8**). If you look at the top-right corner of the image, you can see the edge of the gridded softbox. This could easily have been cloned out in Photoshop, but I decided not to. I feel the small black triangle there helps with the composition, containing the geometric patterns within the frame.

**Separation with Backlighting.** **Plate 8-10**, an image of Bethany, was shot in the lobby area of a nightclub. I knew the wooden panelling and subdued incandescent lighting would make an interesting background because of the repetitive pattern and glow. A slow shutter speed allowed more of the background light in, and then I used flash to light her. I didn't gel my flash, specifically because I wanted to keep that golden glow in the background (see chapter 9).

As you can see in **plate 8-11**, the main light was a flash in a Lastolite softbox. To separate Bethany from the background, I added a second flash for backlighting.

The main light was originally set to TTL, but as she moved, the exposures varied. This was because the changing balance of darker/lighter tones in the frame changed the metering system's interpretation of the overall image. As I zoomed in and out, my TTL exposures would also change. Therefore, I had to set my main flash to manual to achieve better consistency.

The flash in the softbox was mounted on a PocketWizard FlexTT5 transceiver. I started at  $\frac{1}{16}$  power on the main light, then adjusted it from there via the FlexTT5 radio transmitter and master flash on my camera. (*Note:* I used a flash on the camera's FlexTT5, since I needed its autofocus-assist in that dark lobby area.) If you look carefully at **plate 8-11**, you can see that I did feather the softbox so that there would be no glare on the wooden area to camera left.

The background light was a flash that was also set to manual output (around  $\frac{1}{32}$  power since it was direct flash). Any backlight like this is best controlled as a manual flash. Since the backlight doesn't actually contribute to the overall exposure (it only adds rim lighting) it doesn't make sense to have it as TTL flash. This flash was also triggered via a PocketWizard FlexTT5 transceiver.

**Plate 8-10 (facing page).**

Bethany was photographed in the lobby area of a nightclub. ( $\frac{1}{10}$  second, f/4, 400 ISO, 24–70mm f/2.8 lens; two off-camera manual flash units, main light in a softbox)



**Plate 8-11.** A pull-back shot showing the simplicity of the lighting.







**Plate 8-12.** Molly was posed in front of a graffiti-cover wall. ( $1/100$  second, f/7.1, 400 ISO, 24–70mm f/2.8 lens; multiple off-camera flash units)

I left the posing mostly up to Bethany, since she is an experienced professional model. I did, however, ask her to direct her gaze toward the softbox so that the light would fall on her face from a flattering angle and produce a nice gradient of light across her cheek. I also had her angle her body slightly away from the softbox, so that the main light did not fall directly on the front of her.

## **OUTDOOR PORTRAITS**

In the previous examples given in this chapter, we looked at multiple-flash setups that were done indoors. As such, the ambient light didn't play much of a factor in the final exposure; I simply added light to the background via a flash.

## FLASH GROUPS

Most off-camera flash triggers can trigger different groups of flashes. These are usually marked as Group A, B, or C. How you decide to assign those groups is usually up to you. In other words, group B need not be the fill light if you need to use it as a rim light.

**Plates 8-13 and 8-14.** Setup shots of my portrait with Molly.

The same thing can be done outdoors. If the available light isn't too powerful, you can create an image where the lighting is pretty much all just from the off-camera flash units. This gives you total control over the look of the final image; you can balance all the light levels and also control exactly how the light is spread over your scene and subject.

For this session (beginning with **plate 8-12**), I met up with a model, Molly, in an area of Brooklyn with amazing graffiti that is commonly used as a backdrop by photographers. My objective was to test out the Canon 600EX-RT Speedlite, which has a built-in radio transceiver. This makes life simpler for flash photographers, since it eliminates the extra cables and batteries and paraphernalia—all of which increase the chances of something malfunctioning or not being set up properly.

For my setup (**plates 8-13 and 8-14**), I wanted to use three Speedlites, all controlled by the Canon ST-E3-RT flash controller. I used the three flash units in manual mode, set up as A:B C. The main light on the model (A) was diffused with my favorite 24-inch Lastolite Ezybox. The B and C flashes were undiffused





(bare). One of these (B) lit up the background to create a highlight behind her. I flagged this flash with a BFT to ensure no direct light fell on her from it. The C flash was placed directly behind her as a rim light.

As I was documenting my lighting setup, I took a vertical shot (**plate 8-14**) that brought the dramatic sky to my attention. I decided to use this for another setup, so we moved up the street for **plate 8-15**. A flash with a softbox lit the model, while a bare flash behind her helped create separation from the dark background. Both flashes were set to manual output.

A FLASH WITH A  
SOFTBOX LIT THE  
MODEL, WHILE A  
BARE FLASH BEHIND  
HER HELPED CREATE  
SEPARATION.



**Plate 8-15.** The dramatic sky inspired me to create a street shot with Molly. ( $\frac{1}{100}$  second, f/7.1, 400 ISO, 24–70mm f/2.8 lens; multiple off-camera flash units)



# 9. GELLING THE FLASH

SIMPLY ADJUSTING  
YOUR WB SETTING  
SO THAT THE FLASH  
APPEARS NEUTRAL  
DOESN'T FIX THE  
PROBLEM.

## NEUTRALIZING TUNGSTEN LIGHT

The color temperature of a flash is around 5400K. While the numerical value might have little meaning to many photographers, it does mean that light from a flashgun is a lot cooler than the tungsten/incandescent light (which is around 2800K, but varies a lot in actual value). When shooting at a tungsten white balance setting, that means anything lit by the flash will appear too cold, or too blue. However, simply adjusting your WB setting so that the flash appears neutral doesn't fix the problem. It will make the flash look less blue, but your background will go a murky orange.

We can reduce this effect by filtering the strobe. Adding a full CTS (color temperature straw) gel brings the color temperature of the strobe down to 2900K, more or less in balance with tungsten. A 1/2 CTS gel converts flash to 3800K, leaving your backgrounds with a touch of the warmth from the tungsten lighting.

A CTO gel can also be used to bring the color temperature down to 2900K, but this has more red than a CTS gel and could make it slightly more difficult to get full range of colors in your image. Therefore, I would recommend the CTS gels; in my experience, it's easier to get a nice skin tone from them than from the CTOs. Keep in mind that if you filter your flash like this, you will also need to change the WB setting on your camera to either 2800K or tungsten. It's often necessary to adjust your white-balance *even further* as part of a normal RAW workflow—particularly when using bounce flash, which often causes the light from the flash to change color (based on the bounce surface).

Although recent flash models are commonly supplied with a gel that converts the light's color temperature to balance with

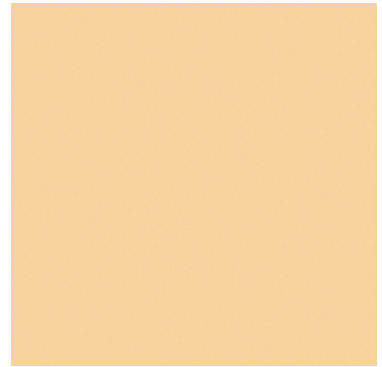
tungsten lighting, I still prefer to cut my own gels and tape them over my flash's head (**plates 9-1** and **9-2**). Gels can be ordered in rolls from any of the major photographic supply stores and are inexpensive. In fact, one of these inexpensive sheets will give you a lifetime supply of filters for your small flash units. If you ever use flash indoors, where tungsten lighting dominates, these gels will be an invaluable part of your flash photography. Let's look at some examples.

**With the Videographer's Light.** At wedding receptions, you'll often find yourself working within a very warm spectrum of available light. There are usually tungsten (incandescent) lights all around. (This is changing as more and more venues are switching to fluorescent lights, but a warm color balance is still typically maintained.) There may also be candlelight or twinkling lights as decoration. Additionally, there is the videographer's light. This will be usually be tungsten balanced, even if it is an LED video light. That leads to a common scenario in which you'll need to shoot with gels: when you decide to work with the videographer's light.

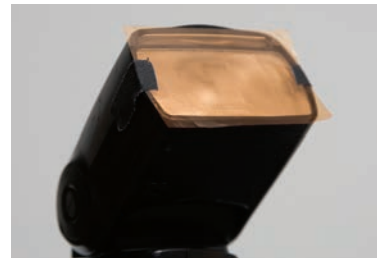
**Plate 9-3** was shot using *only* the videographer's light. During the wedding reception, we whisked the couple outside for a few romantic portraits. Instead of taking turns shooting with the videographer, I worked without flash and just used his video light to shoot around him. A few times, I asked the videographer to hold his camera (with its light) in a specific position so that I could get a certain angle. If I had decided to add flash, whether as the main light or as fill for the video light, my flash would have needed to be gelled, getting it as close as possible the color balance of the videographer's light.

**Plate 9-4** takes us to the next step. It illustrates the use of a CTS gel in tungsten lighting—but also a few other aspects of flash photography in low light.

At this point, we're ready to pull together a few techniques and see how they all fit together. These include: dragging the shutter, gelling the flash, bouncing the flash, determining the best light direction, using TTL flash, and (again) working alongside a videographer.



**Plate 9-1.** A 1/2 CTS gel.



**Plate 9-2.** The 1/2 CTS gel cut to size and applied with tape to a flash head.

**Plate 9-3 (facing page).**

An image shot using the videographer's light. (1/100 second, f/1.2, 1000 ISO, 85mm f/1.2 lens; videographer's light)







**Plate 9-4.** An image shot using the videographer's light plus flash. ( $1/200$  second,  $f/1.6$ , 1600 ISO, 85mm  $f/1.2$  lens; videographer's light, plus TTL flash with FEC at 0EV and  $1/2$  CTS gel)

In many circumstances, the specific camera settings you use don't hold much inherent value—but this is a situation where the settings are critical. When shooting in low light, photographers tend to lower their shutter speeds in order to bring more available light in. That's the method behind the flash technique called dragging the shutter, where you bring in more available light by taking the shutter speed lower and lower (see chapter 7).

Often, however, I go another route to bring in more available light when I use flash: I raise my ISO and shoot with wide apertures. This lets me choose shutter speeds that are higher than normal for indoors, because I don't much like ambient smear or subject blur—and that's a real risk when there's also a videographer covering the wedding. The video light adds just enough light that (despite the darker environment) the flash can't be counted on to freeze movement. Using a higher shutter speed ensures sharper images since it minimizes both camera shake and subject movement. Because I am generally shooting in TTL mode at these events, my flash follows the camera settings to maintain a correct exposure—or at least close enough that I can nudge it with an FEC adjustment.

Adding a gel ensures I am working in the same range of color temperatures as the videographer and every other light source in that environment.

THIS LETS ME  
CHOOSE SHUTTER  
SPEEDS THAT ARE  
HIGHER THAN  
NORMAL FOR  
INDOORS.

To create **plate 9-4**, I worked at a 90-degree angle to the videographer—specifically so I could use his light as a rim light or backlight (here, you can see the video light producing rim light on the groom’s face). Positioning myself at this angle also helps ensure that we don’t appear in each other’s footage (this is why I never shoot directly across from the videographer).

I wanted the light from my flash to spill onto the bride’s face, so it needed to come in from camera right. To do this, I bounced the light to my right, flagging it with a BFT. (Bouncing the flash to my left wouldn’t have made sense, since I didn’t want to light her hair in more detail and leave her face in shadow. Also, bouncing behind me would have given a more flat look to the lighting.)

THIS CREATED A  
SOFTBOX EFFECT  
WITH THE LIGHT THAT  
RETURNED FROM THE  
BOUNCED FLASH.

Because there was no wall directly to my right in this large room, the light bounced back partly from the ceiling, partly from the furnishings and tables, and even a bit from the back wall. This created a softbox effect with the light that returned from the bounced flash.

As you evaluate the image, notice that the videographer’s light appears neutral—not like that orange grunge you get when you mix ungelled flash with tungsten. My white balance here was 3700K, since I was gelling my flash for the incandescent lighting. However, I still typically adjust the overall color balance when processing the RAW file. In this case, because the bounced light picked up different colors from the surfaces it reflected from, it was especially important to finesse the white balance during postproduction. (Again, this really isn’t easy with the JPG format; shooting RAW was important.)

The shallow depth of field caused by shooting at  $f/1.6$  doesn’t concern me. I really just need one point in focus here: the bride’s eye(s). Your attention is immediately drawn to her expression, anyway. To overcome the chances of missing on the focusing—or of the couple moving out of the plane of focus—I shot a number of frames. Then, the decisive moment was chosen as I edited the resulting sequence of images.

With this photograph, you can see the interplay of several techniques, all of which have a role in creating an image that

really captures a moment—and do so without intruding upon the action that is unfolding. After all, it is always about the moment.

**With Streetlights.** For romantic wedding-day portraits like **plate 9-5**, I often take a couple around the venue—in this case, to a spot where we could capture the city lights and car headlights in the background. With my flash in a white shoot-through umbrella, I needed to add a 1/2 CTS gel to bring the flash's color temperature closer to that of the ambient light sources on the street. An assistant held up the light to camera left.

With a shot like this, the camera's settings must be guided by the ambient light—and there isn't a good way to meter for it with an in-camera meter; it really just depends on a good guesstimate for the initial exposure. From there, you can nudge the shutter speed, aperture, and ISO as needed.

For the most part, I relied on changing my shutter speed to bring in the ambient light, since  $f/3.2$  (to help isolate the couple from the background) and 1600 ISO (for low light) are getting close to the ceiling of useful settings. Also, since I was shooting with manual flash, it just made sense to change the shutter speed before I changed anything else.

**Plate 9-5.** Flash was balanced with city lights for this wedding portrait. (1/25 second,  $f/3.2$ , 1600 ISO, 70–200mm  $f/2.8$  lens; manual off-camera flash with 1/2 CTS gel and umbrella)





## STAY SHARP

For this shot, a high ISO was necessary to get to a shutter speed where I could shoot hand-held. Even so, a stabilized lens is essential for this kind of shooting. Using the proper technique for steadily hand-holding the camera and lens also made a big difference. To do this, I supported the lens with my left hand under it, anchoring my elbows in my sides. With my legs apart for a stable base, I controlled my breathing and lightly pressed the shutter release.

I tried shooting this scene in TTL, but the exposure varied too much depending on whether the background lights flared or not. So I settled on adding low-power manual flash; I didn't need a lot of power, since I was shooting at  $f/3.2$  and 1600 ISO.

The strong backlighting from the cars' headlights flaring into my lens also made it really difficult for the camera to focus. Therefore, I had to pre-focus on the couple before the cars stopped at the background intersection, waiting for the next light change.

I HAD TO PRE-FOCUS  
ON THE COUPLE  
BEFORE THE CARS  
STOPPED AT THE  
BACKGROUND  
INTERSECTION.

## GEL THE FLASH FOR EFFECT

In addition to using gels for tungsten/incandescent light color correction, I also gel my flash for creative effect, creating a color shift between my foreground (lit by gelled flash) and my background.

For **plate 9-6**, my model (Bethany) was posed in the foyer of a nightclub where I saw this curved wall that was lined with small mirror tiles, just like a giant disco ball. It was all kinds of awesome, but it needed light—this place was *dark!*

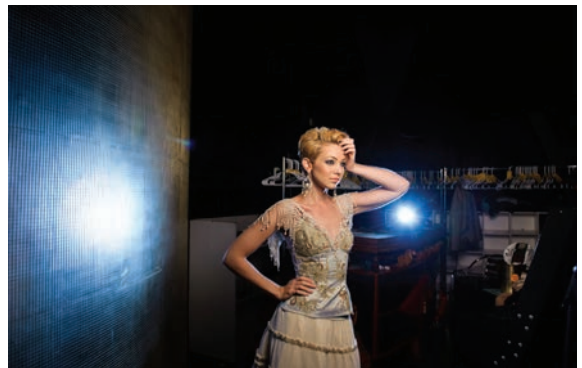
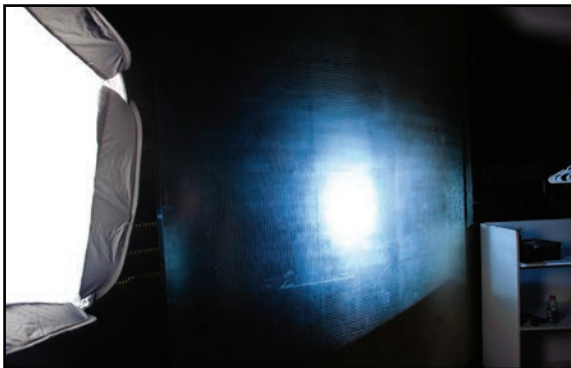
All the light you see was from two flash units. The blue color in the background is the result of one flash having a gel over it. While that might give you the idea that I gelled the background flash with a blue gel, what I actually did was gel my main flash (in a softbox) with two  $\frac{1}{2}$  CTS gels. That's all I had with me—and I wanted those hard, cold, blue tones in the background. A single  $\frac{1}{2}$  CTS gel would have taken the color of the flash to 3700K. Adding a second gel didn't take it as far as a full CTS would have, but it got me to 3350K (going by my settings in editing



**Plate 9-6.** A CTS gel on the main light made the background (lit by ungelled flash) record as blue. (1/60 second, f/6.3, 200 ISO, 24-70mm f/2.8 lens; multiple off-camera flash in manual mode, CTS gels on main light)



**Plate 9-7.** For comparison, here's a shot without the blue background. The results were nice—actually pretty good—but not as otherworldly as the final images.



the RAW file). Because the light on the model was now at a very warm color temperature, the background shifted toward blue in comparison when I set my camera's white balance to give me proper skin tones for my gelled main light.

The area where we were shooting was too small to do a complete pull-back shot that included everything in a single

**Plates 9-8 and 9-9.** The setup for plate 9-6.

frame, so in **plate 9-8**, you can see the main light (a 24-inch Lastolite Ezybox) to camera left. In the middle, you can see the blue hot-spot on the mirrored wall as the secondary flash lit it up. **Plate 9-9** shows Bethany in relation to the flash that was providing the background light. This background light was fitted with a BFT to block any direct light from it hitting Bethany.

On my camera, I had a master flash that controlled the output of the other two flashes. Both flashes were set to manual output, since it was much simpler to control the exposure as manual flash. The light on the background was adjusted to taste by looking at the camera's preview. I'm not sure it would even have been possible to use a light meter to measure that surface—and the wall reflected so much light that there was no real way to predict how TTL flash would have behaved. It was quicker for me to choose a low-power manual setting (around  $\frac{1}{16}$  power) and adjust from there.

### TRY SOME MOVEMENT

The statically posed shots of Bethany looked good, but then we tried a sequence of photographs in which she spun around on the spot to show some movement in the beading on her top (**plate 9-10**). A fabulous model and an unusual setting sweetened with some interesting light—it all added up to some seriously eye-catching results.

**Plate 9-10.** Adding motion kicked the image up a notch. ( $\frac{1}{60}$  second, f/6.3, 200 ISO, 24–70mm f/2.8 lens; multiple off-camera flash in manual mode, CTS gels on main light)



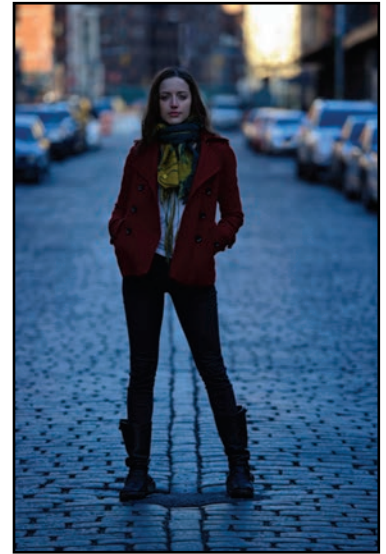




**Plate 9-11.** The starting shot, with the background lit by ambient light and the model lit by ungelled flash. ( $1/250$  second,  $f/2.8$ , 200 ISO, 70–200mm  $f/2.8$  lens; TTL off-camera flash)



**Plate 9-12.** A pull-back shot showing the setup for plate 9-11.



**Plate 9-13.** Before gelling the main light, I adjusted the camera's white balance to 3850K—and tweaked it in postproduction to 4650K. Here's how the scene looked before the addition of flash. ( $1/250$  second,  $f/2.8$ , 200 ISO, 70–200mm  $f/2.8$  lens; ambient light only)

**Plates 9-11** through **9-15** show another example of how you can gel your flash for effect. This time, a dramatic color shift was created between the subject (lit by gelled flash) and the background (lit by ambient light).

**Plate 9-11** is the starting image. I was photographing a model (Anelisa) on a city street in an area of shade. I set my white balance to “cloudy” since I was shooting with flash. (Keep in mind, I will inevitably change this as part of my usual RAW workflow; it's an adjust-to-taste thing.) The lighting technique was a straightforward one you've seen many times in this book. Knowing that I couldn't expose correctly for both the shaded areas *and* the sunlight buildings at the same time, I determined my basic exposure based on the background and underexposed the subject. Then, I picked up the exposure on the model using flash. In this case, I opted for TTL flash so I could work more quickly. **Plate 9-12** shows where the light was held in relation

to Anelisa. I wanted the light to come almost from the front. Therefore, the softbox had to be held a bit higher than normal so I could get the longer shot I wanted without the softbox itself appearing in the frame.

Knowing that I would be gelling my flash with a  $\frac{1}{2}$  CTS gel, I changed my camera's white balance to 3850K. In editing the RAW files, I further adjusted the white balance (see **plate 9-13**) to 4650K. The predominance of blue tones in the available light meant the gelled-flash image still looked too cold at 3850K.

After adding the flash, I created **plate 9-14** at the same exposure settings. However, for the final image (**plate 9-15**), I decided to drop the available light 1 stop by closing down my aperture. While I had enough leeway with my flash exposure that I could safely have cut a stop of light by jumping into high-speed flash sync territory with an  $\frac{1}{500}$  second shutter speed, changing my aperture let me stay at the maximum flash sync speed. Since I was shooting in TTL mode, the aperture change only affected the ambient light, not the flash exposure. (Aperture controls

**Plate 9-14 (left).** The image with the CTS gel added to the main light. ( $\frac{1}{250}$  second, f/2.8, 200 ISO, 70–200mm f/2.8 lens; TTL off-camera flash with  $\frac{1}{2}$  CTS gel)

**Plate 9-15 (right).** For the final image, I dropped the ambient exposure 1 stop by adjusting the aperture setting. ( $\frac{1}{250}$  second, f/4, 200 ISO, 70–200mm f/2.8 lens; TTL off-camera flash with  $\frac{1}{2}$  CTS gel)

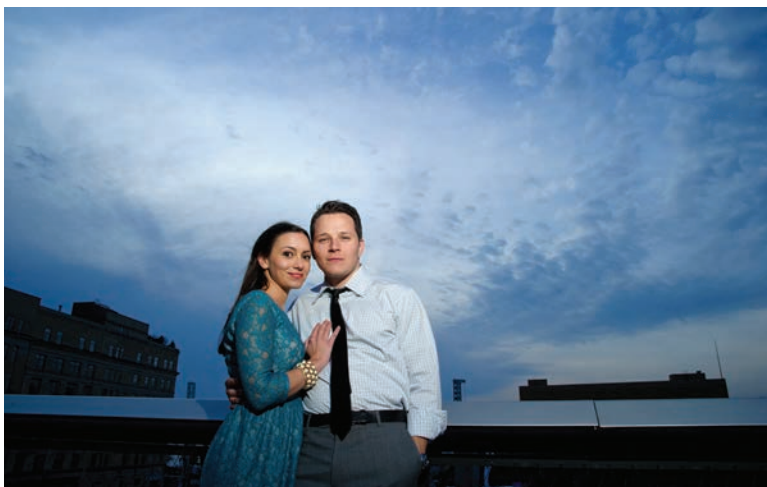




**Plate 9-16.** In my first test shot, there was nice texture but the sky color was too neutral.



**Plate 9-17.** Changing my camera's white balance to that of a ½ CTS gel made the sky much more interesting.



**Plate 9-18.** Adding undiffused flash high and slightly to camera right created a flattering lighting pattern on the couple. (1/250 second, f/11, 200 ISO, 24–70mm f/2.8 lens; TTL off-camera flash with ½ CTS gel)

flash exposure, but only for manual flash; TTL flash follows your choice of settings—as long as you remain within the range of what your flash is capable of producing.)

Changing my ambient exposure like this, underexposing the background even more, allowed my flash to dominate the look of the image for a more dramatic effect. Further, by gelling the flash to a different color than the ambient light, I made Anelisa stand out even more from the background.

## TURNING DAY INTO NIGHT

During my session with Laura and Todd, I wanted to add some variety to the images. The sky had been overcast, but it started to clear up later on—leaving wispy clouds that were perfect for a dramatic sky background. As in many outdoor scenarios, it would have been impossible here to get my subjects and the bright sky equally well-exposed without the addition of some lighting.



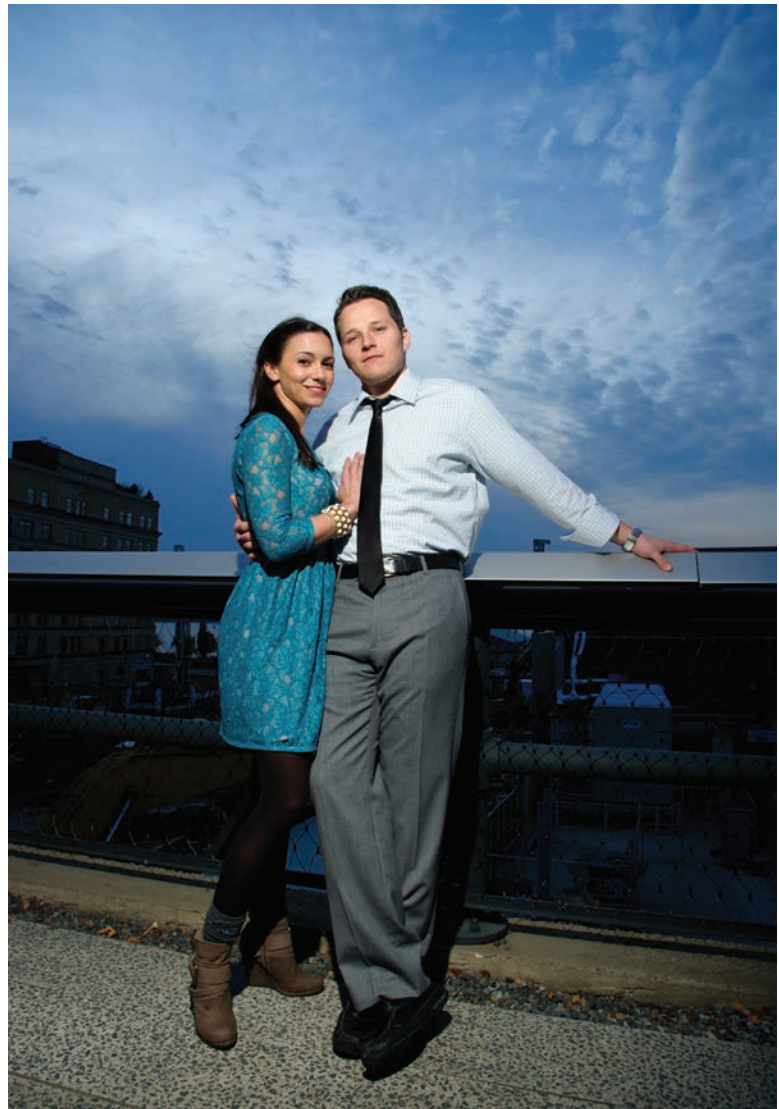
The first thing I did was get my basic exposure for the sky. As long as the sun isn't in the frame, zeroing out the camera's metering needle works quite well. **Plate 9-16** is a test shot I made at  $\frac{1}{250}$  second and f/11 at 200 ISO, showing that I had detail in the sky. Of course, there was a reason I shot at the maximum flash sync speed: it's the sweet spot when using flash in bright light. The sky had a nice pattern to it, but the colors were too neutral and needed something more.

For **plate 9-17** I checked what the sky would look like if I set my white balance to 3850K, knowing I could compensate by gelling my flash with a  $\frac{1}{2}$  CTS gel. Ah—now we're getting somewhere!

Still working at  $\frac{1}{250}$  second and f/11 at 200 ISO, I knew that the single flash wouldn't be able to push enough light out when it was diffused with a softbox. That meant I had to use direct, undiffused, off-camera flash. I had my assistant hold the

THE SKY HAD A NICE  
PATTERN, BUT THE  
COLORS WERE  
TOO NEUTRAL  
AND NEEDED  
SOMETHING MORE.

**Plate 9-19.** One of my final images from the session with Laura and Todd. ( $\frac{1}{250}$  second, f/11, 200 ISO, 70-200mm f/2.8 lens; TTL off-camera flash with  $\frac{1}{2}$  CTS gel)





light nearly above me—just a bit back and to my right—so that the light on Laura’s face wouldn’t show a hard shadow from her nose across her cheek or mouth (**plate 9-18**). Since my exposure settings were determined by how I wanted the background exposed, I had to add  $f/11$  (at 200 ISO) worth of flash on my subjects. The simplest approach was to use manual flash at full power. Using the guide number for the Nikon SB-900, I was able to have my assistant hold the flash the proper distance from the subjects to attain this exposure level. (See chapter 10 for a tutorial on how to use your flash’s guide number to get a correct manual flash exposure.)

With the off-camera flash fitted with a  $\frac{1}{2}$  CTS gel and my white balance set to 3850K, the color balance for my couple was good, and the sky shifted to a dramatic shade of blue. With just these few easy and logical steps, I was able to get to the final sequence of images (**plates 9-19** and **9-20**).

**Plate 9-20.** One of my final images from the session with Laura and Todd. ( $\frac{1}{250}$  second,  $f/11$ , 200 ISO, 70–200mm  $f/2.8$  lens; TTL off-camera flash with  $\frac{1}{2}$  CTS gel)

# 10. PHOTOGRAPHY IN HARD SUNLIGHT

Creating portraits of people in hard sunlight will always be one of the more daunting challenges photographers encounter. But since you will regularly encounter this need, I wanted to dedicate an entire chapter to just this topic: ways to deal with the challenge of harsh sunlight.

## WITHOUT ADDITIONAL LIGHTING

Without additional lighting, or the use of scrims, there are a few basic ways of dealing with the harsh sun:

1. Turn the subject toward the light, or
2. Turn the subject away from the light, or
3. Just suck it up and accept that our photos will look bad.

Of course, that last option isn't really the way to go if you have any pride in your work. That leaves the two other options.

**Turn the Subject Toward the Light.** During a photography workshop with Aleona, we worked in bright sunlight. I posed her into the light, as seen in **plate 10-1**, and used her shadow as a

**Plate 10-1.** Aleona was turned toward the sun. ( $\frac{1}{500}$  second, f/5.6, 200 ISO, 24–70mm f/2.8 lens; available light)







**Plate 10-2.** Changing Aleona’s angle to the sun totally changed the lighting on her face. ( $1/500$  second, f/5.6, 200 ISO, 24–70mm f/2.8 lens; available light)



**Plate 10-3.** Adding a dynamic pose completed the portrait. ( $1/500$  second, f/5.6, 200 ISO, 24–70mm f/2.8 lens; available light)

compositional element. Since I like her too much to have her sear her retinas by looking right at the sun, she wore sunglasses.

In **plate 10-2**, you can see how the lighting pattern on her face changed simply by having her move her head toward the sun. Now add a dramatic gesture or pose, and we have a striking photograph like **plate 10-3**. It’s as simple as that; pose your subject “into” the light, and watch how the lighting pattern changes—especially how the shadow of the nose falls (see chapter 1).

**Turn the Subject Away from the Light.** Another way to deal with the harsh sun, without resorting to additional lighting, is simply to turn your subject away from the sunlight. To do this, you expose correctly for the shady side of the subject and just allow the background to blow out.

Of course, any sunlit areas of the subject will also blow out, so you will lose detail—but depending on how high the sun is, the blown-out areas will hopefully just act as rim lighting that enhances the subject. Even if there are larger areas blowing out, it’s still better than having the subject’s face partially lit by sun and partially in shadow.

POSE YOUR SUBJECT  
“INTO” THE LIGHT,  
AND WATCH HOW THE  
LIGHTING PATTERN  
CHANGES.

WE ALL KNOW THAT  
OVERHEAD SUN ISN'T  
IDEAL FOR TAKING  
PHOTOS—ESPECIALLY  
PORTRAITS!

This is exactly how I went about photographing Katie, in the hard sunlight of a winter's day (**plate 10-4**). Even though I lost much of the background, there is just enough detail to give the portrait some context. The important thing is that the light on Katie's face is even and soft.

This simple method also works well in situations where your subject is turned away from the light and their shaded side is toward open shade (**plate 10-5**). It especially helps if your subject is turned toward omnidirectional reflected light—light that's coming in from everywhere.

Let's look at another example. For the location portrait session seen in **plate 10-6**, the sun was overhead. We all know that overhead sun isn't ideal for taking photos—especially portraits! When I arrived at the estate's gardens, my heart sank. The sun was harsh and there were very few places to hide from it. But I had to do better than just cope; I had to come up with great photographs for my clients in less-than-ideal light. This meant I had to work harder on how I positioned them for the photos. Again, the simplest approach was to have them turn their

**Plate 10-4.** Katie was turned away from the sun. ( $\frac{1}{250}$  second, f/4.5, 200 ISO, 70–200mm f/2.8 lens; available light)



**Plate 10-5.** Backlighting and open shade to one side transforms harsh sunlight into a flattering portrait look. ( $\frac{1}{250}$  second, f/3.2, 800 ISO, 70–200mm f/2.8 lens; available light)



backs to the sun, putting even (shaded) light on their faces. If possible, finding some way to shield the subjects from the hard sun helps, too. In this case, I did use some of the dappled light from the blossoming trees to help break the hard light, but I had the couple lean slightly forward to avoid any of the dappled light falling on their faces.

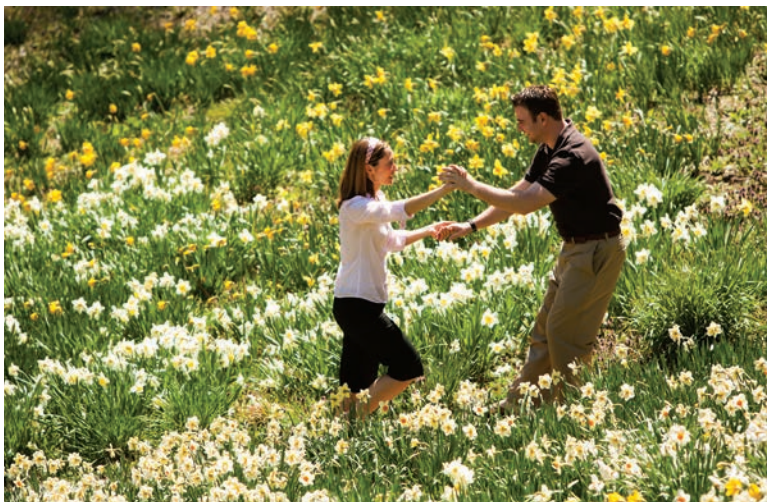
The sunlight does appear as rim light on them, as seen in **plate 10-7**. In this case, it isn't a subtle effect, and does mean that certain parts are blown out—such as their shoulders and the tops of their heads. However, this is acceptable as long as the light falling on their faces is flattering.

This is a situation when I most often use a touch of on-camera fill flash, dialing my TTL flash's FEC setting down to around  $-3\text{EV}$ . Using off-camera lighting does make it easier to position your subject, since you don't have to be concerned about finding perfect light for your subject—you can simply create it. More on adding flash in harsh sunlight appears later in this chapter.

THIS IS ACCEPTABLE  
AS LONG AS THE  
LIGHT FALLING ON  
THEIR FACES IS  
FLATTERING.

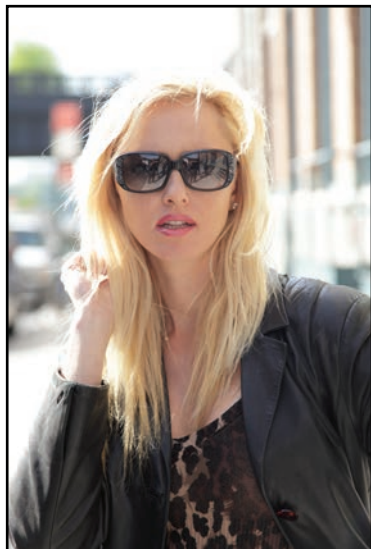


**Plate 10-6.** Careful subject positioning can help you produce great results even in harsh, overhead sunlight. ( $1/250$  second,  $f/4$ , 250 ISO, 70–200mm  $f/2.8$  lens; available light)



**Plate 10-7.** Direct sunlight produced rim lighting on the subjects. ( $1/500$  second,  $f/4$ , 100 ISO, 70–200mm  $f/2.8$  lens; available light)





**Plate 10-8.** A quick shot of Aleona to test my exposure shortcut. ( $\frac{1}{250}$  second, f/4, 100 ISO, 70–200mm f/2.8 lens; available light)

**FOR BRIGHTLY  
SUNLIT AREAS**

$\frac{1}{250}$  second, f/11, 100 ISO

$\frac{1}{2000}$  second, f/4, 100 ISO

**FOR SHADED AREAS**

$\frac{1}{250}$  second at f/4, 100 ISO

## SHORTCUT FOR BRIGHT SUNLIGHT

Let's look at another image of Aleona (**plate 10-8**). While this photo isn't much more than a test shot, it will help illustrate a shortcut that I use to arrive quickly at a bright-sunlight exposure setting that is approximately right.

My shortcut is based on the Sunny 16 Rule, which states that when you photograph something in bright sunlight, a correct exposure can be attained by using an aperture setting of f/16 and a shutter speed setting that is the inverse of the ISO setting (*i.e.*,  $\frac{1}{\text{ISO}}$ ). For example, if you are shooting with a 100 ISO setting in bright sunlight, then the right shutter speed is  $\frac{1}{100}$  second for an aperture of f/16—or  $\frac{1}{200}$  second for 200 ISO at f/16. These are simple, round numbers that are easy to remember.

I like to base my exposure on two combinations of settings extrapolated from this rule:

1. Instead of setting  $\frac{1}{100}$  second at f/16 and 100 ISO, I usually go to  $\frac{1}{200}$  second (or  $\frac{1}{250}$  second) at f/11 and 100 ISO. The higher shutter speed helps with subject movement and camera shake. It's also the maximum flash sync speed for most cameras. This works out great when I do want to use flash.
2. Alternately, to get a shallow depth of field, I just take my camera to these equivalent settings:  $\frac{1}{2000}$  second at f/4 and 100 ISO.

In my experience, if you're shooting in bright sunlight, then the shaded side is around 3 stops under the sunlit area. Therefore, when photographing a subject turned away from the sun, the shortcut is that I set my camera to  $\frac{1}{250}$  second at f/4 and 100 ISO (3 stops down from  $\frac{1}{250}$  second at f/11 and 100 ISO)—and this is close enough a lot of times. From this point, I can nail the exposure with just one or two test shots.

The benefit of this is that I can step out of a building into sunlight and have camera settings at hand that save me a lot of dial-twiddling. With these simple guidelines, you'll hopefully find that you are better able to cope when shooting in harsh sun.

## FIND THE SHADE

The simplest approach to photography in bright sun is just not to deal with the hard sunlight at all. If you can find some shade, use it!

With this portrait of Rachel (**plate 10-9**), I had to deal with sun coming in and out behind a thin layer of clouds. The light alternated between bright and *very* bright, so I posed her in the narrow shadow of one of the pillars. Because I didn't want to use any additional lighting, and I had to make sure I exposed correctly for my subject, the bride. I used the histogram method described in chapter 3. Exposing for the bride and her dress meant that the background exposure was out of my control—so I simply had to let the tonal values for the background fall where they may. However, I did make sure that the background was not distracting.

I HAD TO DEAL WITH  
SUN COMING IN AND  
OUT BEHIND A THIN  
LAYER OF CLOUDS.



**Plate 10-9 (left).** If you can find it, get your subject into some shade. ( $\frac{1}{640}$  second, f/4.5, 400 ISO, 70–200mm f/2.8 lens; available light only)



**Plate 10-10.** Here you can see the narrow band of shade in which Rachel was posed. ( $\frac{1}{640}$  second, f/4.5, 400 ISO, 70–200mm f/2.8 lens; available light only)

**Plate 10-11 (right).** If you can find it, get your subject into some shade. ( $1/250$  second, f/4, 100 ISO, 70–200mm f/2.8 lens; manual off-camera flash with a softbox)



**Plate 10-12.** The narrow band of shade in which she was posed. ( $1/250$  second, f/4, 100 ISO, 70–200mm f/2.8 lens; manual off-camera flash with a softbox)



**Plate 10-13.** The lighting setup.



I used a similar approach when I did a maternity portrait session with Amy on a bright day (**plate 10-11**). I wanted to avoid having her squinting in the bright light—and I also wanted to avoid hard shadows on her face. The first step was to pose her in the even light in the shade of a tree trunk. A slender bit of shadow is enough (**plate 10-12**). In this case, I also decided to add some flash on Amy, just to sweeten the available light. **Plate 10-13** shows the simplicity of the off-camera flash setup. My manual flash was diffused with a 24x24-inch Lastolite softbox and triggered with PocketWizard TT5 units.



## ADD ON-CAMERA FLASH

**Plates 10-14** through **10-16** are typical examples of how I work with a bridal party in hard sunlight on the beach. With their backs to the sun, I had the bridal party walk toward the beach area. This put their faces and nearly every part of their attire are in open shade—lit mostly by the nice, open light reflected from the



**Plate 10-14.** Subjects posed against the sun. ( $1/640$  second, f/5, 200 ISO, 24–70mm f/2.8 lens; TTL on-camera flash with FEC at -3EV)



**Plate 10-15.** Subjects posed against the sun. ( $1/1600$  second, f/4, 200 ISO, 70–200mm f/2.8 lens; TTL on-camera flash with FEC at -3EV)



**Plate 10-16.** Subjects posed against the sun. ( $1/400$  second, f/5.6, 200 ISO, 24–70mm f/2.8 lens; TTL on-camera flash with FEC at -3EV)

**Plate 10-17.** Posing the subjects in direct sun sometimes works well—especially when the shot is more about large gestures than subtle expressions. ( $1/1600$  second, f/5.6, 200 ISO, 24–70mm f/2.8 lens; available light only)



sky and sand. The sunlight became a kind of (irregular) rim light on them. I tried my best to make sure the light from the sun didn't produce harsh cross-shadows on their faces.

In this scenario, a little bit of fill directly from your on-camera flash can work to help subtly with the contrast. I've found that using a lot of direct flash to lift the shaded areas to the same exposure level as the sunlit areas (*i.e.*, “fixing” the light) often results in images that don't look as good—more on this later in the chapter.

You will lose some detail, but that is inevitable with a shoot like this that isn't entirely controlled. I'd rather go for the spontaneity and fun than have a few photographs that are perfectly lit—especially since that option isn't entirely practical with a large group of people moving around on a beach.

The other option is to actually use the full direct sun—and that's something you can do for some images (see **plate 10-17**). One problem with direct sun is that people squint when they look into it. Additionally, their eyes are often shrouded in hard shadow. In this instance, however, many of the subjects wore sunglasses, so these issues simply *weren't* issues. Even for those without sunglasses, squinting and shadowing weren't a concern at all; photos like these are about movement and energy, not nuanced expressions.

The bridal party was keen on doing a photo where they all jumped, so I set my camera to continuous drive, firing it at the

ONE PROBLEM WITH  
DIRECT SUN IS THAT  
PEOPLE SQUINT WHEN  
THEY LOOK INTO IT.

full nine frames per second for three such jumps. With such a large group, there really is no “decisive moment,” so machine-gunning it is the easiest way. On Monday morning, with your feet on the desk and a cup of coffee in your hand, you can select the images that work.

Finally, take a look at my camera settings for this image:  $\frac{1}{1600}$  second at  $f/5.6$  and 200 ISO. At this distance, and at nine frames per second, and in HSS mode, the flash wouldn’t have had any effect. Hence, no flash was used.

Let’s check out some more images from the same event (**plates 10-18** and **10-19**). For the portraits of the bride and groom, Bridget and Matt, I continued to work in full sun but with a touch of fill flash to lift the shadow detail. However, I had the FEC turned down so that the flash would lift the contrast a bit. When posing the couple, I made sure that they didn’t have to squint into the sun. That’s never attractive. I also posed them so that the light on them was as even as possible.

The same approach also works for group photographs (**plate 10-20**). Here, the sun was getting to be quite low. If I had shot at 90 degrees to the sun, I would have had to deal with very harsh shadows. If I had shot with everyone facing the sun, they would

I CONTINUED TO WORK  
IN FULL SUN BUT  
WITH A TOUCH OF FILL  
FLASH TO LIFT THE  
SHADOW DETAIL.

**Plates 10-18 and 10-19.** The bride and groom were posed in bright sunlight for the most even lighting possible. ( $\frac{1}{4000}$  second,  $f/5$ , 200 ISO, 24–70mm  $f/2.8$  lens; on-camera TTL flash with FEC at 0EV)





**Plate 10-20.** A group portrait made later in the day, but still in full sun. ( $1/60$  second, f/6.3, 500 ISO, 24–70mm f/2.8 lens; on-camera TTL flash)



have been squinting with tears in their eyes from the bright light. Having the sun behind their backs was really the only practical solution. (And, happily, there was a low wall handy to help stagger the group.) Some detail was lost to lens flare, but that was acceptable to me because this photo was more about the fun of “having been there” for the guests.

Hopefully these images clearly show the way that I deal with bright sun. It is a simple approach, but it still gives high-quality results when you are strapped for time and don’t have the opportunity to build grand off-camera lighting setups. In short, the approach works and it’s efficient!

YOU MAY HAVE TO  
RESORT TO BRUTE  
FLASH TO SOLVE THE  
PROBLEM.

### **ADD OFF-CAMERA FLASH**

When you can’t position your subjects so that you can get more pleasing light than hard sunlight, you may have to resort to brute flash to solve the problem. When off-camera flash is the only way to fix the problem, there is a simple recipe:

1. Go to your camera’s lowest ISO setting.
2. Set your camera to the maximum flash sync speed.
3. Find the aperture at which you still hold detail in your subject (*i.e.*, the aperture where you don’t overexpose the ambient light on the subject).

At those settings, add enough flash to give you a correct exposure. This is where the flash’s guide numbers come in handy; with these, you know what your flash is capable of (more on this in the

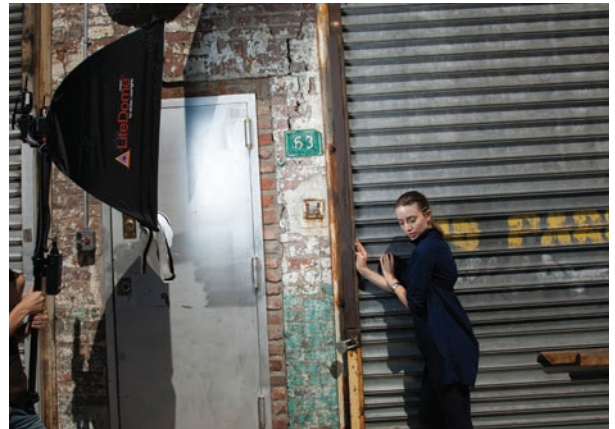
next section). Alternately, a light meter is good—although some don't meter flash properly in very bright ambient light.

For the scenario in **plate 10-21**, the direct sunlight created an unflattering pattern on the model's face. I added the output of two flashes to match the sunlight and help lift the shadows for a more pleasing photograph (**plate 10-22**). The result isn't necessarily the best I could imagine, but it is still a huge improvement over the available light only. The brute power of the flash made it possible

**Plate 10-21.** The existing light created an unflattering pattern. ( $1/200$  second, f/16, 100 ISO, 24–105mm f/4 lens; ambient light only)



**Plate 10-22.** Two direct flashes improved the light significantly. ( $1/200$  second, f/16, 100 ISO, 24–105mm f/4 lens; two manual off-camera flashes)



**Plate 10-23.** The front baffle of the softbox was removed to get the most output from the lights. ( $1/200$  second, f/16, 100 ISO, 24–105mm f/4 lens; two manual off-camera flashes)



## A WIDER APERTURE

So what should you do if you want to shoot at a wider aperture in direct sunlight? Here are a couple more tips:

1. Only if you are sure that your flash has enough power in reserve should you take it to high speed flash sync (HSS) to get a wider aperture. Remember: you lose around 2 stops of light when you switch to this mode, so you shouldn't immediately go to HSS to solve a problematic lighting situation like this.
2. You could use a neutral density filter to cut about 3 stops of light (both the ambient and the flash) and attain a wider aperture for a shallower depth of field.

to work in a tough situation. Even though it appears as though a softbox was used, I had removed the baffles, so the two flashes were direct and unmodified in final image (**plate 10-23**).



**Plate 10-24.** Shawna on the Las Vegas strip. ( $1/250$  second, f/11, 200 ISO, 70–200mm f/2.8 lens; manual off-camera flash with  $1/2$  CTS gel)

## GUIDE NUMBER TUTORIAL

The most power you're going to get from your flash is at full output in manual mode—that's when the flashgun burst dumps everything the flash can produce. You could zoom your flash a little tighter and get a bit more power (and, hence, range), but, essentially, you're at the limit of what your flash is capable of pushing out.

This is useful to know when you are trying to balance flash with bright sunlight. With this portrait of Shawna out on the Las Vegas strip (**plate 10-24**), I wanted that sun-flare look, but I also wanted to balance the super-bright background with flash. Since I was using only a single flash, a softbox would not have worked; it would have cut down the flash's output too much. Therefore, I used direct, unmodified flash. I moved it off the camera so the light would be more interesting than direct on-camera flash would have been.

The technique I used to get to a correct exposure here was essentially the same as the one described in chapter 6, where I used on-camera bounce flash to photograph Shawna.



1. Find an interesting background.
2. To use flash in very bright ambient light, choose your lowest ISO and maximum flash sync speed.
3. Find the aperture to produce the desired exposure on the background.
4. For that aperture, find the distance for which the flash (in full manual output) gives you correct exposure on the subject.

THE GUIDE NUMBER  
IS A SIMPLE FORMULA  
THAT DESCRIBES  
THE POWER OF YOUR  
FLASH.

This is where knowing the guide number (GN) of the flash comes in handy. The guide number is a simple formula that describes the power of your flash. It is calculated by determining, at ISO 100, the distance at which the flash produces a correct exposure at a given aperture. (*Note:* There can be discrepancies here, as manufacturers tend to be optimistic about their flashes' abilities. Zooming the flash will also change the guide number.)

$$\text{GN} = \text{distance} \times \text{aperture}$$

So, in the final flash exposure calculation for **plate 10-24**, I could have determined the right distance to place the flash from my subject by dividing my flash's guide number by the current aperture setting.

For example, the specs for the Nikon SB-900 Speedlight list a guide number of 111.5 feet (34m) at ISO 100 with the flash at the 35mm zoom head position. So if the GN (in feet) is 111.5 and the aperture is set to f/11, the flash will be at full power about 10 feet from the subject ( $111.5 \div 11 = 10.13$ ).

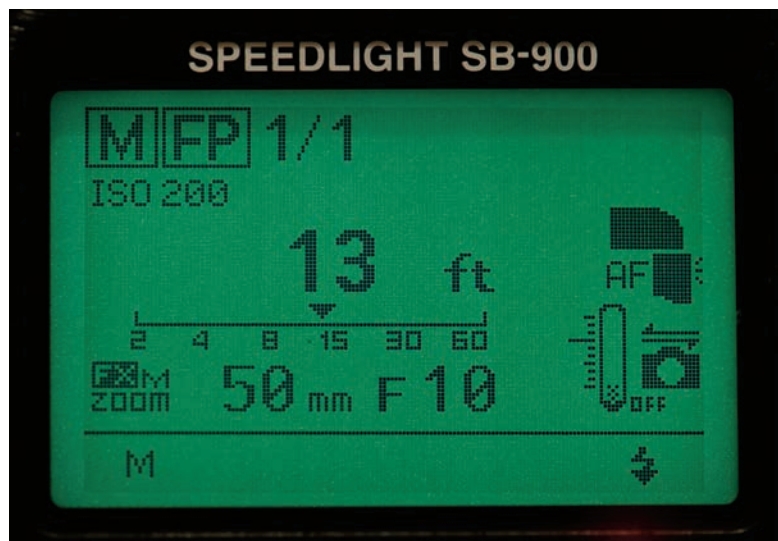
The specs for the Canon 600EX-RT Speedlite list a guide number of 197.5 feet (60m) at ISO 100 with the flash at the 200mm zoom head position. Working through the math again, if the aperture is at f/10 the flash will be at full power about 20 feet from the subject ( $197.5 \div 10 = 19.75$ ). The math isn't scary. We all have smart phones with us, and they all include a calculator.

Now, however, the question remains: what is the guide number of *your* flash? Well, it's time to find that instruction manual again! Of course, firing up Google might just be easier.

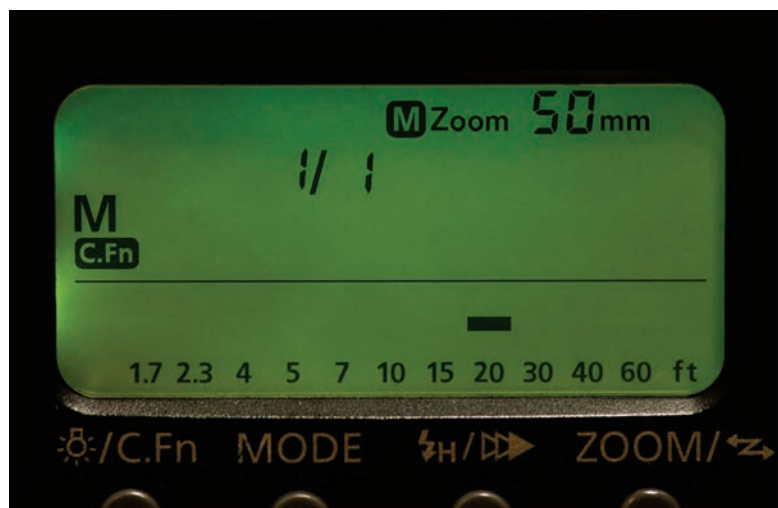
There is a shortcut, though. With the flash on your camera (so it can read the ISO and aperture you set), look at the scale on the back of the flash. For this example (**plate 10-25**), for full power from the Nikon SB-900 at 200 ISO, I have to be 13 feet from my subject for the flash to deliver  $f/10$  worth of flash. (Note that I kept the flash zoomed to 50mm.) The display would have looked like **plate 10-26** on the Canon 580EX II Speedlite. Again, for 100 ISO, I have to be around 20 feet from my subject to get correct exposure for  $f/8$ . (*Note:* The 580EX II only displays the aperture setting when the flash is in E-TTL mode. It's an odd quirk.) Don't make too much of the difference in distance shown here; the Canon Speedlite's display is more ambiguous about the specific distance.

Again, keep in mind that the manufacturers tend to be slightly optimistic about the output of their flashguns, so you still need to check the back of your camera to see if your exposure *really* is correct—or close enough to correct.

**Plate 10-25.** Display for the Nikon SB-900 Speedlight.



**Plate 10-26.** Display for the Canon 580EX II Speedlite.



# 11. VIDEO LIGHTS

**W**e've already looked at how still photographers can work in harmony with the videographer's lighting, but I consider my own video light to be an essential part of my wedding photography lighting arsenal—especially for romantic portraits of the couple. There are times when a video light is just the easiest lighting tool to use.

Because video light has a rapid fall-off in light intensity at the edges of its beam, it can lend a dramatic look to a photograph. In addition, the video light can seem quite natural when used in the context of an existing-light setting; it may not even look like additional lighting. The incandescent white balance of the video light usually matches the existing light fairly well. Finally, video lights produce a continuous light source, making immediate changes to the lighting more intuitive; what you see is what you get. For these reasons, I believe a video light should have a place in every photographer's bag.

The two primary types of video light are LED lights and incandescent lights (with a halogen lamp). Each type has its advantages. The LED lights run much cooler, but they generally aren't as powerful as the incandescent units. On the upside, the LED video lights are usually daylight balanced and shipped with a gel to turn them into incandescent light sources. This makes LED video lights quite flexible.

## VIDEO LIGHT VS. BOUNCE FLASH

So why would you opt for video lighting over flash—especially when you can use a flattering, versatile technique like bouncing the flash? Let's answer that question right now.

### BE CONSIDERATE

When switching on the video light, I hold it so that the light points over my subject's head. This way I don't blind them with the blast of direct light. I also warn them not to look at the light. Then, I have my assistant slowly bring the light's beam down into position.



**Plate 11-1.** A nice bounce-flash portrait of Shawna. ( $1/160$  second,  $f/2.8$ , 800 ISO, 70-200mm  $f/2.8$  lens; TTL on-camera bounce flash)





**Plate 11-2.** Switching to a video light gave me an image with more impact. ( $1/160$  second, f/2.8, 1250 ISO, 24–70mm f/2.8 lens; Litepanels MicroPro LED video light)



**Plate 11-3.** The placement of the video light to camera right, directed down toward the model.

A MORE CONTAINED  
LIGHT SOURCE, SUCH  
AS A VIDEO LIGHT,  
CAN CREATE A MORE  
DRAMATIC LOOK.

As shown in chapter 6, it is easy enough getting nice clean open light with a single on-camera flash when shooting indoors. By bouncing your flash to produce directional light, you can effortlessly get portraits like **plate 11-1**, an image of Shawna. As usual, I used the BFT to flag my flash and get a bit more light on one side of my subject's face.

While I love the look of this light, a more contained light source, such as a video light, can create a more dramatic look. Compared to video light, bounce flash tends to flood an indoor location with light—even when the light's directional quality is enhanced with a BFT. During the same photo session with Shawna, a hand-held video light gave me the type of lighting I wanted (**plate 11-2**). **Plate 11-3** shows how the video light was held in relation to the model.

In the same scenario, **plates 11-4** and **11-5** show what the video light gave me in comparison to what the bounce flash gave me.



**Plate 11-4.** Portrait with bounce flash. ( $1/60$  second, f/2.8, 850 ISO, 24–70mm f/2.8 lens; TTL on-camera bounce flash)



**Plate 11-5.** Portrait with video light. ( $1/160$  second, f/2.8, 1250 ISO, 24–70mm f/2.8 lens; Litepanels MicroPro LED video light)

As a portrait, the bounce flash image isn’t particularly bad . . . but it’s not particularly interesting either—even with the beautiful Shawna in the frame. The bounce flash just opened everything too much with a flood of soft light. With the video light’s dramatic light falloff to the edges, the image is more moody and just looks more dramatic than the one with bounce flash.

**Plate 11-6** was taken in the same location, but with a different backdrop. Here, I specifically wanted the light to be feathered upward, forcing there to be less light on her chest. This accentuated her face. This “what you see is what you get” aspect is part of the appeal of using a video light for photography. You can take minute control over the direction of the light more easily than you can with on-camera bounce flash. (Of course, this minute control means you can also miss your mark; refer back to chapter 1 for some good and bad examples of video-light positioning.)

**Plate 11-6 (facing page).** Here, the light placement was adjusted for a different emphasis. ( $1/100$  second, f/2.8, 1250 ISO, 24–70mm f/2.8 lens; Litepanels MicroPro LED video light)







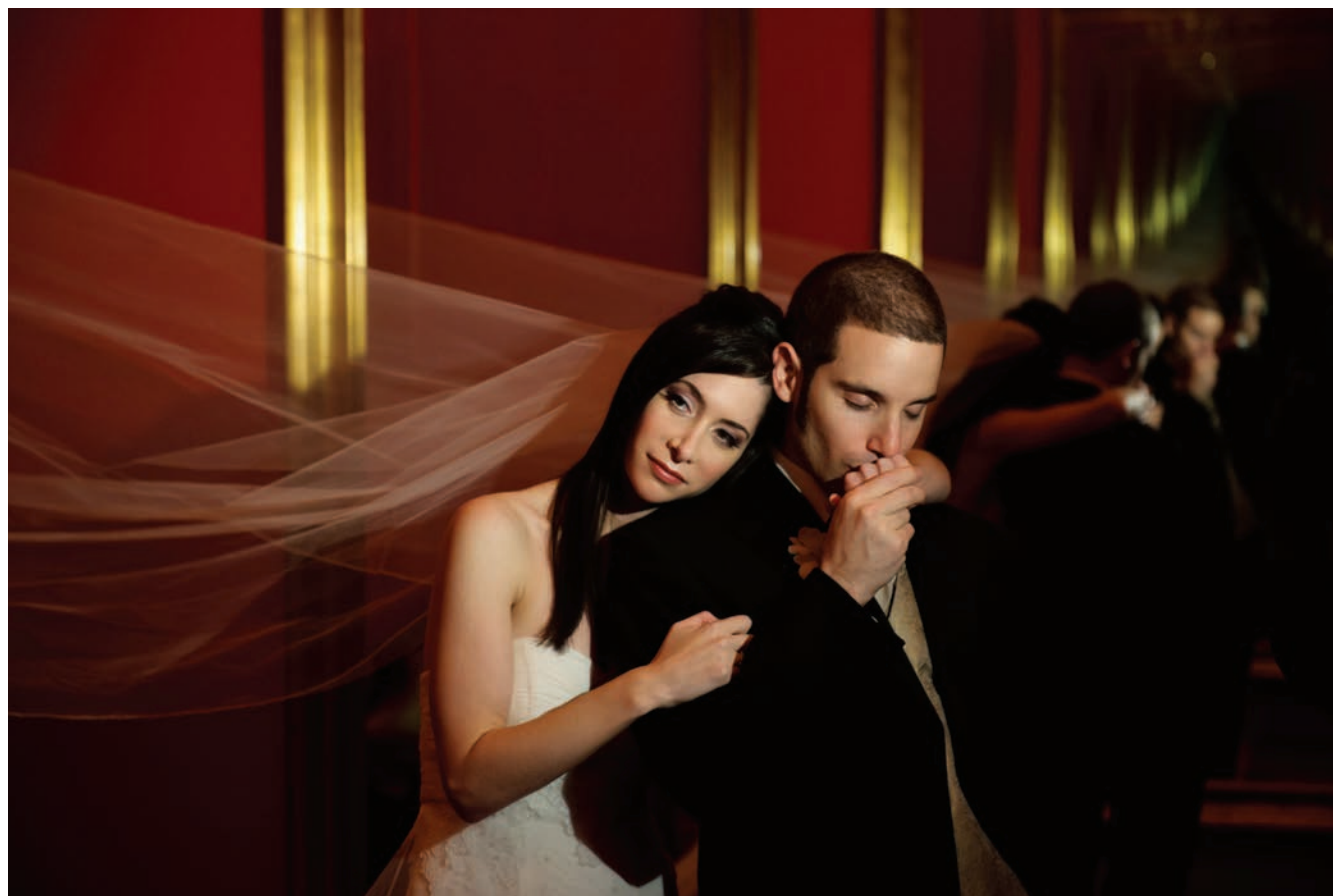
**Plate 11-7 (facing page).** Most of Allison and Scott's romantic portraits were created using a single video light. ( $1/50$  second, f/2.8, 1250 ISO, 24–70mm f/2.8 lens; Lowel ID-Light)

## WEDDING PORTRAITS

For that dramatic, Hollywood look, a video light is probably the easiest thing to use—especially when you need to work quickly, like on a wedding day. With Allison and Scott's wedding, the majority of their romantic portraits (**plates 11-7** through **11-10**) were taken using only a single video light, the Lowel ID-Light. For this shoot, I chose to work with the Lowel ID-Light, instead of the LitePanels MicroPro LED video light, because I wanted a video light that was stronger. I also wanted the ability to diffuse or focus the light, depending on what I needed. It was just the more flexible choice for this event.

As you can see by the camera settings for these images, I needed to work at high ISO settings and wide apertures. This is because video lights are generally used in lower levels of ambient light where the look of the rapid falloff gives the lighting a dramatic look—and provides a lot of control. For example, in the passageway seen in **plate 11-8**, the opposing mirrors gave an infinity effect. The video light was ideal here for containing the light spill; it's basically what made this image possible. I could have created the same image with flash, but it would have been difficult to do it in the short time available.

**Plate 11-8.** The controlled spread of the video light was useful in this mirrored hallway. ( $1/30$  second, f/3.2, 1600 ISO, 24–70mm f/2.8 lens; Lowel ID-Light)





**Plates 11-9 and 11-10.**  
Reducing the intensity of the video light enabled me to hold the detail in the dark backgrounds. ( $\frac{1}{30}$  second, f/3.2, 1600 ISO, 24-70mm f/2.8 lens; Lowel ID-Light)





THE DRAMATIC LOOK  
OF VIDEO LIGHT  
WORKS BEAUTIFULLY  
WITH BLACK & WHITE  
PHOTOGRAPHS.

For **plates 11-9** and **11-10**, I turned down the brightness of the video light to hold the detail in the background. If I had used a brighter light on the couple, I would also have had to use a faster shutter speed, smaller aperture, or lower ISO, which would have made the background go darker—or even black.

As can be seen in **plates 11-11** and **11-12**, images of Tatiana and Brandon at their wedding, the dramatic look of video light works beautifully with black & white photographs. If I had wanted to ease the contrast and bring in more shadow detail, it would simply have been a matter of bouncing my on-camera flash behind me. This would have to be done with the FEC turned way down—to around  $-3\text{EV}$ —so that it just acted as a fill light. The flash would also have to be gelled with a CTS or CTO gel to avoid introducing a blue tint to the fill light.

### AN INTIMATE PHOTO SESSION

Let's bring it all together by looking at how both bounce flash and video lighting might be used within a single photo session, increasing the variety of looks you can produce for the client.

When you work in tighter, more intimate locations, deciding whether or not to include the surroundings will greatly affect

**Plates 11-11 and 11-12.** Video light works beautifully for black & white images. ( $1/60$  second,  $f/3.2$ , 1600 ISO, 24–70mm  $f/2.8$  lens; Litepanels MicroPro LED video light)





**Plate 11-13 (left).** An intimate portrait shot with video lights. ( $1/100$  second,  $f/2.8$ , 1250 ISO, 70–200mm  $f/2.8$  lens; video lights, ambient fluorescent light)

how you shoot. With this photo session of Carly-Erin (**plates 11-13 through 11-16**), I decided I didn’t want the location to be identifiable. Because I was shooting close and tight, the end result isn’t entirely “boudoir”—it’s a little more portrait-like. Yet, it is still sexy and intimate. That was the mood of gentle sensuality I wanted for this sequence of images. For my lighting, I ended up using either video light or bounce flash.

The photo with the birdcage veil (**plate 11-13**) was done with one video light on my model and another, less bright, video light on the background. The fluorescent lights in the ceiling and elsewhere in the room did register to an extent, giving a green

### LENS SELECTION

I mostly used my 70–200mm lens in the 150–200mm range here. I tried the 85mm  $f/1.4$  for a few images, but found that the field of view was not tight enough. For boudoir photography, I often use the 24–70mm lens (mostly at 50mm to 70mm). Then I use apertures around  $f/4$  or wider. However, that would obviously be for less tightly framed photos.

**Plate 11-14 (facing page).** Another video-light portrait of Carly-Erin. ( $1/100$  second,  $f/2.8$ , 1250 ISO, 70–200mm  $f/2.8$  lens; video light)









**Plate 11-15 (facing page).**

Here, I switched to bounce flash for a different look. ( $1/125$  second, f/2.8, 1000 ISO, 70–200mm f/2.8 lens; on-camera TTL bounce flash, with BFT)

**Plate 11-16 (above).** A wider view of an image with just the gentle sensuality I was after in this series. ( $1/125$  second, f/2.8, 1000 ISO, 70–200mm f/2.8 lens; on-camera TTL bounce flash, with BFT)

color cast to the background. To control what I included, I used a shallow depth of field and composed the image so that the out-of-focus Christmas lights framed her.

For the other images in the series, I continued with the shallow depth of field and often shot tight from above so that the sheets became a compositional element. Other times, I shot from a low viewpoint to eliminate what I didn't want to include. We went a little retro with the bird-cage veil at the start of the photo session, but soon lost that for some sensual portraits.

# CONCLUSION

**H**opefully, the narrative arc throughout this book has demonstrated that taking a few key elements into consideration will help you exercise better control over each photo session. When there is a level of consistency in your method of controlling the light, selecting the background, and presenting your subjects, you are firmly on your way to getting great results from every photo shoot.

If you feel intimidated by off-camera flash, then start at the simplest point: enhancing the existing light with just one flash. Experimenting with this uncomplicated sweetening of the available light is a good place to start—and a good foundation from which to begin exploring more complicated setups when you're ready.

And, finally, remember that whatever kind of light source you're using, and whatever environment is the setting for your portraits, observing and controlling the direction and quality of the light is a key to success.

OBSERVING AND  
CONTROLLING THE  
DIRECTION AND  
QUALITY OF THE LIGHT  
IS A KEY TO SUCCESS.

—Neil van Niekerk



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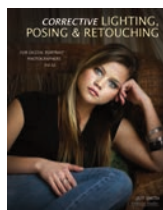
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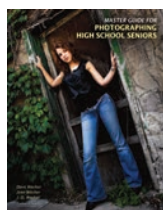
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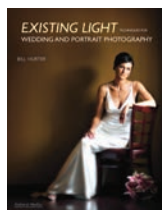
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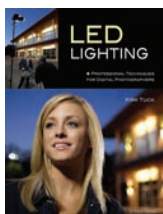


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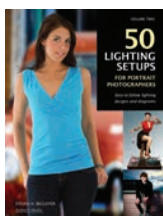
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Great portrait lighting boils down to two simple factors: the *direction* of the light and the *quality* of the light. Once you master these core aspects, the door is wide open to use any light source—natural light, on-camera flash, off-camera flash, studio flash, video lights, and much more—to produce the amazing portraits you’ve envisioned.

### LEARN HOW TO:

- Determine the optimal subject position for natural-light portraits
- Position hard light sources and soft light sources
- Choose light modifiers to adjust the light quality
- Adjust the distance and position of the main, fill, hair, and background lights for refined results
- Combine ambient light and flash for seamless, natural-looking results
- Use on- and off-camera bounce flash to produce big results with small light sources
- Balance the light levels on the subject and the background for more effective portrait designs
- Mimic the beauty of window light with flash
- Get amazing results with video lights
- Gel your lights for flawless color balance or creative color effects
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