Part I

To HDR or Not to HDR … That is the Question

I'm assuming you picked up a copy of this book because you want to learn about High Dynamic Range photography. Cool. You will learn a lot about HDR here. Most important, you'll learn how to use HDR imaging to create your own unique pictures—perhaps even works of art.

You'll also learn something else: There is a time and place for HDR. In other words, there are situations for which HDR is a dream. In other cases, you definitely don't want to use HDR, because it would spoil the mood or make the scene look bad.

Opening this chapter is one of my favorite non-HDR images. It's a sunrise photograph of the Two Mittens in Monument Valley, Utah. I could have used HDR, but opening up the shadows for a higher dynamic range image would have lessened the effect of the dramatic silhouette.

On the next page you'll see that using HDR on a similar scene was not the best idea. You will also see two examples of dramatic non-HDR pictures.

HDR is a very cool technique, but it's important to use it wisely. Knowing when to use it and when to leave an image alone will make you a better photographer. Just remember that a photograph is all about the light. Light illuminates a scene and light can be created in the digital darkroom. Light makes all the difference in the world.

No Substitute for Good Light

Here are three pictures that illustrate HDR vs. non-HDR photography. The image on the left (Photomatix) is an HDR shot, created from several images. Sure, the dynamic range of the photograph is greater than the two images on the right, but the image on the left has no drama and looks flat compared to the other two pictures.

When a dramatic silhouette is your goal, HDR is a no-no.

By the way, I increased the dynamic range of the photograph on the bottom right by "painting" the tree with light from the headlights on our guide's Jeep.

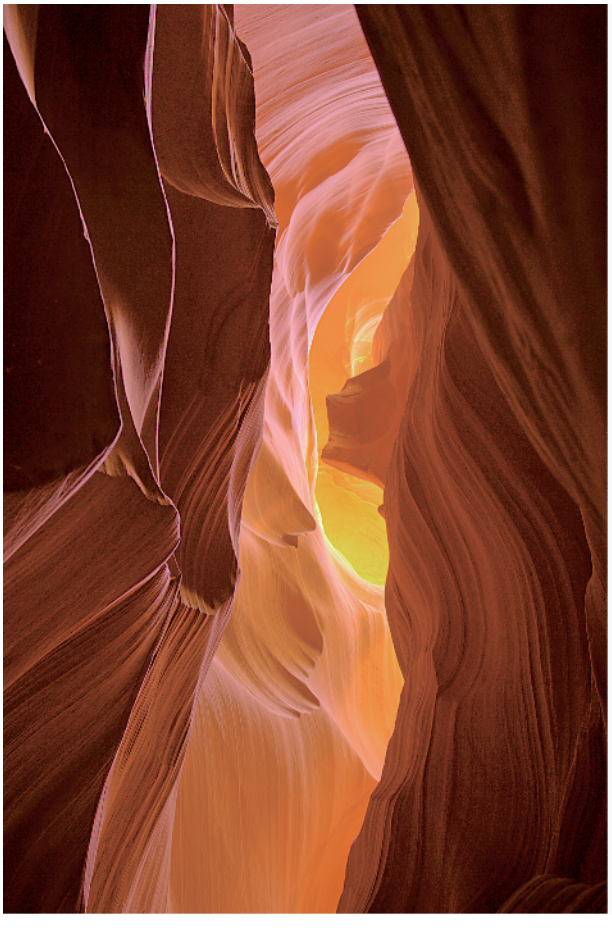
Here is another thought when considering HDR or non-HDR photography: There is no substitute for good light. Make sure your scene is lit appropriately for the photograph you hope to create.

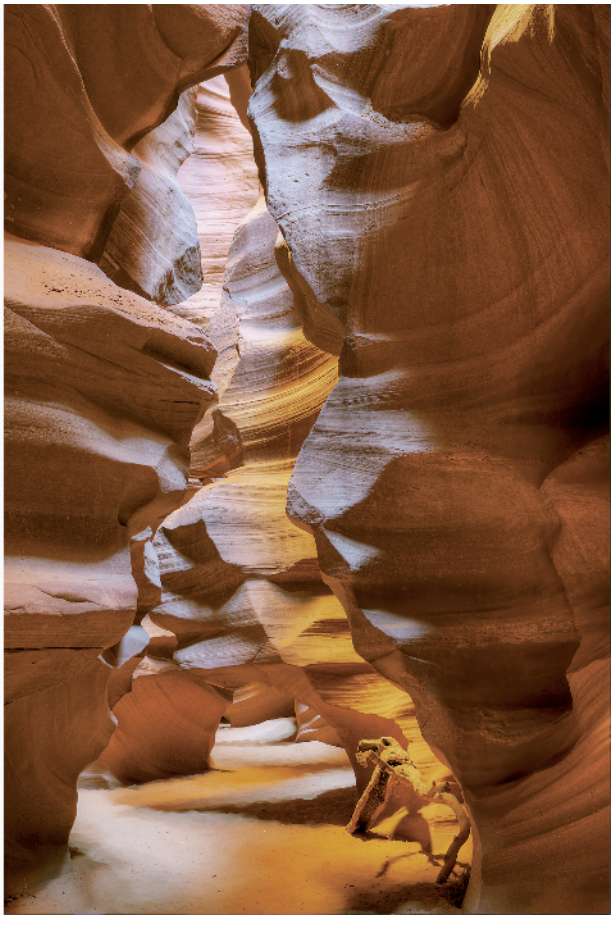
RAW Files are Packed with Data

RAW files contain a ton of data from which you can expand the dynamic range of a single image. You'll learn how to do that later in this book. For now, keep in mind that you can expand the dynamic range of RAW files only a few f/stops. That's compared to many f/stops when you take a series of pictures for processing in Photomatix.

We're back in Monument Valley here. I processed the top image in Adobe Camera RAW. My work reveals details in the shadow areas of the foreground without blowing out the highlights in the background. The bottom image is the unprocessed RAW file. It shows the big difference in brightness level between the shadow and highlight areas. Here, Adobe Camera RAW could handle that difference.

When you want detail in both the shadow and highlight areas of a scene, you'll need to think HDR … Expand the dynamic range with skillful processing of a RAW file or use Photomatix to process a set of images.





When HDR Rules

I created the image on the left from several images that I took in Upper Antelope Canyon in Utah. What a magical place to photograph. However, getting an even exposure in this cool location is not easy, due to the wide contrast range in the scene.

When the contrast range is very wide in a scene is when HDR rules. However, just because you can almost completely open up the shadow areas of scene does not necessarily mean you want to.

For this image, I wanted to include some of the shadow areas in the scene, because shadows can add a sense of drama.

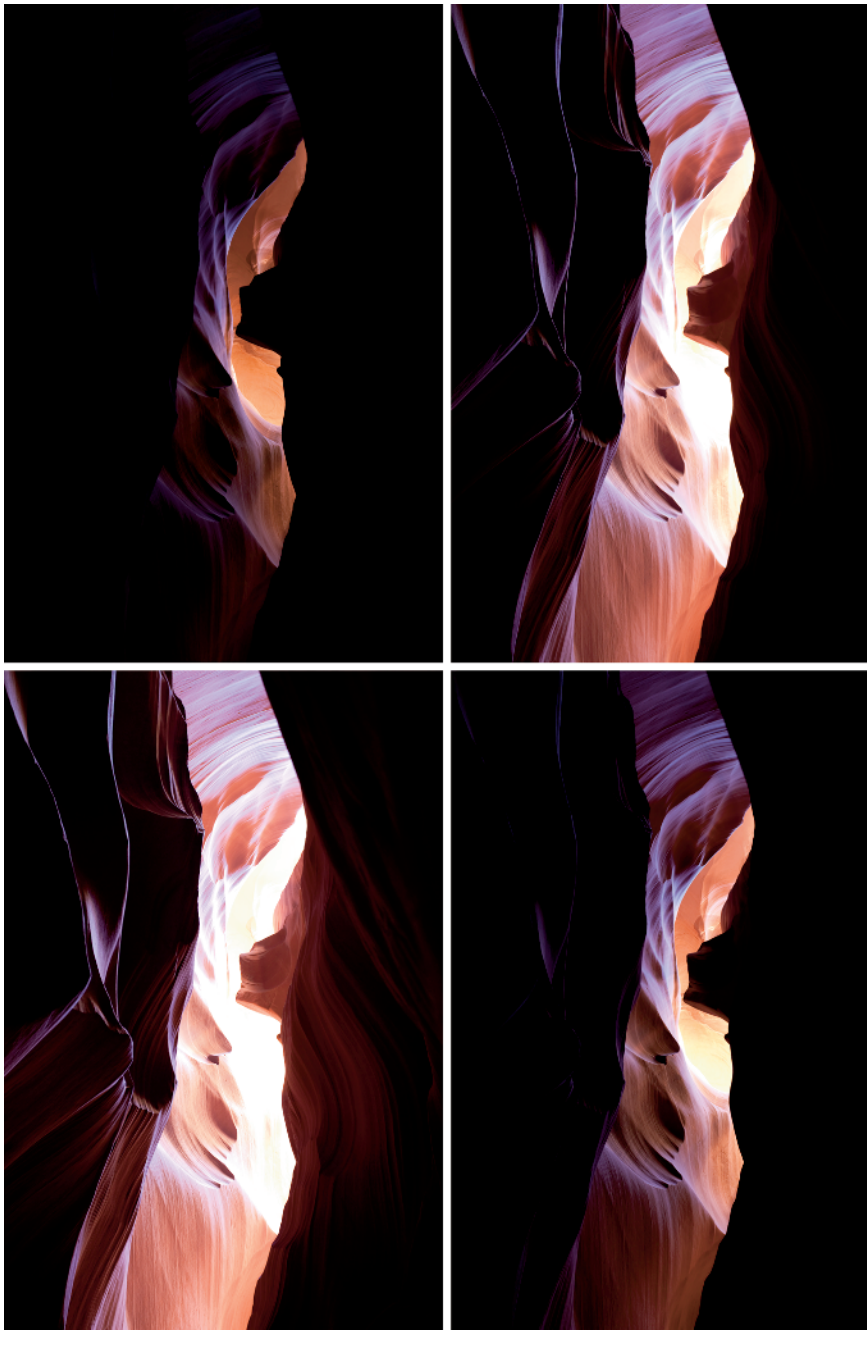
Check out the files on the following page. These are the files I used to create this Photomatix image.

I took the photo on the right in Lower Antelope Canyon. The contrast range was not as great as in my Upper Antelope Canyon image, so processing the image in Adobe Camera RAW did the trick of bringing out the shadow details and toning down the highlights.

More Exposures Mean More Data

Here are the four exposures I took to create the HDR image on the left on the preceding page. The top right shot is the average exposure of the scene. The highlights are blown out and the shadows are too dark.

For my HDR image, as I mentioned, I wanted to maintain some of the shadows. Had I wanted more detail in the shadow areas, I would have taken additional shots, overexposing them to the point where I could see the details on my camera's LCD monitor.



HDR is Not a Magic Fix

Here are two HDR images from a 2009 trip to Horseshoe Bend, which is near Page, Arizona—about a 10-minute drive from the Slot Canyons. In both images, HDR was used to avoid blocked up shadows and overexposed highlights caused by the strong shadow from the sun.

The pictures are okay, but personally I don't like the shadow in the scene. You'll find the remedy for this on the next page.

The Right Light for the Situation

Here is my favorite photograph of Horseshoe Bend. It is not an HDR image. It's a straight shot, actually taken in 2002, before HDR was available.

This image is a success because the contrast range is much less than in the images on the opposite page. In other words, there were no strong shadow areas and no bright highlight areas. That fortunate circumstance was created by an overcast sky.

For a scene like this, there is really no need to shoot HDR. You can expand the dynamic range, if you want to, in Adobe Camera RAW.

The message here is this: Sometimes you need to wait for the right light to get the photograph you envision … or be lucky and get the right light.

Strong Light Might Be the Right Light

Here is an example of when strong, direct sunlight can be the right kind of light for the image you want to create—and HDR is not required. The shadows in this case, created by late afternoon light, add definition to the scene. Remember: Light illuminates; shadows define.

It can be tempting to use HDR to open up shadows in a scene. And sometimes that's beneficial. Other times it causes a shot to fall flat.

Soft Light is Sometimes Right, Too

Here's another non-HDR image. I took this photograph after sunset of the same scene that's pictured on the previous page. I love the soft quality of light in this picture.

Due to the low contrast range in the scene, HDR would not have done much. It may have opened up the darker areas of the picture a little, but that is easily accomplished in Photoshop. (Note: I actually did try an HDR version of this image, and it turned out pretty nice; but I prefer this version.)

The idea is to keep HDR in mind without trying to make each and every one of your photographs an HDR image. I recommend using HDR only when you need it or want to create a special effect.

Taking all of that into consideration, check out the opening image of the Photomatix Meets Topaz Adust chapter (Part VII). I created the artistic effect by combining Photomatix and Topaz Adjust … and then added a digital frame for a digitally created artistic image.

Always Be Prepared for HDR Photography

Because we often find ourselves in high-contrast situations, always be prepared for HDR photography … even if the intention is not to create HDR images.

Being prepared includes toting a tripod and having enough memory cards for all your image sets. Remember that HDR photography takes a lot of memory, because you need to shoot several exposures of a scene to create one image.

For this HDR image of Lower Antelope Canyon, I took five different exposures and then "crunched" them in Photomatix.