Portraiture with One Light

When it comes to lighting, you can do a lot with a little if you know your options

by John Siskin

Why create a method for using one light to do a portrait? Well, the best reason I can think of is less equipment. That's less equipment to carry, set up, take down, and buy. It's also quicker to work with fewer tools; if you have only one light, you always know which light is causing the trouble. It also gives you the freedom to use any additional lights in new and more creative ways.

I'll demonstrate several one-light setups using a friend of mine, Michael J. Pratt, a Los Angeles-based actor. The idea is to be able to change between different looks in just a few moments. I want to be able to start with a strong character light and move to a soft light in the same shoot without interrupting the flow of the shoot. I can do that with just a few simple tools and one light.

Umbrella

For figure 1, I used a 42-inch ribless umbrella and 250 watt-seconds of strobe power with a Norman 2400 head. My aperture was set at f/11.3. The effect was somewhat harsh (even though umbrellas are known for even lighting) because the light had direction and there was no light filling in the shadows. If your light source is so broad it seems to come from everywhere, as on an overcast day, it doesn't have direction. An umbrella acts as a large light from one direction. The advantage of this kind of light is that it defines character. It gives strength to the lines on the face and shape to the features.

Reflector and umbrella

Of course, it is incredibly easy to set up: one light placed on a stand, above the subject and to one side. The closer the light is to the subject, the less defined the character lines will be in the portrait. If you pull the light to the side you can light less of the face. If you pull the light far enough to the side you can light only one side of the face, this is easier with a small light source. It is easy to make changes to this setup while you're shooting. Figure 2 adds a large reflector panel to set up in the first shot. Once again, this is a very fast and easy change. This setup retains the character of the first setup while opening up the shadows.

It is important to set the reflector close to the image. Often I see people set up a portrait with the lights and reflectors at distances of more than five feet from the subject, which greatly reduces the smoothness of the light in the finished image. The exposure remains the same in both the first and second shots; after all, I didn't add any lights. I've included two versions of the second setup, one with a silver reflector and the other with a gold reflector. The gold reflector gives images noticeably warmer shadows (figure 2a). The two reflectors were mounted onto the same frame, so changing them was very easy.

I made figure 3 by placing a diffusing material, white cotton broad cloth, on a frame between the umbrella and the subject. This created a soft light 3.5 by 6 feet in size. Unlike direct light into a diffuser, this setup had no significant hot spot, but the light drops off slowly into the corners. A direct comparison of this image and the first image shows that the diffused light has softer highlights and smoother transitions. The



Figure 1. Umbrella from the subject's right side and above (a); view of the setup (b).

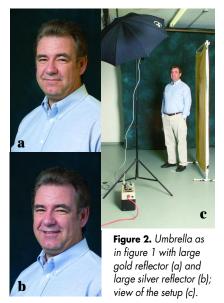




Figure 3. Umbrella and large diffuser, on subject's right side; view of the setup (b).



Figure 4. Umbrella and diffuser as in figure 3, but with a large silver reflector that is bounces light from umbrella through the diffuser (a); view of the setup (b).

overall look is less contrasty. Unless I need to create a particularly harsh look, I use this light arrangement rather than just the umbrella.

The amount of light did change—the diffusion panel sucked up some photons. In this case, I used 500 watt-seconds and an aperture of f/11.5. So I added more light to achieve a similar aperture. As a result, it took a few moments longer to make this change than the first one.

Diffuser and reflector

For figure 4, I added a reflector, the same way I did in the second image. The reflector is placed opposite the diffuser, creating two walls of light. The



Figure 5. Umbrella has been moved slightly from figure 3, with the large silver reflector (a). The reflector is bouncing light directly from the umbrella, as seen in the setup (b).



Figure 6. Results (a) from the same setup as figure 5, with the addition of another piece of diffusing material in front of the umbrella (b).



Figure 7. Uses the same setup as in figure 6, but with a bare-bulb flash placed behind the subject.

result is similar to figure 2, but with a smoother and less contrasty look. The character lines are softer; that makes many people happy. Once again, this is a change I can make without a change in exposure. Another point is that I can change the color of the reflector any time I am using it in these shots. Since I have both colors, silver and gold, set up on opposite sides of the same frame, I simply turn it around.

At first glance the setup for figure 5 looks about the same as the setup for figure 4, but there is an important difference. The reflector in figure 4 was bouncing the light that came through the diffuser, while in figure 5 the reflector was bouncing back light directly from the umbrella—that light never went through the diffuser material, so it's brighter. The change was accomplished by pulling the reflector forward and angling it toward the subject. The umbrella was angled slightly toward the reflector. It is important to check that the spill light created by moving the reflector doesn't cause lens flare. This time you do need to use the meter, since you have changed the diffused light by moving the umbrella and the reflector by using it to reflect the umbrella. The primary difference caused by this change is that you get



Figure 8. Same as in figure 6, but with an oncamera flash to create catch lights in the eyes.

more light from the reflector than in figure 4. The right side of the image is closer in exposure value to the left side. Also, this is another large light source, so it is very soft.

More diffusion

Another option for the setup in figure 5 is shown in figure 6. Everything is in the same place, but a second piece of diffusing material was placed on the frame in front of the umbrella. This reduced the light on the left of the shot without affecting the light coming from the right, balancing the lights even more. In fact, if you use enough diffusion on the left side you can make both sides of the shot even with just one light.

Second-light possibilities

What would I do with another light? Well, I am partial to throwing a bare bulb strobe behind the subject. This lights up the background and creates a partial rim light around the subject. All I need is a low-power light to do this. In figure 7 I used a 900-series Norman head, but much of the time, I'll just use a Norman 200B; it allows me to use less power. Another choice is to use a strobe on the camera or on a flash bracket. That provides better catch lights in the eye, and may change the way the face looks, depending on the power (figure 8). Note that in either of these images it's a good idea to check the exposure, since you are adding more light.

Using reflectors and diffusers can help you to use fewer light sources, and that's a good thing. It also can give you a sense of smooth and even light that's an even better thing!

John Siskin is a commercial and fine art photographer specializing in product images and portraiture, as well as macro and architectural photography. He has taught photography for more than 20 years. He currently teaches black-andwhite photography at Los Angeles Mission College. His studio is in Reseda, CA, and his Web site is www.siskinphoto.com.