# Hard & Soft Light
## Use One, Or Both, for Portrait Work
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Expert Photo Techniques, From Shutterbug

Photographers talk about the characteristics of light using various terms. When we talk about light being soft or hard, we are really referring to the size of the light source. By using both kinds of light we can have more control over the appearance of our subjects.

When you walk outside on a sunny day you're looking at hard light. The shadows have a lot of edge detail and are very dark. Reflections are small and very bright. In light like this we can see a lot of texture in surfaces. The shadows, if the light is coming from the right direction, can be a dramatic and important part of an image. The reason the light works like this is that the sun, since it is 98,000,000 miles away, is a very small light source. Anytime a photographer works with a small light source, whether it is actually small or just far from the subject, the light will have these characteristics. If you want to create a hard light effect you can use just the reflector on a studio strobe or just use an on camera flash without any modifier.
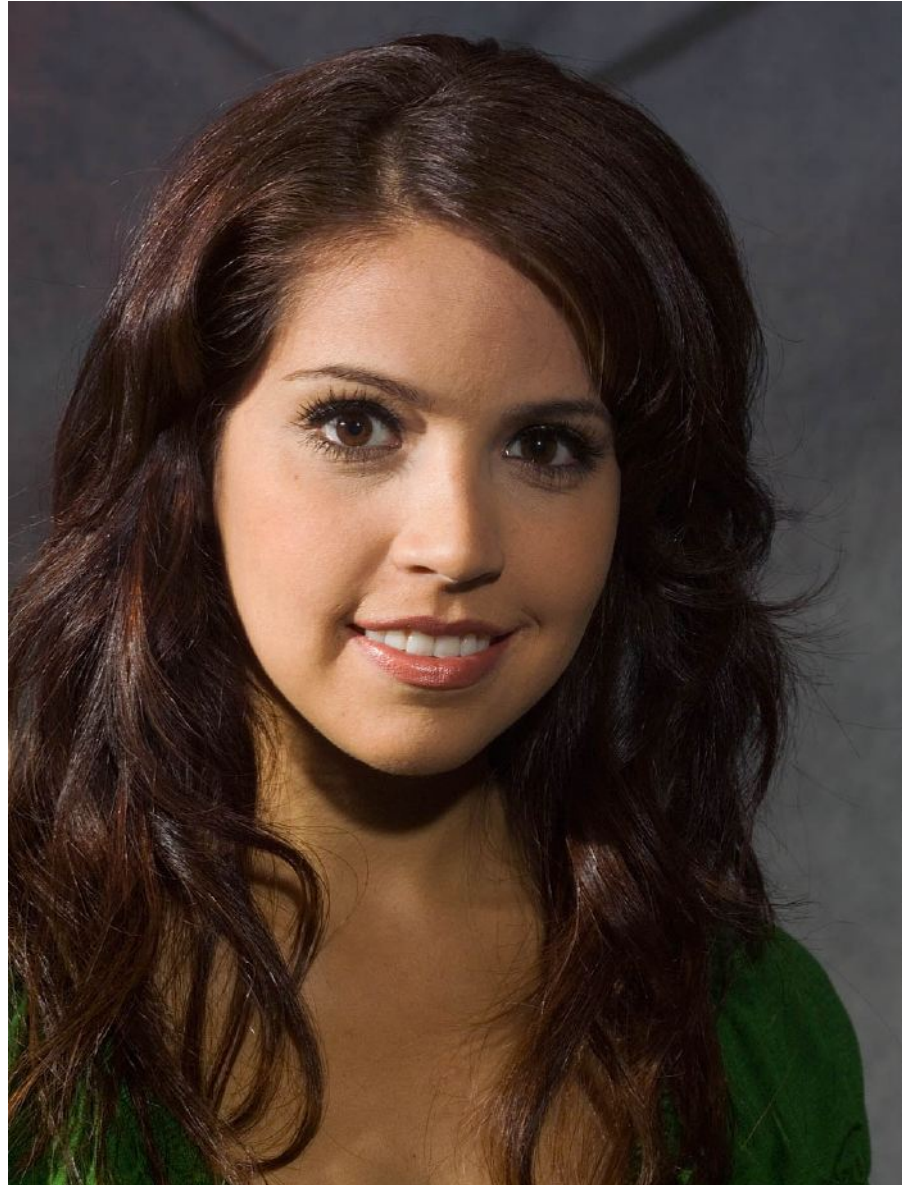
Shot 1) This image was made with two small or hard lights. You can see the sharp transition between the two sides of the face. You can also see the hard shadows from the hair and chin.
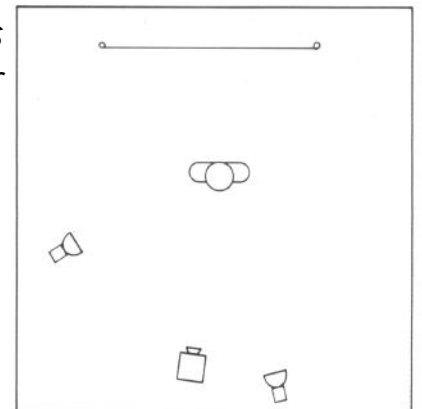
Several tools help you to control the spread of a small light source: barn doors, snoots and grid spots are particularly useful at putting light into a particular place. Shot #1 shows an image made with just hard lights. You'll notice the strong shadows.

If you look at the light on an overcast day the quality of the light will be very different. There will be virtually no shadows and the light will seem directionless. Light like this is very forgiving; for instance on an overcast day wrinkles in a persons' skin will be much less noticeable. The reason is that light comes from all directions, so the shadows from one side of the sky are filled in by the light from the opposing side. Anytime you work with a large light source, whether it is an overcast sky or a large soft box, the light will have a long gradation from highlight to shadow, if there are any shadows. The whole purpose of umbrellas, soft boxes and light panels is to make a small light source into a large light source. The key to using these tools effectively is to keep in mind that size is more important than shape. So a large soft box or a large umbrella will make softer light, at the same distance from the subject, than a smaller tool in the same place. I often use the umbrella and the light panel together in order to create a large soft even light. You can see the effect of one umbrella/light panel combination in shot #2.
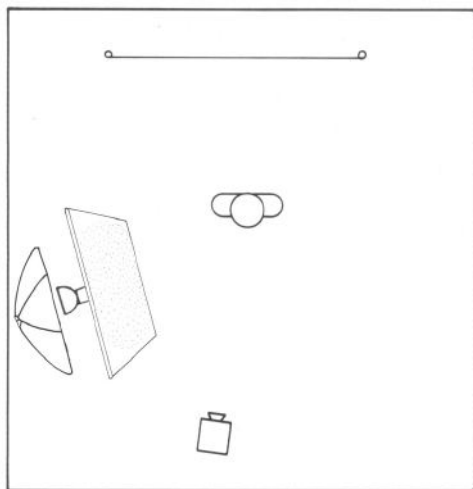
Shot 2) This shot was made with just one large light source. I used a light panel and an umbrella to make the light as smooth as possible. There is only soft shadowing and smooth gradation across the face.

You can see the placement of the tools in the diagram. This is a good light for simple quick projects, since it is so forgiving.

My favorite way to light a person is to use both soft and hard light to flatter the face and still give it character. In shot #3 I used four lights to control the face and the background. You can check the placement of the lights in diagram 3 . The first light is the umbrella/light panel combination. This effectively creates the base of my image, giving me an overall soft light on the subject. Since the light is on camera left there is soft shadowing on the right side of the image. The combination of the umbrella and the light panel works like a 4X6 foot soft box, but gives me a little more variety of options, depending on the placement of the tools. One concern with this combination is that it does use a lot of light, so it helps to have powerful strobes.

The second light for this project is a strobe with a snoot behind the subject. This light defines the left side of the subjects face and sweeps across the cheek. A snoot is basically an open pipe or tube attached over the strobe tube. It keeps the light from spilling onto things you don't want to light. I attached a warming filter over the end of the shoot to give the light a warm glow. You can see that the right side of the image, with the filter is warmer than the left side. By filtering the lights you can control the color on different parts of a subject rather than on the whole subject.

Working with a snoot can be very difficult because placement is critical. When you use a large light source the subject is lit from every part of the light, but with a small or hard light, placement has to be just right. In this case, if the light had been, for instance, further from the camera, you would have had more light falling onto the hair, creating a shadow on the face. Often the best way to position a snoot is to turn off all other lights in the space so that you can really see the modeling light from the snoot.

Next I used a small strobe, without any reflector at all, called a bare bulb, to build some sparkle in the eyes and lips. A large light source will give you a softer more diffused highlight, while this can be effective, it does lack the sparkle of a hard light. So I put a bare bulb right behind the camera. Once again I used a warm gel, as I wanted the sparkle, especially on the lips to have a warm glow. Using a bare bulb is easier than using a snoot, position just isn't really critical in a shot like this. In a shot where you are trying to place the highlights or reflections precisely you would need to give attention to placement of a bare bulb light.

The last light I used in the shot is for the background. Hard light is better when you are lighting a background, because it allows you to control directionality and fall off. A set of barn doors gives you moveable metal sheets attached to your light that will control the way the light spills from the reflector. In this shot there was not a problem with spill from the light, as the subject was pretty far from the background. I used a blue filter to give more color to the gray background.
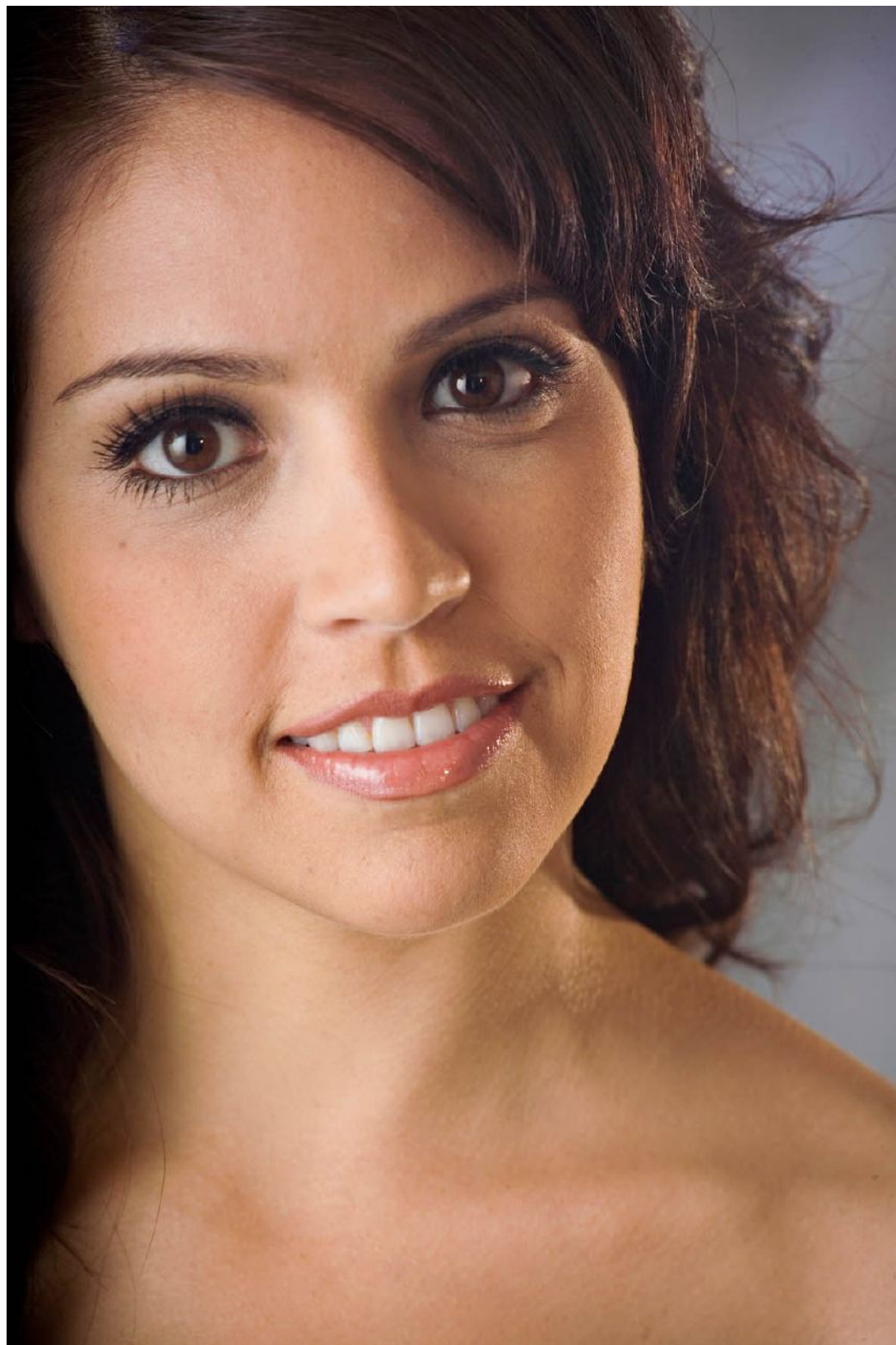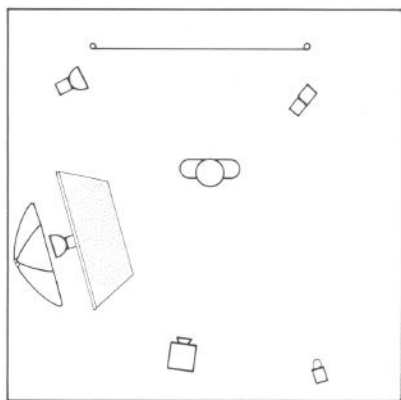
Shot 3) This shot uses both hard and soft light to give more shape to the face. The soft light gives the face overall exposure. The hard lights, three of them, create additional highlights on the lips and the warm light on the cheek. I particularly like the definition at the edge of the cheek and chin. I also used a light with a blue gel on the background.