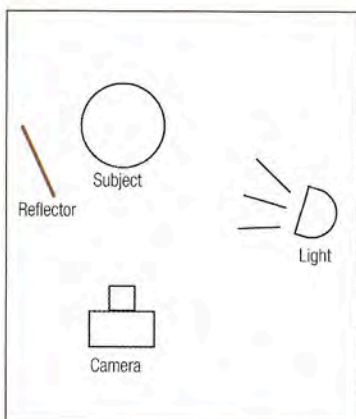


Shoot a Formal Portrait

The time and effort you spend on setting up for a formal portrait shoot is critical to the success of the final image. Prepare in advance by making a list of all the equipment and supplies you will need, so that you don't forget anything. It's a good idea to practice your set-up routine ahead of time, so you aren't struggling with positioning the background and lights or loading film in your camera while your subject is ready to be photographed. You want to be relaxed so your subject is relaxed, too. You'll want to have a friend assist you; he or she can adjust the location of lights and hold the reflector so you can concentrate on positioning your subject and composing your shot.



- 1 Place the background for the photograph close to a wall. There should be about 10 to 20 feet of clear space in front of the background, plus some room to the sides. The background can be a roll of paper, a background cloth, or the wall itself. Put a stool in front of the background about 4 to 6 feet in front of the background. Now ask your subject to sit on the stool.



- 2 Place the light about 45 degrees to the right side of the subject. Have an assistant hold the reflector on the subject's left side, about 3 to 4 feet from the subject. The assistant will have to adjust the angle and position of the reflector for the best effect.



- 3 Set the camera directly in front of the subject, anywhere from 6 to 10 feet away, depending on what kind of lens you are using. The more telephoto the lens is, the further away you'll have to be. Talk to the subject, guide him or her in how they should pose, and take the photograph.



Fig. 5-13. Notice how much darker the shadows are on the subject's face without a reflector. How does this affect the mood of the photograph?



Fig. 5-14. The lighter shadows on the subject's face create a softer look and mood when using a reflector. Which style of lighting would be better for different kinds of subjects and moods?



Fig. 5-15. The previous color portrait was converted to black and white on the computer. How does the mood change as a result?

Artificial Light

Lights and Other Lighting Equipment

TYPES OF ARTIFICIAL LIGHT



Photofloods have a tungsten filament, like a household bulb, but produce more light than a conventional bulb of the same wattage. The bulbs put out light of 3200K color temperature for use with indoor color films. The bulbs have a relatively short life, and put out an increasingly reddish light as they age. Studio photographers call photofloods (and quartz-halogen lights, below) "hot lights" to distinguish them from electronic flash.

Quartz-halogen bulbs contain a gas that prolongs the life of the bulb. They (and their lamp housing fixtures) are often more expensive than photofloods, but they last much longer and maintain a more constant color temperature over their life. Quartz bulbs are color balanced for indoor color films.



Flash equipment (see page 183) ranges from large studio units that power multiple heads to units small enough to clip onto or be built into a camera. Flash should be used with daylight-balanced color films.

Depending on its housing, any of the above can be a floodlight, which spreads its beam over a wide angle, or a spotlight, which has a lens in its housing that focuses the light into a concentrated beam. A spotlight often is adjustable so the light can be varied from very narrow to relatively wide.

REFLECTORS AND LIGHT-CONTROL DEVICES

Bowl-shaped reflectors are used with photo lamps to concentrate the light and point it toward the subject. Some bulbs have a metallic coating on the back of the bulb that eliminates the need for a separate reflector.

Snoot is a tube attached to the front of a lamp housing to narrow its beam. It is used to highlight specific areas.

Grid also attaches to the front of a lamp housing and uses an array of tiny tubes to narrow its beam. Grids are available in a variety of spread angles.



Umbrella reflector is used with a light to produce a wide, relatively diffused light. The light source is pointed away from the subject into the umbrella, which then bounces a broad beam of light onto the scene. Umbrella reflectors come in various surfaces such as silvered for maximum reflectivity, soft white for a more diffuse light, and gold to warm skin tones.

Reflector flat is a piece of cardboard or other material used to bounce light into shadow areas.

Flag is a small panel usually mounted on a stand and positioned so it shades some part of the subject or shields the camera lens from light that could cause flare, the same effect you get outdoors if the sun shines directly into the lens.

Gobo is a plate of metal or glass in front of the bulb that creates a pattern of projected light.



Barn doors are a pair (or two pairs) of black panels that mount on the front of a light source. They can be folded at various angles in front of the light and, like a flag, are used to keep part of the illumination away from the subject or from the lens.

DIFFUSERS AND FILTERS

Diffusion screen, often a translucent plastic, placed in front of a light will soften it and make shadows less distinct. The material must be heat resistant if used close to tungsten bulbs. The screen may clip onto a reflector or fit into a filter holder.

Tent is a translucent material that wraps around the subject instead of around the light source. Lights shine on the outside of the tent so it becomes the light source, producing a very diffused and even illumination. See the tent diagrammed on page 197.



Softbox completely encloses one or more lamps and produces a soft, even light.

Filter holder accepts filters or gels that change the color of the light, diffusion screens that soften it, or polarizing screens to remove glare or reflections.

SUPPORTS FOR LIGHTS AND OTHER DEVICES



Light stands hold a lamp, reflector, or other equipment in place. The basic model has three folding legs and a center section that can be raised or lowered.

Cross arm or boom attaches to a vertical stand to position a light at a distance from the stand. A counterweight at the opposite end of the arm keeps the stand from falling over.

Umbrella mount attaches to a light stand and has a bracket for an umbrella reflector, plus another for the light that shines into the umbrella.

Background paper or seamless is not lighting equipment but is a common accessory in a studio setup. It is a heavy paper that comes in long rolls, 4 feet or wider, in various colors to provide a solid-toned, nonreflective backdrop that can be extended down a wall and across the floor or a table so you can make photographs without a visible break or horizon line. If the paper becomes soiled or wrinkled, fresh paper is unrolled and the old paper cut off. The roll is supported on two upright poles with a cross piece that runs through the hollow inner core of the roll.

Multiple-Light Portrait Setups

TYPES OF LIGHTING SETUPS

SHORT LIGHTING



Short lighting places the main light on the side of the face away from the camera. Short lighting is the most common lighting, used with average oval faces as well as with round faces to thin them down. The four photographs opposite (top) show the separate effect of each of the four lights in this setup.



Conventional portrait lighting is realistic but flattering. If you have ever gone to a commercial portrait studio to have your picture made, the photographer may have arranged the lights somewhat as in the diagrams shown to the right. These lighting setups model most faces in a pleasing manner and a specific setup can be selected to modify some features—for example, using broad lighting to widen a thin face.

A typical studio portrait setup uses a moderately long camera lens so that the subject can be placed at least 6 feet from the camera; this avoids the distortion that would be caused by having the camera too close to the subject, and avoids having the camera and photographer invade the comfort zone of the sitter. The subject's head is often positioned at a slight angle to the camera—turned just enough to hide one ear.

Your choice of main light affects the quality of the light. Direct light from photofloods is shown here, creating relatively hard-edged shadows. A more diffused light (such as a soft box or umbrella reflector) used as the main light would create a more gradual transition between highlights and shadows.

Another common portrait lighting style is virtually shadowless. A typical setup is a highly diffused main light placed close to the camera, plus a fill light. Such lighting is soft, attractive, and easy to use. However, when you don't want such even, shadowless lighting, you can use lights to create a more dramatic effect.

Flash units, direct or diffused, are often used, because they don't heat up the room. When you are learning lighting, the effects of different light positions are easier to judge with continuously burning sources such as a photoflood. Those sources are called hot lights for a reason, though; they can very quickly make your subject uncomfortable.

BROAD LIGHTING



Broad lighting places the main light on the side of the face toward the camera. This tends to widen the features, so it is used mainly with thin or narrow faces. The main light is high so that the catchlight reflected in the eye is at 1 o'clock. The main light in this position may make the side of the head, often the ear, too bright. A barn door on the light or a flag (see page 176) will shade the ear.



BUTTERFLY LIGHTING



Butterfly lighting places the main light directly in front of the face. This type of lighting is sometimes called glamour lighting. The light is positioned high enough to create a symmetrical shadow under the nose but not so high that the upper lip or the eye sockets are excessively shadowed. Fashion photographers often use a variation called beauty lighting, where the main light is large—like an umbrella—and just above the camera.



SETTING UP THE LIGHTS FOR SHORT LIGHTING



The main light in a short lighting setup is on the side of the face away from the camera. Here a 500-watt photoflood is placed at a 45° angle at a distance of about 4 feet. The main light is positioned high, with the catchlight, the reflection of the light source in the eyes, at 11 o'clock.



The fill light is close to the camera lens on the opposite side from the main light. Here it is a diffused 500-watt photoflood. Because it is farther away than the main light, it lightens but does not eliminate the shadows from the main light. Catchlights from the fill are usually retouched out of the final image.



The accent or back light is usually a spotlight placed high behind the subject, shining toward the camera but not into the lens. It rakes across the hair to emphasize texture and bring out sheen. Sometimes a second accent light is added to place an edge highlight on hair or clothing.



The background light helps separate the subject from the background. Here it is a small photoflood on a short stand placed behind the subject and to one side. It can be placed directly behind the subject if the fixture itself is not visible in the picture.



CARL DUROCHER Bad Boy, 2007

Notice the effect of the background light in this portrait made with no fill. One light illuminates the subject, one is on the background. The contrast between the lit and unlit area of the face makes the subject's scowl seem even more intense.

