

Lighting Basics

The first step in lighting is **PRE-VISUALIZATION**

- You have to know what you want, before you can know when you have it
- In order to know what you want to achieve, you need to understand the material, the subtext, this information, will guide you and provide the answer to the question: why?

1. Exposure: The most basic lighting need is to achieve the desired exposure
 - Achieving the desired level of illumination will give you an exposure, but it will not necessarily create the mood or feeling that you want to achieve.
 - Your most important tool when lighting is your eyes. Take the time to look at and see what you are looking at
2. Lighting For Mood
 - Light is known only through contrast. We can only see light when there are shadows and only see shadows when there is light.
 - Shadows give away all of light's secrets. They tell us where the light source is. Whether the light is hard or soft. The number of sources.
 - Mood is mostly affected by the direction of the light, color of the light, degree of contrast and quality of the light
 - Fill light is used to control contrast and modify mood.
3. Lighting for Depth
 - When lighting, you can create depth through tonal separation or you can reduce the illusion of depth by having the foreground and background blend into one visual "plane"
 - Chiaroscuro is the practice of placing lighter objects against darker backgrounds and darker objects against lighter backgrounds to facilitate tonal separation.
 - Depth is important, because we exist in three dimensional space. We are predisposed to accept three dimensional space as realistic and natural. Filmed images are projected onto a two dimensional medium. By creating the illusion of three dimensional space, we enable the audience to accept the space we have created as real, and they are more easily able to suspend disbelief and allow themselves to be transported into the world we have created.
 - When shooting in color, remember that cool colors (blues) recede and warm colors (yellows) advance. You can use color to add to the illusion of depth.
4. Lighting for Texture
 - By utilizing soft sources, from oblique angles one can accentuate the textures of surfaces.
 - Allowing the audience to see the subtleties of texture, enables them to feel that the images are real, and they may become more involved with the story.

5. Motivated Lighting

- Motivated lighting generally refers to lighting that simulates the direction, quality and color of practical light sources within a shot or sources established in a previous shot in the same scene.
- Light does not have to be motivated from practical sources. Sometimes a scene calls for a surreal treatment, or an unnatural lighting effect. Other times, the psychology of the scene dictates an approach that defies logic. This is lighting that is motivated by truth rather than reality.
- In most instances, one should not try to call attention to the lighting. Anytime the audience notices the mechanics of film making, they have been taken out of the “reality” you are creating for them on screen.
- Lighting that is not motivated by practical sources, can be made to look real. In such a case its effect will be felt subconsciously by the audience.

6. Quality of Light

- The quality of a light refers to its being hard or soft
- This is known through the shadows it defines and which in turn define it.
- Hard light creates shadows whose outline is sharply outlined
- Soft light creates softer shadows, shadows that gradually blend into the areas surrounding them
- Smaller light sources cast harder shadows than larger light sources.
- Light rays that travel in a direction that is parallel to each other cast harder shadows than rays that are scattered
- When the subject being lit is closer to the surface on which the shadow is cast, its shadow will be harder. When the subject is farther from the surface, the shadow is softer.
- We are accustomed to only seeing one shadow from one subject, though under certain conditions, multiple shadows do exist in nature. It is frequently considered more believable if each subject casts only one shadow that is visible in frame.
- Hard light can be softened by making the source larger relative to the subject and by interspersing the rays of light into a more scattered pattern
 - Soften light by bouncing it off a soft reflector
 - Diffusing it with heat resistant diffusion material
 - Moving the light closer to the subject
 - Note: When shooting in color, bouncing light off a colored reflector will alter the color of the light reaching the subject
 - Using tinted diffusion material will alter the color of the light reaching the subject

7. Working with Natural Sources

- Natural sources, refers to light sources occurring naturally.
- Outside during daylight hours we have two sources. One is a hard source that casts hard shadows and is more intense than its counterpart. The sun is the main source of illumination for day exteriors.
- The second source is much softer, its shadow can only be seen when the sun is not present and it casts a very soft shadow. It is the sky.
- If one decides to shoot with the sun behind the camera and directly in front of the subject, a number of problems can occur.
 - Beware of camera shadows
 - Notice how dark the eye sockets can become with the sun high overhead
 - Notice how dark some of the shadow areas in the background can become
- If you shoot with back light, that is the main light being behind your subject,
 - You will not have any camera shadows, because the shadow will fall behind the camera
 - The eye sockets will not be as dark and contrasty, because the face will be illuminated with soft sky light instead of harsh sunlight.
 - The shadow areas in the background will not be as dark, because you will be setting your exposure for the shadow areas instead of the areas in full sunlight.
 - Beware of lens flares--they can be extremely beautiful and very distracting. Again—pre-visualize your scene and consider your intent before you roll.
 - Beware that sunlight directly hitting the lens can alter your exposure reading causing you to grossly underexpose your shot. Shade your lens whenever appropriate.
 - When you shoot in back light, you might prefer the results if you open your aperture from the camera's recommended reading. *This will depend on your intent for the "look" of the shot.
 - You will likely find it helpful to use either Foam Core or Show Card to bounce light into some of the shadow areas when shooting outdoors

8. Suspension of Disbelief

- The goal of the film maker is to mount a film in which the audience will be able to lose themselves (suspend disbelief).
- As film makers it is our objective to create cinematic worlds that feel believable within the confines of the parameters we establish in each film to the audience, whether the setting is in the past, present or future; on this planet or another, in a place grounded in reality or fantasy, we need to enable the audience to feel as if it is real; as if it is a place where they can lose themselves even if only for a short period of time.
- Lighting plays a key role in creating this effect