

The Film Connection – Chapter Nine

- 1.) Describe the basic duties of a DP. Explain the difference between a director of photography and a cinematographer.

The DP's prime directive is ensuring that the image is captured in the best quality possible. He/she works with the camera operator, first assistant camera operator, and the second camera assistant. In contrast, the cinematographer's main function is to alter the camera and lighting to create the desired image. The primary difference is that the cinematographer works with the camera and the DP does not. Therefore, the director of photography might direct the cinematographer to create the visuals deemed necessary.

- 2.) What jobs comprise the director of photography's crew? What are the duties of each member of his team?

The camera operator, the first assistant camera operator, and the second camera assistant collaborate with the director of photography to create the image he/she feels is best for the production. The camera operator physically controls the camera and maintains the structure and angles decided by the DP. The first assistant camera operator, or 1st AC, is responsible for focusing and refocusing the camera lens to match the movement of the actors. Lastly, the second camera assistant, or 2nd AC, applies the clapperboard and prepares the camera for each shooting, including charging batteries and changing lenses.

- 3.) Why is depth perception important when lighting an actor?

Depth perception is crucial for providing a three-dimensional image rather than a flat image. Our own eyes can create depth perception, but a camera cannot. Hence, various types of lights create the needed depth perception for a filmed image.

- 4.) What are the three main lights used in cinematography? How are they used together to create "the visual image"?

The three main lights are the key, fill, and backlights. The key light shines right in the actor's face, making the face look brighter and two dimensional. The fill lights restore the shadows of the nose and brows, darkening the image a touch. Finally, the backlight is applied to separate the actor from the background by being shined in the back of the actor's head. All of three of these lights create the visual image that is put to film.

- 5.) What is the difference between tungsten incandescents and HMIs? What is the purpose of each?

Tungsten incandescents give off a yellow light and HMIs (hydrargyrum medium-arc iodide) give off a blue light. Tungstens are often used when filming indoor scenes and work very well for filming dark interior scenes. HMIs on the other hand, are often preferred during filming outdoor scenes and can be used to apply a bright and vibrant light onto an image, or brightly light a large area.

- 6.) What are some of the other tools a director of photography will use to create lighting effects?

A DP may also use gels, scrims, bounces, C-stands, sandbags, and apple boxes. Gels are sheets of cellophane that can be placed over the light to change its color and effect. Scrims are used to pattern or diffuse the light, and can range from fabric to wood to plastic. Bounces are tools used to reflect the light in another direction, ranging from mirrors, reflective foam, or shiny plastic. C-stands can have a variety of uses, but they are usually utilized for holding up lights. Sandbags are used to hold them in place to keep them from falling, and apple boxes are used to give more height to a C-stand.

- 7.) What are the different parts of a camera?

A camera is comprised of the following:

Camera body – Keeps unwanted light out of the film

Lens – Forms a sharp image on an object

Iris or diaphragm – Adjusts the amount of light in a film

Shutter – Controls the amount of time that light is exposed to a film

Focal plane – The area where a piece of film or digital sensor is located, usually at the back of the camera.

- 8.) Why is "vetting" your DP so important? When vetting him, what characteristics are you looking for? What do you want to avoid?

As a director, your DP's style should match the style of the film you have in mind. Therefore, it's important to see the work he/she has done in the past and check his/her references, and to make sure that he/she is easy to work with, smart, competent, and experienced. You'll want to avoid differences in opinion and arguments on the set regarding visuals and lighting.

- 9.) What is the most important quality of a camera?

The camera's quality is determined by the relationship between the lens, shutter, and iris, which determine depth-of-field (depth of sharpness). Without a sharp image, a proper film cannot be made, for the audience must be able to see your work.

- 10.) What is a lens and what is its primary purpose?

A lens is an object that is usually made out of glass or plastic that attaches to a metal or plastic barrel. The lens forms a sharp image on an object onto the focal plane, allowing the image to be stored in the film or hard drive of the camera itself.

- 11.) What is focal length and what does it affect?

Focal length is a magnification power of a lens, usually measured in millimeters. The larger the focal length, the larger the image will be. Hence, a film taken on a cell phone would be smaller than one taken on a Handycam because the focal length is very small compared to the one on a Handycam. The focal length also determines the field of view, which is the entire area being filmed. For a cell phone camera, the field of view is not very much, so the one filming might have to step back quite a bit to get a clear shot of someone dancing in front of him/her. But for a Handycam, the person filming might not have to step back at all.

12.) What is controlled by the iris?

The iris determines the depth-of-field, which will cause the image to appear more blurry or more clear. A larger iris opening will create shallow focus on an object while a smaller iris opening will create greater focus on an object.

13.) What does the shutter control?

The shutter controls the amount of time that light is exposed to a film.

14.) In your own words, why is well executed sound important?

Well executed sound is crucial because without proper sound, the audience cannot appreciate your film. Improperly recorded sound will make it impossible to hear the actors, which will make it difficult to comprehend the plot, hence the audience won't be able to follow your story.

15.) Who generally comprises a sound crew?

A sound crew is usually made up of a sound mixer, a boom operator, and one or two sound assistants. The sound mixer supervises the audio department, brings the equipment, decides the microphone placement, and adjusts the volume level of the mic—not too low or not too high. The boom operator holds the shotgun microphone just so the boom mic isn't visible in the frame.

16.) Why does the mixer need to make sure levels are kept within a proper range?

The sound mixer must be very careful to keep the volume levels consistent, for if the mic is too loud, the sound will be difficult to edit as there might be some buzz in the background. However, if the mic is too soft, it will be hard to hear the actors.

17.) What are the tasks of a sound assistant?

The sound assistants attach wireless mics onto the actors' clothing and makes sure that those mics are not misplaced and go back to the sound mixer. They also wind up cables and change batteries for the wireless mics to make sure that they can be used by the actors without difficulty.

18.) What is time code used for?

The time code allows the digital imaging technician (DIT) to display various takes to the director. It is also utilized by the editor to sync the audio and images together, as the timecodes will match each other. The images and audio must be in sync at all times. If not, the film will seem sloppily shot and edited, and aggravate the viewers.