UNIT – 3: PHOTOGRAPHY

UNIT STRUCTURE

3.1 Learning Objectives

3.2 Introduction

3.3 Concept of Photography

- 3.3.1 Photography – Basic Idea
- 3.3.2 Beginning of Photography
- 3.3.3 Still photography
- 3.3.4 Technical concepts of Photography

3.4 Types of Camera

- 3.4.1 Types
- 3.4.2 Parts of a still camera
- 3.4.3 Movie Camera

3.5 Writing & Editing of Captions

3.6 Shots and Camera Movements

- 3.6.1 Shot
- 3.6.2 Camera Movement

3.7 Let us sum up

3.8 Further reading

3.9 Answers to check your progress

3.10 Possible Question

3.1 LEARNING OBJECTIVES

After going through this unit you will be able to:

- discuss the concept of photography;
- identify the types of camera;
- differentiate between still and movie photography;
- explain good composition;
- write and edit captions for still photography; and
- identify the shots and camera movement used in movies.

3.2 INTRODUCTION

How often do you get excited to see a good photograph? Whether it is of your child playing or that of a picture taken in a picnic or a marriage party, we all appreciate a good photograph. A photograph helps us to recall our past and makes us nostalgic. Do you realize how the camera works? What are the different types of camera? In this unit we will introduce you to the basic concept of 'Photography'.

After a thorough study of this unit you will have developed an adequate understanding of the concept of Photography. We will discuss various types of camera and the differences between still and movie photography. We will also discuss the different concepts of composition and exposure in photography with all its characteristics and aspects.

We hope that this unit will open up to you the exciting world of photography in a completely new light. So let us begin our journey into this world by understanding the meaning of the word 'photography' from the point of view of a professional visual communicator. While studying this unit try to focus on the fundamentals, as this unit will be the beginning of a new way of looking at photographs!

3.3 CONCEPT OF PHOTOGRAPHY

Communication became one of the basic needs of our lives. Without communication, whatever may be the process, we can not survive in a society. To express out ideas and emotions we use different types of communication channels—be it interpersonal communication or even mass media tools to reach out to the masses. Reaching out large numbers of people at a time requires technology and most forms of modern communication tools use technology in one form or the other. Visual communication has a different appeal to influence all categories of people, whether it may be a photograph published in the newspaper or moving images. Photography is a universal means of communication and a valuable tool in many fields. Be it moments of a family event or the Big Bang picture or even a satellite picture of the moon or the earth, photographs can record

not only that which human beings can see, but also so many subjects, which are beyond our range of vision. Though we usually take photography to be the process of making pictures by means of the action of the lights and consider it a scientific invention, it is much more than that and is also a major art form.

3.3.1 Photography – Basic Idea

"If photography is used merely as a technical process to record some visual fact, it is an appendage to science. However, if it is used as an expression of emotions that's personal to each individual…it becomes art." - Peter Rose Pulham. Pulham, one of the great photographers in the world, wanted to say that photography is not only a technology to record a situation, but it is also an art that can record the emotion and expression of the nature with the help of this scientific technology. We can define photography as a method of recording the image of an object by the action of light, or related radiation, on a sensitive material. Literally photo—graphy means writing with light.



LET US KNOW

The word photography has been derived from the Greek words 'photos' meaning "light" and 'graphos' or graphein meaning "to draw". The term is generally accepted as referring to any method of producing a visible image by the action of light.

The use of the term 'photography' was suggested and also first used by the scientist Sir John Fredrrick William Herschel (1792-1871) in a letter dated 28th February, 1839 to Willium Henry Fox Talbot (1800-1877).

The term photography usually refers to the formation of optical images projected by a lens in a camera onto a film or other material carrying a layer of light-sensitive silver iodide salts and the duplication and reproduction of such images by light action (printing); in an extended sense it also includes

the formation of images by certain invisible radiations (ultraviolet and infrared rays) and images recorded in other sensitive materials not containing silver by means of chemical or physical processes or both.

3.3.2 Beginning of Photography

The forerunner of the camera was the *camera obscura*, a dark chamber or room with a hole (later a lens) in one wall through which images of objects outside the room were projected on the opposite wall.

In 1839, Louis-Jacques-Mandé Daguerre announced the first commercially successful photographic process, the *daguerreotype*. Two years later William Henry Fox Talbot patented his negative-positive *calotype* process, which became the forerunner of modern photographic processes. After that the wet *collodion* process was developed in 1851 and by dry plates in 1871. George Eastman, the young dynamic entrepreneur introduced flexible films in 1889. Since then, the light sensitivity (speed) of films has been greatly improved, and the quality of film emulsions has become so fine that prints many times larger than the size of the film can be made. Colour photography, expensive and complicated in the 19th century, has been so refined that it is nearly as easy as black-and-white photography. Technical improvements in the camera have transformed it from a bulky, cumbersome apparatus to a compact, sophisticated device that is often small enough to fit in a pocket.

And finally, photography became popular among the people thanks to the entrepreneurship of George Eastman. The Eastman Kodak Company was born in April 1880, when Eastman began the manufacture of dry photographic plates for sale at Rochester. The young company faced a total collapse once when dry plates with dealers went bad. Eastman recalled them and replaced with a good products. ‘Making good on those plates took our last dollar’- he said. ‘But what we had left was more important- reputation’.

In his words, in an attempt to make the camera as convenient as a pencil, Eastman invented the flexible film to replace the bulky plates. In 1988, the Kodak camera was introduced and the slogun was very much important

as well as interesting. It was- 'you push the button, we do the rest'. The Kodak brand name was registered in 1888 and was recently been rated as the fourth most well known brand globally.

3.3.3 Still photography

Still photography is a method of recording permanent images in a photographic material or in a light-sensitive paper or in a memory by the action of light projected by a lens in a camera. It was developed in the 19th century through the artistic aspirations of two Frenchmen, Nicéphore Niepce and Louis-Jacques-Mandé Daguerre, whose combined discoveries led to the invention of the first commercially successful process, the daguerreotype (1837). In addition, two Englishmen, Thomas Wedgwood and William Henry Fox Talbot, patented the negative-positive calotype process (1839) that became the forerunner of modern photographic technique. Photography was initially used for portraiture and landscapes. In the 1850s and '60s, Mathew B. Brady and Roger Fenton pioneered war photography and photojournalism. From its inception, two views of photography predominated: one approach held that the camera and its resulting images truthfully document the real world, while the other considered the camera simply to be a tool, much like a paintbrush, with which to create artistic statements.

3.3.4 Technical concepts of Photography

Composition and exposure are two important parts of photography. A person has to do two things when taking a photograph: Composition and exposure. In simple words, exposure stands for the technical part of photography and the composition expresses the artistic viewpoint of a photographer.
The 'Compose and Expose Rule' can come in handy when shooting pictures. 'Compose' and 'expose' are the two words that rhyme for which it is easy to remember. A photographer would do well to compose first and then expose.

(a) Composition :
Composition is the creative or artistic part where a photographer arranges all of the elements of his picture within the frame or viewfinder to produce

what should hopefully be a pleasing composition.

In his book '*Photography for the Beginners'*, Alok Chandra Roy writes that a beginner, with little or no artistic experience, may often face problems in arranging or "composing" the various elements of subject of interest within the camera view - finder to obtain the most pleasing picture.

Roy, in his book suggested some points, which are worth knowing for the beginner –

1) Keep your subject of interest away from the four edges of the picture, or it will look very odd.
2) Keep the subject just away from the geometrical centre of the picture. Otherwise it gives a dull and very formal effect in the picture.
3) Allow more space in front of the subject than behind it. In a portrait, there should be more space in front of the face. A moving subject should be shown moving into the picture. As far as possible these methods are to be applied when taking photograph. It is always easier to avoid an unwanted subject by changing the view point or camera angle.
4) Always keep in mind that nothing else gets more importance than your subject of interest in the picture.

(b) Exposure :

We have taken a look at the creative side of taking photographs – composition. Now let us look at exposure. It simply means allowing light to strike the film. The tricky part is to know how much light you need and how to control the amount of light reaching the film. A photographer has to control the exposure by allowing light to pass through the aperture for a given amount of time. Apertures and shutters are used to control the exposure. If a photographer allows passage of more than enough light then the picture may burn out, by which the picture gets over exposed and the reverse is known as 'under exposed'. So, the adjustment of the appropriate aperture and shutter speed is a sensitive matter. Now the question is that, on what factors do aperture and shutter speed depend on? Ashok Dilwali, in his book *All About Photography*, says that, the choice of the combination of aperture and shutter speed depends upon three factors. These are –

(i) Hand held or tripod mounted: when a tripod is used, a small aperture and low shutter speed give image sharpness with better depth of field.

(ii) Subject in motion: if the subject is moving, a large aperture with fast shutter speed is necessary.

(iii) Sharpness of details: if this is important, a combination of small aperture with slow shutter speed is essential.

Aperture : A device that controls amount of light admitted

One needs to be aware of some terms like f-stop, shutter speed etc. Let us briefly discuss them–



Aperture : A device that controls amount of light admitted

Aperture and f-stop: The aperture is just a hole behind the lens whose size can be varied to allow more or less light to pass through it. The size of apertures is expressed in f-stop. Aperture range may look like this: f-1.4; f-2; f-22; f-32. Lesser the f-stop, greater is the exposure. Therefore f-1.4 allows more light to get into the camera than say, f-22.

Shutter and Shutter Speeds The shutter prevents light from reaching the film until the moment of exposure, when it opens for a predetermined time allowing light passing through the lens aperture to reach the film. Shutter speed is measured in seconds or fractions of seconds. Typical shutter speeds are 1/3,1/6,1/12…1/100…1/600…1/1250 etc. Lower the number in the denominator, slower the shutter speed. If the shutter speed is adjusted to 1/12 it means it is open for a longer time than when it is adjusted to 1/1250 of a second.

Film speed: A film's sensitivity is known as its 'speed' and is expressed as an ASA/ISO number.

Depth of Field : Depth of field is a phrase that defines a measure of distance that spans the distance ahead of and behind a subject focused on; and, within that distance, the image is fairly sharp.



CHECK YOUR PROGRESS - A

1. What do you mean by Photography? Answer within 50 words.

.....

.....

2. What is the difference between analogue and digital camera? Answer within 100 words.

.....

.....

.....

.....

3. What is a lens? Answer within 50 words.

.....

.....

4. Fill in the blanks of the following —

i) A ..... is an application that enables to see on the display screen exactly what will appear when the document is printed.

ii) Literally photography means .....

iii) The term photography was first used by the scientist .....

3.4 TYPES OF CAMERA

The word Camera has been derived from Latin, which stands for a room, a light proof dark room. Basically, a camera is just a light tight box with a small hole in it. In fact it is relatively simple to build a camera using a cardboard box, some black tape and some tinfoil or a small piece of aluminum from a softdrink can. Cameras can be film-based or digital. As the name suggests, film-based cameras what we call in common parlance a film-roll while digital cameras capture images on storage chips that come with the camera. Digital images are easy to click, manipulate (using software such as Adobe Photoshop) and print.

3.4.1 Types

Cameras can be classified is a number of ways; for example,

a) Types of Camera based on function:

1. Still
2. Movie

b) Types of Camera based on technology:

1. Analog
2. Digital

c) Types of Camera based on format:

i) Still

1. Range finder (RF)
2. Single twin lens reflex (SLR)

ii) Movie

1. Celluloid
2. Video



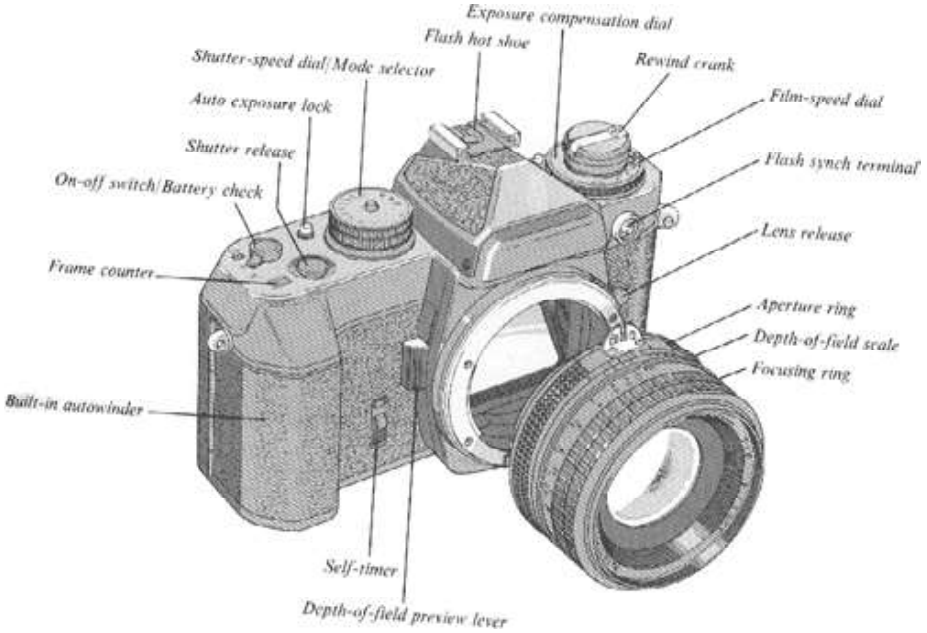
Celluloid : Flammable film base made of cellulose nitrate

Finding the nodal point in a RF and SLR camera is slightly different. In brief, the difference between the RF and SLR camera is in the preview mode. In the RF camera the image previewed and the image captured are not the same. The amount of image information is different around the edges. In the SLR camera both the image previewed and the image captured are identical; in computer jargon the SLR camera is a “WYSIWYG” camera. RF camera differences occur because the preview and captured image optical paths are different. The RF camera shows two optical paths - one into the lens for image capture and the other into a preview window.

Paul Wotel says that as a technology, analog is the process of taking an audio or video signal (in most cases, the human voice) and translating it into electronic pulses. Digital, on the other hand, is breaking the signal into a binary format where the audio or video data is represented by a series of “1”s and “0”s. It is simple enough when it is the device— *analog* or *digital* phone, fax, modem, or likewise—that does all the converting for a person.

Analog technology has been around for decades. It is not that complicated a concept and it is fairly inexpensive to use. But its disadvantage is that analog signals have size limitations as to how much data they can carry. On the contrary, the beauty of *digital* is that it knows what it should be when it reaches the end of the transmission. So, clarity is the main advantage in the digital process. In most cases, we can get distortion-free sound and clearer TV pictures in this technology. *Celluloid* is a colourless flammable material made from nitrocellulose and camphor and used to make photographic film. It was developed in 1869 as the first synthetic plastic material, which is made of a colloid of cellulose nitrate (nitrocellulose) plasticized with camphor. It is tough, cheap to produce, and resistant to water, oils, and dilute acids. Most of the feature films are made with the use of this celluloid film. The main advantage of celluloid film is that the sharpness and the quality of the picture is not compromised. On the other hand, video is a new format for recording a moving image. It is a series of framed images put together, one after another, to simulate motion and interactivity. A video can be transmitted by number of frames per second and/or the amount of time between switching frames. The main advantage of this format is that we can immediately watch what we have taken. But in the celluloid format we can not watch the recorded image immediately.

3.4.2 Parts of a still camera



To take a still photograph we need a still camera, whatever it may be whether Range finder or SLR. According to Liz Masoner, a renowned freelance photographer, we can divide the parts of the camera mainly into mainly two parts – one is the camera body and the other is the lens. First of all let us discuss the camera body.

(a) Camera body :

The camera body is the most basic part of a camera. It is the box that holds the film and the camera controls. The lens is either built-into the body or attached to the body. The body also houses a battery that powers the shutter, flash, light meter, and other controls. There are generally rings to connect a strap to the camera for easy carrying as well. A camera body consists of the following parts-

- **Lens**: The lens is a part of the camera (or an attachment for the camera) that focuses light into the body and onto the film. The aperture is also contained within the lens.
- **Film Compartment**: In film cameras, there is a compartment in the back of the camera to hold the film. This compartment has a space for the film canister, sprockets to guide the film across the exposure area, a pressure plate to tighten the film, and a take up reel to wind the film.
- **Viewfinder**: The viewfinder is the hole in the back of the camera that a photographer looks through to aim the camera.
- **Shutter:** A solid piece of plastic or metal inside the camera that prevents light from reaching the film or digital sensor.
- **Shutter Release**: The shutter release is a button that raises a shutter inside the camera for a specified amount of time to allow light to expose the film.
- **Shutter Speed Control**: It is the point on the camera where anybody can set the amount of time the shutter will remain open.
- **Film Speed Control**: The film speed control allows to calibrate the camera's meter to the film speed for an accurate exposure reading.
- **F-Stop Control**: The F-Stop controls allow one to set the size of the aperture within the lens.

- **Flash:** A flash is a device used in photography that produces an instantaneous flash of artificial light. Digital cameras now include a built-in flash by default.
- **Hot Shoe Mount**: The hot shoe mount is a point on the top of most SLR cameras where an external flash can be connected.
- **Lens Ring Mount**: On cameras that allow interchangeable lenses, there is a metal ring on the front of the camera where additional lenses can be attached.

3.4.3 Movie Camera

A movie camera is a type of photographic camera which takes a rapid sequence of photographs on strips of film. In contrast to a still camera, which captures a single snapshot at a time, the movie camera takes a series of images; each called a “frame”. This is accomplished through an intermittent mechanism. The frames are later played back in a movie projector at a specific speed, called the “frame rate” (number of frames per second). While viewing, a person’s eyes and brain merge the separate pictures together to create the illusion of motion.

A video camera on the other hand, is portable, resembling a movie camera but one that records on videocassettes for playback on a television set. In a video camera, there is a provision of sound recording simultaneously with the visual. So, in a video camera microphone, speaker, LCD screen are added to the camera body.



ACTIVITY

Visit a nearby photo-shop and watch different types of cameras. If you have a range finder camera, then compare it with a SLR camera to see what other facilities are there in such a camera and how it is different from your range finder camera.



CHECK YOUR PROGRESS – B

1. Fill in the blanks of the following–

i) SLR stands for .....

ii) The forerunner of the camera was the.....

iii) The ..... is the hole in the back of the camera that a photographer looks through to aim the camera.

iv) A ..... is a device used in photography that produces an instantaneous flash of artificial light.

V) A ..... is a type of photographic camera which takes a rapid sequence of photographs on strips of film.

3.5 WRITING & EDITING OF CAPTIONS

It is true that a picture or a photograph can express thousands of words. But some time a text is needed to make a photograph more meaningful. So, we need a caption to explain the meaning of a photograph. In a simple manner we can define the term Caption as a textual representation that refer to information identifying a picture or illustration. Let us discuss briefly how to write and edit a good caption for a photograph.

John D. Simmons, Staff Photographer of *Charlotte Observer*, offers some advice to write and edit good captions. According to him, “good captions are more than just the subject’s name and what’s going on in the photo. In fact, if all you do in your caption is explain the activity in the photo it has little or no value to the reader. Good captions incorporate the five W’s: Who, What, Where, When and Why. You can occasionally throw in “How” if the photo is so technically complicated and interesting that the reader might wonder how it was made. Good captions are spelled correctly. Good captions are factually accurate. Good captions leave the copy editors with few questions. Good captions not only enhance your standing in the newsroom but also the photo department’s standing. Good captions are essential to the credibility of the newspaper and its standing in the community.”

Following are some important points which should be followed for write and editing a photo caption.

The five W's and How: Five Ws- Who, What, Where, When, Why and one H- How. These are used for basic information about the story. It is a fundamental concept in journalism. Suffice to say that the same principle holds good for a photo caption.

Accuracy: It is another important point that must be kept in mind while writing a caption. The person has to ensure that the facts she has given in the caption are accurate or that she can quote a source or the subject. If she gets a call from the copy desk about a conflict with the reporter's information it always feels good to be able to say that the quoted the subject or that the name has been checked.

Spelling: A caption is basically a sentence or two. Even a simple spelling mistake can create problems in expressing the meaning of the caption. Sufficient care should be taken to avoid spelling errors.

Editing Captions: A caption writer should always reread the captions. She should identify the subjects from left to right and by a physical description whenever possible. A physical description of the subject can be of their clothing or facial expression.

A great caption has added value when it is well written. To write a good caption one has to know the journalistic concepts and develop the skills of a journalist. Second, she should also be skilled as a writer. One has to use the language with a flourish. A good caption has accurate, useful information and is a good read.



ACTIVITY

Open the pages of a daily newspaper and watch carefully the photographs published there. Now read the captions and try to prepare some different captions, which will be appropriate from a readers' point of view.



CHECK YOUR PROGRESS – C

1. What is a caption? Answer within 20 words.

.....

.....

2. What are the five Ws and one H?

.....

.....

3.6 SHOTS AND CAMERA MOVEMENTS

In contrast with the still photography, where single snap shots are captured by a still camera at a time, in the movie photography, a camera person has to take a series of images. Here, in the movie photography, a snap shot is known as a 'frame'. Generally, we know that to establish a shot we have to record at least 3-5 seconds, which includes more than 72 frames. Each second captures 24 frames of video. A movie photographer should be aware of concepts like shot sizes, camera movements etc. Let us discuss the basic concepts of shots and the movements of the movie camera.

3.6.1 Shot

The pictorial material recorded by a camera is a shot. According to Oxford Dictionary, shot is a scene in a film or movie that is filmed continuously by a camera. In film making, the shot is the equivalent, in writing terms, of a word, a phrase, a sentence or a paragraph. The director of a movie shots film; each shot is the length at which a camera works continuously in a stationary and/ or in motion.

There are mainly eight shot sizes, which are known as basic shots. These are -

1. Extreme Long Shot (ELS):

An extreme long shot is the widest, most comprehensive and view possible of a location or event. It is a very wide field of view in which the camera takes in the entire playing area. The principal subject or subjects are miniscule in relation to the background and tend to compete with the surroundings for the viewer's attention.

2. Long Shot (LS):

It is slightly closer to the field of view than the extreme long shot. But the subject remains dominated by the much larger background area. Usually, it is a wide and distant perspective that orients the viewer to overall setting and surroundings.

3. Mid Long Shot or (MLS) Long Mid Shot:

The image size in MLS is shorter than long shot. If our subject is a person, and if he is standing with a background then the mid long shot is up to the knee or in between the knee and the feet from above.

4. Mid Shot (M/S):

This is the most frequent shot used in T.V. news and any kind of television interactive programme, the one that best captures the action. It defines the camera perspective between long shot and close up, whereby subjects are viewed from medium distance.

5. Mid Close-up (MCU):

In MCU the image size is up to the chest of a person from above. It is more like our passport photograph and is commonly used in TV news especially in case of recording statements, interviews and speeches. Generally the name and the title captions are super imposed against this shot at the bottom of the frame.

6. Close-up (CU):

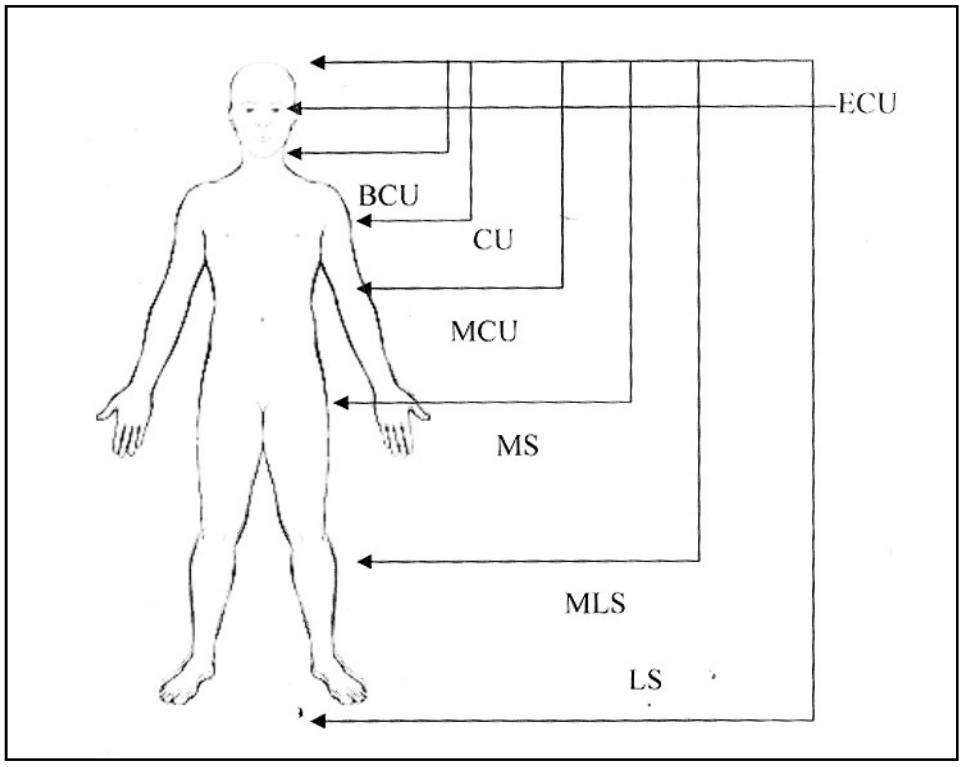
Close-up is the most popular of all shot sizes. It is mainly used for interviews. Here the subject becomes the primary focus of interest within the shot. Only a small portion of the background is visible. In this shot we see just the head and the shoulder blade of the interviewee or the interviewer.

7. Big Close-up (BCU):

The image size in BCU is the face, i.e. the fore-head and the chin of a person and is often used during interviews while the person is in a state of deep emotion or thinking.

8. Extreme Close-up (ECU):

In this shot the camera goes even closer, i.e. the shot is even tighter, sometimes to show only a particular part of the body organ, such as, the eyes or the lips or the fingers.



3.6.2 Camera Movement

As the basic criterion of video is 'moving pictures', the camera may be required to move to create interest in the minds of the viewer. There are generally *two types* of cameras movements. (i) One is to change the place of the camera itself. It means that the entire camera and pedestal can be moved about. (ii) The second type of camera movement is to move the camera without displacing the camera itself. The camera head alone moves atop its stationary pedestal.

1. PAN:

Pan is the horizontal camera pivot right to left or left to right, from a stationary position. It follows a subject, re-directs viewer's attention from one subject to another, shows relationship between subjects, and scans the subjects too large to fit into one shot. The pan operations are used to show two horizontal frame of reference and continuity. It is not advisable to use pan operation frequently in TV news since they result in problems during editing, however, it may be used to show, for example, several VIPs sitting on the dais.

A pan should have a definite starting point and a definite ending point. Sometimes you can have a subject look in the direction of the pan and then execute the camera move to reveal to the viewer what the subject sees.

2. TILT:

Tilt is the movement of the camera on its vertical axis up or down, from a stationary position. When the camera is moved upwards, it is tilt-up and the reverse is tilt-down. It follows movement, contrasts differences in size between two subjects or gives viewer point of view sense of a subject's height.

3. PEDESTAL:

The vertical movement of the camera up or down as the centre-telescoping column of the pedestal is raised or lowered. The pedestal control on a camera changes its point of view just as what any one can see from his sitting position and then stand up to look around.

4. ZOOM:

In zoom operations, only the lenses of the camera move. Actually a zoom brings a subject into and out of close-up. Lens capability permits change from wide-angle to telephoto or vice-versa in one continuous move. Cameras have a zoom control to vary the camera lens's field of view.

A zoom lens gets its name from its ability to move closer to or farther from the subject being photographed. 'Zoom out' means moving away from the subject to get a wider shot. Zooms are rarely used in TV news, because

they are difficult to edit. Most zooms can be eliminated by stopping the camera, reframing the shot and then restarting the camera.

5. TROLLEY or TRUCK:

Trolley or truck is the movement of the camera parallel to the subject's movement. It means the lateral movement of the camera on its pedestal. What is trolley? Actually it is a small vehicle with wheels that can be pushed or pulled on a track along and is used for carrying things like the whole recording system and also the cameraman.

6. DOLLY:

Dolly is a low platform on wheels for moving heavy objects like a camera. Dolly movement is the movement of the camera on its pedestal either toward or away from the subject or scene. When it goes to close the subject by the camera it is called Dolly in and the reverse is Dolly out.

7. ARC:

Actually arc is the part of a circle or a curved line. This movement is the combination of a dolly and a trolley. The arc is a semicircular movement of a camera and its pedestal.

8. CRANE:

A crane is the movement of the camera atop the long arm of a contraption. Crane is a tall machine with a long arm, used to lift and move materials and other heavy objects. The camera crane is a huge mounting device with four pairs of wheels on a base and a large arm extending outward.



ACTIVITY

If you are a regular viewer of television news channel and an entertainment channel, then try to identify the shots used in both the channels. What are the basic shots and camera movements are used by the news channel and what are the shots and movements are utilized by the entertainment channel?



CHECK YOUR PROGRESS – D

1. What is a shot? Name the basic shots of a movie camera. Answer within 50 words.

.....

.....

.....

.....

2. What is the difference between Trolley and PAN movements? Discuss within 100 words.

.....

.....

.....

.....

.....

3.7 LET US SUM UP

Photography is a method of recording the image of an object by the action of light, or related radiation, on a sensitive material. Literally photography means writing with light. The use of the term photography was suggested and also first used by the scientist Sir John Fredrrick William Herschel (1792-1871) in a letter dated 28th February, 1839 to Willium Henry Fox Talbot (1800- 1877). The word Camera has been derived from Latin, which stands for a room, a light proof dark room. Composition and exposure are the two important parts of photography. Composition is the creative or artistic tad where a photographer arranges all of the elements of his picture within the frame or viewfinder to produce what should hopefully be a pleasing composition. Exposure is the scientific and mechanical tad where a photographer exposes his film to light through the lens of the camera. To write great captions, it must be accurate must have useful information for added value and be a good read. Shot is the pictorial material recorded by a camera. There are mainly eight shots, which are known as basic shots.



3.8 FURTHER READING

- *Photography for the Beginners*, Alok Chandra Roy, Apsara, Guwahati
- *All About Photography*, Ashok Dilwali, National Book Trust, New Delhi
- *Photo One*, Muse Kenneth, Prentice H
- *Video Production,* Vasuki Belavadi, Oxford University Press
- *Mahurat*, Ankuran Dutta (ed.), Cotton College, Guwahati



3.9 ANSWERS TO CHECK YOUR PROGRESS

CHECK YOUR PROGRESS : A

1. Photography as a method of recording the image of an object by the action of light, or related radiation, on a sensitive material. Literally photography means writing with light. The word photography has been derived from the Greek words ‘photos’ meaning “light” and ‘graphos’ or graphein meaning “to draw”.

2. The difference between analogue and digital camera is that as a technology, analog is the process of taking an audio or video signal (in most cases, the human voice) and translating it into electronic pulses. Digital on the other hand is breaking the signal into a binary format where the audio or video data is represented by a series of “1”s and “0”s.

3. The lens is a part of the camera (or an attachment for the camera) that focuses light into the body and onto the film. The aperture is also contained within the lens.

4. Fill in the blanks of the following –

   i) A WYSIWYG is an application that enables to see on the display screen exactly what will appear when the document is printed.

   ii) Literally photography means writing with light

   iii) The term photography was first used by the scientist Sir John Fredrrick William Herschel.

CHECK YOUR PROGRESS :B

1. Fill in the blanks-
   i) SLR stands for Single Lens Reflex
   ii) The forerunner of the camera was the camera obscura.
   iii) The viewfinder is the hole in the back of the camera that a photographer looks through to aim the camera.
   iv) A flash is a device used in photography that produces an instantaneous flash of artificial light.
   v) A movie camera is a type of photographic camera which takes a rapid sequence of photographs on strips of film.

CHECK YOUR PROGRESS :C

1. Caption is a textual representation that refers to information identifying a picture or illustration.
2. Five Ws- Who, What, Where, When, Why and one H- How.

CHECK YOUR PROGRESS :D

1. The pictorial material recorded by a camera is shot.

   There are mainly eight shots, which are known as basic shots. These are - extreme long shot, long shot, Mid Long Shot, Mid Shot, Mid Close-up, Close-up, Big Close-up and Extreme Close-up.
2. The difference between Trolley and PAN movements is that the pan changes the horizontal point of view from atop a stationary pedestal or tripod. The trolley or truck actually moves the camera, establishing a new shooting angle, which results in a much different view of the subject or scene photographed.



3.10 POSSIBLE QUESTIONS

1. What is a shot? What are the basic shot sizes? Discuss with illustration.
2. Explain the importance of the movement in movie camera. What are the basic movements? What are the differences between Trolley and PAN, Dolly and Zoom?
3. What is a caption? What are the thumbrules to be followed to write a good caption?
4. What do you mean by Photography? What is the difference between analog and digital camera?

References:

- Roy, Alok Chandra, *Photography for the Beginners*, Apsara, Guwahati
- Dilwali, Ashok, *All About Photography*, National Book Trust, New Delhi
- Kenneth, Muse, *Photo One*, Prentice H
- Bright, P S, Chemistry of Photography & Related Careers in *Junior Science Refresher*, July 2007
- Dutta, Ankuran (ed.), Mahurat, Cotton College
- http://www.bestfamilyvideotips.com;
- http://www.photography.about.com
- http://en.wikipedia.org/wiki
- http://www.notrain-nogain.org
- http://wikieducator.org