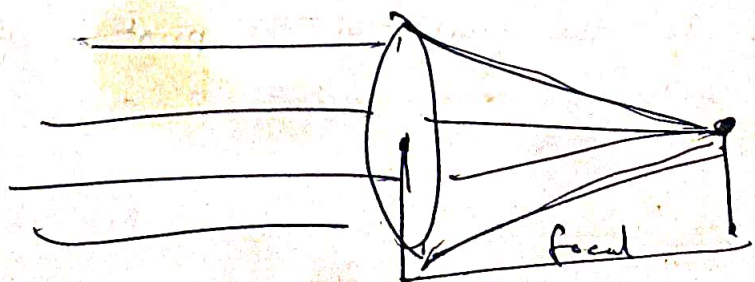


"PHOTOGRAPHY"

Need and Importance:-

1. Newspapers and magazines have become a part of most people's daily life. It doesn't mean that literacy is rising in India, for even the illiterate glance through any publication can hold of it. To a large extent it is their desire to 'see' things, even if they cannot read.
2. Photographs in publication not only appeal to this element in them, but give a visual dimension to an event, a happening.
3. Journalism students are often told that a good photograph equals a thousand written words. This is true only to the limited extent that every few photographs qualify this.
4. Pictures are not just space-fillers, though on some occasions, it becomes necessary to consider them just as such. They must be good in themselves. Even when a photograph is an illustration of an idea, it must have a quality which can enable an editor to choose it on its own merit.
5. Many a story needs, or needs further explanation, which only a picture can give. Moreover, there is need to encourage 'asides' to stories.
6. Radio gives important spot news quicker than a newspaper can. Television shows them alive. The role that a newspaper can play with regard to these becomes limited. By bringing in 'asides', highlighting the human element through photographs, a newspaper can score over radio and television.

Inf



Selecting a photograph or quality of good photographs:-

- ② The news picture must create an action. It must tell a story. It should be possible for a clever photographer to get an 'active' picture even at a routine function like a dinner or birthday party.
- ③ The best picture shows life happening. In the very best news picture the subject is not at all conscious of the camera. Life is not posed. Life moves. The people in the picture must be active.
- ④ The intelligent news editor or picture editor must look for the dramatic element in a picture. He must look for movement. Action pictures lose their drama and excitement if they are not closeup.
- ⑤ While taking photographs, care must be taken that it must create an impact. If a picture does not affect you emotionally you should consider rejecting it.
- ⑥ Every photograph must have one striking element.

Before selection following questions will be kept in mind?

- ① Is it unusual?
- ② Does it arouse any curiosity?
- ③ Does it arouse emotion or fear or sympathy?
- ④ Does it make one smile?
- ⑤ Does it tell about people?
- ⑥ Does it sum up or symbolize anything?
- ⑦ Does it highlight any thing which the written story does not?
- ⑧ Does it tell a story? Is it hot?
- ⑨ In what size or in which page can it be used?
- ⑩ Is the quality of the print is good enough to respond to enlarging or reducing it, and still appear clean and good?

Editing photographs.

- ① In editing photographs, the aim should be enhance the visual impact. Just as a skilful sub editor brighten or brighten a dull piece of writing, so imaginative editing can transform what at first sight was a disappointing print into an arresting picture.
- ② The first task of the picture editor is to select the photographs to be used and to decide the relative prominence each to have - they must be judged not only on their technical excellence - bright, sharp, well composed but also on their editorial value, their news worthiness and whether they conform to accepted standards of honest reporting and good taste.
- ③ The editor should recognize the legal implications of publishing a particular photograph; for ex, will its appearance in the paper be held to be contempt of court or will it invite an action for libel.
- ④ Having made these decisions, he then proceeds to the editing. The photograph may have to be cropped, (cutting out unwanted background) Scaled, enlarged or reduced. This is part of the editorial work.

Cropping :-

- ① A picture's value consists in its interest, composition and quality of reproduction. A small poor quality picture must be ~~rejected~~ because the flaws will be magnified in the enlargement.
- ② photographer or editor must decide how many persons to include in the picture, how much of a person to include and what background is essential.
- ③ The picture editor must judge the photograph from editorial point of view as well as from technical point of view.
- ④ when a picture has news value but does not meet the technical requirements, the picture editor has to crop it so as to retain only the most interesting part and enlarge it in the

reproduction.

⑤ A photograph, as we have discussed earlier, is a composition. The composition should help the reader grasp the picture's message clearly and immediately. If the picture is too cluttered the reader's eyes scan the picture looking for a place to rest. But if the picture contains a strong focal point the reader at least has a place to start. An important function of the picture editor therefore is to cut out unnecessary details to strengthen the overall view.

Scaling: -

- ① Once a picture is cropped it needs to be 'scaled' to fit exactly into the page layout prepared by the desk. Scaling merely measuring the picture ~~for~~ for size.
- ② Correct scaling is important for the proper dummies of pages.
- ③ It will also help visualize clearly how they will look on the page and whether the details in the picture will come out too big or too small.
- ④ The general sequence of picture editing is to crop first and scale afterwards, the editor, after tentatively cropping for content, will be prepared to modify this in order that the picture fits the available space. ~~It~~ i.
- ⑤ Scaling of photographs is done with aids of printer's proportion scale or, if that is not available, by using the less precise, diagonal line method.
- ⑥ Scaling instructions are normally written on the back of the photograph, with the width expressed in columns and then the depth in centimeters.

Caption writing

2

- 1) The main objective of the Caption is to make the reader respond to the picture in the manner intended by the photographer and the picture editor.
2. A reader first look at the picture at the focal points and then at the other parts. He then turns to read the Caption to confirm what he has seen. The Caption will provide the answers to the questions of who, what, where, when, why and how, unless some of these are apparent in the picture itself.
- 3) Writing Caption is an art. They must be brief and to the point, but not so short that they leave reader wandering about the situation involved.
- 4) Good captions supplement and even explain the pictures, but they do not repeat obvious information in the photograph.
- 5) While brevity is key, captions, should not be telegraphic and omit words that are important for smooth reading.
- 6) Peoples in pictures should be identified by their full names and if necessary for understanding, with their titles or other explanation of who they are.
- 7) Subjects should be identified as to their place in pictures, because most readers will not know them well enough to recognize them.
- 8) Present tense must be used. Only on rare occasions is the past tense required, specially when it is a historical photograph highlighting something what happened many years ago.
- 9) While working out a caption, it is best to obtain details from the photographer and the reporter concerned. The man behind the camera was on the spot. He knows exactly what happened and in what circumstances he took the photographs.

Composing! -

① Composition is the selection and arrangement of a number of parts or elements to create a unified whole.

Perception - organizing what has been sensed to find the meaning of an experience - is a form of composition. So perception is the basic guide to composition of a photograph.

② Composers need to know the syntax and structure of the medium, the language, used. Otherwise expressions are likely to be limited in subtleties and in appeal, not fluent, not articulate.

③ Order is an arrangement of elements that makes sense for the given subject matter, that seems logical, that conveys meaning, that gives balance and design to the composition.

order provides conciseness and clarity. Composing for order begins with recognition of a relationship *etc.* to that.

④ Successful photographers have learned how things look to their film. They pay attention to the basic visual qualities in things, and special attention to that of most fundamental of all qualities, the one without which others would not exist, the lightning. Light, obviously, makes objects visible, but more than the light defines the nature and quantity of objects and the atmosphere around them. It is light that creates the symbols of the photographic vocabulary: space, shapes, lines, textures, patterns, colors, blacks, whites, grays, sharp images, blurred images.

Ⓐ space

Ⓑ line

Ⓒ tone

should be kept in mind while composing.

Space and Scale.

The choice of shooting distance is an important one in composition not only because of the perspective involved but because choice of shooting distance has a major effect on emphasis within the picture frame. As more is included within the frame as the shooting distance increases, emphasis generally falls to large masses rather

than details.

→ Photographers must remember that size, either the mass of individual objects or the extent of space, is not an absolute in pictures; size is always relative. Length, width, shape, and volume each gain their scale through a dynamic interrelationship with all the remaining elements of the image including the borders of the picture.

Line

Two kinds of lines exist in most images the actual and the implied. Actual lines are really seen. They are the edges of buildings, fence wire and roads, stair railings etc.

Implied lines are only suggested, not real, but they can be controlling factors in a visual composition.

Both kinds of lines are important in composition because

- ① They direct the movement of the viewer's eye through the photograph and, in a well-composed photo, keep the eye within the borders of the picture
- ② They establish visual emphasis if they guide the eye of the viewer to the center of interest.
- ③ They indicate movement or action. Diagonal lines in the format are especially indicative of movement. Horizontal lines tend to be static, restful, inactive. Vertical lines often seem alive, vigorous.
- ④ They indicate stress, strain, or a conflict of opposing forces.
- ⑤ They indicate stability or instability

Tone

The third factor of significance in composition is tone. A tone is defined in black and white photography as a section or a step of the gray scale. Thus a tone can be black or white or any one of the gray tones between black and white.

Tones are imp in composition because

- ① Tones evoke emotional responses
- ② Tones define form
- ③ Tones aid emphasis.

The Reciprocity law of Exposure:-

The first step in light control is determining proper exposure - the right amount of light to produce the image we want. The amount of light will be determined by its intensity (or brightness) and the total amount of time it is allowed to strike the light-sensitive particles. Stated as a formula or "law" it amounts to this.

Exposure (E)

is the product of (=)

Intensity (I)

multiplied by (x)

Time (T.)

This is the reciprocity law of photochemistry:

$$[E = I \times T]$$

In this law, I and T are reciprocals, meaning if you increase one (double it, for example) and decrease the other to the same degree (cut it in half), the result (E) is unchanged. For the vast majority of photographs taken the reciprocity law holds, with intensity controlled by an aperture and time controlled by shutter.

Aperture:-

→ Aperture is a round, or nearly round hole, and the amount of light admits to the camera is controlled by its intensity of light entering to the camera is controlled by it.

→ A ^{range of} small aperture sizes can be provided by a diaphragm formed of thin metal blades, mounted usually between the glass elements of the lens. These blades overlap to form a nearly circular opening. Turning a ring or lever on the outside of the lens swings all the blades simultaneously outward or inward, thus expanding or contracting the size of aperture.

→ But the same amount of light can be spread over a small area, thus creating a bright image, or it can be spread over a large area, creating a relatively dim image

→ The distance the light travels from aperture to film determines how much the light spreads out and, thus, if the aperture is constant, distance from the aperture to film determines if the image will be bright (high in intensity) or dim (low in intensity).

→ So the intensity of the light hitting the film inside the camera is established by two factors.

1.) By the diameter of the light beam allowed through the lens by the aperture

2.) By the distance ~~and a short distance can go~~ the light travels from aperture to film.

"A small aperture and a short distance can give the same light intensity as a large aperture and a relatively long distance"

f/number:-

"Since the intensity factor in exposure must take into account both aperture size and distance the light travels from aperture (which is at or near the optical center of the lens) to film, we can call intensity as a ratio between aperture size and focal length. An example: if the aperture ~~as a ratio between aperture size and diameter~~ is 25mm (1 inch) and focal length of the lens is 50mm (2 inches), then the ratio is 1:2.

That is translated into an f/number as 2, usually expressed as f/2

The f denotes that "it is a measurement of the aperture diameter as a fraction of the focal length". This permits us to make direct

comparisons between apertures irrespective of the actual sizes and focal lengths of different lenses. The normal sequence of these

f/numbers (sometimes called stops) is: 1, 1.4, 2, 2.8, 4, 5.6, 8, 11, 16, 22,

32, and so on.

The Shutter

- ① We can control time with camera shutters. A typical shutter may offer a series of automatically timed exposures ranging from a maximum of 1 second down to $1/500$ (or $1/1000$) of a second, proceeding from one to the other in equal steps. Each step reduces the time by one half. The shutter-scale markings, for example, may be:

1, 2, 4, 8, 15, 30, 60, 125, 250, 500, 1000

- ② The first number in this series stands for one second, but all other ^{are} fractions of a second; 2 is $1/2$ and 4 is $1/4$ and so forth.
- ③ Because exposure doubles (or halves) with each step on either aperture or shutter scale, changing the shutter speed in one direction and changing aperture in the opposite direction will mean no change in exposure if the equal no of steps are taken on each scale.
- ④ Remember $E = I \times T$ and if we double 'I' but halve 'T' the product 'E' must remain unchangeable. Note that all the aperture-shutter speed pairings in the following list will give the same exposure

f/32	$1/30$
f/22	$1/60$
f/16	$1/125$
f/11	$1/250$
f/8	$1/500$

These settings would all give the same exposure in a series of pictures taken of the same object with one kind of film under unaltered lightings.

filters

- ① Filters are important tools in photography because they significantly increase the photographer's ability to control the image. Filters can make the image of white clouds stand out in dramatic relief against a dark sky, can penetrate haze, or put atmospheric haze into an image when little existed in the actual scene.
- ② Filters can put contrast into the black and white reproduction of two different colors of equal brightness value in the print.
- ③ Filters can be used in two ways in photography: to modify the light falling on the subject (a filter over the light source) and to modify the light passing through the lens before it reaches the film (a filter in front of the lens). Filters designed to be used in front of the lens are the most practical, the most convenient, and thus the most important in black and white photography, and these are the ones we are concerned with.

In Black & white photography, the filters most frequently used are

- ① **Correction filters**:- to build black and white contrast in the image to make the image appear about the same as the color contrast viewed by the eye.
- ② **Contrast filters**:- To build black & white contrast in the image between originating contrasting colors of nearly the same brightness or to exaggerate or emphasize contrasts in the actual scene.
- ③ **Haze filters**:- To reduce the effect of atmospheric haze on the image.
- ④ **Polarizing filters**:- To reduce or eliminate certain reflection or glare.
- ⑤ **Neutral density filters**:- To reduce the light of all colors that reaches the film to avoid overexposing the film.

Filter factor depend upon

- ① The proportion of the light the filter absorbs
- ② The color sensitivity of the film
- ③ The color of light
- ④ The color sensitivity of the eye

Depth of field

① Anyone who has examined photographs at all critically will have noticed that images of objects both near and far from the camera appear to be in focus in many pictures. Although a lens can be focused on only one plane at a time. This optical phenomenon is called depth of field.

② Depth of field, in fact, a result of the limitations of human eye and not the result of any optical magic produced by the photographic lens. When a lens is focused to give a sharp image of a particular object, other objects closer and farther away will not be equally sharp. But the decline in sharpness is gradual, so that the eye viewing the photograph does not detect any blur.

This zone of apparent sharpness, the distance from the nearest object to the farthest object that both appear to be in focus, is depth of field.

③ The Depth of field depends upon the angle of light rays approaching the film - that is, the angle between rays originating at a given subject point. The angle of the light ray is itself controlled by two factors. The size of the aperture used for making the film exposure and the distance between lens and object.

4. As the diameter of the lens reduced aperture reduced, the angle between the converging light-ray is reduced, thus increasing the depth of field. Likewise, as distance between lens and subject increases, the angle between the light ray is reduced, and the depth of field again increases - until the far limit of depth of field reaches infinity, beyond which, of course, it cannot go.

Angle of view :-

- ⇒ image size increases with focal length, it logically follows that longer the focal length of the lens, the ~~less~~ less of the subject the lens will include on the negative, if negative size remain constant, which it normally does, Or, to state it another way, the greater the lens focal length, the narrower its angle of view (sometimes called field of view)
- ⇒ Angle of view through the lens expands as focal length decreases: the 21-mm lens on the 35mm camera will give an angle of view of approximately 90° . double the angle of view of the 50mm lens. So a short focal-length lens is usually referred to as wide-angle lens because it is the angle of view that is important to the photographer.
- ⇒ The wide-angle lens can be used relatively close to a principal subject without eliminating the surrounding environment from the negative. Such a lens also seems to exaggerate spatial separation between objects within its field of view, ~~but as we shall see in the following~~
- ⇒ The long focal-length lens, on the other hand, limits the field of view and, in effect, reaches out to bring objects closer so that the photographer can take the picture from a relatively distant position but keep the image large on the negative and limit the recorded image to just that part of the scene where his interest lies.
- ⇒ Thus we see why newspaper and magazine photographers and other professional photographers prefer a camera with interchangeable lenses.
- ⇒ The photojournalist with, for ex, a single 35-mm camera with 35mm camera and several lenses can function effectively in close quarters with a wide angle lens. On the other hand, the same camera with a long lens serves him well at sports event.

Types of lenses

→ A photographic lens (also known as objective lens or photographic objective) is an optical lens or assembly of lenses used in conjunction with a camera body and mechanism to make images of objects either on photographic film or on other media capable of storing an image chemically or electronically.

→ While in principle a simple convex lens will suffice, in practice a compound lens made up of a number of optical lens elements is required to correct the many optical aberrations that arise.

→ A lens may be permanently fixed to a camera, or it may be interchangeable with lenses of different focal lengths and other properties.

→ For a given film or sensor size, specified by the length of the diagonal, a lens may be classified as:

- ① **Normal lens**: angle of view of the diagonal about 50° ; a focal length approximately equal to the diagonal produces this angle.
- ② **Wide angle lens**: focal length shorter than normal, and angle of view wider.
- ③ **Telephoto lens**: focal length longer than normal, and the angle of view narrower. A distinction is sometimes made between a long-focus lens and a true-telephoto lens: the telephoto lens uses a telephoto group to be physically shorter than its focal length.
- ④ **Zoom lenses**: Zoom lenses are widely used for small-format cameras of all types: still and cine cameras with fixed or interchangeable lenses.
- ⑤ **Apochromat**: lenses have extreme correction for chromatic aberration.
- ⑥ **Fish eye lenses**: extreme wide-angle lenses with an angle of view of up to 180 degrees or more, with very noticeable distortion.
- ⑦ **Stereoscopic lenses**: to produce pairs of photographs which give a 3-dimensional effect when viewed with an appropriate viewer.
- ⑧ **Soft-focus lenses** which give a soft, but ^{not} out of focus, image and have an imperfection-removing effect popular among portrait and fashion photographers.