

## Photojournalism

A camera is a vital tool in photojournalism. It serves as the main instrument with which a photojournalist discharges his duty. Hence, to excel, a photojournalist must understand and master the different types of cameras as well as their parts.

### TYPES OF CAMERAS

#### 1. Point and Shoot camera

As the name implies - point and shoot cameras, one has to point the camera at something and trip the shutter. The camera does all the work for you. It is a type of camera in which the focus and exposure is entirely automatic. Point and shoot cameras are often abbreviated as P&S. The photographer aims the camera and presses the button; the camera does the rest. Point-and-shoot cameras can vary from cheap throw-aways to pocket-sized digitals. Even high-end cameras have a point-and-shoot option, in which the camera makes all settings automatically. Although there may be settings for different lighting conditions such as bright sun vs. dusk, point-and-shoot cameras have no options to manually set the aperture, shutter speed and focus. Today's P&S cameras are much more sophisticated. While there are still some P&S film cameras, such as the disposable or one time use cameras, most P&S today are digital.

**Aperture Definition:** The adjustable opening in a camera lens that light passes through and reaches the camera's shutter and image sensor. It is a hole within a lens, through which light travels into the camera body. The larger the hole, the more light passes to the camera sensor. Aperture also controls the [depth of field](#) (how much your photo is bright from front to back), which is the portion of a scene that appears to be sharp. If the aperture is very small, the depth of field is large, while if the aperture is large, the depth of field is small. In photography, aperture is typically expressed in "f" numbers (also known as "focal ratio", since the f-number is the ratio of the diameter of the lens aperture to the length of the lens). Examples of f-numbers are: f/1.4, f/2.0, f/2.8, f/4.0, f/5.6, f/8.0.



**Shutter Speed Definition:** The amount of time the shutter (a flap or curtain covering the image sensor) is open to control the amount of light passing through the lens to the image sensor and creating a photo. Shutter speeds are typically measured in fractions of a second, when they are under a second. Slow shutter speeds allow more light into the camera sensor and are used for low-light and night photography, while fast shutter speeds help to freeze motion. Examples of shutter speeds: 1/15 (1/15th of a second), 1/30, 1/60, 1/125.

**Focus:** It is *the moving of the lens elements until the sharpest possible image is achieved*. Depending on the distance of the subject from the camera, the focusing elements have to be set a certain distance from the camera's sensor to form a clear image.

### **Features of P&S cameras:**

- ✓ Metering systems, which calculate the amount of light entering the camera
- ✓ Variable shutter speed
- ✓ Variable aperture
- ✓ Zoom lenses
- ✓ Automatic focus
- ✓ Preset controls for various photographic situations such as:
  - landscapes
  - night-time
  - people
  - close-up or macro

The biggest drawback to P&S cameras is that many do not have a *through the lens* (TTL) viewfinder. This means that what you see through your viewfinder may not be what you capture on film or digital media. P&S cameras are usually small and fit into a pocket or purse. They are best used for casual picture taking where capturing the memory is more important than creating a marketable image. The following are the series of this type of camera:

### **Popular P&S Cameras**

- ✓ Kodak Easyshare series
- ✓ Canon Sureshot series
- ✓ Canon Powershot series
- ✓ Pentax Optio series
- ✓ Nikon Coolpix series



## 2. SLR and DSLR

SLR stands for *Single Lens Reflex* and DSLR stands for *Digital Single Lens Reflex* and refers to how the light enters the camera. These are the cameras you see many professionals and serious

amateurs lugging around. These cameras have a larger body than most P&S cameras and interchangeable lenses. While SLRs started out as fully manual, where the photographer had to control all features including focus, most of these cameras are capable of acting in a fully automatic mode just like a P&S. Many now allow the photographer the freedom to also take control of all functions or any combination of functions. These cameras allow for great control over the photography process and allow the photographer to take images not always possible with a P&S.

***The basic difference between SLR and DSLR lies in how you capture pictures.*** The functionality of both is very similar - light enters the camera through the lens, it gets captured and the image is captured either on a film or on a memory card.

However, SLR cameras mainly use film. When light enters the camera, image is captured in a film.

In the digital format, light enters the camera, the sensor sensors the light and captures it in a memory card. Most modern cameras are digital camera. SLR is the old technic of using film.

### **Features:**

SLRs and DSLRs allow for control over:

- ✓ shutter speed
- ✓ aperture
- ✓ film speed
- ✓ focus point
- ✓ magnification (through the use of various lenses)
- ✓ capability for add-on flashes
- ✓ remote releases
- ✓ additional battery packs.

The following are the series of this type of camera

### **Popular DSLR Cameras**

- ✓ Canon Digital Rebel
- ✓ Nikon D90
- ✓ Pentax K10D



YouTube Link explaining difference between **Point and Shoot** and **DSLR** camera:

<https://youtu.be/mvoiT1pGMVM>





## PARTS OF 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 attaches 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.

**Lens:** The lens is the 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.

**Viewfinder:** The viewfinder is the hole in the back of the camera that a photographer looks through to aim the camera. Some viewfinders use a mirror inside the camera to look through the lens (TTL). Other viewfinders are simply holes through the body of the camera. Viewfinders that look through the lens (TTL) allow the photographer better accuracy when composing their images.

**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. In an SLR camera, this button also raises a mirror that allows the photographer to use the viewfinder to look through the lens itself. Many SLR cameras also allow a remote release of the shutter via a cable or IR remote.

In automatic cameras, the shutter release also causes the film to advance to the next exposure. In manual cameras, there is a "film advance lever" that must be turned in order to advance the film and the exposure counter.

**Shutter:** An opaque piece of metal or plastic inside your camera that prevents light from reaching the film or digital sensor. The shutter is opened, or released, by the shutter release button. The amount of time the shutter stays open is controlled by the shutter speed setting.

**Shutter Speed Control:** The shutter speed control is the point on your camera where you set the amount of time the shutter will remain open. On automatic cameras, this is generally accessed through a menu and displayed on a screen on the back of the camera. In manual cameras, the shutter speed is generally controlled and displayed on a knob on the top of the camera. The shutter speed is measured in fractions of a second but is generally shown as the denominator only. For example, 1/60 of a second is shown as 60.

**Film Speed Control:** The film speed control allows you to calibrate your camera's meter to your film speed so that you will get an accurate exposure reading. The film speed may be set electronically through a menu or via a knob/button on manual cameras. On manual cameras, the control is often integrated with a film speed indicator on the top of the camera. On automatic



cameras, the control and film speed indicator are generally separate with the film speed being indicated on the electronic menu display on the back of the camera.

**F-Stop Control:** On automatic cameras, the F-Stop control is on the camera. For older manual cameras, the F-Stop is controlled on the lens. The F-Stop controls allow you to set the size of the aperture 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. When the roll of film has been completely exposed, automatic cameras use a small motor to rewind the film. Manual cameras require the photographer to turn a small "rewind knob" to manually rewind the film into the canister. If the film is not rewound before the back compartment is opened, the film will be exposed to enough light to ruin the images.

**Flash:** Most cameras now include a built-in flash. Some are simple light bulbs built into the front of the camera. On SLR cameras, most built-in flashes pop-up out of a protective storage area on the top of the camera. External flashes can often be attached via the "*hot shoe mount*" or, in the case of manual cameras, a small connector port on the front of the camera that accepts a cable attached to a distant flash.

**Hot Shoe Mount:** The hot shoe mount is a point on the top of most SLR cameras where an external flash can be connected. It is called a "hot shoe" because it has electrical contact points and guide rails that fit over the bottom of the flash like a shoe.

**Lens Ring Mount:** On cameras that allow interchangeable lenses, there is a metal ring on the front of the camera where the lens will attach. This ring contains electrical contact points to connect the lens controls to the camera body. There is a small button or lever to the side of this mount called the "lens release button" that releases the lens from the body.







**Camera Controls:** In all but certain specialized cameras, the process of obtaining a usable exposure must involve the use, manually or automatically, of a few controls to ensure the photograph is clear, sharp and well illuminated. The controls usually include but are not limited to the following:

### 3.3 CAMERA SUPPORT

We have better photo quality with the supporting of camera which includes tripod stand monopods, raffle grips. We shall be discussing these one after the other.

1. **Tripod stands:** there are many variations available and they are useful in natural field of photography picturing the plant, bird animal habitat and so on. A shaky tripod is worse than useless. The tripods must have a good head, which is adjustable in three directions. A small ball-and- socket head is useless as it will not hold a camera with any weight of lens



2. **Monopods:** these are single telescope tubes with some form of camera support at the top example - a ball and socket head. They are much less rigid than a tripod stand and do not allow long exposures, but they can reduce camera movement and they are very useful for semi action photography. They are generally lighter and more portable than a tripod stand.







3. **Rifle grips:** these are useful devices which comprise an adjustable stock with a shoulder butt at the near end a hand grip at the far end. The camera fits on an adjustable plate to allow it to be used close to the eye and the shutter is tied via a long cable release from a trigger on the hand grip. This combination of steadying the set up against the shoulder and releasing the shutter with a cable- release makes for a very smooth operation and they can add to your ability to avoid camera shake by two stops of the shutter speed. They are highly mobile supports and they have been found to be most useful when photographing birds or mammals with relatively long focal length lenses fitted.



4. **The beam bag:** this is a fascinatingly useful and versatile support that consist of a strong bag filled with dried beams, polystyrene similar material and closed up. The shape should be rectangular rather than square so that it could be stood on end for higher viewpoint.





5. **A- G- clamp -with a head -on:** can be clamped to fence posts or car windows for support, though it is rarely solid enough to use a long lens and the support is hardly where you want it. The ground spike generally is pushed into the ground to give a firm ground level support though personally we have found the beam bag to be better for most situations



**A magnapol:** this can be attached to any metal surface by a powerful magnet.

## **THE CAMERA TECHNIQUE**

As we have the script writer making use of his/her subjects to make series of sentences, a photojournalist maintains the subject, yet takes different pictures, the photographer does this by identifying the point of action, also visualises the picture statement to support each point and decides on how to change from one statement to another. It is therefore important that a photojournalist knows the techniques involved in his profession.

1. It is important to aim or place the camera at revealing angles, it is important to reveal facial expressions.

2. If performers are interacting with each other, do not distract them by your signs, instead, cross your camera, (if in the studio) but if outside with the still camera, simply change your position.
3. Do not allow performers to cover other performers or objects that ought to be seen. So, when taking the shot keep the performers within frame and when framing keep important elements away from the edges of the picture.
4. Keep the subject in focus well illuminated. You can attain greater depth of the field by changing to lens of shorter focal length.

## **Assignment**

1. Using the journalism training acquired so far, cover at least one local news story and attach photos elaborating the news story. Keep in mind that image quality attracts extra marks so ensure to get the best angles.

## **PHOTO EDITING: Meaning and Origin**

### **Understanding Photo Editing in Mass Media**

Human beings are not like other animals. We don't take most of our food substance raw: we either refine or process the raw food items in order to make it not only consumable but also good for our health. News stories are also like food items. News stories are sent to the media houses by reporters in its crude forms. The final output, (the published news stories) are the refined forms of the crude news sent in. Similarly, photographs are also refined to meet the taste of the readers. If photographs are not well edited before they are published, the implication is grievous than that of news stories. The reason is that, it is possible to refute the interpretation of the words in a news story but it is not easy to deny a published photograph, which mirror the event.

It is obvious that photographs capture a moment in time. Photos are generally regarded as "*factual*," as opposed to a drawing or painting, which would be the artist's interpretations. Photos tend to be trusted more, because they accurately depict what is in front of the camera at the moment the picture is taken.

In journalism, photographs are supposed to be accurate in order to depict the exact incident. The essence of photo editing therefore does not mean that the pictures will be totally transformed to connote a meaning order than the original meaning or shows something different than what really happened. You can now see that the essence of photo editing in journalism is neither to glamorize the event nor to beautify the object unlike the commercial photographers, whose objectives is to please their clients with beautified photos.

### **Origin and Definitions of Photo Editing**

The concept of photo editing is almost as old as photography itself. The first photographic images were recorded in the *1820s*, and one of the first widely known edited photos was a *portrait of Abraham Lincoln*. Sometime in the 1860s, someone took a standing portrait of Southern Congressman *John Calhoun*, and superimposed/pasted Lincoln's face on the portrait, and created a historic photo of Lincoln on the spot. People had to edit pictures by hand. Editing by hand required pasting photos together. Tools such as ink, paint and airbrushes were used.



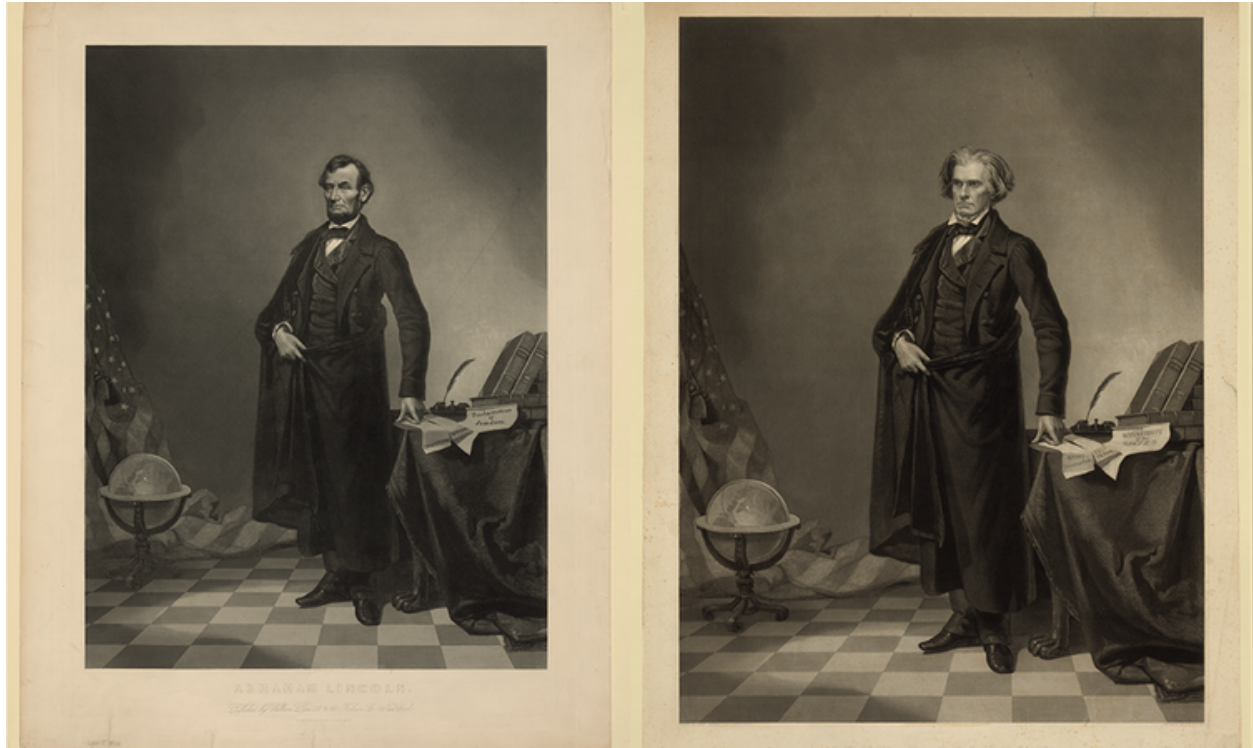


Photo editing was first experienced in Nigeria during the era of the first newspaper, *Iwe Irohin fun Awon Ara Egba ati Yoruba*. Though, the newspaper started with only words without any image, images were later added particularly when the newspaper gave room to advertising messages. The first sets of pictures in the newspaper were art works and line drawing. As technology improved and different cameras of various functions were manufactured, the essence of photojournalism was felt and the need irresistible. As you have noted earlier that photo editing starts from *choosing what to shoot and which shot tells the story better*, it will, therefore, be clear to you that the beginning of photojournalism marked the beginning of photo editing.

Photo editing simply means an act of making pictures fit for publication. Photojournalists take many shots from which the editor chooses one or more that best tell the stories. The process of selecting the best shot that either tells or supports a story and the refining of the crude shots to meet the taste of the readers is known as **photo editing**.

Editing is the art of adding the correct amount of lighting and sharpness to the photo. If your photo comes out too dark, you can edit it to make it lighter. Or if you'd like to crop something out of a photo, editing allows you to do that.

## Reasons for Photo Editing

As we have said earlier, as a newspaper reader, you may find some photographs disgusting if they are published raw without editing. Editing is not or not only to beautify the photographs to be published, there are many substantial reasons why photo editing is a must in journalism. Let's have a look at some of the reasons:

**1. Editing for clarity:** Photographs to be published may not be clear enough for the media audience to interpret. It may be that the photograph is too small to be visible or so blurred that the image(s) could not be identified. It may also be that the colour of the image in the photograph submerged in the background colour, making it difficult to separate the image from the background. The reasons for taking shots that are not clear are:

- a. Quality of the camera
- b. How qualified the photojournalist and his/her experience
- c. Climatic condition and the angle from which the shot is taken
- d. Type of shot taken e.g. motion shot

Compare the photographs below, which one do you consider clearer? Do I hear you say Figure 1? You have just noticed the essence of photo editing for clarity.

Figure 1

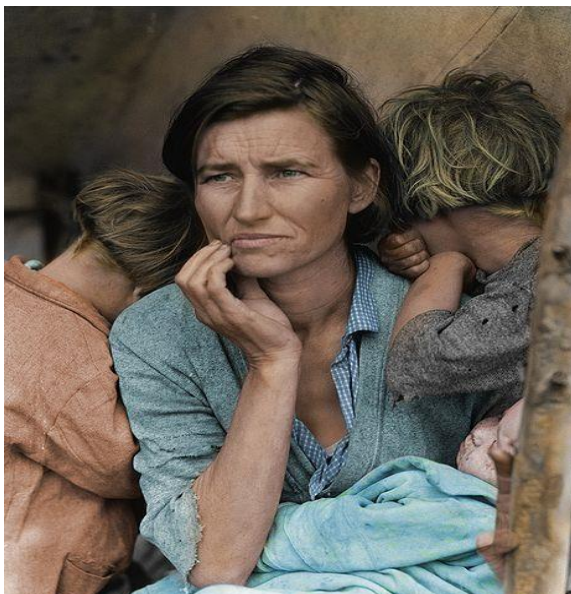
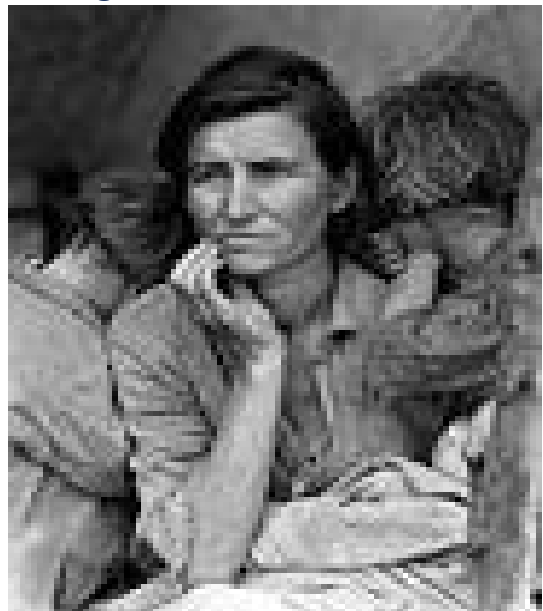


Figure 2



**2. Editing for Specific Targets:** Photo editing sometimes is done to achieve specific goals. It could be done to lay emphasis on specific parts of a photograph or to hide the parts that do not support the news story. For example, in a photograph of road accident victim, photo editing could be done to lay emphasis on the injured parts and to hide other parts of the body of the victim.

Consider the photographs below



**3. Editing for Moral Value:** Some photographs are obscene and do not conform to our moral standard and value. Any photograph that disregards human dignity and glamorizes indecency and immorality needs to be edited

in order to protect our moral value. Will you consider the picture below morally okay in the Nigerian newspaper?

**Figure 4**



*Sun Girls: culled from Daily Sun May 11, 2014*

- 4. Editing for beautification:** Sometimes, photographs are edited to beautify the image or scene of an incident if there is need for it. If the photograph of an important figure is taken in a ceremonious function, the photograph could be beautified in a way that will not change the context but rather better portray the event. If you critically study the figure below, you will notice that it was not well edited as you could find red-eye in the photograph (see the arrow). Red-eye defect occurs when more light than required lands on the object while taking the shot. It can be removed during editing to make picture not only beautiful but also to look as if it was not taking with the defects.



**Figure 5**



*From The Guardian Thursday, April 24, 2014, Pg. 43*

**Editing for Legal Implication:** Some editing are done to photographs published in newspaper to avoid running avow of law. Many of the media houses have been found guilty of publishing photographs indiscriminately without giving consideration to legal implication. For example, if the photograph of a criminal is taken with some onlookers at the background, the background needs to be edited and made plain. Otherwise, it may be misinterpreted that the persons in the background are also criminals, and indeed it is libelous. Also, the faces of accused persons must be blurred by the media houses when publishing or when showing on the television until the court of law pronounces them guilty of the offence. You will find much about blurring and other editing terms in the follow up concepts. You can see an example of the accused persons, whose faces were blurred in the figure 6 below.



**Figure 6**



*From The Guardian Friday, April 25, 2014, Pg. 15*



Source: EFCC's social media handle

## EDITING CONCEPTS IN PHOTO-JOURNALISM

### Captioning

A caption is a short sentence, accompanying a photo, which provide additional information on the content of the photo and leaves no questions in the mind of a reader.

John Smock (2008) agrees that a photo caption should provide the readers basic information needed to understand a photograph and its relevance to the news. It should be written in a consistent, concise format that allows news organizations to move the photo to publication without delay. He argued further that professional standards of *clarity, accuracy and completeness* in caption writing should be as high as or higher than any other writing that appears in a publication. A poorly written caption that is uninformative or worse: misleading can diminish the impact of a good photo and undermine its credibility. If readers can't trust the accuracy of the simple information included in a caption, why should they trust what they read in the rest of the publication?

A caption is also known as a **cutline**. It can also be described as a written summary that briefly explains a photograph. A caption includes who, what, when, where, and sometimes why and how of a photograph.

In most photo captions, the first sentence identifies the people and place in the photograph and supplies the date and location where it was taken. The second (and perhaps third) sentence should provide contextual information to help readers understand what they are looking at.



From The Guardian Wednesday, July 2, 2014, Pg. 5

Caption

Photograph

### 3.1.2 Tips for Writing Good Captions

You should have it in mind that there is no generally approved standard for writing photo caption. But a good caption must fulfil certain conditions and the person writing the caption must put some rules into consideration.

Some of the rules are listed below:

- a. **Trite writing should be avoided.** Do not point out the obvious by using such phrases as “looks on,” “is shown” and “pictured above.”
- b. **Don't editorialize.** The cutline writer should never make assumptions about what someone in a picture is thinking or try to interpret the person's feelings from his or her expression. The reader should be given the facts and allowed to decide what the feelings or emotions are.
- c. **Avoid the known; explain the unknown.** The cutline writer should avoid characterizing a picture as beautiful, dramatic, grisly or other such descriptive terms that should be evident in the photograph. If it's not evident in the photograph, telling the reader won't make it happen. However, the cutline

should explain something about how the picture was taken if it shows something not normally observable by the human eye. For example, was a wide-angle lens used? Or time-lapse photography? Explanations also are needed for special effects, such as the use of an inset or a picture sequence.

- d. Reflect the image.** Cutline writers should make sure that the words accurately reflect the picture. If a picture shows two or more people, the cutline writer should count the number of identifiable people in the photo and check the number and sex of the people identified in the cutline to make certain that they match. Special precautions should be taken to make sure that the cutline does not include someone who has been cropped out of the original photo.
- e. Always, always, always check spelling.** The cutline writer should check the spelling of names in the story against the names that a photographer has provided to see if there are discrepancies. The editor also should be sure that names in the cutline are the same names used in the story. It should not be John Smith in the cutline, but John P. Smith in the story.
- f. “Wild art.”** Photographs that do not accompany stories often are termed “wild art.” The cutlines for wild art should provide the same basic information that a story does. Such things as the “five W’s” (who, what, when, where and why) are good to remember when writing such cutlines. If you don’t have all the information you need, get on the phone and get the information. Don’t try writing the cutline without needed facts. Sometimes, wild art is used on a cover page to tease (refer) the reader to a story inside. But, unlike television, don’t tease the reader in the cutline. Give as complete a story as possible, giving the reader the option of going inside for more details. Most cutlines for wild art also have a caption line (overline).
- g. Accompanying art.** If a picture is running with a story, a lengthy cutline is usually not needed. Sometimes a single line is sufficient to identify the people or situation shown in the picture and to make clear their relationship to the story. Remember that most cutline readers have not yet read the story. Many of them will read nothing but the cutline and the headline. So, the cutline must strike a delicate balance between telling enough information for the reader to understand the photo and its context while being as crisp and brief as possible.

**h. Shorter is better.** Cutline writing triggers a temptation to use long sentences. Avoid that temptation. The cutlines that accompany Associated Press photos are notorious for their rambling sentences. They need to be rewritten into clear crisp sentences.

## Photo cropping

Cropping is one of the highly efficient ways to improve the quality of the contents of a photograph. Cropping *builds a focus on the main subject* or the lines of force, and eliminates those parts of the photograph that distract attention from the main subject. Cropping eliminates wasted space around the needed portion of the photograph.

## How to Crop a Photograph

If you are to crop successfully, you should pin the area you want to a particular statement and then crop according to that statement. In the following image of tree, you could say: “the foreground tree”, for instance. Going by your statement, the photograph can be said to have many distractions. These include the background building, the electric poles, etc.



A.



B.

*Figure 5:* The photograph is cropped from A to B

If in another case your statement had been “the tree and its surround”, then there would have been no need to crop the photograph from A to B, as the background of A would be vital to the realisation of that statement.

### **Cropping Guidelines**

- 1. Crop tight for emphasis:** A tight crop emphasizes both the subjects of the photo and the intensity of action therein. However, crop for relevance. Too tight cropping (close up) may sacrifice relevant background, and too loose cropping may let in irrelevant content.
- 2. Crop thoroughly:** edit the photograph as if it were a written story: remove all irrelevant material.
- 3. Do not slice any part of the body contained in the photograph.** Thus, show well any part you wish to show. This is especially true when a part of the body is in a position that would help tell the story. Cutting the hand that is gesticulating affects content, because the reader needs the hand to catch the attention.
- 4. Do not amputate or behead:** every head has a mother. Cropping at some joint in the body leaves a feeling of incompleteness and dissatisfaction; for



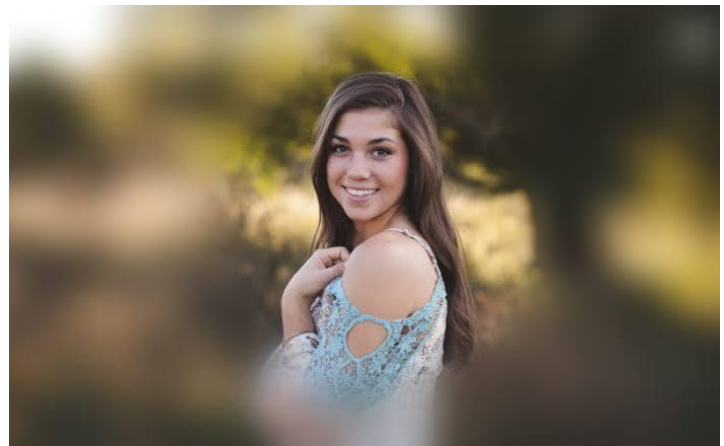
instance - the fingers, the wrist, elbow, shoulder, leg. If the editor wants a head shot, he should not dare crop at the Adam's apple. The chin is a good stop, but if the neck is to appear in a shot, there should be a little strip of shoulder to serve as the base of the picture.

5. Whitespace should not be neglected, especially in action pictures. Pictures such as those showing runners or footballers need some room. That creates the feeling of a space in which action occurs or into which action flows.
6. When cropping portraits, allow sufficient space at the top and sides. Letting the head hit the roof creates a feeling of discomfort.
7. When the sky above a picture would provide distracting details, it should be cropped off. Leave a background that contributes to the scale and sense of the picture.

## **Blurring**

Blurring is a photo editing technique in which part of the image in a photograph is *faded, covered or protected from the readers' view or access*. The backgrounds of photographs are sometimes blurred in order to give the image in the photographs the attention it deserves. It is most often done to protect the dignity of the person in the photograph or as a means of protecting our moral value and guiding against indecency.

The best Wildlife photography will always show a crystal-clear animal against a blurry background. This is done by using just the right combination of lens, aperture, and shutter speed, and really helps to make the subject stand out. If a background of branches and leaves were as sharply focused as the bird in the foreground, it would be very easy to lose the bird in the background "noise."



## **Scaling, Cutting and Fixing**

Everyone dealing with any sort of publication -- even a web publication -- must understand the concepts of scaling and cropping (trimming an image to make it more effective). This process involves using a technique to determine what space a photograph will occupy when it appears on a page, printed or electronic.

Historically, editors have received a collection of news and feature photograph prints from a photo staff, freelancers and from one or more wire-photo services (i.e., the Associated Press). As editors moved through the page-layout process, they selected certain prints for publication and determined how the photos should be cropped.

Typically, an editor received a photo print in some standard size (i.e., 5 inches x 7 inches or 8 inches x 10 inches). So, during the production process the photo usually had to be enlarged or reduced to convert it to the space provided in the page layout. Careful layout techniques required the editor to calculate the reproduction dimensions of the photo at the time the page dummy was being prepared.

At least four techniques are available for photo scaling (i.e., calculating the reproduction size). They are:

- Electronic picture editing terminals: the most common used today.
- The ratio method: an handy thing to know.
- The rule of the diagonal: It's so simple, it's amazing.
- The proportion wheel: a terrific little device that some of us old-timers still use.

**a. Electronic picture editing terminals:** Most daily newspapers are using the electronic picture editing terminals for photo scaling (as well as for the several other tasks, including the ability to make photos sharper, to make colour corrections, etc.). However, many publications still expect editors to crop photos manually, so in this course we will touch on the first three techniques mentioned above, which are valuable and skills you can utilize throughout your career.

**b. Proportion wheel:** A snazzy little device, much like a slide rule, except it's circular -- one flat plastic wheel atop another. You simply line up the original size to the desired side and, voila! the other desired number (for either height or width)

**c. Ratio Method:** It is based on the mathematical verity that the original width is to the reproduction width as the original depth is to the reproduction depth. If the reproduction depth is the unknown (as is most often the case), the formula is:

$$\begin{aligned} & (\text{Reproduction Width} \div \text{Original Width}) \quad \times \text{Original Depth} = \quad \text{Reproduction} \\ & \quad \quad \quad \text{Depth or} \\ & \quad \quad \quad (\text{RW} \div \text{OW}) \times \text{OD} = \text{RD} \end{aligned}$$

**Example A:** Reducing the Photo

The original is a photograph 39 picas (61/2inches) wide by 48 picas (8 inches) deep. You want the reproduction width to be 25.5 picas (that's 251/2 picas or 25p6). You need to calculate what the reproduction depth will be. The following assumes you will proceed with a calculator.

**Step 1:** Divide the reproduction width by the original width.

$$25.5 \div 39 = 0.6538461$$

**Step 2:** Leave 0.6538461 on the calculator screen and multiply by the original depth to find the reproduction depth.

$$0.6538461 \times 48 = 31.384615$$

Thus, you would indicate a depth of 31.4 picas (or approximately 51/4 inches) on the layout.

**Example B:** Enlarging the Photo

The original is a photograph 27 picas wide by 16picas deep. You want the reproduction width to be 39 picas.

**Step 1:** Divide the reproduction width by the original width. Remember the formula is  $(\text{RW} \div \text{OW}) \times \text{OD} = \text{RD}$   $39 \div 27 = 1.4444444$

**Step 2:** Leave 1.4444444 on the calculator screen and multiply by the original depth to find the reproduction depth.  $1.4444444 \times 16 = 23.1111111$

Thus, you would indicate a depth of 23.1 picas.

**Warning:** The potential danger in this method of calculation is forgetting to convert pica measurements to decimals. Remember, for instance, that the expression 25p6 means 25 picas and 6 points. The 6 points, of course, are equal to one-half of a pica. So 25p6 should be entered in a calculator as 25.5 picas. Remember that 3 points equal .25 picas, 6 points equal .5 pica, 9 points equal .75 pica, etc.

**d. Diagonal Method:** You can achieve the same results as the ratio method without a calculator using pencil and a line gauge (or ruler). Here's how you can determine the reproduction depth of a photograph or other artwork (assuming you know the production width)

**Step 1:** Make a copy (Xerox) of the photograph or artwork. (If you can't make a copy, simply draw a box the same size as the image you want to resize.)

**Step 2:** Draw a diagonal line from the upper left corner to the lower right corner.

**Step 3:** Using your ruler, put it at the top of the copy (obviously, with the 0 inch marker at the edge of the point where the photograph or artwork begins). Then make a mark indicating the width you want the photograph or artwork to be. Do the same at the bottom of the photograph. **Step 4:** Connect the marks at the top and bottom of the copy with a perpendicular line.

**Step 5:** Next measure the distance from the edge of the copy to the point where the perpendicular line crosses the diagonal line. That measurement equals the reproduction depth for your photograph.

**Reminder:** Do not use the original photograph (not even the back side) for this process. You are likely to damage the photo print, and any marks on the back of a photograph will show up in the reproduction process. Always make a copy.

**Example: Using the diagonal to figure the reproduction depth**

**Step 1:** Assume your original photo is 30 picas wide by 42 picas deep. (For the purpose of this example, draw a rectangle that size; i.e., five inches wide by seven inches deep.)

**Step 2:** Draw the diagonal line from the upper left to the lower right. **Step 3:** Assume the reproduction width is to be 25p6 (that's 25.5 picas). On the top line of your rectangle, make a dot that is 25.5 picas to the right of the upper left corner. Do the same on the bottom line of the rectangle. Draw a vertical line that joins those two dots.

**Step 4:** Note where the new vertical line intersects the diagonal. That intersection's distance from the rectangle's left side is the reproduction width for your photo. In this example, that should be 35.7 picas (or just under six inches).

**Enlarging:** Enlarging works the same way. Simply extend the top and bottom lines to the right and extend the diagonal beyond the lower right corner.

**Depth instead of width:** If you know what depth you want the photo, you figure the width simply by using the above procedure --except you move your initial measurements to the sides of the image.

**Step 1:** Make a copy (Xerox) of the photograph or artwork. (If you can't make a copy, simply draw a box the same size as the image you want to resize.)

**Step 2:** Draw a diagonal line from the upper left corner to the lower right corner.

**Step 3:** Using your ruler, put it at the **left side** of the copy (obviously, with the 0-inch marker at the edge of the point where the photograph or artwork begins). Then make a mark indicating the depth you want the photograph or artwork to be. Do the same at the right side of the photograph.

**Step 4:** Connect the marks at the right and left sides of the copy with a perpendicular line.

**Step 5:** Next measure the distance from the edge of the copy to the point where the perpendicular line crosses the diagonal line. That measurement equals the reproduction width for your photograph.

Cropping is a technique used for removing the unwanted subjects and irrelevant details from a photo, to change its aspect ratio, and to improve its overall composition. The technique plays an important role in various photo editing tasks, e.g., making a thumbnail for easily visualizing a large number of photos or printing a digital photo of an arbitrary size on paper of a specific size. Large photo collections are now available with the widespread use of digital cameras and the Internet. Automating photo cropping is essential for editing such a large amount of photos without requiring iterative user operation

### **3.2 Bleeding**

It simply means a system of intentionally running photographs off the edges of the pages of newspaper. Photo bleeding refers to Photograph or line that runs off the page when printed. Photograph may bleed on any side and on one, two, three or all four sides (in latter case either a cover or double-page spread) according to position on page. Bleed pictures always loose a percentage of picture area due to trimming of printed sheet down to published or trim size.

When any image or element on a page touches the edge of the page, extending beyond the trim edge, leaving no margin it is said to **bleed**. It may bleed or extend off one or more sides. Photos, rules, clip art, and decorative text elements can bleed off the page.

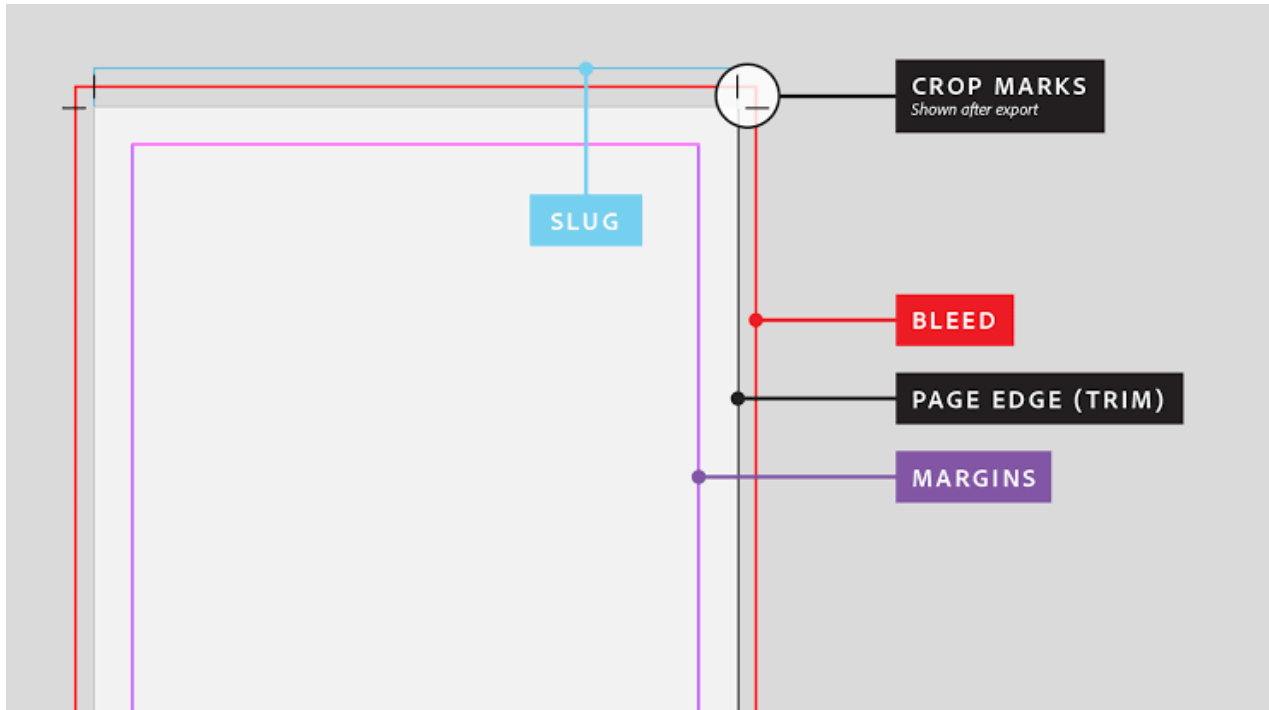
A bleed is usually an intentional design element; however, sometimes an unintentional bleed can occur when the page is trimmed too much. This can happen with margins that are not wide enough

Bleed refers to objects that extend beyond the edge of the printed page. This page tells you why bleed is needed, how much is needed and how to fix issues with bleed. For an example of the use of bleed, look at the image below. The picture of the monkey and the gray rectangle go beyond the edge of the page. They ‘bleed off’ the edge of the paper.



<http://www.prepressure.com/design/basics/bleed>





Full bleed means that an image extends beyond the edge of the page on all four sides.

### 3.3 Flopping/Flipping

A **flopped** image is a static or moving image that is generated by a mirror-reversal of an original across an opposite direction. Flopping can be used to improve the subjective aesthetic appeal of the image in question. There are two main uses in advertising, one practical, and one subjective. On a practical level, images of cars are often flopped to ensure cars look appropriate for left-hand-drive or right-hand-drive markets. This allows the results of a single production shoot to be used across markets, allowing a cost saving. On a subjective level, the direction in which a person is looking or a car appears to be travelling may be regarded as important. When placing a picture on a page of text, it is usual for depictions of people to face into the text, rather than off the page; thus, when compositing a page, a picture may be flopped so it may be placed either side of a column of text.

Cultural considerations come into play — a picture of a person eating with his/her left hand may be flopped for publication in a Muslim publication, due to the strong taboo against eating with the left hand in Muslim society. Similarly, Vincent van

Gogh a renowned photographer took the trouble to etch some of his originals in mirror reversed form so that when printed, people in the image would appear, correctly, as right-handed



## Original Selfie



## Flipped Selfie

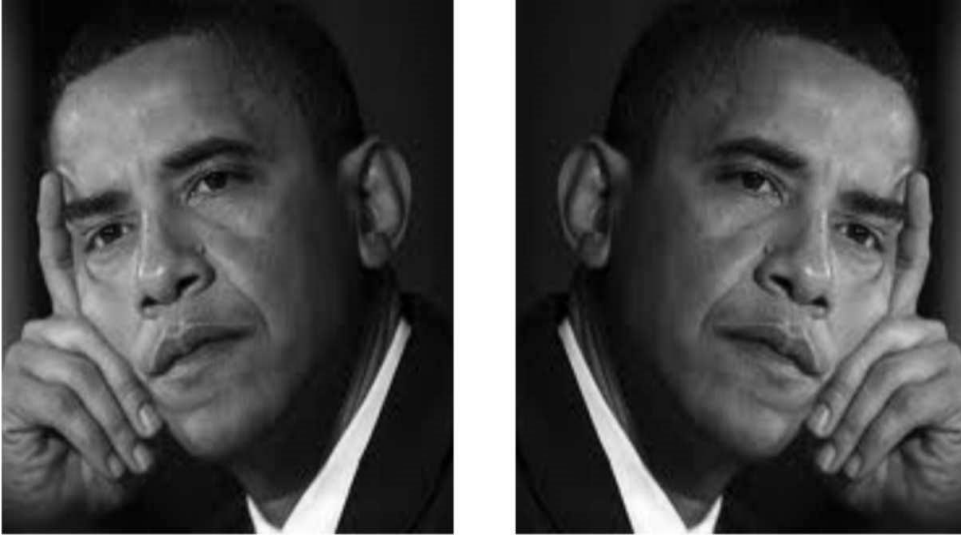


### 3.7 Ethics of Image Editing

Ethics in image editing especially with regard to photograph cannot be over emphasised. Superimposition, doctoring, dubious mirroring or negative reversing is just few of what crafty people do with. The following example will explain the issue of editing. The first of the picture shows the right hand on the cheek while the one on the right shows a left hand on the cheek, whereas both are only and just one photograph. How do you determine which of the photographs is not correct and which one is genuine? Also look at the Raymond's pimple near his nose. Would you say it is on the right or on the left? It is crucial to note here that, it is unethical to mirror or reverse a photograph like that, as it can be challenged in court. If it can be proved that you are being mischievous in the use of the photograph, you may end up paying dearly for your unethical behavior.

This is only the wrong thing with either of the photograph. Look at the top of the photograph. You will notice that hair on his head is sliced off.

The reason why the photograph is selected.



*Figure 6: Dubious mirroring of Photographs is an unethical sub editing practice*