

# Patrician College of Arts and Science

Department of Electronic Media

Video Editing :  
*Principles & Practices*

SAY3B

ODD Semester

Presented by  
Paulson Santhosh Nithyarajan J.L



# **CONTENTS :**

**Principles of Visual Grammar / Good framing**

**EARLY HISTORY OF FILM EDITING**

**NON LINEAR EDITING**

**LINEAR EDITING**

**Modern Styles / Techniques of Editing.**

**Television Broadcasting Standards.**

- **INTRO:**

- There are few things we need to keep in mind while capturing images/shooting.
- The edges of the frame are very important and plays an important role in composition of an image. Some of the things which we have to keep in mind in order to have good composition.

- **Headroom:-**

- The space above a particular object inside a frame is called headroom. The right amount of space above the object or a person gives a good composition.
- We should be very careful in framing a shot, because while transmission certain amount of area around the frame will be erased or lost. While too little or too much headroom gives an imbalanced look to the image in the frame.

- **Noseroom / Leadroom:-**

- Amount of space in front of a person when he is walking. When the person is walking towards or pointing towards the right side, then there would be an amount of space in front of his nose, like wise to the left side also if he is going to the left side.
- This gives a good composition. The right amount of space in front of the person when he walking or running. Too less space will be very awkward and too more space will lead to imbalance in the frame.

**Pan:-**

The simplest camera movement is the pan. The horizontal movement of the camera. – left to right or vice versa. The movement does not involve movement of the camera mount (camera stand), only the camera is moved. It is used to give variety among a number of static shots, but usually the main use of a pan is to show relationships between the objects in the frame.

**Tilt:-**

Another simple camera movement is the tilt. The vertical movement of the camera – up and down, even as the pedestal stays stationary is called tilt. The tilt resembling the movement of our head up and down, provides a view of the elements lying above and below the field of view.

**Track in and track out / Dolly in and Dolly out:-**

Also called as "dolly in and dolly out". The combined physical movement of the camera along with pedestal (camera stand). The camera and the pedestal are mounted on a track and trolley that moves the camera either towards or away from the principal object. Moving the camera towards or away from the subject alters the size relationships between the objects in the foreground and the background.

### **Truck left and truck right / Crab left and crab right:-**

Involves the lateral movement of the camera and the tripod mounted on a track and trolley. In this case the camera moves sideways on its mount along with the subject.

It is mainly used to follow the subject moving across the screen. Trucking or crabbing is also used to reveal the extent of a scene, section by section, and also series of objects.

### **Arc Right and arc left:-**

As the name suggests, the angular movements of both the camera and the tripod mounted on a track and trolley is called an arc.

Both the camera and the mount moves left in a curved manner and also does the same in the right side also.

This kind of movement is used to give a fresh viewpoints. Arcing serves to change the visual emphasis on a subject while the camera is in movement.

### **Zoom in / zoom out:-**

Here only the camera lens moves. The lenses zoom in or zoom out. The camera mount or the stand remains at the same point. To get closer to the images and go away from the objects. Zooming in simply magnifies the central portion of the field of view and zooming out merely results in going further away from the object.

### **Pedestal up/ pedestal down:-**

Here both the camera and the camera mount (stand) move up and come down. Such movements helps to achieve top- angle or low angle with in the frame.

A ped-up position means the subject is being looked down. Similarly ped-down position means the subject is being looked up. A ped- up position of the camera helps in seeing over the foreground objects and also the overall action.

Action happening over the foreground object. But in a ped-down position the camera gives importance to the foreground and leaves out background.

## EARLY HISTORY OF FILM EDITING

-- At the end of the 19th century, during cinema's infancy, films had no cuts or editing whatsoever. The camera ran for as long as the film reel was. During screening, the 1-minute footage was shown in its entirety to a paying audience.

### **A.1 Edwin S. Porter:**

-- **The static image was tedious. Editing was the solution. Edwin S. Porter, an early film pioneer, experimented heavily on the two main principles of editing: ellipsis and cross cutting.**

-- Both techniques contributed for his achievements with the movies *Life of an American Fireman* (1903), *The Great Train Robbery* (1903) and *Dream of the Rarebit Fiend* (1906).

The film was the first American film with a plot, featuring action, and even a closeup of a hand pulling a fire alarm. The film comprised a continuous narrative over seven scenes, rendered in a total of nine shots.

-- These early film directors discovered important aspects of motion picture language: that the screen image does not need to show a complete person from head to toe and that splicing together two shots creates in the viewer's mind a contextual relationship.

### **A.3. Eisenstein:-**

Was a pioneer in the use of montage, a specific use of film editing. He and his contemporary, Lev Kuleshov, two of the earliest film theorists, argued that montage was the essence of the cinema. His articles and books—particularly *Film Form and The Film Sense*—explain the significance of montage in detail.

- His writings and films have continued to have a major impact on subsequent filmmakers.
- Eisenstein believed that editing could be used for more than just expounding a scene or moment, through a "linkage" of related images. Eisenstein felt the "collision" of shots could be used to manipulate the emotions of the audience and create film metaphors.

### **A.4. Lev Kuleshov:**

- Soviet filmmaker, was among the first to dissect the effects of juxtaposition. -- Through his experiments and research, Kuleshov discovered that depending on how shots are assembled the audience will attach a specific meaning or emotion to it.

In his experiment, Kuleshov cut an actor with shots of three different subjects: a hot plate of soup, a girl in a coffin, and a pretty woman lying in a couch. The footage of the actor was the same expressionless gaze. -- Yet the audience raved his performance, saying first he looked hungry, then sad, then lustful

## NON LINEAR EDITING

- \* The foundation of all non-linear editing (NLE) systems is a computer with a high- capacity hard drive and a fast processor.
- \* The main function of this computer is to facilitate your selection of clips (shots or shot sequences), put them in a specific order, and recall this order during playback.
- \* Although there are several high-end editing systems on the market that combine specialized computer hardware and editing software, your laptop computer and a simple editing program will do just fine for the average editing job.
- \* Contrary to linear editing, where you copy a selected clip from one tape to another, the basic principle of nonlinear editing is digital file management.
- \* Each of the files contains a single frame or, for all practical purposes, a series of frames that make up a clip (shot). \* You probably now see why this system is called “nonlinear”: you can access any one of the files (frames or clips) instantly in any order regardless of where the information is located on the NLE hard drive.

- \* The computer then flags the selected clips so that they play back in the sequence you specify.
- \* Note that the video files themselves are not moved from where they are stored on the hard drive; your editing simply tells the computer the order in which to play back the clips.
- \* If you were to equip your editing suite, opt for a high-end desktop computer with a high-capacity hard drive and a high-speed processor.
- \* The typical nonlinear editing (NLE) system must also include two fairly large external monitors—one for the computer output and the other to show your edited sequences—and two small loudspeakers.
- \* It somehow seems easier to work with two separate screens than with a divided one.
- \* If you intend to control the volume of additional sound sources, or premix several of them before importing them to the NLE, you will also need a small audio mixer.

# LINEAR EDITING

## **Insert Editing:**

Sometimes you want to insert a new video clip over top of existing video footage. For example, you might have a lengthy shot of a person speaking and you'd like to insert a few cutaway shots to break it up and make it more interesting.

As previously discussed, if you try to do this using assemble editing, you will get a horrible picture disturbance at the end of the edit. Also, the audio from the new footage will replace the existing audio — in the example above this would not be desirable.

The answer is *insert editing* — a method of inserting new video over old video with clean beginning and end points. You can also add new pictures while keeping the original audio. Unfortunately not all video machines are able to do video inserts. It is a relatively advanced function for consumer-level equipment, and is normally only available in semi-professional or professional machines.

One thing to note with insert editing is that it *must be done over the top of* pre-recorded footage (or stable black).

## **There are two types of Assemble Editing:**

**-- A Roll–Editing from a single source,** with the option of adding an effect, such as titles or transitioning from a frozen image the start of the next cut or scene.

**-- A/B Roll–Editing from a minimum of two source VCR’s or Camcorders and recording to a third VCR.**

This technique requires a Video Mixer and/ or Edit Controller to provide smooth transitions between the sources. Also, the sources must be electronically “Sync’d” together so that the record signals are stable. The use of a Time Base Corrector or Digital Frame Synchronizer is necessary for the success of this technique.

## **Modern Styles / Techniques of Editing.**

### **Cut :**

➤ The break and common border that links two pieces of film and separates two shots Smooth cuts that add to continuity.

### **Continuity Editing:**

➤ Continuity editing is invisible and seamless. It allows us to follow the point of view of the camera without interruption.

➤ Relies upon matching screen direction, position, and temporal relations from shot to shot.

➤ The film supports the viewer's assumption that space and time are contiguous between successive shots.

### **Jump Cut:**

➤ An cut that appears to be an interruption of a single shot. Either the figures seem to change instantly against a constant background, or the background changes instantly while the figures remain constant.

## **Match Cut:**

- A graphic match, also called a match cut (or, in the French term, raccord), is a cut in film editing between either two different objects, two different spaces, or two different compositions in which objects in the two shots graphically match, often helping to establish a strong continuity of action and linking the two shots metaphorically.
- Stanley Kubrik's 2001: A Space Odyssey contains a famous example of a match cut.
- After an ape discovers the use of bones as a tool and a weapon, he throws one triumphantly into the air.
- As the bone spins in the air, there is a match cut to a much more advanced tool: an orbiting satellite.

## **Smash Cut:**

- A smash cut is a technique in film and other moving picture media where one scene abruptly cuts to another for aesthetic, narrative, or emotional purpose.
- To this end, the smash cut usually occurs at a crucial moment in a scene where a cut would not be expected.
- EXAMPLE : A clichéd use of a smash cut is in a murder scene: the killer brings a knife plunging down into his victim, and just before the blade pierces the skin, the scene is suddenly replaced with a non-violent use of a cutting edge, such as the chopping of vegetables.

# **Television Broadcasting Standards.**

## **National Television System Committee (NTSC)**

NISC is a television broadcasting system used in a number of countries including Korea, Japan, Canada, North America, parts of South America, Mexico and the Caribbean islands.

It is named after the National Television Systems Committee, the industry wide standardization body that created it.➤ The National Television Systems committee was set up in 1940 by the Federal Communication Commission in the United States to establish a nationwide standard for black and white TV transmission.

## **Phase Alternating Line (PAL)**

PAL, short for Phase Alternating Line, is the analogue videoformat used in television transmission in most of Europe (except France, Bulgaria, Russia, Yugoslavia, and some other countries in Eastern Europe, where SECAM is used), Australia and some Asian, African, and South American countries. PAL was developed in Germany by Walter Bruch, and first introduced in 1967.

## **Systeme Electronique Pour Couleur Avec Memoire**

SECAM (Sequential Electronique Pour Couleur Avec Mémoire, French for “sequential colour with memory”) is an analogue television system, using frequency modulation to encode chrominance information.

It is so named because it uses memory to store lines of colour information, in order to eliminate the colour artefacts found on systems using the NTSC standard. It uses a 625-line vertical, 50-line horizontal display. It was developed for the same purpose as PAL, but uses a different (and many would argue inferior) mechanism to do so.



# Thank you

<https://www.patriciancollege.ac.in/>