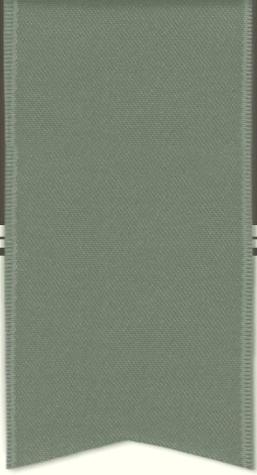


BMC Semester IV

Subject- Camera and Editing for TV

BMC CC 409 Unit- 4



INTRODUCTION TO VIDEO EDITING



The Goals of Editing

There are many reasons to edit a video and your editing approach will depend on the desired outcome. Before you begin you must clearly define your editing goals, which could include any of the following:

Remove unwanted footage

- This is the simplest and most common task in editing. Many videos can be dramatically improved by simply getting rid of the flawed or unwanted bits.

Choose the best footage

- It is common to shoot far more footage than you actually need and choose only the best material for the final edit. Often you will shoot several versions (takes) of a shot and choose the best one when editing.

The Goals of Editing

Create a flow

- Most videos serve a purpose such as telling a story or providing information. Editing is a crucial step in making sure the video flows in a way which achieves this goal.

Add effects, graphics, music, etc.

- This is often the "wow" part of editing. You can improve most videos (and have a lot of fun) by adding extra elements.

Alter the style, pace or mood of the video

- A good editor will be able to create subtle mood prompts in a video. Techniques such as mood music and visual effects can influence how the audience will react.

Give the video a particular "angle"

- Video can be tailored to support a particular viewpoint, impart a message or serve an agenda.

Different Types of Video Editing

There are several different ways to edit video and each method has its pros and cons. Although most editors opt for digital *non-linear* editing for most projects, it makes sense to have an understanding of how each method works.

Film Splicing



Technically this isn't video editing, it's film editing. But it is worth a mention as it was the first way to edit moving pictures and conceptually it forms the basis of all video editing.

Traditionally, film is edited by cutting sections of the film and rearranging or discarding them. The process is very straightforward and mechanical. In theory a film could be edited with a pair of scissors and some splicing tape, although in reality a splicing machine is the only practical solution. A splicing machine allows film footage to be lined up and held in place while it is cut or spliced together.

Linear editing

- Linear editing was the original method of editing electronic video tapes, before editing computers became available in the 1990s. Although it is no longer the preferred option, it is still used in some situations.



- In linear editing, video is selectively copied from one tape to another. It requires at least two video machines connected together — one acts as the *source* and the other is the *recorder*. The basic procedure is quite simple:
- Place the video to be edited in the source machine and a blank tape in the recorder.
- Press *play* on the source machine and *record* on the recorder.
- The idea is to record only those parts of the source tape you want to keep. In this way desired footage is copied in the correct order from the original tape to a new tape. The new tape becomes the edited version.
- This method of editing is called "linear" because it must be done in a linear fashion; that is, starting with the first shot and working through to the last shot. If the editor changes their mind or notices a mistake, it is almost impossible to go back and re-edit an earlier part of the video. However, with a little practice, linear editing is relatively simple and trouble-free.

Non-linear Editing



- In this method, video footage is recorded (captured) onto a computer hard drive and then edited using specialized software. Once the editing is complete, the finished product is recorded back to tape or optical disk.
- Non-linear editing has many significant advantages over linear editing. Most notably, it is a very flexible method which allows you to make changes to any part of the video at any time. This is why it's called "non-linear" — because you don't have to edit in a linear fashion.
- One of the most difficult aspects of non-linear digital video is the array of hardware and software options available. There are also several common video standards which are incompatible with each other, and setting up a robust editing system can be a challenge.

Video Editing Terminology

- **Capture Device:** A hardware or firmware device used to convert analogue video into digital video.
- **Compressors & Codecs:** Software or firmware used to compress and decompress digital video. Compression makes the file size smaller.
- **Editing:** The process of rearranging, adding and/or removing sections of video clips. Also, creating transitions between clips. Editing is part of post-production.
- **Encoding:** The process of converting digital video into a particular format, for example, saving a video project in MPEG-2 format for DVD distribution.
- **Layering:** Adding multiple layers of superimposed video.
- **Linear Editing:** Also known as *tape to tape* editing. A method of editing in which footage is copied from one tape to another in the required order.
- **Non Linear Editing:** An editing method which uses computer software to edit the footage.
- **Transition:** The way one shot changes to the next.
- **Post Production:** Everything that happens to the video and audio after production, i.e. after the footage has been shot. Post production includes video editing, audio editing, titling, colour correction, effects, etc.

Video Editing

Editing is the creative of filmic reality and the foundation of film art.

-V. I. Pudovkin (1915)

Broadcast Stages of Video Editing

Video editing is a process. It is a combination of various technical functions, sequenced together to achieve an aesthetic goal.

Video Editing

When editing is done well, it is be largely unnoticed by the by the viewing audience.

What is Editing?

Video Editing is reviewing and changing a video by making additions, deletions or other changes to conform to some agreed-upon standard.

Step 1. Digitize/ Ingest the footage into the computer

As odd as it may seem, post-production begins with preproduction. Some of the best edits a video editor will ever make are on paper. The moment a script becomes a storyboard, you should step into action.

But in another way we can call the *first step* in video editing is transferring all our footage from our camera to the computer. If footage is from a video camera or DSLR, then we should to copy footage from the SD card to the device.

After that we can create a folder for each project. Then create a sub-folder for all the raw transferred video footage and divide any additional media, such as music or images, into separate sub-folders too.

Step 2. Trim (clean up) each video segment or clip, deleting unwanted video frames.

After that we are going to do is log our footage. This is where we sort through all of our source video material, cut out all the usable clips, group them into bins, then label those bins accordingly. A good editor views the rushes and looks for fluidity of movement and nuances that will later be incorporated into the film.

Step 3. (Assembling) Place the clips into the timeline.

The timeline usually includes multiple tracks of video, audio, and graphics. This timeline allows the editor to view the production and arrange the segments to fit the script.

Open the editing software which is available into computer and create a new project inside of project folder. After going through the clips and look for the best takes of each one. Once we have found preferred take, drag or import the footage or folder into the project tab and add it to project's sequence timeline. Apply this same process for every shot, laying everything out in linear order. This is called "assembling the edit."

Video editing software will reference the location of the original files, so make sure that don't move or delete them until we have finished the editing project.

Where logging gives us first glimpse at our film's footage, the first assembly gives us the first glimpse of the movie laid out in a linear structured format.

In the first assembly or rough cut, the scenes are placed in order and checked for continuity. This all-important step in the editing process allows for revisions and new ideas to be tried and tested.

Step 4. (Fine Cut) Add video special effects and transitions.

Nonlinear edit systems allow all kinds of effects such as ripple, slow/fast motion and color correction. Transitions include dissolves, cuts, and a variety of wipes.

The *fine cut* no longer focuses on the entire film, but on the details of each and every cut. The fine cut emphasises and strengthens the rhythms and structures identified in the first cut.

Step 5. (Final Cut) Insert additional audio, if desired.

When a fine cut has been agreed with the editor, director and producer, the sound designer, music composer and title designer join the editor. Sound effects and music are created and added to the final cut.

Audio effects may be used to “sweeten” the sound. Music or voiceovers may be added at different points in the project.

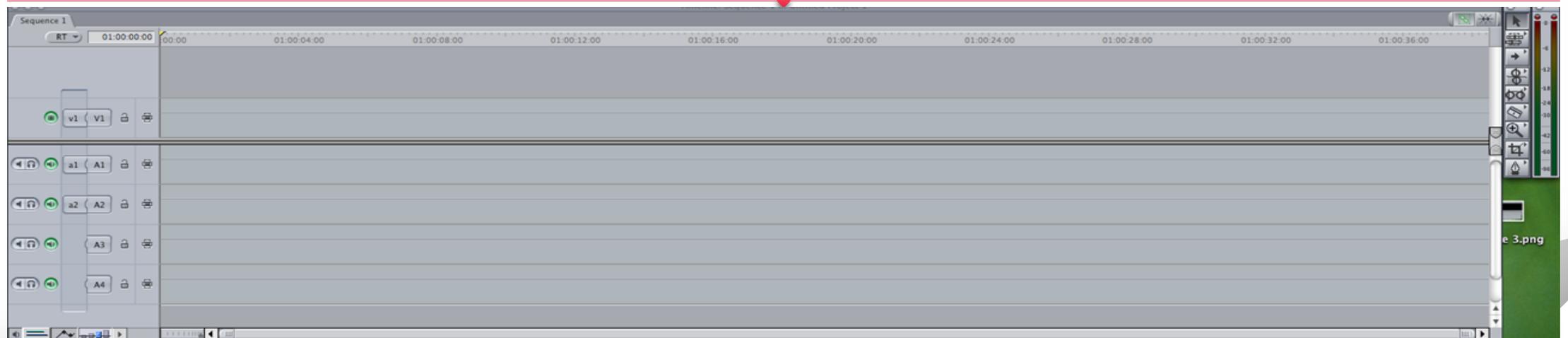
Step 6. Output the final program to the distribution medium.

Watch and listen the final video on different devices with different speakers and collect feedback on how it was received. Make any revisions if it is necessary, then export final video!

Timeline Video Editing

In **video editing**, **timeline** is a commonly used interface found in most **video editing** programs. This interface enables authors to lay a **video** project out in a linear fashion horizontally across a monitor.

1



Timeline Video Editing

A chronological display of an edited sequence in a non-linear **editing** system.

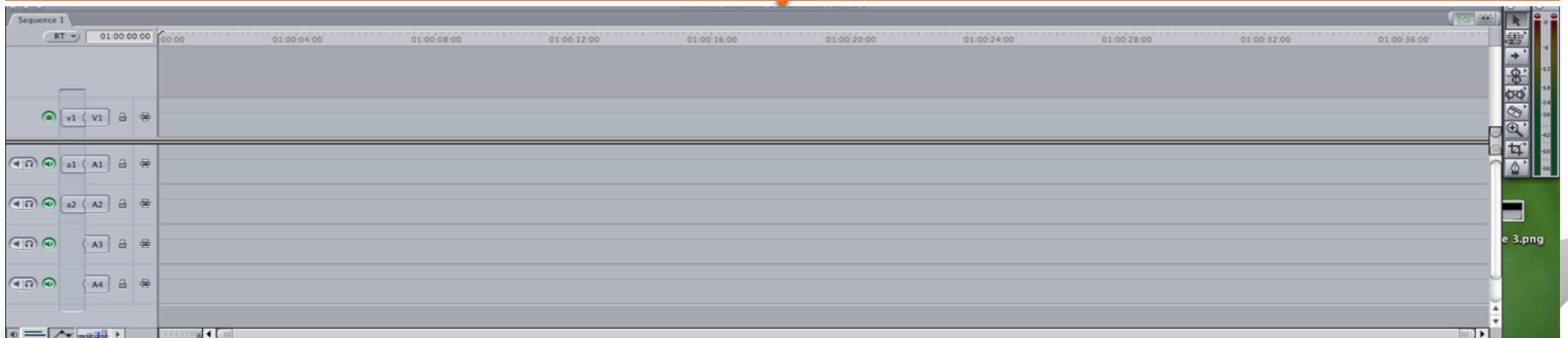
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Timeline Video Editing

In NLE systems, a **timeline** is a **graphical depiction** of audio and video tracks. Much of the editing that takes place is done within this graphical timeline, thus the phrase "timeline editing".

3



The Video Editing Timeline

- Most video editing software these days has a non-linear timeline editor or sometimes called an NLE (nonlinear editor). This is the part of the software that allows you to add media, cut it, arrange, adjust it – basically manipulate the parts the video, so it looks, sounds, and feels the way you want it. The nonlinear part means that you don't have to put the media onto the timeline in linear or sequential order. If you wanted, you could add the last clip, then a middle clip, then fill-in between, before adding the beginning media.

The Video Editing Timeline

- **Timeline.** It's called a timeline because the various pieces of video will be lined up horizontally, with footage on the left displaying before footage on the right. Usually, the timeline will have time code markers indicating the location of each frame.
- **Tracks.** Usually stacked vertically, allowing for multiple pieces of media (both audio and visual) to be added to your video. In most editing programs, visual items on the higher tracks will appear on top.

The Video Editing Timeline

- **Media.** The media sits on the timeline and can be made up of video, audio, text, images, etc. These are the elements of your video.
- **Playhead.** The playhead indicates where in the video you are previewing. The playhead is an essential element to make sure you are editing the correct part of your video.

Workflow for Editing with a Video Timeline

- There are many ways you can go about editing video, and you should determine what works best for you.
- Gather all of the footage that you think you might want to use in your video.
- If you have a lot of footage, it is helpful to label everything. It seems like a lot of work, and it is, but the bigger the project, the easier it will be to find everything that you need later.
- Once you have your footage gathered, add the key footage to the timeline to start building the order and general flow of the video.

Workflow for Editing with a Video Timeline

- When you have marked a clip by selecting the IN and OUT points in the Source window, you can add the clip to the timeline. Simply drag the video from the Source window down to the timeline window, you can add the clip to the timeline. you would like to change the length of a clip once you have it on the timeline. There are several ways to do this.
- You can drag either end of the clip on the timeline with the mouse or you can use the razor blade and cut a clip, and then delete either end by clicking on the end and hitting the delete key. Then you can right-click on the gap that you created and choose Ripple Delete from the menu that pops up.

Workflow for Editing with a Video Timeline

- When you have your main footage in place and are giving the message you want, you can start adding secondary footage, including adding **b-roll**, **lower thirds**, and other images or text.
- **Transitions:** Sometimes simple cuts from one clip to the next work well, but other times you might want to use fancier transitions from scene to scene. For example, you might want to use a **dissolve**, or a **wipe** or a **fade**. Once in place on the timeline, right-click on the transition to adjust it if you like.

Workflow for Editing with a Video Timeline

- When you play your movie, you will not be able to immediately see how the transition will actually look. That's because of some transitions take some extra processing to complete the effect. Editing software tells you that extra processing still needs to be done by putting a small red bar above the transition. To activate the extra processing, you **Render** the timeline. When the processing is finished, you can play your movie to see the transition.
- Once you've built out your video visually, you can add audio, like music.

The Art of Editing Video on the Timeline

Editing video on the timeline is a mixture of both art and science. There are lots of effects, interesting and cool things you can try. But as with many things in life, less is more.

Thank You
