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Video Recording

Video Editing and its Impact

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What is editing

- Editing is the process of selecting, arranging, and connecting shots into a meaningful overall flow.
- Editing transforms the recorded material into a narrative or informative structure.
- Editing is a combination of technical process and dramaturgical decision-making.
- Editing organizes space and time in accordance with the intention of the author.
- Editing directs the viewer's attention and builds the rhythm of perception.
- Editing is the crucial stage in which a film or show takes its final shape.



Editing is called "The Language of Cinema" “

- Editing combines frames just as sentences combine words in a language.
- The order of the frames generates a meaning that is not present in the individual frames.
- The montage uses visual and auditory "grammatical" cues as transitions and rhythm.
- Editing shapes the subjective experience of space and time of the viewer.
- Editing allows for ellipses, information condensation, and associative thinking.
- Editing affects emotions just as strongly as the content of the frame.



A brief evolution: from tape to digital

- Early authors physically cut and glued film tape in editing tables.
- The Soviet school developed montage theories as a means of generating an idea.
- Classical Hollywood standardized continuity and imperceptible cuts.
- Linear video editing introduced tape and device control in television.
- Digital non-linear editing has yielded unlimited versions and rapid experimentation.
- Today's systems bring together cloud collaboration, proxy work, and remote teams



Technical and artistic aspects of editing

- Technical aspects include format, codecs, synchronization, and media organization.
- Artistic aspects include rhythm, transitions, continuity, and dramaturgical logic.
- The editor must understand the narrative arc and the psychology of the viewer.
- The editor works with the director, cinematographer and sound designer.
- The quality of image viewing and sound monitoring influence editing decisions.
- The relationship between technical quality and dramaturgy is crucial for a professional result.



Basic concepts and workflow

- Frame is the basic unit of recorded material.
- A scene is a whole plot in a unique time and space.
- A sequence is a series of scenes that belong to the same narrative objective.
- Offline editing is used for creative decisions with raw/raw files.
- The online finisher solves color correction, sound and delivery of the master.
- Archiving and versioning are mandatory steps of a professional workflow.



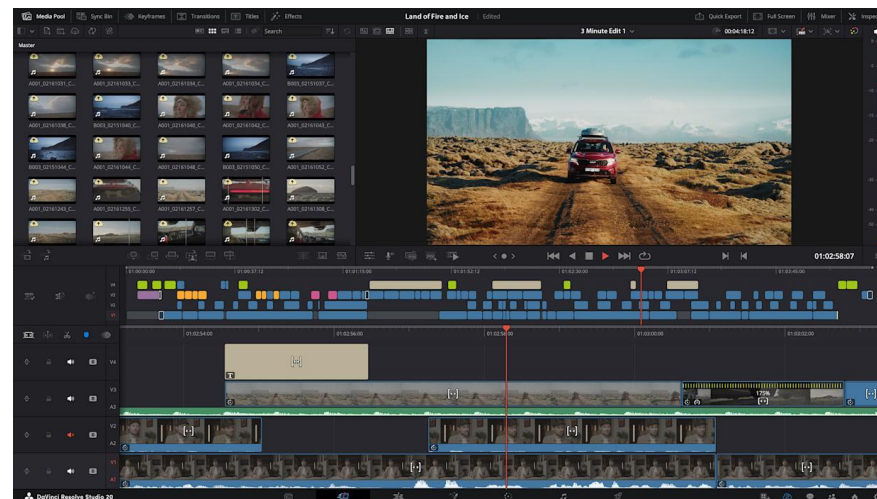
Linear Editing

- Editing in which the frames are connected consistently, without the possibility of subsequently changing the previous steps.
- Typical for analog video systems (U-Matic, Betacam, VHS) – the editor has to go in order from start to finish.
- Suitable for fast-paced TV news, chronicles and simple reports.
- Disadvantage: each change requires a rewrite of the sequence.



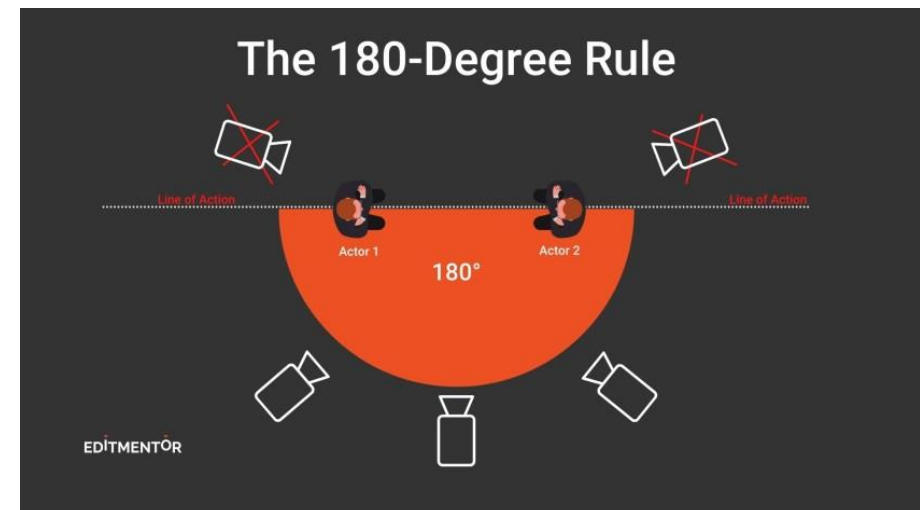
NLE - Non-Linear Editing

- Digital editing that allows free access to any frame at any time.
- It allows for infinite versioning, undo/redo functions, and parallel operation.
- It works in software such as: Adobe Premiere Pro, DaVinci Resolve, Avid, Final Cut Pro.
- standard in modern television and film production.
- Allows integration of image, sound, effects, subtitles and color correction.



Continuous (imperceptible) editing

- The goal of continuous editing is to preserve the spatial and temporal logic of the scene.
- Editing transitions are imperceptible – viewers do not think about cutting.
- The 180° rule, eyeline match and match on action are respected.
- The classic Hollywood school has developed the principles of continuity for "invisible editing".
- It is most commonly used in films, TV shows and TV shows.
- Creates a sense of natural flow and realism.



Discontinuous (expressive) editing

- Deliberately violates the rules of continuity in order to evoke emotion, shock, or symbolism.
- It uses jump cut, flash cut, contrasting transitions, and unexpected joints.
- The goal is to draw the viewer's attention to the idea, not the narrative.
- Typical of the Soviet assembly school (Eisenstein, Vertov) and the French New Wave.
- In modern media, it is used for trailers, videos and social networks.
- Discontinuity becomes part of the style and rhythm.



Rhythmic and metric editing

- Rhythmic editing is based on movement and music, while metric montage follows exact time intervals.
- The length of the frame is determined by the pace of the scene, not the length of the dialogue.
- It is used in music videos, action movies and commercials.
- By changing the rhythm of editing, the emotional tone also changes – fast cuts = tension.
- In music editing, cuts follow a rhythmic and metric editing beat, beat, or melodic accent.
- A modern example: "Baby Driver", where every scene breathes to the rhythm of the music.



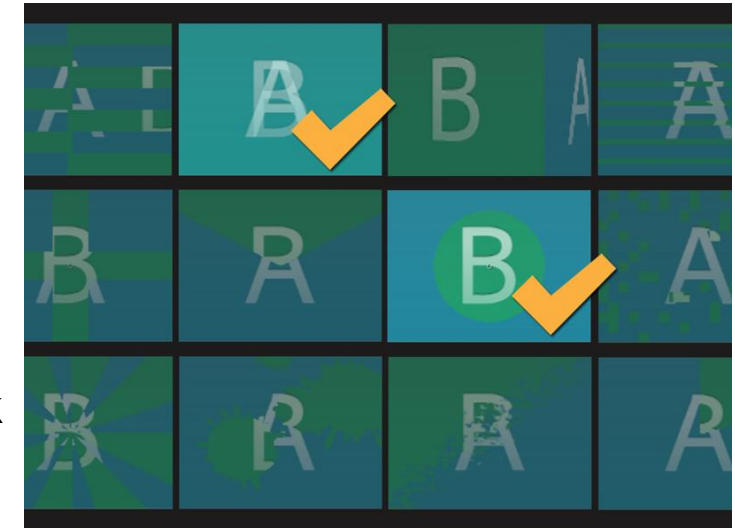
Associative and tonal editing

- Associative editing brings together images that together create a new meaning.
- Eisenstein's principle: "1 + 1 = 3" – the combination of two frames creates a third meaning in the viewer's consciousness.
- Kuleshov's experiment: the same facial expressions, different shots → different emotions.
- Tonal editing connects frames according to color, light, sound, or rhythm of tone.
- It is used in art films, documentaries and poetic sequences.
- It combines emotion, association and visual harmony



Introduction to Editing Transitions

- A montage transition is a way of merging two frames into a whole.
- The transition affects the rhythm, meaning, and emotion of the scene.
- Basic division:
 - Cut – abrupt transition without visual effect
 - Dissolve – gradual transition from one frame to another
 - Aperture (fade in/out) – the frame disappears or appears from black
 - Wipe – the frame "deletes" the previous one in a certain direction
 - Match cut / J-cut / L-cut – transitions connected by content or audio
- The choice of transition depends on the genre, rhythm, emotion and editing style.



Cut – Basic Transition

- The most common and important type of mounting crossing. Often on TV news.
- It is created by instantly changing one frame to another without any visual effect.
- It maintains the continuity and natural rhythm of the scene.
- The editor decides when the cut happens – timing is key.
- Types of cuts:
 - Straight cut** – A standard transition between two frames.
 - Invisible cut** – masked by movement, imperceptible to the viewer.
 - Smash cut** – Sudden contrast (e.g., noise → silence).
 - Jump cut** – skip in time or on the move; It's creating a discontinuity.



Invisible Cut

- It is used to maintain continuity without visible interruption.
- The cut is hidden by means of camera movement, darkness or the passage of an object in front of the lens.
- To the viewer, it looks as if the scene was filmed in one take.
- It is used in films with long shots (e.g. "Birdman", "1917").
- It provides fluidity, but requires precise preparation and matching of shots.



Smash cut and Jump cut

- **Smash cut:** A cut between two drastically different situations (e.g. noise → silence).
 - The effect of shock, contrast or comic surprise.
- **Jump cut:** A jump within the same action, "a seek in time".
 - It breaks the continuity, but increases the rhythm and dynamics.
- Both techniques emphasize rhythmic and emotional dissonance.



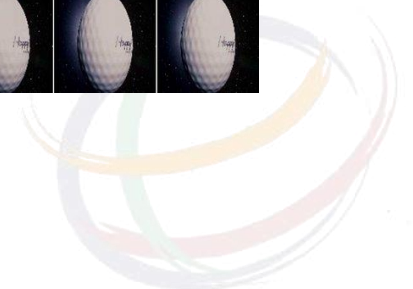
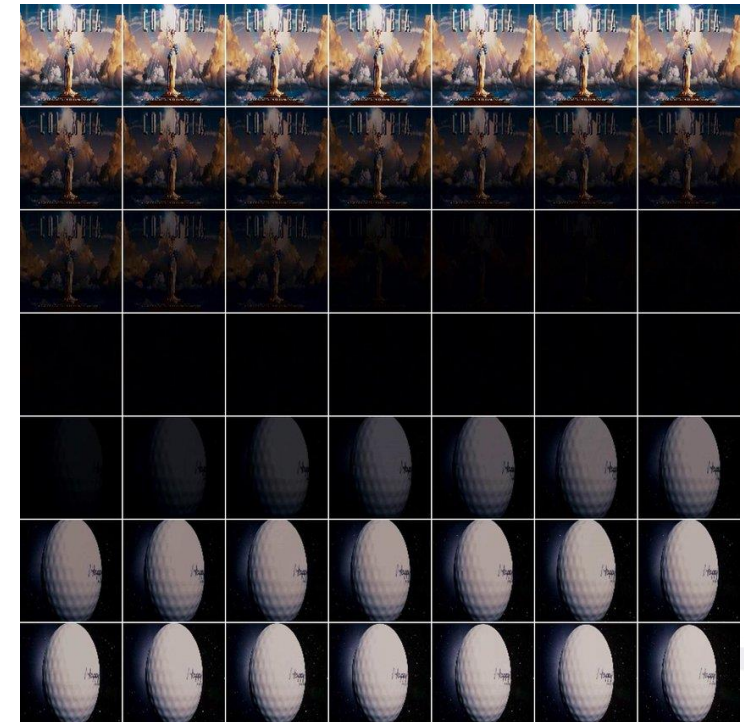
Dissolve

- The gradual disappearance of one frame while the other appears.
- It symbolizes the passage of time, a change of place or state of consciousness.
- It can have a narrative or emotional function (e.g., memory, dream).
- In modern editing, it is used sparingly – formerly the standard in classic film.
- Digital version: "Cross dissolve" in software.



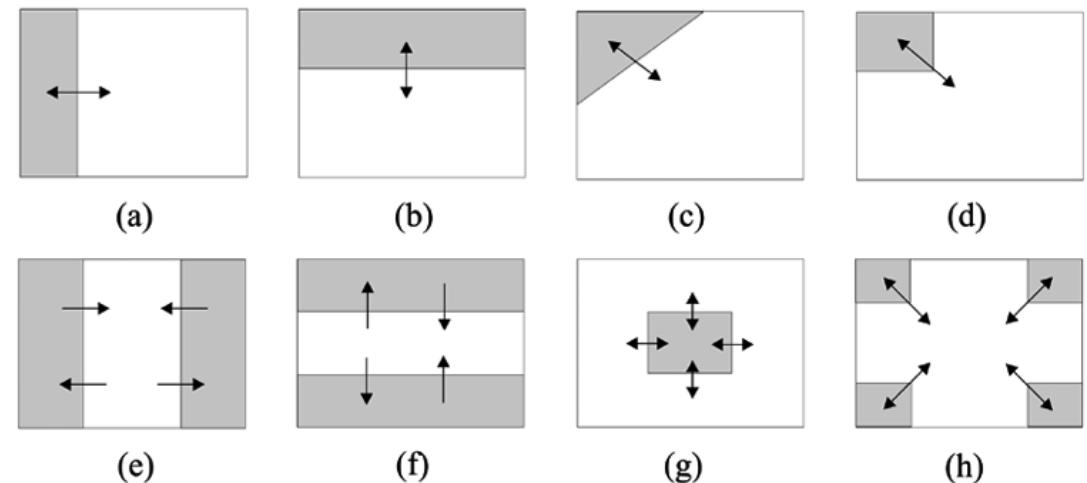
Fade in / Fade out

- **Fade in:** the image slowly appears from black (start).
- **Fade out:** the image slowly disappears into black (end).
- It marks the beginning or end of a sequence, chapter, or story.
- Psychological effect: calming, completion, contemplation.
- Sometimes used in transitions between day and night.



Wipe

- The new frame "erases" the previous one horizontally, vertically or diagonally.
- It was popular in old movies and TV series (e.g. Star Wars).
- Today, it is used more in stylized videos and announcements.
- It can symbolize a change of time, place, or theme.
- Digital versions are available in most software as "transition effects".



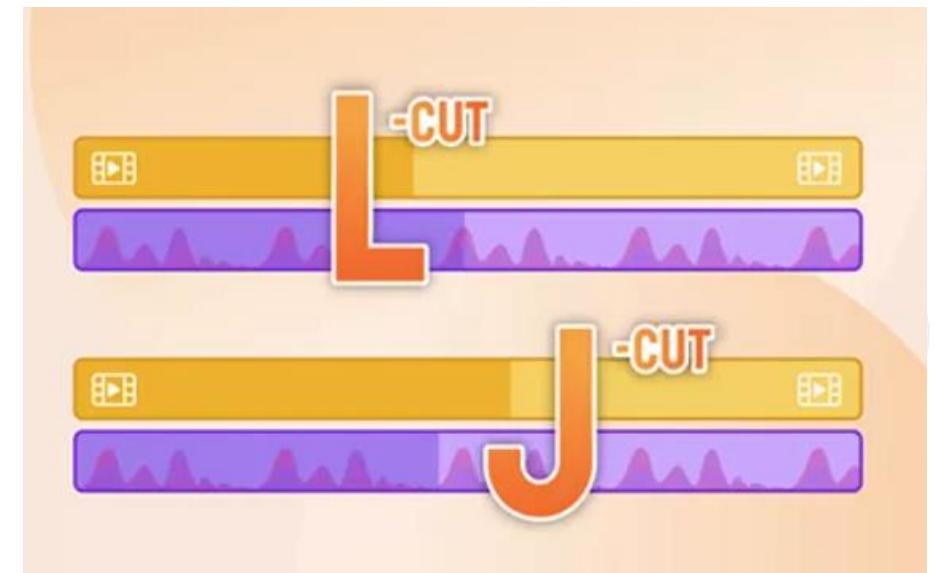
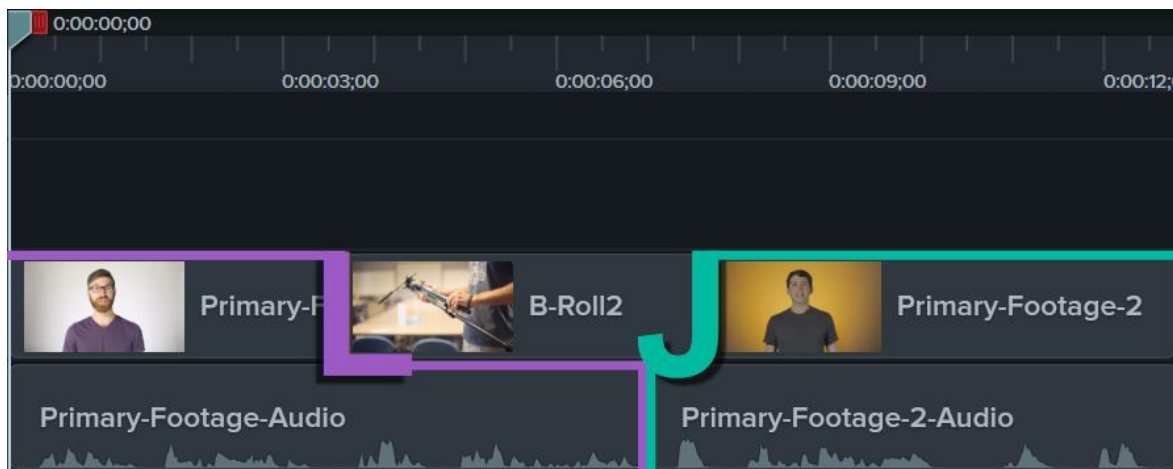
Match cut and Graphic match

- **Match cut:** A combination of two frames that are visually or conceptually identical.
 - Example: shot of the sun → shot of the bulb.
- **Graphic match:** It uses similar shapes, colors, or movements to connect scenes..
 - A visual metaphor that enhances the meaning.
- A famous example: "2001: A Space Odyssey" – a bone → a spaceship.
- It connects the past and the future, reality and the idea.



J-cut and L-cut

- **J-cut:** The sound of the next scene begins before the image appears..
 - Allows for a "softer" transition and anticipation of events.
- **L-cut:** The sound of the previous scene lasts while the new picture has already begun.
 - Creates continuity and coherence of scenes through tone.
- They are used in dialogues, documentaries, and rhythmic transitions.
- A key tool for emotionally connecting scenes.



Rhythm and tempo of editing

- The rhythm and tempo determine the emotional tone and perception of the story.
- Rhythm refers to the dynamics of changing frames, while tempo describes the overall flow of a scene.
- The editor uses the length and arrangement of shots to control the viewer's attention.
- A good rhythm makes a film "alive" – a bad rhythm seems monotonous or chaotic.
- Rhythm is shaped through movement, music, cut, sound, and duration.



The connection between rhythm and emotion

- Quick cuts cause tension, excitement, action.
- Slow cuts create peace, introspection, emotional depth.
- By changing the rhythm, the editor "breathes" along with the emotion of the scene.
- Rhythm can accompany or counter music and acting.
- In emotional scenes – longer shots; in dynamic – shorter
- A change in rhythm affects the meaning of the:
 - Acceleration, rising tension
 - Slowing down, creates a feeling of seriousness or sadness
 - Abrupt cut, surprise, comedy, shock.



Length of the frame in practice

- The average duration of the frame depends on the genre and format:
 - Action movie: 1-2 seconds
 - Drama/dialogue: 4–6 seconds
 - TV news: 3-5 seconds
 - Social media: 0.5–2 seconds
- Each one has to last exactly as long as it conveys the information.
- Rule: "Cut as late as possible, but not too late". It should happen exactly when the viewer's mind moves from one motive to another.



Rhythmic and metric editing

- Rhythmic editing: cuts follow the movement and energy of the image or music.
- Metric editing: cuts occur at a specific time interval.
- Rhythm editing is used in music videos, fight scenes, and trailers.
- By changing the rhythm of the scene, it becomes more dramatic or calm.



Rhythm and music

- Editing can be synchronized with the rhythm of the music ("cut to the beat").
- A change of pace creates contrast and enhances the experience.
- In music videos, the tempo of the music dictates the tempo of the cuts.
- The combination of fast editing and slow melodies creates an ironic effect.



Rhythm control by editing

- The editor uses rhythm as a tool to guide attention.
- Too fast rhythm tires the viewer; It's too slow to sleep.
- Ideally: alternating between fast and slow sequences.
- In the news: rhythm holds attention; In the drama: Rhythm builds tension.



Dynamic editing in the digital age

- The modern viewer has a shorter attention span – the rhythm accelerates.
- On social networks, the average duration of the frame < 2 seconds.
- AI tools analyze the emotion of a scene and automatically adjust the rhythm.
- Dynamic editing combines classic storytelling and automated effects.



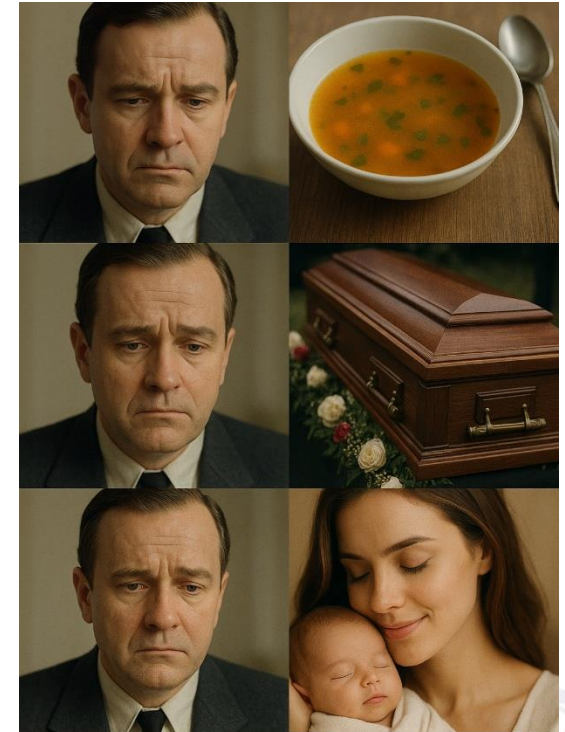
Order as a source of meaning

- Editing not only brings the shots together, but creates a new meaning in their order.
- By changing the order of the frames, the same scene can have a completely different meaning.
- The dramaturgy of editing is based on the psychology of perception: the brain connects images into a whole.
- Each frame is a sentence, and the order of the frames is the grammar of visual language.
- The viewer does not see the shot in isolation, but in the context of what precedes and follows.



The Kulešov Effect

- Lev Kuleshov proved that meaning depends on order and context.
- Experiment: the same shot of the actor's face shown with different images –
 - soup - hunger
 - Suitcase - sadness
 - child – tenderness
- Conclusion: Viewers project an emotion based on neighboring frames.
- This is the basis of the psychological perception of montage.



How the order changes the meaning

- Example 1: face, explosion, emotion = fear.
- Example 2: explosion, cheek, emotion = shock, confusion.
- In both cases, the same shots, but a different experience.
- The order defines how viewers interpret cause and effect.
- In the movie "Psycho" (Hitchcock) – rhythm and order create tension before anything happens.

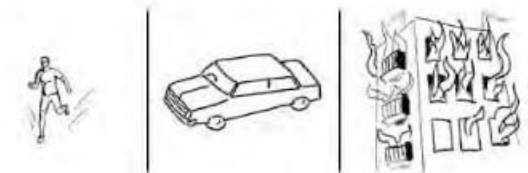
1. Auto – čovek – zgrada u plamenu;
Čovek se dovozi autom i trči ka zgradi u plamenu.



2. Zgrada u plamenu – čovek – auto;
Bežeći od vatre, čovek trči prema autu da se spase.



3. Čovek – auto – zgrada u plamenu;
Čovek koji je izazvao požar, beži autom od zgrade.



Ejzenštajnov principle „1 + 1 = 3“

- Sergei Ejzenštajn laid the foundation for modern assembly theory.
- The combination of the two frames does not create a sum, but a new third meaning.
- For example: frame of man + frame of child, meaning "fatherhood".
- Editing is a tool for emotional and ideological construction.
- On its own, none of the frames expresses complete emotion.
- But by combining the four, the viewer constructs an emotional arc: tension, fear, relief, love.
- Thus, editing does not only depict events, but creates a psychological experience.

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Rules for switching between plans

- The installation according to the plans must be logical and visually natural.
- Avoid sudden jumps between two very similar planes (e.g. large - large).
- It is recommended to go by the difference in size:
- Total - medium plan - close-up (gradual approximation).
- Large - medium - total (gradual distance).
- And they are used only as a means of expression.
- Rule: the difference in the size of the plans should be at least 30% for the cut to be imperceptible.
- The cut must change the camera angle by at least 30° compared to the previous frame.
- Minor changes cause a visual jolt ("flicker cut").
- This rule ensures the fluidity of the transition and the continuity of movement.
- In multi-camera systems (e.g. TV studios), this rule applies between cameras A, B and C.



Rules for switching between plans

- Transitions between plans should be motivated by movement, emotion, or change of information — not random.

Rule 1 – Logical sequence:

- Far → General → Medium → American → Medium → Large → Very large → Detail*
- *We take the viewer from orientation in space to emotional focus.*

•Rule 2 – Resizing the plan:

- Each new plan must differ by at least 30% in frame size for the cut to be justified.

•Rule 3 – Avoid "jumping"“:

- Do not switch from Medium directly to Medium Large without a visual reason – it looks like a technical error.

•Rule 4 – Dynamic transition:

- The movement of the camera (pan, tilt, zoom) or the movement of the subject can "merge" the two planes naturally.

•Rule 5 – Emotional progression:

- *Distant and general plans — create context and distance.*
- *Medium and American plans — introduce dialogue and action.*
- *Close-ups and very close-ups — convey emotion and psychological tension.*
- *Detail — gives symbolism, meaning, focus.*

•Rule 6 – Return to the Bigger Plan:

- After multiple close-ups, insert a total or semi-total to restore the viewer's spatial orientation.

•Rule 7 – Combination of plans:

- For the dynamics of the scene, he uses changes of planes in the rhythm: total – medium – large – detail – back to total.



Questions

During the assembly process, it is necessary to answer the following questions:

1. Which of those available to you do you want to use?
2. What is the order of personnel?
3. How long does the frame last and what impact does it have on the audience?
4. At what point should I move from one frame to another?
5. In what way will the staff continue to the next one (transition, cut)?
6. If it is a transition, how fast will it take place?
7. Is there a good continuity in the image and sound that supports continuity in the action (action)?
8. Are special effects needed in the editing?
9. Will you use color correction?



Conclusion

- Modern audiences have a shorter attention span – editing is speeding up and simplified.
- Vertical video (9:16) calls for centralized composition and more close-ups.
- In news broadcasts, cutaway is used to maintain rhythm and visual dynamics.
- On social media, the montage has to "grab attention" in the first 3 seconds.
- AI tools automatically analyze emotional moments and adjust the length of the frame.
- A modern editor is an artist and a technician at the same time.
- Technology (AI, NLE, neural analysis) expands possibilities, but the basic principles remain the same.
- Every montage is an interpretation of reality, not just its depiction.
- The future: automated editing - AI, but with a human sense of rhythm and meaning.



Questions & Answers

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