Chapter 3: EDITING

The **editor** shapes and arranges shots, scenes, and sequences, putting together the pieces of the film into its final form. The editor starts with **rushes** or **dailies**--the first positive prints of takes--usually sent to the director soon after a day's shooting. These are uncut rolls of film taken directly from the camera and processed as the shooting of the film proceeds. Using the script as a guide, he or she selects the best takes and assembles a **rough cut**, an early edited version of the best takes (much like the rough draft of a manuscript). Later the editor hones the version into the **fine cut**, a version much tighter than the rough cut and nearly ready for approval. The last edited version, the **final cut**, is the last version. During the fine and final cuts, the editor includes such elements as special effects, laboratory-produced transitions, and the mix (all sounds at their proper volume levels).

The actual process of editing goes by several names, but usually "**cutting**" and "**editing**" are used. Little confusion results from the word "editing" since filmmakers use it chiefly to indicate the process of joining together strips of film. **Cut** and **cutting**, however, have other meanings: an individual strip of film consisting of a single shot, the separation of two pieces of action as an instantaneous "transition" (as in "the film cuts to"), a verb meaning to join shots together in the editing process, or an order to end a take ("cut!"). The process of joining pieces is best called "editing" to avoid confusion.

Continuity

The organic development of events in print literature is called the story. Film uses another word because of the inherent differences between film and print: **continuity**. This word acknowledges that visuals and sound come together in a unique way to create a narrative. The narrative line of a film cannot be adequately captured on paper; a script contains only sketchy fragments of continuity. A writer forms sentences a word at a time, evolving rhythms from an immense grab-bag of vocabulary. A filmmaker, on the other hand, cuts and pastes various shots together.

The Russian filmmaker Vsevolod Pudovkin suggested that a "film is not shot, but built." His distinction is important. The process of creating continuity involves not only reproducing events but re-creating them in a new and more vital way. Raw visual images and sounds fuse in a process that is far more than the sum of its parts. As if by magic, the editor transforms

unrelated sensory experiences into a single unit so natural that a viewer cannot imagine any of the pieces missing.

Transitions

As the joiner of the pieces of celluloid making up a film, the editor relies on certain standardized devices to relate segments to each other and to the whole. Film uses a rhythm of visual punctuation marks, somewhat as writing does, both to qualify what precedes and to prepare for what follows.

The cut is the most common method of moving from shot to shot. One shot simply replaces another on the screen without any apparent transition, much as one word follows another in a sentence. A cut that blends shots so carefully that the switch is unobtrusive and natural is called a **match cut**. Most cuts in a film are match cuts. If continuity is broken by a cut calling attention to itself from an unnatural jump in space or time, the result is a **jump cut**. Some jump cuts are unintentionally caused by poor match cuts, but sometimes filmmakers want the abruptness--even shock--of the jump cut. (Consider, for example, a shot of a person starting to clear snow from a walk replaced by a shot of the person in the same position with most of the snow gone.) Jump cuts are relatively rare in film.

Another major transitional device, the **dissolve** (also called a **lap dissolve**) gradually merges two images by showing both shots simultaneously for a few seconds. As the second shot becomes stronger, the first becomes less and less visible, gradually disappearing completely. A quick dissolve usually suggests the passage of a brief period of time, and a slow dissolve suggests a longer period of time. A rippled or blurred dissolve often suggests a flashback in a character's mind. In the early years of films, dissolves were quite lengthy. Now they often occur so rapidly that the viewer must look closely to be sure a transition is not a simple cut.

The **fade** creates a transition of darkening the image until the screen is blank. A **fade-out** shows the screen gradually dimming until it is black; the **fade-in** restores light to the screen until a bright image arrives. (Fades to white or red also can be seen occasionally.) Although traditionally ending both scenes and sequences, fades usually terminate sequences since they are relatively stronger transitions. Not only does time or place distinctly change after a fade, but a viewer faces a black screen for a brief period of time as well. This break reinforces the separation of two actions. The fade is most appropriate where a narrative does not flow continuously but requires

definite interruption. The fade is still a common form of ending films.

Two mechanical forms of transition, the **wipe** and the **flip**, were used more extensively in the early days of movies. To envision a **wipe**, imagine wiping off a row of words on a blackboard, but, as you move the eraser, a new set of words appears behind the eraser. This is what a wipe does with visual images. One image will "disappear" by being taken over and replaced by another image moving in a pattern across the screen. A wipe may move from left to right, top to bottom, diagonally, inward from all sides, outward from a pinpoint center like a ring of ripples from a thrown pebble, in a spiral, and so on. Wipes can be either hard or soft edged.

The **flip**, on the other hand, shows an image flipping as if someone turned over a coin or a playing card. One cinematic image replaces another as if the second were the flip-side of the first. However, the flip and the wipe seem artificial and thus call attention to themselves. They show up primarily where the filmmaker seeks a comic, antique, or stylized effect.

The **iris** is a distant cousin of the wipe. The iris gradually and softly darkens an image in a circular pattern from the edge of the frame until only a peephole remains visible. In the early days of the movies, the iris worked much like a close-up or a zoom by focusing attention on a small part of the action such as a face. Frequently the iris then blacked out the entire screen, producing an effect much like a fade. Or a shot often opened with an iris to focus attention on one element and then expanded to reveal the full scene.

A related device, the **mask**, darkens areas of the screen for optical effects. For example, a mask produces the illusion of a periscope, keyhole, telescope, binoculars, knothole, or a chink in a wall. The mask, however, is not intended as a transition but as a device--often comic—-to overlay an action with a shape.

The **swish pan** blurs details by sending the camera spinning on its vertical axis. The blurred highlights and swishing movement create a rushing sensation, propelling action from one setting to another. The swish pan can also be used to suggest confusion and to intensify violent action.

The **split-screen** can also be considered (loosely) a form of transition. Split-screen offers two or more frames of action simultaneously, with the multifaceted action interrelated by being on the screen at the same time. The viewer's eyes are left to move from screen segment to screen segment, participating in the process of transition and able to operate somewhat

independently of a filmmaker's direction. Telephone conversations, for example, are often simulated with split-screen, allowing a viewer to choose when to observe the speaker's face and when to watch the listener's reactions.

Rack focus moves the focus from one subject to another during a single shot, changing a viewer's attention from one part of the screen to another (blurring the previous point of attention). This shot keeps the scene's spatial relationships, while changing the center of attention.

Guiding the Eye

In establishing continuity, the editor does not simply replace one shot with another. Editing is the coordination of shots. Rhythms established within a shot by camera movement, sets, or actors must be maintained from shot to shot in a sensible way.

An editor's most immediate task from shot to shot is to guide a viewer's eyes to the most important part of the screen. The composition of a shot leads a viewer to focus unconsciously on a certain spot on the screen. If the point of focus of the next shot occurs on the opposite side of the screen, the shift of focal center will briefly jar a viewer. Such shifts occur too rapidly for typical viewers to catch them consciously; rather, they will be distanced and made uncomfortable without knowing why. If much poor eye guiding occurs throughout a film, viewers will probably walk out saying the movie was bad, but they will probably blame the actors or the plot for what is the fault of the editor. Because good editing is invisible, few viewers detect patterns--or problems--in editing.

Viewers also unconsciously expect all shots to be taken from one side of an imaginary line through the center of the action (called the **180-degree rule** or the **imaginary line**). A blatant violation would seem to reverse the action. Imagine a car chase seen in several shots moving right to left suddenly shown moving left to right. Viewers would be temporarily confused by the sudden turnaround. Viewers become oriented to seeing action from a certain direction, so filmmakers maintain perspective for the viewer.

Viewers also expect a following shot to be different in angle and distance from the previous shot. A slight difference creates momentary disorientation (becoming, perhaps, an unintended jump cut). Classical continuity avoids such jumps by using **reverse angles** (an angle opposite the previous shot) or by

the **thirty-degree rule** (each camera position varies from another by at least thirty degrees).

Another example of maintaining movement between shots occurs when a character walks out a door. If she exits on the left side of the screen then enters from the left in the next shot, a viewer assumes the actress is re-entering the same room. But if this cut is meant as an exit from one room and an entrance to another, a viewer will be temporarily confused. The actress exiting left needs to enter from the right in the next shot if she is entering another room, unless other signals from the location are unambiguous.

In addition, shots promising a certain movement need to fulfill their promise. The most frequent type of promised movement comes from a **look of outward regard**. If an actor sitting alone in a room hears a noise and suddenly looks left, the viewer assumes that the next shot will be through the eyes of the actor and that viewer and actor now see the same thing. A promised move to the left must be followed by the camera seeing what is on the left, or the viewer will be confused.

A **reaction shot** works in much the same way as a look of outward regard. When two people are talking and one looks at the other while they talk, the camera will cut to the face of the second actor to observe his reaction. A reaction shot cuts away from the main action to view a related minor part of what is going on. If a man strikes a dog, the following shot will show the dog's reaction. A fist fight will often include shots of spectator reaction. Such shots add information and move logically and emotionally with the dominant rhythm of the action.

Rhythm

An editor orchestrates movements from shot to shot, advancing cumulatively to a fluid expression of content and meaning. When a person controls movement, he or she creates a rhythm. Some movements are fast, slow, some graceful, and so on. Rhythmic movement surrounds us in life: our hearts beat at a regular rate; our lungs inhale and exhale in a recurrent pattern; waves roll uniformly upon the shore; the tides come in and go out at predictable rates; and the cycles of days, seasons, and years go on methodically. Each rhythm contains meaning: rapid breathing indicates exertion; a slow heartbeat suggests faintness of life; the changing seasons spell birth, maturity, old age, and death. Almost every human activity has its own peculiar rhythm.

Two kinds of rhythm can be traced in film: within the shot and outside the shot. A shot of a horse walking has a slow rhythm, while a shot of a running horse offers a rapid tempo. Movements within a shot have three sources: the object or character viewed, the background, or the camera. One, two, or all three can move during a shot to establish rhythms. Rhythm outside the shot resides in the measured time a shot stays on the screen. Five shots of fifty seconds each would create a slow pace, while a minute's worth of half- and three-quarter-second shots would establish an extremely rapid pace (like some of the imagery of MTV videos).

Usually, an editor matches rhythm within and outside the shot. Shots of a leisurely walk on Sunday afternoon will be held for a long time, while shots of a fight will be short and rapid. Just as an excited heartbeat and respiration suggest intense activity, so does a rapid series of camera shots. By manipulating the speed at which shots occur, an editor helps a viewer to perceive through kinesthetic sensation.

Rhythm of all types involves variations in speeds. Musical and poetic rhythms move regularly between strong and weak elements. The rhythms of film also depend on movement between strong and weak elements, although a steady and regular beat can be held for a short period. Analogies to a form such as music, with highly regular rhythms, can mislead a person trying to understand film rhythm. A film would obviously have difficulty appearing in 4/4 time. Rather, a filmmaker adapts rhythms to the pace of content, slowing down, speeding up, and alternating with the materials at hand. Effective tempo fits the movement of a scene. If a distinct tempo is obvious to an audience, the chances are that the tempo is wrong. Since rhythm moves with the mood of the action, viewers are normally almost unaware of rhythm, yet it has much to do with the mood felt by viewers as they watch.

The physical possibilities are endless for manipulating rhythm. As dialogue occurs, a camera might switch between two characters at an even time interval, or it might switch as the speakers change. Or partway through a conversation, the camera might switch to a closed door, return to the central character, then at shorter and shorter intervals return to the door to prepare for and heighten suspense over something about to happen.

Similarly, lines of movement help establish rhythms. A chase scene will show distances growing shorter. As the cops near the bad guys, the duration of shots will also be shortened, intensifying anticipation. The visual movements countering each

other offer yet another way of heightening tension. The cavalry riding left to right on the screen appears in imminent conflict with the Native Americans riding right to left. A sense of approaching conflict grows out of line direction, reinforced by decreasing shot duration as opposing forces near each other.

Each scene and sequence contains rhythms, and these build into the rhythm of the whole. Yet the rhythms of the subordinate units of a film contribute a great deal to a viewer's understanding. A full-length film cannot maintain a single frenetic (or slow) pace for ninety minutes. Viewers always move through increasingly intense surges of action, but the rhythmic ebb and flow of scenes and sequences allow periods of relative calm. Rhythm consequently provides viewers with an emotional handrail, helping them to feel what their minds can then perceive.

Space and Time

- Shot 1: A man steps from a cab; in the background a sign says "LaGuardia."
- Shot 2: An airplane in flight.
- Shot 3: A man walking from a plane toward a sign saying "Welcome to San Luis Obispo."

These three short shots demonstrate a filmmaker's ability to manipulate space and time. Viewers know a New York to San Luis Obispo flight takes several hours (and at least one change of planes), and they know the distance is nearly three thousand miles. Yet without feeling that reality has been violated, viewers let the travel time and distance slip by on the screen in a few seconds. Film obviously has a unique ability to manipulate space and time.

Time works on three levels simultaneously: real, psychological, and dramatic. On the **real** level, a film can reproduce an almost perfect illusion of movement as it occurs in time. A man getting out of a cab will do so at the same rate he would in life. Words cannot reproduce the illusion of actual time. A paragraph describing a man exiting from a cab can involve five or five hundred words, and the reader can take five seconds or five minutes to read the paragraph. Film reproduces the action as it appears in life, with both sound and visuals.

Time also works on a **psychological** level. The viewer has a subjective sense of time that the filmmaker tries to control. Psychological time works independently of clock time. Everyone knows this from personal experience: when a person is bored,

depressed, or unhappy, time seems to move slowly; when that person is busy and exuberant, time moves quickly. A boring lecture seems to last hours, and an exciting party always seems to end soon after it starts. Abnormal mental states alter time even more.

The most important aspect of time, however, is **dramatic**. When a filmmaker uses time to bring about vivid, emotional, and striking effects, he or she uses dramatic time. Unless speeded up, slowed down, or reversed by mechanical processes, time is fixed within the shot and hence nondramatic in itself. But time outside the shot, as well as time altered mechanically within the shot, is fluid and flexible. The filmmaker can manipulate it in any way he or she wishes. Since film has no real tenses, unlike verbal languages, the continuous present of time can be altered and adapted to the needs of film.

The continuous present of time in a film progresses in a normal chronological pattern, consequently imposing a good deal of structure (especially within shots and scenes). The present sums up what has gone before and prepares the viewer for what will happen. In this sense, the dramatic time of film works much like the mind's concept of time. Even when the mind (or film) turns to the past, it is still thinking in the present.

Yet unlike the human mind, film does not stay long in the actual present. The dramatic tools available to the filmmaker allow the normal progress of an event in time to be accelerated, slowed, or altered. The most frequent variation of the normal rhythm of time is acceleration. The three air-travel shots above illustrate **accelerated time**. Clock time has sixty seconds to the minute; accelerated time has more than sixty seconds worth of action in a minute. A plane trip may take three hours of clock time but only five seconds of accelerated time.

Accelerated time can be produced by mechanical means within a shot by filming at a slower speed than normal so that normal projection rate will speed up the action. The result is **fast motion** (the camera is run slower than normal so it goes through the projector faster than normal, making an action take place faster than it would in reality). A camera can also create a sense of intensified experience by moving rapidly toward or away from a subject, approaching or retreating at a high velocity.

Just as it can be accelerated, time can be slowed down. An event taking one minute can be spread out to take three minutes if the filmmaker chooses to do so. The primary method of decelerated time is the mechanical technique of **slow motion**. Film is run through the camera at a rate faster than normal so that it will appear slower than usual when projected. Or the

camera can use slow pans or zooms to create the feeling of decelerated time.

Speed can also be reduced outside the shot. A fight lasting one minute, for example, can take three minutes if other elements receive attention at the same time. A face reacting in the crowd, another fight starting, a horse shying--any additional information helps slow down action. Repetition also allows reduced speed. Repeating an event increases the time it seems to take to occur. Or part of an event can be repeated, making a film move two steps ahead, one back, then two more ahead.

In addition, short flashbacks can be used to slow time. **Flashbacks** are shots (or scenes) from the past inserted into present action (often used subjectively to suggest a memory). While a character has brief thoughts flash into his mind, time in the film is suspended. (The effect does not hold for long flashbacks; they tend to move into their own continuous-present time pattern.) When such techniques are used, a viewer may, however, have no psychological sense of slowed time.

Cross-cutting (parallel editing) can slow time, though it need not. **Cross-cutting** moves the viewer between two parallel actions. For example, one group of people might be hiking, while another goes to town for supplies. By following group A for a while, then switching to group B, the film follows both courses of action. If all actions of both are followed, clock time will be doubled. If, on the other hand, clock time is maintained, breaches in the actions of each group will be easily recognizable. Because it juxtaposes events, cross-cutting is one of the most important editorial tools available to a filmmaker. Through cross-cutting, a filmmaker can weave relationships and bring courses of action together.

Alterations in time necessarily involve alterations in space. To show a man sitting in a café reading a paper followed by a shot from a different angle would indicate no movement in time or space beyond the instant taken to cut between shots. The viewer automatically realizes that time movements involve space movements as well. The alteration of image size and light qualities on the screen represents actual movement in physical space. The visual component of film produces changes in light intensity and pattern, and these changes are taken by a viewer to mean that both space and time have changed. If the man sitting in the café were next seen walking along a forest road, for example, a viewer would assume a substantial amount of time had passed.

Film moves us freely in space as it does in time. As viewers, we sit in one place, yet instantaneously the medium shifts us from spot to spot. In life our ability to draw closer to a subject, as well as our ability to change angle of vision, depends directly on the amount of time it takes to move physically from position to position. Film, on the other hand, moves us instantly from New York to San Luis Obispo without disturbing our sense of reality. From a back view of a situation, we easily move to a view of only the speaker's lips. Such movements do not distort our concept of space, but enhance our understanding of content. Cinema moves freely in space and time, effortlessly doing what the mind does in dreams.

Montage

Editing takes two principal forms. The first we have examined above and called "editing," explaining that it involves the artistic ordering of images and sounds in rhythms evoking a film's theme and movements. But another element of editorial art is also important: **montage.**

(The distinction between editing and montage goes by other names as well, chiefly "continuity editing" or "narrative montage" [editing] and "dynamic editing" or "expressive montage" [montage]. Those who speak of narrative and conditional montage have simply adopted the French word for editing, "montage." I have kept the word "montage" for the unique juxtapositional principles of editing growing from Eisenstein's work.)

Montage can perhaps be understood most easily through the Japanese hieroglyphs pointed out by Sergei Eisenstein, the initial spokesman for creative montage. The Japanese hieroglyph is a form of picture-writing welding together two representative symbols. The combination of the two creates a larger meaning than can be accounted for by the sum of the two added together. One should visualize a multiplication sign between the two symbols rather than an addition sign; hence a series of images operates on the mind not by A + B = C but by A x B = Y. Each symbol alone represents an object; together they suggest a concept. Here are some examples from Japanese hieroglyphs:

water x eye = to weep
mouth x bird = to sing
dog x mouth = to bark
knife x heart = sorrow
mouth x child = to scream

When symbols for water and eye are yoked together, for example, they mean more than eye and water; they suggest the concept of

weeping, implying sorrow. The idea of weeping is not in any way built into symbols for eye or water, but rather the idea of weeping emerges from the joining of the two symbols.

Montage (coming from the French *monter*, "to assemble") is a rhetorical arrangement of juxtaposed shots. The combination of shots produces an idea by combining the visual elements of two dissimilar images. A longing face, for instance, juxtaposed to a turkey dinner suggests hunger. Or the image of a fox following that of a man making a business deal would indicate slyness. Segments of film working together to create a single idea have no counterpart in nature; their juxtaposition occurs through the editor's imaginative efforts. Because it depends on the editor's ability to yoke dissimilar images into a single image, montage is a highly creative form of editing.

Eisenstein, writing in the 1920s, thought that film continuity should advance through a series of shocks and conflicts. Contemporary films, though, advance chiefly through **match (continuity) editing**. Filmmakers reserve montage for specific effects. Even Eisenstein sparingly used the vital clashing montage he advocated. Some of his montage developments, though, show that his ideas can be applied effectively. In one film, he juxtaposes shots of workers being gunned down and oxen being slaughtered; in another he compares Kerensky (the Russian prime minister overthrown by the Bolshevik Revolution in 1917) to a peacock. Eisenstein's ideas of montage continue to affect modern films, often through simple contrasts in images. For example, shots of a lavish home complete with swimming pool and servants followed by shots of a tenement family's squalor say something more than (and different from) images of squalor alone could say. Together the images point up a strong contrast and disparity of living situations with inevitable political and moral consequences. No such consequences result from simply showing images of rich people.

One last highly effective example of montage in Orson Welles's *Citizen Kane* deserves note. In a series of shots, Kane and his wife, Emily, are seen sitting at breakfast over a number of years. Each shot represents a passage in time, and each shows the couple sitting farther and farther apart at a table that seems progressively longer and more distancing. At first the backgrounds are simple and the two talk lovingly. With each shot, the couple talks less; the background grows more ornate and cold; and finally the two icily ignore each other, with Emily reading the newspaper rivaling Kane's own *Inquirer*. The shots last only a short time, but the montage speaks cogently of the dissolution of a marriage.

Something like montage shows up in the kind of images an editor can create. **Superimpositions** (**supers** or **double exposures**) display two images simultaneously, causing each to comment upon the other and often evoking an idea more significant than its two parts. This technique, little used today, typically shows the passage of time with a series of images, spirits (such as ghosts), or both a character and what the character is thinking about.

All principles of montage apply to sound and to sound counterpointed to visuals, as well as to visuals alone. Sounds not only reinforce, but can also generate, ideas. The essence of visual montage is counterpoint--apparently unrelated images pressed up against each other and welded together to form a new unit. Sounds can also counterpoint each other and the accompanying visuals. Consider, for example, the face of the president speaking with apparently intense sincerity, but the only sounds are hysterical shrieking and moaning. Either the visual or the sound in its proper context would make one kind of sense, but joining unrelated sights and sounds generates an entirely new idea and forces viewers to see new relationships. Some filmmakers think that the most effective sound **counterpoints** visuals, since every bit of music, dialogue, or sound that is inconsistent with its accompanying visual image forces viewers to use their imaginations.