Sergei Eisenstein and the Montage

The Russian filmmaker, Sergei Eisenstein (1898-1948), is considered one of the first truly important narrative filmmakers, and is also credited (incorrectly) with inventing the film montage, or sequencing of specifically timed edits for emotional impact.[1] Many of Eisenstein's films have survived and are still studied in every film program, not only because they were early examples of editing for emotional impact and narrative control, but also because his work is still quite astounding, evocative, and emotionally compelling.

Some of Eisenstein's most famous film sequences have been recreated, nearly shot for shot by modern directors, as an overt act of homage. But these recreated sequences, using Eisenstein's proven techniques in montage, still create the same intended sense of tension, suspense and dread when viewed by audiences who are unaware of the homage and have never seen any of Eisenstein's films.[2]

Eisenstein important not only as a filmmaker, but as a writer and theorist who practiced his trade while also working out the theories that informed it. Because film is such an insistently visual medium, it doesn't often attract practitioners who are also excellent writers or dedicated theorists. Therefore, Eisenstein is important because he was an innovator in the medium itself, but was also the author of a number of insightful manifestos and poetics that influenced generations of filmmakers nearly as much as the images he captured on film.

---

[1] I still have to find the correct citation for first use of "montage" both as term and as technique. If I can't find it, the sentence should be re-written to reflect that Eisenstein is best known for perfecting and experimenting with different montage techniques, even though he didn't actually "invent" the process.

[2] For a very clear (and almost cheesy) example of this, see the Odessa Steps sequence with the baby carriage in Eisenstein's *Battleship Potemkin (1925)*, and then see the courthouse step sequence with the baby carriage in Brian DePalma's version of *The Untouchables* (1987).

I have included long selections from the early chapters in one of Eisenstein's works, *Film Form*. In these selections, Eisenstein discusses the different effects filmmakers can produce through a series of simple montage sequences. What Eisenstein says in this work in 1929 is true today, not only for filmmakers but most importantly for new media developers who wish to create similar montage-like image sequencing in their own works. I borrow from many of Eisenstein's ideas about editing and montage at the end of this chapter when we begin to establish a rhetoric for the use of motion, or film-like assembly, in new media work.

Film Form: Essays in Film Theory
By Sergei Eisenstein

Edited and translated by Jay Leyda
Harcourt, Brace & World, Inc © 1949, New York
Selections from Chapters 1,4, & 6

Selection I: Through Theater to Cinema

It is interesting to retrace the different paths of today's cinema workers to their creative beginnings, which together compose the multi-colored background of the Soviet cinema. In the early I920S we all came to the Soviet cinema as something not yet existent. We came upon no ready-built city; there were no squares, no streets laid out; not even little crooked lanes and blind alleys, such as we may find in the cinemetropolis of our day. We came like bedouins or gold-seekers to a place with unimaginably great possibilities, only a small section of which has even now been developed.

We pitched our tents and dragged into camp our experiences in varied fields. Private activities, accidental past professions, unguessed crafts, unsuspected eruditions-all were pooled and went into the building of something that had, as yet, no written traditions, no exact stylistic requirements, nor even formulated demands.

Without going too far into the theoretical debris of the specifics of cinema, I want here to discuss two of its features. These are features of other arts as well, but the film is particularly accountable to them. Primo: photo-fragments of nature are recorded; *secundo:* these fragments are combined in various ways. Thus, the shot (or frame), and thus, montage.

Photography is a system of reproduction to fix real events and elements of actuality. These reproductions, or photo-reflections, may be combined in various ways. Both as reflections and in the manner of their combination, they permit any degree of distortion—either technically unavoidable or deliberately calculated. The results fluctuate from exact naturalistic combinations of visual, interrelated experiences to complete alterations, arrangements unforeseen by nature, and even to abstract formalism, with remnants of reality.

The apparent arbitrariness of matter, in its relation to the status quo of nature, is much less arbitrary than it seems. The final order is inevitably determined, consciously or unconsciously, by the social premises of the maker of the film-composition. His class-determined tendency is the basis of what seems to be an arbitrary cinematographic relation to the object placed, or found, before the camera.

We should like to find in this two-fold process (the fragment and its relationships) a hint as to the specifics of cinema, but we cannot deny that this process is to be found in other art mediums, whether close to cinema or not (and which art is not close to cinema?). Nevertheless, it is possible to insist that these features are specific to the film, because film-specifics lie not in the process itself but in the degree to which these features are intensified.

The musician uses a scale of sounds; the painter, a scale of tones; the writer, a row of sounds and words- and these are all taken to an equal degree from nature. But the immutable fragment of actual reality in these cases is narrower and more neutral in meaning, and therefore more flexible in combination, so that when they are put together they lose all visible signs of being combined, appearing as one organic unit. A chord, or even three successive notes, seems to be an organic unit. Why should the combination of three pieces of film in montage be considered as a three-fold collision, as impulses of three successive images?

A blue tone is mixed with a red tone, and the result is thought of as violet, and not as a "double exposure" of red and blue. The same unity of word fragments makes all sorts of expressive variations possible. How easily three shades of meaning can be distinguished in language—for example: " a window without light," "a dark window," and "an unlit window."

Now try to express these various nuances in the composition of the frame. Is it at all possible?

If it is, then what complicated context will be needed in order to string the film-pieces onto the film-thread so that the black shape on the wall will begin to show either as a "dark" or as an "unlit" window? How much wit and ingenuity will be expended in order to reach an effect that words achieve so simply?

The frame is much less independently workable than the word or the sound. Therefore the mutual work of frame and montage is really an enlargement in scale of a process microscopically inherent in all arts. However, in the film this process is raised to such a degree that it seems to acquire a new quality.

The shot, considered as material for the purpose of composition, is more resistant than granite. This resistance is specific to it. The shot's tendency toward complete factual immutability is rooted in its nature. This resistance has largely determined the richness and variety of montage forms and styles—for montage becomes the mightiest means for a really important creative remolding of nature.

Thus the cinema is able, more than any other art, to disclose the process that goes on microscopically in all other arts.

The minimum "distortable" fragment of nature is the shot; ingenuity in its combinations is montage…

Selection II: A Dialectic Approach to Film Form

In nature we never see anything isolated, but everything in connection with something else which is before it, beside it, under it, and over it. GOETHE

According to Marx and Engels the dialectic system is only the conscious reproduction of the dialectic course (substance) of the external events of the world.

Thus:

The projection of the dialectic system of things
into the brain
into creating abstractly
into the process of thinking
yields: dialectic methods of thinking;
dialectic materialism—   PHILOSOPHY.

And also:

The projection of the same system of things
while creating concretely
while giving form
yields: ART.

The foundation for this philosophy is a *dynamic* concept of things:

Being—as a constant evolution from the interaction of two contradictory opposites.

Synthesis—arising from the opposition between thesis and antithesis.

A dynamic comprehension of things is also basic to the same degree, for a correct understanding of art and of all art-forms. In the realm of art this dialectic principle of dynamics is embodied in

CONFLICT

as the fundamental principle for the existence of every artwork and every art-form.

For art is always conflict:

(1) according to its social mission,
(2) according to its nature,
(3) according to its methodology.

According to its social mission *because:* It is art's task to make manifest the contradictions of Being. To form equitable views by stirring up contradictions within the spectator's mind, and to forge accurate intellectual concepts from the dynamic clash of opposing passions.

According to its nature *because:* Its nature is a conflict between natural existence and creative tendency. Between organic inertia and purposeful initiative. Hypertrophy of the purposive initiative—the principles of rational logic-ossifies art into mathematical technicalism. (A painted landscape becomes a topographical map, a painted Saint Sebastian becomes an anatomical chart.) Hypertrophy of organic naturalness of organic logic—dilutes art into formlessness. (A Malevich becomes a Kaulbach, an Archipenko becomes a waxworks side-show.)

Because the limit of organic form (the passive principle of being) is *Nature*. The limit of rational form (the active principle of production) is *Industry*. At the intersection of Nature and Industry stands *Art*.

The logic of organic form vs. the logic of rational form yields, in collision,

the dialectic of the art-form.

The interaction of the two produces and determines Dynamism. (Not only in the sense of a space-time continuum, but also in the field of absolute thinking. I also regard the inception of new concepts and viewpoints in the conflict between customary conception and particular representation as dynamic—as a dynamization of the inertia of perception—as a dynamization of the "traditional view" into a new one.)

The quantity of interval determines the pressure of the tension. (See in music, for example, the concept of intervals. There can be cases where the distance of separation is so wide that it leads to a break—to a collapse of the homogeneous concept of art. For instance, the "inaudibility" of certain intervals.)

> *The spatial form of this dynamism is expression.*
> *The phases of its tension: rhythm.*

This is true for every art-form, and, indeed, for every kind of expression.

Similarly, human expression is a conflict between conditioned and unconditioned reflexes. (In this I cannot agree with Klages, who, a) does not consider human expression dynamically as a process, but statically as a result, and who, b) attributes everything in motion to the field of the "soul," and only the hindering element to "reason." ["Reason" and "Soul" of the idealistic concept here correspond remotely with the ideas of conditioned and unconditioned reflexes.])

This is true in every field that can be understood as an art. For example, logical thought, considered as an art, shows the same dynamic mechanism:

> ... the intellectual lives of Plato or Dante or Spinoza or Newton were largely
> guided and sustained by their delight in the sheer beauty of the rhythmic
> relation between law and instance, species and individual, or cause and effect

This holds in other fields, as well, e.g., in speech, where all its sap, vitality, and dynamism arise from the irregularity of the part in relation to the laws of the system as a whole.
In contrast we can observe the sterility of expression in such artificial, totally regulated languages as Esperanto.

It is from this principle that the whole charm of poetry derives. Its rhythm arises as a conflict between the metric measure employed and the distribution of accents, over-riding this measure.

The concept of a formally static phenomenon as a dynamic function is dialectically imaged in the wise words of Goethe:

> *Die Baukunst ist eine ertarrte Musik.*
> (Architecture is frozen music.)

Just as in the case of a homogeneous ideology (a monistic viewpoint), the whole, as well as the least detail, must be penetrated by a sole principle. So, ranged alongside the conflict of *social conditionality,* and the conflict of *existing nature,* the *methodology* of an art reveals this same principle of conflict. As the basic principle of the rhythm to be created and the inception of the art-form.

Art is always conflict, according to its methodology.

Here we shall consider the general problem of art in the specific example of its highest form—film.

Shot and montage are the basic elements of cinema.

Montage

has been established by the Soviet film *as* the nerve of cinema.

To determine the nature of montage is to solve the specific problem of cinema. The earliest conscious film-makers, and our first film theoreticians, regarded montage as a means of description by placing single shots one after the other like building blocks. The movement within these

building-block shots, and the consequent length of the component pieces, was then considered as rhythm.

A completely false concept!

…montage is an idea that arises from the collision of independent shots-shots even opposite to one another: the "dramatic" principle.* ["epic" and "dramatic" are used here in regard to methodology of form—not to content or plot!]

A sophism? Certainly not. For we are seeking a definition of the whole nature, the principal style and spirit of cinema from its technical (optical) basis.

We know that the phenomenon of movement in film resides in the fact that two motionless images of a moving body, following one another, blend into an appearance of motion by showing them sequentially at a required speed.

This popularized description of what happens as a *blending* has its share of responsibility for the popular miscomprehension of the nature of montage…

Let us examine more exactly the course of the phenomenon we are discussing—how it really occurs—and draw our conclusion from this. Placed next to each other, two photographed immobile images result in the appearance of movement. Is this accurate? Pictorially—and phraseologically, yes.

But mechanically, it is not. For, in fact, each sequential element is perceived not *next* to the other, but on *top* of the other. For the idea (or sensation) of movement arises from the process of superimposing on the retained impression of the object's first position, a newly visible further position of the object. This is, by the way, the reason for the phenomenon of spatial depth, in the optical superimposition of two planes in stereoscopy. From the superimposition of two elements of the same dimension always arises a new, higher dimension. In the case of stereoscopy the superimposition of two nonidentical two-dimensionalities . results in stereoscopic three-dimensionality.

In another field, a concrete word (a denotation) set beside a concrete word yields an abstract concept—as in the Chinese and Japanese languages, where a material ideogram can indicate a transcendental (conceptual) result.

The incongruence in contour of the first picture-already impressed on the mind-with the subsequently perceived second picture engenders, in conflict, the feeling of motion. Degree of incongruence determines intensity of impression, and determines that tension which becomes the real element of authentic rhythm.

Here we have, temporally, what we see arising spatially on a graphic or painted plane.

What comprises the dynamic effect of a painting? The eye follows the direction of an element in the painting. It retains a visual impression, which then collides with the impression derived from following the direction of a second element. The conflict of these directions forms the dynamic effect in apprehending the whole…

Upon closer examination of the particular beauty of irregularity as employed in painting, whether by Grunewald or by Renoir, it will be seen that it is a disproportion in the relation of a detail in one dimension to another detail in a different dimension.

The spatial development of the relative size of one detail in correspondence with another, and the consequent collision between the proportions designed by the artist for that purpose, result in a characterization—a definition of the represented matter.

Finally, color. Any shade of a color imparts to our vision a given rhythm of vibration. This is not said figuratively, but purely physiologically, for colors are distinguished from one another by their number of light vibrations.

The adjacent shade or tone of color is in another rate of vibration. The counterpoint (conflict) of the two—the retained rate of vibration against the newly perceived one yields the dynamism of our apprehension of the interplay of color.

Hence, with only one step from visual vibrations to acoustic vibrations, we find ourselves in the field of music. From the domain of the spatial-pictorial—to the domain of the temporal-pictorial—where the same law rules. For counterpoint is to music not only a form of composition, but is altogether the basic factor for the possibility of tone perception and tone differentiation.

It may almost be said that in every case we have cited we have seen in operation the same *Principle of Comparison* that makes possible for us perception and definition in every field.

In the moving image (cinema) we have, so to speak, a synthesis of two counterpoints—the spatial counterpoint of graphic art, and the temporal counterpoint of music.

Within cinema, and characterizing it, occurs what may be described as:

visual counterpoint

In applying this concept to the film, we gain several leads to the problem of film grammar. As well as a *syntax* of film manifestations, in which visual counterpoint may determine a whole new system of forms of manifestation…

For all this, the *basic premise is:*

> *The shot is by no means an element o f montage.*
> *The shot is a montage cell (or molecule).*

In this formulation the dualistic division of

> Sub-title and shot
> And
> Shot and montage

leaps forward in analysis to a dialectic consideration as three different phases of one homogeneous task of expression, its homogeneous characteristics determining the homogeneity of their structural laws.

Inter-relation o f the three phases.

Conflict within a thesis (an abstract idea)—*formulates* itself in the dialectics of the sub-title—forms itself spatially in the conflict within the shot—and *explodes* with increasing intensity in montage-conflict among the separate shots.

This is fully analogous to human, psychological expression. This is a conflict of motives, which can also be comprehended in three phases:

1. Purely verbal utterance. Without intonation-expression in speech.

2. Gesticulatory (mimic-intonational) expression. Projection of the conflict onto the whole expressive bodily system of man. Gesture of bodily movement and gesture of intonation.

3. Projection of the conflict into space. With an intensification of motives, the zigzag of mimic expression is propelled into the surrounding space following the same formula of distortion. A zigzag of expression arising from the spatial division caused by man moving in space. *Mise-en-scene.*

This gives us the basis for an entirely new understanding of the problem of film form.

We can list, as examples of types of conflicts within the form-characteristic for the conflict within the shot, as well as for the conflict between colliding shots, or, montage:

1. Graphic conflict.
2. Conflict of planes .
3. Conflict of volumes .
4. Spatial conflict .
5. Light conflict.
6. Tempo conflict, and so on.

Nota bene: This list is of principal features, of *dominants*. It is naturally understood that they occur chiefly as complexes.

For a transition to montage, it will be sufficient to divide any example into two independent primary. pieces, as in the case of graphic conflict, although all other cases can be similarly divided:
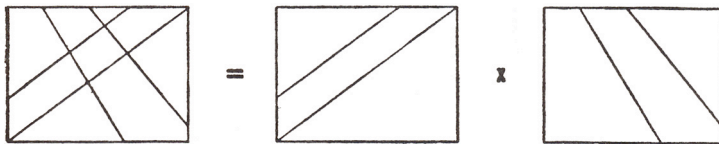
Some further examples:

7. Conflict between matter and viewpoint (achieved by spatial distortion through
      camera-angle) (see Figure 5).
8. Conflict between matter and its spatial nature (achieved by *optical distortion* by
      the lens).
9. Conflict between an event and its temporal nature (achieved by *slow-motion* and
      stop-motion)
and finally

10. Conflict between the whole *optical* complex and a quite different sphere.

Thus does conflict between optical and acoustical experience produce:

                              sound-film,

which is capable of being realized as

                              audio-visual counterpoint.

Formulation and investigation of the phenomenon of cinema as forms of conflict yield the first possibility of devising a homogeneous system of visual *dramaturgy* for all general and particular cases of the film problem.

Of devising a *dramaturgy o f the visual film-form* as regulated and precise as the existing *dramaturgy of the film-story.*

From this viewpoint on the film medium, the following forms and potentialities of style may be summed up as a film syntax, or it may be more exact to describe the following as:

a tentative film-syntax…

Selection III. Methods of Montage

In every art and every discovery, experience has always preceded precepts. In the course of time, a method has been assigned to the practice of the invention. GOLDONI

Is the method of overtonal montage unrelated to our previous experience, artificially grafted onto cinematography, or is it simply a quantitative accumulation of one attribute that makes a dialectic leap and begins to function as a new qualitative attribute?

In other words, is overtonal montage a dialectical stage of development within the development of the whole montage system of methods, standing in a successive relation to other forms of montage?

These are the formal categories of montage that we know:

I. *Metric Montage*

The fundamental criterion for this construction is the abso*lute lengths* of the pieces. The pieces are joined together according to their lengths, in a formula-scheme corresponding to a measure of music. Realization is in the repetition of these "measures."

Tension is obtained by the effect of mechanical acceleration by shortening the pieces while preserving the original proportions of the formula. Primitive of the method: three-quarter-time, march-time, waltz-time (3/4, 2/4, 1/4, etc.), used by Kuleshov; degeneration of the method: metric montage using a measure of complicated irregularity (16/17, 22/57, etc.).

Such a measure ceases to have a physiological effect, for it is contrary to the "law of simple numbers" (relationship). Simple relationships, giving a clarity of impression, are for this reason necessary for maximum effectiveness. They are therefore found in healthy classics of every field: architecture; the color in a painting; a complex composition by Scriabin (always crystal clear in the relations between its parts); geometrical *raises-en-scene;* precise state planning, etc.

A similar example may be found in Vertov's *Eleventh Year,* where the metric beat is mathematically so complex that it is only "with a ruler" that one can discover the proportional law that governs it. Not by *impression* as perceived, but by *measurement.*

I do not mean to imply that the beat should be recognizable as part of the perceived impression. On the contrary. Though unrecognized, it is nevertheless indispensable for the "organization" of the sensual impression. Its clarity can bring into unison the "pulsing" of the film and the "pulsing" of the audience. Without such a unison (obtainable by many means) there can be no contact between the two.

Over-complexity of the metric beat produces a chaos of impressions, instead of a distinct emotional tension.

A third use of metric montage lies between its two extremes of simplicity and complexity: alternating two varying piece-lengths according to two kinds of content within the pieces…

2. Rhythmic Montage

Here, in determining the lengths of the pieces, the content within the frame is a factor possessing equal rights to consideration.

Abstract determination of the piece-lengths gives way to a flexible relationship of the actual lengths. Here the actual length does not coincide with the mathematically determined length of the piece according to a metric formula. Here its practical length derives from the specifics of the piece, and from its planned length according to the structure of the sequence.
It is quite possible here to find cases of complete metric *identity* of the pieces and their rhythmic measures, obtained through a combination of the pieces according to their content.

Formal tension by acceleration is obtained here by shortening the pieces not only in accordance with the fundamental plan, but also by violating this plan. The most affective violation is by the introduction of material more intense in an easily distinguished tempo.

The "Odessa steps" sequence in *Potemkin is* a clear example of this. In this the rhythmic drum of the soldiers' feet as they descend the steps violates all metrical demands. Unsynchronized with the beat of the cutting, this drumming comes in *off-beat* each time, and the shot itself is entirely different in its solution with each of these appearances. The final pull of tension is supplied by the transfer from the rhythm of the descending feet to another rhythm-a new kind of downward movement-the next intensity level of the same activity-the baby-carriage rolling down the steps. The carriage functions as a directly progressing accelerator of the advancing feet. The stepping descent passes into a rolling descent…

3. Tonal Montage

This term is employed for *the first time*. It expresses a stage beyond rhythmic montage.

In rhythmic montage it is movement within the frame that impels the montage movement from frame to frame. Such movements within the frame may be of objects in motion, or of the spectator's eye directed along the lines of some immobile object.

In tonal montage, movement is perceived in a wider sense. The concept of movement embraces *all affects* of the montage piece. Here montage is based on the characteristic *emotional* sound of the piece-of its dominant. The general *tone* of the piece.

I do not mean to say that the emotional sound of the piece is to be measured "impressionistically." The piece's characteristics in this respect can be measured with as much exactitude as in the most elementary case of "by the ruler" measurement in metrical montage. But the units of measurement differ. And the amounts to be measured are different.

For example, the degree of light vibration in a piece cannot only be gauged by a selenium light-element, but every gradation of this vibration is perceptible to the naked eye. If we give the comparative and emotional designation of "more gloomy" to a piece, we can also find for the piece a mathematical co-efficient for its degree of illumination. This is a case of "light tonality." Or, if the piece is described as having a "shrill sound," it is possible to find, behind this description, the many acutely angled elements within the frame, in comparison with other shape-elements. This is a case of "graphic tonality."

Working with combinations of varying degrees of soft-focus or varying degrees of "shrillness" would be a typical use of tonal montage.

As 1 have said, this would be based on the *dominant* emotional sound of the pieces. An example: the "fog sequence" in *Potemkin* (preceding the mass mourning over the body of Vakulinchuk). Here the montage was based exclusively on the emotional "sound" of the pieces—on rhythmic vibrations that do not affect spatial alterations. In this example it is interesting that, alongside the basic tonal dominant, a

secondary, accessory *rhythmic* dominant is also operating. This links the tonal construction of the scene with the tradition of rhythmic montage, the furthest development of which is tonal montage. And, like rhythmic montage, this is also a special variation of metric montage.

This secondary dominant is expressed in barely perceptible changing movements: the agitation of the water; the slight rocking of the anchored vessels and buoys; the slowly ascending vapor; the sea-gulls settling gently onto the water.

Strictly speaking, these too are elements of a *tonal* order. These are movements that move according to tonal rather than to spatial-rhythmic characteristics. Here spatially immeasurable changes are combined according to their emotional sound. But the chief indicator for the assembly of the pieces was according to their basic element-optical light-vibrations (varying degrees of "haze" and "luminosity"). And the organization of these vibrations reveals a complete identity with a minor harmony in music. Moreover, this example furnishes a demonstration of consonance in combining movement as *change* and movement as *light-vibration…*

4. *Overtonal Montage*

In my opinion, overtonal montage…is organically the furthest development along the line of tonal montage. As I have indicated, it is distinguishable from tonal montage by the collective calculation of all the piece's appeals.

This characteristic steps up the impression from a melodically emotional coloring to a directly physiological perception. This, too, represents a level related to the preceding levels.

These four categories are *methods* of montage. They become montage *constructions* proper when they enter into relations of conflict with each other-as in the examples cited.

Within a scheme of mutual relations, echoing and conflicting with one another, they move to a more and more strongly defined type of montage, each one organically growing from the other.

Thus the transition from metrics to rhythmics came about in the conflict between the length of the shot and the movement within the frame.

Tonal montage grows out of the conflict between the rhythmic and tonal principles of the piece.

And finally—overtonal montage, from the conflict between the principal tone of the piece (its dominant) and the overtone.

These considerations provide, in the first place, an interesting criterion for the appreciation of montage-construction from a "pictorial" point of view. Pictorialism is here contrasted with "cinematicism," esthetic pictorialism with physiological reality.

To argue about the pictorialism of the film-shot is naive. This is typical of persons possessing a decent esthetic culture that has never been logically applied to films…The veriest novice in films would not think of analyzing the film-shot from an identical point of view with landscape painting.

The following may be observed as a criterion of the "pictorialism" of the montage-construction in the broadest sense: the conflict must be resolved *within* one or another category of montage, without allowing the conflict to be one of differing categories of montage.

Real cinematography begins only with the collision of various cinematic modifications of movement and vibration. For example, the "pictorial" conflict of figure and horizon (whether this is a conflict in statics or dynamics is unimportant). Or the alternation of differently lit pieces solely fro the viewpoint

of conflicting light-vibrations, or of a conflict between the form of an object and its illumination, etc.

We must also define what characterizes the affect of the various forms of montage on the psycho-physiological complex of the person on the perceiving end.

The first, metric category is characterized by a rude motive force. It is capable of impelling the spectator to reproduce the perceived action, outwardly. For example, the mowing contest in Old *and New is* cut in this way. The different pieces are "synonymous"—containing a single mowing movement from one side of the frame to the other; and I laughed when I saw the more impressionable members of the audience quietly rocking from side to side at an increasing rate of speed as the pieces were accelerated by shortening. The effect was the same as that of a percussion and brass band playing a simple march tune.

I have designated the second category as rhythmic. It might also be called primitive-emotive. Here the movement is more subtly calculated, for though emotion is also a result of movement, it is movement that is not merely primitive external change.

The third category—tonal—might also be called melodic-emotive. Here movement, already ceasing to be simple change in the second case, passes over distinctly into an emotive vibration of a still higher order.

The fourth category—a fresh flood of pure physiologism, as it were—echoes, in the highest degree of intensity, the first category, again acquiring a degree of intensification by direct motive force.

In music this is explained by the fact that, from the moment that overtones can be heard parallel with the basic sound, there also can be sensed vibrations, oscillations that cease to impress as tones, but rather as purely physical displacements of the perceived impression. This particularly refers to strongly pronounced timbre instruments with a great preponderance of the overtone principle. The sensation of physical displacement is sometimes also literally achieved: chimes, organ, very large Turkish drums, etc…

Thus, tone is a level of *rhythm…*

5. Intellectual Montage

Intellectual montage is montage not of generally physiological overtonal sounds, but of sounds and overtones of an intellectual sort: i.e., conflict-juxtaposition of accompanying intellectual affects.

The gradational quality is here determined by the fact that there is no difference in principle between the motion of a man rocking under the influence of elementary metric montage (see above) and the intellectual process within it, for the intellectual process is the same agitation, but in the dominion of the higher nerve-centers.

And if, in the cited instance, under the influence of "jazz montage," one's hands and knees rhythmically tremble, in the second case such a trembling, under the influence of a different degree of intellectual appeal, occurs in identically the same way through the tissues of the higher nerve systems of the thought apparatus.

Though, judged as "phenomena" (appearances), they seem in fact different, yet from the point of view of "essence" (process), they are undoubtedly identical.

Applying the experience of work along lower lines to categories of a higher order, this affords the possibility of carrying the attack into the very heart of things and phenomena. Thus, the fifth category is the intellectual overtone.

…The intellectual cinema will be that which resolves the conflict-juxtaposition of the physiological and intellectual overtones. Building a completely new form of cinematography—the realization of revolution in the general history of culture; building a synthesis of science, art, and class militancy

In my opinion, the question of the overtone is of vast significance for our film future. All the more attentively should we study its methodology and conduct investigation into it.

Moscow-London, Autumn 1929

The poetics Eisenstein proposed in 1929, while obviously heavily influenced by Marxist ideas of the time about political as well as pictorial dialectics, have served as the foundation for nearly all film editing since his time. His six forms of visual, dialectical conflict apply to not only film construction, but also the construction of any effective and persuasive presentation of motion on a screen.

To review, the first five of Eisenstein's forms of visual conflict through editing are:[3]

1. Graphic Conflict.
2. Conflict of Planes.
3. Conflict of Volumes.
4. Spatial Conflict.
5. Light Conflict.

These forms of visual conflict are then put to use through his five categories of montage: Metric, rhythmic, tonal, overtonal, and intellectual.

In the final section of this chapter I will expand on these elements in the construction of new media rhetoric of motion. A knowledge of how these elements can be combined to create not only persuasive motion itself, but also a "sense" of motion from static elements is very useful for new media production.

---

[3] I will note here that the other 5---6-10, are actually refinements on the first 5 ideas, which are useful for film, but which do not hold as much relevance for new media production, at least not for now.

Eisenstein's montage techniques are poetics still commonly used by modern directors, possibly without such a consciously theoretical approach, but certainly with some of the same political intention. For example, Oliver Stone uses nearly every one of Eisenstein's concepts of visual conflict in the nighttime attack sequence in *Platoon* (1986), and in the hyperkinetic dream sequences in *Natural Born Killers* (1994), both intended to also represent a sense of helplessness of characters trapped in insane systems larger and vastly more powerful than themselves (foot soldiers trapped in the insanity of Vietnam, and the powerless underclass trapped beneath a corrupt power system that only "respects" violence and how it is glorified through media culture). Steven Spielberg makes use the Eisenstein's conflicts of planes, volumes and light, intercut through a metric montage (timed to a military march) to create a sense of terror, chaos and dread in D-Day beach sequence in *Saving Private Ryan* (1999).

In a very basic sense, tonal and overtonal montage techniques, combined with music and matched to rhythmic montage, is apparent in any current music video and in most high-end television commercials such as those from Nike, BMW, and Microsoft. These effects are quite prominent in commercials that link a positive idea or mood with a company image instead simply attempting to create a "need" for a specific new-and-improved widget. The editors of television commercials are especially aware of the political and persuasive power behind the combination of images in a dialectical montage, using Eisenstein's techniques to perfection in a way that would also certainly horrify Eisenstein by how his techniques are now being used to feed and support the very capitalist systems that most his film and life work attempted to discredit and destroy.