

Antonio Somaini

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The Screen as “Battleground”: Eisenstein’s “Dynamic Square” and the Plasticity of the Projection Format

Antonio Somaini

The question of the relations between the three concepts of format, medium, and *dispositif* is raised by different, pre- and post-digital ways of understanding the term “format.” If we focus in particular on the history of cinema, we can study the relation between these three terms by referring to at least three different meanings of “format,” indicating, respectively, the size of the photosensitive area of a frame within a celluloid film (8mm, 16mm, 35mm, 70mm, etc.), the aspect ratio of a projected image, and the way in which a digital moving image file is encoded for storage, processing, transmission and display, often through some kind of compression. In all three cases, what emerges is the close link between the concepts of “format” and “form”: more precisely, between “format” and the process of “giving a standardized form” (in the sense of “formatting”) to visual phenomena by capturing, storing, and organizing them through specific material supports, procedures, and techniques that will condition the way they will become visible again through some kind of visual or audiovisual *dispositif*.

Jonathan Sterne’s (2012, 8) definition of the format as “what specifies the protocols by which a medium will operate”, originally formulated in the context of a study on the history of the audio MP3 format, may also apply to the three meanings of format we just mentioned. The size of the photosensitive area of a frame within a celluloid film, the aspect ratio of a projected image, and the encoding of a digital image file define

indeed some of the “protocols” according to which the medium of cinema operates, by conditioning its storage, processing, transmission, and display possibilities. Interpreted in this sense, the term format does not coincide with and may not be subsumed under the older notions of medium and *dispositif*. The three terms indicate three different levels that interact and intersect with one another without ever coinciding, and their history, etymology, and connotations are significantly different. The notion of “medium,” for example, has a history within which different meanings and different genealogical lines interweave and intersect with one another. In it, we find not only the meanings of “medium” that emerged during the 1920s and 1930s—the medium as a means of mass communication (as in the expression “mass media”) or as a set of supports, techniques, and procedures defining the specificity of some artistic practice (as in the expression “the medium of painting”)—but also older understandings of “medium,” such as the medium as a person or object acting as an intermediary between the realms of the living and the dead, as in the tradition of Spiritism or as a sensible environment, atmosphere, *milieu*, or *Umwelt* defining the conditions of sensory perception: a meaning that reaches back to Aristotle’s notion of *metaxy* in his treatise *De Anima* and that reappears again in a series of contemporary studies on the material, environmental, and elemental dimensions of media.¹

In this essay, I will study the relations between format, medium, and *dispositif* taking as a reference point a text that tackles the question of format (both in the sense of the photosensitive area of the frame within a celluloid film and in the sense of the aspect ratio of a projected image) from a point of view that is at the same time figurative, perceptual, psychological, anthropological, art-historical, and, we could say today, media-archaeological. The text, well known within the field of film studies, is entitled “The Dynamic Square,” and was written by a film director, Sergei Eisenstein, who throughout his artistic and intellectual trajectory never ceased to explore the potential of the new techniques, formats, and *dispositifs* that were transforming the cinematic medium, such as sound, color, widescreen, and stereoscopic cinema. Eisenstein did not have the possibility to experiment with this last technology but nevertheless took it as the object of a long essay, “On Stereocinema,” written in 1947 at the end of his life (Eisenstein 2013).

1 For a brief history of the concept of “medium” interpreted as sensible environment, atmosphere, *milieu*, or *Umwelt*, with a focus on Walter Benjamin’s writings, see Somaini 2016. An example of the current relevance of this tradition for contemporary media theory can be found in Peters 2015.

“The Dynamic Square” is the title of a lecture given by Eisenstein at a meeting organized by the Technicians Branch of the Academy of Motion Pictures Arts and Sciences in Hollywood on September 17, 1930. After having left the Soviet Union in the summer of 1929 and travelled across Europe—visiting cities such as Berlin, Zürich, London, and Paris, where he entered into contact with film directors such as Jean Painlevé and the group of “dissident” Surrealists who had distanced themselves from André Breton in order to join Georges Bataille and his journal *Documents*²—Eisenstein arrived in the United States in the month of May 1930 together with his two close collaborators, the assistant Grigori Aleksandrov and the camera operator Eduard Tisse. Aleksandrov and Tisse had worked with him on all the films realized during the 1920s—*Strike* (1924-25), *Battleship Potemkin* (1925), *October* (1927-28), and *The General Line* (1926-29)—and would accompany him across Mexico, between December 1930 and March 1932, to work on another film project destined to remain unfinished, *Que viva Mexico!*.

After a few weeks spent on the East Coast, during the summer of 1930 Eisenstein settled in California, where, thanks to the mediation of the producer Jesse L. Lasky, he signed a contract with Paramount Pictures. None of the film projects Eisenstein worked on while under contract—*An American Tragedy*, from a 1925 novel by Theodore Dreiser; *Glass House*, a dystopian film set in an entirely transparent building reminiscent of the most ambitious projects of glass architecture developed during the 1920s;³ *Sutter's Gold*, based on the novel *L'Or: La merveilleuse histoire du général Johann August Suter* (1925) by Blaise Cendrars—was developed beyond the stage of a script accompanied by drawings, and the contract itself was ceased by mutual consent in October 1930.

Even though the collaboration with Paramount didn't lead to any actual film being realized, the encounter with the Hollywood studio system led Eisenstein to face a number of technical transformations which were taking place at the end of the 1920s, such as the introduction of various wide-screen formats, the competition between them, and the drive towards standardization. Since the second half of the 1920s, a number of wide-screen formats (based either on wide film or on wide-projection formats, sometimes using anamorphic distortions) had been gradually introduced. Natural Vision, developed by George K. Spoor and P. John Berggren, was a

2 On Eisenstein's six months in Paris between November 1929 and May 1930, see Rebecchi 2018.

3 Eisenstein's notes and drawings for the unrealized film project *Glass House* have been published in French translation in Eisenstein 2009. On *Glass House*, see Somaini 2017.

process using 63.5mm film, a 1.84 negative aspect ratio, and a 2:1 projection aspect ratio (a/r, from now on), which was used for the first time in 1926 for a film on the Niagara Falls and then in 1927 for J. Stuart Blackton's film *The American*, also known as *The Flag Maker*. Fox Grandeur, developed by Fox Film Corporation in 1929, used 70mm film, a 2.07:1 negative a/r, and a 2:1 projection a/r. Vitascope, developed by United Artists in 1930, used 65mm film, a 2:1 negative a/r, and a 2.05:1 projection a/r. And Magnafilm, developed by United Artists, used 70mm film. In 1930, RKO Radio Pictures developed another kind of Natural Vision, this time using 65mm film. Finally, if we limit ourselves to the main widescreen formats developed before Eisenstein's lecture, there was Realife, developed by MGM, which used 70mm film, a 2.07:1 negative a/r, and a 1.75:1 projection a/r.

The memorandum distributed before the meeting organized by the Technicians Branch of the Academy of Motion Pictures Arts and Sciences did not mention specifically any of these widescreen formats, but rather a broader idea of "Wide Film and Wide Screen formats" with aspect ratios of 3:4, 3:5, and 3:6 (Eisenstein 2010b, 206). The aim of the meeting was to evaluate these different horizontal formats, both in aesthetic and in technical terms, in the effort to reach some kind of consensus among technicians and producers leading eventually to some kind of standardization. One of the authors mentioned in the memorandum, Loyd A. Jones, pleaded in favor of wide, horizontal formats based on what he considered to be a prevalence of the horizontal format in the history of painting: his contribution was accompanied by a series of statistical considerations, mainly based on pre-Impressionist landscape paintings, according to which the dominant ratio of base to altitude in the history of painting was 1:1.5 (Jones 1930).

In opening section of his lecture, Eisenstein positions himself immediately against any form of standardized, normative approach to projection formats, stating that "by not devoting enough attention to this problem, and by permitting the standardisation of a new screen shape without the thorough weighing of all the pros and cons of the question, we risk paralysing once more, for years and years to come, our compositional efforts in new shapes as unfortunately chosen as those from which the practical realisation of the Wide Film and the Wide Screen now seems to give us the opportunity of freeing ourselves" (Eisenstein 2010b, 206). His plea in favor of the widest freedom in spatial frame composition is followed by the concrete proposal of a "dynamic square," a square film format that would be *dynamic* in the sense that it could produce different projection formats at any stage during the screening of a film, exploring—through

manipulations during filming or editing that would mask “a part of the shape of the film square, the frame” (Eisenstein 2010b, 209)—the whole range of smaller squares and vertical or horizontal rectangles that are contained within the initial, basic square.

The plasticity of this square film format, according to Eisenstein, would allow the medium of cinema to adapt to the multiple spaces, objects, and shapes that could be represented within a film, opening up a maximum degree of freedom in spatial and figurative composition, without privileging either the horizontal dimension or the vertical one. Following a conflictual and dialectical approach to film form that he had developed at the end of the 1920s (in particular in “The Dramaturgy of Film Form,” written in 1929 and meant to be published in the catalogue of the exhibition *Film und Foto* in Stuttgart⁴), Eisenstein sees in the “dynamic square” a flexible screen shape capable of visualizing the contrasts between “vertical and horizontal tendencies” that can be found in the visible world and that—through a kind of empathic experience of space that had been theorized in the field of art history by figures such as August Schmarsow and Heinrich Wölfflin⁵—become psychological contrasts in the spectator. As we read in “The Dynamic Square”:

In the forms of nature as in the forms of industry, and in the mutual encounter between these forms, we find the struggle, the conflict between both tendencies. And the screen—as a faithful mirror, not only of conflicts emotional and tragic, but equally of conflicts psychological and optically spatial—must be an appropriate battleground for the skirmishes of both these optical-by-view, but profoundly psychological-by-meaning, spatial tendencies on the part of the spectator. (Eisenstein 2010b, 208)

The only screen shape that can allow these horizontal and vertical tendencies to unleash all their expressive and dialectic potential, according to Eisenstein, is the square, the “dynamic square”:

The battlefield for such a struggle is easily found—it is the square. . . . The one and only form that is equally fit, by alternately suppressing right and left or up and down, to embrace all the multitude of

4 An English translation of this text, originally written by Eisenstein in German, can be found in Eisenstein 2010a.

5 On the presence of the question of empathy in German theories of architecture between the end of the 19th and the beginning of the 20th century, see Mallgrave and Ikonomidou 1994 (which contains also an English translation of August Schmarsow’s “Das Wesen der architektonischen Schöpfung,” 1894).

expressive rectangles in the world. Or used as a whole to engrave itself by the 'cosmic' imperturbability of its *squareness* in the psychology of the audience.

And this specially in a *dynamic* succession of *dimensions* from a tiny square in the center to the all-embracing full-sized square of the whole screen!

The dynamic square screen, that is to say one providing in its dimensions the opportunity of impressing, in projection, with absolute grandeur every geometrically conceivable form of the picture limit. (Eisenstein 2010b, 208–209)

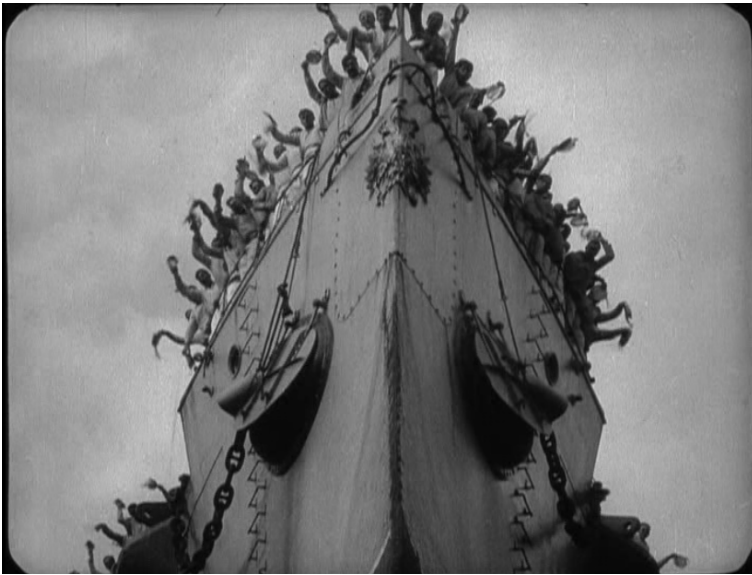
In *Battleship Potemkin*, Eisenstein had experimented with such a possibility in the scenes of the mass pilgrimage, across the city and the port of Odessa, toward the little tent on the dock hosting the body of the deceased sailor Vakulinchuk, one of the protagonists of the mutiny (fig. 1).



[Figure 1] Still from *Battleship Potemkin* (1925).

This experiment, as Eisenstein recalls in "The Dynamic Square," had been limited and insufficient, since the masking of the two lateral portions of the horizontal frame had produced indeed "an upright standing strip" but had not broken really with the dominant, horizontal format. "The *vertical spirit*," writes Eisenstein, "can never be attained in this way: first, because the occupied space comparative to the horizontal masked space will never

be interpreted as something *axially opposed to it*, but always *as a part* of the latter, and, second, because in *never surpassing the height* that is bound to the horizontal dominant, it will never impress as an opposite space axis, the one of uprightness” (Eisenstein 2010b, 209). In one of the sections of his unfinished book *Nonindifferent Nature* (1939–45), Eisenstein recalls how for the premiere of the film in Moscow he had imagined a more daring solution, which would have emphasized even more the plasticity of the screen. At the end of the projection, as the gigantic stern of the battleship comes closer and closer to the spectators sitting in the movie theater (fig. 2), the screen was supposed to be suddenly torn by a real stern, onto which some of the real sailors of the Battleship Potemkin in 1905 would have stood in front of the audience, a sudden breach out of the space of representation into the space of the spectator.⁶ Eisenstein had found numerous examples of this in Kabuki theater, where a long, raised platform called *hanamichi* cuts across the space of the audience and is used for the main character’s entrances and exits (fig. 3).



[Figure 2] Still from *Battleship Potemkin* (1925).

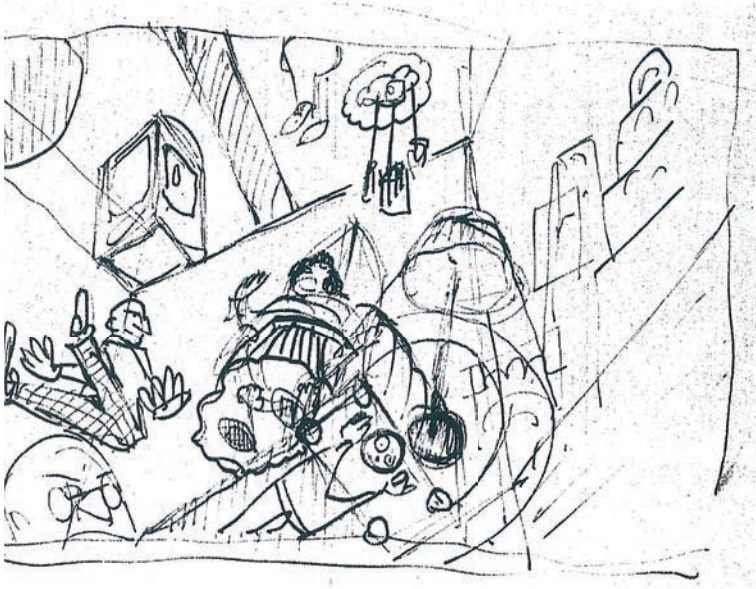
6 A description of this idea, which was not carried out, can be found in Eisenstein 1987, 33–34.



[Figure 3] *Hanamichi* stage at National Theatre of Japan. Source: Nesnad / Wikimedia Commons (CC BY 4.0 license).

One of the unrealized projects Eisenstein worked on first in Berlin in 1926 and then while under contract with Paramount in 1930, *Glass House*, was specifically conceived as an experiment in spatial frame composition. Meant to be staged and filmed within a completely transparent space, *Glass House* was characterized by a camera that could see through glass walls, ceilings, and pavements (fig. 4). Initially unaware of this transparency, the protagonists of *Glass House* would have suddenly perceived it, turning the space of the house into a dystopian environment of relentless optical surveillance. In this way, the film staged a double, aesthetic and political experiment, exploring the figurative potential of glass as a transparent material and analyzing the consequences of a social life unfolding in a condition of total transparency.

During the 1920s, the widespread use of the technique of masking (including the particular cases of the iris shot, the counter matte or *cache/contre-cache*, and the split-screen) are the sign of a shared need to overcome the rigidity of the standardized 1:1.33 aspect ratio of silent films in order to explore a whole new range of expressive possibilities. The different types of masking allowed film directors to reframe the image, for example by giving it a circular or oval form surrounded by a black halo, thereby evoking the opening of the eye or the view through a hole or



[Figure 4] Eisenstein's sketch for *Glass House*. Source: Eisenstein 2009.



[Figure 5 a-d] Stills from *Der müde Tod* (1921) with masking in various shapes and formats.



[Figure 6] Still from *Der müde Tod* (1921)

through a lens, with all the aesthetic and psychological connotations that this reframing of vision might entail.

Among the many examples we could mention within the cinema of the 1920s, Fritz Lang's *Der müde Tod* [*Destiny*] (1921) shows us how the technique of masking could be used for different kinds of circular, oval, rectangular, or even triangular reframing (fig. 5). Lang introduced a reframing that architectural forms, such as ogival arches and circular openings (fig. 6), often create with their dark walls producing the effects of masking. In the film, these various kinds of reframing end up *compressing* the visible space, by surrounding it with areas of shade and black which seem to symbolize the haunting presence of death, the central theme of the film.⁷

Many other examples of variable projection formats might be mentioned, such as the triple-screen projection (later renamed "Polyvision") with which Abel Gance experimented in the final section of his monumental *Napoléon* (1927). At the moment in the narrative when the film shows Napoleon's invasion of Italy, the single-screen projection, with its 1:1.33 aspect ratio, suddenly turns into a tryptich with an astounding aspect ratio of 1:4.00: a wide projection format that allows Gance to explore a


7 For an interesting analysis of Fritz Lang's use of different kind of maskings in *Der müde Tod*, see Kuo 2018, 286-291.



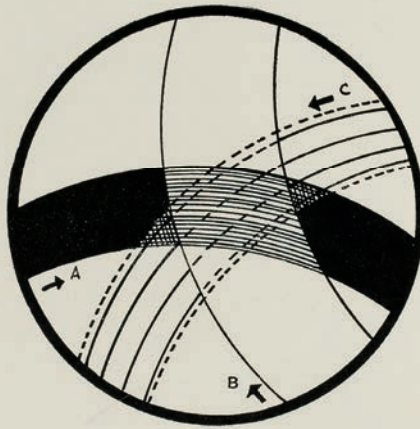
[Figure 7] Three stills from *Napoléon* (1927).

whole series variations in frame composition (fig. 7). László Moholy-Nagy mentions Gance's *Napoléon* in the second edition of his *Malerei Fotografie Film (Painting Photography Film)*, published in 1927, in which he dedicates a chapter to what he calls, in German, “Das simultane oder Polykino,” the “simultaneous cinema” or “polycinema,” a new cinematic *dispositif* consisting in a semi-spherical, concave screen onto which several films could be projected at the same time. In his book Moholy-Nagy presents a diagram (fig. 8) of what he considered to be an example of how one could approach the cinematic *dispositif* in a “productive” way, “productive” in the sense of creative, unconventional, unprecedented, and according to a general vision of artistic practice as a “productive,” sensory-enhancing approach to media such as painting, photography, film, typography, and radio that Moholy-Nagy theorizes throughout his book. The diagram is accompanied by a concrete demonstration of how three films could be projected at the same time, overlapping onto one another within the semi-spherical screen of the Polykino:

From left to right runs the film of Mister A: birth, life story. From bottom to top runs the film of Madam B: birth, life story. The projection surfaces of the two films intersect one another: love, marriage, etc. The two films can then either intersect each other, through overlapping sequences of events, or run parallel to one another; or, a new, common

Um recht deutlich zu werden, teile ich eine schematische Skizze mit 

Von links nach rechts läuft der Film des Herrn A: Geburt, Lebenslauf. Von unten nach oben läuft der Film der Dame B: Geburt, Lebenslauf. Die Projektionsflächen der beiden Filme schneiden sich: Liebe, Ehe usw. Die beiden Filme können dann entweder sich kreuzend, in durchscheinenden Geschehnisfolgen oder parallel nebeneinander weiterlaufen; oder es kann ein neuer gemeinsamer Film der beiden Personen an die Stelle der beiden ersten treten. Als dritter bzw. vierter Film könnte der Film des Herrn C gleichzeitig mit den Vorgängen A und B von oben nach unten oder von rechts nach links oder auch in anderer Richtung laufen, bis er die anderen Filme sinngemäß schneiden bzw. decken kann, usw.



Ein solches Schema wird natürlich für ungegenständliche Lichtprojektionen in der Art der Fotogramme ebenso geeignet, wenn nicht geeigneter sein. Mit Ein-

[Figure 8] "Polycinema" projection diagram. Source: Moholy-Nagy 1927.

film of the two persons might step in and replace the two previous ones. As a third or fourth film there could be the film of Mister C, which could run at the same time as the events unfolding in the films A and B, moving from top to bottom or from right to left, or in any other direction, until it would cross paths in a meaningful way with the other films, by intersecting them, being superimposed onto them, etc. (Moholy-Nagy 1927, 40, our translation)

Eisenstein's lecture on the "dynamic square" comes, therefore, at the end of a decade that had seen many experiments on the format of image projection: through masking, multi-screen dispositives, and variations on the shape and size of the screen itself. Well aware of all these experiments, Eisenstein presents us with a unique example of how the question of the projection format and of its relationship with cinema as a medium and a *dispositif* might be tackled from a series of different points of view: figurative, perceptual, psychological, anthropological, art-historical, and media-archaeological.

Figurative, to begin with, because Eisenstein emphasizes the fact that only a dynamic projection format may enhance "the figurative potential of the screen" and therefore allow a reconsideration of "the whole aesthetic of figurative composition in cinema which for thirty years has been rendered inflexible by the inflexibility of the proportions of a screen frame determined inflexibly once and for all" (Eisenstein 2010b, 206). The "dynamic square" may in fact adapt to the wide variety of horizontal and vertical forms that can be found in the profilmic space, both in natural landscapes and in man-made, built environments. Many of these forms, he writes, "have been banished from the screen until today" (Eisenstein 2010b, 209). Among them we find vertical forms: "Glimpses along winding medieval streets or of huge Gothic cathedrals overwhelming them. Or these replaced by minarets if the town portrayed should happen to be oriental. Decent shots of totem poles, the Paramount building in New York, Primo Carnera, or the profound and abysmal canyons of Wall Street in all their expressiveness" (Eisenstein 2010b, 209). We also find horizontal forms, such as the infinite horizons, fields, plains and deserts of "the Death Valley" (Eisenstein 2010b, 208), a landscape that Eisenstein would soon find again in Mexico, in the wide open fields of agave that we see in the images shot for the episode "Maguey" of *Que viva Mexico!*.

Perceptual, then, because only the "dynamic square" projection format seems to respond, according to Eisenstein, to both the *horizontal* and *vertical* dimensions of human visual experience, without privileging exclusively the lateral vision through a kind of "passive horizontalism" (Eisenstein 2010b, 207).

Psychological, since the "dynamic square," with its unstable format, may become "a gigantic new agent of impression" onto the mind and the body of the spectator, opening up, through "the rhythmic assemblage of varied screen shapes" (Eisenstein 2010b, 218), new possibilities within that constant search for expressive means capable of influencing the spectator

that characterizes Eisenstein's entire theoretical reflection: from the early essays on the "expressive movement" of the actor and on the "montage of attractions" to the late writings on "pathos," "ecstasy," and the "regression" toward "pre-logical," "sensorial," "archaic" forms of thought and expression that we find in unfinished book projects such as *Nonindifferent Nature* (1939–45) and *Method* (1932–48).⁸

Anthropological, since the to-and-fro between vertical and horizontal views allowed by the "dynamic square" leads the spectator to reexperience the transition from horizontal to vertical life forms that, according to Eisenstein, characterizes both the development of the single human individual and the development of entire societies, according to a vision of history based on the parallelism between ontogenesis and phylogenesis, which appears throughout Eisenstein's late writings. As he writes in "The Dynamic Square,"

We started as worms creeping on our stomachs. Then we ran horizontally for hundreds of years on our four legs. But we only became something like mankind from the moment when we hoisted ourselves on to our hind legs and assumed the vertical position. Repeating the same process locally in the verticalisation of our facial angle too. (Eisenstein 2010b, 207)

This gradual drive towards the vertical dimension, though, did not lead for him to a disappearance of the previous, horizontal forms of perception, both at the individual and at the societal level:

In the heart of the super-industrialised American, or the busily self-industrialising Russian, there still remains a nostalgia for infinite horizons, fields, plains, and deserts. . . . An individual nation achieves the height of mechanisation yet marries it to our peasant and farmer of yesteryear. The nostalgia of "big trails," "fighting caravans," "covered wagons" and the endless breadth of "old man rivers." . . . This nostalgia cries out for horizontal space. (Eisenstein 2010b, 208)

Art-historical, since the "dynamic square" allows cinema to refer to the various horizontal and vertical composition formats that can be found throughout the history of the arts, not only in the West but also in the East. In his text Eisenstein mentions—referring once more to that Japanese cultural and artistic tradition he had been interested in since the early

8 For a partial translation of the texts that Eisenstein had written for the book project entitled *Method*, see Eisenstein 2017. On the idea of "sensorial thinking", one of the core ideas of Eisenstein's unfinished book, see Vogman 2018.

1920s—the *makimono* and *kakemono*, the horizontal and vertical scroll paintings produced within a figurative culture that did not adopt any kind of rigid framing nor privilege the horizontal format, as one could see, for example, in the variable shapes of the *ukiyo-e* woodblock prints of Hokusai’s series *One Hundred Views of Mount Fuji*, for example *Mount Fuji Seen Through a Spider Web* (fig. 9).



[Figure 9] *Mount Fuji Seen Through a Spider Web*, woodblock print by Hokusai (ca. 1849).

Source: Smithsonian Libraries.

Media-archaeological, finally, because the plastic, malleable, unstable projection format that Eisenstein suggests with his “dynamic square” is a way of acknowledging the fact that cinema, rather than having any kind of medium-specificity that isolates it from other moving-image and projected-image media, is firmly rooted within the *longue durée* of a whole series of forms of light and image projection, each of which produced different kinds of formats. In his notes for a “general history of cinema”—an unfinished book project that Eisenstein developed during the last two years of his life, between 1946 and 1948⁹—the media-archaeological dimension that pervades much of Eisenstein’s writings of the 1930s and 1940s comes to the foreground, and it is here that we find the idea that filmic projections are part of a history to which belong the light filtered through the stained-glass windows of the Gothic cathedrals and producing different color light plays through the space of the nave and onto the interior walls, the light projections of magic lanterns and phantasmagorias, the various traditions of shadow theater and shadow projections (the Javanese *Wayang* and the Turkish *karagöz*), the projected light of the Dioramas, Løie Fuller’s light shows, the revolving lighthouse on the Palais de l’Industrie in 1889 and the centuries-long tradition of fireworks. According to Eisenstein, in the projection of a film into a movie theater, one can feel the echo of these various traditions of image projection, thereby refusing to accept any standardized, normative projection format.

This media-archaeological dimension of Eisenstein’s essay leads us to draw a series of conclusions concerning how the relation between format, medium, and *dispositif* emerges from his idea of the screen as a “dynamic square.” Rather than being confined within the perimeter of some kind of medium specificity, cinema is for him a medium that is firmly located within a wide network of media that constantly remediate each other, interweaving with one another throughout the course of history. Cinema’s *dispositif* is not a fixed set of elements deployed in space according to a stable configuration, but rather a *dispositif* that never stops transforming in time. The first experiments of stereoscopic cinema carried out during the 1940s in the United States and the Soviet Union, for example, were considered by Eisenstein as a form of extending the process of montage from the flat space of the screen to the entire volume of the movie theater, impacting much more directly the bodies and the senses of the spectators. The idea of a malleable, flexible projection format that is synthesized with the expression “dynamic square” is fully coherent with such an open vision of the cinematic medium and the cinematic *dispositif*, and directly linked

9 See Eisenstein 2016.

to Eisenstein’s belief in the limitless potential of montage. His idea of the “dynamic square” envisioned the screen as a “battleground” through which “the magic force that is montage” could open up “an entirely new era of constructive possibilities” (Eisenstein 2010b, 215).

References

- Eisenstein, Sergei. 1987. *Nonindifferent Nature*. Translated by Herbert Marshall. Cambridge: Cambridge University Press.
- . 2009. *Glass House*. Edited by Alexandre Laumonier. Dijon: Les Presses du Réel.
- . 2010a. “The Dramaturgy of Film Form (The Dialectical Approach to Film Form)” [1929]. In Sergei Eisenstein, *Writings, 1922–1934. Selected Works Volume 1*, edited and translated by Richard Taylor, 161–80. London: I.B. Tauris.
- . 2010b. “The Dynamic Square” [1930]. In Sergei Eisenstein, *Writings, 1922–1934. Selected Works Volume 1*, edited and translated by Richard Taylor, 206–18. London: I.B. Tauris.
- . 2013. “On Stereocinema” [1947]. In *3D Cinema and Beyond*, edited by Dan Adler, Janine Marchessault, and Sanja Obradovic, 20–59. Toronto: Public Books and Intellect.
- . 2016. *Notes for a General History of Cinema*. Edited by Naum Kleiman and Antonio Somaini. Amsterdam: Amsterdam University Press.
- . 2017. *The Primal Phenomenon: Art*. Edited by Oksana Bulgakowa and Dietmar Hochmuth. Translated by Dustin Condren. Berlin: PotemkinPress.
- Jones, Loyd A. 1930. “Rectangle Proportions in Pictorial Composition.” *Journal of the Society of Motion Picture Engineers* 14 (1): 32–49.
- Kuo, Li-chen. 2018. *Le noir comme invention du cinéma: matière, forme, dispositif*. PhD dissertation. Paris: Université Sorbonne Nouvelle Paris 3.
- Mallgrave, Harry Francis, and Ikonomou, Eleftherios, eds. 1994. *Empathy, Form, and Space: Problems in German Aesthetics, 1873–1893*. Santa Monica: The Getty Center for the History of Art and the Humanities.
- Moholy-Nagy, László. 1927. *Malerei Fotografie Film*. Munich: Albert Langen.
- Peters, John Durham. 2015. *The Marvelous Clouds: Toward a Philosophy of Elemental Media*. Chicago: The University of Chicago Press.
- Rebecchi, Marie. 2018. *Paris 1929: Eisenstein, Bataille, Buñuel*. Milan: Mimésis.
- Somaini, Antonio. 2016. “Walter Benjamin’s Media Theory: The *Medium* and the *Apparat*.” *Grey Room* 62 (Winter 2016): 6–41.
- . 2017. *La Glass House de Sergueï Eisenstein*. Paris: Éditions B2.
- Sterne, Jonathan. 2012. *MP3: The Meaning of a Format*. Durham, NC: Duke University Press.
- Vogman, Elena. 2018. *Sinnliches Denken: Eisensteins exzentrische Methode*. Berlin: Diaphanes.