Back in Focus. Cinematic Architecture Beyond Spatial Montage

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Intention

We live in a world dominated by movement, one which has shifted its institutions from space-centered to time-centered. Speed, information, and time have become the main elements of a technological society for which the notion of "space" does not necessarily include physical attributes. The need for physical space manifested by the pre-informational society has been replaced by the necessity of informational and virtual space.

Architecture, still appearing to be "one of the last modes of thought based on the inert"², has lost its elemental role as a space maker; one reason might be found in its lack of responsiveness to contemporary conditions of speed and movement. According to Senagala, "architecture of space became impotent... while architecture of time is becoming increasingly significant."³

Encroached in inertia and diminished in importance, architecture exists as background, a condition that endorses its public reception in a state of distraction rather than awareness. Decades ago, Walter Benjamin declared the inescapable condition of architecture to be received by public in a state of casual noticing. In Benjamin's equation, the reason behind architecture's downgrading to the status of background was the public's incessant desire for seeking distraction. ⁴

By comparison, film, collectively experienced, had the predisposition to be received in a state of awareness, due to its shocking effects. Vidler's later take on the issue of architectural reception also articulated the importance of the collective in the reception of architecture; if architecture would have the power to shock, just like the film does, then its public would receive it in a state of awareness.⁵

This thesis challenges contemporary architectural stasis and its unquestioned reliance on Euclidian space. Instead, it advances a model of design based on dynamism and temporality which would be connected to the contemporary time-centered culture. Such a time-based architecture relates to film, itself a form of art unfolding in time as a continuum section. Film can inform an approach to architectural design based on concepts of dynamism, for film is an art of time and movement.

An assumption of this study is the link between architecture's inertia and its inability to transcend its background condition. Within a static familiar architecture, introducing elements of dynamism inspired by film has the potential to shock, creating what Breton and the school of psychoanalysis labeled as "dislocations" – the "displacement of things and persons from their own space and own time, from their own relative dimensions and public values."

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This thesis redefines the term cinematic architecture, challenging its sole association with spatial sequence. In architectural theory and practice, the reference to film has consistently revolved around notions like montage and sequence. The term cinematic architecture gained its connotations via the works of Eisenstein - the guru of Russian montage - and the works of Tschumi, who admittedly employed filmic montage principles in the design of La Villete. The following thesis advances a new definition of cinematic that possibilities includes film's multiple manipulate time and space, its power to create dream state, as well as its quality to allude to worlds outside the frame of the screen.

The dynamic cinematic architecture advanced by the following thesis challenges the spatial-temporal linearity of the familiar Euclidian space and further releases the unconscious.

Dynamic architecture in theory and practice

Recognizing dynamism as a vital part to the work of art or architecture is not a novelty. Giedion's and Faure's inquiries into the dynamic nature of form, Bragaglia's photodynamic experiments, Greg Lynn's vector spatial montage and Tschumi's represent diverse theoretical and practical efforts to connect architecture with motion and time, and constitute the object of examination of the following part of the study.

Giedion's dynamic baroque and Faure's cineplastics

The question of understanding a static object through the lens of temporality and movement was raised early in the 20th century by Siegfried Giedion and Elie Faure. Giedion was among the first theoreticians to raise the problem of architectural movement at the status of theoretical debate.8 Giedion found in baroque and particularly in the work of Borromini the manifestation of principles of movement and space unfolding in time. Despite later arguments according to which interpretation of Borromini's architecture served Modernistic propagandistic messages, 9 Time, Space, and Architecture is valuable for its systematic interest in architectural movement.

As early as 1920s, Elie Faure challenged architects to develop a design approach based on the principle of *cineplastics*, a term defined as the fusion between cinema and architecture. ¹⁰ Faure's definition of "plastic" included explicit reference to the notion of movement, for plastic art "expresses form at rest and in movement." ¹¹ Film and architecture are connected via their shared quality of being plastic arts. In Faure's words,

the cinema is plastic first: it represents a sort of moving architecture which is in constant accord, in a state of equilibrium dynamically pursued with the surroundings and the landscapes wher it is erected and falls to earth again. ¹²

As a plastic art, architecture should escape its immobility, and thus become "ensemble in action." Faure's cinematic architecture would be one "broken down and remade ceaselessly – by imperceptible passages of tone and modeling that are in themselves architecture at every moment." 13

Futurist photodynamism and the image of distortion

Motion also stood at the core of Futurist philosophy. In futuristic terms, the object was understood as "plastic whole" one that included the object itself as well as the environment that surrounds it. Hence, an object moving through space became more than "an immobile body subsequently set in motion, but a truly mobile object." ¹⁴

The expression of the true mobility was achieved through the use of photodynamism, a principle of graphic representation that captured the object's motion in a single stroke. Marey's chronophotography recorded movement as a series of broken shots, photodynamism had the absolute benefit of showing movement as a continuum. Balla's Dynamism of a dog on a leash, or Bragaglia's Young Man Rocking responded to this new aesthetic of motion, one that included the trace of memory and revealed best the anatomy of the movement. The photodynamic image is mostly valuable for facilitating the representation of speed through degrees of distortion. In Bragaglia's vision, the greater the speed of the object was, the greater the distortion. 15

Greg Lynn's vector forms

Greg Lynn's critique of architectural stasis simultaneously offers the antidote: a model of architecture based on the concept of motion-form. Such an architecture is based on principles of stability rather than statics, where stability represents "dynamic persistence," while statics implies "timeless inert." The architectural site itself is seen as an environment of "gradiated motions and forces... liquid medium with aqueous characteristics of flow and transformation in time." The architectural site itself is seen as an environment of "gradiated motions and forces... liquid medium with aqueous characteristics of flow and transformation in time."

While arguing for a dynamic architectural form generated by fields of forces, Lynn disputes the most common model to introduce movement in architecture via sequentiality and cinematics. Indeed, the cinematic model provides the illusion of movement, created by the rapid succession of individual frames. As such, the movement is simulated, given its reconstruction through the means of the projection apparatus.

While obviously truthful of an observation - for film unfolds in the time of its reception -Lynn's opposition to cinematic inspiration is not entirely founded. Film is an art of movement and time for reasons that go far beyond its capacity to create the illusion of movement at 24 frames per second. Film space is permeable, pointing towards a world outside its frame and thus continuing in imaginary space and time. Moreover, through its editing and camera techniques like slow motion, speed motion, freeze frame, close up, long shots, and so on, film shows time and space in a relation unfamiliar to natural perception. further unfamiliarity can release the subconscious, continuing the action in the realm of the self.

Spatial montage

As early as 1865, Auguste De Choisy stresses the importance of the spectator's mobile point of view in the creation of aesthetic emotion. Choisy is the first to link the apparent disorder of the Acropolis to the sequential perception created by peripatetic vision. Decades later, Sergei Eisenstein took Choisy's theory further, arguing for the sequential nature of aesthetic perception. Eisenstein introduced the notion of time into the experience of art, thus situating

himself in opposition to Lessing's theory of division of arts into time-based and space-based. 18

An architect turned director, Eisenstein saw spatial sequence as the basis for revealing architectural space. In his 1930s article dedicated to the issue of architectural montage, Eisenstein identifies two "paths" of the eye: the *cinematic* path, one where, according to Vidler's interpretation of the article, "a spectator follows an imaginary line among a series of objects, through the sight as well as in the mind, 19 " and the architectural one, involving the movement of the spectator "through a series of carefully disposed phenomena." 20 Arguing for the necessity to look to architecture with the eye of the filmmaker, 21 Eisenstein advances the idea of an intimate connection between film montage and spatial sequence. Both in film and in architecture, the whole is created through the careful juxtaposition of images created either by the camera or by peripatetic vision. Similarly to the filmmaker, the architect can manipulate the duration of each image.

The idea of spatial montage is also explored by Tschumi in the design of La Villette. The park's "cinematic promenade" - the counterpart of Corbusier's promenade architecturale and of Eisenstein's architectural path - has explicit correspondence to a film strip. Within this film strip, "the sound-track corresponds to the general walkway for visitors and the imagetrack corresponds to the successive frames of individual gardens." ²² La Villete translates almost literally principles of film montage. In Tschumi's words, "the linearity of the sequences orders events, movements and spaces... Each part, each frame of a sequence qualifies, reinforces or alters the parts that precede and follow it." 23

Film as a tool for design

Cinema is a form of art that incorporates time, movement, and change. Its dynamism puts film on a level of appreciation which, according to Maya Deren, is more meaningful than static manner. ²⁴

Designing with film does not exclude the employment of what the theory and the practice of architecture defined as "cinematic."

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Nevertheless, this study advances a cinematic inspired several architecture by possibilities that seem to have been overlooked. The following part of the thesis presents ways in which film's endless spatial and temporal combinations, its capacity to show hidden aspects of reality, and its rhetoric character can inform a dynamic cinematic architecture beyond spatial montage.

The manipulation of time and space

One of film's main characteristics consists in its peculiar ability to manipulate time and space. As Karin Damrau notices, "Film simulates us to imagine space... no other form can have such a playful attitude to time and space, can compose, distort or even reinvent the interconnections between them." According to Panofsky, film realizes "the spatialization of time and the dynamization of space." On a similar note, Faure observes how "cinema incorporates time into space. More than this, time really becomes a dimension of space.

Echoing Faure, Maya Deren explains film's possibility to manipulate time and space as "the extension of space by time and the extension of time by space. ²⁸ For example, the length of a stairway can be extended through the editing of several shots taken from different angles, creating "an image of enduring labor to some elevated goal." ²⁹ The extension of time can also be achieved through similar techniques; in addition, reprinting of frames, slow motion or freezing in mid-action can expand time beyond its normal length. ³⁰

The extension or contraction of space through time can be achieved, for example, through the use of walkways moving at different speeds, a condition commonly encountered in airports. The different speeds of the walkways contraction. create spatial dilation or Architecture transcends its threedimensionality, incorporating fourth dimension, that of time.

To certain extend the manipulation of time and space by the means of pacing is similar to film's methods to achieve the dilation or contraction of time and space through techniques like slow motion, fast motion, close-up, long shot, and so on. As Benjamin observes, "with the close-up, space expands; with slow motion, movement is extended." ³¹

On the same note, Kracauer defines slow motion as a temporal close up, "achieving in time what the close up is achieving in space," while Maya Deren labels it "a time microscope." 32

The revealing of architecture's fourth dimension by the means of different moving paces cannot be achieved without the permanent reference to the familiar pace of the activity. Filmic slow motion, for example, is a mind construct; the process of comprehending it implies the awareness of the "known pulse of the identified action." Therefore, while watching an object moving in slow motion — and by extension in accelerated motion — the viewer experiences what Deren calls "the double exposure of time." The identified action is accelerated motion — the viewer experiences what Deren calls "the double exposure of time."

In architectural space, Deren's double temporal exposure can also be realized by the continuous reference to recognizable, familiar moving pace. The awareness of multiple time lines can be achieved through the use of screens projecting either simultaneous or already past actions. Such an exposure of past created through projecting screens or through reflective surfaces can make one aware of his of her memory.

Seeing action refracted through an artificial medium also creates what Sierek calls "double awareness" of the self. 35 Along with this conscience of own presence, screens projecting action that takes place elsewhere allow voyeurism, an experience similar to film watching. The awareness of the double – a theme highly favored by surrealist advocates – splits self existence into ego and the ego that observes itself 36, a condition that finds it most popular incarnation in Time Square's screens – themselves voyeuristic devices that record and display the life of the street.

In addition to double exposure of time and double awareness of self, architecture can reveal its temporal dimension through the employment of spatial distortion. Eric Rohmer's discussion of filmic distortion of time and space echoes the futurist understanding of distortion as a measure of speed. Rohmer argues for the connection between film's "spatial forms of expression" and its method to express time, for "spatial distortion must be accompanied by a distortion in time, a speeding up or a slowing down." 37

Despite expressing matter in motion, futurists' photodynamic experiments did not find extensive application outside bi-dimensional media. Architecture is capable, nevertheless, to include temporal dimension via the use of distortion. Space can unfold continuously in sections, each section showing different degrees of distortion and implicitly, different speed values. Such distorted matter can raises the awareness of a double exposure of time; one of the users in space - of transiting and experiencing - and one of tectonics, imprinted in the continuously unfolding spatial distortions.

A new window into reality

In addition to specific ways to manipulate time and space, film's creative potential consists in its power to reveal hidden aspects of a multilayered reality inaccessible to senses. According to Kracauer, film has the potential to discover "things normally unseen." Among them, the too big and the too small, "the transient" - or the unobservable phenomena like the growth of plants and the passing of clouds - and the "blinds spots of the mind" or things normally unseen, like the too taken for granted familiar.³⁸ Film makes visible hidden layers of reality through the use of cinematic techniques like the close up, slow motion, freeze in action, long shot, reverse motion or fast forward motion. As Kracauer observes, these techniques "blast the prison of conventional reality, opening up expanses which we have explored at best in dreams before." 39

Walter Benjamin synthesized brilliantly film's capacity to reveal invisible aspects of a reality governed by new spatial and temporal dimensions, and thus "to assure us of a vast and unsuspected field of action." In his words,

film furthers insight into the necessities governing our lives by its use of close-ups, by its accentuation of hidden details in familiar objects, and by its exploration of commonplace milieux through the ingenious guidance of the camera. 40

Similarly to film, architecture can become a vehicle that carries one beyond the borders of the immediate reality. Architecture can perform similarly with the camera. Inhabiting

such an architecture is thus inhabiting a camera. Seen through the lens of architecture, space can be contracted, stretched, or warped. Film uses framing in order to create the window into the unseen; likewise, architecture can manipulate framing for focusing on specific elements of the perceived reality.

As Kracauer observes, through the uninhibited nature of the camera, film has the potential to reveal "phenomena overwhelming consciousness." 41 According to Walter Benjamin, it is the camera that helps discover "the optical unconscious," in a process similar psychoanalysis. 42 Benjamin's camera, "swooping and rising, disrupting and isolating, stretching and compressing" sequences and objects has the potential to arrest what lies "outside the normal spectrum of sense impressions" carrying the spectator in a world of psychoses, of dreams, and of hallucinations.

Film space is similar to dream space, and film time is similar to dream time. As Alain Robbe Grillet admits, a dream is neither a spatial nor temporal linear unfolding. 43 instantaneous occurrence eliminates its duration, thus being just "a brief instant in which space is developed." Dreams allow the creation of what Robbe-Grillet "paradoxical space." The paradoxical world of dream space inverts, subverts, and reverse notions like interior and exterior. In dream,

no one needs to use a doorway to cross from the interior to the exterior. Interiority itself appears to transform from exterior to interior through an invagination, whereby all of space is sucked to either one side or the other.⁴⁴

The concept of paradoxical – or dream – space has implications at design level. In dream or in film the traveling between distinct worlds occurs without reliance on known physical and temporal coordinates. Nevertheless, hypersurfaces – kinetic structures activated by sensors that record environmental changes – can become vehicles for crossing the known reality, performing similarly to a wormhole. One does not have to move in order to go across universes. Instead, the universe, electronically operated, can change at the speed of light.

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Permeability of film space

Film space is permeable, pointing out to worlds not necessarily articulated in the screen space. Unlike stage world, film world is open. As Sparshott notices, "the edge of a cinema screen functions like a window frame to which we attribute infinite continuity." Film possesses an inherent "sense of infinity" that enhances the freedom of movement of the camera. 45

Similarly to film frame, architectural framing can act as a device for stimulating imagination. For example, the framing of certain segments of objects in the environment – a portion of a staircase, a portion of the human body – allows the mind to fill in the gaps. Architecture becomes dynamic at mental level, by stretching the imagination.

The permeability of the film frame brings into discussion the importance of peripheral vision in the design of architecture, for action occurring at the fringes of visual perception can direct one's movement through space. On the other hand, perspective – the main tool for designing and visualizing space - does not provide the image of a whole perceived reality, but only a portion of it, that of visual focus. The perspective misses on human vision's capability to be simulated by peripheral action, and becomes an obsolete tool for design.

Film's occurrence hangs between past and future. According to Karl Sierek, film is rhetoric, a collection of "things not yet said and no longer said," presenting "images which the recipients chase after and hurry ahead of." 46 Film happens "between retrospection and anticipation. What is seen and heard is already gone; what is to come already casts a shadow." 47 Film's dynamism consists in its capacity to refer incessantly to other spaces and to point out to possible worlds.

Through the use of hypersurfaces, architecture has also the potential to suspend action between past and future. By definition, the hypersurface is an element of becoming; its transformation creates a space that hangs between intention and consummation. The hypersurface throws architecture in the realm of rhetoric.

Film relies on editing, a process that involves assembling and re-assembling of its parts. For this reason, film continues beyond its finality, as it contains in itself all its other potential materializations. As Benjamin observes,

the finished film is the exact antithesis of a work created by a single stroke. It is assembled from a very large number of images and image sequences that offer an array of choices to the editor... the film is therefore the artwork most capable of improvement. ⁴⁸

Unlike film, architecture is designed with finality. The concept of editing in architecture – the object of Archigram's explorations – implies, on the other hand, a reconsideration of architecture as an unfinished, incomplete product, open to multiple incarnations. Such an architecture, stretching beyond its finality contains the germ of anticipation and sets up multiple possible futures.

Concluding thoughts

The continuously changing architecture advanced by this thesis cannot be experienced or even perceived as a whole or as a finished product. This architecture of hypersurfaces, screens, lens, speed walks and spatial distortions is actualized through the presence of its public. Designing such architecture implies addressing the level of the complex eye, one infused with awareness rather than distraction.

Endnotes

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² Greg Lynn. *Animate Form*. (NY: Princeton Architectural Press, 1999), p. 9.

³ Senagala, 364.

⁴ Walter Benjamin. "The Work of Art in the Age of its Technological Reproducibility," second version, in *Selected Writings. Walter Benjamin*, ed. Marcus Bullock and Michael W. Jennings (Cambridge, MA: Belknap Press, 1996), p. 101-133.

- ⁵ Anthony Vidler, *Warped Space. Art, Architecture, and Anxiety in Modern Culture* (Cambridge, MA: The MIT Press, 2000).
- ⁶ Gilles Deleuze, *Cinema 1: Movement-Image*, Hugh Tomlinson and Barbara Habberjam trans. (Minneapolis, MN: University of Minnesota Press, 1986).
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- ⁸ Siegfried Giedion, *Space, Time, and Architecture.* (Cambridge, MA: Harvard University Press, 1967).
- ⁹ Christof Thoenes "Form has been set in motion. On Understanding the Architecture of Borromini," *Daidalos* 67, (1998), p. 68.
- ¹⁰ Mitchell Schwarzer, *Zoomscape. Architecture in Motion and Media*, (NY: Princeton Architectural Pess, 2004), p. 230.
- ¹¹ Ibid.
- ¹² Elie Faure, *The Art of Cineplastics*, trans. Walter Pach (Boston: The Four Seas Company, 1923), p. 24.
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- ¹⁴ Umberto Boccioni, "Plastic Dynamism" in *Futurist Manifestos*, ed. Umbro Apollonio. (NY: The Viking Press, 1973), p. 93.
- ¹⁵ Anton Giulio Bragaglia, "Futurist Photodynamism 1911" in *Futurist Manifestos*, ed. Umbro Apollonio, (NY: The Viking Press, 1973), p. 40.
- ¹⁶ Greg Lynn. "An advanced form of movement" Architectural Design, 9-10, (1999), p. 55.
- 17 Ibid.
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- ¹⁹ Vidler, p. 119.
- 20 Ibid.
- ²¹ Ibid.

- ²² Bernard Tschumi, *Cinegramme Folie. Le Parc de la Villette* (Princeton, NJ: Princeton Architectural Press, 1987), p. 12.
- ²³ Ibid.
- ²⁴ Maya Deren, "Cinematography: The Creative Use of Reality"in *Film Theory and Criticism*, *Introductory readings*, ed. Gerald Mast and Marshall Cohen, p. 62.
- ²⁵ Karin Damrau, "Fantastic Spatial Combinations in Film." *Architectural Design* 1 (2000), p. 59.
- ²⁶ Erwin Panofsky, *Three Essays on Style*, (Cambridge, MA: MITT Press, 1995), p. 96.
- ²⁷ Faure, p. 38.
- ²⁸ Deren, p. 62.
- ²⁹ Ibid.
- 30 Ibid.
- 31 Benjamin, p. 117.
- ³² Deren, p. 58.
- ³³ Deren, p. 60.
- 34 Ibid.
- ³⁵ Carl Sierek, "Regulations and Retrospection: The Rhetoric of Buildings and Films." *Daidalos*, 64, (1997), p. 117.
- ³⁶ Anthony Vidler, *The Architectural Uncanny. Essays in the Modern Unhomely.* (Cambridge, MA: the MIT Press, 1992), p. 37.
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- ³⁸ Siegfried Kracauer, *Theory of Film. The Redemption of Physical Reality.* (NY: Oxford University Press, 1960), p. 56.
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- 40 Benjamin, p. 117.
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- 42 Ibid.

⁴³ Alain Robbe-Grillet and Alberto Perez Gomez, "Paradoxical Spaces in Literature, Film and Architecture: A Dialogue with Alain Robbe-Grillet," in *Chora*, ed. Perez-Gomez, vol. 2. (Montreal, Canada: McGill University Press, 1994), p. 248.

⁴⁴ Ibid.

⁴⁵ Francis Sparshott. "Basic Film Aesthetics," in *Film Theory and Criticism. Introductory Readings*, p. 295.

⁴⁶ Sierek, p. 117.

⁴⁷ Ibid.

⁴⁸ Benjamin, p. 109.