For a Blobbing in the Networked Zones

Leslie Sharpe

University of California, San Diego
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From Monstrous M/Other to Monstrous Out-There

There is a slippery meeting place of thing and non-thing in the data-realm of visual-tracking systems, a place where matter and non-matter are blurred in that moment before classification, when both are detected and interpreted as data, but not yet designated by technology as one or an ‘other.’ Until this matter is analyzed, and then classified with computer algorithms it hovers in a space of indeterminate threshold where matter and nonmatter shift and merge, leaking into each other and into other fields.

This can be read as a moment of becoming, as in animation—the time and place where in-betweens act to ‘generate life’: to animate. These in-betweens are not static, but in the process of mutation—uncanny forms that reminds us of what was and anticipate what may be.

If we were to think of this process of mutation as like the emergent monstrous portrayed in science-fiction film, it would be close to the transformative process of emergent puberty/sexuality bursting out of Syl’s body in Roger Donaldson’s 1995 film *Species*.¹ It is appropriate that this film is named not for an other, alien, or stranger, but for classification(s). If we were to choose a *form* for this monstrous, the archaic beast that emerges in *Species* would be a poor model. Instead, we would take the medium and the generator of form in *Species* as the model: “the alien is the genetic code for a woman *picked up by a radio telescope* … an idea that was first done in the British TV serial *A for Andromeda*”² What is this free-floating “genetic code for a woman” out there but raw data, “picked up by a radio telescope,” passed back and forth by satellites and transmitters, duping a few sci-fi spaceships, tracked by paranormalists, and stalked and classified in the data-gathering of computer-vision systems?³ The invisible out-there. Perhaps a ghost.

In his book *The Language of New Media*, new-media theorist Lev Manovich has pointed out that

> “the electronic signal does not have a singular identity—a particular state qualitatively different from all other possible states. … the electronic signal is essentially mutable. This mutability of electronic media is just one step away from the ‘variability’ of new media. … a new media object can exist in numerous versions. … But, to a significant extent, an electronic signal is already characterized by similar variability because it can exist in numerous states.”⁴

The free-floating ‘code for women’ picked up in outer space in *Species* is a floating signal (as well as a floating signifier), a not-yet-form, a nothing. We may anticipate it as form, but its tendency is in the variable. We have no way of knowing of it as leading here or there, as in the vectored trajectories discussed by Ton Verstegen in his book *Tropisms*.⁵ This floating signal rushes to find walls to define itself or to break down, and in doing so, it seeps into cracks and holes and inside folds. It occupies space but it can also become space if differentiated from matter that ‘matters.’ It has yet to be made visible, and we often struggle to make it so, classifying in order to bring about visualization—and stasis. While this search for stasis undoubtedly is relevant for some classification, at what point is the variable form determined by this classification, and how could a constantly changing signal appear as a cultural form?
Who/What You Gonna Call It?

“Sensor Ghosts

…it is not impossible to deceive sensors. One of the primary means of identifying a ship is by using its warp signature, and ships can be modified to emit fake ones. When a Maquis group led by Thomas Riker stole the USS Defiant NX-74205, they programmed at least one Maquis ship to transmit the Defiant’s warp signature. As a result, the Cardassians wasted valuable resources attempting to engage an insignificant vessel…”

“During the journey, strange ‘sensor ghosts’ kept reappearing, bearing the distinct possibility of a cloaked ship tailing us. … Mesay again warned us and even handed over some engineering specs to help us modify our sensors to spot cloaked Sossetan vessels. The remaining journey passed without further events, although the ‘ghosts’ faithfully stayed with us.”

In military usage, as well as in the fantasy worlds of science fiction and gaming, the term “sensor ghost” refers to ‘false’ representations that appear when a sensor mistakenly picks up a signal. In gaming and science fiction, sensor ghosts are often a cloaked or disguised ship trying to dupe or distract an enemy. This camouflaging deception can be employed in a science-fiction or gaming narrative as an element of strategy or suspense as in the above passages found on the Internet.

‘Sensor ghost,’ or ‘radar ghost,’ originated as a military term to describe ‘false’ signals picked up by a ship’s radar. The assumption that it was not a false signal and that an enemy could be present had to be taken into account until proven otherwise. Even when proof of an enemy did not appear, the signal still held potential to become that object, hence the signal was ‘mutable.’ However belief in the possible presence of the enemy was a necessary precondition for that potentiality to exist in the signal.

When one is in an active war-zone, such paranoiac possibilities are a constant and can make benign objects seem suspicious. An American officer stationed in the Mediterranean during the 1973 Mideast war describes the recurring appearance of a blip on his ship’s radar in the following online account titled “Attack at Dawn.” The blip was assumed to be a submarine, yet was nowhere to be seen. “Radar and visible light was trapped between the sea and an atmospheric layer causing the radar, and our eyes, to sense objects much farther than was normally possible. Thus our nighttime contact was relegated to the status of a radar ghost, an unexplained anomaly.” Eventually, the officer discovered the cause of the radar ghosts: flying birds. This ‘flying bird’ dupe was utilized with irony in the tactical-media artwork “Suicide Box” by Natalie Jerijimenko of the artists’ group Bureau of Inverse Technology.

More recent visual-tracking systems are able to follow and isolate moving objects but are often stymied by shadows, traces of the object moving (referred to as ghosts), or moving background elements that seem to merge with the moving object. Engineers in computer-vision research at UCSD and elsewhere have developed algorithms that seek out differences in recorded data of matter and nonmatter such as shadows, or unrelated moving backgrounds so as to isolate the object being tracked to facilitate reconstruction and simulation for purposes of identification.
In the cases above, raw ‘ghost’ data carries attributes of haunting as it teases visual capture, defies boundaries, and avoids recognition and classification. Its presence as data allows it a complexity of existence, a slippery leakage from one state to another, with the possibility of escaping defining structures of the visual in undefined non-Cartesian spatialities, shifting in and out of space and form. This complexity recalls architect Greg Lynn’s “mechanics of blobs … characterized by complex incorporations and becomings rather than by conflicts and contradictions.” These ghosts are blobs; like Caspar the “friendly ghost,” they can be hopeful rather than frightening as they anticipate the possible in the utopian mutability of data held within communicative space.

I will return to this communicative space later in this paper. First I would like to focus on data as variable and mutable cultural process and form, in architectural practice as well as in filmic representation.

Blobbing before the Blob: Mutation

The architect Greg Lynn has devoted considerable research, writing and practice to the topic of mutation, influenced by the writings of Deleuze, Foucault, and Leibnitz, among others. Lynn states “…animate design is defined by the co-presence of motion and force at the moment of formal conception.”

Using computer animation in the design phase of his buildings, Lynn allows the building to function as a ‘living’ organism which undergoes change according to its environment, to find the common ‘in-between’ in the relationship between a thing and its environment.

According to Maria Luisa Palumbo, “The central goal of Lynn’s research is the deconstruction of the architectural organism in search of a fluid flexible form that acquires corporeality and vitality as it becomes more disorganic … matter folds onto itself in search of those lines of involution that lead the organism in an opposite direction to that of the differentiation of species, namely the undifferentiated, the common fact [a reference to Deleuze] … between the building and the ground, between architectural geometry and the orography of the site.”

Lynn arrives at a static form that recalls places of commonality, in-between and key points and movements derived from mutation in the design phase. While it is tempting to utilize biological metaphors such as the organic (or its inverse, the disorganic), I will avoid these as they can shift the focus of Lynn’s work away from a process that is not about ‘organism’ or organic growth, and away from his focus on tendentious relationships between space and form, between space and place.

In describing his projects, Lynn has used terms such as “forces of movement” (Port Authority Gateway), “zones of influence” (Artists’ Space Installation), “orbital trajectories” (Henie Onstad Installation,” and “visual obstacles and visual attractors” (House Prototype in Long Island). While based in research on mutation and the trajectory, Lynn applies these concepts to his work and process using computer animation, which allows the properties of mutability and variability that Lev Manovich assigns to new-media objects.

For example, in the design phase of Lynn’s installation at Artists’ Space in New York, orbs representing different project nodes held what Lynn called a “sphere of influence that affected the other nodes.”
Bound within the walls of the exhibition space, the nodes moved in an animated sequence to take a chronological place. As Lynn describes it, “Once located, the sphere of influence of each project was expanded to fill the surroundings of its gallery space. Within the zone of influence, each node was given an equal force of attraction on the other four nodes. Based on these influences, they tended towards other nodes and connected into a continuous surface or ‘blob.’” This blob then underwent subsequent transformations (or blobbing) that related to the site itself.

These zones of influence are not unlike those spaces of unclear, unclassified data of ghosts and shadows in the vision-tracking images mentioned earlier, however they begin (and can be recalled) as visibly separate from the initial primitives of the nodes. The zones have a clear trajectory towards those that share influences, and they intersect with these to create a third space—a merge area. This merge area becomes the point of flux as some sections find a stationary place while others find new zones of influence. Conceivably, this flux could continue or ‘blob’ indefinitely, however the zones are held in place by the exhibition walls. While the flux area has the desire to shift, the wall creates a border that contains the blobbing within a particular moment and within a line of contextual limits that could be conceived of as a network.

What if this physical line did not exist? What if Lynn were to create this design within the space of telecommunications? Lynn’s blobbing would then have to follow another groove, i.e., the ‘grooves’ of bandwidth or noise, and find other contextual limits beyond the visible or physical. I will consider this possibility again later when discussing Matt Locke’s writing and the communication space. First I would like to look at representations of mutating space in the film *Vertigo* and the more recent films *The Matrix* and *Ghost in the Shell*.

### Slide Off the Mirror into the Crack: Crevise

In Alfred Hitchcock’s classic suspense film *Vertigo* (1958), the protagonist Scottie, a police detective, is chasing a criminal high on the rooftops of San Francisco. The criminal reaches the edge of one building and jumps across the precipice, landing on the next building where he continues to flee. The policeman following him also jumps across and lands awkwardly, then recovers and continues the chase. He is followed by Scottie, who also jumps but slips upon landing. Sliding to the edge of the roof, Scottie barely manages to cling to the bending edge with his bare hands. As soon as he gains a firm hold, Scottie looks down. In a point-of-view shot, we see what Scottie sees—a seemingly endless crevice filling the space to the street far below.

At this moment, the ground seems to fall far back, creating a cavernous space between him and the bottom. Scottie is frozen in terror. The policeman retreats from the chase, and as he reaches out to lift Scottie to safety, falls to his death on the street below. Both Scottie and the audience see the fall, which seems endless. The audience continues to see the scene on the street behind Scottie, where it becomes background, a *faux accompli*. The focal point of the final image in this sequence is on Scottie’s frozen gaze and newly-formed trauma, which informs the narrative programs of the remainder of the film (Scottie...
overcoming his phobia, breakdown and his guilt; his obsession with stand-ins for dead women; the murder story; and the numerous failed love stories).

Rewind to Scottie’s first glimpse of the street as he hangs. The street is not static, it moves. On one hand, this is the detective’s fear—that the street, or those criminal and debased elements associated with it, will rise up beyond police control. While Vertigo is not classified as a ‘noir’ film, by 1958 certain attributes associated with the ‘noir’ detective would be normalized so that these characteristics would be present in non-noir detective roles. For instance, by this time film audiences could expect that a detective might ‘slum’ or cheat to get information, but only as a strategic move or lapse for the narrative’s sake, thus distinguishing the detective from the beat cop (who worked the street and was prone to permanent corruption). In Scottie’s case, the ‘slumming’ begins at this moment, when Scottie is both lured and repelled by the street far below and its promise of finality.

The shot of Scottie’s first glimpse of the street presents it as moving, not static—falling and rising as if swelling from the depths of the earth, as if animate. It is his (and our) first glimpse of vertiginous urban space as an alluring and moving form. It is depicted here as a space where things are not what they seem and don’t act as they should, like the hallucinatory space of the hole in Alice in Wonderland, here introduced as an aspect of urban space, and affiliated with panic.

The New Animate

In Vertigo, Scottie is obsessed with the dead and their reanimation. This includes his own reanimation, for he is frozen and incapacitated the moment he looks down into the crevice. In the hallucinatory dream sequence designed by John Ferren, Scottie lays in sleep only to look up at his terrified face hurtling towards him, and then his silhouetted body falling in an endless space beyond the grave, beyond gravity. In this sequence, Hitchcock allows abstraction and fantasy—as well as a faster pace—to convey a state of hallucination and panic through the use of metaphorical animation.

The one moment that realist photography is used alone as animation in Vertigo is the shot at the beginning when Scottie looks down and the street moves. It is the first suggestion of space affecting vision and psyche, and is the first moment in the film where we learn that space can be animate and monstrous. It is relevant that this suggestion of monstrous space happens with the street. Although Scottie does not literally fall to the street and to literal death, he falls into a trauma related to the street, with the accompanying anxiety that it entails for the detective, and in this psychological street he endures desire and hallucination, loss and pain, and finally resorts to abuse and the negligent death of Judy.

How is this crevice then picked up and played out in later filmic homages to Vertigo? Two films that represent the crevice sequence in a significant way for this paper are The Matrix (Andy and Larry Wachowski, 1999) and the Japanese anime film Ghost in the Shell (Mamoru Oshii, 1995) which The Matrix quotes (along with other films). Both The Matrix and Ghost in the Shell were significant for their innovations in film animation technique: Ghost in the Shell was the first animated feature to combine...
2D cel animation with computer graphics, and *The Matrix* introduced the technique of bullet-time photography, merging shots taken from multiple camera angles into the same sequence.  

In *Ghost in the Shell*, a cyborg cop is seen at the beginning of the film dropping into the exaggerated crevice space between skyscrapers, only to disappear into the background of the lively urban street space below. “I don’t believe it! Thermoptic camouflage!” exclaims one of the characters who watch her morph into the street space below them. In this case, the hand reaching out has become evil, only poised to shoot the cyborg had she not literally disappeared into the street. The appearance of street space below the cyborg is the inverse of that in *Vertigo*—it is a maze of overpasses and traffic, gleaming like smooth stainless steel, its two-dimensional animation form heightened. Unlike the dimensional muddy-brown street monster that rises up to terrify Scottie, the space below in *Ghost* lifts up only to be worn as a polished blue surface, as a means of disappearance and safety. Or so it seems. In *Ghost in the Shell*, simulation is the new monstrous, conflating Baudrillard’s three orders of simulacra. The ghost that inhabits is the thing that terrifies, and the not knowing what is real (or really cyborg) and what is ghost is the new panic-space. “I don’t believe it!”, for it may not be real, but ‘thermoptic camouflage’ or a ghost, an implant, a technological worm. That gleaming maze of overpasses below may also be simulation.

This theme of the terror of simulation is played out further in *The Matrix*, not with the figure of the cyborg, but with space and all within it—its inhabitants, actions, and physical attributes.

Early in the film, the protagonist Neo is led to the precipice in another chase sequence, however this time he is being chased by the agents of the Matrix. His ‘saviour’ Morpheus, leads Neo by telephone to a precipice high outside the skycraper where he works. Just as Scottie looked down in *Vertigo*, Neo looks at the space below and is unable to go on. He is still too skeptical and innocent to scale the building or to jump down and rely on thermoptic camouflage. In a shot that mimics the scene in *Vertigo* where the policeman falls to his death, Neo drops the phone that Morpheus used to reach out and save him. Neo watches the phone drop in a slow hypnotic swirl to the street below and seems to experience the nausea and dizziness of vertigo. He gives up and turns himself in to the agents.

The moment before Neo drops the phone, he is connected to Morpheus by it. This communications device is used in *The Matrix* as a means of transport from one world (the Matrix) to another (the ‘real’ world, according to Morpheus and his cohorts). But Neo is not ready to be convinced that body and space could be reduced to data, transported and reanimated to another world—real or not—via technology. Instead, he chooses to enter other worlds via two proven methods—literary imagination (the white rabbit, a reference to Alice in Wonderland), and hallucinogenic drugs (the red pill). Once Neo follows the rabbit and swallows the pill, he allows himself to believe in transformation and transport via technology. Once that has happened, the monstrosity of vertical space disappears, becomes yet another surface to traverse or shift, giving way to designed space and matter as the mutating new animate, the new monstrous.

In the GUI of the DVD that accompanies *The Matrix*, one can follow iconic links of the white rabbit or the red pill to view documentaries about the making of the film. One sequence demonstrates the advanced ‘Bullet-Time’ photography and digital montage used in the film. The camera setup used for the bullet-time
photography was clearly influenced by the multi-camera setup of Eadweard Muybridge and the circular image production machine of Étienne-Jules Marey’s chronophotographic gun, both of which preceded and anticipated the sequential imagery of cinema. In its use of bullet-time photography combined with digital animation and montage, *The Matrix* similarly anticipated a new direction in film practice that would consider film as variable data to be reconfigured by algorithms and communications. The circular set-up of numerous still and motion cameras allowed for a range of point-of-view, as well as various speeds, of filmed imagery. The mass of raw footage becomes a ‘database’ that is later digitally composited to create a seamless and shifting flow through time and space, where camera occasionally becomes character, time and space are in constant flux, and the objects of representation become data.

This is the space of communication.

**Blob Me to Your Zone**

The film *The Matrix* anticipated a space changed and traversed not just by software but also by telecommunications, and utilized the genre of science fiction to pose the usual questions of reality vs simulation in the virtual, or possibilities vs dangers of technology, especially when in the hands of global capitalism. With the increasing ubiquity of wireless technologies (such as PDAs, cellphones, pagers, GPS, etc) that enter into our world and connect us via networks rather than offering virtual worlds, we find those technologies changing our understandings of space, behavior and place. We cannot operate under previous understandings of space that were based primarily on physical place. Nor can we operate under previous conceptions of time as wireless allows us instant means of access, and impresses a state of ephemerality on our daily experience.

Manuel Castells differentiates between the “historically rooted spatial organization of our common experience: the space of places” and a “new spatial process … the space of flows” and discusses how the “space of experience shrinks inward toward the home, as flows take over increasing shares of time and space.” This space of experience shrinks even further with wireless technologies, to a zone that moves with and surrounds the body. This zone shifts with the flows and nodes of communication.

In his article “Wireless Culture Performs in the Temporary Intimate Zone,” British artist and writer Matt Locke discusses his work “Speakers Corner,” a piece that displays SMS messages transmitted by cellphone or posted on the internet on public LCD displays in urban spaces in Great Britain. He compares older forms of public and private address (such as ‘scratching,’ gossip, graffiti, and soapbox speech) to contemporary forms that have arisen with cellphone use, such as instant messaging. Locke also analyzes the space of private cellphone dialogue.

He suggests that mobile technologies create a new kind of behavioral space related to communications, space, and time—a space that he refers to as the “Temporary Intimate Zone” (TIZ)—an ephemeral, boundless behavioral space created in the use of portable phones. While users are connected via technology, they are disconnected to the place they—possibly again ephemerally—are in. Hence the condition of ephemerality is twofold—the experience of ‘connection’ to both the place they are in and the space of
communication are experienced only momentarily. Locke does not discuss the space of ‘passage’ or being in transit, which while being nomadic, is not ephemeral, although the condition of being in transit is that of ephemerality.

For Locke, new understandings of space formed by the *derive* \(^{31}\) and psychogeographic approaches to space are also important in helping us to understand the ‘zone’ of space created through mobile technologies. In 1955, French Situationist Guy Debord wrote that psychogeography is “the study of the precise laws and specific effects of the geographical environment, consciously organized or not, on the emotions and behavior of individuals.”\(^{32}\)

Debord was a founder of the French political/cultural group known as the Situationists who had two main periods of activity between the late 1950s to the late 1960s, and whose critical writings and activities on “unitary urbanism” have been influential for artists and architects doing work related to public space.

For artists interested in forming new understandings of space and matter, looking at how technology affects those understandings is crucial. Technology’s tools, such as GPS and wireless and mobile devices, can also help to develop a new notion of psychogeographic space and provide a new form of dérivé. As demonstrated by Locke’s work and the work of other artists using mobile technologies, new meanings of space and matter in the the networked and physical realm can be formed as cultural and critical practice, perhaps with a bit of networked blobbing.

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Leslie Sharpe

UCSD, La Jolla, California

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NOTES

1. The film is every misogynist's nightmare of the tale of the ugly duckling reversed in the maternal: from sexy babe to devouringly protective reproductive beast. The monster and related special effects in *Species* were designed by H. G. Giger, who also designed the alien in the first film version of *Alien*.


3. The scenario in *Species* presents a generic woman, ready for harvest, ready to be incubated and ‘born’ by science but ultimately unable to escape nature in the form of Darwinian destiny once she landed on earth and was made into human form.


9. See the Bureau of Inverse Technology's website for images and descriptions of their tactical-media projects, including Natalie Jerijimenko's “Suicide Box” at http://www.bureautit.org/

10. UCSD's Computer Vision and Robotics Research (CVRR) laboratory is headed by Dr. Mohan Trivedi. Research in the lab is currently focused on computer-vision systems to track traffic accidents and incorporating emergency response. See also R. Cucchiara *et al*’s article “Detecting Objects, Shadows and Ghosts in Video Streams by Exploiting Color and Motion Information.”

11. This differential between nonmatter and matter by computer vision systems will be incorporated into an artwork I am producing as a Faculty Fellow. I will also pursue a vein of research related to tracking and paranormalists.

12. …and eventual busting when identified—by Ghostbusters!


14. Greg Lynn: *Forms, Bodies & Blobs*. The work of Greg Lynn, Toyo Ito and other architects working with shifting matter and space is integral to the subject of my long-term research project as a Faculty Fellow at UCSD.

15. See Maria Luisa Palumbo: *New Wombs: Electronic Bodies and Architectural Disorders*.


18. This sequence of increasingly failing jumps anticipates Scotties breakdown.

19. This motif of the debased versus the pure is repeated in *Vertigo* in the dual role Kim Novak plays of the elegant, mysterious Madeleine, and the tacky streetwise Judy. See Slavov Zizek, *Looking Awry: An Introduction to Jacques Lacan through Popular Culture*, p. 84. For examples of a thoroughly corrupt detective, see the works of Jim Thompson.

20. In medical cases of patients who suffer symptoms of vertigo, a large percentage are simultaneously undergoing symptoms of panic attacks, and often in the stages of depression. The treatment for the vertigo is to deal with the source of panic or depression through measures such as therapy or drugs. See Sharpe and Barber, *The Vestibulo-Ocular Reflex and Vertigo*.

21. In his book *Looking Awry*, Slavov Zizek identifies the space of the abyss in *Vertigo* as the ‘hole in the Other’ that is “concealed by the presence of the fantasy object [Madeleine]”: “The abyss Scottie is finally able to look into is the very abyss of the hole in the Other (the symbolic order), …this abyss of the “lack of the other” causes the profound vertigo that troubles him.” Zizek points out that Scottie could not look into the abyss until Judy (remade as Madeleine)'s death. Scottie could not face the woman (or her presence as representing lack). See Slavov Zizek, *Looking Awry: An Introduction to Jacques Lacan through Popular Culture*, p. 86).

22. See also the opening credits of *Vertigo*, designed by Saul Bass with a swirling concentric animation by John Whitney.

23. In his book *Simulacra and Simulation*, Jean Baudrillard poses “three orders of simulacra: 1) naturalist founded on the image; 2) productive, founded on energy and production, and 3) simulation, founded on information” (p. 121). The ‘ghost’ seems to lead to all three, but particularly to the last, as Baudrillard states “of total control.”

24. The chase sequences in *The Matrix* are notable for their combination of the Hollywood chase with chase-running that recalls the movement of computer game characters (Trinity runs like Lara Croft from the game *Tomb Raider*), and the mid-air fight choreography of Chinese martial-arts films such as that in Ching Siu Tung's 1987 film *A Chinese Ghost Story*.

25. Neo has not yet learned the body language of anti-gravity movement of the Matrix, derived (as mentioned in fn 24) from games, comics and Chinese martial-arts film.

27. The camera as character in film is not new, however the way in which it is played out again in *The Matrix* and other films such as *Fight Club* could not be accomplished without digital effects, and suggest an impossible traversing and collapse of time and space.

28. See pages 330–333 of Lev Manovich’s *The Language of New Media* for his discussion on code and cinema. See also the section on database and cinema on pages 237–243 of *The Language of New Media* and his recent new-media work “Soft Cinema,” screened at the recent Future Cinema exhibition at ZKM. Online information about this work is at Manovich’s website at http://www.Manovich.net/cinema_future/toc.htm


30. Matt Locke: “Speakers Corner: Wireless Culture Performs in the Temporary Intimate Zone” (online at HorizonZero)

31. The term ‘derivé’ was defined in the June 1958 publication of the *Internationale Situationiste* as “An experimental mode of behavior linked to the conditions of urban society: a technique for hastily passing through varied environments,” describing an activity where one approaches urban space in a random fashion in order to derive a new understanding of that space.

32. Guy Debord: “Toward a Situationist International” in *Situationist International Anthology*.

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**FILMS**


