

## The Indexical and the Concept of Medium Specificity

Let us merely note in passing that the Holy Shroud of Turin combines the features alike of relic and photograph.

—Bazin

In a provocative article on the indexical status of the shroud of Turin, Georges Didi-Huberman traces the quasi-theological, quasi-technological attributes of this “advent of the visible.” A relic of the first order, sometimes displayed in a procession that only incites and frustrates the desire to *see*, to verify that this is indeed the authentic tracing of Christ’s body, the shroud itself is legible only through a kind of hermeneutic *straining*. But its legibility and its aura were reaffirmed in 1898, when Secondo Pia developed a photographic negative of the shroud that “unexpectedly” revealed the emergence of a recognizable face. For Pia, it was a miraculous moment of epiphany.

What Didi-Huberman traces here is the transformation of index into icon via a photographic technology, with all the sacred connotations attached to iconology. In this case, for the faithful, there is a certain inescapability of the iconic, which is willed into existence through a technology whose objectivity and authenticity seem incontestable. What Didi-Huberman focuses in his analysis of the shroud is the very emergence of figuration from a stain.

Photography is perfectly situated to act as the mediator of such a miracle because it shares the indexical status of the stain—as the trace and hence corroboration of an existence. And it is not coincidental that the privileged form of the index has been associated with death—the shroud of Turin, André Bazin’s death mask in “The Ontology of the Photographic Image,” Roland Barthes’s photograph that perfectly captures the essence of his dead mother and occasions an extended meditation on indexicality (*Camera*). The lure of the indexical is linked to its intimate collusion with what Didi-Huberman calls the “fantasy of referentiality,” with the inert stability of the real, most fully realized in death. Nor is it accidental that both Bazin’s death mask of the pharaoh and the shroud of Turin are associated with sovereignty, whether spiritual or worldly. For the indexical itself has attained a form of semiotic sovereignty in the face of its imminent demise.

Certainly, within film theory, confronted with the threat and/or promise of the digital, indexicality as a category has attained a new centrality, as has the work of Bazin. One might go so far as to claim that indexicality has become today the primary indicator of cinematic specificity, that elusive concept that has played such a dominant role in the history of film theory’s elaboration, serving to differentiate film from the other arts (in particular, literature and painting) and to stake out the boundaries of a discipline. Despite its essentialist connotations, medium specificity is a resolutely historical notion, its definition incessantly mutating in various sociohistorical contexts. At its birth, the cinema’s most striking characteristic was, in fact, its indexicality, commented upon in countless newspaper and magazine articles that heralded the new technology’s ability to capture time and movement—what invariably went by the term “life itself.” But with Griffith and Eisenstein, in entirely different ways, and with the rationalization of film as an art, editing or montage emerged as the principle of cinematic form and the true potential of the medium. Anchored by an account of the indexicality of the photographic image, the long take, and depth of field, Bazin marked out the terrain he viewed as proper to the ontology and power of cinema. For the Structural filmmakers of the sixties and seventies (e.g., Peter Gidal, Hollis Frampton, Michael Snow, Paul Sharits), medium specificity was incarnated in film’s material base—the celluloid subject to scratching, the grain of the film, the gap between film frames and its production of an illusion of movement (subjected to scrutiny in the flicker film), and the projector itself and its cone of light. Seventies film theory complicated and diversified the notion of medium specificity

by situating it as a structure or system—the apparatus—that orchestrated camera, spectator, and screen in the production of a subject effect. Today, it could be argued, it is the indexicality associated with the analogical, chemical base of the image that emerges as the primary candidate, in contention with the rise of digital media.

It might be prudent, at this point, to investigate more fully the very concepts of “medium” and “medium specificity,” given the claims that we live in a “post-medium” era or that the digital effectively annihilates the idea of a medium in one fell swoop of convergence. We tend to think of a medium as a material or technical means of aesthetic expression (painting, sculpture, photography, film, etc.), which harbors both constraints and possibilities, the second arguably emerging as a consequence of the first. The potential of a medium would thus lie in the notion of material resistances or even of matter/materiality itself as, somewhat paradoxically, an *enabling impediment*. The juxtaposition of negativity and productivity is crucial here. A medium is a medium by virtue of both its positive qualities (the visibility, color, texture of paint, for instance) and its limitations, gaps, incompletions (the flatness of the canvas, the finite enclosure insured by the frame). From this point of view, even in a medium invoked as the support of an effect of the real, the spectator’s knowledge is continually reaffirmed by the limitations of the medium, which prevent the production of a complete illusion. Indeed, in E. H. Gombrich’s view, there must be some sort of gap, absence, or lack to enable the most important spectatorial activity, which he labels “projection.” Far from being “taken in” by the illusion, the viewer actively participates in the construction of an impression of the real and is led by experience and expectation to “project.” In the essay “Conditions of Illusion,” he claims, “When we say that the blots and brushstrokes of the impressionist landscapes ‘suddenly come to life,’ we mean we have been led to project a landscape into these dabs of pigment” (203). Gombrich outlines two conditions that must be met in order to support the illusion: (1) the viewer must be assured that he or she can close the gap or incompleteness that is a necessary consequence of the limits of the medium; (2) the viewer “must be given a ‘screen,’ an empty or ill-defined area onto which he can project the expected image” (208). The screen is exploited by those artists who know how to produce “expressive absence” and are educated as to the “power of indeterminate forms.” Yet, beyond the skill of the artist, it is the very structure of the apparatus of painting, of the ritualized forms of viewing that generate the screen, receiver of the viewer’s projections: “The distance from the

canvas weakens the beholder's power of discrimination and creates a blur which mobilizes his projective faculty. The indistinct parts of the canvas become a screen" (222). Far from an insistence upon mimesis or verisimilitude, this is a demand for blankness, illegibility, and absence as the support of illusion. It also suggests that the experience of a medium is necessarily determined by a dialectical relation between materiality and immateriality.

Within art history, the concepts of medium and medium specificity have been yoked to a notion of Greenbergian formalism wherein every authentic work of art is caught in a self-reflexive spiral, referring only to itself and its own conditions of existence (in painting, for example, flatness). In striving to counter this Greenbergian appropriation as well as the reductive and reified understanding of medium as unworked physical support, Rosalind Krauss has defined a medium as "a set of conventions derived from (but not identical with) the material conditions of a given technical support, conventions out of which to develop a form of expressiveness that can be both projective and mnemonic" ("Reinventing" 296). Medium specificity names the crucial recursiveness of that structure that is a medium: "For, in order to sustain artistic practice, a medium must be a supporting structure, generative of a set of conventions, some of which, in assuming the medium itself as their subject, will be wholly 'specific' to it, thus producing an experience of their own necessity" (*Voyage* 26). This is a restricted specificity that takes the individual work and its activation of particular conventions as its point of departure, and not the medium itself. Those works that can be labeled "medium specific" are those reiterating and reconfirming the constraints of their material support. Yet, it is a strange type of specificity that is selective, and if certain works can repudiate that label, the medium's constraints are, after all, not very constraining. Which is, I think, the point. Proper to the aesthetic, then, would be a continual reinvention of the medium through a resistance to resistance, a transgression of what are given as material limitations, which nevertheless requires those material constraints as its field of operations.

Hence—and I think Krauss would agree—it is ultimately impossible either to reduce the concept of medium to materiality or to disengage it from that notion. In its very resistance, matter generates the forms and modes of aesthetic apprehension. Yet, technologies of mechanical and electronic reproduction, from photography through digital media, appear to move asymptotically toward immateriality, generating images through light and electricity. The answer to the question, "Where is the film?" is

less assured than that concerning the physical location of a painting. Is it the celluloid strip, the projected image, the viewer's apprehension of the illusion of motion? This complexity may help to explain the constant return to and refinement of the concept of cinematic specificity in film theory. For the structuralist filmmakers of the 1970s, that specificity lay in film's most palpable and delineable features—its chemical base, the projection of light, the grain of the film. Above all, it excluded notions of representation, of iconicity, of the illusion of the real, repudiating the optics of Renaissance perspective built into the lens. For Peter Gidal, one of the primary spokespersons for what he called "Structural-Materialist" film, the focus on this form of cinematic materiality had a direct connection to the methodology and epistemology of a Marxist materialism and shared in its radical critique of bourgeois culture.<sup>2</sup>

Nevertheless, an emphasis upon film's chemical, photographic base now serves to differentiate the cinema from digital media and repeatedly invokes indexicality as the guarantee of a privileged relation to the real, to referentiality, and to materiality. For although not all of cinema is indexical (and animation, for some, would be the most striking counterexample),<sup>3</sup> mainstream fiction and documentary film are anchored by the indexical image and both exploit, in different ways, the idea of the image as imprint or trace, hence sustaining a privileged relation to the referent (for Lev Manovich, cinema is the "attempt to make art out of a footprint" [295]). Paul Willeman, for instance, bemoans the shift from the photochemical to the digital image because it severs the link between representation and referent:

*An image of a person in a room need no longer mean that the person was in that particular room, or that such a room ever existed, or indeed that such a person ever existed. Photochemical images will continue to be made, but the change in the regime of "believability" will eventually leech all the resistance that reality offers to "manipulation" from even those images [...] The digitally constructed death mask has lost any trace [...] of the dialectic between index and icon. (20)*

Willeman's approach takes on an unacknowledged Bazinian inflection when he argues that digital media is authoritarian in opposition to the more open, democratic quality of filmic legibility.

This is Dai Vaughan's argument as well, pushed even further in his claim that "the age of the chemical photograph has broadly coincided

with that of mass democratic challenges to entrenched power" (192). Film enables this through its confirmation of the existence of a world prior to and outside of power.

*The point of photography is not that it mimics definitively the experience of seeing an object, but that its relation to that object is a necessary rather than a contingent one. More tellingly: the object is necessary to the photograph. These necessities find their complement in a specific manner of trust. The visual idiom of the photograph reassures us not only that it is a nonarbitrary transformation of the thing represented but, more fundamentally, that an object of which this is a representation must have existed in the first place. (182)*

Although Vaughan does not name it as such, this description clearly coincides with Peirce's notion of the indexical sign—the sign most closely allied with the physical world, indeed, the only sign for which that world can be seen as *cause*.

Within Peirce's taxonomy of signs, the power of the index is a denotative one, forcing the attention to a particular object, here and now (*Pierce* 24). Indices are characterized by a certain singularity and uniqueness; they always refer to individuals, single units, single collections of units, or single continua. They are dependent upon certain unique contingencies: the wind blowing at the moment in a certain direction, a foot having landed in the mud at precisely this place, the camera's shutter opening at a given time. Unlike icons, indices have no resemblance to their objects, which, nevertheless, directly cause them. This is due to the fact that the index is evacuated of content; it is a hollowed-out sign. It (for instance, a pointing finger) designates something without describing it ("The index asserts nothing; it only says 'There!'" [Peirce, *Essential* 226]). An index is a particularly forceful and compelling form of sign—it directs the attention to an object by "blind compulsion" (*Collected* 161).

Unlike icons and symbols, which rely upon association by resemblance or intellectual operations, the work of the index depends upon association by contiguity (the foot touches the ground and leaves a trace, the wind pushes the weathercock, the pointing finger indicates an adjoining site, the light rays reflected from the object "touch" the film). The object is made "present" to the addressee. The specificity and singularity associated with the index are evidenced most clearly in Peirce's designation of the demonstrative pronouns (for example, "this," "that")

as “nearly pure indices” (although, existing within language, they must be symbols as well [*Essential* 226]). As Ducrot and Todorov point out, “In language everything that relates to *deixis* is an index: words such as *I, you, here, now*” (86). Roman Jakobson calls deictics *shifters* because their reference is entirely dependent upon the situation of speaking itself and shifts from one implementation to the next (131–33). “This” is evacuated of all content and simply designates a specific and singular object or situation, comprehensible only within the given discourse. Deixis is the moment when language seems to touch ground, to adhere as closely as it can to the present reality of speech. Peirce was acutely aware of this and hence contested the traditional wisdom that dictates that a pronoun (such as “this,” “that,” “I”) is a substitute for a noun. These pronouns have a directness and immediacy that all nouns lack; they are capable of indicating things in the most straightforward way. Therefore, Peirce claims that “a noun is an imperfect substitute for a pronoun” (*Collected* 163n).

Photography and film would seem to be excellent examples of sign systems that merge icon, index, and to some extent, symbol.<sup>4</sup> Although indexical because the photographic image has an existential bond with its object, they are also iconic in relying upon a similarity with that object. To the extent that photography and film have recourse to language (or are labeled themselves), they invoke the symbolic realm. It is interesting to note that Peirce himself seemed to situate photography as primarily indexical, subordinating the iconic dimension to secondary status. Photography’s iconicity was a by-product of its indexicality:

*Photographs, especially instantaneous photographs, are very instructive, because we know that they are in certain respects exactly like the objects they represent. But this resemblance is due to the photographs having been produced under such circumstances that they were physically forced to correspond point by point to nature. In that aspect, then, they belong to the second class of signs, those by physical connection.* (*Collected* 159)

For Peirce, the iconicity of the photographic image is reduced by the sign’s overadherence to its object (elsewhere he claims that an icon, in order to resemble its object, must also be noticeably different). The icon inhabits more comfortably than the index the realm of a language based on absence and differential signs.

The index, more insistently than any other type of sign, is haunted by its object. The index is “actually modified” by its object (Peirce,

*Collected 145).* It puts its addressee into a “real connection” with its object, and at one point, Peirce defines the index as “being really and in its individual existence connected with the individual object” (*Peirce 251*). Indices “furnish positive assurance of the reality and the nearness of their Objects” (25). But they are limited to the assurance of an existence; they provide no insight into the nature of their objects; they have no cognitive value, but simply indicate that something is “there.” Hence, the “real” referenced by the index is not the “real” of realism, which purports to give the spectator knowledge of the world. The index is reduced to its own singularity; it appears as a brute and opaque fact, wedded to contingency—pure indication, pure assurance of existence. This, for Didi-Huberman, is the significance of the small, irregular stain located on what would be Christ’s right wrist on the shroud of Turin, which, formless, resembles nothing, but for that very reason has been subjected to the most intense analysis, mapping its geometry, generating its relation to the wound caused by a nail. The very lack of iconicity of the stain, the fact that it defies comprehension as a recognizable image, confers upon it the greatest authenticity, making it the guarantee of the credibility of the shroud itself.

*The effacement of all figuration in this trace is itself the guarantee of a link, of authenticity; if there is no figuration it is because contact has taken place. The noniconic, nonmimetic nature of this stain guarantees its indexical value. I might add that the word authenticity is common to the vocabulary used by Peirce to describe the index and to the cultural discourse of theologians concerning relics. [ . . ] The absence of figuration therefore serves as a proof of existence. Contact having occurred, figuration would appear false. And the signifying opaqueness itself reinforces the it was of an object [ . . ]. (68)*

Didi-Huberman lays out here the terms of the index’s privileged relation to contact, to touch, the assurance of its physical link, as well as its resistance to iconicity that becomes, in the case of a photograph, according to Peirce, a mere accident or by-product of contact. Resemblance may occur, but it is not necessary to the functioning of the index as sheer evidence that something has happened, that something exists or existed.

Film, nevertheless, seems inevitably to carry with it an admixture of iconicity, its celebrated illusion of reality propping itself upon its technologically supported indexicality. Scores of Lumière films testify to the fascination of merely recording events, of tracing and preserving

movement of all sorts, but always recognizable, always mimetic. The physical or existential connection to its object that is the index's distinguishing characteristic, in the case of photography, yields an iconic image (mediated by a lens built according to the dictates of Renaissance perspective). However, the index as Peirce describes it has what often appear to be two contradictory, or at least incompatible, definitions. First, when the index is exemplified by the footprint or the photograph, it is a sign that can be described as a trace or imprint of its object. Something of the object leaves a legible residue through the medium of touch. The index as trace implies a material connection between sign and object as well as an insistent temporality—the reproducibility of a past moment. The trace does not evaporate in the moment of its production, but remains as the witness of an anteriority. Hence, this understanding of the index necessarily aligns it with historicity, the “that has been” of Barthes’s photographic image. The second definition of the index, on the other hand, often seems to harbor a resistance to the first. The index as deixis—the pointing finger, the “this” of language—does exhaust itself in the moment of its implementation and is ineluctably linked to presence. There is always a gap between sign and object, and touch here is only figurative. Of these two dimensions of the index emphasized by Peirce, the latter is frequently forgotten in the drive to ground the photochemical image as trace. Only the first definition—the index as imprint or trace (preeminently the footprint)—seems to correspond to the cinematic image. Light, as the physical connection, effects the photochemical base in such a way that it bears the imprint of the object, eschewing all the arbitrariness we usually associate with the sign. But for Peirce, as outlined above, the trace was only one genre of index, and not necessarily the most crucial or decisive. The pointing finger, instantiated in the “this” of language, incarnated the very ideal of indexicality, its purest form. The word “this” can only be defined, can only achieve its referent, in relation to a specific and unique situation of discourse, the here and now of speech. And in speech, its referentiality is contingent upon the pointing finger. When it appears in writing, it can only refer back, recursively, to previous words in the syntactical chain. The mandatory emptiness of the signifier “this” contrasts sharply with the abundance of the cinematic image, its perceptual plenitude, its seemingly inevitable iconicity, and hence would seem to be absolutely incompatible with cinematic signification.

Yet, the index as deixis is by no means absent from the cinema. Perhaps the most striking example can be found in the tradition of

an avant garde that continually tests the constraints and alleged limits of a medium, in Michael Snow's *So Is This* (1982), which activates the "this" of language relentlessly. The film consists entirely of words, with an emphasis upon various forms of the shifter—"I," "you," "here," "now," and especially "this." Miming interactivity, the film directly addresses its audience as the "you" of a present tense, that of the film's screening, in an ever new, ever unique moment that repudiates the idea of film as recording or representation, the trace of an object placed before the lens. For instance, the following short discourse is presented in the film one word at a time, the duration of words held on the screen varying in length, the size of the words increasing and diminishing, all against a background of flash frames and mutating colors:

*In 1979 Drew Morey made a film titled *This is the title of my film*. Since this is not his film and the "this" in his title cannot possibly refer to this, his title is not the title of this film and hence the author (Michael Snow) of this film decided to retain this title and to include the foregoing reference to this issue in this film. This is still the title of this film. So is this.*

*So Is This asserts its difference from a book through its rigorous control of the time of reading. The slowness or the rapidity of the appearance of new words on the screen is a play with filmic temporality and audience anticipation. The rejection of the indexicality we usually associate with the cinema allows the film to generate a lie, as in the statement, "This film will be about two hours long" (it is, in fact, forty-three minutes long). However, the film activates indexicality in other ways as well, ways that are more reminiscent of the effects of the trace, presenting shots of the words projected on a screen, manufacturing flashbacks of its own earlier discursive events, and often calling attention to the fact that the words appear on celluloid through recourse to flash frames and color changes. But it is primarily the ironies of the word "this," its refusal of a stable signification and the urgency of its appeal to an impossible presence that are at stake for Snow. In a sense, *So Is This* is the discursive form of *Wavelength* (1967), whose forty-five minute zoom is the embodiment of the pointing finger or the imperative "Look at this!" that Peirce saw as the exemplary sentence form of the index. The endpoint of *Wavelength*'s zoom is, appropriately enough, a photograph.*

The words of *So Is This* are constructed and then filmed so that the orthography itself, the technology of reproduction, becomes the object

of the indexical cinematic image (and contributes to dating the film, an issue to which I will return). There is a sense in which the insistent “this” of Snow’s film reverberates in any film, to the extent that it necessarily “presents,” or actualizes a real for the viewer, orchestrating the trajectory of the gaze in ways that often only seem less dictatorial than *Wavelength*. Christian Metz has invoked the linguistic notion of an “index of actualization” to name this quality:

*The image is always actualized. Moreover, even the image—fairly rare, incidentally—that might, because of its content, correspond to a “word” is still a sentence: This is a particular case, and a particularly revealing one. A close-up of a revolver does not mean “revolver” (a purely virtual lexical unit), but at the very least, and without speaking of the connotations, it signifies “Here is a revolver!” It carries with it a kind of here (a word which André Martinet rightly considers to be a pure index of actualization. (67)*

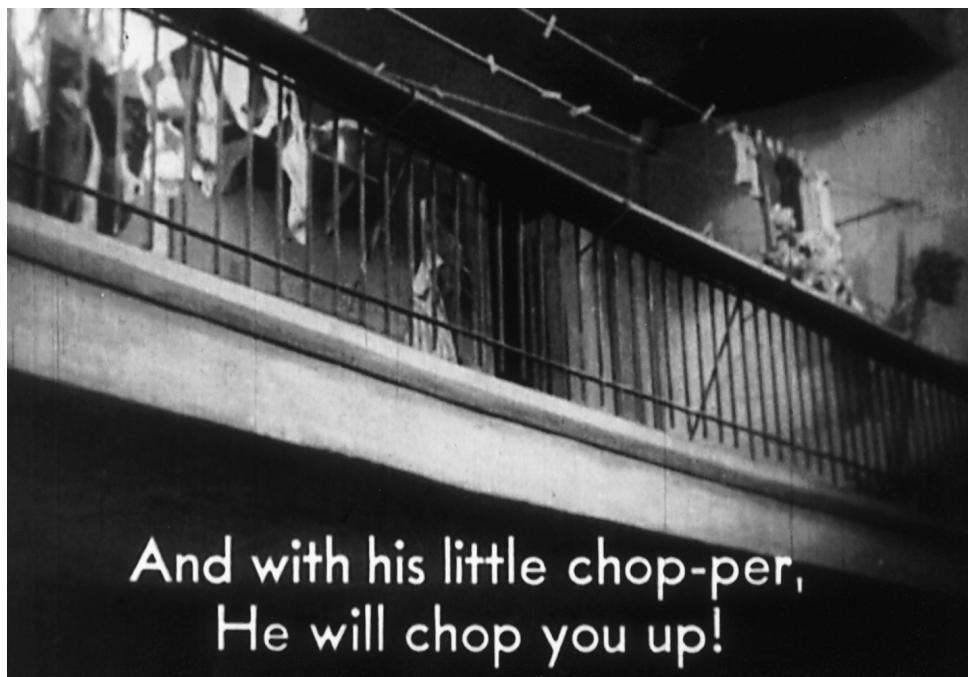
Even a film dependent upon the dialectic between index and icon that Willeman claims is specific to photographic representation, a film such as Fritz Lang’s *M* (1931), has recourse to the indexicality of the pointing finger, of the “this.” Indeed, in *M*, the trace or mark produced through contact (the slap on the back that transfers the chalked “M” to the murderer’s back) comes to figure indexicality itself in both its semiotic and ethical dimensions: it conjures the pointing finger as the vehicle of blame, of censure, in this case for the murderousness that proliferates and contaminates. The irreducible intimacy of the two forms of index—trace and deixis—is persistently elaborated. Preceded by the sound of a child chanting a rhyme about the murderer, the first image of the film emerges out of darkness to reveal a pointing game in which children are eliminated one by one, as the accusatory finger singles them out (fig. 1). The gesture of the pointing finger is taken on by the camera that smoothly sweeps over the courtyard and up to the balcony (fig. 2). The film has a tendency to linger on empty spaces, actualizing the image as the space of a future (or past) event.

Yet, the scene that is most telling comes later in the film, when the blind man paradoxically proves to be the one who “recognizes” the murderer. As the blind man, Heinrich, sells balloons, he hears someone whistling the *Peer Gynt Suite* and futilely tries to follow the sound. A

Fritz Lang, *M*, 1931.



Fritz Lang, *M*, 1931.



comrade sees him trying desperately to pursue the whistling and joins him. They both stare off-screen left, trying to keep the image of the man involved in sight (hearing). Heinrich tells his comrade that he had heard the same whistling the day that Elsie Beckmann was murdered. Both characters sustain a look that activates an off-screen space, invisible but credible given the world that the indexical image has produced (fig. 3). While they gaze off into nothingness, we have no doubt that *something is there* (this is the promise of the index), and our certitude is confirmed by the pointing finger of the blind man. But as the shot draws to a close, the pointing finger approaches and seems to touch the left edge of the frame (fig. 4). What is being indicated, indexed, brought to our attention is the frame itself, as the border between everything and nothing, as the cinematic equivalent of the “this.” For the frame, as Michael Leja has argued, demarcates a space as aesthetic (119). The difference between a footprint in the sand and an index that is framed or appears within a frame has to do with expectations about aesthetic activity, expectations that inevitably transform the index into a symbol. Leja is discussing the paintings of Jackson Pollock, but the pertinence of the photographic and cinematographic frame, in contrast to the frame of a painting, is that it coordinates and necessitates the dialectic of Peirce’s two, seemingly incompatible, definitions of the index, as trace and deixis. The frame directs the spectator to look here, now, while the trace reconfirms that something exists to be looked at. There are two temporalities at work here. While the index as imprint, as trace (as photographic image) endures, the “this” exhausts itself in its own present. Barthes attempted to specify the strange temporality of the photograph as a “having been there” (“Rhetoric”). But it could also be designated as the assurance of a “once now”—this was once the present moment. The dialectic of the trace (the “once” or pastness) and deixis (the now or presence) produces the conviction of the index. In a way that Peirce did not anticipate, the two understandings of the index collude to buttress an almost theological faith or certitude in the image.

It is the index’s nature as trace or imprint that allows it to escape the narrow confines of the “this,” to circulate and to participate in the drama of commodification so compellingly described by Walter Benjamin (“The Work”). And it is undoubtedly the attributes of the index as trace that permit Willeman and Vaughan to praise the indexicality of the cinematic image over and against the manipulability of the digital. For the indexical image, through its physical connection, touches the real, bears

Fritz Lang, *M*, 1931.



Fritz Lang, *M*, 1931.



And he was with a little girl --  
and he whistled just like that!

its impression, and hence assures us that it is still there; while the digital image has the potential to abstract and isolate itself, severing any connection with an autonomous reality.<sup>5</sup> Digital imaging allows for the manipulation of intensities, the seamless combination of image fragments from different sources, and invisible constructions or interventions in image formation (Mitchell 31). Most importantly, it is the ease and undetectability of these manipulations that most alarm Willeman and Vaughan, as well as their ability to undermine confidence in *any* image. It might be objected that photographs and other indexical representations have also been used historically to deceive. In 1988 the Shroud of Turin was proven to be a fraud. Carbon-14 dating established that the cloth itself was manufactured sometime between AD 1260 and 1390 (the shroud's historical emergence dates from 1354 when it is linked to a famous knight). And yet, the stains on the cloth are still evidence of *something*, bear witness to a historical event, even if that event is one of fraud. (The cloth also bears the marks of its history—burns from fires, watermarks from floods, patches sewn on by nuns.) If the index's powers are spent in the verification of an existence, the icon and the symbol (here, in the construction of an elaborate theological narrative about Christ's sufferings) work to extend and prolong the aura of that indexical authenticity.

The index makes that claim by virtue of its privileging of contact, of touch, of a physical connection. The digital can make no such claim and, in fact, is defined as its negation. The digital seems to move beyond previous media by incorporating them all (even the loop characteristic of optical toys, as Manovich has pointed out [314–22]) and by proffering the vision (or nightmare) of a medium without materiality, of pure abstraction incarnated as a series of 0s and 1s, sheer presence and absence, the code. Even light, that most diaphanous of materialities, is transformed into numerical form in the digital camera. In English, a telling symptom of this imperative of abstraction in the digital is its linguistic repression of touch. The first definition of “digital” listed in the *Oxford English Dictionary* is “of or pertaining to a finger, or to the fingers or digits.” The transition from the digit to the digital is effected, first, by defining the most pertinent characteristic of the finger as its discreteness, its differentiation from the other fingers, and second, by emphasizing the way in which the fingers lend themselves to counting, enumeration.<sup>6</sup> Yet, what is elided here is the finger’s preeminent status as the organ of touch, of contact, of sensation, of connection with the concrete. It could be said that the unconscious of the digital, that most abstract of logics/forms of representation, is touch.<sup>7</sup>

Digital media emerge as the apparent endpoint of an accelerating dematerialization, so much so that it is difficult not to see the very term “digital media” as an oxymoron.<sup>8</sup> Is the digital really a medium, or even a collection of media? Isn’t its specificity, rather, the annihilation of the concept of a medium? Its information or representations appear to exist nowhere and the cultural dream of the digital is a dream of immateriality, without degradation or loss. It might be argued that insofar as a medium derives its identity from its relation to the material conditions of its technical support, the limits of the hardware would delineate the specificity of the digital. But in the realm of aesthetics, at least, it is crucial not to forget the inextricability of the medium and the aesthetic object, which not only bears the imprint of its material conditions of existence but continually struggles to redefine and expand the limits of the medium. The motor behind the expansion of the limits of the digital is that of notions of technological progress, of speed, of expanded memory. And the relation of digital representations to their material conditions of existence (which does exist) is so abstract as to be almost unattainable. For the digital exudes a fantasy of immateriality, in contrast to the fantasy of referentiality of the indexical.

While the index’s fantasy has a chemical base, of agents and contact, the digital grounds itself in mathematics, the most abstract of epistemological realms. As Brian Rotman has pointed out, number as a sign system has “long [been] acknowledged as the paradigm of abstract rational thought” (46). Within the mathematical community,

*Platonism is the contemporary orthodoxy. In its standard version it holds that mathematical objects are mentally apprehensible and yet owe nothing to human culture; they exist, are real, objective and “out there” yet are without material, empirical, embodied or sensory dimension. (46–47)*

In the context of the often exuberant embrace of the digital, this Platonism manifests itself as a vision of longevity, as the promise of an escape from time, entropy, degradation. For within the digital realm, there is no difference between original and copy, and information outlasts its material support. As William J. Mitchell points out,

*Digital images seem even more problematic [than photochemical images], since they do not even have unique negatives. An image file may be copied endlessly, and the copy is distinguishable*

*from the original only by its date since there is no loss of quality. Unlimited numbers of displays and prints may be made from each copy, and displays may be fleeting like musical performances rather than permanent like paintings.* (49)

As the technology changes, the information can simply be transferred, without loss, from one “medium” to another: from hard drive to floppy disk to zip drive to CD-ROM. It must be stored somewhere, but that somewhere is subject to mutation and does not make its mark on the representation, which retains its integrity and autonomy. The idea of a medium seems to slip through our grasp.<sup>9</sup>

This is not true of the cinematic image, or at least of cinema as we have known it, wedded to a photochemical base. What is lost in the move to the digital is the imprint of time, the visible degradation of the image.<sup>10</sup> The age of photographs and of films is traced not only in their deterioration but in the type of film stock, lighting, color system, and so forth. In the viewer’s recognition of an old photograph or film as old, the fact of the medium’s materiality is foregrounded, not escaped.<sup>11</sup> The historicity of a medium is traced in the physical condition of its objects. This is why a film like Bill Morrison’s *Decasia* (2002) is so moving in its melancholic record of the slow death of the films once thought to immortalize their subjects, in its chronicling of the deterioration and disintegration of film stock and its subjection to the external forces of water and fire.<sup>12</sup> Toward the beginning of *Decasia*, a slow camera movement traces the immersion of reels of film in a chemical bath. A hand lifts the film to examine it (fig. 5). And then the images begin—images whose recognizability is in question, compromised by physical damage evidenced by scratches, loss of outline and bubbling due to chemical deterioration, images often approaching the threshold of abstraction, with only glimpses of iconicity (fig. 6). Particularly haunting is the shot of schoolchildren walking in an orderly line under the stern gaze of nuns as the image of and around them decays (fig. 7). As they turn the corner in a direction facing away from the camera, one girl turns back and directs her gaze, perhaps curious but now accusatory, toward the camera and toward us, the spectators of her image’s demise (fig. 8). The disintegration of a look is fatal for the cinema. It is the reversal of the emergence of figuration from a stain on the shroud of Turin: representation returns to the stain, to the sheer non-iconic marker of existence. What is indexed here is the historicity of a medium, a history inextricable from the materiality of its base. In the face of the digital, the

Bill Morrison, *Decasia*,  
2002.



Bill Morrison, *Decasia*,  
2002.



image is rematerialized through its vulnerability to destruction. As Paolo Cherchi Usai has pointed out, there would be no history of the image if it were not subject to decay (41).

*Decasia* exhibits a nostalgia for a medium subject to dissolution and corruption, as the mark of its own historicity. Willeman and Vaughan, as well, display a resistance to the notion that we inhabit a postmedium era and to the dream of immateriality,<sup>15</sup> precisely because such a stance refuses the claims of history. Benjamin, whose short history of photography returned to an older technology, the daguerreotype, praising its duration as a form of sensitive and time-filled engraving of the human gaze, consistently turned toward the past in order to comprehend the vicissitudes of the present ("A Small"). For Benjamin, the nineteenth century, with its arcades and optical toys, was the crucible of modernity, and it was the artifacts that disappeared or became obsolete that were most emblematic of the stresses of an evolving capitalist symbolic economy and its logic of commodification. As Krauss points out, "Benjamin believed that at the birth of a given social form or technological process the utopian dimension was present and, furthermore, that it is precisely at the moment of the obsolescence of that technology that it once more releases this dimension, like the last gleam of a dying star" (*Voyage* 4). If the cinema as we know it—contingent upon a photochemical epistemology—is on the verge of obsolescence, the utopian dimension such a fate releases is the desire for the certitude of the imprint, the trace, the etching in a medium whose materiality is thinkable. The source of this longing does not lie in the belief that the cinema gives us realistic representations of objects or people but that, in the manner of the "this," the deictic index, it points to and verifies an existence. It reveals more readily than the digital, with its dream of immateriality, the inescapable necessity of matter, despite its inevitable corrosion, decay, and degeneration. Rotman points to the materiality, the embodiment and the corporeality that is the condition for the possibility of all signifying (70), and what might be called the politics of the medium is an attempt to grasp and retain embodiment as a form of historical labor. As Siegfried Kracauer pointed out, the photograph "must be essentially associated with the moment in time at which it comes into existence" (54). The photochemical image is an inscription, a writing of time, and while Kracauer was suspicious of its potential for a positivist historicism, it nevertheless bore within it, and produced for its spectator, a respect for the resistances and thereness of historicity, for that which leaks out and

Bill Morrison, *Decasia*,  
2002.



Bill Morrison, *Decasia*,  
2002.



cannot be contained within the notion of semiosis. Its promise is that of touching the real.

On the other hand, such an argument has the flavor of a theology, and it is not surprising that the discourse of indexicality seems indissociable from that of the relic. For the index is never enough; it stops short of meaning, presenting only its rubric or possibility, and for that reason it is eminently exploitable—as is the fantasy of immateriality, the dream of the perfect archive, of digital media. The challenge of digital media, in its uses and theorization, is that of resisting not only a pervasive commodification of the virtual but also the digital's subsumption within the dream of dematerialization and the timelessness of information, returning history to representation and reviving the idea of a medium. Making it matter once more.

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## Notes

- 1 The photograph retrospectively established the shroud as a photographic negative, since Pia's negative appeared to be a positive image.
- 2 The debates about medium specificity are frequently linked to a politics of the institutionalization and use of a particular medium, as well as discourses about the role of aesthetics in negotiating the experience of particular works. The proliferation of terms such as *multimedia*, *mixed media*, *intermedia*, and *hybridization* in recent years does not necessarily herald the end of the notion of an isolated medium or of these debates about medium specificity. Implicit in the concept of intermediality, for instance, is a drama of identity and its loss and subsequent regeneration. As media converge, they do not simply accumulate but generate new forms and possibilities that rely on the “haunting” effect of earlier singular media (see Bolter and Grusin). Film itself, due to its combination of image, sound, graphics, music, and speech, is often conceptualized as the first intermedial art form (although opera might contest this notion). The automatic reproduction and repetition associated with mechanical and electronic forms of representation facilitates the haunting process.
- 3 It is arguable that animation is indexical, certainly in the sense that it is deictic through its framing and use of simulated camera movement. But even in terms of the more common sense of the index as trace, animation involves photography and a “that has been” of the graphic image in front of the lens. More tellingly,

- perhaps, techniques such as the pixilation of live actors or even clay figures are clearly indexical. Animation is only nonindexical if the “real” associated with the index is yoked to a traditional notion of realism or to the filming of only objects/places not constructed or generated by human beings (which would strictly limit cinematic indexicality to certain kinds of landscape films).
- 4 Peter Wollen, in his chapter on the semiology of the cinema in *Signs and Meanings*, was the first to point this out and to emphasize the importance of Peirce’s taxonomy of signs in discussions of the cinema.
  - 5 The actual use of digital photographs, however, often simply mimicks that of traditional, chemical photography. This applies to the use of digital photography in constructing family albums as well as to journalistic usage and scandalous incidents such as Abu Ghraib, where the question of the reliability or “truth value” of the image is overshadowed by its shocking immediacy, its imputed documentary status.
  - 6 For a fascinating discussion of fingers and the digital, see Evens.
  - 7 In this context, Hiroshi Ishii’s Tangible Media Group at the MIT Media Lab exemplifies a unique effort to conjoin the digital and the tangible. One of its projects, “Tangible Bits,” seeks to give “physical form to digital information, seamlessly coupling the dual worlds of bits and atoms.” The discourse reveals a nostalgia for that which the digital seems to neglect or exclude—touch.
  - 8 For an intriguing discussion and critique of the ideology of dematerialization and the digital, see Hayles.
  - 9 This is primarily an argument about storage—of images, writing, sounds, and so on. Insofar as a medium is a material configuration, the digital is certainly a medium but a medium whose changing nature is extremely accelerated. As Braxton Soderman has pointed out to me, digital images in the sense of computer graphics (e.g., images from old video games such as Atari, where figures are simply blocks of pixels; the first computer-based ping pong games; 8-bit graphics from Nintendo systems, etc.,) do have a history and are perceptible and perceived as “old.” However, these traces or indications of age are primarily based on the limits (of memory or the graphic user interface) of the hardware and hence, interestingly enough, emerge as aesthetic—matters of style or convention. They are not so much indications of material decay or degeneration (the chemical decomposition of old photographs or negatives, for instance) but of a historical specificity associated with technique (comparable, more or less, to the silent film or the black and white film experienced in the era of sound and color: these remain aesthetic choices today but are marked by a certain historicity).
  - 10 Mitchell describes the inability to trace digital images, their relative emancipation from the signs of historicity:
 

*Image files are ephemeral, can be copied and transmitted virtually instantly, and cannot be examined (as photographic negatives can) for physical evidence of tampering. The only difference between an original file and a copy is in the tag recording time and date of creation—and that can easily be changed. Image files therefore leave no trail, and it is often*

*impossible to establish with certainty the provenance of a digital image.* (51)

Maureen Turim has pointed out to me very astutely that digital images are often utilized for forensic purposes, but the difficulty emphasized by Mitchell remains—the digital image has no internal, necessary, or inalterable relation to time since its temporal specificity is “guaranteed” only by an external system, subject to manipulation.

- 11 It is certainly true that images, like furniture, can be “distressed” (i.e., made to appear older than they actually are). And this technique has been very important within both the avant garde and certain historical fiction films. Here, age is signified—becomes a sign not a trace—and participates in a system of value similar to that outlined by Saussure in *Course in General Linguistics*. However, as with the “forged” stains on the Shroud of Turin, the distressed markings are again evidence of something and bear witness to a historical event, even if that event is one of fraud or the forced introduction of a kind of “lie” about the age of images.
- 12 *Decasia*’s original incarnation was as a live performance. Michael Gordon was commissioned by the Europäischer Musikmonat to write a symphony for the Basel Sinfonietta, and the performance was staged in Basel, Switzerland, on November 4 and 5, 2001. The film was produced as part of this performance and was projected on scrims on the

stage. The recordings of these live performances of the Sinfonietta became the soundtrack for Bill Morrison’s reedited version of the film used in the staged performance. This film, now available on DVD, was produced by Hypnotic Pictures. The soundtrack of the film has been described as apocalyptic and hallucinatory, suggesting the processes of decay and degeneration documented by the images. Michael Gordon has invoked the image of a neglected piano, untuned for one hundred years, as his inspiration for the piece.

- 13 Embracing loss rather than the utopian hope of a perfect archive, Brian Rotman, from a slightly different angle, refuses to abandon mathematics to the Platonists and struggles to reincarnate number. For him, a 0 placed on an infinitely extended line is indexical if indexicality is “interpreted in the usual way as a coupling of utterance and physical circumstance” (10), for 0 acts as a “this” or a “here,” pointing out an origin. Rotman argues that diagrams, because they are “physically experienced shapes [...] having an operative meaning inseparable from an embodied and therefore situated gesture” (59–60), have an indexical dimension. Therefore, to exclude diagrams as a crucial component of mathematics is “to occlude materiality, embodiment and corporeality, and hence the immersion in history and the social that is both the condition for the possibility of signifying and its (moving) horizon” (70).

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