Emotion Capture: Affect in Digital Film

Abstract: André Bazin and Roland Barthes both theorize a cinematic realism based on the indexical ability of the photographic image (the ability of the image to indicate an original object). How are their arguments affected by the advent of digital, nonindexical cinematic technologies? The article considers how a nonindexical realism might be possible, by looking at three recent films: Waking Life, A Scanner Darkly, and Eternal Sunshine of the Spotless Mind

Keywords: Barthes, Bazin, digital, Gondry, indexicality, Linklater, realism

Bazin/Linklater

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More than half a century ago, the great film critic André Bazin ([1946–1957] 2004) described what he called "the myth of total cinema" (2004: 17–22). In Bazin's vision, the history of film could be seen as a progressive movement toward an ultimate goal: "a total and complete representation of reality . . . the reconstruction of a perfect illusion of the outside world in sound, color, and relief...an integral realism, a recreation of the world in its own image, an image unburdened by the freedom of interpretation of the artist or the irreversibility of time" (2004: 21). Bazin calls this goal a "myth" for several reasons. First, because the ideal of a total representation of reality is just that, an ideal: something that we can always strive for, but that we will never fully attain. And second, because Bazin believes that it was the ideal of total cinema that drove the development of the actual technology of film—and not the reverse. Bazin says that the movies were not created by "the two industrialists Edison and Lumière" (2004: 22), the inventors who are generally credited with actually making the first movie cameras and projectors. Movies are rather the product, Bazin maintains, of a group of now-forgotten dreamers: "the fanatics, the madmen, the disinterested pioneers" (2004: 22) who were obsessed with the uncanny power of images.



Bazin's myth is stranger than it might at first appear. It's easy enough to dismiss it as philosophically "idealist," an appellation that Bazin himself would not have rejected. But it's an odd sort of idealism that entirely erases any trace of the Cartesian or phenomenological subject. Despite his own training in phenomenology, Bazin's focus is entirely ontological, rather than epistemological or phenomenological. In Bazin's vision, the world recreated by film seems to exist on its own account, "in its own image," independent of either the creator or the spectator. Photography and film are radically contingent on "the instrumentality of a nonliving agent" (2004: 13). The cinematic artist must therefore step aside from the image that he/she helps to bring into being, letting the machine do its work without imposing subjective interpretations on it. As for the spectator, there is no room in Bazin's account for the voyeuristic subjectivity that is at the center of so much actual film, and so much film theory. Instead, Bazin presents an ideal of self-subsisting images, liberated from any particular perspective, as from any specifically implicated viewer. Film viewing for Bazin is entirely disinterested—as any aesthetic pleasure must be, according to Kant.

Though Bazin insists that the teleological development of film has never been driven by mere technological progress, his outlook still entirely depends on the conditions afforded by nineteenth- and twentieth-century technologies of mechanical reproduction. For Bazin, the indexical quality of photographic and cinematographic images is their most important feature. In traditional photography, there is a literal, cause-and-effect, point-for-point relationship between the object that stands before the lens, and the image that is inscribed on the photographic plate by light reflected off that object. The mechanistic nature of the camera eliminates any imposition of the artist's hand: "for the first time an image of the world is formed automatically, without the creative intervention of man" (2004: 13). Bazin bases his entire "ontology of the photographic image" (2004: 9–16) on its "essentially objective character.... In spite of any objections our critical spirit may offer, we are forced to accept as real the existence of the object reproduced, actually re-presented, set before us.... Photography enjoys a certain advantage in virtue of this transference of reality from the thing to its reproduction" (2004: 13–14).

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What are we to make of all this in the twenty-first century? Today, we might say that Bazin's myth of total cinema has come closer than ever to realization, albeit in a manner that Bazin himself did not anticipate, and would not have appreciated. For what has happened in the last half century

is that, instead of the movies becoming more like reality, reality has become more like the movies. The world we live in is saturated with images, and especially moving images. There are hundreds of cable TV channels, thousands of films available on DVD, surveillance cameras everywhere, lots of hyperrealistic, fast-moving video and computer games, and an ever-increasing number of Webcams and streaming video sources online. There are active, online screens everywhere, from giant electronic billboards looming over the urban landscape, through video monitors running real-time surveillance footage, to the miniature screens of iPods and mobile phones.

But it's not just that the quantity of moving images has increased over the last fifty years; it is also that these images have changed the nature of reality itself. Bazin thought that movies were trying to reproduce a real world that already existed independently of them. Today, this seems hopelessly naive. Images are themselves a constituent part of the "real world." They are as real as anything else, more real, perhaps. Nothing exists independently of TV, the movies, and the Internet. Film and video don't reflect a prior reality; rather, they make the world over in their own images. For instance, political campaigns and professional sports scarcely exist apart from television; they are enacted directly for the camera. "Reality shows" go even further, by putting "real people" into situations that only exist as arbitrary constructions in the mind of some producer. And with video podcasts, and popular Websites like YouTube, people are able to transform their everyday lives directly into televisual performances. Today we live in a world that can itself be described, ironically, as "a total and complete representation of reality."

Also, the indexical character of the photographic image has disappeared. Cheap, lightweight digital video cameras, with instantaneous playback, have made it easier than ever before to capture images of raw, immediate, everyday experience. Yet ironically, we can no longer put our faith in the truth-value of such images. It's not just that anybody, at any time, may already be playing self-consciously for the cameras. But beyond this, photographic images themselves are no longer objective in Bazin's sense. They can no longer carry their own self-evidence, in an age of digital sampling, image-manipulation programs like Photoshop, and CGI (computer-generated imagery). Even when images are not being actively manipulated, the very shift from analog to digital destroys the indexical nature of the photograph. Digital photography is no longer mimetic. The chain of cause and effect is ruptured: no longer does light reflected off an object, and entering a lens, produce analogous chemical changes on a photographic plate. Instead, the stream of light is sampled at precise intervals, and rendered into an abstract binary code (1s and os). This abstract code can be easily manipulated and overwritten: which is why it is so simple a task to edit and alter images on a computer, to lighten and darken and otherwise change appearances, to combine objects and scenes from totally different times and places, and even to convincingly render objects and scenes that never stood in front of the camera in the first place. In digital photography and film, even the most mimetically faithful images are artificial and fictive. There is no longer any ontological distinction between a "true" image and a "false" one.

The new digital technologies would seem to have vitiated all of Bazin's founding assumptions. Yet we should remember Bazin's insistence that technological capability per se was never the point of his myth of total cinema. The "basic technological discoveries," he says, are "fortunate accidents but essentially second in importance to the preconceived ideas of the inventors" of cinema. In fact, the myth of total cinema "seems to call for a reversal of the historical order of causality" (2004: 17). Moreover, Bazin doesn't care about—and indeed, shows no awareness of—the distinction between analog and digital. He is concerned, rather, with the difference between the automaticity of the camera and tape recorder, on the one hand, and the "inescapable subjectivity" (2004: 12) of the arts (like painting, drawing, and engraving) that require the intervention of the artist's hand, on the other. To the extent that digital technologies reinforce the automaticity of the cinematic apparatus, one can imagine Bazin welcoming them. Indeed, this is precisely why the world of simulacra we inhabit today seems like an ironic fulfillment of Bazin's myth of total cinema. If nothing else, the society of the spectacle works toward the goal of "completely satisfying our appetite for illusion by a mechanical reproduction in the making of which man plays no part" (2004: 12).

I'd like to suggest that the real question, for Bazin, is one of *time*: a time that isn't subject to human will because, conversely, the will can only realize itself within time, and as conditioned by it. Film and still photography are both mechanistic, indexical processes; but only film, Bazin says, "makes a molding of the object as it exists in time, and furthermore, makes an imprint of the duration of the object" (2004: 97). Film forces us to wait, just as the real world on which it is modeled forces us to wait. The actual length of time it takes for a process to unfold "is the very substance of the image, its true object" (2004: 27). Long-take *mise-en-scene* shows the actual passage of time, whereas montage (which Bazin deprecates) can only "suggest" it. In his concern with cinematic duration, Bazin looks backward to Bergson—and also implicitly forward to Gilles Deleuze's (1989) concern with the *time-image* in post-Wellesian and post-Neorealist film.

Nonetheless, from a Bergsonian or a Deleuzian perspective, there is something strange about Bazin's treatment of time. For Bazin proclaims the ultimate cinematic image to be "unburdened by...the irreversibility of time." How can this be? Time may well be reversible in the abstractions of physics; but as Bergson insists, the one-way flow of time, and hence the radical difference between the past and the future, is basic to all our actual experience. Doesn't the idea of a time freed from irreversibility therefore contradict the very "integral realism" that is Bazin's goal? When the world is recreated



Figure 1. Waking Life: Richard Jewell and Caveh Zahedi sharing a "holy moment."

"in its own image," time necessarily *passes*. But the very point of Bazinian realism, of this doubling of the world by its own image, is to preserve what would otherwise pass away, to render the very passage of time present. Bazin admits that the cinema's preservation of time is "strangely paradoxical" (2004: 97); but he insists that, "thanks to the artificial proximity provided by photographic enlargement... everything [in the film] takes place *as if* in the timespace perimeter which is the definition of presence" (2004: 98; emphasis added). In effect, Bazin is arguing—against Walter Benjamin—not only that film has an aura, but that its "technological reproducibility" is the very source of its aura. Cinema affirms time and duration; but it does this, paradoxically, in an eternal present. In film, the thickness of "duration" is itself retained, forever and ever.

The filmmaker Caveh Zahedi elucidates this paradox, when he appears as himself in Richard Linklater's film *Waking Life* (2001) (Figure 1). Zahedi explains that, for Bazin, the moment captured on film is *holy*:

And so what film is actually capturing is, like, God incarnate, creating. You know, like this very moment, God is manifesting as this. And what the film would capture if it was filming us right now would be, like, God as this table, and God is you and God is me and God looking the way we look right now, and saying and thinking what we're thinking right now, because we're all God manifest in that sense.... So film is like a record of God or the face of God, or of the ever-changing face of God.

We aren't always aware of the holiness of existence; but with film, "we can frame it so that we see, like, 'Ah, this moment. Holy.' Like 'holy, holy, holy'

moment by moment." When Zahedi speaks of framing the holy moment, his moving hands magically sketch the shape of a film frame. After explaining Bazin's thesis, Zahedi goes on to enact it. He and his interlocutor, David Jewell, just sit still and stare into one another's eyes. Action is suspended. Dogs bark in the background. Everything is stripped away, except for perception and feeling. Time stops; or better, its duration is not sullied or filled by anything besides the very event of duration itself.

This sequence expresses both the intensity and the precariousness of the holy moment. As Jewell says to Zahedi right afterward, "everything is layers.... There's the holy moment and then there's the awareness of trying to have the holy moment.... I was in and out of the holy moment, looking at you." Self-consciousness is unavoidable, and it interferes with the affective intensity of just living in the moment. In order to apprehend the holy moment, therefore, we need to frame it, recall it, reproduce it. Zahedi's conversation with Jewell is itself framed, as it takes place in a film within the film, on the screen of a movie theater. Linklater shows us the movie projector, and he cuts several times to reaction shots of a viewer (Waking Life's unnamed, ambulatory protagonist, played by Wiley Wiggins), whose facial expressions mirror the emotions expressed on screen. In the context of Linklater's film, this is not (psychoanalytic) identification: the voyeur/protagonist is too insubstantial, too spectral, for that. Rather, it is empathic sharing, a contagion or communication of affect.

In the routine of ordinary life, Zahedi says, we resist such communication: "who can live that way? Who can go, 'Wow, holy'? Because if I were to look at you and let you be holy—I don't know. I would, like, stop talking....I'd look in your eyes and I'd cry, and I'd feel all this stuff and that's not polite." As a result, we often fail to appreciate the holiness of the real. "We walk around like there's some holy moments and there are all the other moments...." But at least for the time of its recreated present, the film restores our awareness of the holiness of the moment, of every moment. At the end of the sequence, Zahedi's and Jewell's heads and torsos metamorphose into sublime cloud formations as if to emphasize the simultaneous splendor and transience of the holy moment.

What role does this sequence play in Waking Life as a whole? More generally, what role can the "holy moment" play in a digitized world, and in a medium where indexical referentiality no longer obtains? Linklater's film directly violates Bazin's principle of "integral realism," in that it is animated, rather than directly photographed. But the form of this animation needs special comment. Linklater first shot footage on digital video, with real actors in real locations. Then, in post production, this footage was rotoscoped. That is to say, the images were traced over, frame by frame, and transformed into animation. Rotoscopy is a kind of nonmechanized motion capture. It started out, in the early twentieth century, as a way to draw more lifelike, realistic figures in cartoons. Later, it was used for a variety of special effects most often to create mattes for composite shots, and to stabilize shaky footage. Analog rotoscopy was extremely labor-intensive, since every frame of the source film had to be traced over individually. Digital-rotoscoping software automates the process somewhat, since "the computer...can use the previous frame as a basis [for the next one], which means most of the drawing may already be done" (Silverman 2004). As a result, "even neophytes can quickly master an otherwise daunting process known as interpolated rotoscoping, in which animators trace over live-action DV footage" (Baimbridge 2001). Nonetheless, even with this software, rotoscopy is still an arduous process, and one that has to be carried out largely by hand. It can take "up to 500 hours to create one minute of screen time" (Byrg 2006). Waking Life was the first feature-length film ever to be entirely rotoscoped.

Rotoscopy is deeply ambiguous, from a Bazinian point of view. It obviously violates "the objective nature of photography," the sense that "the photographic image is the object itself, the object freed from the conditions of time and space that govern it" (Bazin 2004: 13-14). But at the same time, rotoscopy is still something of a mimetic process. Through the act of tracing, the image maintains a certain link to reality, despite the subjective impositions of the artist's hand and the arbitrariness of digital code. Linklater uses rotoscopy to reconcile what Bazin saw as the two "broad and opposing trends" of filmmaking: "those directors who put their faith in the image and those who put their faith in reality. By 'image' I mean, broadly speaking, everything that the representation on the screen adds to the object there represented" (24). Linklater is clearly using animation to add things to the objects placed before his camera, for instance, the transmutation of Zahedi and Jewell into clouds. Where old-style analog rotoscopy was used to make animation seem more realistic, Linklater uses digital rotoscopy in order to be less so. And where most digital animation today strives to be as photorealistic as possible, as if to efface its own representative nature (think of all the Pixar films, and of special effects in summer blockbusters like Pirates of the Caribbean), Linklater "use[s] computers to paint reality, not mimic it" (Baimbridge 2001). But at the same time, and again in contrast to Pixar-style simulation, Linklater seeks to maintain a Bazinian fidelity to the real: by insisting on the material traces of the objects and people he transforms, and by respecting the real time, the ever-present duration, of the events that his camera records.

The figures in *Waking Life* seem more vivid, yet at the same time more iconic and abstract, than their strictly photographic images would have been. These are intrinsic qualities of animation as a medium. There's also a freehand openness to much of the animation, a wavering line that suggests fluidity and indeterminacy. But Linklater uses these interventions of the artist's hand

in order to suggest a "realism" of dreams—if such a thing is conceivable—supplementing Bazin's objective realism. That is to say, rather than substituting an aggressive montage style (which Bazin despised) for a mise-en-scène-based style (which Bazin celebrated), and rather than substituting an expressionistic, subjective point of view for an objective, Bazinian one, the film strives to reach a point where the very alternative between "subjective" and "objective" becomes meaningless or irrelevant.

In Waking Life, dreaming is an impassive, aesthetic state of pure contemplation, without the sexual, aggressive charge found in surrealist and psychoanalytic dreams. The protagonist is almost entirely passive; he walks or floats or flies from one encounter to another. As he describes his own experience: "some of it was kind of absurdist, like from a strange movie or something. Mostly, it was just people going off about whatever, really intensely." The film passes, without skipping a beat, from a scene in which a man proclaims the improvement of humankind through a "new evolutionary paradigm," to one in which a man theatrically sets himself aflame in order to illustrate his Bataillean thesis that "society has...a vested interest in considerable losses and catastrophes," to one in which a couple in bed sleepily discuss the paradoxes of collective memory and reincarnation. The protagonist tries, at several points, to wake up, only to find that he has instead merely passed into another layer of dream. Indeed, he cannot awaken: it is suggested several times that he may in fact be dead, and that his "lucid dreaming" is the spectral condition of the afterlife.

Since there is no teleology to this drifting and dreaming, no narrative order, "the irreversibility of time" is not a burden in *Waking Life*. Death itself is irreversible, of course; but once you have passed through it, and into the oneiric realm of the cinema, its urgency is gone, and none of its anxieties really matter any longer. Even the self-immolation scene seems to have no lasting impact on the protagonist/viewer. *Waking Life* presents a series of moods, or "holy moments," that are ephemeral, free-floating, and disjunctive. Each scene has a separate intensity, a pure present with no relation to what comes before or after. Perception and affect are thereby, as Bazin urges, "freed from the conditions of time and space." The "real" is redefined as a collective hallucination, or an ensemble of what Deleuze (1989), in his discussion of the time-image, calls "pure optical and sound situations" (9 and passim). In this way, Linklater translates Bazin's exalted sense of presence and grace into the realm of nonindexical, digital simulacra.

Waking Life offers us a beautiful sense that digitally generated images and sounds are perfectly real, and adequately grounded in and of themselves, regardless of any question as to what they might represent. But in other contexts, the idea of a "real" indistinguishable from hallucination is more likely to strike us with horror. This is indeed the case in Linklater's second

rotoscoped film, A Scanner Darkly (2006), adapted from the novel by Philip K. Dick ([1977] 1991). A Scanner Darkly uses rotoscopy to set forth a nightmare vision of the schizophrenic splitting of consciousness, under the combined effects of drug addiction and perpetual high-tech surveillance. The animation here is more precise, more restrained, and more naturalistic than it was in Waking Life. There is none of the earlier film's freehand visual exuberance. As Angela Mitropoulos (2006) puts it, the technique here suggests "grim hyper-realism," rather than "crayon drawings." Colors are dull and washedout, and the rendered locations tend toward the depressing: druggie pads with trash and detritus strewn everywhere, anonymous freeways and diners, blank bureaucratic spaces (police stations, rehab centers, rooms with banks of surveillance monitors). The Hollywood actors who star in A Scanner Darkly (Keanu Reeves, Robert Downey Jr., Woody Harrelson, Winona Ryder) are fully recognizable, their features sharpened to the point of caricature. Rotoscopy transforms them into manically pulsating and yet strangely hollow doubles of themselves. They are iconic masks behind which there is nothing.

Bob Arctor (Reeves), the protagonist of A Scanner Darkly, is a narcotics agent who has gone undercover, taking on the persona of a drug-using social dropout. His mission is to track down the source of Substance D, the illegal, mind-distorting drug that is the focus of the narrative. But Arctor's life is swallowed up by his role: he himself becomes addicted to Substance D, whose long-term side-effects include the splitting of the two brain hemispheres into separate and competing entities. This identity confusion is only compounded when Arctor is ordered to spy on his own persona, of whom the authorities have become suspicious. Arctor splits his time between sitting around his house, swallowing doses of Substance D and engaging in pointless chitchat and circular arguments with his drug-addled housemates (played with comic verve by Downey and Harrelson), and sitting in front of multiple monitors, watching surveillance tapes of himself, and composing reports on his own behavior. Arctor is breaking down; his personality disintegrates over the course of the film, to the point that he is little more than an empty shell by the end. But he is unable to grasp what is happening to him. Other Substance D addicts suffer full-scale freak-outs; all we get from Arctor is continual, lowgrade anxiety and befuddlement. Reeves is a notoriously inexpressive actor; rotoscopic abstraction amplifies this inexpressiveness, as if to turn it into a positive quality.

In order to protect his undercover identity, Arctor appears in public wearing a "scramble suit" (Figure 2). This is a device that (in the words of Dick's novel) projects outward "every conceivable eye color, hair color, shape and type of nose, formation of teeth, configuration of facial bone structure," all of these changing many times a second. The wearer, safely ensconced within, is "Everyman and in every combination... during the course of each hour." Pro-



Figure 2. A Scanner Darkly: scramble suits and surveillance.

tected by the scramble suit, you have no distinct features: to everyone looking at you, you are just a "vague blur" (Dick 1991: 23). Linklater's animation realizes the scramble suit as a rapid-fire alternation of faces and bodies, male and female, adult and child. The resulting figure is indubitably human; but we can't make any coherent sense of it, or "read" it in any particular way. The scramble suit is creepy and disturbing, because it is entirely singular—it is always a particular face, never a face in general—and yet entirely without qualities—there is nothing stable enough to be pinned down. The scramble suit is thus an extreme image of identity breakdown; Arctor's outward indiscernibility mirrors his inner disintegration. If you're Everyman, you're nobody. Linklater emphasizes this parallel by cutting back and forth between close or medium shots of the suit as seen from without, and close-up headshots of Arctor inside. In the latter, his gaunt and tired face, suspended somewhere between angst and blankness, stands out against a field of gray.

The depiction of the scramble suit is a triumph of Linklater's animation technique. But the suit is also, allegorically, the *ne plus ultra* of rotoscope animation itself. If Linklater's rotoscopy is a way of tracing the world in order to recreate it in its own image, then the scramble suit marks the point at which this technology becomes ubiquitous. It has scanned everyone, and captured their images. It voraciously devours all those bodies and faces, mashes them together, and reduces them to simulacra. That's what it means to maintain some sort of referentiality, or indexical ability, in the digital realm. Whoever copies your image, steals your soul. Rotoscopy as body- and motioncapture is conterminous with the total surveillance that characterizes the world of Linklater's film (which takes place, an opening title tells us, in America

"seven years from now"). Such surveillance is the dark underside of Bazin's myth of total cinema, his wish for a "total and complete... integral realism." Who better than the police to watch the ultimate realist film? The scramble suit itself is the inverted counterpart of surveillance technology. Inside the suit is the one place where you cannot be seen; while the suit's outside broadcasts images of everyone.

In this way, the "look and feel" of the rotoscope technique is itself the real subject of A Scanner Darkly. It's through this look and feel that we get immersed in the world of the film. At first, the animation seems bizarre and distorted, but gradually it "naturalizes" itself in our perceptions. The film's opening sequence shows a man scratching frantically as bugs crawl rapidly over his skin. The blatantly cartoony look of the bugs clues us in to the fact that this is a drug delirium. Eventually, however, the distinction between actuality and hallucination becomes as uncertain for us as it is for the characters themselves. The look and feel of the rotoscope animation expresses both the florid subjectivity of drug-induced phantasmagoria, and the reductive objectivity of video-surveillance footage. There's a quietly terrifying scene in which Arctor wakes up, and finds himself next to a woman addict whom he had enticed into his bed. As she sleeps, her body metamorphoses into that of Donna (Ryder)—the unattainable woman Arctor really desires—and then back again. Shaken, Arctor goes to the surveillance room, and (wearing his scramble suit) watches the incident on video replay—and the momentary metamorphosis takes place on the tape as well. The hallucination has been objectified: it plays out for the surveillance scanner, as well as for Arctor. Within the narrative, this scene epitomizes the formal role that rotoscopy plays throughout the film, the way it transforms, and feeds back on, the reality that it records.

Never has a film been so attuned, in visual terms, to the transformations of psychedelia, and yet at the same time so resolutely downbeat and un"trippy." Linklater suggests that drug-induced altered states, and ubiquitous police surveillance are two sides of the same coin. In *A Scanner Darkly*, Bazin's paradise of heightened and recovered presence is transformed into a hell of manipulation, feedback, and inescapable absolute proximity. For these both follow from the same logic of technologically mediated presence; they are equally valid translations of Bazin's "myth of total cinema" into the digital realm. As Fredric Jameson (1991) observes, the "heightened intensity" and "mysterious charge of affect" of postmodern experience can be registered just as well "in the negative terms of anxiety and loss of reality" as "in the positive terms of euphoria, a high, an intoxicatory or hallucinogenic intensity" (27–28). In *A Scanner Darkly*, rotoscopy gives the suggestion, not of a realism of dreams, but instead of an unrealism (if I may call it that) of the Real itself. It is not that the real has been displaced or distorted by digitization, and its

correlative mechanisms of control. It is rather, more subtly and disturbingly, that such displacement and distortion is *itself* the bedrock reality of digital culture. There is nothing hidden behind the mask, nothing to recover beyond the hallucinations and the surveillance screen. Such is the condition that a Bazinian "integral realism" reveals to us today.

Barthes/Gondry

Roland Barthes, a near-contemporary of Bazin (although he lived much longer), is obviously a very different sort of critic. Barthes might almost be thought of as the anti-Bazin. He is an avowed antirealist who insists on the construction and artificiality of all representations. For Barthes, we live in a thoroughly mediated world (in both the philosophical and the communicational senses of the word *mediated*). Culture is a dense network of signs, irreducible to simple presence. Where Bazin can only grudgingly concede, after expounding his realist "ontology of the photographic image," that "on the other hand, of course, cinema is also a language" (2004: 16), Barthes starts out with language, under which he subsumes other kinds of experience. This doesn't mean that he ignores nonlinguistic sounds and images; but these latter always involve a range of "connotation procedures" (1985: 14), and come to embody a certain "rhetoric" (1985: 21–40). For Barthes, no object of perception or sensation is ever simply *there*; no meaning is ever purely and simply denotative.

Nonetheless, and perhaps surprisingly, Barthes turns out to share Bazin's faith in the indexical truth of the photographic image. In his beautiful final book, *Camera Lucida* (1982), Barthes argues that, "photography's Referent is not the same as the referent of other systems of representation." For every photograph bears witness to "the *necessarily* real thing which has been placed before the lens, without which there would be no photograph ... in Photography I can never deny that *the thing has been there*" (1982: 76). Or again, "the photograph is literally an emanation of the referent" (1982: 80); "the Photograph [i]s an image without code" (88). Photography, therefore, in contrast to language and writing, is not—or at least is *not just*—a system of connotations and arbitrary signs. The essence, or "founding order" of photography "is neither Art nor Communication, it is Reference" (1982: 77).

In thus defining photography, Barthes is careful to add that "we are not yet speaking of film" (1982: 77). But, curiously, when Barthes does turn his attention to film, he seems to reduce moving pictures to photographs. His major essay on cinema, "The Third Meaning" (1985: 41–62), is subtitled "Research Notes on Several Eisenstein Stills." And in this essay, stills are indeed all Barthes writes about. He completely, programmatically ignores montage—despite the fact that montage is, of course, at the center of Eisenstein's aesthetic. Against Eisenstein's theory of the dynamic that occurs between shots, Barthes cites an isolated passage in which Eisenstein mentions the

possibility of a dialectical clash or shock "inside the shot" (1985: 61). This is something, Barthes says, that cannot properly be called montage, and that can only be apprehended by contemplating the shot at leisure, rather than letting one image give way to the next. Barthes moves away from any consideration of the succession of images, even though this is what distinguishes film from still photography. Indeed, he goes so far as to claim that "the filmic, quite paradoxically, cannot be grasped in the projected film, the film 'in movement,' 'au naturel,' but only, as yet, in that major artifact which is the still . . . the 'movement' which is taken for the essence of film is not animation, flux, mobility, 'life,' copy, but merely the armature of a permutational unfolding" (1985: 59–61).

In this way, Barthes rejects what is generally understood as the temporality of film. He mocks the idea that "cinema's sacred essence" can be found in "the movement of the images" (1985: 60); he praises the still because it is a fragment that, precisely, "dissolves the constraint of filmic time" (60). Barthes thus annuls the psychophysiological "persistence of vision" that at one time was thought to be at the heart of cinematic illusion. Instead, he reduces film back to the series of separate still images that, in a material sense, it actually is. The still interrupts the relentless forward movement of the film, liberating us from the pressure of "logical time" or "operational time" (1985: 62). The still thereby opens the possibility of an "obtuse meaning," outside all narrative and semantic codes: "what, in the film, cannot be described . . . the representation that cannot be represented" (58). This "obtuse meaning" is Barthes' own aesthetic ideal, his myth; his counterpart to Bazin's "myth of total cinema." Evidently, the obtuse meaning is "rare" in films: "a few flashes in Eisenstein; perhaps elsewhere?" (59). And we cannot reach the obtuse meaning when we just watch films in the usual way, passively consuming them. Barthes therefore maintains that, "the film, like the text, does not yet exist" (59): a statement that echoes Bazin's famous declaration that "cinema has not yet been invented!" (2004: 21).

Barthes, like Bazin, presents an idealized myth of the cinema, one that actually existing films have yet to fully realize. And Barthes, like Bazin, grounds his myth in the fact that the photographic image is indexical—a condition that no longer obtains in postmodern digital culture. Nonetheless, we have seen that Bazin's vision of "integral realism" still resonates today, because of the way it considers the question of cinematic time. And paradoxically, much the same can be said about Barthes' theory of obtuse meaning," with its rejection of film's present-tense "operational time." Deleuze, theorizing on cinema through Bergson, writes that time differentiates itself "into two flows, that of presents which pass, and that of pasts which are preserved. Time simultaneously makes the present pass and preserves the past in itself. There are therefore, already, two possible [cinematic] time-images, one grounded

in the past, the other in the present" (1998: 98). This bifurcation corresponds precisely to the contrast between Bazin and Barthes. Where Bazin celebrates

the image, Barthes insists on its irrevocable pastness.

Where Bazin celebrates the presence of the image, Barthes insists on its irrevocable pastness. In Bazin's "holy moment," we are graced with a heightened sense of the now, of the present that passes.

> In Barthes' photographs and film stills, to the contrary, the past is preserved in itself, detached from any present.

> Indeed, for Barthes, the reality of the photographic image consists precisely in its pastness. "Every photograph," he says, "is a certificate of presence" (1982: 87). But this means that, when we look at a photograph, what we get is the certification or "authentification" (1928: 87) of a one-time presence rather than the presence itself. The indexical certainty that "the thing has been there" also means that it is there no longer. Photographic evidence always takes the form of a "That-has-been" (1982: 77). This means, ultimately, that photography equals death; the life of the image is the death of the thing of which it is an image. The photograph is an "image which produces Death while trying to preserve life. . . . With the photograph, we enter into flat Death," "death in its literal banality" (1982: 92). Indeed, "not only is the Photograph never, in essence, a memory . . . but it actually blocks memory, quickly becomes a counter-memory" (1982: 91). For memory is a vivifying force: it lifts the past up into the present. But photography, to the contrary, is a mortifying force: it captures the present and drags it down into the past. Every photograph is *"a catastrophe which has already occurred*"; its only message is: *"that* is dead and that is going to die" (1982: 96). Time, for Barthes, is therefore not reversible. Photography and cinematography always revert to an irretrievable past.

> Barthes insists that photographic images are perfectly, materially real in themselves, rather than being fantasies or hallucinations or mere representations. It is only that, because these images are imbued with the past, they are strangely distant and unreachable. The photograph is "a new being, really: a reality one can no longer touch" (87). Today, this new reality is everywhere; images have proliferated beyond our wildest dreams. Even though these images are most often processed in real time, and even though their ability to be indexed can no longer be taken for granted, Barthes' attempt to define them remains compelling. In our "culture of real virtuality" (Castells 2000: 355-406), images linger and return; they become ghostly, haunting our screens long after they should have departed. Can we doubt that they are real, perhaps more real than ourselves, even if we are unable to touch them? For all that Barthes insists that the photograph is a literal, analog trace, a witness to the former presence of some actual object, he finally says that the photograph's "testimony bears not on the object but on time" (89). This

is a formulation that applies more strongly than ever to the nonindexical, digital images that surround us today.

The Barthesian themes of the pastness of the image, its untouchability, and its role as countermemory, are exquisitely explored in Michel Gondry's Eternal Sunshine of the Spotless Mind (2004). This film can be described as a postmodern, digital-age, science fiction equivalent of the 1930s screwball comedy, and especially of the subgenre that Stanley Cavell ([1981] 2004) calls the "comedy of remarriage." It tells the story of the morose Joel (Jim Carrey) and the manic, insecure Clementine (Kate Winslet), who love each other, but also get on each other's nerves, and wear themselves out with constant bickering. One day, after walking out on Joel, Clementine has her memories of him wiped away. (This is thanks to the film's science fictional premise: a technology, offered by a company called Lacuna, Inc., that allows you to selectively erase your memories, so that you can forget everything about an unhappy love affair, forget even the other person's existence, with nothing else about you being affected.) When Joel finds out that he has been erased from Clementine's mind, he is distraught. He decides that he needs to get his memories of her wiped as well. Most of the movie takes place in Joel's brain, while he's asleep, and his memories are being hunted down and expunged. In the middle of the process, he changes his mind: he doesn't want to forget Clementine after all. He runs with her through memory after memory, trying to evade the relentless process of erasure.

In order to convey this process, Eternal Sunshine is dazzlingly fluid and nonlinear. It has elaborate montage sequences that include strange angles, jump cuts, alternations between extreme close-ups and extreme long shots, out-of-focus shots, disorienting pans, disappearing props, sudden changes of background, disconcerting alterations in lighting and color, and a dense web of musical fragments and motifs weaving in and out of the soundtrack. There are also disorienting spatial displacements, like the scene in which Joel appears to run down the same street, in the same direction, several times in succession. Inexplicable objects (like a dentist's chair in the middle of the street, or a crashed airplane falling from the sky) appear briefly from time to time. Carol Vernallis, in her careful and thorough analysis of Eternal Sunshine (2008), catalogues all these aberrant features. Among other things, she counts "fortytwo examples of blurred, composite, and ambiguous faces" in the course of the film, "compromis[ing] the integrity of the human face." Everything in Eternal Sunshine is captured and denatured by digital processing (though it is worth noting that, with a sly perversity, Gondry often simulates digital effects through older, strictly analog means).

In Joel's dream montage, multiple temporalities and levels of reality are continually being juxtaposed (Figure 3 A–D). Joel's memories from different periods melt into one another, while aspects of individual memories get torn

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apart, disaggregated, and redistributed. Scenes that Joel remembers turn into scenes that focus on the act of remembering itself: He tries to wake himself up in order to get through to the technicians who are manipulating his sleeping brain. Dr. Howard Mierzwiak (Tom Wilkinson), the head of

Figure 3 A–D.
Eternal Sunshine of the Spotless Mind: tracking and erasing memories. Four consecutive scenes, from different times, in Joel's dream montage.



Lacuna, Inc., and inventor of the memory-erasing technology, appears within Joel's dream, although he is not personally supervising the procedure. The technicians who *are* performing the operation also appear in

the course of the montage; we see them ignoring the computer readouts of Joel's state, and instead partying in his apartment while he lies there unconscious. Perhaps these shots could be subjectively justified by the fact that Joel is subliminally aware of the technicians' presence; the music they are playing sometimes seeps down into his dream. But the montage also includes scenes of which Joel could not possibly be aware. One of the technicians, Patrick (Elijah Wood), woos Clementine by, in effect, stealing Joel's memories. He repeats Joel's words and gestures to Clementine, in the same places where Joel had originally expressed them. Patrick takes advantage of the fact that Clementine has forgotten these words and gestures—but considers that most likely she will be favorably affected by them, just as she

was before. It's as if the sheer force of Patrick's imitation/repetition of Joel

was enough to weave these incidents into the montage.



In all these ways, Gondry equates the processes of memory erasure with the technology of digital film itself. When there is no indexical referent to anchor the narrative, every fact and every event is up for grabs. Everything is subject to retrospective revision. Just as in Waking Life, though for entirely different reasons, it is no longer possible to dis-

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tinguish between "subjective" and
"objective"
points of view.
In Eternal Sunshine, there is
also no distinction between
the work of the
mind and the
work of the (digitized) cinematic



apparatus. Digital compositing and nonlinear editing seem to be attributes of lived experience, as it is processed and organized in the brain—and not just techniques for the cinematic reproduction of this experience. If *Eternal Sunshine* emphasizes, as Vernallis puts it, "certain kinds of experience: intensity, condensation, transience," at the expense of ostensibly broader and more permanent aspects of personal and social existence, this is because these are indeed the dominant forms of perception, affect, and cognition—or, if you will, the transcendental conditions of experience—in a world made over by electronic and digital technologies.

Everything in Eternal Sun-shine is imbued with a won-drous fluidity. But this does not translate into Bazinian presence; we are not "freed from the conditions of time and space." If anything, when



time and space take on such convoluted, nonlinear forms, we are trapped all the more fully within their labyrinth. The beauty of Gondry's film is tenuous and fragile, since it is always on the verge of disappearance, as one memory after another is erased. Joel flees into the deepest recesses of his mind, to recollections of a time before he met Clementine, even to reminiscences of 3C

earliest childhood, in which he hopes to conceal some vestiges of her presence. But there is no place of memory, no synaptic connection safe from the eradicating force of Dr. Mierzwiak's software. The logic of association, common to the circuits of the brain and those of the computer, is in fact a rigorous and constraining one. The images of Eternal Sunshine of the Spotless Mind are all images of Barthesian pastness, realities "one can no longer touch," but only chase after from a distance, as they slowly but inexorably disappear.

By the end of the memory-erasure process—which is also the beginning of the film—the only remaining trace of Clementine in Joel's mind is her whispered and distorted voice, urging him to return to the beach at Montauk, which is where the couple first met—and where, in fact, they meet again. There is no sense of presence in Eternal Sunshine of the Spotless Mind, because in fact no mind is spotless. Lacuna Inc.'s memory-erasing procedure always leaves a residue behind. This residue takes the form precisely of an absence, or a lacuna, in the place where the memory ought to be. It's like the itch that an amputee feels in his or her missing limb. This is why Gondry's images, like Barthes' photographs, are haunted by the death of what they purport to represent. We are in the realm of what Derrida (1994) calls hauntology: the uncanny persistence, in the form of traces, ghosts, and specters, of what has been murdered or otherwise removed. Gondry would have to agree with Derrida that hauntology is more basic than ontology, more original than Being. When Barthes' indexical "That-has-been" is removed, photography's "flat Death" is drawn into an infinite regress.

Everything in *Eternal Sunshine* is a recollection or a repetition, a bifurcated past/future that drains and exhausts the present. At the end of the film, Joel and Clementine have heard the audiotapes recounting their pre-erasure irritation with one another, and yet they decide to get back together anyway. Clementine warns Joel that all the same things will happen again: they will get on each other's nerves, argue, get angry with one another, feel hellishly depressed, and want to break up. But Joel just shrugs, and says "okay." He can live with that. Jim Carrey's final "okay," in its diffidence and modesty, resonates like Nietzsche's "abyssal thought" of the Eternal Return. For in this "okay" he agrees to, and he wills, the repetition of everything that he has lost, that he has forgotten, and that has made him what he is. For Gondry, the past cannot be recaptured, but only repeated. Time is not reversible; however, its implacable passage, the loss that it entails, can itself be reenacted and reaffirmed, again and again. And this reenactment is a sort of profane redemption, a way of embracing the Real. It's the Barthesian/Nietzschean equivalent of Bazin's more overtly religious "faith in reality." If, as Deleuze says, the most crucial task for cinema today is to "restore our belief in the world" (1989: 182), then Gondry's and Linklater's films are responses to this challenge, as they both, in their different ways, work to affirm and to explore the groundless, vertiginous reality of a world awash in digital simulacra.

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