CRITICAL TERMS FOR MEDIA STUDIES

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3 :: IMAGE

W.J.T. MITCHELL

What is the relation of images and media? It is commonplace to remark (usually with alarm) on the overwhelming number of images that bombard people who live in modern media cultures, which in an age of global media means almost all cultures. When a globally significant event occurs (war, natural disaster), a "storm of images" sweeps across the planet (to echo a *New York Times*' account of the media coverage of Hurricane Katrina in September 2005). New technologies such as the Internet and global television, coupled with the digitization of images, seem to accelerate these storms, heating up the mediasphere and flooding television watchers with "gross and violent stimulants" in the form of images.

The remainder of mass-media culture is devoted to the production of the imagistic equivalent of junk food: instant celebrities, pop stars, sports heroes, politicians, and pundits, whose "images" are carefully cultivated by publicists and whose misfortunes and personal failings provide the centerpiece for entertaining scandals when the supply of violence, catastrophe, and other serious news runs low. As Marshall McLuhan noted, the news is always bad, dominated by images of destruction, sorrow, and grief: "if it bleeds, it leads." But that is merely the sour or salty form of junk food, balancing the sweetness of commercials, which bring "good news"—promises of pain relief, beauty, health, and sexual prowess (punctuated by ominous warnings about side effects).

When it comes to mass media, then, one seems compelled to agree with the Canon camera commercial in which tennis star Andre Agassi asserted that "image is everything." Or with the contrary message, from a later Coca-Cola campaign: that "image is nothing." Or, perhaps, with the deeper truth revealed in an advertisement for Sprite: that "thirst is everything." Whatever the truth of images in media might be, then, we will have to reckon with their radically contradictory reputation as "everything" and "nothing," the most valuable and powerful elements of the messages transmitted by media, or the most trivial, degraded, and

worthless. To understand their paradoxical status, we will have to take a longer view of images in media, asking what they are and why it is that, since time immemorial, they have been both adored and reviled, worshipped and banned, created with exquisite artistry and destroyed with boundless ferocity.

Images did not have to wait for the arrival of modern mass media to acquire this all-or-nothing status. The three great religions of the book, Judaism, Christianity, and Islam, agree on two things: that human beings are created "in the image" of God, and that human beings should not make images, because human-made images are vain, illusory things. One should not take the Lord's *name* in vain, but his *image* is inherently contaminated by vanity and hollowness. The second commandment is absolutely clear on this matter:

> Thou shalt not make unto thee any graven image, or any likeness of any thing that is in heaven above, or that is in the earth beneath, or that is in the water under the earth. Thou shalt not bow down thyself to them, nor serve them. (Exodus 20:4–5, King James Version)

Ingenious commentators through the ages have tried to read this as a ban only on the idolatrous worship of images, not on the production of images more generally. But the language of the commandment is clear. It rules out the creation of images of any sort, for any reason. Perhaps there is a "slippery slope" principle underlying this zero-tolerance policy, a conviction that, sooner or later, images will turn into idols if we allow them to be created in the first place.

Clearly the prohibition on graven images has not worked very well. There may be some aniconic cultures that have succeeded in keeping some kinds of images out of sight (the Taliban are an interesting case), but most cultures, even officially iconoclastic ones such as Judaism and Islam, tolerate innumerable exceptions to the ban (think of the gigantic portraits of Islamic saints and heroes, from the Ayatollah Khomeini to Osama bin Laden).[1] And Christianity, with its spectacular rituals and televangelism, not to mention its encyclopedic repertoire of iconic figures—saints, angels, devils—and the central tableau of the Passion of Christ, himself the incarnate "image of God," has long since given up any real interest in the second commandment. Roman Catholic Christianity perfected the art of mass distribution of holy images as early as the Middle Ages, creating those forerunners of mass-media spectacle known as cathedrals. Cathedrals were sometimes erected, moreover, on the ruins of Greek and Roman temples which had been dedicated to the worship of pagan idols. Modern, secular, "enlightened" cultures have been no better when it comes to erection of cult images and sacred icons: The athe-

ists of the French Revolution erected a statue to the Goddess of Reason; godless Communism produced its own pantheon of heroic idols, from Marx to Lenin to Stalin to Mao; fascism's führer cult borrowed from the iconography of paganism and Norse mythology, transforming German burghers into Wagnerian gods and goddesses; and in the United States, the American flag is routinely treated to rituals of political sanctification. All American politicians must drape themselves in the flag or include it in their photo opportunities, while enormous amounts of overheated rhetoric are expended to head off the (extremely rare) practices of flag desecration.

There are important differences between the role of images in modern mass media and more traditional ways of circulating images to large bodies of people. The invention of photography, cinema, television, and the Internet has brought about a degree of image saturation in global culture that was unimaginable in earlier times. This has led a number of scholars to postulate a "pictorial turn" in modern culture, a qualitative shift in the importance of images driven by their quantitative proliferation.[2] First came the mechanical reproduction of images, exemplified, as Walter Benjamin argued, by the recording technologies of photography and cinema; then electronic communication (Marshall McLuhan's central focus) via "real-time" broadcast and communication media such as radio, television, and the Internet; and most recently biocybernetic reproduction. Biocybernetics, the newest technology of image-production in the sphere of what has come to be called "biomedia" (see chapter 8), is exemplified by the production of those "living images" we call *clones*. Cloning has reawakened all the ancient phobias and taboos regarding the creation of images because it seems quite literally to introduce the prospect of "playing god" by taking over the role of making creatures.

The relation of images to media, then, is a highly sensitive barometer of the history of technology, perhaps because the repertoire of image types (faces, figures, objects, landscapes, abstract forms) has remained relatively stable even as the technical means of reproducing and circulating them has been altered radically. The invention of new means of image production and reproduction, from the stamping of coins to the printing press to lithography, photography, film, video, and digital imaging, is often accompanied by a widespread perception that a "pictorial turn" is taking place, often with the prediction of disastrous consequences for culture. A history of the relation of images and media, then, clearly has to be wary of binary narratives that postulate a single decisive transition from "traditional" or "ancient" media to "modern" or "postmodern" forms. The history of media technology suggests that it has been subject to important innovations from the very beginning, since at

least the invention of writing. The invention of metal casting was a decisive innovation in ancient Rome and China. The invention of oil painting in Renaissance Europe created a revolution in the circulation of images, freeing them from their muralistic attachment to architecture and transforming them into movable property, commodities to be exchanged and sold and copied in the new industry of reproductive engraving. The invention of artificial perspective produced a new relationship between image making and empirical sciences such as geometry and surveying.

While technical innovation is a crucial element of media history and its relation to images, however, it is not the only factor. Political, economic, and cultural influences also play a role. Media are not just materials or technologies but social institutions like guilds, trades, professions, and corporations. The history of mass media in the United States is very different from that of Europe, despite the fact that both sides of the Atlantic are using much the same technologies—movable type, offset printing, electronic tubes, and fiber-optic cables.

What does seem to remain constant across the cycles of media innovation and obsolescence is the problem of the image. The deeply ambivalent relationship between human beings and the images they create seems to flare up into crisis at moments of technical innovation, when a new medium makes possible new kinds of images, often more lifelike and persuasive than ever before, and seemingly more volatile and virulent, as if images were dangerous microbes that could infect the minds of their consumers. This may be why the default position of image theorists and media analysts is that of the idol-smashing prophet warning against Philistines—the exemplary ancient idolaters, since reincarnated in modern kitsch and mass culture. The same critic will, however, typically be engaged in elevating certain kinds of images in selected types of media to the status of art. Aesthetic status is often credited with a redeeming effect on the degraded currency of images, as if the image had somehow been purified of commercial or ideological contamination by its remediation within certain approved media frameworks (typically, art galleries, museums, and prestigious collections). Even a nakedly commercial image from mass culture can be redeemed in this way, as the silk screens of Andy Warhol demonstrate.

As a critical term in the study of media, however, *image* has to be subjected to a more dispassionate analysis, one that brackets the question of value at least provisionally. For the remainder of this essay, therefore, I will concentrate on defining the image and its relation to media in a way that will help us to understand why images have the power to elicit such passion.

First, a definition: An image is a sign or symbol of something by vir-

tue of its sensuous resemblance to what it represents. An image or "icon," as the philosopher C. S. Peirce defined it, cannot merely signify or represent something; it must also possess what he called "firstnesses"—inherent qualities such as color, texture, or shape that are the first things to strike our senses—(what Erwin Panofsky called the "pre-iconographic" qualities of an image, the things we perceive before we are even concerned about what the image represents).[3] These qualities must elicit a perception of resemblance to something else, so that the object produces a double take: it is what it is (say, a piece of painted canvas), and it is like another thing (a view of an English landscape). Where this likeness or resemblance is to be found, and what exactly it consists in, is often a matter of dispute. Some locate it in specific properties of the object, others in the mind of the beholder, while others look for a compromise. Some philosophers have debunked the entire notion of resemblance as too vague to be the foundation of any referential or significant relationship, since *everything* can be said to resemble everything else in some respect or other.[4] The perception of resemblance may turn out to be a *result* of image making rather than a foundation for it; Picasso famously told a critic who complained that his portrait of Gertrude Stein did not look like her, "Don't worry. It will."

We experience the image as a double moment of appearing and recognition, the simultaneous noticing of a material object and an apparition, a form or a deformation. An image is always both there and not there, appearing *in* or *on* or *as* a material object yet also ghostly, spectral, and evanescent. Although images are almost automatically associated with the representation of objects in space, it is important to recognize that some form of temporality is built in to our encounter with any image: phenomenologists note what we might call the "onset" of an image, the event of its recognition, and the "second look" or double take that Wittgenstein called "the dawning of an aspect."[5] An image may also bear other signs of temporality—a date of origin or production (central to the ontology of photographs), a historical style, a depicted narrative (as in history painting), or a labyrinthine interiority that leads the beholder on a pursuit of its depths, as when we observe a drawing coming into the world, drawing out of invisibility the trace of something that is coming into view. Images often appear in series, as in the Stations of the Cross, which narrate the story of the Passion of Christ and call the spectator to enact a ritual performance. And we must not forget that the image has always been, even before the invention of cinema, an object that is potentially, virtually, or actually in *motion*. The real-time images of a camera obscura move if the objects in them move, and their stillness (like that of webcam or surveillance photos) is nevertheless suffused with time (which,

in the contemporary examples may be documented, to the millisecond, in an accompanying time stamp). The silhouettes projected on the walls of Plato's cave are cast by a moving *procession* of sculpted images. The entire history of dramatic performance is bound up with what Aristotle called *opsis* (spectacle), *lexis* (words), and *melos* (music). Actors on stage do not represent themselves; they imitate—that is, produce *images* of—characters and actions through costume and gesture in a setting that is also a scenographic image, because of either the set designer's artistry or the imaginative activity of the spectator (as in Shakespeare's famous call, from the pit of the Globe Theater, to "imagine yourself in the fields of France").[6] The very first image, in biblical tradition, is a sculpted object made of clay that does not remain inert but has life and motion breathed into it by its creator.

So the image is the uncanny content of a medium, the shape or form it assumes, the thing that makes its appearance in a medium while making the medium itself appear as a medium. It remains in memory as a place or face encountered, a landscape or a body, a ground or a figure, a repeatable gesture or "movement image." This is why an image can appear in a narrative or poem as well as in a painting, and be recognizable as "the same" (or at least a similar) image. A Golden Calf, for instance, can be "remediated," appearing in a text, a painting, and (in its proper appearance) in a statue.[7] Images (in contrast to "cultural icons") are not that special or unusual. They are everywhere, a kind of background noise to everyday life. They can rise out of accidental perceptions as well intentional acts, so that we see a face in the clouds, or (as Leonardo da Vinci recommended) look for landscapes and battle scenes in the splashes of mud thrown against a wall by passing carts.

Everything about the relation of images and media, then, seems to expose contradictory tendencies. They can be representational and referential, or "abstract" (a purely geometric circle becomes, with a single well-placed mark, a face with a smiling mouth). Their range of formal possibilities extends from the strictly defined shape to the chaotic jumble, from a geometrically precise design to a Minimalist scatter piece. They can appear as formal, deformed, or *informel*, a readily standardized stereotype or a hideously deformed caricature, a ghostly illusion for the superstitious or a testable scientific model for the skeptical observer. They can be found in architecture as well as in pictures. They can provide maps of empirical reality, or of Neverlands and utopias. They can be achingly beautiful, ugly, monstrous, wondrous, cute, ridiculous, enigmatic, transparent, or sublime. They can be, in short, anything that human imagination, perception, and sensory experience is capable of fashioning for itself as an object of contemplation or distraction.

And this is one of the most puzzling things about the concept of the image. Although we generally think of images first as material pictures or objects in the world, tangible things that can be created and destroyed, we also routinely speak of them as *mental* things—memories, fantasies, dreams, hypnagogic reveries, hallucinations, and other psychological phenomena that can be accessed only indirectly, through verbal descriptions or graphic depictions. What is the status of the "mental image" from the standpoint of media studies? Certainly if *memory* is regarded as a medium, then images will be an important element of the content of memory, along with narratives, lyrics, words, and phrases. Whenever we try to give an account of mental images, we seem compelled to resort to some external, material apparatus as the model for the mind—a theater or cinema, a *musée imaginaire*, a camera obscura, a computer, a camera. We find it difficult to talk about the mind without comparing it to a medium of some sort, often a medium that entails the internal display, projection, or storage and retrieval of images. It is as if, alongside the images *in* media, we have images *of* media that we internalize as subjective pictures of our own mental processes—the mind as photographic apparatus or blank slate, as Freud's "mystic writing tablet," set to receive impressions. In this sense, all images, no matter how public and concrete their staging, are mental things, in the sense that they depend upon creatures with minds to perceive them. (Some images, decoys, for instance, reach below the threshold of human consciousness to attract the attention of animals.)

Of course, in bringing up the mind as a medium for the storage and retrieval of images, one is immediately confronted with the fact that all the minds we know about are housed in *bodies*. To speak of mental images is automatically to be led into the problem of embodiment, and the material world of sensuous experience, whether it is the generalized "human body" of phenomenology or the historically marked and disciplined body of race, gender, sexual orientation, disability, and biomedical technology (see chapter 2, "Body"). Our pursuit of the image across media seems endless and perhaps circular, beginning in the real world with concrete pictures and representational objects in all manner of media, moving rapidly into the mental lives of the producers and consumers of these media, then returning to their physical existence in concrete circumstances. From the standpoint of media theory, then, it is perhaps inevitable that images become the central element of media functions, the thing that both circulates through all conceivable varieties of media as an appearance or communicated content, and emerges from this flux in the moment of secondary reflection to provide models for the entire process. The image, in other words, is both at the center and the circum-

ference of the problem of media: images always appear *in* some medium or other, and we cannot understand media without constructing images *of* them.

Senses and Signs

The default meaning of image is "visual image," though that very phrase suggests that images can be apprehended by, and addressed to, other, nonvisual senses. Acoustic, tactile, gustatory, and even olfactory images are unavoidable notions, and they satisfy the same basic definition of imagery: they are signs or symbols by way of sensuous resemblance, bundles of analog information carried by different sensory vehicles, received by distinct perceptual channels. A sugar substitute doesn't merely "signify" sweetness but awakens the sensation we associate with sugar. When Nutrasweet learns to simulate the granular, crystalline appearance of sugar as well as its taste on the tongue, it will be a more perfect icon. Algebraic notations such as "equals," "is congruent with," and "is similar to" are, as Peirce noted, icons in the sense that they make a highly abstract relation of resemblance or equivalence immediately visible. When the channels or senses are crossed or confused, we speak of "synesthetic" images, colors heard as sounds or vice versa. The ordinary vocabulary of music invokes visual and graphic analogies such as color, line, and gesture, and verbal "echoes," assonance, alliteration, and rhythmic figures and rhymes are fundamental to the way that aural images arise in the sound of words.

Returning to the default, it is a commonplace in media studies to use phrases like "visual media" or "visual art" to mean roughly the same thing: forms such as painting, photography, sculpture, cinema, and television that are treated as fundamentally addressed to the eye. These are commonly distinguished from "verbal media"—literature, books, newspapers (the "print" media)—the distinction almost invariably accompanied by ritual lamentation over the decline of literacy and the displacement of reading by spectatorship. But a moment's reflection suggests that the situation is not quite so simple. First, all the examples of "visual media," and especially the mass media, turn out to be *mixed* media that combine visual and acoustic images, sights and sounds, pictures and words. Second, the so-called print media have, from their beginnings, included printed *pictures* and other graphic images. Moreover, print itself, as a material medium, is taken in by the eyes. The choice of typeface or font is itself a choice about the "look" of a text. Marshall McLuhan famously argued that the Gutenberg revolution was the transformation of a previously oral culture into a visual culture. The linear process of read-

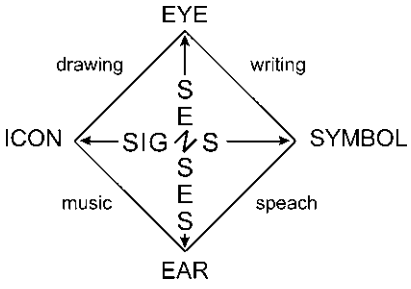
ing, he suggested, was closely aligned with the development of the linear, geometrically defined space of artificial perspective.

When we talk about "verbal" and "visual" media, then, we are confusing two quite different distinctions, one involving semiotics (the classification of signs) and the other involving the senses. On the terrain of signs, the difference between the verbal and visual is the difference between what Peirce would call a symbol, an arbitrary and conventional sign, and an iconic sign, which signifies by virtue of its sensuous resemblance to what it stands for. Most examples of print media (say, newspapers and magazines) deploy both words—verbal signs that are to be read as arbitrary symbols—and visual images, iconic signs that are scanned for their resemblance to things in the world.

On the terrain of the senses, by contrast, the verbal/visual distinction is that between hearing and seeing, speaking and showing, oral and visual communication. The distinction between signs and codes fades into the background; icons and symbols can appear on *either* side of the divide. Conventional, arbitrary symbols can be addressed to the eye or to the ear, as can iconic signs. Media based in "visual images" comprise the full range of print culture, and media based in "acoustic images" cross the boundaries of speech and music. The figure below will clarify the intersection of the double distinction between signs and senses that underlies the often confusing categories of verbal and visual media.[8]

The Digital Image

No account of the image in media studies would be complete without some discussion of the "digital image." Some scholars have argued that the arrival of computer-processed images has produced a radical transformation in the ontology of the image, altering its fundamental essence as an object of human experience. One line of thinking holds that digital images (in contrast to traditional, chemical-based photographs) have lost their causal, indexical linkage to "the real," becoming untethered ap-



pearances subject to willful manipulation. This was, of course, always a possibility with hand-made images, which often represented things that no one had ever seen. (The emphasis on *manipulation,* a term that carries within it the image of the human hand, is interesting in relation to the fingers figured in *digital*.) If we confine the question to the history of photography, it seems clear that both the profilmic event and the dark-room process have always been manipulable, if not with the ease and rapidity provided by programs such as Photoshop. Nonetheless, digital images, like the photographs of torture at Abu Ghraib prison, seem to retain their credibility. In general, we might say that claims about a photograph's connection to "the real" are heavily dependent upon what precisely counts as the relevant notion of the real, and upon attendant circumstances, such as who took the picture when. Photographs are not taken "on faith" in a courtroom: their veracity must be vouched for by secondary testimony and human witnesses. The aura of self-evidence that hovers about images in any medium, their sensuous presence or "firstness" (to recall Peirce's terminology), can lend them an easy credibility that may be the occasion for a sense of their faithfulness to the real, or (for the very same reason) can make them objects of suspicion. If digitization has produced a change in the ontology of images, it might, then, be more plausibly sought in the changed conditions of their "being in the world"—the changed conditions of their production and circulation, the exponential increase in the number of images, and the rapidity of their transmission, especially via the Internet.

Another, even more radical claim for the novelty of the digital is that it has rendered the image "in its traditional sense" obsolete. The image, recoded as pure numerical information, is, in principle, quite independent of the human body and its senses. The sensuous "firstness" of the image and its reliance on the analog code of infinitely differentiated impressions and similitudes is replaced by a language that is read (and written) by machines. The old regime of sensuous images is reduced to mere surface appearance or "eyewash," to use Friedrich Kittler's term; what is important and real are the ones and zeros of the binary code. Unsurprisingly, this argument is often accompanied by a dark, dystopian vision of a "posthuman" order. If man was created in God's image and God was remade in man's, with the onset of secular humanism, it makes a kind of sense that the invention of artificial intelligence and "thinking machines" would mark the end of the human and the image altogether. The posthuman imaginary postulates robots and cyborgs—biomechanical hybrids—as the emergent life-forms of our time. "Man" and "woman" have become obsolete categories—stereotyped image classes—to be replaced, one hopes, by actually existing men and women.

The postulation of the digital image as a radical break with the past has not gone unchallenged. The liveliest images of the posthuman digital age continue to be located in the future, in science fiction films and novels (both traditional genres).[9] The numerical or "digital infrastructure" beneath the "eyewash" of analog experience remains the province of technicians, not ordinary users, who treat digital images in much the same way as analog images (except easier to copy and distribute). It is sometimes claimed that digitization introduces a component of interactivity between the beholder and the image that was unavailable to traditional images: one can "click" on a hot spot in a digital image and go to another one, or change the look of the image, or open up a textual gloss, or even (in Lev Manovich's concept of the "image-interface" and the "image-instrument") treat the image as a control panel for the manipulation of information. Yet interactivity and immersion have been features of image culture at least since Plato's cave or the invention of carnival. As for the obsolescence of the analog image, one cannot help but notice that, at the precise moment when a stream of alphanumeric ciphers is unveiled as the deep truth of the digital "matrix" in the film by that title, the digits align themselves into the analog human shapes of the "agents" of the Matrix. All the counting and calculation and computation that underlies the digital image comes home to roost, finally, in what Brian Massumi has called "the superiority of the analog." If the ones and zeros did not add up to an image that massages the familiar and traditional habits of the human sensorium, it is unlikely that the digital revolution would have gained any traction at all.

This is not to argue that, when it comes to images, there is nothing new under the sun. But whatever this newness is, it will not likely be well described by a binary history that separates the digital image from all that proceeded it. For one thing, the very idea of the digital is ambiguous. Nelson Goodman argued that what makes a code digital is not numbers or counting but the use of a finite number of characters or elements, differentiated without ambiguity from one another. The alphabet, under this definition, is digital. Mosaic tile would count as a digital medium, as would the benday dots of newspaper images. But if digitization is confined to systems using numbers, and specifically to the binary system that underlies computer processes, then something of the specificity of contemporary digital imaging may be discerned. Mark Hansen argues, contra Manovich, that

> it is not simply that the image provides a tool for the user to control the "infoscape" of contemporary material culture . . . but rather that the "image" has itself become a process and, as such, has become irreduc-

> ibly bound up with the activity of the body. Specifically, we must accept that the image, rather than finding instantiation in a privileged technical form (including the computer interface), now demarcates the very process through which the body, in conjunction with the various apparatuses for rendering information perceptible, gives form to or *in-forms* information. In sum, the image can no longer be restricted to the level of surface appearance, but must be extended to encompass the entire process by which information is made perceivable through embodied experience. This is what I propose to call the *digital image*. (Hansen 2004, 10)

I would agree with everything in this passage except for the tense of the predicates; the image, I would suggest, *has always been* bound up with the body, but that interconnection is now made evident by the onset of digital imaging, in the sense of binary computation. Just as photography revealed unseen and overlooked visual realities, an "optical unconscious" in Walter Benjamin's phrase, and just as cinema produced both a new analysis and a historical transformation of human visual experience, digital imaging may be uncovering yet another layer of the perceptible cognitive world that we will recognize as having always been there. We know that the most archaic images have always involved "a process . . . bound up with the activity of the body," that they have always given form to information. But now we are in a position, thanks to the invention of digital imaging, to know it in a new way. Our situation may be very like that of Alberti, who understood that artists had already known how to represent depth, foreshortening, and other practical equivalents of perspective, but whose treatise, *Della Pittura*, made these practices accessible in a new way to systematic, mathematical analysis and unforeseen extrapolations.

New technical media certainly do make for new possibilities in the production, distribution, and consumption of images, not to mention their qualitative appearance. Artists, as Marshall McLuhan observed, are often at the forefront of experimentation with the potential of new media, and earlier media innovations such as photography and cinema, which were widely regarded as inherently hostile to artistic expression, are now firmly canonized as artistic media of the first importance. But media innovation is driven by other factors as well: by technoscientific research, by the profit motive, and by emergency situations such as war. If researchers like Paul Virilio and Friedrich Kittler are correct, one cannot understand stereophonic sound without considering the guidance apparatus developed to allow bomber pilots to fly "blind" in a fog, the movie camera without considering its evolution from the machine gun, or the Internet without considering it origins in military communica-

tion. One must recognize, however, the conservative trajectory of these inventions, their tendency to return to the "firstnesses" of sensuous, analog experience. The bomber pilot's stereo headphones find their cultural vocation as a means to mediate the image of realistic acoustical space, the sound of an orchestra in a concert hall. The staccato shots of the machine gun become the photographic shots that together form a "movement-image" of the human body in action (or a "time-image" of a body doing nothing at all, as with the still images that convey the story in Chris Marker's classic film *La Jetée*). The Internet becomes a metamedium that incorporates the postal system, television, computer programming, the telephone, newspapers, magazines, bulletin boards, advertising, banking, and gossip. Images continue to arise and circulate in these new media, metastasizing and evolving so rapidly that no conceivable archive could ever contain them all.

It seems unlikely, then, that any new technology is going to render images, or sensuous firstnesses, resemblances, or analog codes, obsolete. The persistence of these qualities is what ensures that, no matter how calculable or measurable images become, they will maintain the uncanny, ambiguous character that has from the first made them objects of fascination and anxiety. We will never be done with asking what images mean, what effects they have on us, and what they want from us.

Notes

1. See Bland (2000) on the role of images in Jewish culture.

2. See Boehm and Mitchell (2009), Mirzoeff (2000).

3. Peirce's icon should not be confused with what we have been calling "cultural icons," which are images that have a special importance (religious icons, idols, patriotic symbols). The icon in Peirce's sense is merely a sign by resemblance.

4. See Nelson Goodman, *The Languages of Art*, for the most sustained critique of the notion of resemblance as a basis for representation.

5. Wittgenstein, *Philosophical Investigations*.

6. *Henry IV, Part I*, Prologue.

7. See Jay David Boulter and Richard Grusin, *Remediation: Understanding New Media* (Cambridge, MA: MIT Press, 2000).

8. I have confined this discussion of sensory modalities to the eye and ear, what Hegel called "the theoretic senses." A fuller analysis would suggest that the proper categories are not *eye* and *ear* but the *scopic* and *vocative* drives, which combine eye/hand and ear/mouth. It would also note that vision itself is constituted as the coordination of optical and tactile sensations. We could not see anything if our sensory-motor system had not learned to navigate the world by moving through and touching it. See my article "There Are No Visual Media," in *Media Art Histories*, ed. Oliver Grau (Cambridge, MA: MIT Press, 2007), 395–406.

9. Similarly, the hyperbolic rhetoric surrounding the invention of new, immersive 3-D im-

ages, billed as "virtual realilty," seems to have subsided or become a staple of cinematic remediation in various forms of special effects.

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