a loss glossed over by the temporal machinery of cinematic suture with the imaginary hallucination of a common world picture. What I have come to appreciate from the conceptual interface of so many digital artworks is that we must alter how we think temporally, in an analog or even dialectical fashion, in order to inhabit the space and history of the ampersand, to dwell in the contact zone, in the AND, of code and craft. If nothing else, digitality provides us with a means to rest in the between of the ampersand, between 1 & 0, so Hill might say. Digital art that inhabits the ampersand revitalizes the power of contrast and paradox rather than seeking its transcendence through the ontology of cinema and its dialectical legacy. This is the intricate critical space where we can pause to examine what is happening, critically and politically, to our visual and intellectual cultures.

WOUNDS OF REPETITION IN THE AGE OF THE DIGITAL: CHRIS MARKER’S CINEMATIC GHOSTS

Death is the ferryman; he shows the way to language, to order, to the consideration of lack, to meaning, to culture.

—LYOTARD, "One of the Things at Stake in Women's Struggles"

The disturbed relation with the dead—forgotten and embalmed—is one of the symptoms of the sickness of experience today. . . . It becomes a wound in civilization, asocial sentimentality, showing that it has still not been possible to compel men to indulge solely in purposeful behavior. The dead . . . are expunged from the memory of those who live on. Men have ceased to consider their own purpose and fate; they work their despair out on the dead.

—HORKHEIMER AND ADORNO, "On the Theory of Ghosts"

The dead are expunged from the memory of those who live on. While such a theorization of ghosting does not represent the artistic strategies of either Daniel Reeves or Grace Quintanilla, it is a fitting description of at least one cinematic and psychiatric approach to trauma and its aftermath. A dominant method utilized by the U.S. Army for treating post–World War II shock syndrome could be described by the formula of "speak and you shall remember in order to forget." You might recall the memorable scene in John Huston’s film Let There Be Light (1944) when a voice recounts the condition of a soldier "who doesn't even remember his own name and entire past" as a result of shell shock suffered during the invasion of Okinawa. The film depicts a psychiatrist who hypnotizes the soldier in order
the psyche’s sadomasochistic procedures of incorporation and its subsequent sublimated projection of the horrific sights of culture’s traumas. By toggling imagery between the seven Omega computers in his home studio, Reeves morphed sequences of family portraits so that the emotive depth evoked by these personal photos flow into one another with sublimated grace and fluidity. “Along with keen hand tintings and other painterly treatments,” writes Steve Seid, the curator of Berlin’s Transmedia 97, “the high-tech effect of morphing finally becomes not so much graphical pizzazz as a visual recognition of our seamless linkage to the past.”

In view of my admiration for the practiced craft of Daniel Reeves’s digital imagery, it may sound ironic that I have discussed with Reeves my ambivalence about the digital architecture of Obsessive Becoming whose aesthetic results I so admire. My discomfort stems from the proximity of Reeves’s finely tuned piece to what Lunenfeld describes as the “digital dialectic.” In a fashion rarely achieved so successfully in the annals of cinema, Reeves combines a captivating, melancholic narrative with the morphed loops of family and historical footage in order to create a hyperreal zone of emotive interactivity.

What I am trying to get at is in the context of what I would call “emotively charged memory,” the memory that perhaps surrounds trauma and pain and suffering... the most exciting morphing that goes on in the whole piece is not the faces in the end, it is rather prosaic to me, was the ability to take the black and white photographs and make them appear as a rag in water or paper thrown to water... a poetic representation, a visceral representation of how I think, images at least, transmute, transform, permutate in the mind.

Both the specialized codes and cultural codes of documentary and amateur cinema here morph into a streaming spectacle of universal trauma that goes beyond examining what is happening to our visual and intellectual cultures. Reeves’s painful chant of trauma nurtures emotive immersion rather than prompting critical examination.

I have attended screenings of few films that evoke such a consistent response of overwhelmed emotions and identification with the artist as happens in the wake of Obsessive Becoming. This well could be due to Reeves’s deep belief in the universal pathos of his story. Associating the private terror of family violence and loss with the cross-cultural reality of historical trauma, the middle section of Obsessive Becoming even links Reeves’s family trauma with imagery from the broader historical traumas of the twentieth century. The viewer is taken through a stream of documentary footage linking the plight of children in the Warsaw ghetto, Japanese victims bearing the burn wounds of atomic fallout, soldiers skirmishing in the Vietnam War, and smart bombs crashing into Gulf War bunkers. Reeves manipulates the images of embalmed photographs and dusty documentary to free the cultural code from its encryption in the formal codes of the document. “What we have forgotten will come back,” he laments in a voice-over that tracks the ugly footage of Nazi concentration camps. Yet, what comes back, it seems to me, is not the juxtaposition of analogous imagery that might revise our reception of the footage of amateur and documentary cinema. What comes back is not a cinematic reflection on the resemblances and contrasts of complex historical traumas. What comes back as remembered in Obsessive Becoming is a flow of familiar media images, electronic sound tracks, and sorrowful narrations that tend to render the difference of forgetfulness to the same: “They are no different than you,” the narration says of the portraits streaming through the end of the tape... “the face is the same.”

 Might not such an assuming declaration reflect the essence of digital dialectics? The synthesized blend of digital sameness here softens out the hard edges of analogical difference. The remains of forgetfulness certainly arise in all their pathos in Obsessive Becoming. But it is not clear that Reeves’s chanting obsession with the universality of his pain prompts anything close to an examination of the shadows of cinema or anything resembling a critical relocation of the remains of culture. To return to the critical distinction I have tried to maintain throughout this chapter, it could be said that the emotional gain promised by Reeves’s digital aesthetics equals the loss of analogy’s difference, outside and within cinema. Instead of foregrounding the resistant differences of digital analogy and resemblance, Reeves capitalizes on his masterful craft of the code to reduce the critical edges of difference to the softened sameness of the spectacle of digital dialectics.

My hope is that my toggling here between code and craft, between theory and practice, between cinema and new media, will have foregrounded the theoretical choices made available to us by the code of the digital platform. In doing so, I also hope to have demonstrated how digital culture can revitalize the loss of enigma characteristic of earlier codes of analogy,
Jesus” (Figure 7) provides a viewing of Piper’s videotape The Rites of Passage, in which art provides a montage of the representation and passage of four hundred years of ongoing endurance. Here the combination of digital processing, mental incorporation, and cultural representation are presented as transgressively parodic activities of the master’s legacy: “the instance of how black people’s spiritual and musical genius borrowed what was given to them and then made them their own.” Overall, Piper’s complicated digital platform generates a new medium of cultural capital from the preservation of the historical traces and memories of black residue that cast a lasting shadow on the purity of the Empire. Relocating the Remains marks not only the ongoing procedures of the containment of loss but also, I wish to insist, the processes of cultural anxiety and the baroque resurgence of loss and trauma as a kind of revolutionary melancholia. The digitized melancholia structuring Piper’s CD-ROM turns aggressively against the narcissistic love object, Mother Britain, in a way that saves its black subject from psychic annihilation.38

**OBSESSIVE BECOMING: DANIEL REEVES**

I will make my way toward a conclusion by touching on the other spectrum of digital loss, works that profit from the blended cinematic/digital code to dwell within the interface of a loss whose public resonance is grounded in the pain of private or personal affect. Neumark’s Shock in the Ear, which I analyze in chapter 8, is one example of a CD-ROM that relies on the blends of digital editing of sound and image to offer the user thoughtful passage through the more interiorized zones of the deeply personal traumas of family and medical histories. It is important to appreciate, moreover, that the digital code can offer such a mental space to the viewer of single-track video as well as to the user of a multifaceted CD-ROM. Of particular note, in this vein, is the 1995 video Obsessive Becoming, by the American-Scottish artist, Daniel Reeves. Appropriating amateur photos, home movies, and documentary footage, Reeves stuns his viewers with a masterful series of morphs and digitized sound tracks that narrate the artist’s discovery of untold family trauma. The narrative relies on family interviews and home footage to recount the affliction of violence on the artist and his brother by their stepfather; it replays the artist’s shocking discovery that their stepfather was not their real father, and that his real father, himself subject to domestic violence when a boy, was institutionalized as the result of his own violent outbursts. This troubled narrative is linked and fused by Reeves to his continuous artistic attempts, since his first well-received video, Smothering Dreams, to overcome his own trauma that he suffered as a soldier in the Vietnam War when he was the only member of his platoon to survive an ambush by the Vietcong. Of equal weight in the piece is Reeves’s scared resemblance in physique and psyche to his brother alongside whom he frequently morphs in shape and spirit, from the stilled photos of their childhood to their more recent interactions in front of Daniel’s camera. Patricia R. Zimmermann has put her finger on the pulse of this tape by valuing its emotive narrative of the violence of male bonding that is embedded in the endless system of patriarchy.39

One could say that this story is not new to the digital age—Western letters have known it since Oedipus. Replaying the interiorized trauma of Oedipal fantasy, the two sons speak literally of wanting to kill the father and wish nostalgically for more intimacy with the mother. Yet, there remains something searing about how Reeves enraptures his audiences with a tale that pierces the heart more quickly than it challenges the intellect. Although mimicry plays an important tonal role in this piece as well, it does so more in relation to trauma than to parody. Distancing his work from anything resembling the parodic burlesque of Grace Quintanilla’s family relations, Reeves capitalizes on the internalized regenerations of digital photo editing in a way that mimics the deeply structured psychic relations themselves. “These things happen,” Reeves says in his voice-over narration, “because I feel they happen.” Reeves’s sophisticated blends of morphing call to mind
Marina Grzinic and Aina Smid; and *Natural Selection* (1998), from Britain's Mongrel. I will dwell further on this difference between the playfulness of digital burlesque and the deadly seriousness of digital loss by turning my attention to the 1997 CD-ROM by Keith Piper, a leading figure in Britain's Black Arts movement. *Relocating the Remains* is a CD-ROM catalogue of Piper's retrospective exhibition of video, sculptural, and digital installations that opened in 1997 at the Institute of International Visual Arts in London and later toured at the New Museum of Contemporary Art in New York and the National Gallery of Canada in Ottawa.

What is fascinating about the CD-ROM synopsis of this show is its transformation of Piper's loud and large-scale three-dimensional installations into the softer, quieter, miniaturized forms of QuickTime movies and virtual reality computer graphics. It could be argued, thinking back to Godard's nostalgia for the passing ontology of cinema, that the CD-ROM diminishes the colossal form and almost mystical milieu of Piper's museum installations. The subtitle of the CD is, after all, "mapping the traces of 3 expeditions: an interactive journey through the work of Keith Piper." But rather than diminishing the art form, the traces of this CD-ROM, I suggest, provide an alternative interface, one that mimes the installations not in a burlesque manner but rather in a way that highlights the structural insistence of repetition with a difference that is so crucial to Piper's work. By mimicry here, I refer to Homi K. Bhabha's notion of "the process of the fixation of the colonial as a form of cross-classificatory, discriminating knowledge within an interrogatory discourse, and therefore necessarily raises the question of the authorization of colonial representations; a question of authority that goes beyond the subject's lack of priority (castration) to a historical crisis in the concepuality of colonial man as an object of regulatory power, as the subject of racial, cultural, national representation." It is within the journey of interactivity that the user of Piper's CD-ROM is situated in "the between," in the toggle effect, between the history of colonialism and its mime, between the object of the technological interface (from slave ship to computer chip) and the subject representing racial, cultural, and national specificity and difference.

Piper initially mimics the colonial procedures of regulation by organizing the three expeditions around three (un)classifications: UnMapped, UnRecorded, UnClassified. "Unclassified" re-creates two of Piper's video/digital installations, *Caught Like a Nigger in Cyberspace* and *Tagging the Other.*

*Tagging the Other* replicates Piper's fast-paced, hip-hop video wall that plots the black subject's inscription in the technological interface, from the bondage of surveillance to the framing of the media. *Caught Like a Nigger* presents the user with a video game that reflects on the black subject's false entry into the capitalist free world of cyberspace. Similarly, "UnMapped" traces the conflicting cultural representations of the toggle between "Negrophilia and Funk: The Sight of a Negro," "The Sound of a Negro," and "The Feel of a Negro." Finally, the four pieces that compose the section "UnRecorded" retrace the loss of the memory of the Middle Passage and the complex imprint of its blockage on British cultural identity. Given the resonance of recent international crises of immigration, from East Timor to Kosovo, I will comment on Piper's work by focusing on the centerpiece of this section, "An English Ship."

The installation establishes a historical linkage between the colonial institutions of Christianity, British Empire, and slavery by opening with an introductory loop to "A Ship Called Jesus," the ship donated by Elizabeth in 1564 for the first official slave trading voyage and the ship in which, the subtitle tells its viewers, "we have been sailing . . . ever since." Regardless of the passage taken through this virtual tale, whether through "The Story of an English Queen," "A Pirate," or "A Ship Called Jesus," the cybertraveler is caught in a paradoxical zone that makes an issue of the nature of the universal "we." The initial track is interrupted by competing sound loops of voices hailing the user to enter three different venues. By moving the cursor over the graphic "Pirate," which links to fluctuating sites of the slave trade and the stock market, the user triggers a repetitive male sound bite, "Commerce is our goal." When the cursor slides over the collage of Elizabeth, a voice sounding like Margaret Thatcher tells "us" that "I think it means that people are really rather afraid that this country might be rather swamped by people of a different culture." Finally, sliding over "A Ship Called Jesus," the cursor activates the soulful spiritual, "You Know I'm Gonna Find a Way to Freedom."

"Embracing the anguish of past that has not yet passed into representation," writes Kobena Mercer, "A Ship Called Jesus exemplifies a critical postmodernism in which art survives the experience of trauma by entering into a practice that performs an ethics of responsible disenchancement—letting go of losses that can never be redeemed by the promises of the future but only endured through the labor of symbolisation." "A Ship Called
life the historical still life with animation, montage, and morphing. Even though the photos appear to be arranged in chronological order, they move through artistic alteration between the present and the past, regardless of which photo album they are in. It is striking that the last page of Roberto's album presents the user with two unaltered QuickTime clips of films starring Roberto, Los Olvidados and Mujeres de Teatro. Although the cinema is positioned here as the analog culmination of the life of Roberto, not to mention the end point of this digital loop, the clips themselves seem somewhat flat and rather unnatural in comparison to their prior appropriation as digitally animated photos. As Godard would be correct to think of these miniaturizations as but the shadow of their films, they stand out forcefully here as literal specters of the multimedia interface. The miniatures, now lacking the nostalgia of their historical purity, reflect Roberto's own retrospective distance from that past, as now a remembering subject who thinks about the code that had contained him and who knows the past only in relation to its manifestation in the present.

Only when all loops of the past and present have been hit does the user of Vice-Versa have access to the material arranged literally on the "top shelf" of the CD's cabaret-like mise-en-scène: "the depths." Here, again, the structure suggests the kind of perspective on depth that also constitutes part of the cinematic code frequently compared to the shallowness of television and now multimedia. It promises the very profundity, for instance, that Bill Nichols has accused cybernetic systems of lacking: "The chip is pure surface, pure simulation of thought. Its material surface is its meaning, without history, without depth, without aura, affect, or feeling." (how frequently do we hear television and now multimedia derided for their lack of depth?)

It is the depths, in Vice Versa, that render the user most vulnerable to the intersubjective zone characteristic of the best of CD-ROMs that dwell passionately on the very histories, affects, and feelings thought by Nichols to be negated by virtual technologies. Here the user is invited to click on the private parts of the aged nude bodies of the Cobos to learn more about them. This rather trite aspect of the CD—one both the entry into depth and its passage through the procreative organs—is what paradoxically constitutes the cultural promise of this multimedia experiment. The digital clarity of these natural bodies replete with wrinkles, folds, sags, and splotches both resists the cinematic code of the sutured body of the aging star and confronts the user with a provocative reflection on the naturalness of aging.

Similarly, the process of interaction itself implicates the user in the loss of the code: from the grounding of analog vision in the gesture of the click (remember Freud's essay on the paranoid sound of the camera capturing the primal scene?) and the playful foreshortening of voyeurism's distance to the challenge of the viewer to act out the rendering of the whole body into its fetishistic parts. And what's the result of the click, of the entry into performative commentaries of the actors on their autobiographical relation to specific body parts? Really, and here's the digital rub, really nothing other than more of the same contemporary, burlesque footage that had already confronted the user in the prior albums of past and present. Here the depths pun not simply on the loss of life but more importantly on the loss of the code. What we see no longer reads according to the naturalized codes of cinema and its melancholy relation to the body that brought us to it. In its place stands the performative gesture of hyperrealistic hallucination, in which the taboo site of the aged body usurps the public and private codes of its secrecy and horror. There is something about these dancing, winking, undulating body parts that revivify the modulating relations of the cinematic code, that reanimate cinema's memento mori in the playful codes of digital mimicry and mime.

Relocating the Remains: Keith Piper

Let me be cautious, however, not to leave the impression that the digitized code simply privileges burlesque and mime. While this is clearly the case with a wide range of wonderfully ludic CD-ROMs, from Spain's Let's Tell Lies (1999) by Christina Casanova and Australia's Cyberflish Girlmonster (1995) by Linda Dement to the American Isabel Chang's Virtual Makeovers for the Post-Identity Cyborg (1999), an equally significant number of CD-ROMs and digital installations rely on the zones of digitality to evince the experience of passing itself. How trauma leaves its mark on the history of the subject and its inscription of loss in cinema, video, and installation are the subject of a wide range of digital art, from Australian installations and performances such as Shock in the Ear by Norie Neumark (1998), Suzanne Treister's No Other Symptoms: Time Travelling with Rosalind Brodsky (1998), and Jill Scott's Immortal Duality (1997) to CD-ROMs such as The Crazy Bloody Female Center (1999), from Americans Nina Menkes and the Labyrinth Project: Troubles with Sex, Theory and History (1997), from Slovenians
VICE VERSA: GRACE QUINTANILLA

Few, if any, multimedia projects interface with the history of cinema without assuming an ambivalent relation to the cinematic code. Of the many CD-ROMs I could choose from Contact Zones: The Art of CD-ROM that might illustrate this ambivalence, one seems particularly appropriate to the task at hand. A playful example is the 1999 Vice-Versa: Presenting the Past, the Present, and the Depths of Roberto and Chelo Cobo, by the Mexican artist Grace Quintanilla. Vice-Versa literally presents the miniaturized trace of cinema as something “like the photo of a loved one carried with us.” Aiming “to experiment with the boundaries of traditional documentary in which the narrative structure is conceived in a linear way and predetermined by the director,” Quintanilla plots the life stories of the nationally known cabaret performer, Chelo Cobo and her movie star brother, Roberto Cobo (Roberto would be most familiar to readers for his role as the young protagonist El Jaibo in Bunuel’s Los Olvidados). Now in the twilight of their lives, they reflect back on their pasts through their meditation on recent photographs of their naked bodies that were taken by their niece, Grace. Structured not around a film, but around the psychic zone of the family photo album, the CD-ROM permits users to access historical photo and video files as well as digitally altered contemporary footage of the personalities who subsequently perform nude for the camera as if acting out the nude photographs around which they nervously shaped their retrospective narratives.

To this aged brother and sister born from actor parents, the profession of acting always doubled as their primal scene. They took to acting and dancing before they could distance themselves from the mirror stage and the family code. The narrated photo novella of the CD-ROM reveals that both child actors incorporated or naturalized the codes of cinema and cabaret almost before the procedures of mimicry could be symbolized. Crucial to the CD-ROM is the digital method of morphing that Quintanilla uses to represent the ebb and flow of time through which memory confronts the subject with fantasy’s retrospective traumas and pleasures. Notable is the morph of footage of Chelo’s first film role, as an infant of six months lying in a crib, into an image of the elder, nude Chelo curled up in the fetal position. Throughout the CD-ROM, the faces of Roberto and Chelo transform so fluidly into morphed versions of their younger and older selves that even the nude, curled-up figure of the aged Chelo looks naturalized in the cinematic crib she occupied as an infant (Figure 6). Rather than simply “permitting history’s elision and repression” through “the endlessly regenerative self-creation of morphing,” as Scott Bukatman and others have argued about mainstream cinema’s repetitive display of morphing, Quintanilla’s morphing is marshaled to foreground the dynamics of aleatory time and motion through which the psyche maintains a charged relation to the complexity of history’s incorporation. Digital toggling between past photo albums and present moments thus confronts the user, not to mention the family subject, with the specter of specialized codes that have become naturalized, perhaps too much so, in the aleatory zone of family history.

Two aspects of this CD-ROM are particularly noteworthy to our discussion of the code. First is the seemingly analog structure of the piece. Users can choose between past and present photo albums that provide loops of the combined family/media history of each personage. The albums contain clickable photos that often come alive in video footage, bringing to

![Figure 6. Grace Quintanilla, Vice-Versa: Presenting the Past, the Present, and the Depths of Roberto and Chelo Cobo, 1999.](image-url)
such, known at two different times, in this case moments of unknowable increments, would in fact be different knowledge.

o: Wait a second. . . . Are you suggesting that thinking might be inextricably linked to time and that a kind of leapfrogging of moments, and the knowledge of those moments, gets compared, producing a difference, thus enabling the leapfrogging to continue? . . .

I: I would say that if it is possible for us to have a discussion—to toggle—then it is possible that the comparison we are speaking of and the theories surrounding it are not trivial but absolutely fundamental to our intraweave, or perhaps at the point we had better just "call it a game." I'm going along with our assumption from the beginning that there can't be a binary culture because two (1 & 0) cannot forget themselves, and therefore cannot live time, that is the time of remembering. One is always reciprocal to the Other and therefore one always knows what state they are in and there can be no forgetting because there can be no loss of technology: no change equals no time equals no difference. Once there is no difference, information becomes purely quantitative and questions cease.23

Perhaps it can be said, returning to the boomerang effect, that digital precision frees the momento mori from analog time and its movement forward through its decapitation of, and juxtaposition with, the body of cinema. Emblematic of the digital code and its liberation of hallucination from the analog weight of history itself is the spectral image that closes Hill's digitized tape. "Imaging the brain closer than the eyes," the camera suddenly looks out from within the inside cavity of the skull as if staging the hallucinatory reversal of encoded perspective.24

Decapitated by the boomerang of the loop, might not hallucination be thought to roll freely around in the studios of new media cut off from its anchoring in a certain history of cinematic perspective, analog temporality, and the ordering gaze? Put otherwise, might the specter of hallucination be thought now to haunt, in the enigmatic recombinations of digital code, the body of cinema and its gaze, to haunt in the sense of a toggle effect? I suggest that digitality can be said to render the momento mori anew, this time by differentiating it from photography's "embalmed time" and cinema's suture of temporality. Maybe we're faced with something akin to what Lacan saw in Holbein's The Ambassadors, whose decapitated anamorphic

skull confronts the viewer with the surprise of death's perspective and the loss of the self-same confident gaze.25 "The longer I wait," utters the narrative voice tracked onto Hill's digital still life,

the more the little deaths pile up; bodily substance is no longer an excuse; too much time goes by to take it by surprise. So much remains. No doubt it can all be counted, starting with any one, continuing on with any other one until all is accounted for. A consensus is reached. It can all be shelved in all its quasi-bliss, this thing is the turf. These sightings as seen before me made up of just so many just views, nature's constituency sits with indifference to the centrifugal vanishing points that mentality posits so falsely.

Already in 1968, Gilles Deleuze imagined just such an aesthetic when he theorized, in Difference and Repetition, "elements, varieties of relations and singular points [that] in the work or object, in the virtual part of the work or object, without it being possible to designate a point of view privileged over others."26 Deleuze would be very quick to caution us, however, that the evacuation of a privileged point of view need not necessitate the loss of the analogue, at least in its conceptual guise as analogy and resemblance. Of course, it is quite common to understand digitality as shifting the ground of artistic craft, to continue with this metaphor, away from representation and toward virtualization, away from resemblance and toward simulation. The promise of digital aesthetics, moreover, has been understood in relation to its intensification of interactivity through which the user's physical or manual participation in the circuit of artistic presentation simulates or projects the user's own virtualizations, fantasies, and memories in consort with the artwork. But while opening the artwork to the virtual relations of digitality and enhanced interactivity, a significant number of digital craftspeople also have remained faithful to the preservation, investigation, and critical analysis of the cinematic archive and its dependence on prior codes of resemblance and analogy.27 I have come to appreciate that analogy's loss, outside and within cinema, should constitute the central object of study in any attempt to give digital culture a history. It is in this context of looking back to the cinematic past to reach into the digital future, via the present past, that my research has prompted me to reflect on how new media incorporates earlier themes and methods of cinematic representation as a means of articulating cybernetic paradigms of craft, code, and history.
in the sense articulated by Christian Metz in his canonical essay of 1968, "Problems of Denotation in the Fiction Film." There Metz reflects on the nature of cinematic denotation by clarifying how film is structured around the partial equations of visual and auditory analogy, by the perceptual similarity of signifiers and significeds. Put simply, cinematic images and sounds match ideas and emotions. Film works hard to make images look and feel real. On another, more complex level, Metz emphasizes how the symbolic nature of cinematic connotation overtures perceptual analogy as the latter accrues value through the additional meaning it receives from sociocultural codes. In these terms, consider how the white dress that lifts up over Marilyn Monroe's head, from the hot air of a sidewalk grate, becomes less a dress than the sign of a female star, the mark of the gaze, and the icon of the practice of Hollywood cinema.\textsuperscript{16}

It is significant to the understanding of the cinematic code that Metz brings these two terms together. Both the denotation and the connotation of cinematic analogy are constitutive of a mixture of two important signifying structures: what Metz terms "specialized codes" and "cultural codes." Specialized codes are purely cinematographic signifying features: think of "montages, camera movements, optical effects, 'rhetoric of the screen,' interaction of auditory and visual elements, and so on." Cultural codes, in contrast, constitute the iconographical, perceptual, and other codes of given social groups. These cultural codes are "so ubiquitous and well 'assimilated' that the viewers generally assume them to be 'natural.'"\textsuperscript{17} Of particular importance to our consideration of the history of the code is not so much the distinction between these codes as the "modulation" of the two analogical systems. We've come to appreciate, for example, how many classical Hollywood films were coded through cinematic form to have the man assume the role of the active agent while the women often become objects of what Laura Mulvey calls "to-be-looked-at-ness."\textsuperscript{18} What's crucial, as I've argued more extensively in \textit{Like a Film}, is how Metz's distinction seems open to the probability that the specialized codes of cinema have themselves become, or always already were, "naturalized" or "cultural." In this sense, they return to cinema not as "specialized" but as cultural codes that function for the most part "within photographic and phonographic analogy."\textsuperscript{19} I am thinking here of the sorts of cinematic codes that, writes Metz, "intrude to the film by means of perceptual analogy each time an object or an ordering of objects (visual or auditory) 'symbolizes' within the film what it would have symbolized outside of the film—that is to say, within culture."\textsuperscript{20} One can recall the futile attempts of Godard's male protagonist in \textit{Breathless} to model himself after Bogart (something that had to be accomplished by naturalized procedures of acting, not by digitized programs of morphing). To appreciate such a modulating relation in which the specialized discourse of film is folded back upon itself, "naturalized" as "culture," we need only recall Godard's nostalgic reference to film's miniaturized structure in and through the video monitor as something like the photo of a loved one carried with us. Were he to have written his essay in the digital moment, Metz might have told Godard that his "longing for a film, the nostalgia, the echo of a film" is actually the cinematic code itself, this time naturalized as the analogical code we wish to give to digital culture.\textsuperscript{21}

Perhaps it is precisely something like this echo that constitutes the thoughtful spectacle of Gary Hill's digitized video \textit{Site Recite (A Prologue)}. In reviving the baroque conventions of the memento mori, Hill capitalizes on digital clarity and its transformational possibilities to confront us with the recitation of an analog accumulation of loss. As marked by the anamorphic skull, such an accumulation of loss can be known, as Louis Marin reminds us, as nothing but a sign of representation's ephemerality. While providing a horizontal, analog pan of the still-life assemblage of memento mori, Hill inverts the clarity of perspective through the losses and gains of anamorphic perspective. The digital coding of cinematic loss is what here frustrates the analog move forward. The digital convention of temporal pause, ocular layering, and the clear separation of encoded sound and video tracks opens up a space of recitation while at the same time, I suggest, foregrounding the lasting legacy of the analog code itself. The challenge of this piece might be said to lie in its crafting of the code. For digitality, in this context, provides us with the code for confronting something of a revitalized memento mori through which we can contemplate our electronic passage through recent history and its visualization.

In his essay nodding to the digital code, "Between 1 and 0," Hill articulates this paradox in the guise of a philosophical dialogue between two characters, 1 and 0.

1: What you are saying is that it matters whether our foreknowing occurs exactly at the same time or whether perhaps there is a slight delay which would allow for comparison to take place. That is, that knowledge as
memory and cultural study thus situated on the side of theory while
digital art is set apart from culture to be limited by the constraints of practice? Should it be our critical task to go beyond examination of what is hap-
pening to our visual and intellectual cultures so that the digital dialectic might ground Idea in the constraints of practice?

Even only a proximation of the weight of such an intellectual code con-
tinues to impinge on critical practice in the digital age, then we also might
wonder about the corollary binarism, cinema and new media. Does cin-
ema provide the code of new media's craft? Is cinema, or the idea of cin-
ema, what provides the reference for the free-floating hallucinations of new
media's art? Is this what lies behind the subtitle of this section, "Digitality,
Psychoanalysis, and the Memory of Cinema"? Are we crafting our sense of
the new media in the shape of its fleeting cinematic core that, for its part,
may never have realized itself as much more than an idea, an idea approx-
nimated but never attained due to the vicissitudes of craft?

It would be rather depressing to think that our chore is simply to predict
something for the twenty-first century similar to what Heidegger mourned
for the twentieth century. In "The Age of the World Picture," Heidegger
attributes the lost flexibility of scholarly invention and artistic craft to the
"projection and rigor" of the code of modern technology and institution-
alized research. Following in the wake of the loss of the gods (Nietzsche),
"science becomes research through the projected plan and through the secur-
ing of that plan in the rigor of production." Put simply, the rigorous
replication of code dictates the plan of craft. Were we to seek a corollary
discourse in the world of cinema, we need only turn to the likes of Jean-
Luc Godard, who mourns the passing of cinema (the twentieth-century
god) into the rigorous emptiness of the televisual (and now digital) code.
"Cinema is higher than us," Godard insistently reminds us, "it is that to
which we must life our eyes. When it passes into a smaller object on which
we lower our eyes, cinema loses its essence." But rather than simply mourn
the loss of the gods through the passing of cinema, I propose that we cap-
talize on Godard's description of the diminished essence of cinema to think
the rigorous duplication of the (digital) code. Otherwise, might the arrival
of inordinate miniaturization and the advent of the new media with its
thumbnail and windows signal the cinematic paradox of digitality? That
to shape a digital code means to bear the loss of code itself, to carry on the
legacy of cinema as the crypt of the twentieth century?

For an idea of what kind of loss I am contemplating, permit me to elab-
orate on the code as it stands in relation to cinema. In doing so, I hope
to make clear how the cinematic code might be understood to linger in dig-
itality as something of a crypt or a carrier of the discourse of loss, mourn-
ing, and melancholia so familiar to cinema studies. There certainly is a
critical tendency to follow this path in relocating the code of the new craft
in the loss or continuation of cinema. I was struck, for example, by how
many articles crossed my transom for the special issue of Wide Angle
that think of digital memory in this context. Writers as different as Maureen
Turim, Margaret Morse, Yvonne Spielmann, David Tafler, Sean Cubitt,
Michele Pierson, and Mary Flanagan dwell on the trajectory or even the
translation of the cinematic code in the new media: the legacy of montage,
the legacy of the star system, the legacy of silent cinema. That is, they pro-
vide answers to the rather paradoxical task of thinking digitality as the ana-
logue of cinematic practice and representation, as something like cinema.
But rather than dwell on the pragmatic issues of production, I reflect on
the conceptual significance of the new media, particularly as it corresponds
to the visual procedures, ontological positions, and cultural attitudes asso-
ciated with cinema. But in doing so, I mean not to separate theory from
practice but rather to foreground the conceptual articulations of digital
craft. As I'll make evident in discussing the work of Gary Hill and Daniel
Reeves, digital cinema may create the perfect environment of morphings
and time passings through which loss and its trauma can both be visual-
ized by the artists and shared through immersion by the spectators. In a
related way, as I have learned from the CD-ROMs of Grace Quinlinna
and Keith Piper, the multimedia platform can provide the venue for visual
and aural juxtapositions, artistic manipulations, and conceptual constrasts
through which the discourse of mourning and time passing can also serve
to unsettle the many codes of realism, fetishism, and national/racial pride
so dear to cinema and its theorization. Even though it might be figured as
cut off from cinema by the boomerang effect of digital culture, the hallu-
cinar cinematic code haunts the interface of digital multimedia.

BETWEEN I AND O

Permit me to reformulate this paradox of digitality in the more formal
terms of the cinematic code. I am thinking of the cinematic code of analogy
The question confronting us, then, is "where do we locate the lure of the new media?" Might the new media be situated, however precariously, in the memory of the body of cinema, or does it float free of the prior code? Is it, as Manovich would have us believe, simply a matter of the computer conversion of data and variability whose "paradigm is concerned not with time but with space"? Or might the promise of digital art dwell somewhere in the in-between, in the interstitial zone between the binaries that are shared by our cinematic, critical, and digital heritages: code and craft? While the code has moved, in the digital context, from the stuff of theory to the matter of computing, it could be said to maintain a continued binary relation to the craft of artistic production. The one, code, suggests the work of criticism and theory (even in the context of computing), not to mention history and its idea, while the other, craft, denotes the work of art, the hand of the artisan, the here and now of techne. These terms may well imply something like a digital kernel and its artistic shell, with the code grounding the craft in the virtuality of Idea that can be only approximated, approached in the new, in the now, of the craft of art and software. Are we thus to be guided, once again, by the aesthetic dialectic derived from Plato in which the artisan and her crafts never quite live up to the virtual promise of Idea and his codes?

This is the slant given to the new media by many of its proponents, such as those gathered in Peter Lunenfeld's collection of essays *The Digital Dialect: New Essays on New Media*. In the introduction to the volume, "Screen Grabs: The Digital Dialect and New Media Theory," Lunenfeld summarizes his collection's critical orientation in a way that ends up validating the Platonic divide between Idea and techne. "The digital dialectic," he writes,

offers a way to talk about computer media that is open to the sophisticated methodologies of theory without ignoring the nuts and bolts or, better yet, the bits and bytes of their production. To repeat, the digital dialectic goes beyond examining what is happening to our visual and intellectual cultures as the computer recodes technologies, media, and art forms; it grounds the insights of theory in the constraints of practice.11

Now let's return to our formula, code and craft. Should we understand it to reflect Lunenfeld's mandate that so clearly aligns insight with theory and constraint with practice? Do we mean to contrast the artistic work in new media with the examination of what is happening to visual culture? Are
curators and artists that digitality has something creative and critical to offer to the cinematic legacy, in contrast to the ambivalence of some participants about the growth of digitized cinema. While some discussants lamented digitality as a marker of the death of cinema, a great many others lauded it for providing a catalyst for the revival of forgotten cinematic histories, for the reinvention of cinematic form, and for the sharpening of theoretical reasoning. This approbation of the digital seemed most poignant when voiced by emerging artists of color such as Gilliam and Woolery, who saw in the new technology a means for developing a reflective approach to appropriated historical footage from problematic racialized films from which we have learned to distance ourselves. They were able to capitalize on the codes of digital editing and sound production to juxtapose sequences from films like Birth of a Nation and Imitation of Life with artistic presentations that counter Hollywood’s tainted historical memory of the hierarchies of race. The wide range of artistic CD-ROMs, which I continue to collect and exhibit in the Rose Goldsen Archive of New Media Art at the Cornell Library, also provided evidence of the new archival role of digital media and its sometimes uncomfortable relation to the nostalgic reminiscence of the days of Flaherty and his contemporaries in early cinema.

Resounding throughout the public discussions of these exhibitions was an enthusiastic appreciation for the coda of the digital whose terms combine and shift with the ease and fluidity of bits and bytes: appropriation/repetition/layering/simulation/retrospection. Indeed, the retrospective nature of repetition and digital coding—how initial images, forms, and narratives are refigured through their contemplative re-citation and re-presentation—consistently inscribes the new media in the memory and memorialization of its antecedents, cinema and video. Since the time of these exhibitions, a wide spectrum of publications on new independent work in digital media have emphasized the theoretical reflections between new media and early cinema, as well as artistic and curatorial projects that emphasize interaction over spectating. Dear to my heart is the 1999 special issue of Wide Angle on "Digitality and the Memory of Cinema" (2002), which I edited in the wake of the Flaherty Seminar and whose revised introductory remarks constitute the bulk of this chapter, which here again functions as an introductory threshold, this time to considerations of "Present Past: Digitality, Psychoanalysis, and the Memory of Cinema." That issue of Wide Angle included contributions from me, Martin Trawin, Peter Jackson, and John Hess, Margaret Morse, Sean Cubitt, George Legrady, Michele Pierson, Ross Gibson, Yvonne Spielmann, Mary Flanagan, and Joseph Milutis. They extend the digital themes most prominent in contemporary cinema and its study to a consideration of formal procedures shared by new media and historical cinema as well as to an appreciation of many of the independent artists who have extended the boundaries of digital cinema. The Wide Angle issue appeared on the heels of Thomas Elsaesser and Kay Hoffmann’s collection, Cinema Futures: Cain, Abel, or Cable? and Lev Manovich’s influential book, The Language of New Media, and was followed by a special issue of Parachute on “écrans numériques / digital screens,” not to mention the gargantuan catalogue edited by Jeffrey Shaw and Peter Weibel, Future Cinema: The Cinematic Imaginary after Film.²

Rather than follow the lead of other leading digital theorists who have lamented the passing of socially conscious art with the arrival of digitized Hollywood,³ I have profited from the independent scene to articulate a case for the social/formal promise of digital art and its memory of cinema. What I personally find refreshing and gratifying is the blend of formal considerations of analogy, collage, editing, special effects, and the star system with a persistent emphasis on the theoretical contributions made by recent digital artists to the critical understanding of social issues of race, gender, sexuality, and politics. Meaning to complicate the arguments of theorists such as Manovich, who maintains that cinema “has found a new life as the toolbox of the computer user,”⁴ I am particularly interested in how the digital platform lends itself to a decisive program of social and aesthetic intervention while still serving, as I will suggest, as something of a spectral crypt of the coda of cinema.

It is in the spirit of foregrounding the political edge of the dialogue between cinema and new media that I wish to open this section on "Present Past" by profiting from conceptual terms important to the work of the engaging independent artists, Gary Hill (USA), Grace Quintanilla (Mexico), Keith Piper (England), and Daniel Reeves (Scotland). I have frequently expressed my belief that artists working in the new media have accepted the critical responsibility of thinking their way into the twenty-first century.⁵ I thus wish to frame this section by entering into dialogue with some of their weightier thoughts about the cryptic return of cinema in the digital age.
confrontation with these challenges was the keen sense expressed by many

What left a deep impression on me during public discussions held in

Russia, China, and the USA was the enthusiasm displayed by many

Growing interest in digital technologies among artists, curators, and media

The success of this mode-

Two overlapping curatorial projects in the late 1990s complemented this section.

call to be reflected. The fact that cinema

The propose arises here: does this phenomenon persist, but

**DIGITAL CODE**

BEARING THE LOSS OF THE

DIGITALITY AND THE MEMORY OF CINEMA:

CHAPTER 5