

Between Film, Video, and the Digital

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Between Film, Video, and the Digital

Hybrid Moving Images in the
Post-Media Age

JIHOON KIM

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*For Sun Joo Lee,
my dearest intellectual colleague
and emotional companion*

CONTENTS

Editor’s Foreword ix

Acknowledgments xv

List of Illustrations xix

Introduction: Hybrid moving images and the post-media conditions 1

- 1 Videographic moving pictures: Remediating the “film stilled” and the “still film” 47
 - 2 Digital glitch video and mixed-media abstraction: Materialism and hybrid abstraction in the digital age 99
 - 3 Transitional found footage practices: Video in and out of the cinematic fragments 145
 - 4 Intermedial essay films: “Memories-in-between” 197
 - 5 Cinematic video installations: Hybridized apparatuses inside the black box 241
- Afterword 295

Notes 301

Index 355

INTRODUCTION

Hybrid moving images and the post-media conditions

Hybrid moving images and medium specificity

Media artist Jim Campbell has produced a number of pieces consisting of images made with LED displays of photographic and filmic materials. In these pieces, the low-resolution electronic displays, combined with digital image processing, transform the photochemical material into a series of pixels. Accordingly, the images waver between the discreteness of the digital and the continuity of the analogue, taking on multiple levels of hybridization derived from material and technical aspects of the pieces. This is illustrated in *Home Movies 300-1* (2006, Figure 0.1), a work which projects the 16-mm moving portrait of an anonymous family onto a double Plexiglas screen while its 300 LEDs diffuse the footage into a series of noises as the minimal units of digital visual information. At the same time, the viewer is also able to see the discreteness of the minimized units when watching the display from a distance. What captures the viewer's attention, then, is the ghostly registration of family members, such as a smiling mom, a child on a swing, a toddling child, etc., which is perceived as continuous. As Richard Shiff notes, *Home Movies 300-1* positions the viewer "at the single door that opens to both classes of image, to representation and to abstraction."¹ Yet it could also be added that the ambivalence

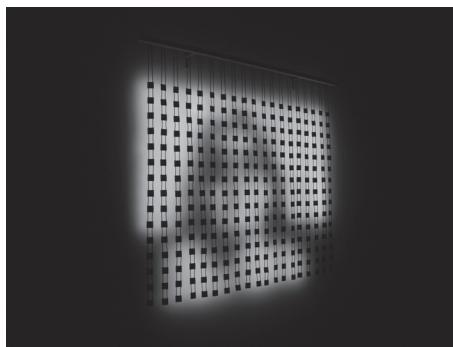


FIGURE 0.1 Jim Campbell, *Home Movies 300-1* (2006), *installation view*, 60 × 50 × 3 inches. Video installation: custom electronics, 300 LEDs, courtesy of the artist.

caused by the digital processing of the analogue image leads to other layers of hybridization: of still and moving images, of recorded and simulated images, and of luminous and pixelated images.

Campbell's work exemplifies the ways in which contemporary media art pieces across various platforms and genres, ranging from avant-garde cinema to video installation, provide a fresh look at the photographic inscription of reality either by bringing the still photograph to life or by unearthing the photographic stillness embedded in the moving image, both achieved with the help of digital technologies. This new breed of practices fosters hybrid visual forms that make porous the boundaries between live-action and animated images, as well as between the recorded and the manipulated. On an even more complex level, Campbell's images are based on the combinatory employment of photography, film (both with digitized data), and digital video (as replaced by the LEDs) that results in the dynamic coexistence of stasis and motion. Thus, they are structurally either both photographic and filmic or of these. The co-presence of the two media amounts to a form of moving image that reveals both the differences and the similarities between them through an array of technical processes allowing the coexistence of, and the exchange between, their properties.

Digital technologies play a pivotal role in formulating the aesthetics of co-presence that Campbell's images present to their viewer.

While grounded in the combination of custom LEDs and computational algorithms, his self-devised digital imaging system alludes to this double nature of digital video, to the extent that its resulting visual expression integrates photographic representations and at the same time radically transforms them according to the ways in which the series of discrete elements (pixels) comprising them are manipulated. In this sense, Campbell's ambiguous visual expressions reflect the situation that the ongoing proliferation of digital technologies in the terrain of art practice during the last two decades has unsettled the status of the moving image. From the 1990s onward, digitization has subsequently precipitated the flexibility of media images because they are grounded in numerical codes subject to putatively unlimited manipulations. Since then, numerous art practitioners across different fields have responded to the volatility of image by creating new works of art that could obscure established distinctions between different media arts, including cinema, video art, and digital art. These artworks have presented certain types of moving images in which the different forms of media coexist and influence each other, such as the images emblematised by Campbell's works. The fact that these images are based on the merger of the properties of these media and articulate the phenomena of border crossings between their corresponding arts raises the following three questions. First, if these images remain highly ambiguous, what can we identify as an artistic medium in this combinatory system (i.e., what is its key medium: found film, photography, computer algorithm, or, an array of LEDs)? Second, if these images disallow the belief in a single medium's directive role in shaping a particular sensible form, how can we reconfigure the notion of a medium vis-à-vis the variety of practices producing them? And finally, what theoretical framework can we use to describe the growing exchange between previously distinct media and the emergence of the art forms based on this exchange?

In response to these three questions, this book characterizes these images as "hybrid moving images," an array of impure image forms characterized by the interrelation of the material, technical, and aesthetic components of existing moving image media—namely, film, video, and the digital. The term "hybrid" denotes its two etymological underpinnings, firstly, "a mixed form of two concepts from two language systems, the Latin *hibrida* (mixed blood)," and secondly, "the Greek *hubris*—excess,"² which suggests that the

form transgresses the boundaries of each system. Various literary and cultural studies based on poststructural, postmodern, and postcolonial theories have elaborated upon these two meanings of the term in association with the concepts of multiplicity, heterogeneity, fusion, diversity, and difference, using them to describe conditions in which different linguistic or cultural systems meet and interact so as to blur the previously maintained distinctions between themselves and others, including an array of conceptual dichotomies such as the global and the local.³ More specifically, hybridization refers to “the two-way process of borrowing and blending between cultures, where new, incoherent and heterogeneous forms of cultural practice emerge in . . . [the] third spaces.”⁴ Seen in this light, hybrid moving images point to the in-between spaces of existing audiovisual media, as well as to certain forms produced by an array of interrelations that drive the mutual influences between the media. These images, then, enable us to redefine each medium’s identity not as self-determined, but as constructed through its transfer to, and appropriation of, other media and forms.

The term “moving image” refers to a category of images in motion broader than the images that have traditionally been discussed in a discourse grounded in a sharp distinction between one art form and another. In this sense, the uses of the term have often been associated with a rejection of medium-essentialist thinking in the context of changing and emerging relationships between different artistic forms and means. Noël Carroll develops his concept of the “moving image” by way of his attack on the doctrine of modernist medium-specificity thesis, which consist of the three arguments that (1) a medium is defined by a physical substance (2) it maintains its unique essence derived from its intrinsic material qualities, and (3) the unique nature of the medium indicates or dictates each art’s own domain of expression and exploration. Carroll draws upon various counterexamples, including the nonfigurative films of the avant-garde practices, image processing in video, and the cinema based upon digitally composite images, in order to demonstrate that the forms and styles of film are not necessarily determined by a limited set of techniques such as the cinematographic representation of reality through the film camera and certain methods of montage.

Carroll’s use of the term “moving image” is related to his definition of a medium as being irreducible to a single material

entity. For him, a medium is “generally composite in terms of its basic constituents”⁵; and “an art form then is composed of multiple media.”⁶ Here film serves as a telling example for validating these two arguments. As to the first argument, even though film is defined as a medium on the basis of a filmstrip, its resulting image is not necessarily derived from a camera’s recording of profilmic reality, but includes “flicker films,” which can be made by the alternation of blank and opaque leader without photographic emulsion. Also, as to the second argument, even though film is defined as an art form of a moving image that bears a photographic impression of reality, this does not necessarily include a filmstrip but embraces video, to the extent that video “may be developed . . . to the point where most of us would have little trouble calling a commercial narrative made from fully high-definition video a film.”⁷ Based on these two arguments, Carroll paves the way for reconfiguring a technological medium as constitutively hybrid: that is, there is no single element of a medium that ahistorically ordains a single set of forms and styles; instead, it is differentiated into multiple components, which supports the idea that “a single art form may sustain different, nonconverging potentials and possibilities”⁸ for diverse and aesthetic approaches and formal developments. Carroll’s discussion of a filmstrip could be such a case, given that it is associated not simply with realist cinema but also with flicker films and handmade films. For both forms are distinct from each other in terms of their different aesthetic approaches to the materiality of the filmstrip, as well as in terms of the differences in the techniques and other materials that intersect with the filmstrip. This differentiation of forms leads him to denounce the idea that a medium’s identifiable “pure” domain immediately determines a particular set of forms whose aesthetic effects are indicative of its most genuine essence. Instead, it allows Carroll to take on a pragmatic view on the relation between a medium and its forms or styles: “It is the use we have for the medium that determines which aspects of the medium are relevant, and not the medium that determines the use.”⁹ More significantly, this pragmatism indicates that Carroll’s concept of a medium embraces the historical variability or reinvention of its components as well as its possible border crossing with other media. As to the impact of digital video and computer-based special effects on the production of feature films, he suggests that these testify to the increasing intersections

between film and other moving image media that were anchored in their distinct art forms (video art and computer art), as well as to the innovation of film's mediality and aesthetics vis-à-vis the development of these media: "Film is not one medium but many media, including ones invented long after 1895, and even some of which have yet to be invented. Video and computer-generated imaging, for example, are film media . . . in the sense that they may be components of what we now call films."¹⁰

D. N. Rodowick tellingly demonstrates that Carroll conflates an objection to the medium-specificity argument with an exclusion of anything that is regarded as materially or technically specific to a given medium. Carroll convincingly testifies to the constitutive multiplicity of a moving image medium and the extent to which its components are open to stylistic variation and historical invention, both of which demystify the belief in a medium's univocality and in its power to dictate forms of an art as manifestations of its predetermined essence. But there is no reason that dismissing these two lines of the medium-specificity argument prevents us from abandoning any observation of what components a medium is composed of and what effects they produce. Rather, Carroll's suggestion of a medium's internal and external hybridities is based on his identification of a medium's components and of their relation to aesthetic effects, all of which he excludes from his concept of the moving image. Thus what Carroll ironically validates, for Rodowick, is that "nothing . . . would disallow specifying media with a strong kinship (film, video, and digital imaging) as having a variable distinctiveness containing overlapping as well as divergent elements or qualities."¹¹ The media's characteristics associated with their hybridity, such as historical variability and openness to different materials, forms, and practices, then become compatible with the concept of medium specificity—one which is not reducible to the medium-specificity arguments of a medium's teleological essence and of the absolute distinctiveness of its forms, but nonetheless requires us to observe a medium's composite properties and discern differences and similarities between them and those of other media. Ultimately, what Rodowick proposes is *a dialectic of medium specificity and hybridity* with regard to a medium's internal differentiation and its possibilities for being aligned with what is outside it: "I am happy to admit as many hybridizations of media as artists can invent in their actual practice. But what makes a hybrid

cannot be understood if the individual properties being combined cannot be distinguished.”¹²

Taking Rodowick’s discussion above as a point of departure, this book characterizes hybrid moving images as being grounded in and indicative of the dialectic of medium specificity and hybridity, or as being produced by a set of artistic practices that aspire to reconfigure the concepts of a medium and its specificity vis-à-vis hybridization. To be sure, these images cannot be fully contained within Carroll’s concept of the moving image, in which any observation on the differences of media in their material and technical components, as well as the notion of a medium as such, is eliminated. Rather, these images ask us to keep our eye on the material, technical, and aesthetic dimensions of the media involved. For they are based on the changes in a medium’s internal components or in the ways that they are combined differently with other media elements that have hitherto not been regarded as contained within its art form. Seen in this light, what I call hybrid moving images are inseparable from the images that each of the three media has produced on its own (filmic, videographic, and digital images), and much more from the differences and similarities between these images. At the same time, central to these images is the fact that they result from the different relations between media that frequently cross the generic and disciplinary borders between their corresponding arts. To summarize, the hybrid moving images demonstrate that it is more productive to identify different moving images grounded in the variability of a single medium or the differing combinations of more than two media, rather than insisting upon the “moving image” as a general category.

These two aspects of hybrid moving images, the constitutive compositeness and variability of a medium, as well as the possibility for its alliance with other media, echo Berys Gaut’s discussion of a medium. In a way similar to Carroll and Rodowick, Gaut asks us to distinguish two ways of conceiving a medium: a medium as “the kind of stuff out of which artworks are made” and a medium as that which is “constituted by a set of practices that govern the use of the material.”¹³ For Gaut, the latter notion demonstrates that the material alone cannot invariably determine the medium of an art form: as with painting, for instance, it includes not only oil pigment and a canvas, but also chalk, charcoal, tempera, woodcut, etc., and it is up to a set of practices and their underlying conventions

what material is adopted and how the material realizes an artwork that constitutes a painting. But this functionalist view alone is not sufficient because the materials “also play a role in finely individuating the media of painting—as instanced by oil painting, as opposed to watercolors or frescos.”¹⁴ The reciprocal complimentary relationship between the materials and a set of practices can be applied to the media of the moving image. For instance, celluloid may be used both for the record of profilmic reality and for the graphic rendering of nonphotographic imagery with handmade techniques, but the latter use is limited in comparison to computer graphics in terms of the degree of flexibility by which an image can be manipulated. Considered this way, I define an artistic medium as a set of material and technical components, which not only allows for but also is constituted by formal variations of artistic expression.

The idea of a medium being determined by an array of technical and aesthetic conventions suggests that an art form can be seen as involving more than the components of one medium when it is realized. This is certainly suggested by Carroll and Rodowick, but Gaut elaborates upon this in his notion of “nesting,” referring to the phenomena by which “media can contain other media.”¹⁵ The medium of the moving image serves as a telling example of this phenomenon of “nesting,” since it encompasses different types of images, each of which can be discerned by the specific medium producing that image, such as celluloid, analogue video, digital video, computer graphics, etc. To push this point further, the hybrid moving images are seen to testify to more different aspects of nesting than Gaut’s original concept proposes. While Gaut speaks of only the plurality of the media that are incorporated in a given art form, for example, the moving image, hybrid moving images based on the intersection of film, video, and the digital demonstrate that there are other levels of incorporation at play: first, the incorporation of more than two distinct media components—for instance, the mixture of film’s components and those of video—into the form of a moving image, which is made by a set of artistic practices that throw these media in a new relation; and second, the incorporation of old moving image media into the digital as the digital adopts and reworks the old media’s formal components by converting their material and technical elements into digital codes. These two levels of incorporation suggest that the phenomena of nesting in the digital age have become so complex that it is

insufficient merely to acknowledge that a medium contains several media. Rather, what is required is to examine the relations between the media constituting the medium of the moving image. The notion of hybridization, then, serves as a framework for theorizing the two levels of incorporation as more complex types of nesting than those discussed by Gaut.

Finally, like Rodowick's claim, Gaut's idea of nesting suggests that it is still indispensable for us to identify the properties of a medium that constitutes an art form and to differentiate them from those of other media that engage in shaping the form. In this view, it is meaningful to ask, for instance, what features are specific to digital images in contrast to traditional photochemical images, even when the former perceptually resembles the latter. Here the notion of specificity is not necessarily defined in terms of uniqueness as it is asserted by the traditional medium-specificity argument. For in this case, the representation of photographic imagery *as such* is not unique to photochemical media such as photography and film, but shared by the digital. This suggests that the specificity of a digital image can be identified only in comparison to photochemical images, that is, according to what conventions of photochemical media the digital adopts and what new properties it adds to those conventions in order to allow for new expressive possibilities in the resulting image. Gaut's concept of "differential properties," that is, "properties that distinguish one group of media from another group, but that are not necessarily unique to any particular medium,"¹⁶ provides us with a useful analytic framework for discussing the media of the moving image and the relation between them. The live-action imagery based on the bond between the lens and profilmic reality, for instance, is specific to film, video, and the digital in contrast to other media (for instance, literature and music), but is not unique to any of them. This notion of specificity, which is comparative and relational, is particularly helpful in examining hybrid moving images, since their impurity can be illuminated by identifying what properties are shared by the media constituting the images and what features pertain to each of them individually. To be sure, careful attention to the formal dimension of the artwork is particularly crucial to this conception of medium specificity. For it is on the level of form that the structural similarities and differences between diverse media images are negotiated and interrelated while simultaneously being made visible.

Post-media conditions

This book contextualizes the emergence of hybrid moving images across different genres and platforms within the larger contexts of the “post-media” age. In doing so, it argues that the images’ material, technical, and aesthetic hybridities derive from and at the same time are expressive of “post-media conditions,” which I define as an array of conditions that have posed fundamental challenges to the traditional definition of artistic media—namely, that a media’s material and technical components immediately determine its forms and expressive possibilities, which are exclusively distinct from the forms and expressive possibilities of other media. It was both the discourses on contemporary art criticism and the studies on new media and media art that coined the term, and these have developed the debates about those conditions since the late 1990s. In contemporary art criticism, Rosalind E. Krauss played a determining role as she proposed and elaborated upon the term “post-medium condition” in a series of her writings, and the discourses on contemporary art by Jacques Rancière and Nicolas Bourriaud, among others, are more or less in alliance with Krauss’s argument on that condition. Meanwhile, such thinkers as Lev Manovich and Peter Weibel, whom I consider as pertaining to the “new media camp,” have introduced the term “post-media condition” as a response to the discourses mainly circulated in the contemporary art criticism bloc. Although the difference of a keyword in the two discursive domains—“medium” in the domain of contemporary art criticism and “media” in that of new media camp—implies a conspicuous front line that has persisted in regard to how to evaluate the impacts of electronic and digital technologies on the forms and practices of art, the discourses in both domains have reached three common points of post-media conditions that lay the groundwork for this book: (1) the demise of the modernist medium specificity, that is, the proliferation of electronic and digital technologies that has led to the dissolution of the boundaries between one art form and another, which were previously sustained by a media’s unique properties; (2) as a response to the demise of the modernist medium specificity, a renewed awareness of what media’s material, technical, and aesthetic components are and what artists can do with those components; and, (3) as a result of this renewed awareness,

the emergence of artistic practices by which the media's components have new, previously uncharted relationships with those of other media in ways that go beyond its formal boundaries. The last two conditions, I shall argue, suggest not the total abandonment or loss of medium specificity *per se*, but a reconfiguration of medium specificity in tandem with media hybridity.

Krauss's concept of the post-medium condition means that the pervasive power of electronic and digital media challenges Clement Greenberg's idea of medium specificity so profoundly that it transcends the traditional definition of artistic medium in general. Television and video cannot be contained within the purview of modernist medium specificity, according to which a medium's distinct identity is derived from its unique material properties, and this identity exclusively delineates the medium's formal and generic boundaries as distinctive from other mediums. This is because the material and technical components of television and video are constitutively heterogeneous, allowing them to exist in putatively diverse forms, spaces, and temporalities. Krauss writes, "Even if video had a distinct technical support—its own apparatus, so to speak—it occupied a kind of discursive chaos, a heterogeneity of activities that could not be theorized as coherent or conceived as having something like an essence or unifying core. . . . It proclaimed the end of medium specificity. In the age of television, so it broadcast, we inhabit a *post-medium condition*."¹⁷ Similarly, the "new media camp" has coined such terms as "post-media aesthetics" (Manovich) and "post-media condition" (Weibel) in order to describe the ways in which the idea of Greenbergian medium specificity became fundamentally dismantled under the growing influence of electronic and digital technologies. Manovich points out that the emergence of television and video precipitated the "rapid development of new artistic forms" (assemblage, happening, performance, installation, time-based art, process art, etc.) that encouraged "the use of different materials in arbitrary combinations (installation) . . . [and] . . . aimed to dematerialize the art object (conceptual art)."¹⁸ For Manovich, the digital revolution of the 1980s and 1990s marks the most consequential development of the dissolution of modernist medium specificity, in that the shift to digital representation, along with the introduction of new editing tools that could be applied to most media and substitute traditional distinct artistic means, has led to the dissolution of the "differences between photography

and painting (in the realm of still image) and between film and animation (in the realm of a moving image)”¹⁹ on the material levels of perception, storage, and distribution. In a similar vein, Weibel outlines a historical trajectory of cinematic experiments beyond filmic imaginary into three phases: the expanded cinema movement in the 1960s extending the cinematographic code with “analogous means”; the video revolution in the 1970s harnessing “intensive manipulation and artificial construction of the image”; and the digital apparatus in the 1980s and 1990s with “an explosion of the algorithmic image and new features like observer dependency, interactivity, virtuality, [and] programmed behavior.”²⁰ Consequently, the loss of modernist medium specificity recognized by both Krauss and the “new media camp” theorists (Manovich and Weibel) asks them to revisit the traditional definition of a medium, as well as paying attention to the array of artistic practices by which that medium’s components interact with those of other media in ways that challenge the previous distinctions between one art form and another.

Krauss’s response is to redefine a medium as “a set of conventions derived from (but not identical with) the material conditions of a given technical support.”²¹ The medium in question here is not reducible to its physical properties alone, but instead is reconceived as a multiplicity of its material and technical components which lend themselves to the development of artistic conventions, but none of which have a directive power in determining the medium’s expressive possibilities. Krauss draws upon the idea of the filmic apparatus as exemplary of her definition of medium, considering the medium as being characterized by its “aggregative” condition in which medium specificity is still maintained and at the same time internally differentiated according to the heterogeneity and interdependence of its components. “Film consists of the celluloid strip, the camera that registers light on the strip, the projector which sets the recorded image into motion, and the screen,” she writes, “as an artistic medium, it cannot be reduced to any of the elements as objects, but all of them are united to constitute its apparatus.”²² In so doing, Krauss avoids any direct association between the medium and its physical substance as is the case of the Greenbergian medium-specificity argument, and instead highlights the significance of certain artistic expressions that call into question the effect of a medium’s constraints and thereby reconfigure it as

an open field for the interplay of “conventions” and “possibilities.” Hence her notion of the medium reconciles the requirement for the material and technical specificity of a distinct medium with the formal and conceptual diversity of artistic creation.

Krauss’s redefinitions of the medium as a “set of conventions” derived from a “technical support,” and of medium specificity as being occupied by the intersection of the medium’s internally heterogeneous components and a range of expressive possibilities given by the medium’s conventions, imply that a traditional medium is capable of going beyond its previous formal boundaries and has new alliances with other mediums. Calling this artistic operation “reinventing the medium,” Krauss has praised several artists who reexamine the inner complexity of older material supports and techniques that are now perceived as outdated under the pervasive influences of new media. Along with Marcel Broodthaers’s films, which aim to investigate the nature of film in relation to cinema’s primitive technique derived from the flip book (for instance, his *A Voyage on the North Sea* [1973–1974]),²³ these artists’ practices include James Coleman’s “projected images” that waver between photographic stillness and cinematic motion due to his idiosyncratic blending of slide projection and the filmstrip’s photograms;²⁴ Jeff Wall’s conceptual photo-panel teeming with cinematic allusions; and William Kentridge’s “drawings for projection” built on the transformative amalgamation of outmoded technical remnants, such as pre-cinematic optical toys, cartoon animation, and handmade film.²⁵ For Krauss, those artists’ works concern the idea of a medium as “conventions out of which to develop a form of expressiveness that can be both projective and mnemonic,”²⁶ insofar as they interrogate the range of expressive possibilities given by the material and technical properties of the old mediums (painting, photography, and film) and their interrelationships in a redemptive manner. It is significant to underline that those artists’ practices, as well as Krauss’s concept of the medium as technical support, seem to reconcile the legitimacy of medium specificity with the hybridization of the art forms based upon that medium. Those artists are commonly grounded in their own recognition of a medium’s specific features, but the medium used by the artists lends itself to a variety of conceptual practices that seek out the medium’s nature beyond the essentialist assertion that the medium’s physical domains immediately guarantee its proper art forms. This

practice, then, promotes the combination of a medium with the materials, techniques, and conventions of other mediums that had been considered outside that medium's standardized forms: for instance, Coleman's imagery transcends the standardized projection of cinema and alludes to the photographic stillness embedded in the filmstrip, and Kentridge's drawings for projection transgress the boundaries of charcoal drawing and excavate its historical relation to hand-drawn animation and cartoon animation.

Jacques Rancière has extensively problematized the Greenbergian conception of the medium whose material specificity alone defines the medium's essence and therefore buttresses the separation of different art forms. In a similar manner as Krauss's medium as technical support, Rancière offers his own redefinition of a medium as "milieu" in two ways: both as "the milieu in which the performances of a determined artistic arrangement come to be inscribed, [and as] the milieu that these performances themselves contribute to configuring."²⁷ In doing so, he has paid attention to a wide range of artistic practices that promote hybridizations of mediums, or, mixtures and clashes between the art forms' heterogeneous elements: that is, practices ranging from film and video installation pieces to multi-platform projects that invite the blurring of the boundaries between art and nonart, or between the artistic object and the life-world.²⁸ In an interview, Rancière clarifies that all these practices are defined by "the erasure of medium specificity, indeed by the erasure of the visibility of art as a distinct practice."²⁹ Rancière finds in Jean-Luc Godard's *magnum opus* video work *Histoire(s) du cinéma* (1988–1998) a telling example of how his video-based montage emerges as the montage of a "metamorphic operativeness, crossing the boundaries between the arts and denying the specificity of materials."³⁰ Godard's various ways of fragmentation and juxtaposition by virtue of video's technical effects make possible a series of unexpected encounters between particular cinematic images, paintings, and literary or philosophical texts. Rancière's emphasis upon the medium as promoting hybridizations of previously separated arts echoes a series of criticism by Nicolas Bourriaud, who coined a now well-known term "relational aesthetics." By this term, he singles out the various open-ended works of art since the 1990s as a set of artistic practices "which take as their theoretical and practical point of departure the whole of human relations and their social

context.”³¹ A closer inspection of Bourriaud’s line of arguments illustrates that his relational aesthetics are not solely concerned with the renewal of the bond between art and life, but also between art and its audience. For Bourriaud, relational aesthetics as the principle of reestablishing art in this manner is built upon “random materialism,” a particular materialism that “takes its point of departure the world contingency, which has no pre-existing origin or sense.”³² This materialism suggests that an individual material adopted by an artist neither imposes its essence on his/her conception of the artwork nor predetermines the form of the artwork. Rather, it is the form that takes precedence over the material in the artwork. Bourriaud defines a form as a “structure” which comes into being in the “dynamic relationship enjoyed by an artistic proposition with other formations, artistic or otherwise.”³³

Manovich and Weibel also consider the emblem “post-media” as opening up a situation in which digital technologies serve as an environment in which techniques and aesthetic features of a media are dislocated from its medium-specific boundaries and become increasingly hybridized with those of other media. It is in these two senses that the two theorists’ arguments on the post-media conditions are not unlike Krauss’s “technical support” or Rancière’s “milieu.” Manovich claims that the “post-media” aesthetics are indebted to the developments of various software applications in the areas of moving image production since the mid-1990s, such as Adobe After Effects, Maya, Inferno, and so forth, through which “previously separated media—live action cinematography, graphics, still photography, animation, 3D computer animation, and typography—started to be combined in numerous ways.”³⁴ In Weibel’s words, Manovich’s argument on this situation is rendered as the “total availability of specific media” under the computer, which results in two phases of contemporary art practice: the “equivalence of media” and the “mixing of the media.” While the first phase refers to the computer’s recognition of each art form and its respective medium, the second means that its hardware and software lead to the innovation of each form and the mixture of its media-specific features: “Video and computer installations can be a piece of literature, architecture or a sculpture. Photography and video art, originally confined to two dimensions, receive spatial and sculptural dimensions in installations. Painting refers to photography or digital graphics programs and uses both. The

graphics programs are called paint programs because they refer to painting. Film is proving to be increasingly dominant in a documentary realism which takes its critique of the mass media from video.”³⁵

For the theorists of post-media conditions, the equivalence and availability of all media under computer-based imaging and interfaces does not necessarily lead to the elimination of previous art forms. For Weibel, “it does not render the idiosyncratic worlds in the world of devices or the intrinsic properties of the media world superfluous. On the contrary, the specificity and idiosyncratic worlds of the media are becoming increasingly differentiated.”³⁶ For Manovich, the developments of various software applications to simulate the aesthetics and working methods of previous media amount to what he calls a “hybrid revolution” in the culture of the moving image since the 1990s: a revolution characterized by the reigning of the moving image sequences that use “juxtapositions of media and hybrids of different media techniques as their basic aesthetic principle.”³⁷ This may not support the idiosyncrasy of previous media as it is defined by the traditional medium-specificity argument, insofar as computerization extracts their techniques from their physical support and turns them into algorithmic operations. But in other senses, this hybridity draws our attention to the extent to which various technical procedures available from the software applications are traced back to the moving image forms grounded in previous media (film, photography, painting, video), such as stop-motion animation, 2D and 3D computer graphics, optical printing, analogue “effects” video, etc. Again, this availability of the techniques of the previous media opens up possibilities for their various fusion, including a peculiar technique’s migration into other media aesthetics and forms: “While particular media techniques continue to be used in relation to their original media, they can also be applied to other media . . . motion blur is applied to 3D computer graphics, [and] computer generated fields of particles are blended with live action footage to give it an enhanced look.”³⁸

It should be noted that Krauss’s argument on the post-medium and the post-media discourses of the “new media camp” have an antagonistic relationship with each other in terms of their opposing views on the impacts of electronic and digital technologies. Following Walter Benjamin, Krauss limits her ideas of the medium as technical support and of reinventing the medium to the outdated

technological means (analogue photograph or film) that are increasingly recognized as obsolete in the context of the proliferation of electronic and digital technologies, assuming that they threaten to eliminate the medium's material and technical specificities and assimilate artistic creativity and autonomy into their imperative to mass communication.³⁹ In so doing, her renewed theorization of medium specificity turns out to be circumscribed within the definitional polarity between the "medium" as the resource for artistic expression (and the projector of artistic autonomy) and the "media" as technological means of communication and culture. This dichotomy validates the idea that Krauss's idea of reinventing the medium is possible only when the medium is regarded as obsolete, therefore bracketing out any consideration of an array of artistic practices that explore the expressive possibilities of the medium by relating the medium's material and technical components and its conventions to those of new "media." Thus, it becomes clear that her thesis of the post-medium condition is still anchored in a belief in the uniqueness and singularity of the means of artistic expression that is part of the same Greenbergian modernist argument on medium specificity that she originally intends to renew or overcome. This problem becomes more conspicuous when we see that what Krauss sees as the technical support for reinventing the medium, such as analogue photography and film, is not totally dissociated from the machine-based technologies implied by the term "media."⁴⁰ The fact that in Krauss's theorization there is no space for considering the technological components and their operations of old artistic means enables me to choose the term "media" instead of "medium" in my characterizations of the conditions connoted by the prefix "post."

On the other hand, it should also be worth noting that the discourses on post-media are in some senses as reductive as Krauss's theorization of post-medium, in terms of their assumption that electronic and digital technologies annihilate the idea of medium specificity *per se* and assimilate any artistic practices into their new technical principles. For Manovich, "transcoding," translating all existing media into numerical data and formats through simulation, stands out as the most fundamental principle of new media, as it suggests a process by which the computer negotiates with any of media objects as well as their respective forms and techniques. "Because new media is created on computers, distributed via

computers, and stored and archived on computers,” Manovich contends, “the logic of a computer can be expected to significantly influence the traditional cultural logic of media . . . [and] the computer will affect the cultural layer.”⁴¹ His emphasis upon the processes of simulation and transcoding, however, adds up to a celebration of the possibilities for various combinations of any visual expressions and techniques in moving image production within the same software environment. This is linked to the following conclusion: “Whether these media are openly juxtaposed or almost seamlessly blended together is less important than the fact of this co-presence itself.”⁴² But there is no reason for postulating that the representations and techniques of traditional media disappear, or, are “seamlessly blended together,” just because some of their key definitional prerequisites—for instance, a medium as it is defined by its stable materiality that has a directive impact on the formation of an art—become untenable under the influence of digital media. Considering this, I argue that the formal, technical, and aesthetic components of non-digital media are still at play in the operation of new media even though the processes of simulation and transcoding replace their materiality. Art critic Sven Lütticken supports my argument as he astutely points out that the post-media theorists such as Manovich do not consider the “role played by memory in guiding the use of media.” For Lütticken, the reason that we still maintain the concept of media even though digitization appears to absorb and introduce notable changes in them is that the “media are not just tools or machines,” but also “layerings of [their] conventions, and memories [that] haunt us.”⁴³ Consequently, electronic and digital technologies might disallow the idea of medium specificity if it means an array of boundaries that distinguish one art form from another, but this does not necessarily mean the total annihilation of all the material, technical, and aesthetic components in the traditional technologies for artistic practices.

In sum, my comparative reading of the post-medium and the post-media discourses demonstrates that despite the duality of “medium” and “media,” both share with one another the demise of the modernist medium-specificity argument that insists upon the boundaries between one art form and another, and the reconfiguration of media as internally divided and non-reductive rather than the traditional idea of the medium as primarily defined

by its unique material properties. Besides these two commonalities, Krauss's observations on the artists whom she considers as reinventing the medium in response to the post-medium condition touch on the larger domains of the growing interactions between the art forms (for instance, film and photography) that were previously separated under the traditional logic of medium specificity, as well as between the material and techniques that constitute each of them. The post-media discourses also see those interactions as being activated by the computational processes of simulation and transcoding, by which different objects and techniques that were hitherto demarcated become available and opened to a variety of combinations. All the three correspondences are in line with critic J. Sage Elwell's understanding of the post-medium condition as closely related to the post-media condition, in that both are premised upon the deep hybridization of historically existing media in the age of the digital: "The ability to document performance-based concept pieces, the capacity to transform video into a medium itself, the birth of digital technology and the ongoing realization of digital convergence have all combined to yield a media fluidity. . . . In this post-medium condition everything is a potential medium for artistic creation, including digitization itself."⁴⁴

While concurring with Elwell's view, I would stress two more implications of the three correspondences between the two lines of the discourses. First, both discourses' perspectives on the hybridizations of different art forms and their components commonly suggest that the idea of media hybridity does not necessarily contradict—and thus can be compatible—with that of medium specificity, which demands identifying a media's material, technical, and aesthetic components and the components' differences from those of other media: as in Krauss, her identification of the filmic apparatus as aggregative, and as in Manovich, his view of simulation and transcoding as intrinsic to digital technologies. Second, both discourses' privileged examples of the hybridized artistic expressions—for Krauss, Coleman's "projected images" and Kentridge's "drawings for projection" and, for Manovich, a variety of moving images based upon the combination of the techniques and aesthetics that were separated in different mediums (film, photography, hand-drawn animation)—implicitly point to the hybrid moving images that this book defines and classifies.

Film's post-media conditions

Since the 1990s, it has not simply been film as a celluloid-based medium for the art of the moving image that the post-media conditions outlined thus far have profoundly impacted, but also cinema as an apparatus comprising film's systems of production and reception, its previously designated social site (movie theater), its experience (collective viewing), its cultural status, and its history.⁴⁵ Considering these changes, this book characterizes these two consequences as "post-filmic" and "post-cinematic" conditions, under which the previous medium-specific boundaries of film or cinema become fundamentally dissolved. The decline of the celluloid-based image by the dominance of electronic and digital media arouses several changes heralded by the "death of cinema" discourses on multiple levels: dispensing with reality, the computer-generated imagery does not entice us with any object of contemplation anchored in film's engagement with physical space and time;⁴⁶ the changing value of a cinematic system from the authenticity of going to the movie theater to the interchangeability of viewing practices throughout various platforms (DVD, digital projection, and the internet) in the name of multimedia impoverishes cinema as a prominent form of cultural experience;⁴⁷ from the standpoint of avant-garde cinema, the reigning of digital tools is regarded as thwarting the value of artisanal cinema based on a filmmaker's physical relation to the materiality of film;⁴⁸ and finally, the photochemical image as indicative of a past to the viewer of a present is overshadowed by the electronic and digital images that seem to collapse temporal differences into real-time instantaneity.⁴⁹ All these different yet overlapping responses commonly point to the shrinking of film as an art grounded in the primacy of the photographic moving image whose celluloid-based materiality was believed to maintain the image's connection to the profilmic event, or of cinema as a cultural institution that had long maintained its own setting, equipment, and experience. Viewed together, these discourses of the death of cinema are consolidated into what Anne Friedberg sees as a consequence of media convergence, an end of filmic medium specificity in its traditional sense. "The differences between the media of movies, television, and computers are rapidly diminishing," she writes, "the movie screen, the home television screen, and the computer screen

retain their separate locations, but the types of images you see on each of them are losing their medium-based specificity.”⁵⁰ While all these discourses on the death of cinema suggest the fluctuation of cinema studies as a distinct discipline grounded in its previously stable object of inquiry and concepts, it is also worthwhile to single out two key post-media conditions of film that have been more frequently raised in the discipline and thus deserve more focused attention.

The first and foremost post-filmic condition is undoubtedly the loss of film’s celluloid-based materiality and its subsequent erosion of the value of the filmic image as causally linked to the passage of time in reality. Theorists who highlight this condition tend to emphasize an array of material, technical, and aesthetic discontinuities between celluloid and digital production. For Mary Ann Doane, the indexicality of cinema associated with the analogical relationship of its image to the referent does more than differentiate it from other art forms; the indexical in cinema bears the inextricability of the medium—film’s chemical and photographic base—as well as the possibility for “a transgression of what are given as material limitations.”⁵¹ In this respect, digital technologies are viewed as an increasing threat to the restraints and possibilities that were previously guaranteed by the properties of celluloid medium insofar as they “exude a fantasy of immateriality.”⁵² Doane’s point dovetails an argument from the film preservationist Paolo Cherchi Usai, for whom the immateriality of the digital image marks a fundamental diversion from the historicity of filmic image, an image whose history is derived from celluloid’s material and chemical features subject to entropy and decay.⁵³ Experimental filmmaker Barbette Mangolte links this material difference to the difference of temporal aesthetics between celluloid-based and digital cinema, asking why it is difficult for digital cinema to express duration. For Mangolte, the technical base of the image in digital cinema is fundamentally distinct from the materiality of celluloid and the physicality of its filmstrips, both of which enable the analogue filmic image to have a unique relationship to the duration of the past. “In film, two seconds is three feet and twenty seconds is thirty feet,” she writes. “There is no way to ignore duration when you physically manipulate the piece of film. Nothing like this exists in digital editing.”⁵⁴ Rodowick takes up and furthers Mangolte’s position, claiming that digital capture, transcoding, and synthesis serve to express a different temporality

in digital cinema than the presentation of past duration because they introduce a temporal discontinuity into the processes of recording, editing, and display, unlike the continuities of analogical transcription in the celluloid-based cinema. For Rodowick, digital technologies transform the expression of duration in film, allowing digital cinema to construct what he calls the “digital event,” one that corresponds less to the duration of the world and lived time than to the control and variation of numerical elements internal in the computer’s algorithmic operations.⁵⁵ Rodowick’s view on the fundamental replacement of the inscription of lived duration in the filmstrip with the algorithmic temporality of digital imaging echoes Vivian Sobchack’s contrast between the cinematic cut and the digital morph. Unlike the cut or dissolve in the celluloid-based cinema that is used to effect a temporal change inscribed in the series of filmstrips, in the digital morph “difference is accumulated not as a whole constituted from discrete elements but rather as a subsumption to the sameness of self-identity.”⁵⁶

The theorists’ voices that herald the dissolution of filmic materiality and the indexical value that it was supposed to guarantee are associated with the second overarching post-media condition of film, namely, the loss of the identity of film as a stable object. This identity crisis has been suggested in two ways. First, as for digital cinema, its images are defined not by the primacy of lens-based imagery as in the case of celluloid-based cinema but by their constitutive heterogeneity thanks to the computer’s capacity to transcode any media object and its accompanying techniques. In a similar way as Carroll’s use of the term “moving image” as a broad category, Manovich argues that digital cinema consists of the sum of live-action material (and extensively, analogue photograph), painting, image processing, compositing, 2D and 3D computer animation, and is defined as *“a particular case of animation that uses live-action footage as one of its many elements,”* because “live action footage is now only raw material to be manipulated by hand—animated, combined with 3D-computer generated scenes, and painted over.”⁵⁷ Second, in accordance with the hybridity of the images in digital cinema, the components of traditional cinema have become assimilated into the language and operations of the computer. For Manovich, cinema as a major art form of the twentieth century has found new life, as its key elements—its ways of viewing (framing, camera movements), of structuring time and

space (montage between different shots), of making narrative space (a transparent, single-perspective space viewed through the rectangular screen), etc.—are simulated and extended to the basic principles of the user's accessing, organizing, and interacting with data and objects in the computer software.⁵⁸ The avant-garde film and modernist art in the 1920s, notably Bauhaus and Russian constructivism, each represented by László Moholy-Nagy and Dziga Vertov, lie at the heart of the translation of cinematic elements into digital software and user interaction—that is, cinema's afterlife as a “cultural interface.”⁵⁹ Here cinema is considered not so much a definable object or stable medium, but instead a set of representational, perceptual, and expressive conventions which have been developed since its inception and have been borrowed by new media.

At first sight, Manovich's view on the cinema's transition into the cultural interfaces of the computer might cause discomfort for the theorists (Rodowick, Doane, etc.) who have stressed the post-filmic conditions of digital cinema, including the crisis of celluloid-based cinema. The theorists rightly point out the technical differences between celluloid-based cinema and digital imaging, as well as the ways in which the latter unsettles both the image of the former and its relation to reality. As we have seen in my reading of the discourses of the “new media camp,” it is true that the post-media conditions proposed by those discourses might run the risk of declaring both the abolition of medium specificity *per se* (and of the concept of the medium in general) and the computer's triumphant absorption of all the technical and aesthetic possibilities of previous media in its transcoding and algorithmic operations. However, if we assume that the technical, aesthetic components of previous media are not entirely annihilated but that they persist in the representations and operations of new media to varying degrees, Manovich's overall arguments in *The Language of New Media* (2001) and its related writings can be read as entailing a range of hybridities inherent in the images that digital technologies configure in their varying relationships to cinema. That is, just as Manovich's emphasis upon numerical representation, by which any media element is represented as a discrete sample dissociated from its material origin, is read as highlighting the digital image's discontinuity with the image of celluloid-based cinema, his explanations of transcoding and cultural interfaces appear to suggest an ineluctable reliance of

the digital image upon the aesthetic and technical components of celluloid-based cinema. Seen in this light, Manovich's two ways of redefining cinema can be read as less teleological than they seem to be, even though some of his arguments are not totally free of techno-deterministic utopianism.

If we consider the ontology of the digital image or digital cinema as grounded in the negotiations between digital technologies' technical differences from celluloid-based cinema and their dependence upon its technical and representational conventions, we can arrive at another instance of the reconciliation between medium specificity and media hybridity, or between the newness of digital technologies and the continuities between celluloid-based cinema and digital imaging. I would call these continuities between the old and the new systems "diachronic hybridization." This type of hybridization echoes a media-archaeological perspective that has demonstrated how digital technologies are situated in the forms and techniques of past media, including Thomas Elsaesser's framework on observing how digital technologies could serve as a "time machine" through which cinema's variability and heterogeneity from its outset can be exposed and reevaluated,⁶⁰ as well as André Gaudreault and Philippe Marion's argument that digital cinema's alliances with other media platforms (such as theme parks, television, and the DVD) testify to cinema's recurring intermediality, namely, cinema's adoption of existing cultural forms (such as magic trick shows, park attractions, stage performances, etc.) in its early stage.⁶¹ Philip Rosen's brilliant idea of "digital mimicry" turns this media-archaeological point of diachronic hybridizations into a media-ontological concept. Rosen coins this term to indicate the extent to which the manipulability of the image afforded by digital equipments and graphic algorithms possesses "the capacity to mime any kind of non-digital image," particularly, in his context, the indexical image produced by photochemical media.⁶² This signals that digital manipulation, unlike the rhetoric on the novelties of digital imaging in contrast to the historically preceding media, is compelled to rely on and incorporate their forms of imagery. In this way, regardless of the increased flexibility and rapidity with which any alteration and configuration of the image can be implemented, which Rosen calls "practically infinite manipulability," digital manipulation must be seen as the mixture of the purely digital and its impure—originally non-digital—elements. Thus, while the manipulative

capability of the digital might be regarded as idiosyncratic due to its specificities such as numerical representation and transcoding, its transformation of old media forms does not necessarily obliterate their specificities on a formal and conventional level but instead demands “a hybridity of old and new.”⁶³

In fact, this scholarship’s sensitivity toward the hybridity of digital cinema and imaging in relation to their historical precedents drives my interpretation of film’s post-media conditions as well. However, there is a key point of caution to be taken in adapting this diachronic perspective, namely that the arguments of Doane, Rodowick, and others on the digital’s differences from photochemical media are still useful in keeping an eye on the technical structures of the digital that inscribe their specific qualities and on the features of the photochemical media that are eroded or displaced by the digital. Thus, I would argue that in developing the perspective on diachronic hybridization, we need to see both continuities and discontinuities, or, to put it in another way, to see the digital’s media-specific features that coexist with its hybrid aspects. For experimental filmmaker and theorist Malcolm Le Grice, an awareness of digital technologies’ fundamental media-specific differences from other mechanical media systems, such as nonlinearity, programmability, and interactivity, can be supplemented by the technologies’ reliance upon those mechanical media: “Some of the more prominent current technological developments in digital media are driven by a desire to produce a time-based auditory and visual capacity which is more or less continuous with the forms and language developed from the history of cinema.”⁶⁴ In this way, it is possible to understand the post-filmic and post-cinematic conditions as being marked by the dialectical correlation of medium specificity and hybridity, and to conceptualize the images produced by digital technologies’ adoption and processing of the photographic and filmic representations as expressing different hybrid configurations of the old and the new. In the words of Markos Hadjioannou, examining the ontology of the images in terms of their hybridity is a “matter of dealing with the new as not new or old but new and old, as simultaneously distinct and interactively interrelated, so that each medium acquires a space of its own but where boundaries are in fact always shifting.”⁶⁵

As a supplement to the diachronic hybridization that has been raised in the existing scholarship that positions digital techniques and aesthetics within their incorporation of (or reliance upon)

the techniques and aesthetics of film as old media, I propose “synchronic hybridization,” a kind of hybridization derived from the encounters between historically existing media technologies in a given time. What I am calling synchronic hybridization in the context of the post-media conditions points to the transformation of cinematic components (cinematography, *mise-en-scène*, and the experience of time and space) and their migration into other art forms and platforms that were largely regarded as distinct from the normative formation of the cinematic apparatus. Or, to put it in another way, the conditions refer to the situations in which those components have been thrown into the double movement of deterritorialization and reterritorialization created by the growing influence of post-filmic technologies and of the arts and media that have been excluded from the traditional medium-specific ideas of cinema. I develop this type of hybridization from another discursive thread of cinema’s post-media conditions. In fact, it was an array of “paracinematic” experiments in the 1970s that prefigured a key moment of synchronic hybridization. Jonathan Walley’s excellent study of the projects, emblematised by the works of Anthony McCall, Paul Sharits, and Tony Conrad, demonstrates that they are cross-disciplinary cinematic practices that aimed to seek the properties and effects of cinema in relation to the domains of performance, post-minimalism, conceptual art, and site-specific art—that is to say, outside the material parameters of film.⁶⁶ The synchronic hybridization prefigured in the work of paracinema has become quite popular since the 1990s, with the dramatic rise of media installations based on the interplay of previously distinct artistic expressions—film and video art, for instance—and straddling between the gallery space and the film theater. Addressing those diverse practices of installation which exploit and transform cinematic elements through other art forms and technical means (video and digital media), Raymond Bellour succinctly touches on the idea of synchronic hybridization as follows: “All we have is incertitudes—slip-sliding, straddling, flickering, hybridization, metamorphosing, transition and passages between what is still called cinema and the thousand and one ways to show moving images in the vague and misnomered domain known as Art.”⁶⁷ In accordance with Bellour’s notion of the “passages” between cinema and contemporary art, Francesco Casetti proposes the concept of the “relocation of cinema” to indicate the post-cinematic situations

enabled by the influences of electronic and digital technologies, under which cinema maintains some elements of the traditional filmic experience while simultaneously involving a variety of forms, platforms (DVDs, mobile phones, the internet, etc.), and activities that it did not previously embrace.⁶⁸ Pushing this idea further, Casetti goes on to assert that the idea of the cinematic apparatus under post-media conditions “no longer appears to be a predetermined, closed, and binding structure, but rather an open and flexible set of elements . . . an assemblage.”⁶⁹ Bearing in mind and developing the ideas of Walley, Bellour, and Casetti, I argue that synchronic hybridization serves as a useful conceptual framework for identifying an array of hybrid moving images produced when the technical and aesthetic components of film go beyond the standardized formation of the cinematic apparatus and are fused with other art forms or media technologies, as well as for examining the images’ complex and border-crossing ontological features.⁷⁰

Consequently, this book argues that film’s post-media conditions can be fully illuminated when we consider both types—diachronic and synchronic—of hybridizations in regard to film’s growing impurity and its persistence in other art forms and media technologies. As for diachronic hybridization, digital technologies appropriate a set of components that have previously defined the identity of film (the photographic image, camera movements, styles of montage, etc.), producing a variety of moving images by maintaining some of its components’ properties (for instance, an image’s photorealistic expression and the image’s reference to profilmic reality) and transforming others with their specific features, such as simulation and algorithmic manipulations. At the same time, synchronic hybridization is useful in identifying and examining the diversified connections between cinema and other existing or emergent technologies, which are emblemized by, for instance, cinema’s multiform distribution via DVDs, mobile media, digital projection, Web-based platforms, etc. In either case, the moving images manifest themselves in the varying coexistence and interrelation of the features derived from the specificity of digital technologies, and those derived from their hybridized reliance upon the material, technical, and aesthetic elements of film. This is the case not only with digital video (DV) cinema and spectacular narrative cinema (two major categories of mainstream cinema), but also with avant-garde cinema, with moving image installations marked by video’s deliberate

merger with cinema (contemporary art), and with various types of digital media art that transform and relocate the components of cinema through computer algorithms (new media art). Thus, it is a key aim of this book to investigate the dynamic negotiations between medium specificity and media hybridity in the moving images produced in those practical territories of nonmainstream cinema.

Video's post-media conditions

In the modernist age, analogue video was considered to be sharply distinct from film because of two aesthetic features that were expressive of its material and technical specificities. The first feature is that, unlike the filmic image, the forms of video image hinge upon an array of technical processes that directly deal with the continuous flow of electronic signals as a constitutive factor of its material. That is, any manipulation of the signal on all levels of the apparatus—from the camera to the synthesizer or processor to the monitor—leads to a shift in the end result of the image, ranging from a change in its surface quality to a change in the relationship between two image units (such as the frame and the shot). This ontological aspect of the video image is what Yvonne Spielmann calls “transformation imagery,” an array of “flexible, unstable, nonfixed forms of the image” characterized by their “fluid pictoriality.”⁷¹ Spielmann’s two features of the video image—“transformative imagery” and “fluid pictoriality”—seem to establish a direct association between the medium’s material and technical properties and the aesthetic forms that they produce. This association alludes to a canonical tendency of early video art which created a variety of video imagery as part of an investigation into the new machine’s inherent nature. Categorizing this tendency as “image-processing video,” as exemplified by Nam June Paik, Steina and Woody Vasulka, Stephen Beck, Peter Donebauer, and Eric Siegel, to name just a few, curator Lucinda Furlong describes it as evocative of Spielmann’s two features. “The image-processing encompasses the synthesis and manipulation of the video signal in a way that often changes the image quite drastically,” Furlong writes. “it conjures up a number of very specific stereotypes: densely layered ‘psychedelic’ images composed of soft, undulating forms in which highly saturated colors give a painterly effect, or geometric abstractions that undergo a

series of visual permutations.”⁷² Numerous accounts of video art have largely defined the stereotypes of the “image-processing” as a direct manifestation of video’s underlying substance, of its states of change, and even of the processes or devices as such, most of which were devised and modified by the artists themselves.

The second feature of video concerns the temporality of the image. The medium-specific discourses on the time of video consider simultaneity and instantaneity as the two most prevalent and intertwining features, both of which are presupposed to be unavailable to film. Early commentators such as David Antin, Stanley Cavell, Bruce Kurtz, Krauss, Fredric Jameson, and others glean both features from the technological formation of early video—live feedback and the existence of the monitor, both inherited from television.⁷³ In contrast to film as a medium, defined by the delay between the inscription of the past event and the time of viewing, video is inherently marked by its engagement with the “present tense.” The continuous flow of the electronic signal in video is described as shaping the simultaneity of event recording and transmission. Under this technological implementation, instantaneity refers to the fact that video’s temporal dimension is hardly stable, inasmuch as the continuum of the flow can be interrupted in the processes of editing and transmission for the sake of making its record of time ephemeral, multiplied, or dubious. This is also deemed to be differentiated from film, a medium which, during projection, structures time built upon the immutability of the recorded past. Regardless of the differences between those discourses, the emphasis on “simultaneity” and “instantaneity” is predicated upon the direct association between the construction of the video apparatus and the aesthetic determination of an artistic medium.

The material, technical, and aesthetic boundaries of analogue video have been weakened when it yielded to digitization, which resulted in two changes that contributed to repositioning video as “post-media.” The first conspicuous change is that digital video is incorporated into an element of the computer that consists of numerous software algorithms to simulate existing media, with its hardware becoming invisible. The second—and more significant—change is the shift from “transformation imagery” to “digital manipulation” in terms of the material and technical dimensions of video imagery. For examining this shift, it is meaningful to consider

Timothy Binkley's argument on digitization as the passage from "transcription" to "conversion." The term "transcription" indicates that analogue media, including film and analogue video, transfer an image from one physical medium to another for storage and display it as materially homogeneous. As with analogue video, a light wave captured by an electronic signal is first transcribed to the processing instruments, then to the magnetic tape combined with display and playback devices. Those two transcriptions ensure the identity of the electronic current as the material source of the image. This material homogeneity of the image is not maintained in the digital "conversion," by which an image is turned into abstract numerical data. As with digital video, the electronic signal of varying voltages is not transcribed, but converted into a pattern of abstract relationships made by software-driven mathematical algorithms. "Digital media do not make analogue ones obsolete, since interfaces are needed to make numerical abstractions tangible, and these converters usually connect digital numbers with analogue events," writes Binkley.⁷⁴ A key difference between analogue video's transcription and digital video's conversion, then, is that in the latter's case the shift on the surface of visual information can occur through means other than transforming the electronic waveform as a material component, the means to which the former was restricted. This entails an array of procedures in digital video post-production, which can be called digital manipulations. They enable one to exert a wider range of control over the source image than allowed by the processes of analogue video. In this way, while deepening the instability and fluidity of the video image, digital manipulation makes discontinuous the circuit of recording, transmission, processing, and display—a continuity presupposed in the transformation of analogue video.

This discontinuity of digital video has two remarkable consequences for the ontology of digital video image in comparison to its analogue counterpart. First, the visual information coming from the electronic transcription of an event in front of the lens does not become a prerequisite for the specificity of the video image in the digital era. To put it differently, in digital video, any sort of image taken from different material sources can be converted into a series of information that is easily translated into a flow of electronic signals. The now-popularized video software applications are able to deal not merely with images captured by

the digital camera, but with image objects encoded from originally different material formats (transferred film, scanned photography and painting, 2D or 3D graphics). In this sense, it is tempting to say that digital video echoes the way in which Manovich defines digital cinema as the sum of previously disparate images, including live-action imagery. Second, in tandem with the extendedness of the source image of digital video, the manipulation paradigm includes a resulting image which does not need to be directly concerned with the intrinsic qualities of video as a distinctive medium. Since the mid-1990s, video art has witnessed the increasing erosion of the “pure” electronic moving image. A number of renowned video art critics attribute this change to the digital revolution, an innovation that causes changes in video technologies and, at the same time, the merger of different media in generating imagery. For instance, Chris Meigh-Andrews states: “The convergence of computer manipulated imagery from a diverse range of sources, together with the development of image display technologies . . . has rendered the distinction between previously distinct media increasingly obsolete and largely irrelevant.”⁷⁵ Michael Rush also agrees with Meigh-Andrews’s declaration of the weakened medium specificity of video. “Video technology is now in a hybrid stage, combining all manner of digital technologies in the creation of what is likely to be a new medium,” Rush claims. “It is time for video to assume its place as simply a ‘filmic’ medium, now that the word ‘filming’ refers to the many ways in which the moving or animated image is created.”⁷⁶

Since the 1990s, the transition from analogue transformation to digital manipulation has also enabled the ontological distinction between film and video in the light of temporality to be diminished. As the projection of the prerecorded image increasingly replaced the feedback system combined with the monitor, it promoted film’s incursion into the exhibition space. Accordingly, the simultaneity between recording and viewing did not become a prerequisite for the temporality of video. Yet the dominance of projection is not a single factor in this change. As to the possibility of converting film into digitized files for projection, numerous artists came to cross the boundaries between video and cinema in various ways, each pursuing their own inquiry into the time of the moving image. Not simply did the artists adopt a cinematic language and production system for shooting with a video camera, but they often used digital-based video technologies to deal with any format of footage

in editing and installation, whether shot on film or video. In this way, the disintegration of the easily identifiable video apparatus has triggered the interchangeability of cinema and video. Fueled by this technological reformation, a number of exhibitions have brought together a variety of works coming from different materials (16 mm and 35 mm film, digital video, HD video) and installation formats (film projection, video projection, or plasma-screen display) in the name of examining notions of time which do not precisely conform with the concepts of simultaneity and instantaneity. This suggests that the ways of using video to explore the time of the moving image became diversified. Organizing an exhibition devoted to works derived from video projection, Marc Mayer already anticipated this tendency in the mid-1990s, which he characterized as a “reflection on time.” “Through real time or extreme slow motion, through repetition, or rapid pictorial variation and recombination, through editing,” he notes, “video projection resembles nontemporal art without actually compromising the temporal dimension.”⁷⁷

In sum, the paradigm shift to digital manipulation entails that the video image has become uncoupled from the particular technologies of video’s early years, and that it has merged with the material, technical, formal, and aesthetic constituents of other media images in terms of its aesthetic dimensions of surface and temporality. It is from these two consequences that we can identify video’s post-media conditions in its digital phase. Despite these conditions, however, the affinity between early video’s transformative capacities and the manipulation of digital video has not drawn specific attention in the still-modernist criticism on contemporary video art. What should be underlined in this context is that the property of video that makes their source image temporally fluid and figuratively flexible is still maintained in its digital version. For illustrating this point, it is of great help to refer to Manovich’s remark on the relationship between the electronic and the digital in terms of the instability of the image:

To a significant extent, an electronic signal is already characterized by similar variability because it can exist in numerous states. For example, in the case of a sine wave, we can modify its amplitude or frequency; each modification produces a new version of the original signal without affecting its structure. . . . All that happens when we move from analogue electronics to digital computers is that the range of variations is greatly expanded.⁷⁸

To expand on Manovich's view on the transition of video from electronic media to the digital, it could be argued that the analogue video image is relatively "hard" in comparison to the "softness" of digital video imagery, the latter of which is able to encompass images derived from both electronic and non-electronic signals (pixel), or from both signal-based images and the encoded versions of object-based images (picture, photography, film). While this ontological heterogeneity of the image based on the computer's processes of abstraction and transcoding can be seen as specific to digital video, the capability of video to alter the figurative and temporal qualities of the source image remains continuous from analogue video. It is here that the digital video image involving elements of visual media previously distinct from purely electronic imagery—namely, photography, painting, and film—is also conceptualized as both medium-specific and hybrid. Spielmann indeed suggests this point in her discussion on the importance of the intersection of analogue video with the digital. "Due to its open apparatus—the processing and transformative characteristics of the electronic image—video, despite its status as an analogue medium, shares significant features of the digital," she notes, "*both the electronic and the digital media forms of video have the potential to produce imagery in any direction and dimension in an open structure.*"⁷⁹

With this dialectical juncture of medium specificity and hybridity in mind, I would claim that what matters in the video's post-media conditions is the persistence of the transformative techniques of analogue video in the manipulation paradigm of digital video. Those who engage in the debate on the status of video in the digital era nonetheless tend to emphasize the weakened link between those techniques and the formal and aesthetic imperatives that video is directed to pursue; as Spielmann further argues: "The point I want to stress is that such contemporary 'video installations' are less concerned with video than with other media forms."⁸⁰ Her argument suggests that the importance of video may be neglected when the manipulative features of video do not deal with the processes of video *as such*, but instead with the forms or conventions of film and photography. However, Spielmann's downplaying of the hybrid forms of moving image in digital video contradicts her observation on the correspondence between electronic transformation and digital manipulation for two reasons: first, in terms of materiality, the image encoded from the celluloid-based media exists under the

condition of the interchangeability between electronic signal and digital pixels; and second, for this reason, the image lends itself to certain changes made by the manipulative techniques of video such that it acquires different qualities in its final state. For these two reasons, the exploration of other media forms via the manipulation of digital video does not necessarily mean the elimination of video's material and technical specificities (the amalgamation of electronic signals and digital pixels) in the light of its transformative characteristics. Hence, what is at the heart of evaluating digital manipulation is tracking how these specificities of digital video are linked to the set of corresponding representational practices that testify to video's post-media conditions in the two types of hybridization, as is the case with the ontology of the digital image in relation to film. As to diachronic hybridization, digital video maintains a range of continuities with its analogue predecessor while inscribing its own material and technical specificities in the resulting image; and as to synchronic hybridization, its expressive possibilities have expanded beyond video's previously established medium-specific boundaries that demarcated video art from other visual arts, therein giving it an unprecedented relationship with the components of painting, photography, and film.

Intermedial approaches to hybrid moving images

The post-media conditions of film and video examined thus far eventually aim at identifying the two key conditions for the emergence of hybrid moving images across different media of art: first, diachronic hybridization as a type of hybridization caused by the transition from old media (photography, film, and analogue video) to digital media technologies, which activates the awareness of the old media's internal aggregative characteristics and entails a broad system of interactions between the old and the new media; and second, synchronic hybridization as the sum of conceptual and technical operations that reposition the components of all these existing media and call into question, traverse, and redraw their formal and generic boundaries. Against the backdrop of these two hybridizations, this book defines the ontology of hybrid moving

images as that of “coexistence and interrelation.” This suggests that the images include an array of new production processes by which the material, technical, aesthetic properties of more than two media engage in creating the images thanks to digitization. As a result, the hybrid moving images are marked either by the simultaneous existence of different media elements (for instance, the coexistence of stillness and movement) or by the transformation of one media’s elements through those of the other (for instance, the layering of different temporal traces in a single picture frame). Although previous studies on the digital image have occasionally addressed these two features, they have tended either to exaggerate its difference from the images of old media or to generalize its constitutive hybridity as the seamless absorption of the traces of non-digital media. It is my ambition in this book to overcome these two shortcomings and establish the hybrid moving image as a conceptual field for thinking how the previous ontological accounts of the similarities and differences between old and new media are contested and reconfigured in a variety of ways.

In the following I shall tease out these two definitions of hybridization under post-media conditions by discussing how they appear in the domain of the moving image. This is to propose the idea of intermediality not simply as a methodological tool for approaching and analyzing the hybridity of the moving image, but also as a type of configuration based on the mixture of the components from more than two media and thus on their co-presence and interrelation (For this reason, I prefer using the term “configuration” to “figuration”). In this sense, the two ontological hybridizations demand a formalist view on media technologies and their role in shaping visual expressions, because it is on the level of their forms that the aspects of these hybridizations, including the simultaneous occurrences of their media components, become discernible.

As a methodological concept, intermediality is an umbrella-term that refers to the border crossings between different media and the mixture of them in art forms and practices. Irina O. Rajewsky and Werner Wolf provide broader definitions of this term, such as “a generic term for all those phenomena that . . . in some way take place *between* media,”⁸¹ and one that is “applied to any transgression of boundaries between conventionally distinct media of communication.”⁸² Despite the extreme variety of the subjects and the approaches to intermediality, it is commonly acknowledged that

intermediality suggests a methodological tool for paying attention to the interactions between different art forms or disciplines and analyzing their types such as dialogue, cohabitation, exchange, transformation, collision, appropriation, and repurposing. What is at issue, then, is how to distinguish which particular kind of intermediality fits into the types of moving image based upon the interactions between different art forms or media components. Rajewsky's concept of "media combination" is particularly useful for defining and analyzing hybrid moving images in question. This refers to an array of media artifacts whose intermedial quality is determined by "the media constellation constituting a given media product, which is to say the result or the very process of combining at least two conventionally distinct media or medial forms of articulation."⁸³ Unlike other kinds of intermediality, including the transformation of a given media product into another medium (as in the case of the adaptation of a novel by film), or a self-reflexive inquiry into the extent to which an art form (such as film) is comprised of conventions and styles from other media,⁸⁴ the category of media combination is able to deal with a more particular case in which previously distinct technological media intimately merge with each other in a newly constituted form on the material, technical, and aesthetic levels, while also maintaining the focus on the other aspects of intermediality. Rajewsky's category of media combination inspires me to consider the concept of intermediality as indicating an array of particular moving images based on the varying combinations of components from film, video, and the digital. The notion of combination can be interchangeable with the term "configuration," a concept coined by Joachim Paech to characterize intermediality as particular image forms in which relations between different media technologies are made visible: "The trace of the medium would become describable as *a figured process or a configuration* in the film and in the dispositive situation of observing the film (at the cinema, on television or video, etc.)."⁸⁵ Here, Paech's concept of configuration does not simply emphasize the combinatory nature of an image form that results from the encounter between the material, technical, and aesthetic elements of more than two media. More significantly, intermediality in this sense is understood as a constitutive process by which those elements negotiate with each other in their engagement with the formulation of a new image.

The concept of intermediality as a range of media combinations or configurations helps to distinguish hybrid moving images from the objects of investigation that previous cinema studies have adopted regarding the comparative analyses of the relationships between cinema and other arts, such as literature and painting. As Ágnes Pethő succinctly summarizes, these studies cover a wide area of researches, encompassing (1) the mutual influences of cinema and the arts, (2) the embedded representation of painting or literature in cinema, and (3) common phenomena that can be viewed comparatively in cinema and the arts.⁸⁶ Given Rajewsky's definition of media combination, it becomes obvious that all the comparative studies on the three subjects of intermediality have ultimately resulted in confirming either film's reliance upon other art forms (literature, painting, and theater) as constitutive of its established specificity or cinema's integration of their languages and conventions in its particular organization of images and narratives, such as first-person narration and the composition of *tableau vivant*. These two lines of the cinema studies on intermediality, which are still confined to the purviews of self-reflexivity and intertextuality, suggest that less attention has been paid to the moving image artworks that are marked by their combinatory implementations of more than two media, as well as to the changes in the material and technical dimensions of the media as that which make possible such implementations.

Despite this paucity, Jay David Bolter and Richard Grusin's now-famous concept named "remediation," which is defined as "the representation of one medium in another,"⁸⁷ is perhaps one of the most pivotal theories for conceiving intermediality as a configuration of hybrid moving images from a diachronic perspective. In this view, a new medium is always differentiated into multiple material, technical, and formal elements derived from its repurposing of older media, (e.g., the user interfaces of video game space are based on their algorithms' repurposing of filmic techniques). At the same time, this view supposes that a new medium cannot be isolated as a transcendental entity inasmuch as it can be repurposed as a constitutive element of other emerging media. "A medium is that which remediates," Bolter and Grusin thus write, "It is that which appropriates the techniques, forms, and social significance of other media and attempts to rival or refashion them in the name of the real."⁸⁸ Bolter and Grusin's two additional terms,

“immediacy” and “hypermediacy,” emerge as two representational strategies of remediation that are applicable to historically existing media. While immediacy refers to a range of processes by which the presence of the medium is denied and effaced, so hypermediacy is typified by a fascination with the medium itself as it brings its styles and conventions into relief. Digital technologies, for Bolter and Grusin, are also governed by immediacy and hypermediacy as the double logic of remediation: for instance, just as the World Wide Web encapsulates the logic of hypermediacy as expressive of the desire for multiplicity, so do digital photography and computer graphics for animated films and computer games imitate and adopt the criteria of Cartesian geometry and linear perspective in order to achieve the illusion of transparency. Bolter and Grusin view cinema as a telling example of an art form characterized by the processes of “mutual appropriation” of film and digital media in the double logic of immediacy and hypermediacy. Just as numerous video games borrow the representational strategies of film, from camera positions to the language of editing, so do contemporary films adopt digital viewing interfaces (small-screen viewing devices, interactive interfaces, etc.) and computer graphics, thereby multiplying their media references. To be sure, there are two shortcomings in Bolter and Grusin’s theory of remediation as it is applied to a variety of hybrid moving images in question. First, their examples of remediation tend to privilege the digital artifacts of mainstream cinema and its related entertainment, therefore bypassing various hybridizations that occur in the domains of experimental film and video and media installations.⁸⁹ Second, and more significantly, it is not difficult to see that their conceptual pair of immediacy and hypermediacy reminds us of the aesthetic dichotomy of realism and modernism, which leads to obscure the ways in which digital technologies transform the material, technical, and aesthetic components of an old media to construct a new, hybridized configuration of the image. My classification and analysis of hybrid moving images accordingly aim at overcoming these two limitations of the concept of remediation while acknowledging its effectiveness.

Raymond Bellour’s concept of the “*entre-images* [between-the-images]” can be seen as a prominent concept for considering intermediality as a type of image configuration based on synchronic hybridization, namely, a hybridization by which properties of more than two media representations are set in motion and made visible

under post-media conditions. By this process, the resulting image adds up to the complex exchange between more than two media technologies, as it reveals the differences and similarities between them yet does not strictly pertain to any of them. This is the reason that Bellour sees the *entre-images* as occupying the “space of all these passages” [*l'espace de tous ces passages*]. For Bellour, video is a medium that particularly opens up and configures this liminal space, since

video is above all a go-between. Passages . . . between mobile and immobile, between the photographic analogy and that which transforms it. Passages, corollaries, that traverse without exactly encompassing these "universals" of the image: thus, between photography, film, and video, a multiplicity of superimpositions, of highly unpredictable configurations, is produced.⁹⁰

For Bellour, video plays a particular role in the intersections of different media such as painting, photography, film, and the computer image, as its multidimensional or heterogeneous characteristics generate certain image forms in which a medium undergoes reflexive processes in relation to the other media. Initially, video goes hand in hand with film as a medium that produces the moving image based on the bond between the camera and profilmic reality because it emulates film's lens-based mechanism. At the same time, however, video's particular electronic specificities allow us to create an image that takes on both pictorial qualities and spatiotemporal qualities different than those of film—the latter aspect refers to the effects of multidimensionality and omnidirectionality within the video image's picture frame, which becomes distinct from the linear ordering of visual elements and the clear demarcation between the on-screen and the off-screen spaces in the cinematographic image. Also, these two aspects, which derive from the technical processes of the electronic apparatus, can also be applied to the computer-based imaging system, through which one can access and manipulate any type of visual data, but without necessary reliance upon the recording process of the cinematographic and the videographic images.⁹¹ Considered this way, video is a medium whose specific features are identified, yet at the same time open to the intermedial relations of its historical predecessors and descendants. The *entre-images*, then, opens up the space for a hybrid image form in

which these relations are inscribed and through which the viewer encounters both the convergence of elements of those media and their divergent transformations.⁹²

Bellour rightly places the *entre-images* within the two axes of hybridization. On the horizontal axis (which corresponds to synchronic hybridization) lie new images produced by the exchange and collision between different media images—film, photography, video, and the digital—that were hitherto presupposed to be distinct mediums (what he calls “passages of the image”). On the vertical axis (which corresponds to diachronic hybridization) lies a twofold historical change in the cinematic apparatus, mobilized by electronic and digital technologies (what he calls the “double helix”): the technologies make the cinematic apparatus go beyond its traditional formations while assimilating those formations into their capacities for converting, storing, and transmitting data.⁹³ For Bellour, electronic and digital artifacts cause cinema to be dissolved, while simultaneously emerging as the resources for the evolution of new cinematic forms by which the relationship between old and new media is variably reexamined.

Like Bellour’s *entre-images*, Yvonne Spielmann’s conception of “intermedia” most extensively encapsulates the framework for considering intermediality as a particular type of configuration based on the hybrid relations between different media components from a synchronic perspective: “The characteristic of intermedia may be identified in *certain forms of the image, when elements of the static and the moving image are interrelated to create a third form of the image.*”⁹⁴ Spielmann draws upon Peter Greenaway’s *Prospero’s Books* (1991) in order to identify the two characteristics of the intermedial image. In this high-definition video film, Greenway uses electronic and digital processing to rework and transform both photographic and filmic images. This processing enables a series of static images, reminiscent of the serial photography of Eadweard Muybridge and Étienne-Jules Marey, to be animated in a manner similar to the generation of cinematic illusion. The resulting visual expressions include the dynamic insertion of the digitally animated animals or human figures (i.e., still images, whether painterly rendered or photographed) into the live-action film frame, or point to the “cluster,” a particular type of image that is made through the “multiple layerings of different images or image elements” and results in a “spatial density.”⁹⁵ The cluster serves as a media

object that requires an intermedial approach as a methodological tool for analyzing the array of processes by which different media elements are merged into a hybrid type of image. Spielmann singles out these processes of interrelation as “collision” and “exchange.” First, collision points to the simultaneous existence of elements from different media, for instance, elements of filmic images and static (painterly or photographic) images, in the form of another media technology, for instance, the computer-generated or videographic image. Second, exchange means that the media-specific types of images are “reworked in other media at the level of form.”⁹⁶ For instance, the interval between successive frames in film is processed by electronic and digital imaging system. Thus, the intermedia image calls upon us to see that its hybrid modality hinges upon how these components are maintained or transformed in the structure of synchronic hybridization. Seen in this light, Spielmann’s concept of intermedia allows us to see both the forms and conventions of the traditional media image and the new ontological features introduced by electronic and digital technologies. That is, the intermedia paradigm affirms the material and technical differences of digital media from their analogue predecessors while also turning the viewer’s attention to the ways in which these two are interrelated in a new image form.

Spielmann’s concept of intermediality leads us to recognize the two ways in which the post-media conditions of film and video, marked by a media’s differentiation into its set of material, technical, and formal elements, add up to different types of hybrid moving image. First, it functions as a methodological framework for identifying the image as the configuration of elements coming from different media, which is marked by different patterns of co-presence and interrelation. Second, it suggests that intermediality in the hybrid moving image is grounded in the interrelated ontological conditions of media technologies, namely, the diachronic and synchronic hybridizations of historically existing media. Despite these two advantages, however, Spielmann’s privileging of the cluster as a prominent form of intermedia image overlooks other possible forms of intermediality that are not contained within the aesthetics of sheer juxtaposition as the hallmark of modernist visual art. The types of media artifacts I classify and examine in this book’s chapters suggest that there is a wide range of possibilities for various correlations of film, video, and the digital on their material, technical, and aesthetic levels, which results in different coexistences

of, and exchanges between, the components of those media in the artworks of the moving image.

Addressing the question of how new media technologies simultaneously depend upon and differ from conventional media for creative expression, *Between Film, Video, and the Digital* theorizes the reconfiguration of an artistic medium and its specificity in the context of post-media conditions that enable hybridizations of film, video, and the digital. This wide range of scope is intended to suggest that post-media conditions are not limited to a particular genre or mode of practice. That is, post-media conditions are marked by the attempts of the artists and filmmakers who have aspired to redraw the boundaries between different media and their corresponding art forms or genres, and thereby render them constantly shifting, and by the hybrid images through which their conceptual and technical devices are inscribed and made visible. In this sense, this book is a critical intervention in the topology of the contemporary art and culture of the moving image, correlating an extensive overview of their tendencies with a series of in-depth analyses in the light of a theorization of media hybridization in accordance with the reconfiguration of medium specificity.

In tracing the complex breeds of hybrid moving images and examining their formal and technical aspects, the book offers five categories as conceptual tools: “videographic moving picture,” “hybrid abstraction,” “transitional found footage practice,” “intermedial essay film,” and “cinematic video installation.” I propose these categories to highlight that which happens to the media that would remain as distinct if they had remained under the doctrine of modernist medium specificity, and the changes that post-media conditions bring to the media’s material, technical, and aesthetic layers. These conceptual constructs are not mutually exclusive in terms of the logic of differentiation applicable to the traditional concept of classification: rather, I intend to leave intact the overlaps between the categories in order to underline the extent to which the images’ ontology of coexistence and interrelation is dispersed across different platforms and genres, constructing a range of aesthetic constellations that a seemingly disparate group of artworks commonly realize. That is, these overlaps are a key aspect of the post-media age.

The aesthetic constellations, then, are concerned with a host of concepts that the rich traditions of cinema and media studies

have pursued in theorizing: indexicality, movement, duration, materiality, archive, historicity, memory, and apparatus. I introduce and elaborate on the five categories of hybrid moving images as artifacts that offer a renewed understanding of those concepts: videographic moving pictures in relation to indexicality, movement, and instantaneity; hybrid abstraction in relation to abstraction and materiality; transitional found footage practices in relation to the historicity of cinema and the concept of archive; intermedial essay films in relation to the memory of cinema; and finally, cinematic video installations in relation to the compound idea of the cinematic or video apparatus. In this way, *Between Film, Video, and the Digital* does not simply establish itself as a monograph dedicated to post-media and the hybrid moving image as new theoretical arenas for media transition and the ontology of the moving image, but also offers updated accounts of how traditional cinema and media studies can be revivified in its encounter with its neighboring media technologies and art forms.

The first and second chapters position and track down two aesthetic tendencies of hybrid moving images, namely, photorealistic and abstract aesthetics, in the light of video's post-media conditions. Chapter 1 discusses an array of artworks by Sam Taylor-Johnson, Mark Lewis, Bill Viola, Fiona Tan, Adad Hannah, and David Claerbout, all of which make porous the categorical distinctions between film, photography, and painting by creating an ambiguous correlation between stillness and movement enabled by digital video. It classifies their images as "videographic moving pictures"—a combination of "moving" as pertaining to film and video with "picture" as implying the mode of stillness common to painting and photography. The importance of examining this type of the hybrid moving images lies in its challenge of a few traditional conceptions of traditional art forms: photography as privileged by the material stability of its chemical basis and defined by its capacity to freeze the moment in time; photography demarcated from painting and cinema; and video art whose images are clearly distinct from the filmic image. This chapter stresses a crucial role of digital video in engendering the interaction of three properties derived from film, video, and the digital: film's inscription of photographic reality, analogue video's ability to alter the surface and temporality of the source image, and digital manipulation's blending and mediation of the two. Considering digital video this

way, it is possible to conceptualize videographic moving pictures as remediating and refashioning two historically existing image forms that experimental cinema has long developed in the light of cinema's ineluctable link to photographic stillness, which I call the "film stilled" and the "still film." This chapter closely examines the works of the artists who have elaborated upon these two image forms with the aid of digital video. In doing so, I argue that the layering of photographic and cinematic properties common to the practitioners' videographic moving pictures enables a set of concepts grounded in the analogue photographic media to have unprecedented relations to their previously assumed opposites: indexicality connected to manipulability, and photographic pastness to cinematic presentness.

Chapter 2 provides a classification of hybrid moving images that opposes videographic moving pictures due to their abstractionist aesthetics and materialist energy, while also setting up the historical genealogy of the images. By creating this type of hybrid moving images, artists and filmmakers such as Evan Meaney, Rosa Menkman, Rebecca Baron and Douglas Goodwin, Takeshi Murata, Lynn Marie Kirby, Siegfried A. Fruhauf, Johanna Vaude, Jürgen Reble, and Jennifer West have led to a notable tendency of contemporary digital experimental film and video that has brought into relief and explored the materiality of media. This chapter singles out a dynamic correlation of representational and abstract components in the practitioners' images as a key character of the practitioners' hybrid images. In so doing, it claims that this correlation testifies either to the transition of the aesthetic of abstraction in structural film and analogue video to the material substrates and algorithms of digital imaging, or to the continual interaction between the material traces of film and video. In either case, digital video can be seen as both inheriting its aesthetic of abstraction from its analogue predecessors and inscribing its code-based material and technical specificities in the resulting abstract imagery. Encompassing the two, I offer "hybrid abstraction" as a second category of the hybrid moving image driven by materialist energies, with "digital glitch video" and "mixed-media abstraction" as its subcategories.

Chapters 3 and 4 focus upon how the transformative or manipulative elements of analogue and digital video are used to deal with an array of problems raised by film's post-media conditions, including how the post-filmic technologies shift the ontological state

of the historically existing images, how the post-filmic technologies can serve to continue and update filmmakers' celluloid-based techniques in reworking those images, and how those technologies construct both the memory of those images and that of the filmmakers who reflect upon or investigate those images. Chapter 3 tracks several experimental filmmakers (Vicki Bennett, Gregg Biermann, Christoph Girardet-Matthias Müller, R. Bruce Elder, and Ken Jacobs) who elaborate their found footage practices with the help of digital video. I define their different uses of digital video as "transitional found footage practices," given that their resulting images reflect two ideas of transition regarding the ontology of cinema in the digital age: a transition of film-based techniques for traditional found footage filmmaking such as montage and special effects, and a transition of found footage itself from celluloid to the stream of digital video on the levels of spectatorship and of the film image itself. My interest in the implication of transitional found footage practices, particularly what the hybridity of their images and techniques suggests for found footage filmmaking's major objective of attempting to reconstruct the archive of the past, is extended into Chapter 4. Here, I focus upon a particular group of essay films marked by their uses of video technologies (analogue video, digital video, and internet-based video platforms) to process and retrieve film-based imagery (images made with 8 mm, Super-8mm, 16 mm) that shapes the landscapes of their filmmakers' personal memory and reflection. Such filmmakers as Hito Steyerl, Lynne Sachs, Clive Holden, and Jonathan Caouette employ these multiple formats in their essayistic projects in order to investigate how the memory trace inscribed in film is transformed and reconfigured as it passes through the filters and textures of post-filmic media. Accordingly, these filmmakers' works are replete with images in which the traces of celluloid dynamically interact with the properties of video, images that result in the complex configuration of the two media as testifying to the construction of their memory and subjectivity as open and dialogical. In this sense, I call this type of essay film "intermedial essay films." In these two chapters, the dialectic of convergence and divergence, or medium specificity and hybridity, extend into another dialectical dimension of these practices: that is, the filmmakers' embrace of new technologies stands between past and present in that they aspire to renew their technical and historical exploration of film's past with the present media systems

while also acknowledging the extent to which these systems mutate the celluloid-based image.

The last chapter extends the dialectic of medium specificity and media hybridity from the level of the image to that of the apparatus as it addresses a particular group of media installations that have been popular due to the mutual fascination between cinema and contemporary art since the 1990s. Numerous artists, as well as established filmmakers including Chris Marker, Harun Farocki, Abbas Kiarostami, to name just a few, have extensively used video technologies to draw on and manipulate cinematic image and narrative, such that their works explore the sensorial and mnemonic power of cinema as an art of spectacle and how influential and global cinema was in shaping their memories and artistic ideas. As a result, the works' resulting constitution appears to be the amalgamation of cinema and video on the levels of their image and apparatus. In this chapter, I characterize these works as "cinematic video installations," analyzing the ways in which the medial components of cinema and video are correlated. Providing a critical remapping of how cinematic video installations have been discussed in both the discourses of post-cinema and those of contemporary art, I argue that cinematic video installations must be viewed as a complex hybridization of cinematic and video-based technologies. This argument entails viewing video not as anchored in a limited set of material and technical devices, but as an electronic and digital dispositif that offers the artist a wider range of conceptual and technical methods for the aesthetics of hybridity, impurity, and confusion. Bearing this in mind, I identify in this chapter spatialization (materializing the spectatorial experience of the film image, montage, and narrative in the theatrical or architectural forms of screen-related apparatuses) and temporalization (manipulating the time of the image by means of digital video's capacities) as two key operations that video technologies execute in adopting and altering the components and historical traces of cinema. By performing formal analysis of the installation pieces by several artists or filmmakers such as Farocki, Kutluğ Ataman, Doug Aitken, Eija-Liisa Ahtila, Douglas Gordon, Candice Breitz, and Stan Douglas, I demonstrate that the ambiguous cohabitation of cinematic and video-based specificities occurs not only in the domain of the image space but also in the formation of the apparatus that frames the image and determines the viewer's relation to the image.

INTRODUCTION

Hybrid moving images and the post-media conditions

Hybrid moving images and medium specificity

Media artist Jim Campbell has produced a number of pieces consisting of images made with LED displays of photographic and filmic materials. In these pieces, the low-resolution electronic displays, combined with digital image processing, transform the photochemical material into a series of pixels. Accordingly, the images waver between the discreteness of the digital and the continuity of the analogue, taking on multiple levels of hybridization derived from material and technical aspects of the pieces. This is illustrated in *Home Movies 300-1* (2006, Figure 0.1), a work which projects the 16-mm moving portrait of an anonymous family onto a double Plexiglas screen while its 300 LEDs diffuse the footage into a series of noises as the minimal units of digital visual information. At the same time, the viewer is also able to see the discreteness of the minimized units when watching the display from a distance. What captures the viewer's attention, then, is the ghostly registration of family members, such as a smiling mom, a child on a swing, a toddling child, etc., which is perceived as continuous. As Richard Shiff notes, *Home Movies 300-1* positions the viewer "at the single door that opens to both classes of image, to representation and to abstraction."¹ Yet it could also be added that the ambivalence

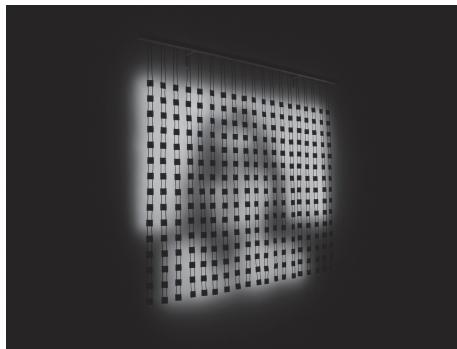


FIGURE 0.1 Jim Campbell, *Home Movies 300-1* (2006), *installation view, 60 × 50 × 3 inches. Video installation: custom electronics, 300 LEDs, courtesy of the artist.*

caused by the digital processing of the analogue image leads to other layers of hybridization: of still and moving images, of recorded and simulated images, and of luminous and pixelated images.

Campbell's work exemplifies the ways in which contemporary media art pieces across various platforms and genres, ranging from avant-garde cinema to video installation, provide a fresh look at the photographic inscription of reality either by bringing the still photograph to life or by unearthing the photographic stillness embedded in the moving image, both achieved with the help of digital technologies. This new breed of practices fosters hybrid visual forms that make porous the boundaries between live-action and animated images, as well as between the recorded and the manipulated. On an even more complex level, Campbell's images are based on the combinatory employment of photography, film (both with digitized data), and digital video (as replaced by the LEDs) that results in the dynamic coexistence of stasis and motion. Thus, they are structurally either both photographic and filmic or of these. The co-presence of the two media amounts to a form of moving image that reveals both the differences and the similarities between them through an array of technical processes allowing the coexistence of, and the exchange between, their properties.

Digital technologies play a pivotal role in formulating the aesthetics of co-presence that Campbell's images present to their viewer.

While grounded in the combination of custom LEDs and computational algorithms, his self-devised digital imaging system alludes to this double nature of digital video, to the extent that its resulting visual expression integrates photographic representations and at the same time radically transforms them according to the ways in which the series of discrete elements (pixels) comprising them are manipulated. In this sense, Campbell's ambiguous visual expressions reflect the situation that the ongoing proliferation of digital technologies in the terrain of art practice during the last two decades has unsettled the status of the moving image. From the 1990s onward, digitization has subsequently precipitated the flexibility of media images because they are grounded in numerical codes subject to putatively unlimited manipulations. Since then, numerous art practitioners across different fields have responded to the volatility of image by creating new works of art that could obscure established distinctions between different media arts, including cinema, video art, and digital art. These artworks have presented certain types of moving images in which the different forms of media coexist and influence each other, such as the images emblematised by Campbell's works. The fact that these images are based on the merger of the properties of these media and articulate the phenomena of border crossings between their corresponding arts raises the following three questions. First, if these images remain highly ambiguous, what can we identify as an artistic medium in this combinatory system (i.e., what is its key medium: found film, photography, computer algorithm, or, an array of LEDs)? Second, if these images disallow the belief in a single medium's directive role in shaping a particular sensible form, how can we reconfigure the notion of a medium vis-à-vis the variety of practices producing them? And finally, what theoretical framework can we use to describe the growing exchange between previously distinct media and the emergence of the art forms based on this exchange?

In response to these three questions, this book characterizes these images as "hybrid moving images," an array of impure image forms characterized by the interrelation of the material, technical, and aesthetic components of existing moving image media—namely, film, video, and the digital. The term "hybrid" denotes its two etymological underpinnings, firstly, "a mixed form of two concepts from two language systems, the Latin *hibrida* (mixed blood)," and secondly, "the Greek *hubris*—excess,"² which suggests that the

form transgresses the boundaries of each system. Various literary and cultural studies based on poststructural, postmodern, and postcolonial theories have elaborated upon these two meanings of the term in association with the concepts of multiplicity, heterogeneity, fusion, diversity, and difference, using them to describe conditions in which different linguistic or cultural systems meet and interact so as to blur the previously maintained distinctions between themselves and others, including an array of conceptual dichotomies such as the global and the local.³ More specifically, hybridization refers to “the two-way process of borrowing and blending between cultures, where new, incoherent and heterogeneous forms of cultural practice emerge in . . . [the] third spaces.”⁴ Seen in this light, hybrid moving images point to the in-between spaces of existing audiovisual media, as well as to certain forms produced by an array of interrelations that drive the mutual influences between the media. These images, then, enable us to redefine each medium’s identity not as self-determined, but as constructed through its transfer to, and appropriation of, other media and forms.

The term “moving image” refers to a category of images in motion broader than the images that have traditionally been discussed in a discourse grounded in a sharp distinction between one art form and another. In this sense, the uses of the term have often been associated with a rejection of medium-essentialist thinking in the context of changing and emerging relationships between different artistic forms and means. Noël Carroll develops his concept of the “moving image” by way of his attack on the doctrine of modernist medium-specificity thesis, which consist of the three arguments that (1) a medium is defined by a physical substance (2) it maintains its unique essence derived from its intrinsic material qualities, and (3) the unique nature of the medium indicates or dictates each art’s own domain of expression and exploration. Carroll draws upon various counterexamples, including the nonfigurative films of the avant-garde practices, image processing in video, and the cinema based upon digitally composite images, in order to demonstrate that the forms and styles of film are not necessarily determined by a limited set of techniques such as the cinematographic representation of reality through the film camera and certain methods of montage.

Carroll’s use of the term “moving image” is related to his definition of a medium as being irreducible to a single material

entity. For him, a medium is “generally composite in terms of its basic constituents”⁵; and “an art form then is composed of multiple media.”⁶ Here film serves as a telling example for validating these two arguments. As to the first argument, even though film is defined as a medium on the basis of a filmstrip, its resulting image is not necessarily derived from a camera’s recording of profilmic reality, but includes “flicker films,” which can be made by the alternation of blank and opaque leader without photographic emulsion. Also, as to the second argument, even though film is defined as an art form of a moving image that bears a photographic impression of reality, this does not necessarily include a filmstrip but embraces video, to the extent that video “may be developed . . . to the point where most of us would have little trouble calling a commercial narrative made from fully high-definition video a film.”⁷ Based on these two arguments, Carroll paves the way for reconfiguring a technological medium as constitutively hybrid: that is, there is no single element of a medium that ahistorically ordains a single set of forms and styles; instead, it is differentiated into multiple components, which supports the idea that “a single art form may sustain different, nonconverging potentials and possibilities”⁸ for diverse and aesthetic approaches and formal developments. Carroll’s discussion of a filmstrip could be such a case, given that it is associated not simply with realist cinema but also with flicker films and handmade films. For both forms are distinct from each other in terms of their different aesthetic approaches to the materiality of the filmstrip, as well as in terms of the differences in the techniques and other materials that intersect with the filmstrip. This differentiation of forms leads him to denounce the idea that a medium’s identifiable “pure” domain immediately determines a particular set of forms whose aesthetic effects are indicative of its most genuine essence. Instead, it allows Carroll to take on a pragmatic view on the relation between a medium and its forms or styles: “It is the use we have for the medium that determines which aspects of the medium are relevant, and not the medium that determines the use.”⁹ More significantly, this pragmatism indicates that Carroll’s concept of a medium embraces the historical variability or reinvention of its components as well as its possible border crossing with other media. As to the impact of digital video and computer-based special effects on the production of feature films, he suggests that these testify to the increasing intersections

between film and other moving image media that were anchored in their distinct art forms (video art and computer art), as well as to the innovation of film's mediality and aesthetics vis-à-vis the development of these media: "Film is not one medium but many media, including ones invented long after 1895, and even some of which have yet to be invented. Video and computer-generated imaging, for example, are film media . . . in the sense that they may be components of what we now call films."¹⁰

D. N. Rodowick tellingly demonstrates that Carroll conflates an objection to the medium-specificity argument with an exclusion of anything that is regarded as materially or technically specific to a given medium. Carroll convincingly testifies to the constitutive multiplicity of a moving image medium and the extent to which its components are open to stylistic variation and historical invention, both of which demystify the belief in a medium's univocality and in its power to dictate forms of an art as manifestations of its predetermined essence. But there is no reason that dismissing these two lines of the medium-specificity argument prevents us from abandoning any observation of what components a medium is composed of and what effects they produce. Rather, Carroll's suggestion of a medium's internal and external hybridities is based on his identification of a medium's components and of their relation to aesthetic effects, all of which he excludes from his concept of the moving image. Thus what Carroll ironically validates, for Rodowick, is that "nothing . . . would disallow specifying media with a strong kinship (film, video, and digital imaging) as having a variable distinctiveness containing overlapping as well as divergent elements or qualities."¹¹ The media's characteristics associated with their hybridity, such as historical variability and openness to different materials, forms, and practices, then become compatible with the concept of medium specificity—one which is not reducible to the medium-specificity arguments of a medium's teleological essence and of the absolute distinctiveness of its forms, but nonetheless requires us to observe a medium's composite properties and discern differences and similarities between them and those of other media. Ultimately, what Rodowick proposes is *a dialectic of medium specificity and hybridity* with regard to a medium's internal differentiation and its possibilities for being aligned with what is outside it: "I am happy to admit as many hybridizations of media as artists can invent in their actual practice. But what makes a hybrid

cannot be understood if the individual properties being combined cannot be distinguished.”¹²

Taking Rodowick’s discussion above as a point of departure, this book characterizes hybrid moving images as being grounded in and indicative of the dialectic of medium specificity and hybridity, or as being produced by a set of artistic practices that aspire to reconfigure the concepts of a medium and its specificity vis-à-vis hybridization. To be sure, these images cannot be fully contained within Carroll’s concept of the moving image, in which any observation on the differences of media in their material and technical components, as well as the notion of a medium as such, is eliminated. Rather, these images ask us to keep our eye on the material, technical, and aesthetic dimensions of the media involved. For they are based on the changes in a medium’s internal components or in the ways that they are combined differently with other media elements that have hitherto not been regarded as contained within its art form. Seen in this light, what I call hybrid moving images are inseparable from the images that each of the three media has produced on its own (filmic, videographic, and digital images), and much more from the differences and similarities between these images. At the same time, central to these images is the fact that they result from the different relations between media that frequently cross the generic and disciplinary borders between their corresponding arts. To summarize, the hybrid moving images demonstrate that it is more productive to identify different moving images grounded in the variability of a single medium or the differing combinations of more than two media, rather than insisting upon the “moving image” as a general category.

These two aspects of hybrid moving images, the constitutive compositeness and variability of a medium, as well as the possibility for its alliance with other media, echo Berys Gaut’s discussion of a medium. In a way similar to Carroll and Rodowick, Gaut asks us to distinguish two ways of conceiving a medium: a medium as “the kind of stuff out of which artworks are made” and a medium as that which is “constituted by a set of practices that govern the use of the material.”¹³ For Gaut, the latter notion demonstrates that the material alone cannot invariably determine the medium of an art form: as with painting, for instance, it includes not only oil pigment and a canvas, but also chalk, charcoal, tempera, woodcut, etc., and it is up to a set of practices and their underlying conventions

what material is adopted and how the material realizes an artwork that constitutes a painting. But this functionalist view alone is not sufficient because the materials “also play a role in finely individuating the media of painting—as instanced by oil painting, as opposed to watercolors or frescos.”¹⁴ The reciprocal complimentary relationship between the materials and a set of practices can be applied to the media of the moving image. For instance, celluloid may be used both for the record of profilmic reality and for the graphic rendering of nonphotographic imagery with handmade techniques, but the latter use is limited in comparison to computer graphics in terms of the degree of flexibility by which an image can be manipulated. Considered this way, I define an artistic medium as a set of material and technical components, which not only allows for but also is constituted by formal variations of artistic expression.

The idea of a medium being determined by an array of technical and aesthetic conventions suggests that an art form can be seen as involving more than the components of one medium when it is realized. This is certainly suggested by Carroll and Rodowick, but Gaut elaborates upon this in his notion of “nesting,” referring to the phenomena by which “media can contain other media.”¹⁵ The medium of the moving image serves as a telling example of this phenomenon of “nesting,” since it encompasses different types of images, each of which can be discerned by the specific medium producing that image, such as celluloid, analogue video, digital video, computer graphics, etc. To push this point further, the hybrid moving images are seen to testify to more different aspects of nesting than Gaut’s original concept proposes. While Gaut speaks of only the plurality of the media that are incorporated in a given art form, for example, the moving image, hybrid moving images based on the intersection of film, video, and the digital demonstrate that there are other levels of incorporation at play: first, the incorporation of more than two distinct media components—for instance, the mixture of film’s components and those of video—into the form of a moving image, which is made by a set of artistic practices that throw these media in a new relation; and second, the incorporation of old moving image media into the digital as the digital adopts and reworks the old media’s formal components by converting their material and technical elements into digital codes. These two levels of incorporation suggest that the phenomena of nesting in the digital age have become so complex that it is

insufficient merely to acknowledge that a medium contains several media. Rather, what is required is to examine the relations between the media constituting the medium of the moving image. The notion of hybridization, then, serves as a framework for theorizing the two levels of incorporation as more complex types of nesting than those discussed by Gaut.

Finally, like Rodowick's claim, Gaut's idea of nesting suggests that it is still indispensable for us to identify the properties of a medium that constitutes an art form and to differentiate them from those of other media that engage in shaping the form. In this view, it is meaningful to ask, for instance, what features are specific to digital images in contrast to traditional photochemical images, even when the former perceptually resembles the latter. Here the notion of specificity is not necessarily defined in terms of uniqueness as it is asserted by the traditional medium-specificity argument. For in this case, the representation of photographic imagery *as such* is not unique to photochemical media such as photography and film, but shared by the digital. This suggests that the specificity of a digital image can be identified only in comparison to photochemical images, that is, according to what conventions of photochemical media the digital adopts and what new properties it adds to those conventions in order to allow for new expressive possibilities in the resulting image. Gaut's concept of "differential properties," that is, "properties that distinguish one group of media from another group, but that are not necessarily unique to any particular medium,"¹⁶ provides us with a useful analytic framework for discussing the media of the moving image and the relation between them. The live-action imagery based on the bond between the lens and profilmic reality, for instance, is specific to film, video, and the digital in contrast to other media (for instance, literature and music), but is not unique to any of them. This notion of specificity, which is comparative and relational, is particularly helpful in examining hybrid moving images, since their impurity can be illuminated by identifying what properties are shared by the media constituting the images and what features pertain to each of them individually. To be sure, careful attention to the formal dimension of the artwork is particularly crucial to this conception of medium specificity. For it is on the level of form that the structural similarities and differences between diverse media images are negotiated and interrelated while simultaneously being made visible.

Post-media conditions

This book contextualizes the emergence of hybrid moving images across different genres and platforms within the larger contexts of the “post-media” age. In doing so, it argues that the images’ material, technical, and aesthetic hybridities derive from and at the same time are expressive of “post-media conditions,” which I define as an array of conditions that have posed fundamental challenges to the traditional definition of artistic media—namely, that a media’s material and technical components immediately determine its forms and expressive possibilities, which are exclusively distinct from the forms and expressive possibilities of other media. It was both the discourses on contemporary art criticism and the studies on new media and media art that coined the term, and these have developed the debates about those conditions since the late 1990s. In contemporary art criticism, Rosalind E. Krauss played a determining role as she proposed and elaborated upon the term “post-medium condition” in a series of her writings, and the discourses on contemporary art by Jacques Rancière and Nicolas Bourriaud, among others, are more or less in alliance with Krauss’s argument on that condition. Meanwhile, such thinkers as Lev Manovich and Peter Weibel, whom I consider as pertaining to the “new media camp,” have introduced the term “post-media condition” as a response to the discourses mainly circulated in the contemporary art criticism bloc. Although the difference of a keyword in the two discursive domains—“medium” in the domain of contemporary art criticism and “media” in that of new media camp—implies a conspicuous front line that has persisted in regard to how to evaluate the impacts of electronic and digital technologies on the forms and practices of art, the discourses in both domains have reached three common points of post-media conditions that lay the groundwork for this book: (1) the demise of the modernist medium specificity, that is, the proliferation of electronic and digital technologies that has led to the dissolution of the boundaries between one art form and another, which were previously sustained by a media’s unique properties; (2) as a response to the demise of the modernist medium specificity, a renewed awareness of what media’s material, technical, and aesthetic components are and what artists can do with those components; and, (3) as a result of this renewed awareness,

the emergence of artistic practices by which the media's components have new, previously uncharted relationships with those of other media in ways that go beyond its formal boundaries. The last two conditions, I shall argue, suggest not the total abandonment or loss of medium specificity *per se*, but a reconfiguration of medium specificity in tandem with media hybridity.

Krauss's concept of the post-medium condition means that the pervasive power of electronic and digital media challenges Clement Greenberg's idea of medium specificity so profoundly that it transcends the traditional definition of artistic medium in general. Television and video cannot be contained within the purview of modernist medium specificity, according to which a medium's distinct identity is derived from its unique material properties, and this identity exclusively delineates the medium's formal and generic boundaries as distinctive from other mediums. This is because the material and technical components of television and video are constitutively heterogeneous, allowing them to exist in putatively diverse forms, spaces, and temporalities. Krauss writes, "Even if video had a distinct technical support—its own apparatus, so to speak—it occupied a kind of discursive chaos, a heterogeneity of activities that could not be theorized as coherent or conceived as having something like an essence or unifying core. . . . It proclaimed the end of medium specificity. In the age of television, so it broadcast, we inhabit a *post-medium condition*."¹⁷ Similarly, the "new media camp" has coined such terms as "post-media aesthetics" (Manovich) and "post-media condition" (Weibel) in order to describe the ways in which the idea of Greenbergian medium specificity became fundamentally dismantled under the growing influence of electronic and digital technologies. Manovich points out that the emergence of television and video precipitated the "rapid development of new artistic forms" (assemblage, happening, performance, installation, time-based art, process art, etc.) that encouraged "the use of different materials in arbitrary combinations (installation) . . . [and] . . . aimed to dematerialize the art object (conceptual art)."¹⁸ For Manovich, the digital revolution of the 1980s and 1990s marks the most consequential development of the dissolution of modernist medium specificity, in that the shift to digital representation, along with the introduction of new editing tools that could be applied to most media and substitute traditional distinct artistic means, has led to the dissolution of the "differences between photography

and painting (in the realm of still image) and between film and animation (in the realm of a moving image)”¹⁹ on the material levels of perception, storage, and distribution. In a similar vein, Weibel outlines a historical trajectory of cinematic experiments beyond filmic imaginary into three phases: the expanded cinema movement in the 1960s extending the cinematographic code with “analogous means”; the video revolution in the 1970s harnessing “intensive manipulation and artificial construction of the image”; and the digital apparatus in the 1980s and 1990s with “an explosion of the algorithmic image and new features like observer dependency, interactivity, virtuality, [and] programmed behavior.”²⁰ Consequently, the loss of modernist medium specificity recognized by both Krauss and the “new media camp” theorists (Manovich and Weibel) asks them to revisit the traditional definition of a medium, as well as paying attention to the array of artistic practices by which that medium’s components interact with those of other media in ways that challenge the previous distinctions between one art form and another.

Krauss’s response is to redefine a medium as “a set of conventions derived from (but not identical with) the material conditions of a given technical support.”²¹ The medium in question here is not reducible to its physical properties alone, but instead is reconceived as a multiplicity of its material and technical components which lend themselves to the development of artistic conventions, but none of which have a directive power in determining the medium’s expressive possibilities. Krauss draws upon the idea of the filmic apparatus as exemplary of her definition of medium, considering the medium as being characterized by its “aggregative” condition in which medium specificity is still maintained and at the same time internally differentiated according to the heterogeneity and interdependence of its components. “Film consists of the celluloid strip, the camera that registers light on the strip, the projector which sets the recorded image into motion, and the screen,” she writes, “as an artistic medium, it cannot be reduced to any of the elements as objects, but all of them are united to constitute its apparatus.”²² In so doing, Krauss avoids any direct association between the medium and its physical substance as is the case of the Greenbergian medium-specificity argument, and instead highlights the significance of certain artistic expressions that call into question the effect of a medium’s constraints and thereby reconfigure it as

an open field for the interplay of “conventions” and “possibilities.” Hence her notion of the medium reconciles the requirement for the material and technical specificity of a distinct medium with the formal and conceptual diversity of artistic creation.

Krauss's redefinitions of the medium as a “set of conventions” derived from a “technical support,” and of medium specificity as being occupied by the intersection of the medium's internally heterogeneous components and a range of expressive possibilities given by the medium's conventions, imply that a traditional medium is capable of going beyond its previous formal boundaries and has new alliances with other media. Calling this artistic operation “reinventing the medium,” Krauss has praised several artists who reexamine the inner complexity of older material supports and techniques that are now perceived as outdated under the pervasive influences of new media. Along with Marcel Broodthaers's films, which aim to investigate the nature of film in relation to cinema's primitive technique derived from the flip book (for instance, his *A Voyage on the North Sea* [1973–1974]),²³ these artists' practices include James Coleman's “projected images” that waver between photographic stillness and cinematic motion due to his idiosyncratic blending of slide projection and the filmstrip's photographams;²⁴ Jeff Wall's conceptual photo-panel teeming with cinematic allusions; and William Kentridge's “drawings for projection” built on the transformative amalgamation of outmoded technical remnants, such as pre-cinematic optical toys, cartoon animation, and handmade film.²⁵ For Krauss, those artists' works concern the idea of a medium as “conventions out of which to develop a form of expressiveness that can be both projective and mnemonic,”²⁶ insofar as they interrogate the range of expressive possibilities given by the material and technical properties of the old mediums (painting, photography, and film) and their interrelationships in a redemptive manner. It is significant to underline that those artists' practices, as well as Krauss's concept of the medium as technical support, seem to reconcile the legitimacy of medium specificity with the hybridization of the art forms based upon that medium. Those artists are commonly grounded in their own recognition of a medium's specific features, but the medium used by the artists lends itself to a variety of conceptual practices that seek out the medium's nature beyond the essentialist assertion that the medium's physical domains immediately guarantee its proper art forms. This

practice, then, promotes the combination of a medium with the materials, techniques, and conventions of other mediums that had been considered outside that medium's standardized forms: for instance, Coleman's imagery transcends the standardized projection of cinema and alludes to the photographic stillness embedded in the filmstrip, and Kentridge's drawings for projection transgress the boundaries of charcoal drawing and excavate its historical relation to hand-drawn animation and cartoon animation.

Jacques Rancière has extensively problematized the Greenbergian conception of the medium whose material specificity alone defines the medium's essence and therefore buttresses the separation of different art forms. In a similar manner as Krauss's medium as technical support, Rancière offers his own redefinition of a medium as "milieu" in two ways: both as "the milieu in which the performances of a determined artistic arrangement come to be inscribed, [and as] the milieu that these performances themselves contribute to configuring."²⁷ In doing so, he has paid attention to a wide range of artistic practices that promote hybridizations of mediums, or, mixtures and clashes between the art forms' heterogeneous elements: that is, practices ranging from film and video installation pieces to multi-platform projects that invite the blurring of the boundaries between art and nonart, or between the artistic object and the life-world.²⁸ In an interview, Rancière clarifies that all these practices are defined by "the erasure of medium specificity, indeed by the erasure of the visibility of art as a distinct practice."²⁹ Rancière finds in Jean-Luc Godard's *magnum opus* video work *Histoire(s) du cinéma* (1988–1998) a telling example of how his video-based montage emerges as the montage of a "metamorphic operativeness, crossing the boundaries between the arts and denying the specificity of materials."³⁰ Godard's various ways of fragmentation and juxtaposition by virtue of video's technical effects make possible a series of unexpected encounters between particular cinematic images, paintings, and literary or philosophical texts. Rancière's emphasis upon the medium as promoting hybridizations of previously separated arts echoes a series of criticism by Nicolas Bourriaud, who coined a now well-known term "relational aesthetics." By this term, he singles out the various open-ended works of art since the 1990s as a set of artistic practices "which take as their theoretical and practical point of departure the whole of human relations and their social

context.”³¹ A closer inspection of Bourriaud’s line of arguments illustrates that his relational aesthetics are not solely concerned with the renewal of the bond between art and life, but also between art and its audience. For Bourriaud, relational aesthetics as the principle of reestablishing art in this manner is built upon “random materialism,” a particular materialism that “takes its point of departure the world contingency, which has no pre-existing origin or sense.”³² This materialism suggests that an individual material adopted by an artist neither imposes its essence on his/her conception of the artwork nor predetermines the form of the artwork. Rather, it is the form that takes precedence over the material in the artwork. Bourriaud defines a form as a “structure” which comes into being in the “dynamic relationship enjoyed by an artistic proposition with other formations, artistic or otherwise.”³³

Manovich and Weibel also consider the emblem “post-media” as opening up a situation in which digital technologies serve as an environment in which techniques and aesthetic features of a media are dislocated from its medium-specific boundaries and become increasingly hybridized with those of other media. It is in these two senses that the two theorists’ arguments on the post-media conditions are not unlike Krauss’s “technical support” or Rancière’s “milieu.” Manovich claims that the “post-media” aesthetics are indebted to the developments of various software applications in the areas of moving image production since the mid-1990s, such as Adobe After Effects, Maya, Inferno, and so forth, through which “previously separated media—live action cinematography, graphics, still photography, animation, 3D computer animation, and typography—started to be combined in numerous ways.”³⁴ In Weibel’s words, Manovich’s argument on this situation is rendered as the “total availability of specific media” under the computer, which results in two phases of contemporary art practice: the “equivalence of media” and the “mixing of the media.” While the first phase refers to the computer’s recognition of each art form and its respective medium, the second means that its hardware and software lead to the innovation of each form and the mixture of its media-specific features: “Video and computer installations can be a piece of literature, architecture or a sculpture. Photography and video art, originally confined to two dimensions, receive spatial and sculptural dimensions in installations. Painting refers to photography or digital graphics programs and uses both. The

graphics programs are called paint programs because they refer to painting. Film is proving to be increasingly dominant in a documentary realism which takes its critique of the mass media from video.”³⁵

For the theorists of post-media conditions, the equivalence and availability of all media under computer-based imaging and interfaces does not necessarily lead to the elimination of previous art forms. For Weibel, “it does not render the idiosyncratic worlds in the world of devices or the intrinsic properties of the media world superfluous. On the contrary, the specificity and idiosyncratic worlds of the media are becoming increasingly differentiated.”³⁶ For Manovich, the developments of various software applications to simulate the aesthetics and working methods of previous media amount to what he calls a “hybrid revolution” in the culture of the moving image since the 1990s: a revolution characterized by the reigning of the moving image sequences that use “juxtapositions of media and hybrids of different media techniques as their basic aesthetic principle.”³⁷ This may not support the idiosyncrasy of previous media as it is defined by the traditional medium-specificity argument, insofar as computerization extracts their techniques from their physical support and turns them into algorithmic operations. But in other senses, this hybridity draws our attention to the extent to which various technical procedures available from the software applications are traced back to the moving image forms grounded in previous media (film, photography, painting, video), such as stop-motion animation, 2D and 3D computer graphics, optical printing, analogue “effects” video, etc. Again, this availability of the techniques of the previous media opens up possibilities for their various fusion, including a peculiar technique’s migration into other media aesthetics and forms: “While particular media techniques continue to be used in relation to their original media, they can also be applied to other media . . . motion blur is applied to 3D computer graphics, [and] computer generated fields of particles are blended with live action footage to give it an enhanced look.”³⁸

It should be noted that Krauss’s argument on the post-medium and the post-media discourses of the “new media camp” have an antagonistic relationship with each other in terms of their opposing views on the impacts of electronic and digital technologies. Following Walter Benjamin, Krauss limits her ideas of the medium as technical support and of reinventing the medium to the outdated

technological means (analogue photograph or film) that are increasingly recognized as obsolete in the context of the proliferation of electronic and digital technologies, assuming that they threaten to eliminate the medium's material and technical specificities and assimilate artistic creativity and autonomy into their imperative to mass communication.³⁹ In so doing, her renewed theorization of medium specificity turns out to be circumscribed within the definitional polarity between the "medium" as the resource for artistic expression (and the projector of artistic autonomy) and the "media" as technological means of communication and culture. This dichotomy validates the idea that Krauss's idea of reinventing the medium is possible only when the medium is regarded as obsolete, therefore bracketing out any consideration of an array of artistic practices that explore the expressive possibilities of the medium by relating the medium's material and technical components and its conventions to those of new "media." Thus, it becomes clear that her thesis of the post-medium condition is still anchored in a belief in the uniqueness and singularity of the means of artistic expression that is part of the same Greenbergian modernist argument on medium specificity that she originally intends to renew or overcome. This problem becomes more conspicuous when we see that what Krauss sees as the technical support for reinventing the medium, such as analogue photography and film, is not totally dissociated from the machine-based technologies implied by the term "media."⁴⁰ The fact that in Krauss's theorization there is no space for considering the technological components and their operations of old artistic means enables me to choose the term "media" instead of "medium" in my characterizations of the conditions connoted by the prefix "post."

On the other hand, it should also be worth noting that the discourses on post-media are in some senses as reductive as Krauss's theorization of post-medium, in terms of their assumption that electronic and digital technologies annihilate the idea of medium specificity *per se* and assimilate any artistic practices into their new technical principles. For Manovich, "transcoding," translating all existing media into numerical data and formats through simulation, stands out as the most fundamental principle of new media, as it suggests a process by which the computer negotiates with any of media objects as well as their respective forms and techniques. "Because new media is created on computers, distributed via

computers, and stored and archived on computers,” Manovich contends, “the logic of a computer can be expected to significantly influence the traditional cultural logic of media . . . [and] the computer will affect the cultural layer.”⁴¹ His emphasis upon the processes of simulation and transcoding, however, adds up to a celebration of the possibilities for various combinations of any visual expressions and techniques in moving image production within the same software environment. This is linked to the following conclusion: “Whether these media are openly juxtaposed or almost seamlessly blended together is less important than the fact of this co-presence itself.”⁴² But there is no reason for postulating that the representations and techniques of traditional media disappear, or, are “seamlessly blended together,” just because some of their key definitional prerequisites—for instance, a medium as it is defined by its stable materiality that has a directive impact on the formation of an art—become untenable under the influence of digital media. Considering this, I argue that the formal, technical, and aesthetic components of non-digital media are still at play in the operation of new media even though the processes of simulation and transcoding replace their materiality. Art critic Sven Lütticken supports my argument as he astutely points out that the post-media theorists such as Manovich do not consider the “role played by memory in guiding the use of media.” For Lütticken, the reason that we still maintain the concept of media even though digitization appears to absorb and introduce notable changes in them is that the “media are not just tools or machines,” but also “layerings of [their] conventions, and memories [that] haunt us.”⁴³ Consequently, electronic and digital technologies might disallow the idea of medium specificity if it means an array of boundaries that distinguish one art form from another, but this does not necessarily mean the total annihilation of all the material, technical, and aesthetic components in the traditional technologies for artistic practices.

In sum, my comparative reading of the post-medium and the post-media discourses demonstrates that despite the duality of “medium” and “media,” both share with one another the demise of the modernist medium-specificity argument that insists upon the boundaries between one art form and another, and the reconfiguration of media as internally divided and non-reductive rather than the traditional idea of the medium as primarily defined

by its unique material properties. Besides these two commonalities, Krauss's observations on the artists whom she considers as reinventing the medium in response to the post-medium condition touch on the larger domains of the growing interactions between the art forms (for instance, film and photography) that were previously separated under the traditional logic of medium specificity, as well as between the material and techniques that constitute each of them. The post-media discourses also see those interactions as being activated by the computational processes of simulation and transcoding, by which different objects and techniques that were hitherto demarcated become available and opened to a variety of combinations. All the three correspondences are in line with critic J. Sage Elwell's understanding of the post-medium condition as closely related to the post-media condition, in that both are premised upon the deep hybridization of historically existing media in the age of the digital: "The ability to document performance-based concept pieces, the capacity to transform video into a medium itself, the birth of digital technology and the ongoing realization of digital convergence have all combined to yield a media fluidity. . . . In this post-medium condition everything is a potential medium for artistic creation, including digitization itself."⁴⁴

While concurring with Elwell's view, I would stress two more implications of the three correspondences between the two lines of the discourses. First, both discourses' perspectives on the hybridizations of different art forms and their components commonly suggest that the idea of media hybridity does not necessarily contradict—and thus can be compatible—with that of medium specificity, which demands identifying a media's material, technical, and aesthetic components and the components' differences from those of other media: as in Krauss, her identification of the filmic apparatus as aggregative, and as in Manovich, his view of simulation and transcoding as intrinsic to digital technologies. Second, both discourses' privileged examples of the hybridized artistic expressions—for Krauss, Coleman's "projected images" and Kentridge's "drawings for projection" and, for Manovich, a variety of moving images based upon the combination of the techniques and aesthetics that were separated in different mediums (film, photography, hand-drawn animation)—implicitly point to the hybrid moving images that this book defines and classifies.

Film's post-media conditions

Since the 1990s, it has not simply been film as a celluloid-based medium for the art of the moving image that the post-media conditions outlined thus far have profoundly impacted, but also cinema as an apparatus comprising film's systems of production and reception, its previously designated social site (movie theater), its experience (collective viewing), its cultural status, and its history.⁴⁵ Considering these changes, this book characterizes these two consequences as "post-filmic" and "post-cinematic" conditions, under which the previous medium-specific boundaries of film or cinema become fundamentally dissolved. The decline of the celluloid-based image by the dominance of electronic and digital media arouses several changes heralded by the "death of cinema" discourses on multiple levels: dispensing with reality, the computer-generated imagery does not entice us with any object of contemplation anchored in film's engagement with physical space and time;⁴⁶ the changing value of a cinematic system from the authenticity of going to the movie theater to the interchangeability of viewing practices throughout various platforms (DVD, digital projection, and the internet) in the name of multimedia impoverishes cinema as a prominent form of cultural experience;⁴⁷ from the standpoint of avant-garde cinema, the reigning of digital tools is regarded as thwarting the value of artisanal cinema based on a filmmaker's physical relation to the materiality of film;⁴⁸ and finally, the photochemical image as indicative of a past to the viewer of a present is overshadowed by the electronic and digital images that seem to collapse temporal differences into real-time instantaneity.⁴⁹ All these different yet overlapping responses commonly point to the shrinking of film as an art grounded in the primacy of the photographic moving image whose celluloid-based materiality was believed to maintain the image's connection to the profilmic event, or of cinema as a cultural institution that had long maintained its own setting, equipment, and experience. Viewed together, these discourses of the death of cinema are consolidated into what Anne Friedberg sees as a consequence of media convergence, an end of filmic medium specificity in its traditional sense. "The differences between the media of movies, television, and computers are rapidly diminishing," she writes, "the movie screen, the home television screen, and the computer screen

retain their separate locations, but the types of images you see on each of them are losing their medium-based specificity.”⁵⁰ While all these discourses on the death of cinema suggest the fluctuation of cinema studies as a distinct discipline grounded in its previously stable object of inquiry and concepts, it is also worthwhile to single out two key post-media conditions of film that have been more frequently raised in the discipline and thus deserve more focused attention.

The first and foremost post-filmic condition is undoubtedly the loss of film’s celluloid-based materiality and its subsequent erosion of the value of the filmic image as causally linked to the passage of time in reality. Theorists who highlight this condition tend to emphasize an array of material, technical, and aesthetic discontinuities between celluloid and digital production. For Mary Ann Doane, the indexicality of cinema associated with the analogical relationship of its image to the referent does more than differentiate it from other art forms; the indexical in cinema bears the inextricability of the medium—film’s chemical and photographic base—as well as the possibility for “a transgression of what are given as material limitations.”⁵¹ In this respect, digital technologies are viewed as an increasing threat to the restraints and possibilities that were previously guaranteed by the properties of celluloid medium insofar as they “exude a fantasy of immateriality.”⁵² Doane’s point dovetails an argument from the film preservationist Paolo Cherchi Usai, for whom the immateriality of the digital image marks a fundamental diversion from the historicity of filmic image, an image whose history is derived from celluloid’s material and chemical features subject to entropy and decay.⁵³ Experimental filmmaker Barbette Mangolte links this material difference to the difference of temporal aesthetics between celluloid-based and digital cinema, asking why it is difficult for digital cinema to express duration. For Mangolte, the technical base of the image in digital cinema is fundamentally distinct from the materiality of celluloid and the physicality of its filmstrips, both of which enable the analogue filmic image to have a unique relationship to the duration of the past. “In film, two seconds is three feet and twenty seconds is thirty feet,” she writes. “There is no way to ignore duration when you physically manipulate the piece of film. Nothing like this exists in digital editing.”⁵⁴ Rodowick takes up and furthers Mangolte’s position, claiming that digital capture, transcoding, and synthesis serve to express a different temporality

in digital cinema than the presentation of past duration because they introduce a temporal discontinuity into the processes of recording, editing, and display, unlike the continuities of analogical transcription in the celluloid-based cinema. For Rodowick, digital technologies transform the expression of duration in film, allowing digital cinema to construct what he calls the “digital event,” one that corresponds less to the duration of the world and lived time than to the control and variation of numerical elements internal in the computer’s algorithmic operations.⁵⁵ Rodowick’s view on the fundamental replacement of the inscription of lived duration in the filmstrip with the algorithmic temporality of digital imaging echoes Vivian Sobchack’s contrast between the cinematic cut and the digital morph. Unlike the cut or dissolve in the celluloid-based cinema that is used to effect a temporal change inscribed in the series of filmstrips, in the digital morph “difference is accumulated not as a whole constituted from discrete elements but rather as a subsumption to the sameness of self-identity.”⁵⁶

The theorists’ voices that herald the dissolution of filmic materiality and the indexical value that it was supposed to guarantee are associated with the second overarching post-media condition of film, namely, the loss of the identity of film as a stable object. This identity crisis has been suggested in two ways. First, as for digital cinema, its images are defined not by the primacy of lens-based imagery as in the case of celluloid-based cinema but by their constitutive heterogeneity thanks to the computer’s capacity to transcode any media object and its accompanying techniques. In a similar way as Carroll’s use of the term “moving image” as a broad category, Manovich argues that digital cinema consists of the sum of live-action material (and extensively, analogue photograph), painting, image processing, compositing, 2D and 3D computer animation, and is defined as “*a particular case of animation that uses live-action footage as one of its many elements*,” because “live action footage is now only raw material to be manipulated by hand—animated, combined with 3D-computer generated scenes, and painted over.”⁵⁷ Second, in accordance with the hybridity of the images in digital cinema, the components of traditional cinema have become assimilated into the language and operations of the computer. For Manovich, cinema as a major art form of the twentieth century has found new life, as its key elements—its ways of viewing (framing, camera movements), of structuring time and

space (montage between different shots), of making narrative space (a transparent, single-perspective space viewed through the rectangular screen), etc.—are simulated and extended to the basic principles of the user's accessing, organizing, and interacting with data and objects in the computer software.⁵⁸ The avant-garde film and modernist art in the 1920s, notably Bauhaus and Russian constructivism, each represented by László Moholy-Nagy and Dziga Vertov, lie at the heart of the translation of cinematic elements into digital software and user interaction—that is, cinema's afterlife as a "cultural interface."⁵⁹ Here cinema is considered not so much a definable object or stable medium, but instead a set of representational, perceptual, and expressive conventions which have been developed since its inception and have been borrowed by new media.

At first sight, Manovich's view on the cinema's transition into the cultural interfaces of the computer might cause discomfort for the theorists (Rodowick, Doane, etc.) who have stressed the post-filmic conditions of digital cinema, including the crisis of celluloid-based cinema. The theorists rightly point out the technical differences between celluloid-based cinema and digital imaging, as well as the ways in which the latter unsettles both the image of the former and its relation to reality. As we have seen in my reading of the discourses of the "new media camp," it is true that the post-media conditions proposed by those discourses might run the risk of declaring both the abolition of medium specificity *per se* (and of the concept of the medium in general) and the computer's triumphant absorption of all the technical and aesthetic possibilities of previous media in its transcoding and algorithmic operations. However, if we assume that the technical, aesthetic components of previous media are not entirely annihilated but that they persist in the representations and operations of new media to varying degrees, Manovich's overall arguments in *The Language of New Media* (2001) and its related writings can be read as entailing a range of hybridities inherent in the images that digital technologies configure in their varying relationships to cinema. That is, just as Manovich's emphasis upon numerical representation, by which any media element is represented as a discrete sample dissociated from its material origin, is read as highlighting the digital image's discontinuity with the image of celluloid-based cinema, his explanations of transcoding and cultural interfaces appear to suggest an ineluctable reliance of

the digital image upon the aesthetic and technical components of celluloid-based cinema. Seen in this light, Manovich's two ways of redefining cinema can be read as less teleological than they seem to be, even though some of his arguments are not totally free of techno-deterministic utopianism.

If we consider the ontology of the digital image or digital cinema as grounded in the negotiations between digital technologies' technical differences from celluloid-based cinema and their dependence upon its technical and representational conventions, we can arrive at another instance of the reconciliation between medium specificity and media hybridity, or between the newness of digital technologies and the continuities between celluloid-based cinema and digital imaging. I would call these continuities between the old and the new systems "diachronic hybridization." This type of hybridization echoes a media-archaeological perspective that has demonstrated how digital technologies are situated in the forms and techniques of past media, including Thomas Elsaesser's framework on observing how digital technologies could serve as a "time machine" through which cinema's variability and heterogeneity from its outset can be exposed and reevaluated,⁶⁰ as well as André Gaudreault and Philippe Marion's argument that digital cinema's alliances with other media platforms (such as theme parks, television, and the DVD) testify to cinema's recurring intermediality, namely, cinema's adoption of existing cultural forms (such as magic trick shows, park attractions, stage performances, etc.) in its early stage.⁶¹ Philip Rosen's brilliant idea of "digital mimicry" turns this media-archaeological point of diachronic hybridizations into a media-ontological concept. Rosen coins this term to indicate the extent to which the manipulability of the image afforded by digital equipments and graphic algorithms possesses "the capacity to mime any kind of non-digital image," particularly, in his context, the indexical image produced by photochemical media.⁶² This signals that digital manipulation, unlike the rhetoric on the novelties of digital imaging in contrast to the historically preceding media, is compelled to rely on and incorporate their forms of imagery. In this way, regardless of the increased flexibility and rapidity with which any alteration and configuration of the image can be implemented, which Rosen calls "practically infinite manipulability," digital manipulation must be seen as the mixture of the purely digital and its impure—originally non-digital—elements. Thus, while the manipulative

capability of the digital might be regarded as idiosyncratic due to its specificities such as numerical representation and transcoding, its transformation of old media forms does not necessarily obliterate their specificities on a formal and conventional level but instead demands “a hybridity of old and new.”⁶³

In fact, this scholarship’s sensitivity toward the hybridity of digital cinema and imaging in relation to their historical precedents drives my interpretation of film’s post-media conditions as well. However, there is a key point of caution to be taken in adapting this diachronic perspective, namely that the arguments of Doane, Rodowick, and others on the digital’s differences from photochemical media are still useful in keeping an eye on the technical structures of the digital that inscribe their specific qualities and on the features of the photochemical media that are eroded or displaced by the digital. Thus, I would argue that in developing the perspective on diachronic hybridization, we need to see both continuities and discontinuities, or, to put it in another way, to see the digital’s media-specific features that coexist with its hybrid aspects. For experimental filmmaker and theorist Malcolm Le Grice, an awareness of digital technologies’ fundamental media-specific differences from other mechanical media systems, such as nonlinearity, programmability, and interactivity, can be supplemented by the technologies’ reliance upon those mechanical media: “Some of the more prominent current technological developments in digital media are driven by a desire to produce a time-based auditory and visual capacity which is more or less continuous with the forms and language developed from the history of cinema.”⁶⁴ In this way, it is possible to understand the post-filmic and post-cinematic conditions as being marked by the dialectical correlation of medium specificity and hybridity, and to conceptualize the images produced by digital technologies’ adoption and processing of the photographic and filmic representations as expressing different hybrid configurations of the old and the new. In the words of Markos Hadjioannou, examining the ontology of the images in terms of their hybridity is a “matter of dealing with the new as not new or old but new and old, as simultaneously distinct and interactively interrelated, so that each medium acquires a space of its own but where boundaries are in fact always shifting.”⁶⁵

As a supplement to the diachronic hybridization that has been raised in the existing scholarship that positions digital techniques and aesthetics within their incorporation of (or reliance upon)

the techniques and aesthetics of film as old media, I propose “synchronic hybridization,” a kind of hybridization derived from the encounters between historically existing media technologies in a given time. What I am calling synchronic hybridization in the context of the post-media conditions points to the transformation of cinematic components (cinematography, *mise-en-scène*, and the experience of time and space) and their migration into other art forms and platforms that were largely regarded as distinct from the normative formation of the cinematic apparatus. Or, to put it in another way, the conditions refer to the situations in which those components have been thrown into the double movement of deterritorialization and reterritorialization created by the growing influence of post-filmic technologies and of the arts and media that have been excluded from the traditional medium-specific ideas of cinema. I develop this type of hybridization from another discursive thread of cinema’s post-media conditions. In fact, it was an array of “paracinematic” experiments in the 1970s that prefigured a key moment of synchronic hybridization. Jonathan Walley’s excellent study of the projects, emblematized by the works of Anthony McCall, Paul Sharits, and Tony Conrad, demonstrates that they are cross-disciplinary cinematic practices that aimed to seek the properties and effects of cinema in relation to the domains of performance, post-minimalism, conceptual art, and site-specific art—that is to say, outside the material parameters of film.⁶⁶ The synchronic hybridization prefigured in the work of paracinema has become quite popular since the 1990s, with the dramatic rise of media installations based on the interplay of previously distinct artistic expressions—film and video art, for instance—and straddling between the gallery space and the film theater. Addressing those diverse practices of installation which exploit and transform cinematic elements through other art forms and technical means (video and digital media), Raymond Bellour succinctly touches on the idea of synchronic hybridization as follows: “All we have is incertitudes—slip-sliding, straddling, flickering, hybridization, metamorphosing, transition and passages between what is still called cinema and the thousand and one ways to show moving images in the vague and misnomered domain known as Art.”⁶⁷ In accordance with Bellour’s notion of the “passages” between cinema and contemporary art, Francesco Casetti proposes the concept of the “relocation of cinema” to indicate the post-cinematic situations

enabled by the influences of electronic and digital technologies, under which cinema maintains some elements of the traditional filmic experience while simultaneously involving a variety of forms, platforms (DVDs, mobile phones, the internet, etc.), and activities that it did not previously embrace.⁶⁸ Pushing this idea further, Casetti goes on to assert that the idea of the cinematic apparatus under post-media conditions “no longer appears to be a predetermined, closed, and binding structure, but rather an open and flexible set of elements . . . an assemblage.”⁶⁹ Bearing in mind and developing the ideas of Walley, Bellour, and Casetti, I argue that synchronic hybridization serves as a useful conceptual framework for identifying an array of hybrid moving images produced when the technical and aesthetic components of film go beyond the standardized formation of the cinematic apparatus and are fused with other art forms or media technologies, as well as for examining the images’ complex and border-crossing ontological features.⁷⁰

Consequently, this book argues that film’s post-media conditions can be fully illuminated when we consider both types—diachronic and synchronic—of hybridizations in regard to film’s growing impurity and its persistence in other art forms and media technologies. As for diachronic hybridization, digital technologies appropriate a set of components that have previously defined the identity of film (the photographic image, camera movements, styles of montage, etc.), producing a variety of moving images by maintaining some of its components’ properties (for instance, an image’s photorealistic expression and the image’s reference to profilmic reality) and transforming others with their specific features, such as simulation and algorithmic manipulations. At the same time, synchronic hybridization is useful in identifying and examining the diversified connections between cinema and other existing or emergent technologies, which are emblematised by, for instance, cinema’s multiform distribution via DVDs, mobile media, digital projection, Web-based platforms, etc. In either case, the moving images manifest themselves in the varying coexistence and interrelation of the features derived from the specificity of digital technologies, and those derived from their hybridized reliance upon the material, technical, and aesthetic elements of film. This is the case not only with digital video (DV) cinema and spectacular narrative cinema (two major categories of mainstream cinema), but also with avant-garde cinema, with moving image installations marked by video’s deliberate

merger with cinema (contemporary art), and with various types of digital media art that transform and relocate the components of cinema through computer algorithms (new media art). Thus, it is a key aim of this book to investigate the dynamic negotiations between medium specificity and media hybridity in the moving images produced in those practical territories of nonmainstream cinema.

Video's post-media conditions

In the modernist age, analogue video was considered to be sharply distinct from film because of two aesthetic features that were expressive of its material and technical specificities. The first feature is that, unlike the filmic image, the forms of video image hinge upon an array of technical processes that directly deal with the continuous flow of electronic signals as a constitutive factor of its material. That is, any manipulation of the signal on all levels of the apparatus—from the camera to the synthesizer or processor to the monitor—leads to a shift in the end result of the image, ranging from a change in its surface quality to a change in the relationship between two image units (such as the frame and the shot). This ontological aspect of the video image is what Yvonne Spielmann calls “transformation imagery,” an array of “flexible, unstable, nonfixed forms of the image” characterized by their “fluid pictoriality.”⁷¹ Spielmann’s two features of the video image—“transformative imagery” and “fluid pictoriality”—seem to establish a direct association between the medium’s material and technical properties and the aesthetic forms that they produce. This association alludes to a canonical tendency of early video art which created a variety of video imagery as part of an investigation into the new machine’s inherent nature. Categorizing this tendency as “image-processing video,” as exemplified by Nam June Paik, Steina and Woody Vasulka, Stephen Beck, Peter Donebauer, and Eric Siegel, to name just a few, curator Lucinda Furlong describes it as evocative of Spielmann’s two features. “The image-processing encompasses the synthesis and manipulation of the video signal in a way that often changes the image quite drastically,” Furlong writes. “it conjures up a number of very specific stereotypes: densely layered ‘psychedelic’ images composed of soft, undulating forms in which highly saturated colors give a painterly effect, or geometric abstractions that undergo a

series of visual permutations.”⁷² Numerous accounts of video art have largely defined the stereotypes of the “image-processing” as a direct manifestation of video’s underlying substance, of its states of change, and even of the processes or devices as such, most of which were devised and modified by the artists themselves.

The second feature of video concerns the temporality of the image. The medium-specific discourses on the time of video consider simultaneity and instantaneity as the two most prevalent and intertwining features, both of which are presupposed to be unavailable to film. Early commentators such as David Antin, Stanley Cavell, Bruce Kurtz, Krauss, Fredric Jameson, and others glean both features from the technological formation of early video—live feedback and the existence of the monitor, both inherited from television.⁷³ In contrast to film as a medium, defined by the delay between the inscription of the past event and the time of viewing, video is inherently marked by its engagement with the “present tense.” The continuous flow of the electronic signal in video is described as shaping the simultaneity of event recording and transmission. Under this technological implementation, instantaneity refers to the fact that video’s temporal dimension is hardly stable, inasmuch as the continuum of the flow can be interrupted in the processes of editing and transmission for the sake of making its record of time ephemeral, multiplied, or dubious. This is also deemed to be differentiated from film, a medium which, during projection, structures time built upon the immutability of the recorded past. Regardless of the differences between those discourses, the emphasis on “simultaneity” and “instantaneity” is predicated upon the direct association between the construction of the video apparatus and the aesthetic determination of an artistic medium.

The material, technical, and aesthetic boundaries of analogue video have been weakened when it yielded to digitization, which resulted in two changes that contributed to repositioning video as “post-media.” The first conspicuous change is that digital video is incorporated into an element of the computer that consists of numerous software algorithms to simulate existing media, with its hardware becoming invisible. The second—and more significant—change is the shift from “transformation imagery” to “digital manipulation” in terms of the material and technical dimensions of video imagery. For examining this shift, it is meaningful to consider

Timothy Binkley's argument on digitization as the passage from "transcription" to "conversion." The term "transcription" indicates that analogue media, including film and analogue video, transfer an image from one physical medium to another for storage and display it as materially homogeneous. As with analogue video, a light wave captured by an electronic signal is first transcribed to the processing instruments, then to the magnetic tape combined with display and playback devices. Those two transcriptions ensure the identity of the electronic current as the material source of the image. This material homogeneity of the image is not maintained in the digital "conversion," by which an image is turned into abstract numerical data. As with digital video, the electronic signal of varying voltages is not transcribed, but converted into a pattern of abstract relationships made by software-driven mathematical algorithms. "Digital media do not make analogue ones obsolete, since interfaces are needed to make numerical abstractions tangible, and these converters usually connect digital numbers with analogue events," writes Binkley.⁷⁴ A key difference between analogue video's transcription and digital video's conversion, then, is that in the latter's case the shift on the surface of visual information can occur through means other than transforming the electronic waveform as a material component, the means to which the former was restricted. This entails an array of procedures in digital video post-production, which can be called digital manipulations. They enable one to exert a wider range of control over the source image than allowed by the processes of analogue video. In this way, while deepening the instability and fluidity of the video image, digital manipulation makes discontinuous the circuit of recording, transmission, processing, and display—a continuity presupposed in the transformation of analogue video.

This discontinuity of digital video has two remarkable consequences for the ontology of digital video image in comparison to its analogue counterpart. First, the visual information coming from the electronic transcription of an event in front of the lens does not become a prerequisite for the specificity of the video image in the digital era. To put it differently, in digital video, any sort of image taken from different material sources can be converted into a series of information that is easily translated into a flow of electronic signals. The now-popularized video software applications are able to deal not merely with images captured by

the digital camera, but with image objects encoded from originally different material formats (transferred film, scanned photography and painting, 2D or 3D graphics). In this sense, it is tempting to say that digital video echoes the way in which Manovich defines digital cinema as the sum of previously disparate images, including live-action imagery. Second, in tandem with the extendedness of the source image of digital video, the manipulation paradigm includes a resulting image which does not need to be directly concerned with the intrinsic qualities of video as a distinctive medium. Since the mid-1990s, video art has witnessed the increasing erosion of the “pure” electronic moving image. A number of renowned video art critics attribute this change to the digital revolution, an innovation that causes changes in video technologies and, at the same time, the merger of different media in generating imagery. For instance, Chris Meigh-Andrews states: “The convergence of computer manipulated imagery from a diverse range of sources, together with the development of image display technologies . . . has rendered the distinction between previously distinct media increasingly obsolete and largely irrelevant.”⁷⁵ Michael Rush also agrees with Meigh-Andrews’s declaration of the weakened medium specificity of video. “Video technology is now in a hybrid stage, combining all manner of digital technologies in the creation of what is likely to be a new medium,” Rush claims. “It is time for video to assume its place as simply a ‘filmic’ medium, now that the word ‘filming’ refers to the many ways in which the moving or animated image is created.”⁷⁶

Since the 1990s, the transition from analogue transformation to digital manipulation has also enabled the ontological distinction between film and video in the light of temporality to be diminished. As the projection of the prerecorded image increasingly replaced the feedback system combined with the monitor, it promoted film’s incursion into the exhibition space. Accordingly, the simultaneity between recording and viewing did not become a prerequisite for the temporality of video. Yet the dominance of projection is not a single factor in this change. As to the possibility of converting film into digitized files for projection, numerous artists came to cross the boundaries between video and cinema in various ways, each pursuing their own inquiry into the time of the moving image. Not simply did the artists adopt a cinematic language and production system for shooting with a video camera, but they often used digital-based video technologies to deal with any format of footage

in editing and installation, whether shot on film or video. In this way, the disintegration of the easily identifiable video apparatus has triggered the interchangeability of cinema and video. Fueled by this technological reformation, a number of exhibitions have brought together a variety of works coming from different materials (16 mm and 35 mm film, digital video, HD video) and installation formats (film projection, video projection, or plasma-screen display) in the name of examining notions of time which do not precisely conform with the concepts of simultaneity and instantaneity. This suggests that the ways of using video to explore the time of the moving image became diversified. Organizing an exhibition devoted to works derived from video projection, Marc Mayer already anticipated this tendency in the mid-1990s, which he characterized as a “reflection on time.” “Through real time or extreme slow motion, through repetition, or rapid pictorial variation and recombination, through editing,” he notes, “video projection resembles nontemporal art without actually compromising the temporal dimension.”⁷⁷

In sum, the paradigm shift to digital manipulation entails that the video image has become uncoupled from the particular technologies of video’s early years, and that it has merged with the material, technical, formal, and aesthetic constituents of other media images in terms of its aesthetic dimensions of surface and temporality. It is from these two consequences that we can identify video’s post-media conditions in its digital phase. Despite these conditions, however, the affinity between early video’s transformative capacities and the manipulation of digital video has not drawn specific attention in the still-modernist criticism on contemporary video art. What should be underlined in this context is that the property of video that makes their source image temporally fluid and figuratively flexible is still maintained in its digital version. For illustrating this point, it is of great help to refer to Manovich’s remark on the relationship between the electronic and the digital in terms of the instability of the image:

To a significant extent, an electronic signal is already characterized by similar variability because it can exist in numerous states. For example, in the case of a sine wave, we can modify its amplitude or frequency; each modification produces a new version of the original signal without affecting its structure. . . . *All that happens when we move from analogue electronics to digital computers is that the range of variations is greatly expanded.*⁷⁸

To expand on Manovich's view on the transition of video from electronic media to the digital, it could be argued that the analogue video image is relatively "hard" in comparison to the "softness" of digital video imagery, the latter of which is able to encompass images derived from both electronic and non-electronic signals (pixel), or from both signal-based images and the encoded versions of object-based images (picture, photography, film). While this ontological heterogeneity of the image based on the computer's processes of abstraction and transcoding can be seen as specific to digital video, the capability of video to alter the figurative and temporal qualities of the source image remains continuous from analogue video. It is here that the digital video image involving elements of visual media previously distinct from purely electronic imagery—namely, photography, painting, and film—is also conceptualized as both medium-specific and hybrid. Spielmann indeed suggests this point in her discussion on the importance of the intersection of analogue video with the digital. "Due to its open apparatus—the processing and transformative characteristics of the electronic image—video, despite its status as an analogue medium, shares significant features of the digital," she notes, "*both the electronic and the digital media forms of video have the potential to produce imagery in any direction and dimension in an open structure.*"⁷⁹

With this dialectical juncture of medium specificity and hybridity in mind, I would claim that what matters in the video's post-media conditions is the persistence of the transformative techniques of analogue video in the manipulation paradigm of digital video. Those who engage in the debate on the status of video in the digital era nonetheless tend to emphasize the weakened link between those techniques and the formal and aesthetic imperatives that video is directed to pursue; as Spielmann further argues: "The point I want to stress is that such contemporary 'video installations' are less concerned with video than with other media forms."⁸⁰ Her argument suggests that the importance of video may be neglected when the manipulative features of video do not deal with the processes of video *as such*, but instead with the forms or conventions of film and photography. However, Spielmann's downplaying of the hybrid forms of moving image in digital video contradicts her observation on the correspondence between electronic transformation and digital manipulation for two reasons: first, in terms of materiality, the image encoded from the celluloid-based media exists under the

condition of the interchangeability between electronic signal and digital pixels; and second, for this reason, the image lends itself to certain changes made by the manipulative techniques of video such that it acquires different qualities in its final state. For these two reasons, the exploration of other media forms via the manipulation of digital video does not necessarily mean the elimination of video's material and technical specificities (the amalgamation of electronic signals and digital pixels) in the light of its transformative characteristics. Hence, what is at the heart of evaluating digital manipulation is tracking how these specificities of digital video are linked to the set of corresponding representational practices that testify to video's post-media conditions in the two types of hybridization, as is the case with the ontology of the digital image in relation to film. As to diachronic hybridization, digital video maintains a range of continuities with its analogue predecessor while inscribing its own material and technical specificities in the resulting image; and as to synchronic hybridization, its expressive possibilities have expanded beyond video's previously established medium-specific boundaries that demarcated video art from other visual arts, therein giving it an unprecedented relationship with the components of painting, photography, and film.

Intermedial approaches to hybrid moving images

The post-media conditions of film and video examined thus far eventually aim at identifying the two key conditions for the emergence of hybrid moving images across different media of art: first, diachronic hybridization as a type of hybridization caused by the transition from old media (photography, film, and analogue video) to digital media technologies, which activates the awareness of the old media's internal aggregative characteristics and entails a broad system of interactions between the old and the new media; and second, synchronic hybridization as the sum of conceptual and technical operations that reposition the components of all these existing media and call into question, traverse, and redraw their formal and generic boundaries. Against the backdrop of these two hybridizations, this book defines the ontology of hybrid moving

images as that of “coexistence and interrelation.” This suggests that the images include an array of new production processes by which the material, technical, aesthetic properties of more than two media engage in creating the images thanks to digitization. As a result, the hybrid moving images are marked either by the simultaneous existence of different media elements (for instance, the coexistence of stillness and movement) or by the transformation of one media’s elements through those of the other (for instance, the layering of different temporal traces in a single picture frame). Although previous studies on the digital image have occasionally addressed these two features, they have tended either to exaggerate its difference from the images of old media or to generalize its constitutive hybridity as the seamless absorption of the traces of non-digital media. It is my ambition in this book to overcome these two shortcomings and establish the hybrid moving image as a conceptual field for thinking how the previous ontological accounts of the similarities and differences between old and new media are contested and reconfigured in a variety of ways.

In the following I shall tease out these two definitions of hybridization under post-media conditions by discussing how they appear in the domain of the moving image. This is to propose the idea of intermediality not simply as a methodological tool for approaching and analyzing the hybridity of the moving image, but also as a type of configuration based on the mixture of the components from more than two media and thus on their co-presence and interrelation (For this reason, I prefer using the term “configuration” to “figuration”). In this sense, the two ontological hybridizations demand a formalist view on media technologies and their role in shaping visual expressions, because it is on the level of their forms that the aspects of these hybridizations, including the simultaneous occurrences of their media components, become discernible.

As a methodological concept, intermediality is an umbrella-term that refers to the border crossings between different media and the mixture of them in art forms and practices. Irina O. Rajewsky and Werner Wolf provide broader definitions of this term, such as “a generic term for all those phenomena that . . . in some way take place *between* media,”⁸¹ and one that is “applied to any transgression of boundaries between conventionally distinct media of communication.”⁸² Despite the extreme variety of the subjects and the approaches to intermediality, it is commonly acknowledged that

intermediality suggests a methodological tool for paying attention to the interactions between different art forms or disciplines and analyzing their types such as dialogue, cohabitation, exchange, transformation, collision, appropriation, and repurposing. What is at issue, then, is how to distinguish which particular kind of intermediality fits into the types of moving image based upon the interactions between different art forms or media components. Rajewsky's concept of "media combination" is particularly useful for defining and analyzing hybrid moving images in question. This refers to an array of media artifacts whose intermedial quality is determined by "the media constellation constituting a given media product, which is to say the result or the very process of combining at least two conventionally distinct media or medial forms of articulation."⁸³ Unlike other kinds of intermediality, including the transformation of a given media product into another medium (as in the case of the adaptation of a novel by film), or a self-reflexive inquiry into the extent to which an art form (such as film) is comprised of conventions and styles from other media,⁸⁴ the category of media combination is able to deal with a more particular case in which previously distinct technological media intimately merge with each other in a newly constituted form on the material, technical, and aesthetic levels, while also maintaining the focus on the other aspects of intermediality. Rajewsky's category of media combination inspires me to consider the concept of intermediality as indicating an array of particular moving images based on the varying combinations of components from film, video, and the digital. The notion of combination can be interchangeable with the term "configuration," a concept coined by Joachim Paech to characterize intermediality as particular image forms in which relations between different media technologies are made visible: "The trace of the medium would become describable as *a figured process or a configuration* in the film and in the dispositive situation of observing the film (at the cinema, on television or video, etc.)."⁸⁵ Here, Paech's concept of configuration does not simply emphasize the combinatory nature of an image form that results from the encounter between the material, technical, and aesthetic elements of more than two media. More significantly, intermediality in this sense is understood as a constitutive process by which those elements negotiate with each other in their engagement with the formulation of a new image.

The concept of intermediality as a range of media combinations or configurations helps to distinguish hybrid moving images from the objects of investigation that previous cinema studies have adopted regarding the comparative analyses of the relationships between cinema and other arts, such as literature and painting. As Ágnes Pethő succinctly summarizes, these studies cover a wide area of researches, encompassing (1) the mutual influences of cinema and the arts, (2) the embedded representation of painting or literature in cinema, and (3) common phenomena that can be viewed comparatively in cinema and the arts.⁸⁶ Given Rajewsky's definition of media combination, it becomes obvious that all the comparative studies on the three subjects of intermediality have ultimately resulted in confirming either film's reliance upon other art forms (literature, painting, and theater) as constitutive of its established specificity or cinema's integration of their languages and conventions in its particular organization of images and narratives, such as first-person narration and the composition of *tableau vivant*. These two lines of the cinema studies on intermediality, which are still confined to the purviews of self-reflexivity and intertextuality, suggest that less attention has been paid to the moving image artworks that are marked by their combinatorial implementations of more than two media, as well as to the changes in the material and technical dimensions of the media as that which make possible such implementations.

Despite this paucity, Jay David Bolter and Richard Grusin's now-famous concept named "remediation," which is defined as "the representation of one medium in another,"⁸⁷ is perhaps one of the most pivotal theories for conceiving intermediality as a configuration of hybrid moving images from a diachronic perspective. In this view, a new medium is always differentiated into multiple material, technical, and formal elements derived from its repurposing of older media, (e.g., the user interfaces of video game space are based on their algorithms' repurposing of filmic techniques). At the same time, this view supposes that a new medium cannot be isolated as a transcendental entity inasmuch as it can be repurposed as a constitutive element of other emerging media. "A medium is that which remediates," Bolter and Grusin thus write, "It is that which appropriates the techniques, forms, and social significance of other media and attempts to rival or refashion them in the name of the real."⁸⁸ Bolter and Grusin's two additional terms,

“immediacy” and “hypermediacy,” emerge as two representational strategies of remediation that are applicable to historically existing media. While immediacy refers to a range of processes by which the presence of the medium is denied and effaced, so hypermediacy is typified by a fascination with the medium itself as it brings its styles and conventions into relief. Digital technologies, for Bolter and Grusin, are also governed by immediacy and hypermediacy as the double logic of remediation: for instance, just as the World Wide Web encapsulates the logic of hypermediacy as expressive of the desire for multiplicity, so do digital photography and computer graphics for animated films and computer games imitate and adopt the criteria of Cartesian geometry and linear perspective in order to achieve the illusion of transparency. Bolter and Grusin view cinema as a telling example of an art form characterized by the processes of “mutual appropriation” of film and digital media in the double logic of immediacy and hypermediacy. Just as numerous video games borrow the representational strategies of film, from camera positions to the language of editing, so do contemporary films adopt digital viewing interfaces (small-screen viewing devices, interactive interfaces, etc.) and computer graphics, thereby multiplying their media references. To be sure, there are two shortcomings in Bolter and Grusin’s theory of remediation as it is applied to a variety of hybrid moving images in question. First, their examples of remediation tend to privilege the digital artifacts of mainstream cinema and its related entertainment, therefore bypassing various hybridizations that occur in the domains of experimental film and video and media installations.⁸⁹ Second, and more significantly, it is not difficult to see that their conceptual pair of immediacy and hypermediacy reminds us of the aesthetic dichotomy of realism and modernism, which leads to obscure the ways in which digital technologies transform the material, technical, and aesthetic components of an old media to construct a new, hybridized configuration of the image. My classification and analysis of hybrid moving images accordingly aim at overcoming these two limitations of the concept of remediation while acknowledging its effectiveness.

Raymond Bellour’s concept of the “*entre-images* [between-the-images]” can be seen as a prominent concept for considering intermediality as a type of image configuration based on synchronic hybridization, namely, a hybridization by which properties of more than two media representations are set in motion and made visible

under post-media conditions. By this process, the resulting image adds up to the complex exchange between more than two media technologies, as it reveals the differences and similarities between them yet does not strictly pertain to any of them. This is the reason that Bellour sees the *entre-images* as occupying the “space of all these passages” [*l'espace de tous ces passages*]. For Bellour, video is a medium that particularly opens up and configures this liminal space, since

video is above all a go-between. Passages . . . between mobile and immobile, between the photographic analogy and that which transforms it. Passages, corollaries, that traverse without exactly encompassing these "universals" of the image: thus, between photography, film, and video, a multiplicity of superimpositions, of highly unpredictable configurations, is produced.⁹⁰

For Bellour, video plays a particular role in the intersections of different media such as painting, photography, film, and the computer image, as its multidimensional or heterogeneous characteristics generate certain image forms in which a medium undergoes reflexive processes in relation to the other media. Initially, video goes hand in hand with film as a medium that produces the moving image based on the bond between the camera and profilmic reality because it emulates film's lens-based mechanism. At the same time, however, video's particular electronic specificities allow us to create an image that takes on both pictorial qualities and spatiotemporal qualities different than those of film—the latter aspect refers to the effects of multidimensionality and omnidirectionality within the video image's picture frame, which becomes distinct from the linear ordering of visual elements and the clear demarcation between the on-screen and the off-screen spaces in the cinematographic image. Also, these two aspects, which derive from the technical processes of the electronic apparatus, can also be applied to the computer-based imaging system, through which one can access and manipulate any type of visual data, but without necessary reliance upon the recording process of the cinematographic and the videographic images.⁹¹ Considered this way, video is a medium whose specific features are identified, yet at the same time open to the intermedial relations of its historical predecessors and descendants. The *entre-images*, then, opens up the space for a hybrid image form in

which these relations are inscribed and through which the viewer encounters both the convergence of elements of those media and their divergent transformations.⁹²

Bellour rightly places the *entre-images* within the two axes of hybridization. On the horizontal axis (which corresponds to synchronic hybridization) lie new images produced by the exchange and collision between different media images—film, photography, video, and the digital—that were hitherto presupposed to be distinct mediums (what he calls “passages of the image”). On the vertical axis (which corresponds to diachronic hybridization) lies a twofold historical change in the cinematic apparatus, mobilized by electronic and digital technologies (what he calls the “double helix”): the technologies make the cinematic apparatus go beyond its traditional formations while assimilating those formations into their capacities for converting, storing, and transmitting data.⁹³ For Bellour, electronic and digital artifacts cause cinema to be dissolved, while simultaneously emerging as the resources for the evolution of new cinematic forms by which the relationship between old and new media is variably reexamined.

Like Bellour’s *entre-images*, Yvonne Spielmann’s conception of “intermedia” most extensively encapsulates the framework for considering intermediality as a particular type of configuration based on the hybrid relations between different media components from a synchronic perspective: “The characteristic of intermedia may be identified in *certain forms of the image, when elements of the static and the moving image are interrelated to create a third form of the image.*”⁹⁴ Spielmann draws upon Peter Greenaway’s *Prospero’s Books* (1991) in order to identify the two characteristics of the intermedial image. In this high-definition video film, Greenway uses electronic and digital processing to rework and transform both photographic and filmic images. This processing enables a series of static images, reminiscent of the serial photography of Eadweard Muybridge and Étienne-Jules Marey, to be animated in a manner similar to the generation of cinematic illusion. The resulting visual expressions include the dynamic insertion of the digitally animated animals or human figures (i.e., still images, whether painterly rendered or photographed) into the live-action film frame, or point to the “cluster,” a particular type of image that is made through the “multiple layerings of different images or image elements” and results in a “spatial density.”⁹⁵ The cluster serves as a media

object that requires an intermedial approach as a methodological tool for analyzing the array of processes by which different media elements are merged into a hybrid type of image. Spielmann singles out these processes of interrelation as “collision” and “exchange.” First, collision points to the simultaneous existence of elements from different media, for instance, elements of filmic images and static (painterly or photographic) images, in the form of another media technology, for instance, the computer-generated or videographic image. Second, exchange means that the media-specific types of images are “reworked in other media at the level of form.”⁹⁶ For instance, the interval between successive frames in film is processed by electronic and digital imaging system. Thus, the intermedia image calls upon us to see that its hybrid modality hinges upon how these components are maintained or transformed in the structure of synchronic hybridization. Seen in this light, Spielmann’s concept of intermedia allows us to see both the forms and conventions of the traditional media image and the new ontological features introduced by electronic and digital technologies. That is, the intermedia paradigm affirms the material and technical differences of digital media from their analogue predecessors while also turning the viewer’s attention to the ways in which these two are interrelated in a new image form.

Spielmann’s concept of intermediality leads us to recognize the two ways in which the post-media conditions of film and video, marked by a media’s differentiation into its set of material, technical, and formal elements, add up to different types of hybrid moving image. First, it functions as a methodological framework for identifying the image as the configuration of elements coming from different media, which is marked by different patterns of co-presence and interrelation. Second, it suggests that intermediality in the hybrid moving image is grounded in the interrelated ontological conditions of media technologies, namely, the diachronic and synchronic hybridizations of historically existing media. Despite these two advantages, however, Spielmann’s privileging of the cluster as a prominent form of intermedia image overlooks other possible forms of intermediality that are not contained within the aesthetics of sheer juxtaposition as the hallmark of modernist visual art. The types of media artifacts I classify and examine in this book’s chapters suggest that there is a wide range of possibilities for various correlations of film, video, and the digital on their material, technical, and aesthetic levels, which results in different coexistences

of, and exchanges between, the components of those media in the artworks of the moving image.

Addressing the question of how new media technologies simultaneously depend upon and differ from conventional media for creative expression, *Between Film, Video, and the Digital* theorizes the reconfiguration of an artistic medium and its specificity in the context of post-media conditions that enable hybridizations of film, video, and the digital. This wide range of scope is intended to suggest that post-media conditions are not limited to a particular genre or mode of practice. That is, post-media conditions are marked by the attempts of the artists and filmmakers who have aspired to redraw the boundaries between different media and their corresponding art forms or genres, and thereby render them constantly shifting, and by the hybrid images through which their conceptual and technical devices are inscribed and made visible. In this sense, this book is a critical intervention in the topology of the contemporary art and culture of the moving image, correlating an extensive overview of their tendencies with a series of in-depth analyses in the light of a theorization of media hybridization in accordance with the reconfiguration of medium specificity.

In tracing the complex breeds of hybrid moving images and examining their formal and technical aspects, the book offers five categories as conceptual tools: “videographic moving picture,” “hybrid abstraction,” “transitional found footage practice,” “intermedial essay film,” and “cinematic video installation.” I propose these categories to highlight that which happens to the media that would remain as distinct if they had remained under the doctrine of modernist medium specificity, and the changes that post-media conditions bring to the media’s material, technical, and aesthetic layers. These conceptual constructs are not mutually exclusive in terms of the logic of differentiation applicable to the traditional concept of classification: rather, I intend to leave intact the overlaps between the categories in order to underline the extent to which the images’ ontology of coexistence and interrelation is dispersed across different platforms and genres, constructing a range of aesthetic constellations that a seemingly disparate group of artworks commonly realize. That is, these overlaps are a key aspect of the post-media age.

The aesthetic constellations, then, are concerned with a host of concepts that the rich traditions of cinema and media studies

have pursued in theorizing: indexicality, movement, duration, materiality, archive, historicity, memory, and apparatus. I introduce and elaborate on the five categories of hybrid moving images as artifacts that offer a renewed understanding of those concepts: videographic moving pictures in relation to indexicality, movement, and instantaneity; hybrid abstraction in relation to abstraction and materiality; transitional found footage practices in relation to the historicity of cinema and the concept of archive; intermedial essay films in relation to the memory of cinema; and finally, cinematic video installations in relation to the compound idea of the cinematic or video apparatus. In this way, *Between Film, Video, and the Digital* does not simply establish itself as a monograph dedicated to post-media and the hybrid moving image as new theoretical arenas for media transition and the ontology of the moving image, but also offers updated accounts of how traditional cinema and media studies can be revivified in its encounter with its neighboring media technologies and art forms.

The first and second chapters position and track down two aesthetic tendencies of hybrid moving images, namely, photorealistic and abstract aesthetics, in the light of video's post-media conditions. Chapter 1 discusses an array of artworks by Sam Taylor-Johnson, Mark Lewis, Bill Viola, Fiona Tan, Adad Hannah, and David Claerbout, all of which make porous the categorical distinctions between film, photography, and painting by creating an ambiguous correlation between stillness and movement enabled by digital video. It classifies their images as "videographic moving pictures"—a combination of "moving" as pertaining to film and video with "picture" as implying the mode of stillness common to painting and photography. The importance of examining this type of the hybrid moving images lies in its challenge of a few traditional conceptions of traditional art forms: photography as privileged by the material stability of its chemical basis and defined by its capacity to freeze the moment in time; photography demarcated from painting and cinema; and video art whose images are clearly distinct from the filmic image. This chapter stresses a crucial role of digital video in engendering the interaction of three properties derived from film, video, and the digital: film's inscription of photographic reality, analogue video's ability to alter the surface and temporality of the source image, and digital manipulation's blending and mediation of the two. Considering digital video this

way, it is possible to conceptualize videographic moving pictures as remediating and refashioning two historically existing image forms that experimental cinema has long developed in the light of cinema's ineluctable link to photographic stillness, which I call the "film stilled" and the "still film." This chapter closely examines the works of the artists who have elaborated upon these two image forms with the aid of digital video. In doing so, I argue that the layering of photographic and cinematic properties common to the practitioners' videographic moving pictures enables a set of concepts grounded in the analogue photographic media to have unprecedented relations to their previously assumed opposites: indexicality connected to manipulability, and photographic pastness to cinematic presentness.

Chapter 2 provides a classification of hybrid moving images that opposes videographic moving pictures due to their abstractionist aesthetics and materialist energy, while also setting up the historical genealogy of the images. By creating this type of hybrid moving images, artists and filmmakers such as Evan Meaney, Rosa Menkman, Rebecca Baron and Douglas Goodwin, Takeshi Murata, Lynn Marie Kirby, Siegfried A. Fruhauf, Johanna Vaude, Jürgen Reble, and Jennifer West have led to a notable tendency of contemporary digital experimental film and video that has brought into relief and explored the materiality of media. This chapter singles out a dynamic correlation of representational and abstract components in the practitioners' images as a key character of the practitioners' hybrid images. In so doing, it claims that this correlation testifies either to the transition of the aesthetic of abstraction in structural film and analogue video to the material substrates and algorithms of digital imaging, or to the continual interaction between the material traces of film and video. In either case, digital video can be seen as both inheriting its aesthetic of abstraction from its analogue predecessors and inscribing its code-based material and technical specificities in the resulting abstract imagery. Encompassing the two, I offer "hybrid abstraction" as a second category of the hybrid moving image driven by materialist energies, with "digital glitch video" and "mixed-media abstraction" as its subcategories.

Chapters 3 and 4 focus upon how the transformative or manipulative elements of analogue and digital video are used to deal with an array of problems raised by film's post-media conditions, including how the post-filmic technologies shift the ontological state

of the historically existing images, how the post-filmic technologies can serve to continue and update filmmakers' celluloid-based techniques in reworking those images, and how those technologies construct both the memory of those images and that of the filmmakers who reflect upon or investigate those images. Chapter 3 tracks several experimental filmmakers (Vicki Bennett, Gregg Biermann, Christoph Girardet-Mathias Müller, R. Bruce Elder, and Ken Jacobs) who elaborate their found footage practices with the help of digital video. I define their different uses of digital video as "transitional found footage practices," given that their resulting images reflect two ideas of transition regarding the ontology of cinema in the digital age: a transition of film-based techniques for traditional found footage filmmaking such as montage and special effects, and a transition of found footage itself from celluloid to the stream of digital video on the levels of spectatorship and of the film image itself. My interest in the implication of transitional found footage practices, particularly what the hybridity of their images and techniques suggests for found footage filmmaking's major objective of attempting to reconstruct the archive of the past, is extended into Chapter 4. Here, I focus upon a particular group of essay films marked by their uses of video technologies (analogue video, digital video, and internet-based video platforms) to process and retrieve film-based imagery (images made with 8 mm, Super-8mm, 16 mm) that shapes the landscapes of their filmmakers' personal memory and reflection. Such filmmakers as Hito Steyerl, Lynne Sachs, Clive Holden, and Jonathan Caouette employ these multiple formats in their essayistic projects in order to investigate how the memory trace inscribed in film is transformed and reconfigured as it passes through the filters and textures of post-filmic media. Accordingly, these filmmakers' works are replete with images in which the traces of celluloid dynamically interact with the properties of video, images that result in the complex configuration of the two media as testifying to the construction of their memory and subjectivity as open and dialogical. In this sense, I call this type of essay film "intermedial essay films." In these two chapters, the dialectic of convergence and divergence, or medium specificity and hybridity, extend into another dialectical dimension of these practices: that is, the filmmakers' embrace of new technologies stands between past and present in that they aspire to renew their technical and historical exploration of film's past with the present media systems

while also acknowledging the extent to which these systems mutate the celluloid-based image.

The last chapter extends the dialectic of medium specificity and media hybridity from the level of the image to that of the apparatus as it addresses a particular group of media installations that have been popular due to the mutual fascination between cinema and contemporary art since the 1990s. Numerous artists, as well as established filmmakers including Chris Marker, Harun Farocki, Abbas Kiarostami, to name just a few, have extensively used video technologies to draw on and manipulate cinematic image and narrative, such that their works explore the sensorial and mnemonic power of cinema as an art of spectacle and how influential and global cinema was in shaping their memories and artistic ideas. As a result, the works' resulting constitution appears to be the amalgamation of cinema and video on the levels of their image and apparatus. In this chapter, I characterize these works as "cinematic video installations," analyzing the ways in which the medial components of cinema and video are correlated. Providing a critical remapping of how cinematic video installations have been discussed in both the discourses of post-cinema and those of contemporary art, I argue that cinematic video installations must be viewed as a complex hybridization of cinematic and video-based technologies. This argument entails viewing video not as anchored in a limited set of material and technical devices, but as an electronic and digital dispositif that offers the artist a wider range of conceptual and technical methods for the aesthetics of hybridity, impurity, and confusion. Bearing this in mind, I identify in this chapter spatialization (materializing the spectatorial experience of the film image, montage, and narrative in the theatrical or architectural forms of screen-related apparatuses) and temporalization (manipulating the time of the image by means of digital video's capacities) as two key operations that video technologies execute in adopting and altering the components and historical traces of cinema. By performing formal analysis of the installation pieces by several artists or filmmakers such as Farocki, Kutluğ Ataman, Doug Aitken, Eija-Liisa Ahtila, Douglas Gordon, Candice Breitz, and Stan Douglas, I demonstrate that the ambiguous cohabitation of cinematic and video-based specificities occurs not only in the domain of the image space but also in the formation of the apparatus that frames the image and determines the viewer's relation to the image.

CHAPTER ONE

Videographic moving pictures: Remediating the “film stilled” and the “still film”

Introduction: “moving pictures” in the post-photographic era

In fall 1977, art critic Douglas Crimp organized an exhibition that showcased the work of Jack Goldstein, Robert Longo, and others. He then placed these works under the umbrella of “pictures”—also the title of the essay dedicated to the show—in the sense that they were “not confined to any particular medium.”¹ By the term “pictures,” Crimp meant the various ways in which artists appropriate and interweave the technical components and representational conventions of different media (not simply photography, film, video, and performance, but also painting and drawing) to compose particular images, which are difficult for viewers to locate within a particular physical substance: “We are not in search of sources or origins, but of structures of signification: underneath each picture there is always another picture.”² More interesting than this postmodern account is Crimp’s use as example “pictures” two films allied and resonant with photography: Goldstein’s *The Jump* (1979),

in which the shimmering figure of a diver continually appears and disappears on the screen via rotoscoping, and Longo's *Sound Distance of a Good Man* (1978), a film that blends a fixed frame as its only formal element with the "literal time of the performed events."³ These two films defy the tenet of modernist medium specificity that demands stable, formal boundaries drawn by the medium's material substrate, either by foregrounding a transition of the human figure from a still image to a moving one (Goldstein's film) or by endowing the motionless subject, which appears to be a frozen image, with a lived duration to generate a subtle juxtaposition between past and present (Longo's film).

Both forms can be called "moving pictures" in a sense; but in this case, the word "picture" must be understood not simply to assist "movement" denoted by the word "moving" but also to imply the mode of stillness, given that one of its primary meanings denotes a "representation made by various means (as painting, drawing, or photography)."⁴ Faced with this confusion, Arthur Danto has defined "moving pictures" as "*pictures* which move, not just (or necessarily at all) pictures of moving things."⁵ Even so, he did not fully overcome the difficulty in finding the "difference between pictures and moving pictures," insofar as there are cases "in which nothing except knowledge of their causes and of the categories which differentiate [one from the other] makes the difference between the two."⁶ Seen in this light, the films of Goldstein and Longo deepen the difficulty, questioning the "knowledge" of the causes of their movement by revealing their reliance on photography and making porous the "categorical" distinctions between cinema and photography. Although made and showcased in the arena of contemporary art, the two filmic works also echoed the thread of experimental films at that time that highlighted and interrogated troubling yet intriguing relations between the two media by virtue of their specific "moving picture" forms.

We now see both artists and filmmakers turning their attention to these forms by way of different platforms and media expressions, from theatrical projection to moving image installation in a gallery, to CD-ROM and the World Wide Web.⁷ Notable in this crossbred trend is the growing use of digital video to rework the "moving pictures" inherited from or alluding to films that manifest their kinship with photography. Given that digital video is harnessed both for recording (as in the adoption of the camera for photography)

and cinematography) and for postproduction (as in the process for *graphically* manipulating the image based on the camera's relation to profilmic reality), in this chapter I shall characterize these hybrid image forms, in which photographic, filmic, and digital attributes reside in conjunction with the correlation of the static and the animated, as "videographic moving pictures." My concept exists in dialogue with several scholarly works in the fields of cinema studies and art history since the 2000s, which examine the hybridity and interconnection of photography and cinema in the spirit of challenging and dismantling the reductive medium-specific distinctions between the two, in response to the ubiquity of films, videos, and installations that confront viewers with the ambiguous exchange between stillness and movement.⁸ In particular, my terminology echoes some concepts recently devised in the field of photography studies that refer to the movement/stillness tension activated by contemporary works of photography and moving image: for instance, in describing Jeff Wall's photographs, in which he employs the conventions of painting, photography, and film, Hilde Van Gelder and Helen Westgeest have used the term "multi-mediating pictures" to indicate that they activate the viewer's "layered perception . . . of the multiplication of mediums."⁹ Similarly, Ingrid Hözl has coined the term "moving stills" to argue that the convergence of moving and unmoving images in digital media "is already laid out in the media history of photographic and filmic images and their hybrid forms."¹⁰ While my own concept of "videographic moving pictures" shares the attention given by these two terms to the dissolution and intermingling of photography and film, it is distinct from them in that it stresses the vital role of digital video in shaping the aesthetic complexity of the particular images that present the cohabitation of stillness and movement.

From the standpoint of contemporary photography, the burgeoning of videographic moving pictures is placed within the sphere of "post-photography," a term that represents both the growing replacement of the analogue camera and photochemical materials by electronic and digital technologies in the production and circulation of photographic imagery, and the ontological and aesthetic changes of photography that are introduced by the replacement of the machinery. Since the early 1990s, numerous writings have addressed the multidimensional impacts of these technologies on the traditional concepts and practices of photography. Regardless of their detailed differences in argument

and position, critics and scholars who have engaged in this discursive field have largely singled out two important developments over art born of chemical photography. First, these newer technologies have displaced photography's material and technical properties, and thereby undermined some of its fundamental characteristics, such as the ability to serve as the "indexical" image, an image that bears a physical connection to the real of the past due to the camera's transcription of the trace of the real on the photochemical plate.¹¹ The "post-photography" discourses both in photography and in film studies have largely asserted that the digital image weakens the traditional photography's indexical link to physical reality because it can be produced without the physical presence of the object that it represents (in the case of the computer-generated imagery based on simulation), and because in digital capture, light must be converted into abstract codes discontinuous with physical space and time (in the case of digital photography).¹² Second, the forms of image produced by post-photochemical technologies fundamentally ask whether photography is a definable medium generating a range of visual images distinguishable from those based on other media or technological means.¹³ Viewed together, these two lines of argument share the position that digitization erodes the boundaries between the lens-based and the graphically manipulated images, and thereby revive the question of whether the distinctiveness of the photographic image holds.¹⁴ The videographic moving picture is seen to substantiate both arguments: its movements, both the movement of an object or event in the image and the movement of the image itself, spring not simply from the inscription of the object or event in the electronic sensor of the recording apparatus, but also from partial and global transformation of the visual record on its material and technical levels. As a few critics in "post-photography" discourse have remarked, the rapid advance of the new media technologies sometimes undermines a distinction between photography and video. For these technologies enable any photographic image, an electronic and digital image on the material level, to be easily extracted from the flow of information from which the video image is derived.¹⁵ In these aspects, the videographic moving picture is an aspect of what Timothy Druckrey calls the "equivocal image" as the "consequence of the unsettled state of electronic representation."¹⁶

Within the context of photographic art, the equivocal nature of the videographic moving picture aligns it with the photographic works

of Jeff Wall, Thomas Struth, Thomas Demand, and Andreas Gursky, to name just a few, who have employed digital technologies to call into question the authenticity of the photographic image and to initiate a complex dialogue with the other systems of representation to which the broadest definition of the term “picture” can refer. Wall, arguably the most prominent practitioner, has, for instance, emblematised the resonance between the videographic moving picture and digital photography by bringing to the foreground an array of different media (painting, photography, and film) evoked by the term “picture.” His photographic work draws together the conventions of film within the frame, composed in a manner similar to painting so as to invite its viewer to see that “there is almost a single set of criteria for the three art forms.”¹⁷ Wall utilizes cinematographic methods (the performance of figures in a staged situation depicted by his camera, the use of the techniques and equipment devised or developed by cinematographers, etc.) as a key building block in arranging those conventions, while also strengthening the presence of the figures’ implied motion. He has also embraced electronic and digital technologies to delicately manipulate the surface of his photographs and thereby to make painting, photography, and film coexist in an ambiguous manner. Wall’s creation of these hybrid expressions is predicated upon his awareness of photography’s post-medium conditions: that is, electronic and digital technologies enable him to change his awareness of photography from a medium grounded in a static photochemical basis to one that shares the fluidity of representation present in painting and film. He writes that the photographic image within these conditions “will disappear from the immediate production-process, vanishing to the more distant horizon of the generation of electricity, and in that movement, the historical consciousness of the medium is altered.”¹⁸

And yet, it should be noted that the two challenges raised by contemporary photographic practices (a challenge to the notion of indexicality as a truthful record of the past, and to the notion of photography as a clearly demarcated form of art in opposition to others) do not necessarily lead to an absolute rupture with analogue photography; rather, they underscore a telling moment in which artists revisit and reconfigure, with the help of electronic and digital technologies, photography’s techniques, forms, and aesthetics in ways that go beyond its traditional medium-specific boundaries, including the photochemical materials that were known to guarantee

photography's value as indexical image, the privileging of the lens-based imagery over the graphically manipulated imagery, and, as I shall discuss in detail, photography's stillness in contrast to the movement of the images in film and video. In this sense, the artists' exploration of the boundaries of photography echoes a revisionist understanding of the "post-photographic" age, one distinct from the pervasive voices of anxiety about its dead end. David Tomas argues that post-photographic practices are simultaneously "historical (*postphotography*)" and "unhistorical (*postphotography*)" insofar as they operate under a tension between what has defined the photographic modes of production and what transcends them.¹⁹ Similarly, Abigail Solomon-Godeau claims that the work of Wall and Gursky, often rejected by a critical view that insists on the intertwined concepts of indexicality and medium specificity in modernist discourse, asks us to reconceptualize photography by considering "a more complex notion of an *apparatus*," namely, by considering all elements of photography "that exceed the camera, the individual picture, and the individual photographer."²⁰ Peter Osborne arguably provides the most radical version of these revisionist discourses, asserting that photography must be understood as the "*historical totality of photographic forms*, or types of images produced in one way or another by the inscription of light."²¹ In this view, photography is a historical concept not privileged by the chemical basis of traditional photography, but subject to the interacting development of all technologies (film, video, and digital) directly concerned with or affecting the production of photographic forms. Osborne's non-essentialist redefinition of photography helps us to understand that contemporary photographic practices do not exhaust but instead exploit the forms of traditional photography, thus reconfiguring its ontological underpinnings even when they distance themselves from its traditional material basis.

In this revisionist view of the "post-photographic" era, the "cinematic"—the "historical totality" of cinematic forms and techniques, to use Osborne's concept—is not simply a prominent object of appropriation, but a gateway through which the contemporary practices have recently reconstituted the photographic object. Tracing the historical lineage of these practices' obsession with the cinematic, George Baker argues that they question and redraw the traditional boundaries of photography by embracing cinematic

movement, which was regarded as the antithesis of photography's frozenness. It was with the emergence of the artists categorized by Crimp as creators of "pictures" that photography's kinship with cinema triggered formal innovations. Baker then maps out three paradigmatic cases of innovation: Cindy Sherman's "film stills," Wall's appropriation of the conventions of cinematography and historical painting for the sake of implying a suspended moment of a narrative in progress (Baker calls Wall's work the "talking picture" in this sense), and James Coleman's reconstruction of films into projection of continuous still images. The contemporary generation of artists, whether photographers (Wall, Gursky, Gregory Crewdson, etc.) or those who have produced both photographs and moving image artworks (whether film or digital video) in mutual dialogue (Demand, Sam Taylor-Johnson, Nancy Davenport, Tacita Dean, Sharon Lockhart, etc.), have varied and refined these three formal innovations, hovering between stasis and motion. Baker places these diverse experiments within (borrowing Rosalind Krauss's term) the "expanded field" of photography, where that medium is reinterpreted and remade in ways that exceed the traditional concept of photographic objects and practices. He writes, "If the photographic object seems in crisis today, it might now mean that we are entering a period not when the medium has come to an end, nor where the expanded field has simply collapsed under its own dispersal, but rather that the terms involved only now become more complex."²²

Certainly, videographic moving pictures can be placed within "photography's expanded field," to use Baker's term, in a few senses. Their movement makes them distinct from the photographic object as a pure still picture and they are made with the electronic and digital technologies different from the photochemical basis of traditional photography. However, even if driven by the imperative to transcend the confines of traditional photography, videographic moving pictures simultaneously draw on and newly illuminate its formal and ontological properties, including stillness and freezing the past that endured in front of the camera. The "cinematic" referred to by videographic moving pictures can be seen as a point of reference by which these properties are reread and repositioned: the modality of photography as stillness and its temporal ontology as a record of past are not eliminated, but given new attention in relation to cinema. Despite the usefulness of the term "photography's

expanded field,” however, it is impossible to ignore that videographic moving pictures pose a few crucial questions unanswered by Baker’s account of the growing exchange between film and photography. First, if “photography’s expanded field” includes artists’ moving image artworks based both on film and on digital video, what distinctions do the latter have from the former? That is to say, what influences does digital video have on image forms—namely, videographic moving pictures—characterized by the cohabitation and intersection of the photographic and the cinematic? Second, isn’t it possible for us to theoretically conceive of videographic moving pictures as emerging not simply from “photography’s expanded field,” but also from “cinema’s expanded field,” in which specific forms of the cinematic image do not eliminate but rather activate cinema’s vexed relationship with photography? Finally, if this is the case, in what ways do these forms disclose photographic characteristics embedded in cinema?

To answer the first question, I shall now argue that digital video plays a crucial role in configuring the hybrid moving images marked by the interrelation of painterly and photographic stillness with cinematic motion as it delicately manipulates the surface and temporality of the source image. In doing so, I take up the works of Sam Taylor-Johnson, Mark Lewis, and Bill Viola, who shoot using a film camera and transfer the celluloid footage to digital video for editing and display. All three artists’ works illustrate what I term videographic moving pictures. As Christine Ross has recently pointed out in her detailed analysis of Lewis’s works, he employs the extended long take as an intermedia form that “combines film, photography, and painting,” along with electronic and digital technologies “as enactment of different temporalities” of the media.²³ Indeed, the same procedures apply to the works of Taylor-Johnson and Viola, whom Ross does not discuss. Accordingly, the images in the works of the three artists initially resemble lens-based—photographic and filmic—imagery, while simultaneously invoking embedded painterly figuration and composition. This ambiguity is made possible by the gradual transformation from stillness to movement, or by the coexistence of static and moving objects within a single shot. Those two characteristics—visual abundance and ambiguity—are in contrast to the imagery of early video art, which is easily distinguishable from film imagery due to its lower image quality, densely layered or undulating forms, or the

appearance of electronic noise on its surface. Seen in this light, the artists' combined uses of film and digital video contradict two key modernist assumptions about video: that video has stable substance as a medium defined by its physical, technical, and functional boundaries—that is, by the integrity of video camera, synthesizer, and monitor—and that the resulting image is a direct manifestation of video's proper qualities. If we abide by these two modernist assumptions, then Lewis's, Taylor-Johnson's, and Viola's technical and aesthetic choices emblemize the status of digital video as post-media: that is, digital video signals the change of status of video from a definable medium directly leading to the generation of particular aesthetic forms to a technology for enabling the moving image to engender the negotiation between different media expressions—painting, photography, film, and video art.

However, although any stable definition of video's modernist medium specificity seems more and more obscured, one must investigate the role of digital video in making this hybrid formation of the moving image,²⁴ as it demonstrates some characteristics that cannot be acquired via celluloid-based image production. First, even if filmic at first sight, the three artists' videographic moving pictures exhibit painterly qualities on photorealistic surfaces, traces produced by the video-based transformation of the source image after the encoding process; and second, although based on the recording of a profilmic event with a single take, the duration and speed of the event is compressed or elongated through digital intervention in the course of editing and display. These two characteristics demonstrate that digital video does not totally jettison the material and technical specificities of analogue video even when it engages with cinematic figuration and duration, unlike analogue video in the early phase of video art; and when its imagery does not explicitly take on the stereotypical forms of early video art, such as psychedelic images composed of undulating forms in highly saturated colors, images of dense collage, abstract imagery marked by varying geometric forms, and real time distinct from a filmic image's recording of past events, all of which were considered expressive of video's unique properties. In the section devoted to analysis of the three artists, I shall examine the extent to which these specificities of video are inscribed in the two aesthetic dimensions—surface and temporal—of hybrid moving images based on the intersection of painting, photography, and film.

To answer the second question, I shall demonstrate that videographic moving pictures remediate and refashion two image forms developed in the practical and theoretical terrains of cinema, namely, the “film stilled” (a type of film marked by the moment in which its linear movement is interrupted by the eruption of the image, which appears to stand still) and the “still film” (characterized by insistence on the fixed camera that captures its object or event changing in time). A thread of film theories on the photographic in the cinema has proposed (the “film stilled” by Raymond Bellour) or suggested (the “still film”) both categories in relation to the tradition of postwar arthouse and experimental films. Encompassing both types of films—for instance, Andy Warhol’s foregrounding of stasis in an extended duration of static camera in *Empire* (1964), and the evolution from a motion picture to a static film in Ernie Gehr’s *Serene Velocity* (1970)—Justin Remes has recently proposed the idea of the “cinema of stasis,” films “in which there is little to no movement, films in which stasis—not motion—is the default.”²⁵ The films that Remes calls “cinema of stasis” are not unrelated to the experiments with cinematic movement in “photography’s expanded field.” The videographic moving pictures follow these two directions simultaneously in their amalgamation of stillness and movement as they appropriate and rework both the “film stilled” and the “still film.” Then, the two properties of digital video—namely, “surface manipulation” and “temporal manipulation”—constitute the processes by which the two intermedial forms are remediated. As an extended discussion of Taylor-Johnson, Lewis, and Viola, I shall examine the video works of Fiona Tan and Adad Hannah as additional cases of videographic moving pictures that refashion the “still film.” I shall focus on the ways in which the mode of reworking the “still film,” which I will call the “single-shot tableau mode,” functions as a fulcrum for the two artists’ aspirations to create intermedial combinations of painting, photography, and film. Yet digital video is able to transform the “film stilled” in more complex ways, because the key procedure for rendering it, the interruption and reactivation of movement, can be deployed on any level of the source image, from its overall duration to its minimal unit as a pixel; and because in digital video, the stilled frame is materially and structurally continuous with the motion of video’s electronic flow. An analysis of the corpus of Belgian artist David Claerbout, which springs from his creative reinterpretation of the techniques

for producing the “film stilled” (freeze-frame and serialized static images), will demonstrate this point.

To answer the final question, I argue that despite the obvious change in the material ontology of traditional photochemical images, electronic and digital technologies do not totally eliminate their temporal ontology: rather, insofar as videographic moving pictures are derived from the adoption of the “film stilled” and the “still film,” artworks based upon them provide opportunities to reread the canonical ontological distinctions between photography and film, which André Bazin and Christian Metz posed in regard to the dichotomy of stillness and movement. Bazin, for example, posed a distinction between photography as “mold,” a medium containing only a “piecemeal” impression of time, and cinema as “molding,” which offers its spectator the “images of duration” produced by movement.²⁶ Metz, too, drew a similar distinction between photography as a “fetish” that can only provide a trace of past motion,²⁷ and cinema, whose impression of reality is the “real presence of motion.”²⁸ Photography scholar David Green claims that this distinction is an “orthodoxy that is open to being challenged,” given that “for all of its illusion of ‘here and now’ the filmic image is equally prey to the passage of time and the slow but inevitable recession from now to then.”²⁹ Seen in this light, both the “film stilled” and the “still film” categories use an illusion of stasis, either by employing the static camera or by repeating a series of identical frames, to evoke the “pastness” of photography concealed in the illusion of movement in the cinema. As Tom Gunning succinctly writes, these films testify to the “dialectical relation between stillness and movement,” which provides “one of the richest uses of motion in film.”³⁰ I argue, then, that videographic moving pictures are preoccupied with activating this “dialectical relation,” demonstrating that particular uses of motion in the image of duration are capable of expressing the temporal complexity of the photograph in relation to cinema. Unlike Bazin’s and Metz’s distinction between the “pastness” of photography and the “presence” of cinematic movement, the works of Tan, Hannah, and Claerbout create forms of movement that do not suppress the frozenness of a photographic past, but take it into the viewer’s present. In so doing, the artists suggest that the temporality of both photography and film is marked by the mutual imbrication of pastness and presence. To be sure, this common temporality is

differently experienced, on account of photography's assertion of frozenness in contrast to cinema's celebration of the illusion of motion. However, by producing these two aesthetic experiences simultaneously, videographic moving pictures, like the "film stilled" and the "still film," make us rethink the traditional medium-specific boundaries with regard to temporality.

Digital video's manipulation of surface and time in Taylor-Johnson, Lewis, and Viola

Digital video's capacity to subtly change the surface of the photographic source image during creation of videographic moving pictures is analogous to the manipulative processes in digital filmmaking's postproduction, which involve painterly alteration of the details of the image such as color, shading, and contrast elements traditionally treated within the terrain of cinematography. One such process is known as "Digital Intermediate (DI)," which originally referred to a stage of postproduction between the initial conversion of celluloid footage to digital files and their transfer back to celluloid strip for projection. In the terrain of postproduction, DI involves manipulating the minute details of live-action footage shot with a film or high-definition camera in order to render it either more photorealistic (as in *O Brother, Where Art Thou?* [Joel Coen 2002] and *The Aviator* [Martin Scorsese 2005]) or more expressive (for instance, the kaleidoscopic backgrounds and figures in radiant and shimmering colors in *Speed Racer* [2008, the Wachowskis]). As John Belton points out, "What's new about the DI process is that it involves the digitization of all or nearly all of the film's images, rather than the partial digitization involved in these earlier features of the post-production workflow."³¹ DI's capacity to convert all the components of the filmic image into pixels and electronic frames during the postproduction process has been viewed as the hallmark of filmmakers' ability to gain higher accessibility to the image for their own expressive aims. Aylish Wood observes that this greater control is possible because DI enables filmmakers "to isolate and alter a single element embedded within an array of other elements."³² In this sense, she argues that the popularization of DI

signals a change in emphasis from the manipulation of the image's macro-elements during shooting (set, actor, costume, lighting) to the "micromanipulation" of its frames and pixels after shooting.

The importance of micromanipulation as an array of techniques for altering the minute details of live-action imagery is particularly relevant to the working method of Taylor-Johnson and Lewis, who have produced hybrid images engendering an aesthetic coexistence of film, photography, and painting. The two artists adopt several techniques of digital video postproduction, including color correction, change of brightness, adding and subtracting of frames, creation of slow dissolves, frame rate changes, and so on to micromanipulate the surface and temporality of the filmed footage.³³ A key technique central to both artists' work, and the most popular of all DI processes, is color grading, which replaces the traditional process of photochemical color timing with an increasingly complex level of intervention into the picture's piecemeal units—even single pixels. Through this process, color correction affects the whole frame of the image, from a broad range of color changes (for instance, the interpolation of three-color scenes into black and white, or vice versa) to alterations in saturation, hue, and luminance.³⁴ Developments since the 1990s in hardware (such as Da Vinci Systems) and software and plug-in programs (such as Synthetic Aperture's Color Finesse) alike have advanced this technique so tremendously as to allow for isolation and dynamic manipulation of various elements in the color field of a single frame.³⁵ This impact of color grading recalls William J. Mitchell's observation of image-processing software applications in the production of digital photography. These applications allow today's artists and photographers not only to alter the overall look of an image, but also to select certain areas and delicately shift color balances in ways that traditional painters and photographers did. Mitchell writes, "The artists can separately adjust lightness and contrast to establish desired tonal relationships and achieve an overall tonal unity, manipulate saturation to produce an appropriately brilliant or subdued effect, and shift hue values to give a satisfactory overall color cast."³⁶

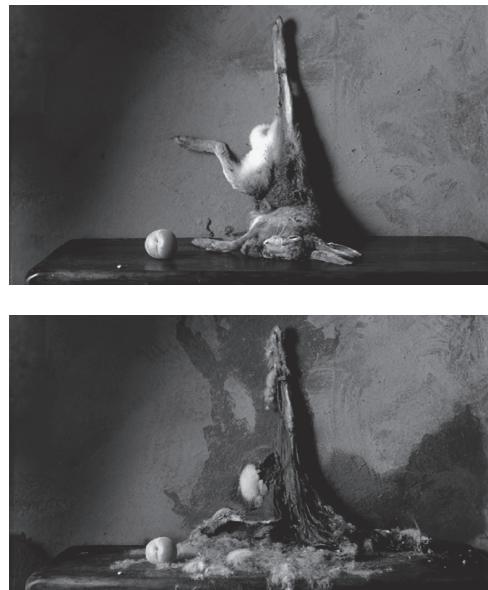
Per Mitchell's insight, the color correction adopted by Taylor-Johnson and Lewis contributes to blending both moving (film and video) and still (photography and painting) images, forging a circuit of interrelation between them. This also aligns with Stephen Prince's

observation of the profound impacts of DI on the relationship between cinematography and postproduction. He writes that microelements such as color, light, and resolution, which were hitherto regarded as changeable principally in the shooting process, can be altered or even created so deeply that “cinematography is becoming a post-production process in ways it has never been.”³⁷ Further, Prince continues, beyond changing the whole workflow of film production, this new alignment between cinematography and postproduction brings cinema closer to “the kind of fine-grain aesthetic control that painters have long enjoyed.”³⁸ The two implications of DI proposed by Prince are well suited to the works of Taylor-Johnson and Lewis. These artists run their entire film-based image through video-editing software and introduce pictorial effects on the surface of photorealistic footage to create subtle interpenetrations of painting, photography, and film.

Shot by a fixed 35-mm camera, Taylor-Johnson’s *Still Life* (2001, Figures 1.1 and 1.2) and *A Little Death* (2002, Figures 1.3 and 1.4)



FIGURES 1.1 AND 1.2 *Stills from Sam Taylor-Johnson, Still Life (2001), 35mm film/DVD, 3min 44 seconds, © Sam Taylor-Johnson, courtesy White Cube.*



FIGURES 1.3 AND 1.4 *Stills from Taylor-Johnson, A Little Death (2002), 35mm film/DVD, 4 min, © Sam Taylor-Johnson, courtesy White Cube.*

update a type of still-life painting developed in the Netherlands in the sixteenth and seventeenth centuries. Both show worldly objects—a dozen fruits on a plate and a ballpoint pen in the former, and a dead hare and a peach on a table in the latter. The objects begin to lose their beauty or abundance, and are eventually subject to mortality and decay with the irreversible course of time. The two works take the single frame structure as a vantage point for evoking both picturesque and photographic imagery, along with a composition that centralizes their own subject matter. With no delay, this atmosphere of stillness is dismantled, as the two pieces compel the viewer to witness common decomposition of the framed objects, a nine-week natural event compressed into about four minutes of running time, culminating in their deformed remnants. Besides the dramatic speeding up of the event, the transposition of fine-tuned surface details that satisfy and simultaneously transgress the assumed naturalness of the objects is crucial to the disconcerting effect of the works. Evoking DI processes, the color and shading

of details are remarkably enhanced by the interplay between film and its digitized data. In terms of color grading, the compression of time of the decay process concomitantly requires Taylor-Johnson to condense into a single shot a broad spectrum of colors different in hue and brightness, while also subtly dismantling the figurative integrity of the event's photochemical record. This is particularly true in *Still Life*, where the red and yellow of the fruits' surfaces transform into the white and gray scale of mold, finally reaching the black and gray tones of the totally rotten lump. This vast range of colors includes intricate changes in shading—not merely on the fruits' surfaces, but also around the plate, on the surface of the table, and on the slightly washed out gray wall. Orchestration of colors and shading continues in *A Little Death*, this time with different details. The process of putrefaction involves not the fungus and smooth transition of fruits to their softened remains, but a radical decomposition of the hare's flesh and skin, and the countless clouds of flies that swarm around the hare. It initially appears that sand is streaming from the hare's left rear leg to the bulk of its body; this is revealed to be the degeneration process of the hare's body and the barrage of flies, accompanied by a growing clot of putrid acid on the wall. The flies' numbers decrease as the hare's body is reduced to its skeletal residue, colored in shades of black and gray due to putrefaction, leaving its hair on the table. All these extreme details are made visible by the chromatic gradation of colors from black to brown. In accordance with this gradation, the subtle, continuous change in brightness and tone of the shadow on the wall draws the viewer's attention to the temporal compression and the time-lapse technique that generates it.

The abundance and oversaturation of color in Taylor-Johnson's "still life" works is also apparent in Lewis's *Algonquin Park, September* (2001, Figure 1.5) and *Algonquin Park, Early March* (2002), two pieces that exhibit the painterly influences of the Hudson River School, John Constable, J. M. W. Turner, and Casper David Friedrich, portraying landscapes in extremely great detail. *Algonquin Park, September* consists of a static shot that contemplates a small island on a lake shrouded in a broad band of dense mist, with a small boat entering from the right. The majestic and mystic atmosphere of the landscape is composed primarily of two delicate movements: while the mist moves slowly from right to left, the surface of the lake ripples gently. The sensations of movement make the island



FIGURE 1.5 *Mark Lewis, Algonquin Park, September (2001), Super 35mm transferred to 2K, 2 min 43 seconds, Film still courtesy and copyright the artist.*

fascinating and phantom-like, in opposition to the sense of stability provided by the panoramic horizontal frame. As Philippe-Alain Michaud perceptively notes, they bring the viewer's gaze to loss and confusion as they "blur all outlines, making it impossible to focus and obliterating spatial reference points."³⁹ This destabilizing effect stems from the excess of two colors accentuated by the movements: the blue of the water and the white of the fog. In particular, as the latter shades from darkness to light, the rest of the picture (the water and the island) gradually shows its original coloring. *Algonquin Park, Early March*, on the other hand, abandons the fixation of the camera but nevertheless builds the same structure of revelation and hypnotic effect, using a slow backward zoom to exhibit a gradual transformation of its picture from vacant white to a frozen lake surrounded by coniferous trees with a group of children playing on a distant ice rink.⁴⁰ The pure white of the plane at the beginning of the work is revealed to be a close-up of the lake as the reverse zoom unfolds. Thus Lewis applies the same method used in *September* to *Early March* in reverse: movement is assigned to the basic element of cinematography, and it serves to develop the static landscape while maintaining its sense of instability and decentralization. The color correction of the original location's footage induces a picturesque tone in parallel with the dialectic of stasis and motion guided by the camera, in a different manner than that used in *September*.

The surface of the lake is so flattened in terms of volume that it looks like a huge, monochrome abstract painting. It is not revealed as a landscape until the zoom gradually enforces the sense of perspective, with shimmering ambient light giving the surface a sense of concreteness marked by contours and forms.

A more significant impact of digital video on the creation of hybrid moving images that engender the coexistence of painting, photography, and film is temporal manipulation, in that it contributes to oscillation between stasis and motion. Indeed, the dissolution of stillness/movement boundaries dates back to analogue video. Raymond Bellour and Trond Lundemo demonstrate that analogue video was a medium that could analyze the “passage between different media images”⁴¹ or function “like a wedge that opens up the distances between movement and the photograph”⁴² thanks to its capacities to decompose the moving image—for example, slow motion and freeze-frame—and thereby to make visible the transition between frames. In addition to these capacities inherited from its analogue predecessor, digital video has widened the spectrum of its visual expression through technological developments made since the 1990s, both in hardware (digital cameras supplying both a low-tech vintage look and a state-of-the-art high-definition look) and in software (release of various editing tools such as Adobe After Effects, Maya, etc.). Maureen Turim has recognized that these developments in digital video enable video images to emulate both photographic stillness and cinematic temporality. “Time-based correction and frame buffering provide the means by which the video image succeeds in simulating cinema, permitting video to manifest the discrete temporal frame,” she writes. “We need to recognize how digital video has tended to render the electronic as if it were a still photography and cinematic temporality.”⁴³ Similarly, Holly Willis notes that digital video obviates the issues of generational loss and poor image quality in analogue video by offering “greatly increased fidelity and malleability.”⁴⁴ Turim’s and Willis’s views suggest that video’s digitization furthers the capacity of analogue video to manipulate the temporality of the electronic image, through techniques such as freezing, compressing, and dilating the time of its record, while also reconfiguring the image in ways that resemble the surface and temporality of photorealistic moving imagery, not traditionally considered expressive of video’s material and technical properties unavailable from photography and film.

Despite being liberated from the demand for self-reflexive inquiry into video's medium-specific qualities, digital video still maintains analogue video's capacity of manipulating the temporality of the image in ways that are distinct from film. In this case, this temporal manipulation is not used to explore real-time signal processing and feedback as video's unique characteristics, demonstrated by the works of William Anastasi, Bruce Nauman, Dan Graham, Nam June Paik, to name just a few.⁴⁵ Rather, it serves to activate different temporalities of painting, photography, and film by creating an image of duration that foregrounds a subtle transition from pictorial or photographic stasis to cinematic motion, or a paradoxical cohabitation of the two. In either case, film is investigated as, in the words of Ross, "a media situated between the photographic and the videographic, between the pictorial and the digital."⁴⁶ However, the uses of digital video to create these hybrid images also suggest that it is not totally dislodged from the flexibility of the image as derived from analogue video's transformative processes. Rodowick aptly observes the ontological continuity of the analogue electronic and the digital. He writes that both media images are "never fully present in space or in time," inasmuch as they are constantly scanned in the midst of transmission, and changed by the operation of display technologies.⁴⁷ This means that although differing from the electronic image in coding (signal vs. pixel) and machinery (synthesizer or processor vs. computer and software), the digital video image is capable of amplifying both the formal variability of its surface and its temporal complexity. Both Taylor-Johnson's and Lewis's works demonstrate that subtle digital transformations of color simultaneously engender the visual qualities of painting, photography, and film in the images. This is also the case with the ways in which the artists manipulate the images in a single shot to render their temporality complicated.

Taylor-Johnson's *Still Life* and *A Little Death* inscribe extreme changes of state—decay and death—in a single take, but the temporal dimension of those changes does not rest solely upon the filmstrip's registration of rotting and molding. It is enhanced by the dissolution of the footage into a seamless transition between different periods of exposure of the camera during the event; Taylor-Johnson's camera was set in exactly the same place (a closed room), the lighting of the object was carefully controlled (artificial illumination), and the event was documented at regular intervals

daily over the course of about nine weeks.⁴⁸ After encoding, the footage was imported via acceleration into the desired duration for the work (three to four minutes). The intervals between individual frames are extremely condensed to suit this manipulation, thus producing the smooth temporal flow of the event. In this sense, neither piece is interested in capturing the whole moment of the event in time; rather, they underline the impact of digital technologies on our temporal experience of the moving image. Taylor-Johnson's video-based condensation of time reframes the recorded image so profoundly that the temporality of the resulting image is perceived as either beyond or beneath the threshold of human perception. This suggests that digital technologies are capable of presenting time independently of either natural progression or human consciousness, and that their temporality radically transforms the celluloid-based inscription of time.

Lewis does not utilize the same dramatic compression of time as Taylor-Johnson, but he has made a few noticeable works in which digital video makes a filmed registration of the event contingent, creating an ambiguous exchange between stasis and motion. These works are characterized by a technique that delicately disrupts the temporal continuity of a shot. *Windfarm* (2001) depicts a dozen rotating wind turbines against the backdrop of a mountain, built on a sandy soil field with bushes spread in the foreground. On closer inspection, the movement of each turbine, save one in the background whose rotor is not turning, is actually intermittent: the rotating speeds change at irregular intervals. This is made apparent by the motion of the rotating shadows thrown by the three biggest turbines in the middle of the scene. The stop-motion effect in this scene, which Lewis orchestrates through digitally assisted removal and reframing of filmed footage, makes the illusion of movement slightly discontinuous.⁴⁹ This temporal ellipsis, brought about by frame-by-frame manipulation, is also seen in *Airport* (2003, Figure 1.6), where nothing particular seems to happen other than the comings and goings of vehicles on an airstrip seen from a terminal window. Eventually, the overarching sense of an unencumbered duration based on the seemingly immediate record of this event is broken. After eight minutes have passed, an unexpected dissolve without any notable seam guides us toward a plane that slowly approaches from the middle of the airstrip to the window after landing. As it is revealed that this single take is in fact a synthesis of



FIGURE 1.6 Lewis, *Airport* (2003), Super 35mm transferred to DVD, 10 min 59 seconds, Film still courtesy and copyright the artist.

two temporally disparate durations, the timing of the overall event is, in turn, called into question: is it drawn directly from the change delivered by the camera, or from duplication and replay of the same record? Here, digital manipulation taints the stability of the filmic image with the temporal indeterminacy attributable to video.

Lewis's *Downtown Tilt, Zoom, and Pan* (2005) is the most sophisticated work of his oeuvre in the light of the temporal complexity of a single take. The first and second sections (tilt and zoom) were shot at dusk, while the final section was set in the clearer morning light. Thus a single shot is actually constructed from two temporally separate takes conjoined seamlessly during postproduction. This is confirmed by the fact that the two red cars in the second and third sections are indeed the same. Additionally, playback during the course of editing complicates this temporal disparity, namely, the coexistence of multiple temporal slices in the duration of a shot.⁵⁰ As such, the backward movement of the two black and red cars results from reverse replay of the second section, not from the spinning of their own wheels. This phenomenon is also at work in the last section, in which the train running backward turns out to be shown in reverse.

Bill Viola's works since the 2000s emblematize surface and temporal manipulations of digital video as two techniques for configuring the images that blend painting, photography, and film and present a delicate transition from stillness to movement. *The Passions*, consisting of a series of video pieces made from

2000 to 2002, explores ways in which human face and body can give expression to an intense amount of inner states. The human figures portrayed in this work are informed by the devotional painting of the Middle Age and Renaissance, an artistic tradition Viola studied at the Getty Research Institute in 1998. There he examined how painters of that time depicted emotional extremes such as pain, anger, fear, and sorrow, and developed his thematic and formal categories that would later be incorporated into this work, encompassing “facial expression, emotions in extreme time, external display of emotional states . . . change of heart, change of mind, the turbulent surface.”⁵¹ The key categories of *The Passions* series, such as the “external display of emotional states,” required video’s capacity to transform the facial and gestural expressions of the human body into the moving image, a form that provides the viewer with an extended time frame for experiencing them in her perceptual threshold. These expressions additionally had to be exaggerated enough to be immediately observed on the surface dimension of the image, so that the viewer sees through it the emotional change of the inner self.

The resulting video image in this series has two remarkable characteristics that attract the viewer’s attention—the delicate distortion of the image surface and the extreme slow motion. The initial two pieces of this work, *Quintet of the Astonished* (2000, Figures 1.7 and 1.8) and *Quintet of the Silent* (2001), both based on a painting *Christ Mocked* (1490–1500) by Hieronymus Bosch, display the two features very well. Commonly beginning with five life-sized figures (four men and a woman in the former, and five men in the latter) that appear to take still postures, both works proceed to a highly prolonged animation that spends about fifteen minutes, encompassing a transition from neutral facial expressions and gestures to a wide spectrum of changes in them that may evoke various, yet eventually unidentifiable, emotional responses. What is also astonishing in these works is the vitality of the lines and colors value that the bodily detail of the actors brings to the forefront of the screen. Because the figures are shot at extreme high speed (approximately fifteen times faster than normal speed, 24 frames-per-second), the fifteen-minute video pieces actually exhibit events that have transpired in about one minute in extremely great detail. Thus, they expose the viewer “to the imperceptible—to incredibly minute shifts in affective tonality well beyond what is observable



FIGURES 1.7 AND 1.8 Bill Viola, *The Quintet of the Astonished* (2000), color video rear projection on screen mounted on wall in dark room, projected image size: 55 × 95 in (140 × 240 cm), 15 min 20 seconds, performers: John Malpede, Weba Garretson, Tom Fitzpatrick, John Fleck, Dan Gerrity, photos: Kira Perov, courtesy of Bill Viola Studio.

by (nontechnically supplemented) natural perception.”⁵² These “minute shifts” of the figures, too, originate from the surface quality of the image, given that they are oversaturated in color and sharp in light and shade. Due to these spatial features that are disclosed on the surface, the figures acquire pictorial, or even graphic, semblance with the referent (in this case, the five actors). In the conversation with Viola, Hans Belting astutely remarks that in this suite, the extremely visceral nature of expressions—such as facial grimace and muscular tension—are experienced “not only as a performance

of a figure within the image, but also as a transformation of the image itself.”⁵³ Viola’s uses of digital video validate Belting’s point, for he rested on an array of digital postproduction processes such as reframing, rendering, color correction, and so forth in order to obtain such painterly transformations of the image, which lead to the hybridization of painting and video. Viola has once stated that his subtle manipulation of the recorded image with digital tools provided by the editing software (Adobe After Effects and Photoshop)⁵⁴ brought him back to his “early experimentation with electronic image processing in the 1970,” while simultaneously encouraging him to compare his work to painting: “This is exactly what painters do—manipulate and shape the fluid surface of the paint so it becomes the emotion.”⁵⁵

Besides those surface manipulations of the image for engendering the coexistence and interrelation of painting and video, Viola applied to *The Passions* a complex process of material and technical mediations between film and video in order to create the extreme slow-motion effect. For bringing the figures in *Quintet of the Astonished* and *Quintet of the Silent* into life, Viola recorded their 45-second performances with 35-mm Wilcam at high speed (300 frames per second) and encoded the film footage with video for editing, playing it at normal speed, and thus providing the viewer with 10-minute extreme slow motion rife with the movement of the figures’ details. Viola’s choice of celluloid instead of high-definition video is predicated upon the difference in the amount of increments per second between the two media. He thought that the resolution of the image is determined not simply by its surface quality but by its frame rates. Thus, the more increments of the recorded image he owned, the more subtleties of movements and changes he would cull from it. He felt that the maximum 30 frames per second obtained with the HD camera of the time (around the late 1990s) were not sufficient for his postproduction stage in which he would work with slowing the source image down. As he confessed, “I also knew that the medium of video, master of the long take, was only capable of shooting the action at thirty frames per second, and I need more visual increments of time to capture the subtlety of the transitions and transformations.”⁵⁶ Despite Viola’s choice of celluloid as the shooting material, however, it is worth stressing that this is grounded in his observation on the material difference between film and video. While video signal is in constant

motion unfolding in space, the art of cinema, Viola asserts, lies in “the combination of image sequences in time (montage)”⁵⁷ insofar as “film is a succession of discrete photographs.”⁵⁸ It is based on his keen awareness of the difference that he adopts film in *The Passions*. He firstly shot the human figures’ states of emotion without any cut, as if treating film stock as the videotape. Then he digitally encoded the filmed image and transferred it to the storage media, which would be played back in his editing room. All these processes involved the manipulation and change of an individual frame and of the in-between space of two frames. This suggests that Viola considers a film frame as an element equivalent to video signal. “I come out of electronic music practice, where frequency is one of your main elements, and it is infinite,” he remarks. “I see frame rate in video as the same thing. It’s a frequency.”⁵⁹

While digital video’s surface manipulation in the works of Taylor-Johnson, Lewis, and Viola is applied to the image shot on celluloid, the images’ final color and shading, which facilitate oscillation between the photographic and the painterly, and between the photorealistic and the graphic, originate from the properties of digital video distinct from film. This point is made clearer when one takes a closer look at two material differences between film and digital video: focus and grain. Prince and Rodowick have observed that digital video records the profilmic object too sharply and clearly, and thus lacks the varying degrees of focus available from celluloid. Also, digital video’s lack of grain, an indicator of film’s vibrancy and luminosity, leads to the extreme clarity of its image, distinct from the look of the filmic image.⁶⁰ In these respects, the three artists’ uses of digital video fulfill their own formal and aesthetic goal—creating the subtle coexistence and interrelation of painting, photography, and film—at the expense of sacrificing some material attributes of celluloid. The artists run the risk of removing filmic focus and grain from the image shot on film as it is encoded. Thus, the cleanliness and sharpness common to all their works’ imagery, made by coupling film-based recording with digital video postproduction, is the backdrop against which the oversaturated and extremely vivid colors are at play.⁶¹ To summarize, all these visual characteristics demonstrate the extent to which digital video extends its capacities to transform the source image into the image of film, which the medium-specific view of video would consider to be sharply distinct from the proper video image, while simultaneously obscuring some of its properties. However

similar to film the images produced by the artists may be, thanks to their overall high-definition quality, their look implicitly disturbs both the naturalness of the filmic image with their unavoidable subtleties, and by extension our belief in the authenticity of the filmic image. In this way, the artists' surface manipulations do not entirely disregard video's material and technical specificities, although the multifaceted relationships to painting, photography, and film signal video's post-media conditions, including the dissolution of the video image's formal boundaries.

These ambivalent aspects of digital video, hybridizing the video image in relation to video's neighboring media while also maintaining its technical and material specificities, also apply to the artists' temporal manipulations of the image. Taylor-Johnson's extreme condensation of recorded time, Lewis's addition and subtraction of frames, and Viola's extreme slow motion all demonstrate that, in terms of producing the illusion of motion, digital video does not totally abandon an electronic frame structure inherited from analogue video and distinct from film, whether rendering its image painterly, photographic, or cinematic. As Sean Cubitt summarizes, "The unit of video is not the single frame but the movement from frame to frame, the disappearing of one and the appearing of another, so that no single frame is ever complete enough for it to be recognized as the particular moment of origin."⁶² While the film-based cinematic image consists of the sum of discrete and stable frames using a mechanical means (projector) to generate the impression of movement, the flexible and unfixed forms of the video image spring from its unstable frame structure, a constant flow of signal that can be modulated in any phase from recording to display. Digital video's capacities, such as progressive scanning, time-based corrections, and frame buffering, make the video image resemble a succession of discrete frame units, so that its movement looks smooth and seamless in contrast to the ceaseless vibration of the analogue electronic image. Even in this case, however, the incompleteness of an individual frame is not totally effaced. As Laura U. Marks astutely remarks, "An electronic image, *whether it is analog or digital*, is implicate, or enfolded, in the interconnected mass of electrons that transmit it along common waves."⁶³ Marks's observation suggests that digital video inherits from its analogue predecessor the fluidity of electronic signals, which allows a video image to render its temporal dimension unstable and ambiguous.

Seen from this perspective, the temporal ellipsis that coexists paradoxically with the sense of continuity in Lewis's works, the extreme condensation of recorded time in Taylor-Johnson's, and the extreme slow motion in Viola's all express the malleability of the electronic signal, which assimilates the discrete film frames of the source image into a continuous flow subject to an array of temporal manipulations in the postproduction processes. This transformation of temporality points to Garrett Stewart's observation on the ways in which electronic and digital media express the temporality of the image in a different way than filmic temporal rendering marked by the progression from the photogram to projection. He writes, "Our eyes held by the instantaneously rescanned frame of electronic mediation, we often see time itself imaged . . . as a process malleable, even reversible, rather than an incremental procession."⁶⁴ Central to his argument is that the temporality of non-filmic moving images, from analogue and digital video to digital cinema, is determined largely by the change in their material base, which ranges from transformation of the electronic signal to permutation of binary code. That those images are not predicated upon the cumulative succession of individual still frames leads Stewart to argue for a transition from filmic "frame time" to post-filmic "framed time," in that time is "captured within a single pictorial field."⁶⁵ All the temporal manipulations used by the three artists, then, suit Stewart's concept of "framed time," inasmuch as their resulting images are perceived as smooth and fluid transition of figures in a "single pictorial field." This demonstrates that changes in the flow of the electronic signal play a key role in transforming the temporality of film, either dramatically or delicately, by allowing for the flexible exchange between stillness and motion, and between the photographic and the graphically figured layers in the image frame.

Remediating the “still film” and the “film stilled” in Tan, Hannah, and Claerbout

In the cases of Taylor-Johnson, Lewis, and Viola, videographic moving pictures ask us to reassess the medium-specific distinctions between different media—painting and film, photography and

painting, and film and photography—by making their formal properties (such as surface features and temporality) coexist and enabling ambiguous exchanges between them. In particular, the subtle transition between stasis and motion in this type of hybrid moving images highlights the fault line between film and photography. This reassessment does not totally negate the distinction between the two media—that photography is a medium of the still image, whereas film is of the moving image—but rather validates the extent to which the distinction is grounded in the ambiguous cross-referencing of each medium with the other. David Green and Joanna Lowry have provided a valuable framework for conceptualizing this relationship through writings that address some artists who have produced videographic moving pictures, as well as others who have explored conceptual and expressive possibilities for “cinematic photographs,” which encourage viewers to observe the temporal changes in their actions and events. Green argues that vacillation between stillness and movement in the former—particularly in the works of Claerbout, which I shall investigate later—demonstrates “not the conflation of photography and film but a conjuncture of the two mediums . . . in which they co-exist and seem to simultaneously occupy the same object.”⁶⁶ Similarly, Green and Lowry claim that the practices of the latter group of photographers (Wall and Crewdson, for example) “draw attention to the manner in which notions of the medium and of medium specificity have always depended on a process of differentiation from, and contrast to, other media in which they stand in relationship.”⁶⁷

Green and Lowry’s argument does not necessarily deny the technical and aesthetic differences between photography and film—for instance, the absence of positive movement in photography and of total stillness in film, or photography’s lack of the apparatus to produce the illusion of continuous motion. Rather, a key point of their argument is that those differences are not premised on the sheer separation between film and photography, but are inseparable from one medium’s dependence upon and evocation of the other. Just as the photographic stillness embedded in the individual photograph of the filmstrip is manifested in certain films whose representation of movement (whether of the image itself, or of the moving objects in the image) is slowed or arrested, so too does movement and duration in time function as a fundamental photographic referent.

As Victor Burgin succinctly remarks, “A film may depict an immobile object even while the filmstrip itself is moving at 24 frames per second: a photograph may depict a moving object even though the photograph does not move.”⁶⁸ This intimacy between movement and stillness in film and photography underscores that the specificities and limitations of each medium are made visible in film’s boundaries with photography or photography’s boundaries with film. Green’s idea of the “conjunction” of photography and film points not merely to the boundaries themselves but also to particular images that are shaped on those boundaries, making them visible. The images, then, reveal both differences and similarities between photography and film through an array of technical processes allowing coexistence of and exchange between their aesthetic properties. Similarly, Baker uses the concept of “dual articulation” to single out this type of image, in which film and photography interpenetrate in their “radical sharing of forms”—for instance, James Coleman’s slide projection of celluloid filmstrips, in which photography takes on movement while cinema is frozen.⁶⁹ From Green’s and Baker’s perspectives, the videographic moving pictures of Taylor-Johnson, Lewis, and Viola clearly achieve the “conjunction” or “dual articulation” of film and photography through their transitions between stasis and motion. Considering the history of cinema and the theories of the vexed relationship between film and photography, the hybrid moving images marked by the coexistence of and exchange between photography and film can be classified as the “film stilled” and the “still film.”

Bellour coins the term “film stilled” in his discussion of Gilles Deleuze’s concept of the “movement-image.” According to Bellour, Deleuze overlooks the importance of the photography embedded in the photogram, what Deleuze himself labels the “immobile section of movement,” when he attempts to redeem cinema from Henri Bergson’s condemnation. Bergson dismissed the cinematic apparatus of his time as adding the illusion of continuous movement to a succession of “immobile sections.” To confirm that Bergson’s concept of the movement-image anticipated the cinema, Deleuze claimed that insofar as the projector adjusts the illusion from the outset through regulated reanimation, it gives us “a section which is mobile, not an immobile section + abstract movement.”⁷⁰ Bellour makes an important revision to Deleuze’s idea of the photographic in the cinema. Instead of embracing Deleuze’s assumption that

cinematic movement is given immediately, Bellour argues that the “immobile section of movement” manifests its photographic temporality—its freezing of a past moment—as it “sets itself apart through an interruption of movement,” which includes freeze-frame, rephotographing of still photos, presence of still images, and slow motion.⁷¹ The instant thus becomes both the “pose,” a snapshot associated with the frozen movement and past time in photography, and the “pause of film,” derived from repetition of a single photograph to produce the illusion of cinematic time. In this way, the techniques for suspension of movement and the search for the instant add up to the cinema that includes the form of image marked by intermedial exchange between film and photography.

For Mary Ann Doane, cinema refuses to accept the petrifaction of movement in the instantaneous photography of Étienne-Jules Marey and Eadweard Muybridge by concealing its own dependency upon the photogram in favor of its celebration of movement and true-to-life effects.⁷² Similar to Bellour’s discussion of the “films stilled,” Doane addresses how the avant-garde procedures of two experimental films made since the modernist era, Chris Marker’s *La Jetée* (1962) and Martin Arnold’s *Pièce Touchée* (1989), enact the still image and its aspiration to photographic instantaneity. If the former has remained a paradigmatic film that pays homage to photographic stasis, the latter is marked by the use of an optical printer to impose the intermittent interruption of flicker effects on the existing filmstrip. Viewed together, each film evokes the snapshot embedded in the photogram, but they render figuration and temporality differently: through slow dissolves and fades of its snapshots, *La Jetée* brings to the forefront the presence of the photograph thereby appealing to its association with the past and death, whereas *Pièce Touchée* treats the instant as that which disappears and yet recurs in the unfolding of cinematic motion. “In dislocating the frame from its normalized linear trajectory,” Doane writes, “[the latter] reasserts the explosive instantaneity at the heart of cinematic continuity.”⁷³

Meanwhile, the “still film” refers to the film form based entirely on the alliance of the fixed camera, the recording of which endures for a given period, with the object in motion, particularly slow, nearly invisible motion. Peter Wollen prefigured the idea of the “still film” in his discussion on the relationship between photography and film. For him, the films of Andy Warhol and Jean-Marie Straub–Danièle

Huillet illustrate a possible combination of photography and film in that they display the “moving picture of the motionless subject.”⁷⁴ The coupling of the static camera with the subject creates an impression of stasis, although the image is not actually frozen. This leads Wollen to claim that there is no sharp contrast between the photographic “past” and the cinematic “present,” and that each medium is able to render different aspects of temporality in relation to the event that it portrays: “The fact that images may themselves appear as punctual, virtually without duration, does not mean that the situations that they represent lack any quality of duration or other qualities related to time.”⁷⁵ This view of the photograph that arrests the event in duration, and thus appears “punctual,” can be applied to the “still film”: the fixed camera’s portrayal of the change in duration does not necessarily mean annihilation of the static quality related to photography.

If the “film stilled” invokes photography’s act of arresting a moment in time as a slice of life through abnormal movements, including slow motion, apparent stillness of the photos (seen in *La Jetée*) and stuttering caused by repetition of film frames (seen in *pièce touchée*), then the “still film,” in contrast, aligns with long-exposure photography, signifying the camera’s extended recording time with an immobile long take. Deleuze confirms the dual articulation of photography and film in this form through his discussion of the “still-life” shots in the films of Yasujiro Ozu: “There is becoming, change, passage. But this form of what changes does not itself change, does not pass on . . . at the point where the cinematographic image most directly confronts the photo, it also becomes radically distinct from it.”⁷⁶ A key strain of recent art cinema, represented by the films of Tsai Ming-Liang (*Goodbye, Dragon Inn* [2003]), Bruno Dumont (*L’Humanité* [1999]), Gus Van Sant (*Gerry* [2002]), and others, has revamped Ozu’s tradition in the name of “slow cinema,” a term recently coined in film criticism to refer to a group of arthouse films that insist upon the aesthetic of extended duration imbued with minimalist, observational deployment of the camera, including static framing.⁷⁷ However, it has primarily been in the domain of experimental cinema that the aesthetic of the long take pushes the film image to its limit—to the moment at which its duration appears to stand still. P. Adams Sitney’s seminal, if controversial, classification of the structural film demonstrates that various formal and material experiments with the film medium

allude to the two intermedial forms of film and photography. Despite the absence in his discussion of the relationship between photography and film, Sitney singles out the “fixed camera position” and the “flicker effect” as two technical strategies characterizing the structural film, which correspond to the “still film” and the “film stilled,” respectively. Thus, by Sitney’s definition, the films of Warhol (*Eat* [1963], *Sleep* [1963], *Empire* [1964]) represent the minimalist use of the fixed camera in comparison to the flicker film, which isolates the frame unit (the photogram) as film’s material property.⁷⁸ Catherine Russell compellingly associates the fixed frame (as shape) with the content ignored by Sitney, discussing several avant-garde filmmakers including Chantal Akerman (*D’Est* [1993]) and James Benning (*Landscape Suicide* [1987]). She categorizes the filmmakers’ bodies of work as associating structural film’s formal experimentation with documentary’s claiming of the real, in the sense that they use the static camera as a device to document human bodies or natural or artificial objects in space, yet critically question how the bodies or objects are constructed within the sphere of visual representation. In these films, extended duration is combined with the static frame to offer “a fake impression of depth, the excess of detail resulting from the fixed state.”⁷⁹ Russell further notes that the fixed camera and its methods of framing and arranging its object exceed the self-reflexive imperative of structural film to reassure the intrinsic nature of film: “Cinema shares its apparatus of vision and techniques of representation with many other media, and the ‘structure’ of structural film extends far beyond cinema.”⁸⁰

The remapping of the “film stilled” and the “still film” in conjunction with rereading of the theories thus far suggests that the history of cinema has taken various forms to reflect on its ambiguous relationship to photography as much as photography has (for instance, in the cases of Goldstein, Longo, Sherman, etc.). While the two traditions—experimental film on the one hand, and artists’ film on the other—in a sense may have had their own historical trajectories in the 1960s and 1970s, it is of little doubt that they ran parallel to each other in terms of the “film stilled” and the “still film” investigating points of differentiation and connectedness between photography and film. In this sense, the films of Goldstein and Longo, which Crimp characterized as examples of the “picture” generation, correspond to the “film stilled” and the “still film,” respectively. This is also the case in Baker’s discussion

of the artworks that explore photography's alliance with film by creating hybrid exchange of stasis and motion. Coleman's slide projection, which Baker regards as achieving the "dual articulation" of photography and film, has a compelling affinity with the flicker effects of the "film stilled." Also, the films of Dean (*Disappearance at Sea* [1996], *Fernsehturm* [2001], *Palast* [2004]) and Lockhart (*Goshogaoka* [1997], *Teatro Amazonas* [1999], *Pine Flat* [2006]), which Baker briefly outlines in his conception of "photography's expanded field" rejuvenate the tradition of the "still film" inasmuch as their static camera portrays deserted or forgotten objects and landscapes (Dean's films) or the quiet moments and details of everyday life (Lockhart's films) at a glacial tempo evocative of photographic fixture.

Consequently, the traditions of the "film stilled" and the "still film," both in cinema and in contemporary art, suggest that renewed attention to the ambiguous relationship between film and photography demonstrates an increasingly mutual influence between the two institutional fields. Within this context, electronic and digital technologies have recently been implemented to remediate these two forms. The types of remediation thus waver between the most primitive techniques, those based on the camera recording for an extended duration, and the most complex technical implementations, which intervene in the most minimal units of the moving image (i.e., the single picture frame and the interval between two adjacent frames). The works of Taylor-Johnson, Lewis, and Viola emblemize the ways in which the combinatory uses of these two techniques lead to hybrid moving images seen as variations on the "film stilled" (specifically, Taylor-Johnson's time-lapse and Viola's slow motion) and the "still film" (the three artists' common employment of the fixed frame). Similarly, Tan's and Hannah's video portraits rely on a combination of the static video camera with a pictorial and photographic system of composition, and Claerbout employs an array of digital manipulations to apply the freeze-frame technique in reverse, animating found or filmed photographs to create a paradoxical cohabitation of stillness and movement. The three artists' remediation of the two forms thus sheds new light on photographic stillness and its temporal complexities embedded in the cinema.

As discussed in the section regarding the works of Taylor-Johnson, Lewis, and Viola, the single-take moving picture invites

technical, figurative, and compositional strategies drawn from film, photography, and painting. For this reason, this type of moving picture is referred to as the “single-shot tableau mode.” Drawing on Denis Diderot’s remark on the similarities between the painted tableau and the staged scene, and linking it to both Bertolt Brecht’s use of the tableau for his conception of epic theater and Sergei Eisenstein’s figuration of the shot as tableau, Roland Barthes identifies the “cut-out rectangle” as the very “condition that allows us to conceive all those arts.”⁸¹ Barthes later extends this comparative view of the static composition into his contemplation of the ontology of photography, arguing that photography is indebted both to the painter’s camera obscura and to the tradition of primitive theater as “a kind of tableau vivant, a figuration of the motionless.”⁸² In underlining some key characteristics revealed by the deployment of the tableau vivant scene in film, its translation of painting’s two-dimensionality and its foregrounding of arrested motion, Brigitte Peucker notes that because the tableau vivant exists as “the nodal point that joins painting, sculpture, and theater, its evocation in film is a moment of intensified intermediality.”⁸³ Noël Burch reads the tableau, which is grounded in the horizontal and frontal placement of the fixed camera, as a key principle in the spatial composition of early cinema, which he calls the primitive mode of representation. The tableau was bequeathed to the early filmmakers, “whose historical task was to adapt to the cinema the essential gestures of classical theatrical, novelistic, and painterly representation,” and their historical efforts to integrate the tableau into cinema have been nearly “forgotten today, to the point that any return to certain primitive practices in this respect will seem avant-garde.”⁸⁴

Burch mentions Akerman and Jean-Luc Godard as two filmmakers who have attempted to return to those “primitive practices” in some of their films, for instance, the former’s *Jeanne Dielman, 23 Quai du Commerce, 1080 Bruxelles* (1975) and the latter’s *Passion* (1982), but they are not alone; a number of contemporary moving image artists outside the terrain of institutionalized cinema have revisited and refashioned the historical and formal connections between film and the tableau. The difference is that the artists’ moving image works are, due in part to their corresponding production of painting and photography, more inclined to evoke the conventions of these media than are the film directors’. For this

reason, the single-shot tableau mode that these artists employ with the video camera tends largely to invite either the photographic portrait or the tableau vivant, on the condition that the camera's objects are human figures that initially appear frozen. Seen from this perspective, the artists who adopt the single-shot tableau mode use video's capacity of recording profilmic reality in an extended duration to make moving image artworks comparable to the "still film." The artworks, then, aim to foreground the representational systems of painting, photography, and film in a reflexive manner.

The still video portrait has been a remarkable phenomenon in contemporary art over the past two decades. In this form, a subject is posed in front of a fixed camera and filmed by it during the whole time of its operation. Along with Thomas Struth, Rineke Dijkstra, and Beat Streuli, Tan has been prominent in this genre in her efforts to extend interest in photographic representation of human subjects into the moving image. Taking as her starting point *Citizens of the Twentieth Century*, August Sander's photographic survey of the German population in the early twentieth century according to occupation, gender, family type, age, and social class, Tan's four-channel video installation *Countenance* (2002, Figure 1.9) creates an archive of contemporary individuals and groups in Berlin that she investigated and captured in 2002. Her six-channel video installation *Correction* (2004, Figure 1.10) extends this approach, presenting



FIGURE 1.9 Fiona Tan, *Countenance* (2002), installation view, courtesy the artist and Frith Street Gallery, London.



FIGURE 1.10 *Tan, Correction (2004), installation view, courtesy the artist and Frith Street Gallery, London.*

more than three hundred video portraits of male and female prisoners and guards filmed at four American penitentiaries. These two installations share Tan’s reflexive reference to the codes and conventions of the still photograph, which activate its theatricality: because the subjects were conscious of the fact that they were being filmed, their poses become decisive acts of constituting their portraits in agreement with the artist and her camera. Tan calls into question the camera’s framing and composition of subjects (full-shot or medium-shot, horizontal angle, and frontality of position), as well as its gaze at the subjects, thereby revealing them as devices that determine the representation of the subjects’ identity. The two pieces’ images diverge from that of the still portrait, however, in that the camera records the subject’s pose but does not freeze it as in photography. The individuals or groups are presumably engaged in Tan’s filming with the intent of self-representation, but spectators can witness the counterbalance of this intent in the bodily changes that slightly break the subjects’ postures: twitching hands, fidgeting fingers, blinking eyes. As Mark Godfrey observes, Tan’s capturing of the movement emphasizes “the anxiety of self-representation” that each pose reveals.⁸⁵

The cohabitation of film, photography, and painting within a single fixed frame and the tension between recording and pose are also evident in the video pieces of Canadian artist Hannah. Unlike

Tan's propensity for photographic portraits, however, Hannah's corpus of work spans various traditions of the visual arts, the tableau vivant being the most salient. Several of Hannah's videos since 2008 are the most explicit references to this tradition that can be found; they present a group of performers holding a pose in order to stage paintings such as Théodore Géricault's monumental work *The Raft of the Medusa* (1818–19), Diego Velázquez's *Las Meninas* (1656), and illustrator Charles Allan Gilbert's *All Is Vanity* (1892). But more interesting, from the standpoint of Hannah's creative reworking of the tableau vivant, is *Museum Stills* (2002), a series of five single-channel videos that investigate the relationship between the museum space (the Montreal Museum of Fine Arts), its artworks (Renaissance and Baroque paintings), and its visitors. All the pieces start with a frozen moment in which beholders are placed in various situations expected of a museum: moments of absorption, in which visitors engage in full appreciation of a religious painting in the mid-seventeenth century, observing it and even imitating its depiction of a character's gesture (*Tribute*, Figure 1.11), a portrayal of a man kneeling with clasped hands against the backdrop of other religious paintings, as if moved by



FIGURE 1.11 Still from *Adad Hannah, Tribute* (2002), SD Video, 5 min, Courtesy of Pierre-François Ouellette art contemporain, Montreal, and Equinox Gallery, Vancouver.

them (*Crying*); and at the other spectrum, moments of distraction and boredom, in which visitors sit languidly in four chairs arranged in a cruciform shape, appearing disinterested in the paintings that surround them (*4 Chairs*, Figure 1.12). The impression of frozenness is broken as each moment becomes an extended duration of time wherein the individuals largely stand still, yet their body parts (eyes, hands, heads, etc.) subtly move. In this way, the scenes are revealed to be staged reenactments of our experiences as viewers. The movements thus mirror either the individuals' efforts to maintain their uncomfortable positions and poses, or their bodies' involuntary, contingent aspects that eschew control of those efforts. The individuals' absorptive manner of staging the particular scenes is thus exposed to the viewer and denaturalized.

If Tan's and Hannah's single-shot tableaux are grounded in the mechanical inscription of profilmic time, a time isomorphic with "what is generally thought to be our everyday lived experience of time,"⁸⁶ then the duration of the shot as a trace of the past takes on its own presence at the time of our viewing. What is notable in this mode is less confirming of the camera's transparent reproduction of an antecedent reality, as the standard realist argument might



FIGURE 1.12 Still from *Hannah, 4 Chairs* (2002), SD Video, 5 min, Courtesy of Pierre-François Ouellette art contemporain, Montreal, and Equinox Gallery, Vancouver.

point out, than bringing to the viewer the technical operations that endow its record with a sense of presence. In doing this, single-shot tableaux echo a revisionist understanding of the photographic image as index, a consideration of the index not as a direct reference to a past reality but as an indication of a temporal ambiguity aroused by the image, an interpenetration of past and present. Daniel Morgan underlines this ambiguity in his brilliant rereading of Bazin's theory: "The objects a photograph presents may not exist in the present, but they are not exactly in the past, nor are they in any other time. They are real but outside (historical) time altogether."⁸⁷ Doane also points to this temporal ambiguity in her reflection on C. S. Peirce's concept of the index characterized by his two overlapping definitions: the index as trace, exemplified by the footprint, and the index as deixis, represented by the pointing finger or the "this" of language, which is "ineluctably linked to presence."⁸⁸ She applies the concept of index as deixis to the tradition of avant-garde cinema, considering the 45-minute zoom effect in Michael Snow's *Wavelength* (1967) "the embodiment of the pointing finger or the imperative 'Look at this!'"⁸⁹ Considered this way, the single-shot tableau functions as deixis in much the same way as the zoom in *Wavelength*: both direct the spectator to the event or a gesture that they frame (the index as trace) while at the same time stressing its temporal duration as identical to the time that passes during viewing of the film. Marin Walberg's comment on Warhol's extended fixed shot duration points out how it acts as deixis: "Warhol's play with filmic representation and the unfolding of an event in real time posits the materiality of a static camera view."⁹⁰ In this case, when the single-shot tableau exposes itself as an object with its material and plastic value, it becomes as much a primary focus of film experience as its imprint of the past.

The temporal paradox of past (index as trace) and present (index as deixis) presented by the single-shot tableau as a "still film" can indeed be found not simply in film theory but also in discourse on photography. Krauss's seminal account of the index is characterized by her consistent use of the term "presence," as she addresses how it operates in many artists' adoption of the photograph as a means of representation and documentation in American art of the 1970s. Such phrases as the "pure installation of presence by means of the index" and the "overwhelming physical presence of the original object"⁹¹ suggest that her concept of the index does not rely simply

upon the pastness of the photographic record. Green and Lowry, too, ascribe the excessive presence of a photographed event to the camera that “operates as the deictic agent.”⁹² For the two theorists, the work of conceptual photographers foregrounds the operation of their camera so that the viewer recognizes how it shapes the concept of photographic indexicality as “performative”—that is, as invoking the real “through ‘pointing to’ the event.”⁹³ Here the ambiguous intermingling of past and present relates to the inseparability of a photographic act from the way in which it is presented to the viewer: the intervention of a camera that records an event or object refers to the reality of a past, but the camera’s performative gesture of pointing toward the reality functions as a mediator that brings the past to the present viewer. Returning to Tan’s video portraits and Hannah’s *Museum Stills*, it is obvious that their video cameras act as performative agents, which they foreground in relation to the poses of their subjects. The subjects’ involuntary bodily movements, then, are seen to underline this aspect of the camera, since they occur at the moment in which their pose as a performative engagement with the camera’s recording process is broken. Seen in this light, the camera in Tan’s and Hannah’s works serves to render the pose as overwhelming the time of the viewer.

Yet another aspect of the camera’s performative role in “pointing to” the pose exists as well. Because Tan’s and Hannah’s method of filming subjects dispenses with other cinematic devices such as montage and camera movement, their installations are viewed as a collection of the primitive form of the moving image, whose motion originates only from the contact between the camera’s continued operation and the subjects’ physical changes of state. This is particularly the case in Tan’s works; her foregrounding of the still camera in *Countenance* and *Correction* relates to her interest in how the codes and conventions of the photographic portrait influenced early cinema’s frontality, and the relationship between the camera’s filming and the filmed subject.⁹⁴ At the same time, the movement of the subjects in Tan’s and Hannah’s works must be understood in relation to the extended duration provided by video. As Lowry observes, the notion of duration introduced by Tan’s video camera renders the pose “something that takes place over time—a time that . . . is also marked out and delimited by the operations of the technology.”⁹⁵ The suspension of the pose originates from the fact that its subject endures the process of video

recording. This is also applicable to *Museum Stills*: the visitors' acts of looking at or being distracted from the paintings take place during the time of recording in which their bodily movement is suspended. Thus, Tan's and Hannah's works bring to the viewer not just the camera's framing, but the time that it imposes on the subject, or the inseparability of time from the subject's pose. The tension between the act of a filmed subject and the time that he or she must endure during the act undoubtedly dates back to the work of film and video performances in the 1960s and 1970s by Bruce Nauman, Vito Acconci, and Joan Jonas, to name just a few.⁹⁶ Seen in this light, Tan's works, as well as those of other "video portrait" artists, are indebted to the capacity of video to render its profilmic subject as pure presence in its duration. Unlike the video performances of the 1960s and 1970s, however, which examined video's duration of real time as its unique property, this videographic mode in the single-shot tableau aims either to activate the temporal complexity of the indexical image common to photography and film (in Tan's works) or to expose and denaturalize the tableau vivant tradition long developed and varied across different media (in Hannah's works).

The video installation works of Claerbout explore the "pensive image" since they confront the viewer with photographs, whose mode of stillness guides her toward the contemplation of them. According to Jacque Rancière, the word "pensive" primarily refers to "someone who is . . . 'full of thoughts,'" but this mental state is interlocked with a specific mode of the image that arouses them, an image characterized by "a certain passivity."⁹⁷ The concept of "pensiveness" that Rancière discusses primarily relates to Barthes's reflection on the temporal ontology of the photographic image and on the viewer's perceptual sensitiveness to it, which leads to his affective contemplation of its pastness. Barthes's concept of pensiveness is based on photography's capturing of a past in the fixed form—namely, its "stasis of arrest"⁹⁸ that allows the photograph's unexpected detail to emerge. For Barthes, film's irreversible flow of linear time, which asserts film narrative and its temporality, absorbs the photographic motionlessness that guarantees a contemplative consciousness.⁹⁹ Thus Barthes considers the stilled image, including film stills, as opening up the space for scrutinizing the photographic index's complex relation to time, in which an oscillation between past and present is not assimilated into the illusion of movement in

the cinema: filmic time is not free insofar as its image “cannot go faster or slower without losing its perceptual figure.”¹⁰⁰

Bellour expands on Barthes’s concept of pensiveness but gives a fresh twist to it by reflecting on the moment in which the filmic image “goes slower without losing its perceptual figure.” By decelerating or interrupting the flow of film, such techniques as the freeze-frame, the suspension of movement, and the rephotographing and enlargement of the still photo in a sequence serve not simply to reveal the hidden presence of the photogram in the cinema, but also to offer the film viewer an opportunity to resist the “unfolding of images in time, a time the spectator cannot control.”¹⁰¹ Bellour then argues that the moment of stillness offered by those techniques creates a “pensive spectator,” a spectator who is capable of distancing himself from the irreversible flow of the filmic image. At the moment of stillness in the cinema the “pensive spectator” is confronted with a merger of two temporalities, the time of the photographic referent and the time of the moving image: “In the frozen film (or photogram), the presence of the photograph bursts out . . . between it and the film from which it emerges, two kinds of time blend together,”¹⁰² continues Bellour. In this way, the frozen or slowed image in the cinema underscores a moment in which its time is coupled with the same temporality as Barthes sees in photography—the ambivalence of “having-been-there” (the past) and “being-there” (the presence of the past).

Laura Mulvey places Bellour’s concept of the “pensive spectator” within the context of today’s viewing devices (such as VHS and the DVD) to pause, decelerate, and rewind the film image, arguing that they “bring to the cinema the resonance of the still photograph, the association with death usually concealed by the film’s movement, its particularly strong inscription of the index.”¹⁰³ The “aesthetics of delay” enabled by the new technologies, Mulvey continues, can yield a form of moving image in which the relation between “film time” (the time when an image was inscribed onto the filmstrip) and “cinema time” (the time shaped by cinema’s illusion of movement) becomes more uncertain than before: the electronic or digital freeze-frame, for instance, is not the actual film frame as found in celluloid, but it restores to the moving image the uncanny presence of a past—and, by extension, the past’s evocation of mortality and death, which Barthes and Bellour associate with the still photograph. In my view, Mulvey’s observation of this freeze-frame testifies to the

extent to which the post-filmic adoption of the techniques for the delay of film is double-edged: the digitally rendered freeze-frame or slow motion makes it clear that the temporal conundrum of analogue media, the ambiguous coupling of past and present, does not exhaust itself in the post-filmic technologies; at the same time, this revivification and repositioning of filmic and photographic temporalities with respect to stillness and movement via the technologies entails the inscription of their properties unavailable in the two media. Claerbout's corpus of digital video stands out in terms of the tension between the two edges, as its images present varying degrees of the dual articulation of photography and film.

A number of Claerbout's video pieces take as a point of departure a found single photograph. When the photograph is projected during a particular span of running time, it initially looks like a freeze-frame in a film, which Bellour might consider as the "film stilled." Now that Claerbout edits the photo in a minimal but significant way by means of digital manipulation, however, the resulting image takes on a coexistence of stillness and movement in the same photo frame: while most of the picture's objects and grounds remain frozen in the past, a small part of its details are set in light motion in the present. First, this movement is focused on the foliage of the tree (*Boom* [1996], *Ruurlo, Bocurloscheweg, 1910* [1997], *Kindergarten Antonio Sant'Elia, 1932* [1998] [Figure 1.13]), so that

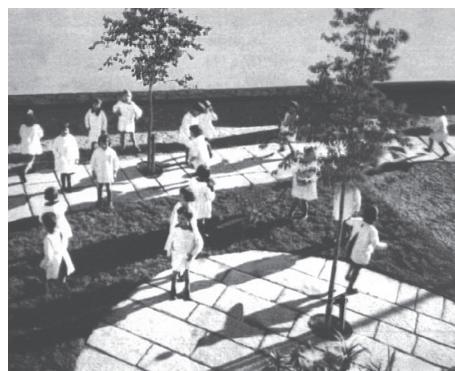


FIGURE 1.13 Still from David Claerbout, *Kindergarten Antonio Sant'Elia, 1932* (1998), single-channel video projection, black and white, silent, 10-min loop © David Claerbout, Courtesy of the Artist and Sean Kelley, New York.

it reminds the viewer of the passage of time as a natural progression of the physical world. Yet in his later works the movement gets more minute as they bring to life the faces of boys and a priest (as their teacher) coming from an anonymous photograph taken at a Catholic boys' school (*Retrospection* [2000]), or the sun and clouds surrounding an aircraft shot down by friendly fire in the Vietnam War (*Vietnam, 1967, near Duc Pho (reconstruction after Hiromishi Mine)* [2001]). As Green observes, all these pieces are characterized by the "undecidability" of whether Claerbout's image is film or photography: "[Claerbout's work] faces us with . . . the possibility of a photograph that unfolds in time (but is not a film) and a film that is stilled in time (but is not a photograph)."¹⁰⁴ Claerbout's technique of "unfreezing a photograph" plays a crucial role in this undecidability because it is in a sense an inverted application of freezing the linear progression of cinematic time, which Bellour and Mulvey have seen as the condition of "pensive" spectator. As he acknowledges, "When the one-directional language of film is suspended then the spectator himself must seek a new position."¹⁰⁵ Considering this way, it might be possible to regard his found material not simply as photography *per se*, but as part of an imagined film, a freeze-frame of a film whose unfolding of images was not achieved but eternally delayed, underlining their details as the inscription of the irrevocable past.

Digital video lies at the heart of the intermixture between the two media, while simultaneously infusing the original image with its own temporal figuration. It reconstitutes on the same picture plane the different levels of time each coming from photography and from film, that is, the living trace of the past and the flow of time as the present, by combining the manipulation of the electronic signal with the retouching of the plane pixel by pixel.¹⁰⁶ As seen in the trembling of the leaves on the tree, for instance, the surface micromanipulation of the encoded picture is embedded within the temporal manipulation of the interlaced scan line, made visible by its continual vibration.¹⁰⁷ With the advent of digital technologies, this temporal simultaneity is elevated to the configuration of what Timothy Murray has called, to draw on Deleuze's reinterpretation of Bergson and Leibniz, "digital incompossibility," in which different modalities of the world, for instance, its actual and virtual faces, are folded and unfolded in a temporal continuum of becoming, affecting each other while maintaining their own singularity.¹⁰⁸

“Rather than either converging or remaining impossible for each other, rather than being either included or excluded, they stand in paradoxical relation to one another as divergent and coexistent.”¹⁰⁹ It is the in-between of the actual and the virtual, of representation and simulation, and of past and present, that makes Claerbout’s works confusing yet poignant. And if this concept implies, as Murray states, a challenge to “prior modernist assumptions about art, aesthetics, and identity,”¹¹⁰ Claerbout’s dual articulation of cinematic and photographic forms encapsulates the ways in which digital technologies cause the two to confront one another within their limits yet liberate them from their material substrate. In this way, his strategy of partial animation gives rise to the threshold between the verification and the dissolution of each medium’s specificities. What lies at the threshold is an artificial temporality, a temporality whose length of duration and direction are up to the material and technical determination of the electronic flow rather than to the measurement of humanized time. This is obvious in the fact that the duration of the animated objects, the wind over the trees, the spectrum of shadow and light, cannot solely be grasped in terms of their natural changes. For in the works there is nothing that would function as the chronological marker of those changes. For instance, the intermittent reflection of sunlight on a window (*Reflecting Sunset* [2003]) or a jungle of concrete pillars at a construction site (*The Stack* [2002]) occurs during 38 minutes or 36 minutes, respectively, but neither of these time spans guarantee that the path of the setting sun matches its natural progression: that is, they might be derived from the dilation or compression of the electronic signal in which the physical traces of the phenomena are inscribed.

At stake for Claerbout is, then, how this electronic and digital temporality serves for the “visible intersection of filmic and photographic temporalities,” undoing any “simple dichotomies between past and present, between movement and stasis.”¹¹¹ In *Vietnam, 1967, near Duc Pho (reconstruction after Hiromishi Mine)* (Figure 1.14), the photograph is placed within the screen as an identifiable object, which is severed between the unperformed movement of the aircraft at the moment of the camera’s fixture and its unavoidable destiny to fall on the ground in the continuing flow of life. The movements of the natural phenomena, the shadows of clouds on the hillside, and the changes in the brightness of sunlight



FIGURE 1.14 Still from *Claerbout*, Vietnam, 1967, near Duc Pho (reconstruction after Hiromishi Mine) (2001), single-channel video projection, color, silent, 3-min loop © David Claerbout, Courtesy of the Artist and Sean Kelley, New York.

on the plain mirror this split. At the phenomenal level, the image is one that acquires filmic duration and slowly moves. Because the actual transition from one state to another in those movements is extremely subtle, however, the slow motion at first sight appears to be the freeze-frame image or the projected slide of the snapshot. The arrested aircraft, then, functions as a fulcrum to maintain this seemingly contradictory visual impression. In this way, the digital reanimation effect indistinguishable from the changes in the natural phenomena, as Mulvey supposes, brings the cinematic image back to the time it was filmed. Then the changes marked by the micromovement are contrasted with the aircraft, thereby highlighting that the snapshot's attempt to portray the aircraft's movement results in its fossilization. In this sense, this contrast attenuates what Thierry de Duve has called the “traumatic effect” of the snapshot, an effect less due to its visual content (scenes of violence or obscenity, for example) than its structural limit—due to its splitting between “too-late” (“too late to witness [an event’s] happening in reality”) and “too-soon” (“too early to see the event occur”).¹¹² What this splitting arouses to the viewer of the snapshot is that its event or object takes on the irrevocable past due to its

failure to convey movement in time, which causes the “sudden vanishing of the present tense.”¹¹³ The micromovement, then, is also seen as a key device to dramatize how the traumatic past caught in the snapshot returns to the viewer’s present.¹¹⁴ It is in this way that the moving image challenges the ontology of the photographic—because the micromovement dissolves the complete fixation of a moment—yet simultaneously affirms it.

For *Retrospection* (Figures 1.15 and 1.16), Claerbout deals with the class photograph in such a way that every person in the group can be recognized as an individual whose expression functions as



FIGURES 1.15 AND 1.16 Stills from *Claerbout, Retrospection* (2000), single-channel video projection, black and white, stereo sound, 16 minutes
© David Claerbout, Courtesy of the Artist and Sean Kelley, New York.

though the *punctum*, a detail or “partial object” as an “accident which pricks”¹¹⁵ the viewer. A series of zoom-ins isolate and reframe certain members of the group one by one, thereby magnifying each of their faces. Therein occurs a minimal, barely perceptible passage from stasis to motion, bringing to the picture’s surface an array of minute changes on the face, such as the mouth’s twitching, the eye’s quivering, and the lip’s small smiling. For generating these subtle animation effects, Claerbout brushes the picture’s pixels and turns their changes into the oscillation of video signal. While directly related to the painterly manipulation in digital photography, for Claerbout this treatment fits into his conception of photography as “a skin that can be touched.”¹¹⁶ In the first place, it is of little doubt that his technique, namely, the combination of magnification and retouching, is at odds with a couple of key arguments for the concept of Barthesian *punctum*: the chemical fixation of the referent on a photosensitive material, which is assumed to guarantee the irrefutable indexicality of the analogue photograph,¹¹⁷ is eroded; more significantly, Claerbout’s manipulative attitude toward the found photograph contradicts the pervasive idea of the *punctum* as being shown outside the intention of the photographer.¹¹⁸ Nevertheless, it is too undeniable that Claerbout drags out from the original photograph what is equivalent to the *punctum*, the details—in this case, the facial expressions of the students: for they are not subjugated to the control of the unknown photographer who took the picture, and thus viewed as “accidentally” inscribed in it. How can, then, we explain this contradictory coincidence of the intentional and the accidental?

The movement of the faces in *Retrospection*, however tranquilized, dismantles the pose and makes their expression ephemeral: that is, the pose becomes something that will disappear as the moment of magnification ends. At the same time, however, it should be noted that this movement is not purely cinematic since it does not deliver the continuous series of images that would lead to efface the faces on the screen. Rather, it functions to amplify the spectral force of the *punctum* as it draws the viewer’s attention to the paradoxical coincidence of absence and presence, of life and death, lingering on the faces. That is, the coming-to-life of their expressions attenuates, in Barthesian sense, that the students are already dead, that is, they are those who were there and then and were destined to die, perhaps at a war. Here the movement, rather than the sheer manifestation

of cinematic medium specificity, is a way of giving a visible form to the uncanny presence of the expressions in the viewer's present in exchange of their inherent immobility. Claerbout makes this point as follows: "My behavior became that of a nurse: it would bring these images back to life and let them float in an environment that would not treat them as *passé*."¹¹⁹ In this sense, the changes in the expressions are seen as the result of *animating what animates the viewer* in the photograph. This also suggests that the movement stresses the sense of loss inherent in the photograph (in the case of the class photo, the loss of the students' souls) and simultaneously incorporates the viewer's perceptual and affective engagement with that which arouses the loss by "pricking" him—the *punctum*.

Consequently, Claerbout's videographic moving pictures, which are based upon his creative reworking of the "film stilled" with digital reanimation of found photographs, stand in the space between photography and film while also pointing out a liminal point in which both converge and differentiate from each other. Claerbout's digital editing opens up this space, thereby substantiating that the new technologies have possibilities for drawing on and metamorphosing the photographic image (or the filmic moving image that discloses its photographic past) which stimulates the viewer's careful and time-consuming reflection. The resulting hybrid moving image is, to Rancière's words once again, "not about to stop being pensive."¹²⁰

Conclusion

I have attempted in this chapter to reposition the theory of the photographic in cinema within the influence of electronic and digital technologies and, in so doing, to categorize and examine the forms of image, which I named videographic moving pictures, that facilitate exchange between film and photography through unprecedented, intense collapse of the boundaries between stillness and movement. In producing these videographic moving pictures, digital video appropriates and transforms the two privileged filmic forms, the "film stilled" and the "still film," haunted by and returning to the temporal complexity of photography. Thus, while videographic moving pictures present hybrid aesthetics of photography and film as in the cases of Tan and Hannah, the technologies often

result in its spatiotemporal configurations not attributable to the analogue version of the two media, such as the delicate transition from stillness to motion in the works of Taylor-Johnson, Lewis, and Viola, and the paradoxical cohabitation of stasis and motion in Claerbout's pensive images. The latter two cases in particular mirror the material and structural shifts in both photographic and filmic images while simultaneously refashioning the intermediality of the two. In all cases mentioned, videographic moving pictures bear witness to a profound paradox that has circumscribed the two analogue media in the digitized production of art during the past two decades: while distanced from their common material basis, both film and photography, hitherto recognized as distinct, find their less-acknowledged resonances in the hybrid forms of image that revivify their complex temporal aesthetics. The simultaneous articulation of stasis and motion in videographic moving pictures suggests that while dismantling their respective boundaries, electronic and digital technologies allow the artists not to disregard the specificities of film and photography, but to revisit them by placing the two media in negotiation with one another. In this sense, what Baker sees as a key lesson of "photography's expanded field" is also applicable to artists of videographic moving pictures: "Not that modernist medium-specificity would simply dissipate into the pluralist state of anything goes, but rather that such mediums would quite precisely *expand*, marking out a strategic movement whereby both art and world, or art and the larger cultural field, would stand in new, formerly unimaginable relations to one another."¹²¹

This chapter further suggests that any attempt to reassure the stable identity of video under the aegis of the modernist belief in medium specificity may short-circuit the extent to which its material and technical features are maintained, galvanized, or redeployed, as its technological conditions have shifted. Rather than insisting on the limited parameters of video's formal and aesthetic outcomes, such as noisy and abstract images distinct from cinema's photorealistic imagery and the expression of real time as distinct from cinema's recording of past events, it is more meaningful to examine the intermedial flow of video's key specificities—surface and temporal manipulations—that both converse with and influence other media components. In so doing, digital video can be placed at the juncture of analogue video, filmic and digital cinema, and the computer. Only then can we bridge a chasm that tends to

be taken for granted in discussing the issues of media exchange after the demise of medium specificity. Video's increasing alliance with cinema, and by extension with painting and photography, in videographic moving pictures is symptomatic of its expanded field at the cost of some of its enfeebled distinctiveness; but even so, identifying and scrutinizing video's specificities in the digital era is of great value for examining how many contemporary artists make use of it conceptually and aesthetically to produce moving images characterized by media hybridity. Indeed, the aesthetic of media hybridity engendered by the manipulative capabilities of digital video is also relevant to a number of contemporary artists and filmmakers, who use it to maintain and deepen the traditions of abstract film and video, the imagery of which are contrasted with videographic moving pictures. My investigation of those artists in the next chapter will demonstrate how the aesthetic of abstraction, which was traditionally considered a self-reflexive inquiry into the material properties of film and analogue video, continues in the digital age—with an emphasis upon how it can be read as pursuing not simply purity, but also aesthetic, technical, and even material hybridity.

CHAPTER TWO

Digital glitch video and mixed-media abstraction: Materialism and hybrid abstraction in the digital age

Introduction: Digital abstract moving images and hybridity

In *Compression Study # 1 (Untitled data mashup)* (2007, Figure 2.1), a mix of the music videos for Rihanna’s “Umbrella” and The Cranberries’ “Zombie,” the viewer is able to witness a moment in which the close-ups of Rihanna and Dolores O’Riordan (lead singer of The Cranberries) become unrecognizable. The face of O’Riordan, coated in gold costume and clothes, is overlapped with Rihanna’s face in black and white, and vice versa, but this transition does not lead to a clean image in which both figures and their gestures would be seamlessly represented. Instead, a whirlwind of broken pixels and irregular shapes in black, white, and yellow overwhelm the figures of both pop stars while leaving only small parts of them in which the viewer is still capable of recognizing the identity of the stars.



FIGURE 2.1 Still from Paul B. Davis and Jacob Ciocci, Compression Study # 1 (Untitled data mashup) (2007), courtesy of the artists.

Artists Paul B. Davis and Jacob Ciocci, the latter a primary member of artistic collective Paper Rad, extend the appropriated digital files of the two music videos and manipulate their underlying frames to create this dynamic tension between the figurative remainders of the pop stars and the abstract play of the kaleidoscopic colors and liquid forms.

The continual clash between the figurative and the abstract can also be observed in Thorsten Fleisch's *Wound Footage* (2003/2009, Figure 2.2). Fleisch took the Super 8-mm footage of a car running across a deserted landscape and scratched and burned the emulsion on its reels before passing the reels through a projector. These hands-on and chemical manipulations create an array of holes, deterioration of colors, an oscillating horizontal white stripe, and a series of black lines on the surface of the footage, all of which refer to film's medium-specific components. While these techniques of crafting celluloid manually and chemically are certainly indebted to the materialist tradition of experimental cinema exemplified by the films of Stan Brakhage, such as *Mothlight* (1963), Fleisch added two non-filmic processes to his reels. He digitized the reels and dislocated some of the pixels with a software application. Accordingly, a random array of fleeting specks appears like boiling noises on the figure of the landscape. Fleisch then reshot the footage from his monitor with a video camera while intervening



FIGURE 2.2 Film still from *Thorsten Fleisch, Wound Footage* (2003/2009), courtesy Thorsten Fleisch.

with the cables that connected the monitor to his computer. This physical manipulation allows a series of scan lines and intermittent electronic flickers to overlap with the traces of celluloid and the specks of pixels. Consequently, the viewer is able to observe the dynamic intersection of the materiality of film and that of digital video. As Fleisch himself remarks, his attempt to blur the boundaries of celluloid-based and digital manipulations in *Wound Footage* “demonstrates the different aspects and aesthetics of each approach but at the same time it shows that it’s all just moving images.”¹

This chapter discusses two types of the hybrid moving images characterized by the coexistence and interrelation of the representational and abstract components in the single picture frame, one type demonstrated by *Compression Study #1 (Untitled data mashup)* and the other by *Wound Footage*. Contrasted with the photographic imagery of videographic moving pictures, these types of the moving images belong to and update the larger traditions of experimental film and video that have explored the materiality of media and brought it into relief. These materialist traditions have developed their own visual expressions of abstraction, which are extended into a variety of contemporary artworks based either on the manipulation of codes and frames in a digital video file (as in

the work of Davis and Ciocci) or on a combinatory use of celluloid-based and digital video-based techniques (as in the work of Fleisch). This chapter then argues that the abstract shapes visible in the artworks testify to either the transition of abstractionist aesthetics in film and analogue video to the material substrates and algorithms of digital imaging, or to the continuous interaction between the material traces of film and video. Encompassing the two, I offer “hybrid abstraction” as a second category of hybrid moving images driven by materialist energies.

My attempt at correlating hybridity with the aesthetics of abstract moving images might at first sound strange, given that abstract film and video has mainly been linked to the discourses of modernist art that consider abstraction to be associated with the essence of the medium. As is well known, the Greenbergian idea of modernist art supports abstract painting as the art form that devotes itself to the medium-specific qualities of painting in a self-reflexive manner, arguing that abstraction expunges figurative and narrational elements from painting and reduces it to its basic elements, such as the canvas as the foundation of the painting’s two-dimensionality, the pigment as its material, and the colors, lines, and geometric patterns (horizontal and vertical lines, diagonals, rectangles, circles, etc.) as its essential forms. This Greenbergian association of the abstract forms with the idea of medium specificity has played a vital role in defining abstract painting as manifesting the “purity” of painting, while also greatly influencing the modernist idea and practice of abstract film.² To be sure, the development of the early abstract film in the 1910s and 1920s was indebted to the interests of Cubist, Futurist, and Dadaist painters, including Hans Richter, Fernand Léger, Viking Eggeling, and Walter Ruttmann, who aspired to extend painting into film, which was then a new medium.³ Thus, the artists (as well as filmmakers) used “the movie screen as a direct substitute for the painter’s canvas, as a framed rectangular space on which a kinetic organization of purely plastic forms was composed.”⁴ The artists’ filmic exploration of abstract forms as essential to painting was also an endeavor to seek the essence of film, given that the geometric patterns changing over time were seen to express visual forms in movement as intrinsic to film while excluding representational elements.

The link between abstract cinema and the essential purity of film was further tightened by the practices of US structural film and UK

structural/materialist film and their corresponding discourses in the 1960s and 1970s. Here, the palette of the abstract forms developed by those practices included not only the change of geometric patterns over time, but also a range of informal shapes derived from scratches and grains on the surface of celluloid, from the edges of filmstrip and perforations, and from chemical transformations of colors. Malcolm Le Grice and David E. James, for instance, regard all these forms as expressing the material components and technical processes of film in purist and self-reflexive ways. For Le Grice, the abstract cinema in the 1960s and 1970s “seeks to be ‘realist’ in the material sense,” insofar as it “does not imitate or represent reality, nor create spurious illusions of times, places and lives.”⁵ Similarly, James characterizes US structural film as “pure film,” in the sense that its orientation “took the form of a general subordination of interest in representation, especially of narrative, and a corresponding emphasis on the materials and recourses of the medium, on the conditions of production and display, and on the specific kinds of signification of which film is capable.”⁶ Here, it is worth noting that Le Grice’s and James’ definitions of the abstract forms in the structural or structural/materialist film as nonrepresentational, antinarrative, and expressive of the materials and processes of the medium in self-reflexive manner are equally applied to the works of the “image-processing” video in the 1970s. That is, both artists and critics have made and reinforced a connection between the works’ abstract forms and the modernist imperative to explore the basic properties of the electronic medium, evaluating the forms as electronic visual expressions distinct from the photorealistic imagery of film and television.⁷ To summarize, the materialist discourses on the abstract moving imagery in experimental film and video have framed it as a direct manifestation of the “pure” material and technical properties of film and video.

While these modernist discourses undoubtedly serve as a key factor in characterizing these abstract forms, this direct association between materialism and purity, I argue, risks overlooking certain aspects of hybridity and impurity that are at play in certain types of abstract moving images in film and video. Building upon this assumption, this chapter argues that the contemporary artworks of hybrid abstraction enable us to consider abstract moving imagery produced by the imperative to investigate the properties of film and digital video in its previously less-acknowledged relationships to

the aesthetic, technical, and material ideas of hybridity. The first idea, namely aesthetic hybridity, starts with the following question: can we truly say that a moving image that involves and displays abstract forms directly leads to its characterization as a “pure” image? This question implies that certain moving images falling under the umbrella of abstract film and video have included in their abstract images the figurative elements (whether lens-based imagery or painterly images) that the aesthetic of abstraction has largely been regarded as having abandoned for the sake of “nonrepresentational” or “nonfigurative” art. In his essay dedicated to “Visual Music: Synesthesia in Art and Music since 1900 (2005),” an exhibition which traces an alternative history of abstract art encompassing paintings, photographs, light shows, films, and videos in the twentieth century, curator Kerry Brougher makes the following point while discussing the abstract films and direct animations of Hans Richter, Walter Ruttmann, Len Lye and Hy Hirsch; he writes:

Rather than eliminating representational imagery, by photographing abstract shapes these filmmakers were in fact turning abstraction into something that could itself be represented—an image of abstraction rather than abstraction itself. Thus, when Lye and Hirsch began to combine abstraction and documentary footage, they were harnessing the power of film to fuse abstraction and representation together.⁸

Several other examples will sufficiently validate Brougher’s point on the combination of abstract and representational forms in the history of abstract film and video. The Lettrist films of Isidore Isou and Maurice Lemaître, for instance, employed hands-on manipulations of found footage, including bleaching, painting, and scratching into the footage’s emulsion, to deform and destroy the footage’s film representation with noisy abstract forms. The direct animations of Harry Smith and Robert Breer, too, are marked by the complex interplay of abstract forms (lines and colors) and figurative elements. In Bill Morrison’s films, including *Decasia: The State of Decay* (2002), the traces of naturally decomposing celluloid take on informal abstract forms that bear the materiality of film. The melting forms marked by an array of holes and burned particles appear to swallow and destroy the representational components inscribed

in the celluloid. The intersection of abstract and representational components that characterizes the aesthetic hybridity of abstraction in these experimental films is also present in video works. A number of contemporary video works that digitally adopt the slit-scan technique, a photographic and cinematographic process in which a camera uses a mounted movable slide with a slit in it to create static images of time-based phenomena, present a transformation of a two-dimensional photorealistic imagery into a distorted image space in which multiple times and perspectives coexist in a single picture frame.⁹ As in Camille Utterback's *Liquid Time Series* (2000–02), the cars and pedestrians in the video footage of the streets of Tokyo and New York are fragmented into vertical sections marked by blurring lines. The resulting image appears as a dense collage of photorealistic components and abstract liquid shapes (sections and lines), which Utterback describes as "video cubism."¹⁰

What I am calling the aesthetic hybridity of abstraction, or the dynamic relation of abstract forms and representational components, is indebted to what Gregory Zinman recently called "messy" abstraction, in contrast to "clean" abstraction. He is arguably the only scholar who proposes a helpful distinction between two types of abstraction in abstract film and video in terms of their differing aesthetic features. While "clean" abstraction involves blocks of color and hard-edged geometric forms, "'messy' abstraction may appear as a seemingly random array of fleeting flecks and sprawling lines skipping across the screen."¹¹ Zinman further writes that the aesthetic of "messy" abstraction can be made not only with physical and chemical manipulations of celluloid, including staining a filmstrip with natural or chemical elements and scratching the strip's emulsion, but also with a "strategic disruption of a video codec's ability to decode a data stream."¹² In my view, Zinman's insight suggests that "messy" abstraction does not simply result in the aesthetic hybridity of abstract and representational components, but can also be produced by the hybridization of newer and older media forms in technical and material ways.

This chapter singles out two types of hybridization, a technical hybridization and a material one, in a number of contemporary artworks that demonstrate the aesthetic of hybrid abstraction, to each of which *Compression Study # 1 (Untitled data mashup)* and *Wound Film* correspond, respectively. What I call technical hybridity means that the dynamic coexistence and interrelation

of abstract and representational elements is predicated upon a correspondence between the techniques of image-processing video and the manipulation of codes and frames in contemporary video pieces that explore the underlying materiality of the digital image in the form of noise aesthetic, that is, works that fall under the category of “digital glitch video.” Le Grice has once pointed out this correspondence when he observed that most of the abstracting techniques in film, except for hand coloring, are available to video with much greater ease and immediacy. He further sees that digital systems lead to the flexible application of the aesthetic of abstraction to contemporary practices, thanks to their capacity to incorporate the forms and techniques of older media (film and analogue video) and mix them in various ways: “If there is aesthetic value in applying the concepts of abstraction to time-based media, and the abstraction of color remains fundamental to this direction, then video and certainly its current hybridization with digital systems provides a more flexible technology for this than film.”¹³ Gene Youngblood is perhaps the only critic who envisioned in the mid-1980s that once digital systems would be developed enough to appropriate both the techniques of hand-drawn animation and electronic imaging, it would be possible to transform photorealistic imagery into abstract forms or vice versa. He writes: “It is possible digitally because the code allows us to combine the subjectivity of painting, the objectivity of photography and the gravity-free motion of hand-drawn animation.”¹⁴ Building upon Le Grice’s and Youngblood’s insights, the first section of this chapter will demonstrate that the technical transition of structural film and image-processing video plays a key role in forming the aesthetic hybridity of digital glitch videos, as these aim at investigating and unveiling the material properties of the digital image.

The second section of this chapter addresses what I call “mixed-media abstraction” as a more radical hybridization of previously distinct media in the context of the avant-garde cinema of the last decade, namely a material hybridization of film and video. To be sure, the simultaneous employment of film and video, or film and computer, were prefigured in the works of John Whitney Sr., Scott Bartlett, Jud Yalkut, and Stan VanDerBeek in the late 1960s, the artists who sought to explore the capacities of a video synthesizer or an analogue computer to produce complex painterly effects, including abstract shapes moving in time and color hues, which

had been developed in the traditions of abstract film and direct animation.¹⁵ But it is arguably only since the 2000s that a number of filmmakers and video artists have rigorously combined film and digital video not merely to create abstract forms but also to achieve a material hybridization of both media. Filmmakers such as Lynn Marie Kirby, Siegfried A. Fruhauf, Johanna Vaude, Dietmar Brehm, Jürgen Reble, and Jennifer West, all physically manipulate film stocks (Super-8, 16 mm, 35 mm) in various ways, including painting, etching, and chemical treatments, and then digitize the stocks in order to further reorganize and transform them, or vice versa (i.e., to take on video footage as their source images and transfer them to film for hand-processed, frame-by-frame manipulation).¹⁶ These combinatory techniques largely result in the ever-changing flux of highly complex, abstract shapes that testify to the coexistence of the material traces of both media: emulsions, tints, and grains as markers of celluloid on the one hand, and pixilated colors, geometric forms, and the unreal surface textures derived from different (high or low) definitions of digital video on the other. I suggest that more than taking their inspiration from the traditions of abstract imagery in the history of avant-garde film and video, these filmmakers push the boundaries between the filmic and the digital to the limit and thereby resist a couple of dichotomies that have been and still are looming over the current climate of avant-garde practices and criticism: first, the opposition between film's recalcitrant materiality and the immateriality of the digital that has been known to erode this materiality; and second, the contrast between the filmmaker's artisanal treatment of celluloid and digital software's automated, algorithmic procedures whose simulation of hitherto meticulous and time-consuming techniques to alter images has been deemed as threatening to the filmmaker's physical intervention.

Digital glitch videos: Digital materialism and aesthetic-technical hybridity

Digital glitch videos refer to a variety of moving image artworks that create and investigate a "glitch" which, according to artist and writer Rosa Menkman, is a perceived error or accident that "appears as a (actual and/or simulated) break from an expected

or conventional flow of information or meaning”¹⁷ within digital communication systems. While the glitch as error is mostly derived from an accidental or intentional malfunction of the mechanical, programmatic, or networked components (such as the hardware or software dimensions of the computer, the encoding and decoding procedures of data files, etc.) that constitute the digital media system, the artifacts that might be perceived as a glitch can also be produced in the system’s normal functioning. As digital media artists Olga Goriunova and Alexei Shulgin note, the glitch artifacts “might originate from technical limitations, such as low image-processing speed or low bandwidth when displaying video,”¹⁸ inherent in a digital system that works normally. Such artists as JODI (a collective of Dutch artists Joan Heemskerk and Dirk Paesmans), Cory Arcangel, Gijs Gieskes, and Daniel Temkin, just to name a few, represent the art of glitch as they have produced various digital artifacts, including videos, graphic images, modified websites, and hacked games, by modifying now-outdated technological objects, codes, and algorithms (for instance, arcade video games), exploiting computer crashes, or creating corrupted codes. Their artifacts accordingly present an array of numbers, lines, eerie colors, and broken blocks of pixels as expressive of degradation and noise. Some of the artifacts challenge the myth of technological progress propelled by digitization as these aesthetic features bring to the foreground the materiality of the technological objects, codes, and algorithms that prefigured contemporary media culture but which are now perceived as obsolete: as in the case of Arcangel’s *The Super Mario Cloud* (2002), in which the clouds floating against a blue background (while the architectural elements of the game are intentionally eliminated) give clue to the foundation of the pictorial space in today’s video games. Others, as in the cases of JODI’s modified websites and games, represent the desire to “bring about specificity [of the digital] as an artistic medium.”¹⁹ As for visual artifacts, the videos or still images that include glitches could spring from an intentional modification of the codes that constitutes their files, or from a bug or inherent technical limitation found in the software or network mechanism that works for the compression and display of the files. The two procedures for exploring the material and technical specificities of the digital image and thereby creating glitch videos are known as databending and datamoshing.

Databending refers to the techniques of changing the codes of an image or video file (JPEG, GIF, PNG, and TIFF for the still image and AVI, MPEG, and WMV for the video image) in ways that do not display its desired digitized values. The raw image file contains minimally processed data (for instance, pixels) from the image sensor of a digital camera, image scanner, or motion picture file scanner. These data contain an array of key information needed to display the image properly, including format, size, color, chrominance, brightness, resolution, dimension, and etc. Databending, then, means ways of incorrectly manipulating the image, such as adding, deleting, and randomly copying and pasting the data, by means of software applications (for instance, Hex Editor) designed to visualize and edit the file's codes. These manipulations bring about certain significant changes in the values of the original still or moving image, which lead to corrupted files of the still or moving image. The files' resulting artifacts appear erroneous or broken images marked by abrupt discolorations, bleeding colors, pixelated blocks, and swirling or displaced scan lines in various sizes, all of which are seen as abstract aesthetic forms. Some artifacts are called ghosting, which appear when a part of the image is doubled by wave-like oscillations like one might see recorded by a seismograph or heart monitor. All of these artifacts suggest that there are various technical procedures, including encoding, decoding, and compression, in the process through which an analogue image is converted into a set of digital data and is later displayed on various interfaces and platforms. The techniques of databending, then, are read as intervening in these procedures that might remain unnoticeable were the image displayed in its normal condition.²⁰

Evan Meaney's *The Ceibas Cycle*, a series of ten videos which he produced from 2007 to 2011, demonstrates the capacity of databending to create a variety of messy abstract forms out of video artifacts. Meaney used Hex Editor and other software applications to extract codes underlying various video clips, such as home movies shot in analogue and digital video cameras (*Prologue: How Mayan Lovers Might Find the Next Life* [2007], *Shannon's Entropy* [2008], and *Ceibas: Sigma Fugue* [2009]), video documents of the monitors at an airport's departure hall (*Beneath the Pressure of the Sky* [2008]), excerpts from a television talk show (*Ceibas: We things at play* [2010]), and video game footage (*Ceibas: Epilogue—The Well of*

Representation [2011]), changing their values in various incorrect ways, including adding, deleting, and copying and pasting data randomly. The resulting artifacts accordingly present an assault of various noisy forms, including bleeding color bars, broken pixels, and boiling color dots, to the extent that they render the original figures of the clips almost illegible while overwhelming most of their details. Meaney developed the techniques of databending not simply to unveil the functions of digital codes that lie beneath the digital image, but also to investigate how the aesthetics of the “noisy” forms give expression to several broader issues of digital culture. For instance, *Beneath the Pressure of Sky* presents the glitches of the airport imagery in ways that suggest how the attempt of the US antiterrorist surveillance system to catalogue all travelers is fundamentally imperfect and destined to failure.

More significantly, Meaney’s glitches engage with the issue of digital archiving as their aesthetic of failure aims to make us aware that the operation of digital systems to encode, compress, and store the video clips are subjugated to the loss and deterioration of their information. In addition to bringing the fragility of digital archiving inherent in its codes and algorithms to the foreground, Meaney’s purposeful manipulation of the codes in the video clips is also grounded in his belief that digital files are as much subject to temporal decay as celluloid. He has once compared the glitches of his videos to the chemical and physical deteriorations in hand-processed films. “The scratches from a hand-processed piece may have shown up there over time due to wear and repeated viewings,” Meaney writes. “Glitching, not surprisingly, has a similar chronologic approximation. Everything on our hard drives is slowly forgetting itself. Information is lost through compression and manipulation, but also through a file’s own forgetfulness.”²¹ Meaney’s interest in digital glitches as indicative of digital memory’s subjugation to loss and forgetfulness is linked to his expression of the figures as ghosts that counter the dream of the digital system to store and communicate information without noise or delay. As he remarks in an interview, “What we call noise is, in fact, an entropic, even ghostly, communication.”²² In *Shannon’s Entropy*, the ghosts of communication have different abstract forms, ranging from shadow-like figures in black and colors to melting shapes marked by flickering lines and dots. Here, Meaney connects these glitches to a text on Alzheimer’s disease, specifically in relation to

the information theorist Claude Shannon, who suffered from the disease at the end of his life. In this context, the ghostly figures and shapes produced by databending express Shannon's awareness of entropy as a noise inherent to the natural and technological system of communication,²³ while also suggesting that both human memory and digital archiving are structurally inseparable from the loss and oblivion of information. *Ceibas: We things at play* also repeats Meaney's insight into digital archiving's subjugation to the decay of information, as its images of the television talk show about the development of the computer as an ideal processor of transmitting and storing information are decomposed into broken pixels and bleeding colors, which are perceived as noises that inherently block the transparent communication of the images (Figure 2.3).

Along with databending as a method of manipulating the codes of image files for creating erratic visual expressions, datamoshing refers to a technique for the production of the moving image that contains unique, eerie visual expressions caused by a technical limitation inherent in the data compression of digital video. This limitation is immanent in the processes by which an original moving image, whether analogue or digital, undergoes the inevitable loss of its data as the computer encodes it into a file of various formats. When the data that form the moving image are compressed for



FIGURE 2.3 Still from Evan Meaney, Shannon's Entropy (2008) from The Ceibas Cycle (2007–11), courtesy of the artist.

digital storage or transmission, such as when 20-gigabytes of data of a single feature-length film are compressed to fit onto a 4.4-gigabyte disk, enormous amounts of those data are discarded. A normative compression process for displaying the image in its original state while discarding those data involves keeping the key information (such as luminance [brightness] and chrominance [color]) of keyframes, which are also referred to as i-frames. In between the keyframes that contain the key information of the original image, there are p-frames (predictive frames) and b-frames (bi-predictive frames) that exist in the proper compression artifact of the original image. While the p-frames contain information predicting the changes in the image (for instance, pixels whose color value has shifted) between the current frame and the previous one, the b-frames include information predicting the image differences between the previous, current, and subsequent frames. Datamoshing, then, refers to the manipulations of removing keyframes while leaving only p-frames and b-frames via software packages such as After Effects and the DivX codec. Because the latter two frames spring from data from previous and forward frames, they are more compressed than keyframes to the point of losing key information required to display the original moving image properly. While the loss of data via compression leads to a corrupted file, an array of other manipulations can be added to it. As William Brown and Meetali Kutty explain, for instance, p-frames that arise from a moving image can be connected to i-frames from different moving images, “with the result that the i-frame of one image, typically paused momentarily on screen, suddenly seems to dematerialize as the moving aspects of the p-frames from another moving image begin to manifest themselves on, within or from behind it.”²⁴ The resulting glitch videos based on this technique produce “bleeding pixels,” in which one image continually overlaps and melts into another while motion turns into a blur of colors. Along with this liquidation of colors and shapes, there are other ways of manipulating the material components of the digital file, such as displacing scan lines, pixelating (viz. the reorganization of chrominance structures within keyframes by turning their chrominance value off), and changing color values, all of which lead to the uncanny and chaotic transformations of the original image, marked by an array of mosaic-like shapes, undulating lines, and fluid contours that overlay abstract forms on the photorealistic elements of the

original image. These various visual effects based on datamoshing have become popular since the 2000s not only in the works of such artists as Sven König, David O'Reilly, and Paper Rad, but also in some commercial music videos, including the video for Kanye West's "Welcome to Heartbreak" (2009) as the most well-known example.

In their *Lossless* series (2008), Rebecca Baron and Douglas Goodwin take the materiality of the digital as the starting point for their experimentation, applying datamoshing that is capable of revealing which material and technical processes are applied during the transfer of a group of existing films to their digital files. In *Lossless 2#*, the two artists interrupted the download of compressed MPEG-2 files of Maya Deren's *Meshes of the Afternoon* (1943) through the open-source P2P protocols of BitTorrent, such that the files were randomly downloaded with many of their keyframes missing. The artists' software algorithms anticipate the keyframes' color signals of pixels in an attempt to assimilate p-frames and b-frames into seamless images, but the resulting images of the film continue to dissolve and reappear. In *Lossless 3#*, Baron and Goodwin removed keyframes from a sequence set in Monument Valley of an MPEG-2 of John Ford's *The Searchers* (1956), thereby blocking the significant changes that would happen when the keyframes updated the whole scene. The same procedure was applied to the famous circular choreographic sequence from Busby Berkeley's *42nd Street* (1933) in *Lossless #5*. The resulting images of the two pieces take on bleeding pixel effects, in which the figures of the original movies are constantly mutated into melted shapes and swirling colors. Baron and Goodwin consider these abstract forms to be expressive of glitches, of the technical limitations inherent in the digital compression processes, as they note: "*Lossless* captures and embraces the slippage that occurs in the performance of media, revealing how its flaws and other artifacts lend a materiality to digital video."²⁵ Baron and Goodwin were also aware that the melting and undulating forms and the bleeding colors that overwhelm the figures in the original films are indicative of the material flexibility of electronic frames and digital pixels, distinct from the discreteness of photograms in celluloid-based cinema. They continue, "Unlike film where every frame is a complete and autonomous picture, digital video saves space by recycling pixels in areas where there is little change between frames."²⁶

As a theorist and artist who has rigorously studied the technical and aesthetic dimensions of glitch, Menkman has produced videos to which either databending or datamoshing is applied in various ways. Her *mimicking lo-fi aesthetics* (2011), for instance, takes a PNG file of a picture depicting a female figure and changes its codes incorrectly, therefore leading to a ghostly image characterized by desaturated black and white, numerous small dots, and irregularly appearing scan lines. By overlaying these abstract forms on the woman's figure, Menkman evokes the digital image's link to the noisy and low-resolution aesthetics of the imagery in the analogue video. Before making this video, she coupled similar databending techniques with analogue video feedback in *The Collapse of PAL* (2010, Figure 2.4) in order to investigate the deteriorations of the PAL signal as a historical form that is now regarded as obsolete but was a precursor to upgraded digital technologies. Meanwhile, in *Dear Mr. Compression* (2009), Menkman used a video file of a female figure similar to the one in *mimicking lo-fi aesthetics* and removes its keyframes, thereby rendering the image to be cut by irregular lines and broken rectangles in bleeding red and blue. For her *Compress Process (Revisited)* (2010, Figure 2.5), Menkman applied three technical manipulations to a compressed video clip,



FIGURE 2.4 Still from Rosa Menkman, *The Collapse of PAL* (2010), courtesy of the artist.

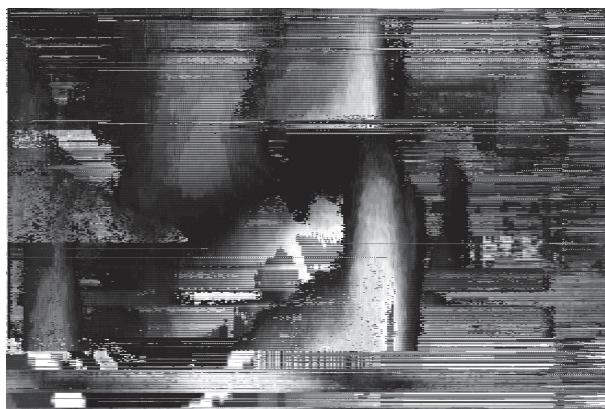


FIGURE 2.5 Still from Menkman, Compress Process (Revisited) (2010), courtesy of the artist.

making its colors unstable and pixelated, bleeding, and layering frames on top of each other, with the result that the image presents eruptions of black and white, undulating curves, and dense collage-like scan lines over a nearly illegible ghost-like figure.

These examples of Meaney, Baron-Goodwin, and Menkman demonstrate that digital glitch videos are part of a range of practices that pursue a materialist approach to digital media, one that aims to investigate and make visible “the raw matter that resides both beneath and at the very surface of digital imagery.”²⁷ A variety of grotesque visual elements, such as blurs, noises, irregular lines, decolorization, broken pixels, bleeding colors, unveil the traces of computational malfunctioning that reveal the underlying material dimensions of the digital image. They are created when one disrupts the data behind the digital image in such a way that undermines its desired function or communicability, such as the full presentation of an analogue movie or photograph in the form of digital files processed by the software algorithms for encoding and display. By problematizing the belief in the seamlessness and transparency of digital representations, the noisy and messy expressions of digital glitch videos, along with other artworks (such as hacked or dysfunctional websites that unveil the operation of HTML), are also seen to critique the “myth of immateriality” that pervades contemporary digital culture, insofar as they demonstrate

that software “cannot exist by itself but is intrinsically embedded in physical data carriers.”²⁸ While elaborating upon the prevailing idea that glitch videos are manifestations of digital materialism in ways that provide a glance to the inner structure and functionality of digital media, I shall also demonstrate that the digital materialism in the videos coincides with the aesthetic and technical hybridities that are noticeable when they are viewed in relation to their analogue predecessors.

The history of the artistic experiments with errors and failures inherent in the mechanical system of media dates back to the pre-digital age. Carolyn L. Kane positions digital glitch videos within the disruptive editing techniques developed in structural film and early video art in the 1960s and 1970s. Developing a formalist and materialist form of cinema, structural filmmakers such as Paul Sharits, George Landow, and Tony Conrad brought noisy visual aspects of the cinematic apparatus to the foreground, including stereoscopic effects, blank frames, deliberately filming out-of-focus, and scratches. In so doing, they aspired to break from and undermine the transparent representation of the cinematic image while also exposing and scrutinizing film’s inherent structure, its material properties and technical processes. These filmic glitches were in parallel to a variety of electric glitches produced in the artworks labeled as “image-processing” videos, including videotapes of Nam June Paik, Joan Jonas, and Steina and Woody Vasulka, in which the optical effects of the distorted signal, produced by such various techniques as manipulating the magnet on the TV set (Paik), setting the image drifting across the monitor screen (Jonas in *Vertical Roll* [1973]),²⁹ and employing the Rutt-Etra synthesizer for real-time signal manipulation (Vasulkas), deform the standardized broadcast or video image to reveal the materiality of the electronic media. Considering this historical genealogy of structural film and image-processing video, Kane argues that there is a paradox at the heart of the filmic and electronic glitches: “The more one attempts to control, to functionalize culture through new technologies, the more does one also proliferate glitches and errors, making these undesirable and unwanted phenomena all the more available to the mechanisms of critique.”³⁰ Similarly, filmmaker Clint Enns argues that the tradition of structural film and image-processing video has gone digital, labeling contemporary digital glitch artifacts as “structural digital videos.” The manipulation of computer files

through niche software and algorithm exploration leads to non-illusionist digital works comparable to those of structural film and image-processing video, which are driven by the investigation into the chemical and electronic noises embedded in the movement of the filmic or video image. “It is exactly this connection that reveals depth in our perception of and interaction with a technology,” Enns writes, “that ties a generation of new media artists to the films of Frampton and Sharits.”³¹ Referring to the same lineage of non-illusionist works in the 1960s and 1970s as Kane and Enns, critic Ed Halter also claims that thinking about materialist film and video “provides a workable parallel for a digital materialism, a means to appreciate new media’s corporeality.”³²

While those discourses on the genealogy are undeniably helpful to historicizing digital glitch videos, it should be further noted that those materialist precursors of film and analogue video can be examined not merely in terms of their intentions to disrupt the transparency of the filmic or video image and unveil the material substrates of the medium, but also in terms of their aesthetics, namely, how the elements of glitches are employed and perceived. The major works that constitute the predecessors of digital glitch videos do more than express the abstract visuals produced by the material and mechanical dimensions of film and analogue video. More significantly, the abstract visuals tend to infiltrate and overwhelm the representational figures of the filmic and video images in order to deconstruct their supposed imperative to transparency and immediacy. As a result, the filmic and video images appear as an array of fleeting flecks and sprawling lines that manifest complex and chaotic forms in their representational contents. Several examples drawn from structural film and early video art would be sufficient to demonstrate this point. Landow’s *Film in Which There Appear Edge Lettering, Sprocket Holes, Dirt Particles, Etc.* (1966) exposes the material components explicitly expressed in its title, as well as their dirty and imperfect traces, in ways that cover and encircle the figures of a girl imprinted in the filmstrip made from a color test. While unveiling these components, Sharits orchestrates the rhythms of explosive, disturbing flicker effects with such representational figures as a man who cuts his tongue (*T,O,U,C,H,I,N,G* [1968]) and patients who undergo a medical film study of brainwave activity during seizure (*Epileptic Seizure Comparison* [1976]). In *Little Dog for Roger* (1967) and

Berlin Horse (1970), Le Grice used an optical printer to expose the full shape of the frame as well as the material traces inscribed in its surface, which are considered as filmic noises that would be removed for transparent representation of the figures (the dog and the horse). Accordingly, the flickering white scratches and black lines consistently overlap with the figure of a dog in the film frames of *Little Dog for Roger*. Or, in *Berlin Horse*, Le Grice printed the original black-and-white footage of a running horse in a negative positive superimposition through color filters, which brings about a rich and dense admixture of the representational and the abstract images with a changing spectrum of blurring white, black, yellow, and red. As in the cases of Landow and Sharits, these two films by Le Grice invite viewers to examine the original footage as a physical substrate embedded in its photographic contents. While disrupting the standardized production of the film medium and revealing its material and technical origin in the forms of imperfection and disintegration, these materialist films offer viewers, in the words of Halter, “an experience of tension between perceiving the form and the content, the graphic and the photographic.”³³

The aesthetic coexistence of noisy abstract forms and representational imagery is more evident in many image-processing videos in the 1960s and 1970s. Picture noises, such as grotesque scan lines, loss of colors, and hard-edged or oscillating geometric forms, were caused by a variety of errors and intentional interferences occurring throughout the multiple procedures of video imaging.³⁴ In *Videotape Study #3* (1967–69), for instance, Paik distorted and manipulated footage from TV programs, including news conferences by US president Lyndon Johnson, to transform the image of the political figure into a riot of fluctuating scan lines and boiling dots, which signal the malfunction of television networks. Likewise, *Electronic Opera # 1* (1969) presents scan lines bent with magnets such that the images of Richard Nixon and John Mitchell swirl. As art historian David Joselit summarizes, these works were predicated upon Paik’s strategy to “develop malignant procedures by which a video signal was distorted and degraded into mere ‘noise.’”³⁵ Investigating the material and processual dimensions of electronic visuality by engaging with the evolution of the video apparatus from analogue video synthesizer to computer, Steina and Woody Vasulka have produced a variety of images characterized not only by pure abstract forms but also by the metamorphosis, deformation,

and omnidirectionality of video signals, all of which are expressive of the essential characteristics of the electronic medium. To be sure, some videos by the Vasulkas present nonrepresentational geometric shapes and electronic noises. However, in such works as *C-Trend* (Woody Vasulka 1974) and *Violin Power* (Steina 1978), the Vasulkas dramatically bend a representational figure (the documentary footage of street traffic in *C-Trend* and Steina herself who is playing violin in *Violin Power*) by interfering with video signal (Steina) or through raster manipulation (Woody). While in *Violin Power*, Steina's figure appears to be mixed with oscillating abstract lines, *C-Trend* produces a constant tension between the live-action imagery of cars and the freely traveling shapes and modulated lines.³⁶ Le Grice applied the complex coexistence of representational and abstract images in his materialist films to his venture into video and computer technologies in his *Digital Still Life* (1984–86) and *Chronos Fragmented* (1995), exploiting a great variety of color combinations and superimpositions afforded by his self-written programming algorithms.³⁷ In summary, the works of Paik, the Vasulkas, and Le Grice are seen as presenting hybrid images of representational and abstract aesthetics. While the artists' image-processing videos have mainly been considered as expressing the medium-specific qualities of analogue video, such as the fluidity of electronic signal, the flexibility of the picture frame in contrast to the discreteness of photographs in film, and unstable pictorial forms, it is rarely acknowledged that their wide-ranging images exhibit these qualities in conjunction with figurative images, whether lens based or simulated, investigating how the two coexist in various ways. Thus, these material specificities of analogue video are made visible not simply in the form of pure image, but also in the form of impure image in which the abstract and representational dimensions interact with one another.

Digital glitch videos push the aesthetic of hybrid materialism in structural film and image-processing video further as they lead to the dynamic intersection of representational imagery and abstract form as the result of digital processing. The colored bars and broken pixels in Meaney's databending videos, more than manifesting the fragile materiality of their underlying digital codes, correspond to the structural films of Sharits, Frampton, and Le Grice in that their abstract, graphic forms collide with home video imagery. The tension between the photographic and the graphic forms is also present in

Menkman's databending videos, in which the dots and scan lines evoke the lo-fi aesthetic of electronic noise in image-processing videos as they transform human faces into ghostly figures. The impure, messy aesthetic derived from the collision of the abstract form of digital code and the image's representational figures is most noticeable in datamoshing videos, particularly those based on the manipulation of compressed files of existing films. In those videos, the digital noises on the surface, encompassing broken pixels, bleeding colors, and interlaced scan lines, appear not as isolated visual traces of the materiality of the digital, but as interpenetrating and dissolving the representational components of the filmic imagery. For instance, in Baron and Goodwin's *Lossless #2*, the female protagonist of *Meshes of the Afternoon* is decomposed into an array of amorphous black-and-white pixels while maintaining some portions of her figure (Figure 2.6). The result is an array of flowing images marked by swirling pixels that melt down the figure and landscape of the original film. While still recalling the surrealist overtone of the original film and its theme of the split self, the ghostly abstract forms signal that the film is dislocated from its celluloid origin and now experienced in the post-filmic algorithm and storage media. In *Lossless #3*, the horses and humans of different races



FIGURE 2.6 Still from Rebecca Baron and Douglas Goodwin, *Lossless #2* (2008), courtesy of the artists.

(cowboys and Indians) in *The Searchers* become indistinguishable as all of them are decomposed into a blur of graphic blocks and streaks of color (Figure 2.7). In these forms, the figures of people and horses are still recognizable, but they are immediately turned into a digital abstraction that gives access to the fragile materiality of codes and the absence of keyframes in the film's compressed file. As Jaimie Baron writes, Baron and Goodwin's datamoshing in the *Lossless* series, by bringing the transition between the figurative and the abstract to the foreground, explores the transformation "from [the figures'] identity as indexical traces of light on silver and celluloid to bits of compressed digital information."³⁸

Takeshi Murata pushes the hybrid aesthetic of the representational and the abstract, of the continuity of the cinematic image and the discreteness of its digital codes, to its limit. Taking up the encoded files of footage from action and B-movies, he transforms the figures of the original footage, including a beast-like monster from the B-movie comedy *Cavemen* (Carl Gottlieb 1981) in *Monster Movie* (2005), Barbara Steele from Mario Bava's vintage horror *Mask of Satan* (1960) in *Untitled (Silver)* [2006, Figure 2.8], and Sylvester Stallone from *Rambo: First Blood* (1982) in *Untitled (Pink Dot)* [2007], into a whirling, fragmented mass of pixels that continue to be decomposed and reformed thirty times per second. The images produced by Murata's datamoshing present a dynamic transition from the movement of figures to the perpetual kinesis of psychedelic



FIGURE 2.7 Still from Rebecca Baron and Douglas Goodwin, *Lossless #3* (2008), courtesy of the artists.



FIGURE 2.8 Still from *Takeshi Murata, Untitled (Silver)* (2006), courtesy of the artist and Salon 94.

colors and informal shapes (blurred lines, pixelated dots, and oscillating waveforms), and vice versa. This transition brings about a couple of tensions that stimulate the viewer's perception: first, a tension between the disorder of violently exploding colors and shapes and the perpetually frustrated effort to reorder the figures inscribed in the original cinematic footage, and second, one between the illegibility of the abstract forms and the persistence of the figures' bodily parts that await the viewer's recognition. For instance, in *Monster Movie* the figure of the monster becomes barely distinguishable from the body of water from which it emerges, as both the monster's gestures (lurching and writhing) and the flow of water are decomposed into a rich maelstrom of twisting pixels in shimmering colors (Figure 2.9). The uncanny transformation of the monstrous figure into unstable shapes and colors is repeated in the work's ensuing sequence, in which the monster runs through a forest and frantically twists its arms. The figure of the monster in that sequence takes full shape momentarily, but it immediately becomes indistinguishable from the whirlpool of pixels that surrounds it. This transformation also allows the monster to waver between the cinematic representation of violence and its digital abstraction, insofar as it leaves a minimal trace of the monster's movement and



FIGURE 2.9 Still from *Murata, Monster Movie* (2005), courtesy of the artist and Salon 94.

gestures that stimulates viewers' recognition. As Zinman observes, the viewers of *Monster Movie* "first see the beast emerging from a dark pool, mirroring the almost immediate eruption of digital chaos that ensues, transforming the image from one of representation to one of abstraction."³⁹ Murata's hybridization of representation and abstraction via datamoshing is more sophisticated in *Untitled (Pink Dot)*, where a hypnotically pulsating pink dot is overlapped with a digital decomposition of Rambo's action scenes, which displaces the spectacular violence of explosion and gun shooting into a mushy maelstrom of fragmented pixels.

The continual rupture between the figures of the movies and the radical exposure of their underlying material substrates in the form of abstract shapes and colors, I argue, situates Murata's works, and by extension glitch videos based on the techniques of databending and datamoshing, within the complex hybridization of film, analogue video, and the digital. At first sight, the interplay between the photographic and the graphic elements suggests that glitch videos are predicated upon, and enable viewers to engage with, the complex intersections of the aesthetic features of film and digital video, respectively. As Manovich writes on Murata's

works, “Now the real change that matters is the one between different media aesthetics, between the texture of a film and the pulsating abstract patterns of flowing patches of colors, between the original ‘liveness’ of human figures in action as captured on film and the highly exaggerated artificial liveness they generate when processed by machine.”⁴⁰ Similarly, Brown and Kutty view what Manovich sees as the exchange between “the original ‘liveness’ of human figures” in film and the “artificial liveness” generated by the algorithmic procedures of digital display, claiming “we are seeing humans interact with/assemble with, or from, pixels; that is, within the frame of the datamosh, the humans and monstrous figures have an ecological relationship/form an ecology/form a network with computers.”⁴¹ Both views are right when they highlight the dissolution of the distinction between figure and ground in Murata’s work as originating from the hybridization of film’s representational components and the materiality of digital video. What is missing in both views, however, is that the explosive colors and distorted abstract shapes in Murata’s work strongly allude to several aesthetic features of image-processing video, including “densely layered ‘psychedelic’ images” and “highly saturated colors [that] give a painterly effect,”⁴² as well as to the works of the early computer animation artists who experimented with the analogue computer at Bell Laboratories by translating its codes into abstract and organic forms in the late 1960s and early 1970s. As to the latter allusion, Murata, in a conversation with Ciocci and scholar Melissa Ragona, cites Lillian Schwartz and Kenneth Knowlton as the artists who inspired him, evaluating Schwartz’s *Pixillation* (1970) as the creation of “super organic forms” by combining “old techniques, like back-lit ink [with] computer generated pixels.”⁴³

Murata’s references to image-processing video and early computer animation are not limited to entailing the aesthetic hybridity of digital glitch videos in relation to its analogue predecessors (analogue video and computer). More significantly, Baron-Goodwin’s and Murata’s works demonstrate that the dynamic exchange between representational and abstract images in digital glitch videos are predicated upon the technical hybridity of digital video, namely the combination of properties inherited from analogue video and those intrinsic to digital imaging. Although analogue video is distinct from digital video in terms of its material (electronic signal vs. digital pixel) and apparatus

(a synthesizer or other electronic imaging tools vs. programming algorithms), its frames' fluid and unstable aspects anticipate, as Rodowick aptly remarks, "the computer's separation of inputs and outputs."⁴⁴ That is, unlike film in which the trace of light transcribed in the celluloid is isomorphic with the projected image on the screen, both the image of analogue video and that of digital video are subject to the various manipulations of electronic signal or digital information anywhere from the camera to editing technologies to the display device.

This common ground of analogue video and its digital successor suggests that both media are similar in terms of the techniques for transforming the input image into the output of abstract forms: just as the image-processing artists distort the electronic signal with various imaging tools, digital glitch video artists directly manipulate the codes that underlie the frames of digitized imagery. Spielmann rightly points out this technical affinity between the procedures of imaging tools in image-processing video and those of digital imaging systems as follows: "The major task of media tools seems to be to control the function and appearance of video: to manipulate, repeat and reposition the effects and build machines to systematize and maximize the possibilities of interconnection and modification—not unlike digital systems."⁴⁵ The artists who utilize the techniques of databending and datamoshing in this sense appear to "control the function and appearance of video" in a manner similar to that of the pioneers of image-processing video. It is based upon this technical affinity that the artists' manipulation of codes aims at exploring and revealing a key property unique to digital video in the spirit of digital materialism: that is, unlike analogue video, the image of digital video is grounded in its encoding of image values into individual pixels that contain the information for color, brightness, and dimension. From this perspective, the software applications available to digital glitch videos are seen to combine, as Manovich notes, the aesthetics and techniques of previous media, such as the image-processing aesthetics and techniques of analogue video (and by extension those of structural film and hand-drawn animation), with "new capabilities specific to the computer—for instance—the ability to automatically calculate the intermediate values between a number of keyframes."⁴⁶ It is precisely of this ability that datamoshing artists, including Baron-Goodwin and Murata, take advantage.

Consequently, digital glitch videos do more than manifest digital materialism. The dynamic coexistence and interrelation of abstract and representational components in those videos demonstrate that digital video is a technology of aesthetic and technical hybridities through its relationship to previous media, including analogue video. Menkman suggests that the reflexive approach to digital technologies in glitch art does not necessarily lead to the sheer manifestation of their material substrates, drawing upon N. Katherine Hayles's conceptualization of materiality as the interplay between a text's physical characteristics and its signifying strategies. Hayles writes, "In this view of materiality, it is not merely an inert collection of physical properties but a dynamic quality that emerges from the interplay between the text as a physical artifact, its conceptual content, and the interpretive activities of readers and writers."⁴⁷ Hayles's idea of materialism as the correspondence between a text and its "conceptual content" implies that the video artworks aimed at investigating the materiality of digital imaging do not necessarily lead to the aesthetic of clean abstraction, which is characterized by interplay of pure colors and geometric forms. That is to say, the messy, impure aesthetic of digital glitch videos, which I call hybrid abstraction, is just as capable of expressing digital materialism as the artworks of clean abstraction. If the coexistence and interrelation of representational and abstract components is a key feature of digital glitch videos, then the materiality of digital imaging is expressed in the feature's allusion to video's technical and conceptual contents, including references to the techniques and aesthetics of image-processing video. This is the reason that digital glitch video's materialism does not necessarily contradict its aesthetic (the coexistence and intersection of representational and abstract images) or technical (their allusions to structural film and analogue video) hybridities.

Mixed-media abstraction

The aesthetic of hybrid abstraction is also conspicuous in the works of "mixed-media abstraction," in which filmmakers combine the materials and techniques of film and digital video to produce a variety of abstract expressions dynamically interacted with representational or figurative components. There are parallels

between these filmmakers and the digital materialism pursued by digital glitch videos in two ways. First, they often make visible the physical materials and supports (pixels, codes, etc.) of the digital through mutation, accident, and malfunction. Accordingly, the images produced by the works of mixed-media abstraction often present noises and glitches—in the forms of aberrant pixels, ghostly distorted figures, and degraded lines—as a means of demonstrating and symbolizing the “constantly mutating materiality”⁴⁸ of the digital as a medium. Second, much like digital glitch videos, the filmmakers’ simultaneous employment of film and digital video to produce these noisy abstract expressions is indebted to the self-reflexive investigation into the material components of film or video technology in structural film and image-processing video. The filmmakers’ embrace of digital materialism also challenges the general assumption of the digital as totally automated and non-human tools, inasmuch as their uses of it are made in close dialogue with their hand-processed techniques of treating film and a range of aesthetic effects that these techniques make. In this sense, the filmmakers’ hybrid deployment of film and digital video in the light of materiality reflects a broader trend in avant-garde cinema since the mid-1990s which Federico Windhausen observes as being “toward the incorporation into video of concerns and pursuits first explored and undertaken with photochemical film,”⁴⁹ in contrast to the sharp borderline between the two media that dominated the experimental practices of moving image up until the early 1990s.

Le Grice, one of the key veteran filmmakers who practiced the incorporation of his film-based concerns and techniques into video, argues that the developments of digital systems in the context of avant-garde film and video are driven by “a desire to produce a time-based auditory and visual capacity which is more or less continuous with the forms and language developed from the history of cinema.”⁵⁰ In this sense, Le Grice coins the term “hydra-media” in order to suggest a possibility for deploying film and the digital in combinatory ways and thereby redefining the limits of both.⁵¹ Considered this way, the filmmakers’ hybrid uses of film and digital video suit Le Grice’s concept of “hydra-media,” in the sense that the viewer can see the two “heads” of both media simultaneously: namely, the components of the original film that can be dissected, assessed, halted, and reassembled in various ways on the one hand, and the inscription of visual effects, such

as signal-based transformation or pixel-based compositing which confer upon the original film a range of spatiotemporal plasticity and multidimensionality not acquirable from that original on the other. In this way, the works of mixed-media abstraction evoke both the digital in the filmic apparatus and the filmic in the digital algorithms or operations on their material and technical levels.

The practices of Californian filmmaker Lynn Marie Kirby have associated the software-based, automated editing with the rehabilitation of experimental filmmaking. Her works are regrouped into two phases: while her *Time Dilation* series (2000–03) employ the computer to manipulate live-action video footage which she filmed—about her domestic life with her child, and about her family vacation and leisure time, her later *Latent Light Excavations* series (2003–07) take on the approach of cameraless film, appropriating the raw film stock that was exposed to the changing sunlight available at several different locations in and around San Francisco and then loaded into video editing software applications. The formal procedures of the films in *Latent Light Excavations*, including exposing the materiality of celluloid, isolating its components, and relying upon the flicker effect, all validate Kirby's alliance with the materialist tradition of structural film, particularly the films of Sharits, Frampton, Le Grice, etc. As René Thoreau Bruckner notes, the flicker effect as a major tenet of structural film "presents itself as a model for modern temporality, in which the present proceeds by successive instants, bursts of barely perceptible light intersected by 'empty' intervals, all passing at a blinding pace."⁵² Kirby employs the computational postproduction system in order to add several video-based effects to the traces of the light exposed on the original footage, such as interlaced scan lines, geometric grids and rectangles, clean color fields, and stuttering rhythms. Bearing in mind that which is manifested through the effects and other material components of celluloid, Kirby technically promotes a mutual dialogue between film and digital video, enabling each to produce its own abstract shapes.

The resulting films of this series, including *Golden Gate Bridge Exposure: Poised for Parabolas* (2004), *St. Ignatius Church Exposure: Lenten Light Conversions* (2004), and *Karate Class Exposure: Three Variations* (2004, Figure 2.10), present dynamic hybridizations of the analogue abstract shapes (created by the material components of celluloid and its exposure to the light) and

their video counterparts. An array of vibrant black-and-white and colored (red, blue, yellow) fields in the video format contains grains and scratches in motion. There are, too, blurred shapes in changing colors, which are the spectra of the light exposed on celluloid. As critic Michael Sicinski writes, Kirby's minimalist isolation of the material components of celluloid recalls Peter Kubelka's *Arnulf Reiner* (1960) and Sharits's *Ray Gun Virus* (1966).⁵³ Kirby's achievement, however, lies in the fact that her precision in computer-based editing succeeds in preserving those material components based upon the methods of cameraless filmmaking within the expressive realm of digital video. As Zinman rightly notes, "The indexical trace that putatively inhere in the photochemical process—the record of the place captured, the dust and light that leave an impression on Kirby's film—is transferred into and persists throughout the digital field."⁵⁴ Additionally, intermittent flicker effects, perforations, and vertical and horizontal stripes, all of which underscore the material specificities of the filmstrip, are intersected by rectangular sections and grids, as well as by interlaced scan lines that directly refer to the materiality of video. Thus, the picture frames in the *Latent Light Excavation* series are filled with the forms grounded in the configurations of film-based and video-based material specificities.

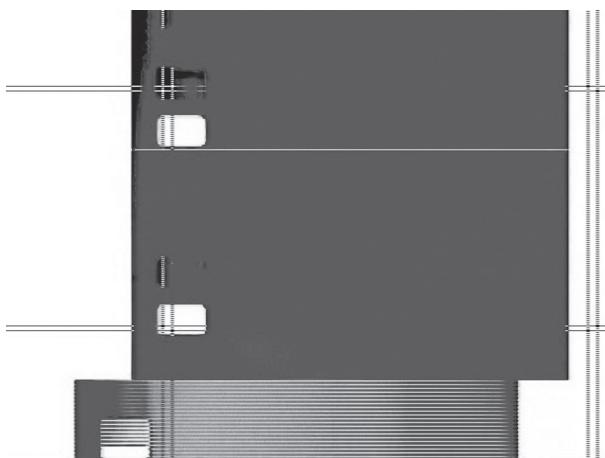


FIGURE 2.10 Film still from *Lynn Marie Kirby, Karate Class Exposure: Three Variations* (2004) from *Latent Light Excavations* series (2003–07), courtesy Lynn Marie Kirby.

Austrian filmmaker Siegfried A. Fruhauf has also updated the traditions of structural filmmaking by traversing between the techniques of celluloid-based filmmaking and those of digital video. His embrace of digital aesthetics, combined with the handcrafted methods of structural filmmaking, was evinced in *Exposed* (2001), a 16-mm film based on the appropriation of a short scene from an existing feature film, where a man observes a dancing woman through a keyhole. As suggested in the film's title, Fruhauf passes the perforations of the original film's strip in front of the projector such that portions of the scene resemble a group of rectangular holes moving around the whole screen. In so doing, he successfully extends structural filmmaking's interest in the aesthetic possibility of film's material substrate into a well-established trope in the psychoanalytic approach to cinema, one that considers the camera's gaze to mobilize the viewer's voyeuristic pleasure. This film undoubtedly evokes a couple of traditions in the rich histories of structural film. The exposure of perforations reminds us of Landow's *Film in Which There Appear Edge Lettering, Sprocket Holes, Dirt Particles, Etc.*, and Fruhauf's association between the abstract aesthetics of film's materiality and its psychic effects is indebted to the films of Peter Tscherkassky. More than update these two traditions, Fruhauf anticipates his sensibility of digital aesthetics by fragmenting the screen into a number of rectangular holes and transforming the screen into multiple layers. The intersection between film's materiality and the digitally informed aesthetics of layer became more evident in his *Structural Filmwaste: Dissolution 1* (2003, Figure 2.11) in different ways.

The film shows material components of leftover 16-mm footage in a split screen, with one panel delayed slightly. Fruhauf stacked and exposed the footage in the darkroom in such a way that the edges of the frame, the splices, scratches, frame lines, and sprocket holes are clearly visible. As the components of the filmstrip are superimposed at the speed of the fractions of a second in a rhythmic sequence of black-and-white frames, the resulting images are seen as inheriting the materialist traditions of structural film, including Peter Kubelka's paradigmatic flicker films that represent Austrian avant-garde cinema. While investigating the operation of the filmic apparatus and the materiality of celluloid, however, Fruhauf rapidly alternates the assaultive eruption of the material components of the filmstrip with clean and sharp black-and-white frames derived from

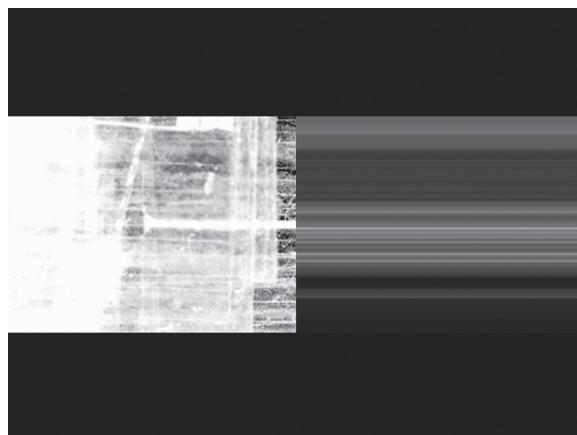


FIGURE 2.11 Film still from Siegfried A. Fruhauf, Structural Filmwaste: Dissolution 1 (2003), courtesy Sixpack Film.

high-definition video. Later, the scratches and grains in the strip's emulsion are gradually replaced with the fast-paced vertical and horizontal scan lines coupled with electronic flicker effects. The transition from the materiality of celluloid to that of digital video ends with a two-dimensional white field generated by a computer, which signifies a purely optical image of abstraction. In this way, Fruhauf succeeds in hybridizing the two material dimensions of film and digital video, while also demonstrating how this mixed-media approach gives rise to the formal variety of abstract imagery. He further explores the transition of structural filmmaking from celluloid to digital technologies in *Exterior Extended* (2013), in which he worked 36 photo frames printed in 35-mm film with digital image-processing methods. The film creates the impression of quickly moving forward and backward in a dilapidated house in the countryside wildly overgrown with plants. This alternation of static shots to create the stroboscopic impression of movement is clearly indebted to Gehr's *Serene Velocity*. While inheriting this materialist tradition of investigating the dialectic of motion and stasis, Fruhauf transforms some frames pictorially while also layering them using both the positives and the negatives. The resulting images present a continual clash between black and white, negative and positive, pictorial and photographic, abstract and representational,

freeze-frame and motion picture, and two-dimensionality and three-dimensionality.

More than maintaining the traditions of structural film, the mixed-media abstraction activated by the hybrid employment of film and digital video allows its materialist impulse to be aligned with expressive possibilities other than reflexively calling the viewer's attention to the materiality of the media. That is, some contemporary directors who have developed the hybrid techniques of film and digital video to create abstract imagery tend to associate the materiality of both media with a variety of metaphoric or symbolic meanings. This tendency is not a radical break from the materialism that has been developed in the structural traditions of experimental film since the 1960s, where film's unique properties and expressive possibilities have become its central subjects. Rather, it is a return to the aesthetic of materiality and medium specificity with a new twist. This revised or updated materialism in the mixed-media abstraction can be compared to a notable tendency in recent film projection performances by Bradley Eros, Sandra Gibson and Luis Recorder, Bruce McClure, to name just a few. In his brilliant recent study, Jonathan Walley makes a compelling comparison between these performances and their precursors in the 1960s and 1970s. Projection performances in the 1960s and 1970s, as part of the expanded cinema practices in North America and the United Kingdom, resisted representation, referentiality, illusion, and metaphor in favor of asserting film's medium specificity—that is, its physical components, basic processes, exhibition space, and the viewer's embodied perception within that space. Conversely, the projects of Eros, Gibson and Recorder, and McClure conceive the specificity of film in rich and subtle ways and evoke various meanings through the film's material and technical qualities (e.g., Eros incorporates mysticism; Gibson and Recorder pursue poetics; and McClure utilizes the projector as an audiovisual performer). Walley argues that these contemporary projection performances do not represent complete departures from the filmmakers' interests in medium specificity that defined expanded cinema of the 1960s and 1970s. What their embrace of meaning and metaphor demonstrates is rather that they have reassessed the aesthetic possibilities of medium specificity in film, in the sense that "medium specificity has never simply celebrated the material base of an art form for its own sake nor simply for the sole purpose of generating an aesthetic."⁵⁵

In fact, the filmmakers' interest in the symbolic overtones of the materiality of celluloid echoes the lyrical traditions of Deren and Brakhage, in which the representational image transformed by film's unique materiality and techniques elicits the worlds of dream and unconsciousness. More than evoking those lyrical traditions, the performances of Eros, Gibson and Recorder, and McClure signal that today's experimental film, as Walley further argues, "does not see 'representational content,' 'abstract associations,' 'significatory' imagery, or 'the repertoire of meaning' as anathema to the emphasis on filmic materiality."⁵⁶ Directors such as Johanna Vaude, Dietmar Brehm, Jürgen Reble, and Jennifer West are seen to be in line with this revised approach to medium specificity by simultaneously employing film and digital video and associating the mixture of their abstract material effects with various symbolic meanings and representational elements.

French filmmaker Johanna Vaude has produced several films based on the dynamic employment of various film formats (Super 8 mm, 16 mm, and 35 mm) and digital video since the 2000s. Before venturing into filmmaking, she studied painting, photography, and poetry, and her practice of the moving image gave the opportunity to unite all the arts. Above and beyond her position of filmmaking an integration of art forms, Vaude's rigorous mixture of the different media has involved hybridizing their corresponding techniques to create impure images marked by the dynamic exchange between heterogeneous visual expressions, encompassing the lens-based imagery drawn from various existing films and videos, as well as the abstract forms produced by the direct manipulation of the media's material components. What Vaude calls "plastic hybridization" includes the interaction not only of formal and aesthetic features endemic to the different media, but also of their material and technical dimensions, as she notes:

Plastic hybridization means *a priori* the natural or artificial crossing of two species or different varieties. If we have two different mediums, such 16 mm and the digital, hybridization is not, for example, a film made with and mounted on 16 mm and projected via video. Hybridization refers more to *a plastic mixing, cohabitation of various elements within the film itself*. This is the transposition of images filmed on mediums such as Super 8, 16 mm, 35 mm or digital video, and reworked from different

techniques working on film (painting, collage, scratching) or digital image editing (Photoshop, After Effects). . . . The “body” of the cinema is changing.⁵⁷

In a video interview included as a supplement to her DVD, *Hybride*, Vaude remarks that her techniques of plastic hybridization, which include painting directly on celluloid, creating chemical reactions on its surface, reshooting the film footage with DV, and manipulating it with the palettes of digital editing, are meant to explore the “vision of an eye that’s open and watches the world and which allows us to enter the interior world.” Vaude’s interest in exploring the “vision of the interior world” recalls Brakhage’s obsession with a vision unbound from conventional ways of seeing, one that he describes as “an eye unruly by manmade laws of perspective, an eye unprejudiced by compositional logic, an eye which does not respond to the name of everything but which must know each object encountered in life through an adventure of perception.”⁵⁸ This enables Vaude to pursue a range of different symbolic and metaphoric meanings evoked by the complex interplay between abstraction and figuration. The meanings are the human being’s will to overcome and transcend the violent images of the world in *Notre Icare* (Our Icarus [2001]), the beauty of the choreography of sword warriors in *Samouraï* (Samurai [2002]), the ideal representations of human beings throughout different ages in *Totalité Remix* (2005, Figure 2.12), and the images of death in *De l’Amort (Love & Death)* (2005).

Totalité Remix is comprised of iconic and photographic images that depict the ideal figure of a human being based on the intersection of art, science, and philosophy throughout different periods of history, including André Vésale’s *écorchés* (painted figures that show the muscles of the human body without skin), drawings by Agrippa de Nettesheim and Leonardo da Vinci, and chronophotographs of human bodies in motion by Marey and Muybridge. Vaude initially shot these images in Super 8 mm, painted them manually to add a kaleidoscopic effect of blurry colors to them and to give them a variety of movements and rhythms. She then reshot the images in digital video and edited them with a variety of digital effects, including double and multiple exposures of their figures and complicating their tones and colors. The resulting images of these hybrid techniques

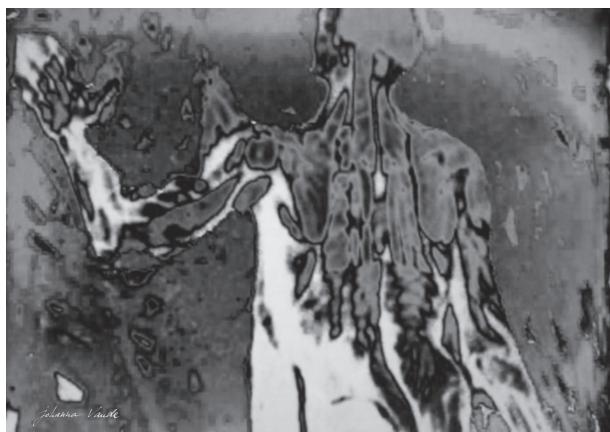


FIGURE 2.12 Film still from *Johanna Vaude, Totalité Remix* (2005), courtesy Johanna Vaude.

during both shooting and editing allow viewers to appreciate two aesthetic hybridizations that appear on their surfaces: first, hybridization of stillness (painterly and photographic) and motion, and second, hybridization of figurative and abstract imagery. The latter hybridization also enables the viewer to see the connections between the contents and the symbols of all of the figures. The abstract forms and colors explode all the frames of the film, to the extent that they overwhelm and simultaneously highlight the human figures in movement. Vaude's experimentation with the material and technical intermixture of media to create plastic hybridization of the photographic and abstract images takes another thematic variation in *De l'Amort (Love & Death)*. The film adopts familiar icons of horror and terror drawn from various horror and fantasy movies, including the vampire in F. W. Murnau's *Nosferatu* (1922), the zombies in George A. Romero's *Night of the Living Dead* (1968), a wolf, a naked woman, a man grappling with his fantasies and obsessions and who fights monsters to rejoin the woman he desires. Their figures are dramatically distorted, such that they seem to lose their contours but appear passionately and fiercely. As in the case of *Totalité Remix*, this distortion in *De l'Amort (Love & Death)* was made with Vaude's method of plastic hybridization, through which the 35-mm footage of horror

film trailers was reshot in video, edited in digital video via special effects, double exposures, and changes in colors and tones. In both films, the hybrid abstraction of film and digital video demonstrates the metaphoric meanings of the inner world that Vaude considers to be visualized through the eye untutored by conventional ways of seeing, ranging from the chaos from which human beings and civilization are born (*Totalité Remix*) to the horror that resides in human beings' inner state of mind (*De l'Amort [Love & Death]*).

Vaude's endeavors to link the competing materialities of celluloid and digital video to the metaphoric expressions of abstract forms go hand in hand with the hybrid techniques of Austrian filmmaker Dietmar Brehm. By digitally reworking the footage that he shot from the 1970s to the early 2000s in Hi 8 mm and 16 mm, he produced 93 short videos from 2006 to 2011, labeling them as the *Praxis* series. Of all the short films compiled in this series, those included in *Praxis 5-8* (2008–09) demonstrate the most hallucinatory effects of enigmatic, blurry images based on the processing of Super 8-mm or 16-mm footage with digital effects. The films present various figures that recall several surrealistic motifs, including a silhouetted man standing in front of a window (*Sonntag* [1995/2008] in *Praxis 5*), a naked, dancing woman in an unidentified porn movie (*Akt* [1996/2008, Figure 2.13] in *Praxis 5*), a naked man who lies on the



FIGURE 2.13 Film still from Dietmar Brehm, *Akt* (1996/2008) from *Praxis 5-8* (2005–08), courtesy Sixpack Film.

ground like a corpse (*Berlin* [1985/2009] in *Praxis 7*), a couple in the middle of sexual intercourse (*Paris* [2002/2009] in *Praxis 8t*), bodily details of a naked woman intercut with cryptic objects (a light bulb, a cigarette box, etc., in *Personal* [1976/2009] in *Praxis 8*), and the face of the filmmaker driving a car, shadowed by dark glasses (*Chesterfield* [1986/2009] in *Praxis 8*). In treating these figures, Brehm employs the sharpness of the high-definition format and digital transformations in ways that maintain and even amplify the grainy materiality of the outdated filmstrips. As a result, the figures take on both abstract and representational qualities, insofar as they appear to oscillate between transparency and obscurity and between legibility and illegibility. Sometimes the human figures are almost decomposed into ghostly abstract shapes of different colors, as is the case with yellow in *Rodox-1* (2002/2008, in *Praxis 6*) and red in *Rodox-2* (2002/2008, in *Praxis 6*). These ambiguous aspects mark the multiple material stages through which the figures passed, from celluloid to the digital, while also strengthening the series of desires and drives evoked by the figures: the desires for violence and obscenity and the death drive which are repressed in reality but embedded in the unconscious.

German filmmaker Jürgen Reble and Los Angeles-based artist Jennifer West use digital technologies to amplify the aesthetic of abstraction generated by the chemical and physical transformations of celluloid. Since the mid-1980s, Reble has experimented with various ways of manipulating Super 8-mm and 16-mm filmstrips, such as bacterial decomposition, burning, bunching, carving, chiseling, scraping, and atmospheric corrosion (exposing film reels to sunlight and other natural substances including wind, rain, airborne dust, pollen, and dirt for varying number of months), in order to transform the emulsion of celluloid. These chemical, hands-on, and biological processes contribute to the disintegration of the original colors in the emulsion of the filmstrips, in which the layers of colors are broken down and dynamically mixed. The resulting images then present various liquid forms of multilayered colors, with dynamic cracks and crevices continually appearing and disappearing. In addition to investigating the ways in which the perpetual transformations of images signify the materiality of the celluloid subjugated to its own chemical and natural decay, Reble himself was aware that the interplay of the colors and abstract shapes is capable of bearing various metaphors in that the images

resemble religious icons, biological entities, and cosmic dimensions. Characterizing his physical, chemical, and biological manipulations of film emulsion as “film alchemy,” Reble writes, “*The colors remained very pure and intense*, but had departed from their previous form. Indeed, they were laying themselves down upon the old action film to form veritable mosaics of color, remarkably like the stained glass of church windows.”⁵⁹

In his nine-part work *Materia Obscura* (2009, Figure 2.14), Reble revisited his *Instabile Materie* (1995), a film for which he covered hand-processed 16-mm filmstrips with chemical substances, mostly salts, to create various color transformations and mold shapes in the emulsion of the strips. Years later, Reble digitized parts of the film frame by frame in high-definition format and transferred them to a computer to reorganize them into nine new sequences and slow down the passage of the film’s imagery. Both the HD format and the slow motion enable viewers to take a closer look at the natural and chemical transformations that occurred during the emulsion of the filmstrips. By employing both celluloid-based processes and digital technologies simultaneously, Reble intended not merely to assert film’s materiality as its medium-specific qualities but also to dramatize the ways in which the interplay of chemical substances and the emulsion of film reveals “a bizarre, strange world full of magic.”⁶⁰ Part 1 of *Materia Obscura* starts with the image of boiling brown and white specks, which are later gradually transformed into black holes against the backdrop of a dense brown surface.

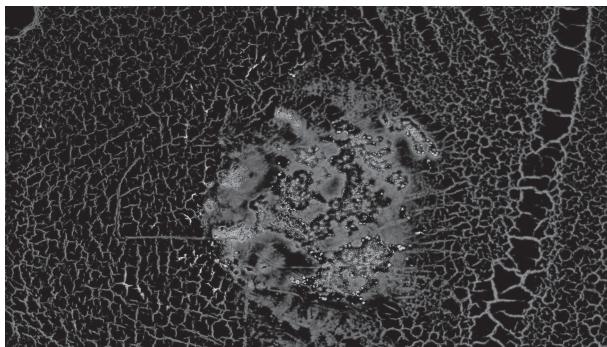


FIGURE 2.14 Film still from Jürgen Reble, *Materia Obscura* (2009), courtesy Jürgen Reble.

This scene, reminiscent of craters on the ground of the planets in the solar system, is replaced by a group of red cracks and crevices that emerge on a black surface. Here, the image marks a transition from the planetary to the cosmic dimensions, as it later presents changing clouds in yellow and gold, which are turned into blue concentric circles and a nebula-like shape in indigo blue. As this sequence ends by repeating the boiling brown and white specks from the beginning, they can be seen as symbolizing the Paleozoic era of the earth. In the rest of the sequences from *Materia Obscura*, Reble varies his association of abstract shapes produced by chemical transformations with other metaphoric—cosmic, geological, biological, and religious—meanings, rather than expressing the shapes as indicative of celluloid's materiality in a self-reflexive manner. In Part 2, for instance, blue shapes dynamically move while continuing to be transformed into dynamic shapes that resemble living organism's cells, nebulas, clouds, and mists. Part 3 presents red shapes against a brown background, thereby evoking the murals of primitive man. In Part 4, an array of yellow lines appears like broken crystal glasses on blue and black backgrounds, which are overlapped by a black circle that reminds the viewer of a ring in total eclipse.

Another alchemist working in film, Jennifer West has employed a wide variety of hands-on and chemical manipulations in order to investigate the expressive possibilities of abstract colors and shapes created by the transformation of celluloid. In a short piece published in *Artforum*, West clarifies that her handmade techniques of scratching, rubbing, corroding, and painting film emulsions, as well as her uses of various ingredients including spray paint, nail polish, air freshener, flowers and foliage, etc., are influenced by the tradition of cameraless films of Man Ray, Lye, and particularly Brakhage who “transferred the angst-laden gestural abstraction of the action painters to celluloid.”⁶¹ West’s remark demonstrates not only a key motivation of abstract cinema to translate the color, vision, and motion of painting into the moving image but also her desire to bridge cameraless film with Abstract Expressionism as an art-historical reference. Her *Lavender Mist Film/Pollock Film 1* (*70mm film leader rubbed with Jimson Weed Trumpet flowers, spraypainted, dipped and splattered with nail polish, sprayed with lavender mist air freshener*) (2009), for instance, presents splatters and drips in various colors (black, pink, yellow) in a similar way as

Jackson Pollock's action paintings. As described in the film's title, West uses a 70-mm film leader rubbed with flowers like a canvas, on which she painted the dynamic play of rounded shapes of varying sizes and colors with spray paint, nail polish, and air freshener. Besides this art-historical reference, West's abstract imagery, based on her manual processing and her mixture of solid and liquid materials with the materiality of celluloid, gives a nod to various metaphoric expressions and emotions, including her references to rock bands (grunge bands and riot grrrls), drugstore culture, and youth culture. For this reason, some of West's films present rich and complex admixtures of lens-based imagery and a variety of abstract forms produced by the chemical and physical manipulation of celluloid. *Nirvana Alchemy Film (16mm black & white film soaked in lithium mineral hot springs, pennyroyal tea, doused in mud, sopped in bleach, cherry antacid and laxatives—jumping by Finn West & Jwest)* (2007) combines the footage of West and her son jumping on a trampoline with relentlessly moving abstract figures, blood-red swathes and neon green lines produced by soaking and sopping the footage in several ingredients and chemicals. The interplay of the representational elements (the jumping of West and her son) and the abstract shapes (including the scratches on the filmstrip created by their footsteps) renders the film's movement free and agitating, therefore recalling the atmosphere of Nirvana's songs to which the film pays homage. West's strategy of combining the chance effects of participants' activities on filmstrips with her chemical transformations of celluloid was also applied to her *Skate the Sky Film* (2009),⁶² for which she used the Tate Modern's Turbine Hall as a temporary skate park and asked her riders to skate directly on filmstrips.

When she presents her films based on the tradition of cameraless films on celluloid, West chooses to project the films' footage using a digital format. In an interview with Quinn Latimer, she remarks that her choice to use the digital format is because the whirring sound of an analogue film projector is "too nostalgic," and because the digital format ensures that her films' subjects, including rock bands and skateboarders, "are considered in the medium of their time."⁶³ As Zinman writes, her insistence on digital projection for these two reasons is "in keeping with cinema's increased reliance on modes of digital production, dissemination, and projection and maintains certain qualities ascribed to the cinematic experience."⁶⁴

While most of her works use digital technologies to enhance the material and chemical effects of abstract compositions and relocate the celluloid-based imagery in the post-filmic projection of art galleries, *Spiral of Time Documentary Film* (2013, Figure 2.15)⁶⁵ provides a complex dialogue between digital and filmic images. This time, West takes Chris Marker's travelogue essay film *Sans Soleil* (1982) and Robert Smithson's *Spiral Jetty* (1970), a poetic film that documents the process of his site-specific project of the same title, as two art-historical references for her attempt to extend the materialist aesthetic of celluloid to other metaphoric meanings. 16-mm filmstrips were dripped, splattered, and sprayed with several salted liquids, including balsamic and red wine vinegar, lemon and lime juice, and hair dyes. West's inclusion of salt as a key ingredient signals *Spiral of Time Documentary Film* as a materialist remake of *Spiral Jetty*, insofar as the salt alludes to Utah's Great Salt Lake as the site for Smithson's project. The celluloid emulsion transformed by the chemical substances is

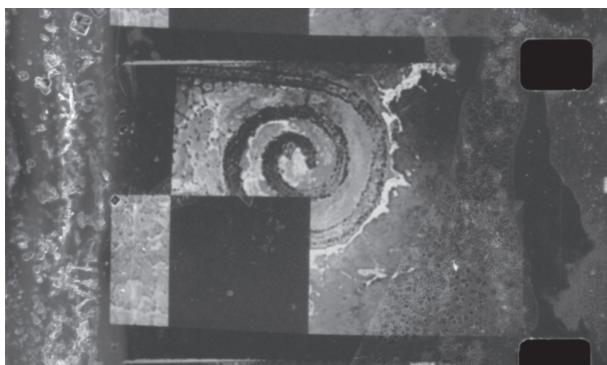


FIGURE 2.15 Film still from Jennifer West, *Spiral of Time Documentary Film* (16mm negative strobe-light double and triple exposed—painted with brine shrimp—dripped, splattered and sprayed with salted liquids: balsamic and red wine vinegar, lemon and lime juice, temporary fluorescent hair dyes—photos from friends Mark Titchner, Karen Russo, Aaron Moulton and Ignacio Uriarte and some google maps—texts by Jwest and Chris Markers' *Sans Soleil* script—shot by Peter West, strobed by Jwest, hands by Ariel West, telecine by Tom Sartori) (2013), 9 min 1 second, 16mm negative transferred to high-definition, Commissioned by Utah Museum of Contemporary Art, courtesy of the artist.

overlapped with several subtitles gleaned from Marker's script for *Sans Soleil*, as well as with the landscapes of the Dead Sea in the Middle East and of Spiral Jetty on Google Maps, whose footage West shot on her computer screen. By exposing all the elements two or three times, West places both the analogue and the digital inside the same frame while also establishing the film's resulting visual expressions as hybrid images that straddle the boundaries between abstraction and figuration. The landscapes of the two locations are presented as computer-generated imagery framed within the computer screen. The images of the landscapes, however, vacillate between legibility and illegibility as magenta sunspots and blue lines, two abstract shapes produced by the chemical transformation of celluloid, continue to unfurl across the landscapes. The explosion of abstract figures that make the images of the locations barely recognizable fits into West's aesthetic scheme applied to other films that include representational images, as she explains: "Even in my films with recognizable images, the viewer is *shifting back and forth between an occasional glimpse of imagery and all types of markings, splatters, shred marks, drips, and holes.*"⁶⁶ In the case of *Spiral of Time Documentary Film*, the viewer's experience of "shifting back and forth" between the representational and the abstract images echoes Meaney's materialist exploration of archive and memory in the digital age by means of digital glitches. If the images of the two locations on Google Maps represent a digital reconstruction of the memory of Spiral Jetty in Smithson's past, then the abstract figures that overwhelm the images suggest that this digital memory is as much subject to material decay and oblivion as the memory trace inscribed in celluloid.

Conclusion

The two categories of artwork grounded in aesthetic hybrid abstraction, namely digital glitch video and mixed-media abstraction, testify to what Manovich sees as two changes in the art of abstraction occurring since the mid-1990s. First, the opposition between abstraction and figuration, established by the Greenbergian medium-specific discourse on modernist art, dissolved as a variety of software applications became able to appropriate and simulate the aesthetics and techniques of abstract painting, film, and video

and fuse them with photorealistic or figurative imagery in various ways. Other than the proliferation of hybrid images derived from the applications' capacities, the second change in the domain of "pure" abstraction is the shift from the principle of reduction to one of complexity; that is, if the abstract forms in the modernist abstract painting of the early and mid-twentieth century are grounded in reducing painting itself to its basic material properties and technical elements, then the constantly changing patterns of lines and geometric shapes observable in the software-based abstract artworks of the contemporary age follow the aesthetics of complexity, influenced by software engineering and complexity science.⁶⁷ While consenting to the first change proposed by Manovich, I would stress that his second change—namely, the paradigm shift from the principle of reduction to that of complexity—is not limited to artworks that take a direction of pure abstraction. The three aspects of hybridity that I have discussed in this chapter—the technical hybridity of digital glitch videos, the material hybridity of mixed-media abstraction, and the aesthetic hybridity common to both—demonstrate that the principle of complexity governs not only the art of pure abstraction but also the intersection of abstract forms with photographic or figurative imagery. Again, this intersection allows us to reread a couple of tendencies in contemporary abstract film and video beyond the purview of the modernist idea of abstraction, repositioning abstraction itself within the contexts of media hybridizations.

I further argue that the three aspects of hybridity in the works of hybrid abstraction also derive from and attest to several post-media conditions of film and video. Digital glitch videos testify to the dissolution of film's celluloid-based materiality that previously contributed to the distinction of its image's form from that of video imagery, as well as to the fact that digital technologies transform the filmic image into a data object subject to the manipulation of codes and algorithmic procedures of postproduction and display. At the same time, the works' allusions to image-processing video illustrate that the techniques and aesthetics of analogue video are also dislocated from its medium-specific boundaries as they are remediated by, and relocated into, digital video's software environments. Finally, the works of mixed-media abstraction propel us to see the ways in which film and video, once regarded as sharply distinct, enter into a new, previously uncharted relationship in the persistence of the materialist energy that had led to the

developments of abstract forms. It is in these three ways that the aesthetic of abstraction, which at first glance opposes to that of photorealism in videographic moving pictures, also engages in configuring an array of hybrid moving images as indicative of the post-media conditions.

CHAPTER THREE

Transitional found footage practices: Video in and out of the cinematic fragments

Introduction: Defining transitional found footage practices

In a roundtable discussion on obsolescence and American avant-garde cinema, critic Paul Arthur proclaimed: “The much-vaunted war between digital or video, and film, is in certain ways much like media hype before a heavyweight prizefight.” Arthur’s statement asks us to rethink medium-specific distinctions between film and its neighbors, which still shape the fault line between the “old” and the “new,” or the “pure” and the “impure.” This notion is grounded in Arthur’s attention to two types of filmmakers: first, the pedigree of veteran filmmakers—Ken Jacobs, Michael Snow, Ernie Gehr, and Jonas Mekas, to name just a few—previously regarded as “film purists,” who are now “all working in video”; and second, “younger-generation filmmakers like Peggy Ahwesh and Scott Stark who move back and forth between digital and film.”¹ It is worth mentioning that directors in Arthur’s list such as Jacobs, Gehr, and Ahwesh have been concerned with found footage filmmaking, a type of film practice characterized by the “extensive use, transformation and re-interpretation of other filmmakers’ images.”²

The definition of found footage film in the rich history of experimental cinema is predicated on its aspiration to investigate the material and technical components of the borrowed image, as well as its underlying historical and cultural implications; and on its aesthetic and technical approaches to the image, which alter the image's qualities or place it in a new chain of meanings. Some of the works in Arthur's list, which recycle film images but are made with video technologies or a combination of celluloid-based filmmaking and electronic and digital methods, introduce profound instability to these two defining factors of found footage film—namely, the historical and ontological factor of the existing film images functioning as objects of investigation, and the aesthetic and technical factor of the filmmaker's approach to them. In this chapter, I shall categorize these works as "transitional found footage practices," and investigate how the technological passage from film to electronic and digital media affects the two factors defining found footage film.

The term "transitional" bears an array of overlapping implications. First and foremost, it signifies that cinema is in a state of technological change, through which film's key components (the camera, the filmstrip, the editing table, the projector, and the screen, all of which establish film as a medium grounded in the photochemical process) are gradually replaced by electronic and digital technologies. These changes demonstrate the new technologies' profound impact not simply on the production, distribution, and exhibition of cinema, but also on the collection, restoration, and conservation of film as a reservoir of history and memory. From the perspective of experimental filmmaking, the term "transition" involves the question of authorship, in that these changes are viewed pragmatically as a threat to the artisanal mode based on the intimate relation—both physically and manually—of the filmmaker to the medium. The question gains a deeper relevance given that found footage filmmaking has been developed in close dialogue with the artisanal mode. Seen in this light, the found footage practices in question are quintessentially relevant objects of inquiry, because they illustrate and are derived from a reaction to many of the transitional characteristics of cinema above. The original image, appropriated and reworked by the practitioners, exists not strictly on celluloid, but as the film (the whole body of a film or its fragments) encoded with analogue or digital video. For

this reason, the practitioners' modes of production are increasingly influenced by a variety of new technological artifacts, ranging from storage media to devices for film-to-video conversion or vice versa (for instance, telecine scanners) to software for editing and special effects. Accordingly, the filmmakers' outputs are hard to pin down in the light of the assumed purity of film, an assumption that lies at the heart of the argument on cinematic medium specificity, upon which the ideology of experimental filmmaking still depends considerably.

However, all those changes do not necessarily indicate ineluctable historical ruptures between film and electronic and digital media. Rather, the idea of transition suggests that a medium for production and circulation of an art form undergoes technological hybridization. For David Thorburn and Henry Jenkins, comprehending the aesthetics of transition means to "resist notions of media purity" and to recognize that "each medium is touched by and in turn touches its neighbors and rivals."³ From this perspective, each medium's constitution is plural inasmuch as it is open to different formal, aesthetic, stylistic, and institutional practices that invite the influence of other media. Similarly, Rodowick remarks, "The self-identity of a medium may accord less with a homogeneous substance than with a set of component properties or conceptual options."⁴ Rodowick's view encourages us to associate Thorburn and Jenkins's idea on the transition of a medium via external influences with its internal, dynamic heterogeneity: simply put, the identity or essence of a medium may be understood more palpably through the ways through which its own characteristics and qualities interact with those of other media than from the identification of a single, all-defining formal quality. Taken together, the idea of transition as external and internal hybridizations each suggested by Thorburn and Jenkins and by Rodowick eventually leads us to consider film and video alike as two media that exist both separately and relationally. On the one hand, each has both similarities with and differences from the other, shaping its own distinguishable art forms or cultural products; and on the other hand, each potentially allows for the influx of the other in the course of shaping a sensible form—for instance, a film involving video-based methods of production, or a video used in combination with film-based images or techniques. Thus, the idea of transition places emphasis on the multiplicity of the relationships between

the two media both historically and synchronically. Archivist and theoretician Giovanna Fossati provides a fresh take on the idea of transition in her rigorous conceptualization of the hybridity of cinema. She notes,

Films today are hybrid, being produced at the same time analog and digital. Although new films may perhaps become all digital soon, film-born and hybrid-born films (i.e., films from the analog past and films made during the transition) are destined to *a perpetually liminal status*. As *material artifacts* they are both analog and digital (e.g., the nitrate film stored in the archive's vault and its digitization stored on a server and available online); as *conceptual artifacts* they are both the historical artifact and the historicized one (e.g., the nitrate film and its reenactment via a digital projection).⁵

Fossati's argument here is not to deny the indisputable differences between film's photochemical properties and those of the digital, but to understand the uncertain ontological status of film as a "dynamic object where the material and conceptual artifacts are bound together."⁶ Fossati is correct in that film has arguably never been linked to a uniquely distinct artifact. In terms of film preservation, with which Fossati is primarily concerned, some practices are more inclined to restoring a film's conceptual dimensions (its profilmic objects, styles, mise-en-scène, etc.) through digital manipulations (color correction, dust removal, digital compositing of its deteriorated parts, etc.), although film's material dimensions are not purely derived from celluloid. This hybridity can be equally applied to the cases of transitional found footage practitioners. They validate the assumption that the transition of existing images from film to electronic and digital media does not affect their conceptual dimensions, namely, film as "historical artifacts" and film as the artifacts "historicized" by the practitioners' work. To add to Fossati's argument on film's hybridization, the liminal status of the images used by transitional found footage practitioners partly stems from electronic and digital technologies, which leave their material trace on the surface and temporality of the images. The transitional character of the images can be true of the technical apparatus available to those practitioners, as well as of the aesthetic choices that it provides. As filmmaker Yann Beauvais points out,

today's avant-garde filmmaking is "not any longer limited to [the silver-based medium], but it is realized by means of a combination of media, from video to film passing through the digital in many different forms."⁷

Based on the idea of the transition and hybridity of one medium in relationship to the other, I present the following two arguments on transitional found footage practices: first, considering the level of technologies necessary for access to and conversion of the extant images into a finished object, transitional found footage practices are based on the combination of media, in which the multiple layers of film as a medium are also confirmed and transformed; and second, on the level of the resulting image's aesthetics, the forms of transitional found footage practices must be considered neither the direct manifestation of film nor its absorption into non-filmic media, but instead as the intermedial configuration of the two. I develop these two arguments through my examinations of the key filmmakers who deepened this relational mode of practice in the arenas of contemporary experimental filmmaking—the Christoph Girardet-Matthias Müller duo, R. Bruce Elder, and Ken Jacobs. These three cases will additionally yield several theoretical and discursive reflections on found footage filmmaking, each of which alludes to two ideas of transition.

The first idea of transition is suggested by several previous studies on found footage filmmaking. Catherine Russell sees the use of television and film archives by experimental filmmakers since the 1950s as "apocalyptic," associating it with the advent of the postwar consumer culture, marked by its indiscriminate bombardment and wasting of images: "It is the collage style of the age of television that renders history and memory unstable and fragmentary."⁸ For Russell, fragmentation and juxtaposition adopted by avant-garde found footage filmmakers underscore this condition, rendering a progressive and coherent history impossible while also bringing "past, present, and future into a new nonlinear temporality."⁹ Russell's voice echoes Adrian Mackenzie, who sees the increased engagement with recycled images since the 1990s as "an attempt to retrieve, analyze, [and] deconstruct cinematic styles that have shaped the collective memory of consumer, capitalist society."¹⁰ Both Russell and Mackenzie suggest a correspondence between the postmodern imagescape and the technical and aesthetic aspects of found footage filmmaking; that is, the televisual modes of representation,

such as fragmentation, quotation, and pastiche, are reflected in the techniques and textuality of found footage films aiming to analyze and subvert past images. While concurring with this idea of correspondence, I stress that the two theorists rely on tropes of the modernist avant-garde, such as montage, collage, and *readymade*, to discuss the aesthetics and techniques of found footage film. For this reason, their arguments tend to be conflated with discourse on the strategies of appropriation in modern and contemporary art, though some of these filmmakers are modern artists influenced by modern art.¹¹ Russell and Mackenzie thus run the risk of obscuring the specific status of found footage film and the ontology of the image that it recycles. Considering this, I shall elaborate upon the technical and aesthetic impacts that technological shifts, triggered by the post-filmic media, have had on the traditional methods of found footage filmmaking, whether revitalizing the methods or introducing new, previously unattainable possibilities.

The second idea of transition relates to a historical consciousness of found footage filmmaking with regard to how its images exist. Arthur notes that this mode of practice reflects a distance between the material, technical, and industrial conditions of filmmaking engraved in the past image and those available to the filmmaker of the present. Because the temporality of recycled films in this mode is unavoidably split “between a present context and the shadow of prior production circumstances,” they speak “not only of a distant past and/or a ‘repressed’ quotient of meaning but of manufacturing resources and protocols.”¹² Arthur also provides a more detailed description of what he means by “manufacturing resources and protocols”: “Recontextualization will inevitably, indeed should, undercut the integrity of original footage since fidelity to technical standards (e.g., gage, camera speed, aspect ratio) of extant images is virtually impossible.”¹³ Although not explicitly proceeding further, Arthur points to the changes both in the ontological dimension of the found images (“the integrity of original footage”) and in their material and technical dimensions (“technical standards”) as they are reworked by found footage filmmaking. Willem de Greef writes, too, that in found footage filmmaking “reproducing an image always involves transferring it onto a different material. The consequences are alterations of color, contrasts that differ from the original.”¹⁴ In comparison to Arthur’s perspective, however, de Greef’s places more emphasis on the potential for found footage

film to create new meaning from the original image, and to forge a new filmmaking mode from the image: “What we refer to as ‘citing’ actually is *copying, a new production*. . . . The original is paraphrased, annexed, [and] re-formulated.”¹⁵ Viewed together, Arthur’s and de Greef’s thoughts can be reformulated on the one hand as the dialectic of deconstruction and reconstruction, and on the other as the exchange between some visual qualities from the original image and others from its copy. Given that the copy is not simply a duplication of the image but a transformation and reformulation, the resulting image in the transitional found footage practice is marked by the distance between past and present, as well as by the interplay between the original film’s specific qualities and the varying degrees of videographic and digital promiscuity.

How then do the practitioners of transitional found footage filmmaking extend their celluloid-based techniques of reworking and investigating the original film into the technical properties of video and digital technologies? And how does the dialectic of deconstruction and reconstruction in the hybridity of the image and its techniques contribute to the task of found footage filmmaking to engage with the cinematic past and reconfigure its history? I answer these questions by drawing on Walter Benjamin’s ideas of the “dialectical image” and the “loss of aura.” These two ideas help us to understand the technical and aesthetic hybridities of the image in transitional found footage practices as an ambivalent consequence of cinema’s post-media conditions—that is, the destruction of its celluloid-based properties and the reconstruction of possibilities to explore its material and cultural past in the present.

The technical transition of found footage practices: Montage and special effects

Montage and special effects are the two key technical strategies of found footage filmmaking on which the transition from film to video has an effect. In his landmark study on the traditions of avant-garde found footage films, William C. Wees singles out these two strategies for transforming original images. Along with his classification of the three methods of montage—namely, “compilation,” “collage,” and “appropriation”—for creating various juxtapositions that redefine

borrowed images,¹⁶ he considers as another thread of found footage practice in experimental filmmaking a variety of films in which footage “has been scratched, scraped, perforated, painted, dyed, bleached, chemically-altered, or subjected to various techniques of optical printing that radically change its appearance.”¹⁷ To draw upon Michele Pierson’s words, the techniques for radically transforming and displaying the material surface of celluloid footage are seen as “special effects,” which include frame-by-frame manipulation, recombination of the filmstrip, and “any technique or class of techniques for *manipulating images within the film frame.*”¹⁸ A number of contemporary American found footage filmmakers including Craig Baldwin, Abigail Child, Leslie Thornton, and Jay Rosenblatt, as well as European practitioners including Johan Grimonprez (Belgium), Péter Forgács (Hungary), Yervant Gianikian and Angela Ricci Lucci (Italy), and many others, have deepened the tradition of montage-based found footage filmmaking with radical juxtapositions of disparate images creating unexpected associations. Dispersed across a wide variety of subcategories from compilation documentary to the construction of alternative history, the artists or filmmakers use the tropes of montage to explore, in the words of Michael Zyrd, “the metaphoric qualities of found footage, finding ambiguity and revelation in both the recognizable iconic image, resonant with cultural and historical connotation, and detritus, the seemingly inconsequential footage whose very banality and ubiquity is made resonant of mass media.”¹⁹ On the other hand, Pierson illustrates her concept of special effects by citing the films of Peter Tscherkassky and Martin Arnold, two notable contemporary filmmakers who probe and unmask the institutional codes and conventions governing mainstream narrative cinema by expanding the methods of structural film, a number of radical alterations to the material and processual dimensions of the found film image to the extent that it barely retains its original state.

The proliferation of digital files (ripped data from VHS videos or television programs) on storage media and networked platforms (websites or user communities for uploading and downloading of video files, such as YouTube, Google Video, and Vimeo), the development of software for editing and file sharing, and the emergence of new means for storage and distribution of visual data, have all recently refashioned the traditions of found footage films based on montage and special effects techniques. Adrian Danks notes

that the recent flourishing of found footage cinema across the globe has become increasingly linked to “non-cinematic” practices that emerged during the last twenty-five years, “as a greater emphasis on the recycling of materials and sources, sampling, turntable scratching, [and] digital vision-mixing.”²⁰ The non-cinematic practices indicated by Danks, which originated in the arena of popular music in the 1980s, are now seen as expanding across a variety of contexts, ranging from contemporary art to Web-based or software-based cultures.²¹ The influence of these techniques on contemporary art is encapsulated by Nicolas Bourriaud’s concept of “postproduction,” a term that refers to a vast, albeit heterogeneous, array of artistic practices in use since the 1990s, which commonly rely on preexisting works or their formal structures to respond to the overpopulation of images and information and to extract new modes of production from them. For Bourriaud, the development of digital technologies and the vocabulary of the new cultural modes that they introduce—programming, sampling, copying, pasting, and sharing; and the eradication of traditional distinctions between production and consumption or readymade and original work—play a key part in the emergence of the art of postproduction, that is, an array of artistic practices that aim to make something new from something already produced: be it an artwork, an artist’s method or scheme for making that artwork, or a readymade object. While arguing that postproduction is another kind of production rather than a mere appropriation of the original artwork or object, Bourriaud considers the DJ, whose task is to select cultural objects and insert them into new contexts, an influencing figure of postproduction, and explains that the growing number of artists influenced by the DJ culture demonstrates that “the art of the twentieth century is an art of *montage* (the succession of images) and *detournage* (the superimposition of images).”²² Similarly, Eli Horwatt argues that the practice of moving image appropriation enabled by those conditions—what he calls “digital remixing”—“represents a continuation in the development of the strategies and techniques of found footage filmmaking but possesses its own unique aesthetic and rhetorical contributions.”²³ For Horwatt, the internet, an archive of found images open for limitless access, surfing, and accumulation, recycles the montage aesthetics of found footage filmmaking as it is linked to digital software, a toolbox for creating new juxtapositions of those images.

It should be noted, however, that the emphasis on electronic and digital technologies shared by Danks, Bourriaud, and Horwatt is still too limited to pinpoint the ways in which those technologies influence the technical and aesthetic dimensions of found footage practices in avant-garde cinema. Terms such as “sampling,” “remix,” and “postproduction” are primarily concerned less with the historical context of found footage film and its montage-based and process-based techniques than with the broader cultural logic of contemporary audiovisual formation spurred by new technologies. A few scholars have recently suggested potential for shaping the hybrid discourse on the transition of montage that results from changes in the technological basis of film production and reception. Martin Lefebvre and Marc Furstenau argue for an affinity between viewing a film on the editing table and watching it on video technology: “*VCRs don’t so much reproduce film projection as they partially mimic the way an editor may access a film that has been threaded onto a Steinbeck*—including even viewing the film on a reduced-size screen.”²⁴ VCRs allow the viewer to see the transferred film footage in ways that disrupt the temporally linear, forward movement operated by the projector, including freeze-frame (pause), slow motion (including “frame-by-frame” advance), fast forward, and rewind functions. Lefebvre and Furstenau extend the correspondence between the editing technology and the domestic viewing system to a comparison of nonlinear digital editing systems using the DVD. The characteristics of viewing of a film through a DVD player, such as random access to the film’s transferred footage, nonsequential viewing, and playing segments (chapters) in any order, even random, grant the editor “the ability to produce—quickly and at little cost—multiple versions of any given sequence (or section) of a film, and provides several on-screen (analog) display possibilities for the digitized data.”²⁵ This is grounded in the DVD’s reproduction of the technical repertoire of nonlinear digital editing. For Lefebvre and Furstenau, this technological transition of the apparatuses used by the film editor bears a more crucial consequence regarding the ontology of cinema. Nonlinear editing structured by digital video testifies to “an increasing tendency to see a film as an object that may legitimately undergo perhaps constant revision and rearticulation.”²⁶

Seen in this light, the new technical possibilities for transitional found footage practices, such as remix and sampling, do not simply

validate the influence of electronic and digital technologies; rather, I argue that these possibilities testify to the technical and aesthetic hybridization of transitional found footage practices, inasmuch as they demonstrate both similarities and differences in the transformation of cinema vis-à-vis its hitherto celluloid-based constitution. That is, such techniques as remix and sampling in those practices can be used for their practitioners to extend their celluloid-based montage and special effects in the realm of digital editing on the one hand. In this case, there might be a range of correspondences between these two techniques, and these correspondences enable the resulting image of transitional found footage practices to occupy both the aesthetic qualities of the film-based original image and those produced by digital manipulation. On the other hand, digital sampling and remix in those practices, too, inscribe their own videographic qualities in the surface and temporal dimensions of the original filmic image, thus manifesting themselves as more or less distinct from the celluloid-based montage and special effects. For instance, similarities are seen in transitional found footage practice's adoption of nonlinear digital editing, a continuation of the montage methods used in celluloid-based found footage filmmaking, which were themselves grounded in the procedures of editing on the Steenbeck machine. This nonlinear editing might be called digital sampling or digital remix, but only when it reflects the extent to which today's cinema does not solely consist of the celluloid medium's specific characteristics. Susanne Østby Saether's three characterizations of sampling concisely make this point: first, digital sampling engages in "questions of materiality, in the face of the ephemeral nature of current screen culture"; second, it implies "a fragmentation of the original material, giving priority to a non-linear representation"; and finally, it focuses on the "technological investment involved in the reproduction and subsequent repetition of pre-existing material."²⁷ I argue that, in the context of transitional found footage practices, these three aspects are related to three questions raised by the post-media situation (i.e., that digital production and storage technologies have fundamentally altered the aesthetic and technical conditions of celluloid-based cinema): first, how do the filmic images originally produced and experienced in celluloid bear witness to the coexistence and interrelation of celluloid-based and digitized qualities? Second, in what ways are fragmentation and nonlinearity seen to result from the transformation of images from celluloid to

digital files and pixels? And finally, which properties of digital tools for appropriating, juxtaposing, and transforming images are capable of translating celluloid-based montage and special effects into the domain of digital editing, while also providing new technical possibilities that were previously unattainable from celluloid-based found footage filmmaking?

Lefebvre and Furstenau's points concerning the changing status of editing can be applied not merely to the realm of traditional montage, but also to that of special effects—freeze-frame, slow motion, etc. Given that digital video endows the encoded version of a filmic image with manipulations of its surface and temporality, however, the influence of new technologies on the special effects of found footage filmmaking should be discussed more extensively than by Lefebvre and Furstenau. Here, the range of techniques that can be applied to found films extends into the domain of “digital compositing.” In a narrow sense, the term refers to general operation in the computer culture that aims at “assembling together a number of elements to create a single *seamless* object.”²⁸ In a broader sense, the term is understood to include a variety of techniques allowing for the coalition of different layers into a single image frame. The term’s broad definition implies aesthetic possibilities beyond simply a synthesis of objects, blending separate layers in a coherent manner to strive for the ideal of photorealism; for instance, a juxtaposed, multilayered visual field is possible, akin to the collage and photomontage of the 1920s. If this modernist aesthetic is just an option, then it could be argued that digital compositing in its broad sense is characterized in two ways: on the one hand, by coexistence of different media components in a single frame through various methods, and on the other by the ability of any element in the frame to interact with another. Lev Manovich summarizes those two points as follows: “Digital compositing now allowed the designers to easily *mix any number of visual elements regardless of the media in which they originated and to control each element in the process.*”²⁹ He also sees digital compositing as facilitating a number of special effects developed in the field of experimental cinema (including found footage filmmaking), such as the use of an optical printer to superimpose different visual elements on a single space, and the practice of painting or scratching the surface of celluloid. Given the importance of those two techniques as special effects in avant-garde found

footage filmmaking, digital compositing in transitional found footage practice (a different set of techniques for juxtaposing and manipulating of different media elements) corresponds to the found footage films based on digital special effects. To be sure, there is one crucial difference: if the films made using optical printing or scratching/painting aim to investigate film's medium-specific dimensions (the materiality of celluloid, the relationships between photographs, the operation of the projector, the illusion of filmic movement, etc.), then transitional found footage practices are concerned with the simultaneous appearance of multiple media characteristics—the filmic on the one hand, and the electronic and digital on the other—or the dialogue between them.

From another perspective, the inclusion of digital compositing as a technique in transitional found footage practice is viewed as the collapse of the boundary between montage and special effects. The distinctions between the two kinds of found footage film, made by Wees and Pierson, namely, films based on montage and those based on special effects, respectively, suggest that they were regarded as separate, both conceptually and practically. Whereas those two forms ran largely parallel to the differences between the Steenbeck editor and the optical printer or other manual and chemical treatment of celluloid, the interface of video-based and computer-based editing fully repositioned the linear arrangement of discrete images and a variety of compositing functions within the same working table. As Manovich further notes, “Re-ordering sequences of images in time, compositing them together in space, modifying parts of an individual image, and changing individual pixels become the same operation.”³⁰ In line with Manovich, Tilly Wanes observes that “time and space are no longer separate modes but are fully imbricated in the editing process, engendering a new multi-dimensional form of montage.”³¹ This process also makes possible what curator Stefano Basilico calls “gestural” uses of editing, for example “stretching,” “removing,” “arranging,” “erasing,” “cutting,” and “repairing”; these gestural processes allow artists and filmmakers to manipulate film fragments by virtue of video technologies and treat them as objects subject to temporal and figural changes of state.³² Full integration of montage and special effects into the expanded editing field governed by digital video software accordingly yields two technical and aesthetic consequences in transitional found footage practice. First is a free insertion of temporal manipulation and

composition-based techniques—for instance, keying, multilayering, juxtaposition, etc.—in the sequential assemblage that leads to a compilation or collage film. Second is an expansion of special effects into not a limited number of scenes but the whole part of a film, or a number of different films that will later be recombined using montage methods.

The recent digital found footage films by Vicki Bennett (aka “People Like Us”) and Gregg Biermann vividly demonstrate the technical exchange between montage and special effects, as well as the dynamic aesthetic hybridization of borrowed filmic images and digital visual expressions. Initially, these two filmmakers seem distinct in terms of their technical traditions of experimental found footage filmmaking: that is, montage-based and special effects-based found footage films. Bennett uses the montage—more precisely, collage—method to create radical juxtapositions of various filmic images (including B-movies, educational films, etc.) available in the form of digital files from online archives and websites, while Biermann adopts a variety of software features as digital special effects to transform canonical classic films, including *Vertigo* (Alfred Hitchcock, 1958), *The Wizard of Oz* (Victor Fleming, 1939), and so on. This distinction, however, becomes blurred when comparing their films’ techniques and resulting images. In Bennett’s films, such as *We Edit Life* (2002), *The Remote Controller* (2002), and *Work, Rest, and Play* (2007), viewers see that the images connected by sequential editing evolve into a variety of superimpositions based on digital compositing. A key technique of digital compositing is “matte extraction,” which allows Bennett to select and cut out defined parts of a digitally encoded filmic image according to their values (color, luminance, etc.).³³ By interweaving these parts with fragments from other borrowed films, Bennett’s films present a dense spatial collage in which people, objects, and backgrounds from different sources appear to coexist and interact within a single frame, with no clear boundaries between them: a man in color who operates a machine controller is shown beneath black-and-white dancing marionettes inside the machine’s monitors in *The Remoter Controller*, and children from a 1950s educational film dance around an animated robot in *We Edit Life*. The scratches on the surfaces of the borrowed images in Bennett’s films testify to their celluloid origin, but the interactions of the black-and-white footage with the colored and animated material, and of still images with

moving images, result in spatial density as an aesthetic characteristic of electronic and digital imagery.

Biermann's films, too, emblemize the dynamic exchange between montage and special effects in software-based editing, as well as radical transformation of the celluloid-based image. In *Utopian Variations* (2008), the "Over the Rainbow" sequence from *The Wizard of Oz* moves forward from the beginning and backward from the end in half-second intercuts. This repetition, a variation of sequential editing, overlaps with what Manovich calls "spatial montage," a new dimension of video and digital editing derived from digital compositing that allows for various juxtapositions of different elements in a single picture frame.³⁴ The sequence in *Utopian Variations* gradually builds from one screen to a twenty-five-voice split-screen canon in which each voice is slightly out of sync. In fact, Biermann's use of split screen as a spatial montage strategy relates to some of his other films, which rework Hitchcock's films to offer the viewer a refreshed aesthetic experience of their mesmerizing and kaleidoscopic aspects. In his *Spherical Coordinates* (2005), Biermann takes Janet Leigh's driving scene from *Psycho* (1960) and transforms it into a dizzying array of concentric circles, using the capacity of digital software to twist, bend, fold, and flip the image. Similarly, *Labyrinthine* (2010) transforms the iconographic shots from *Vertigo* into composite sequences of infinitely increasing superimpositions. As a result, a default frame of the shots gives birth to a multiplicity of images within frames of different sizes, each frame producing a new smaller one according to a rhythmical scheme whereby each shot is repeated four or five times (Figure 3.1). As Eivind Røssaak rightly remarks, these two films demonstrate that in digital software, "continuity editing is replaced by a discontinuous and labyrinthine editing process, and the screen no longer displays one image at a time, but several."³⁵ This algorithmic dimension of Biermann's editing, in which the image is given in the form of mutable codes that lead to a variety of juxtapositions and transformations, is deeply rooted in digital technologies, and cannot be achieved using only celluloid-based editing and special effects. In a broader sense, however, these juxtapositions and transformations could not have been conceived without the two techniques of celluloid-based found footage filmmaking or the original films' visual and cultural dimensions, which are still recognizable in the resulting images of Biermann's



FIGURE 3.1 Film still from Gregg Biermann, *Labyrinthine* (2010), courtesy Gregg Biermann.

films. These two aspects allow us to consider transitional found footage practices as technical and aesthetic hybrids of film and digital video.

Deconstructive compilation: Montage and special effects in Girardet-Müller

German experimental filmmaker Matthias Müller and video artist Christoph Girardet, in addition to their solo work, have collaborated to produce a number of video pieces and installations. Extracting specific scenes from various feature films, educational films, and TV commercials, the two practitioners recontextualize them using montage-style compiling akin to digital sampling and remixing. This encyclopedic approach demonstrates the aesthetics of compilation according to Wees's classification of found footage films. However, unlike Wees's characterization of compilation films as those following "a clear, linear development" of borrowed images and not questioning their "representational nature,"³⁶ Girardet and Müller structure their compilation projects according to the method of collage. They bring into relief the common characters, motifs, codes, conventions (such as continuity editing, master shot, eye line match, and graphic match), and emotional effects of their

appropriated images. In this sense, their method can be described as “deconstructive compilation” driven by the aesthetic of collage. This enables the two practitioners’ found footage works to oscillate between continuity and discontinuity, between the footage’s fragmentary status and the artists’ conceptual organization. Since their collaboration, video technologies for viewing and editing have strengthened this method. These technologies facilitate Girardet and Müller’s collection, analysis, and rearrangement of their archive of found images. A range of special effects, including video-based slow motion and compositing of elements within a single picture frame, transform the original filmic images into transitory media objects open to electronic and digital manipulation of surface and temporality, while at the same time allowing the two artists to augment their deconstructive approach to the representation of narrative cinema and television genres as developed in the traditions of avant-garde found footage films.

The Phoenix Tapes (1999, Figures 3.2 and 3.3), Girardet and Müller’s first collaborative work, is a six-part compilation of excerpts from Hitchcock’s forty movies; it reveals a study of Hitchcock’s recurring themes and “universal language of gesture that encompasses both cinematic and everyday modes of communication.”³⁷ While the two artists depend upon their method of compilation, their undertaking of the psychosexual meanings implicit in Hitchcock’s body of work aligns with the deconstructive approach of Arnold and Tscherkassky, who deploy special effects driven by the optical printer to interrogate the fears and desires activated or repressed by the mechanics of Hollywood cinema.³⁸ A notable feature of the work is the relation of its compilation-based montage to the material and technical conditions of video technologies under which Girardet and Müller study Hitchcock’s films. Thus, the films’ images are seen as ontologically “transitional”: they conceptually maintain the films’ original components (figures and objects) while also being subject to video’s electronic flows and technical procedures. As a result, Hitchcock’s filmic images in the work intersect three levels of video technologies: video’s material level, which determines the surface quality of the images from the extracted films; the level of spectatorship, which structures Girardet and Müller’s study and archiving of films; and finally, the editing level, which determines the available montage and special effects.



FIGURES 3.2 AND 3.3 Film stills from *Christoph Girardet and Matthias Müller, The Phoenix Tapes* (1999), courtesy of the artists.

Considering video's materiality, Christa Blümlinger notes that the work's inferior "visual quality" evokes watching classical films via a video apparatus: "[Girardet and Müller] opted for their personal collection and apparently started from VHS material through which the reference to a zone of experience—television and video recorder—is equally inscribed as a material alienation effect."³⁹ The poor quality of the images, which Blümlinger refers to as the "alienation effect," illustrates some of the technical differences distinguishing a videotaped copy from its original film, summarized by Charles Shimo Tashiro as "insufficient brightness," "low resolution," and the "loss of vivid color."⁴⁰ This preservation of video's inferiority on the surface of the compiled films links to

Müller's approach in his previous Super 8 mm or 16 mm films, such as *Home Stories* (1990), for which he filmed Hollywood melodramas of the 1950s directly from the television set in order to reassemble them into a collage of their recurring motifs and clichés. This approach, Müller states, aimed to highlight the contrast between the cinema as the most influential and supreme larger-than-life event shaping the memories of its audience in the twentieth century, and the cinema as it was later shown on the small screen: "The film [*Home Stories*] uses shots that were elaborately produced for the big screen. However, I'm only familiar with them from television: that is, incredibly shrunken. The shabby aesthetics of my film, which are far from the original glamour, are supposed to say something about the path that brought these images to me."⁴¹ The borrowed films' alteration, caused by their passage from celluloid to electronic signal in *Home Stories*, makes a double-sided statement regarding their presence among today's audiences, including Müller himself. On the one hand, it marks the extent to which Hollywood cinema's universal and powerful styles and narratives entered the archives of film history, and can now be recovered by the personal act of fascination- and admiration-charged memory; on the other hand, the deterioration in size and quality suggests that an encounter between past and present is premised on the irreducible distance between them. Hollywood films, essentially a series of codes and conventions (lighting, acting, gestures, movements, etc.) that make their protagonists beautiful and memorable, become at once the remnants of film history—forced into profanation, obscurity, and oblivion—and the ambiguous objects of desire that are no longer attainable in the electronic and digital era. In this sense, the alienation effect of the video-based inferiorities of Hitchcock films in *The Phoenix Tapes* presents Hitchcock's remarkable objects, techniques, and effects as simultaneously forgotten and remembered: video technologies deprive them of some material qualities that only celluloid-based cinematic viewing can maintain, but also encourage appreciation of their vitality and complexity.

The reciprocation of remembering and demystification extends into the level of video spectatorship that laid the groundwork for Girardet-Müller's work with Hitchcock's films. While the visual inferiorities outlined above mark the VCR as an unsatisfactory medium for reproducing a celluloid image, Tashiro states that its

other functions, such as freezing and playback, pave the way for “a connoisseurship of form that theatrical viewing discourages.”⁴² Anne Friedberg, too, notes that the VCR’s time-shifting functions treat films “as objects of knowledge to be explored, investigated, deconstructed as if they were events of the past to be studied.”⁴³ More recently, Caetlin Benson-Allott argues that VCR-based spectatorship, marked by the viewer’s physical and affective labor of controlling the tape, has a “unique relationship to fetishism” that cannot be grasped by such “apparatus” theorists as Christian Metz, who presupposes the theatrical condition as the all-encompassing grounds for theorization of the viewer’s identification with the film image.⁴⁴ Similarly, Laura Mulvey sees the DVD’s capabilities of halting, reversing, and delaying cinematic time as resurrecting the viewer’s fetishistic control of the film image.⁴⁵ All arguments concerning video’s post-filmic spectatorship echo Girardet and Müller’s procedures of compiling and editing for *The Phoenix Tapes*. Their study of Hitchcock’s films, which must have involved freezing, playback, and extraction,⁴⁶ is reflected in their wide-ranging collection of scenes—whether established shots (“Rutland”), close-ups (“Burden of Proof”), or private moments (“Bedroom”), as well as in their cumulative, repetitive patterning by which they match scenes thematically, graphically, and kinesthetically. The two artists’ montage method, too, takes on the two aspects of the fetish as defined by Metz and Mulvey: the extraction of shots (to use the psychoanalytical term, “partial objects”) from a complete body, based on the operation of “isolation”; and the representation of a whole by its parts. These aspects of the fetish have a double-sided effect on perception of the fragments of Hitchcock’s films. While presenting themselves as key memorable moments, indicative of Hitchcock’s well-known aesthetics and affective powers, they are decontextualized so deeply that the viewer is not entirely able to keep up with what films they come from. In this regard, the two artists’ collage is not so much intended as a chronological ordering of shots, which would concede Hitchcock’s canonical status; rather, the shots are treated as images that persist, and thus are occasionally replayed, in the memory of individual or collective viewers as “fragmentary carriers of emotion that flow into new constellations.”⁴⁷

Derailed (Figure 3.3), the third episode of *The Phoenix Tapes*, illustrates a deliberate combination of video-based special effects

and the deconstructive compilation of Hitchcock's disparate fragments. It juxtaposes a brief scene from *Spellbound* (1945), in which Gregory Peck is shown sleeping, with a variety of nightmarish leitmotifs, among which the train is most central. The viewer is placed in a dreamlike position by patterns of collage more complex than sequential rearrangement of shots similar in thematic and graphic elements. This is amplified by the "jerking effect" of the shot of Peck sleeping, which makes his neck move forward and backward continuously during a short period of time. Using this video-based pulsation as a fulcrum, the section interweaves several shots of the running train with a number of scenes that elicit hallucination (a kaleidoscopic superimposition of two women who see someone off at the station platform), anxiety and paranoia (shots of a group of people glaring at a protagonist, who remains unidentified), and terror (several female characters who faint, and male characters who fall off a cliff [*North by Northwest* (1959)] or building [*Vertigo*]). While keeping the black-and-white scenes intact, Girardet and Müller remove colors from some colorized scenes to "generate a condensed, homogenous impression of the merciless mechanism of a monstrous dream machine."⁴⁸ This de-colorization effect serves to decontextualize all the shots so deeply that they trigger the viewer's mnemonic play with Hitchcock's original films. At the same time, their common partial characteristics (the gaze without an object, or characters falling with no visible cause), attenuated by the two artists' repetitive, cumulative editing, render the whole section a mixture of the familiar and the overlooked, of the memorable and the banal. Seen in this light, the replay of Peck sleeping alludes to the mechanism of video spectatorship in which shots of a single film or of different films are extracted, fragmented, and redeployed while granted specific values or meanings.

Girardet-Müller's *Kristall* (2006, Figures 3.4 and 3.5) compiles bedroom scenes in which men and women see themselves or each other through a mirror; these scenes are drawn from a variety of films—mostly Hollywood melodrama, horror, and film noir, with the occasional European art cinema classic—from 1931 to 1987. The scenes incorporate Girardet and Müller's research on the mirror's roles in shaping the narrative of the overall films. More than simply complicating mise-en-scène, the mirror displays wide-ranging affective registers such as intimacy, pensiveness, anxiety, fear, and other ambiguous emotional states. The filmmakers carefully



FIGURES 3.4 AND 3.5 *Film stills from Girardet and Müller, Kristall (2006), courtesy of the artists.*

put the bedroom scenes together according to the criteria of their formal and compositional elements, such as the figures' directions of gaze, poses, gestures, costumes, hair, and so forth. All those elements commonly serve to imbue the scenes with the fantasies of bourgeois families or couples, marked by narcissistic pleasures, mutual intimacy, and luxurious lifestyles. In their extraction and rearrangement of the scenes, the filmmakers aim primarily to reveal the fragility of those fantasies. The faces of the women, each of whom is waiting for her partner, are clouded by suspicion, emptiness, loneliness, and boredom. At the same time, the male characters' scenes steadily accumulate moments of narcissism, obsession, and frustration. Additionally, along with these single-person shots, the work aims to disintegrate the fantasy of heterosexual romance. Its climax begins with the first series, thirty shots of women adjusting

their makeup or getting their hair done; they are followed by the second series, of forty-three shots with a quick rhythm of women turning away from the mirror as though their attention has been captured by something unexpected. After a few shots of men reflecting pensively on themselves in the mirror, the third series of five shots present the men behind the women. Here, each is viewed through the mirror in his partner's bedroom as he enters. The final series, a dozen shattered mirrors punched in anger by the men or the women, signify the violent breakup of their mutual relationships.

Girardet and Müller utilize digital compositing in combination with their method of deconstructive compilation to manipulate the surface quality of some borrowed shots of the mirror. Midway through *Kristall*, they distort the texture of the shots with digital video effects so that the characters' faces are slightly fragmented (Figures 3.4 and 3.5). This distortion deliberately deconstructs the spatial integrity of a single shot, while also imbuing the faces with dreamy or hallucinatory overtones. In this way, Girardet and Müller's use of digital compositing suits what Wees calls "deconstruction with reconstruction,"⁴⁹ a dialectical strategy that avant-garde found footage filmmakers use to call upon the viewer to recognize their ambivalent attitude toward mainstream cinema. In *Kristall*, stars from the Hollywood and European film industries, including Elizabeth Taylor, Joan Crawford, Jeanne Moreau, Kirk Douglas, Marcello Mastroianni, and Anthony Perkins, are portrayed in multiple frames shaped by mirrors and windows, decorated with soft-focus cinematography that endows them with an atmosphere of eternity and transcendence. When accumulated, they look so amorous and elusive as to live permanently in the fictional world created by the language of mainstream cinema. But this glamour and allure proves to be a fragile, stereotyped construct of the film industry, as digital compositing violates the appearance of the stars so radically as to denaturalize the whole in-frame space surrounding each of them. Viewed together, the two characteristics confer upon those stars the "ambiguous aura" as a "perpetual reminder that their images have lives of their own, which anyone with the means to reproduce them can manipulate at will."⁵⁰

In her take on *Kristall*, Russell pays attention to the suspension of action characterized by the "empty, waiting, mirrored image," arguing that the moment of fragmentation in its climax brings the viewer back to the dimension of "gesture" as that which exhibits, to

use Giorgio Agamben's words, the "pure mediality" of the human being: a fundamental form of human life before human action is codified to serve particular ends.⁵¹ Russell's argument, albeit largely agreeable, would be more compelling if she pointed out that this revelation of "pure mediality" could not be fully achieved without digital compositing. The gestural dimension of the stars' bodies is made visible not simply by excavation and reassessment of their images, but by undoing the images that subject the bodies to the determination of clichés and formulas themselves. To be sure, digital compositing in *Kristall* exerts the second kind of deconstruction by breaking down the aura of the stars. But this destruction is premised upon another destruction of aura—the aura of the filmic image. The destabilization of the surface—that is, the distorted multilayering of the same single frame—testifies to the assimilation of the filmic image into video's fluidity and pictoriality on a material basis, without eliminating the image's cinematic richness of meaning. In this regard, abstraction of the stars' "pure mediality" in *Kristall* hinges upon the intermedial exchange between cinema and video, namely, upon the transformation of cinema into an image object accessible to manipulation by post-filmic technologies.

Transitional found footage practices as dialectical and archival

The concepts of Walter Benjamin pervade the critical discourse on found footage film. First, his notion of allegory implies understanding cultural objects of the past as discarded, forgotten, fragmented, and deteriorated.⁵² In this sense, Jeffrey Skoller compares some key found footage filmmakers (Jacobs, Gehr, etc.) to "brooders and cine-ragpickers," declaring that their engagement with lost cinematic objects from the early twentieth century sets up "new possibilities for a *re-membering* of the past in the present."⁵³ Similarly, Russell conceives of found footage films as producing a "counternarrative of the memory trace" insofar as their appropriated material "belongs to a contingent order of time,"⁵⁴ one that resists the assumption of history as progressive and coherent. This idea of found footage filmmaking as allegorical is also linked to Benjamin's concept of the "dialectical image," a

specific image of the past that attains “legibility only at a particular time”⁵⁵ in the present. Indeed, it is the concept of the dialectical image that legitimizes a great variety of found footage films in the Benjaminian sense. By defining fragments of the past as constantly marked by the present, Benjamin likens the dialectical image to a broader methodology of historiography as antithetical to the notion of history as the progression of linear time: “The destructive or critical momentum of materialist historiography is registered in that blasting of historical continuity with which the historical object first constitutes itself.”⁵⁶ Seen from this perspective, found footage filmmaking is a means to access “history in the form of an unordered archive populated by historical subjects that pressure representation ‘from below,’”⁵⁷ or the practice of “re-writing history in order to gain a fresh perspective on both the past and the current situation.”⁵⁸

Benjamin’s demand for “materialist historiography,” as well as his assumption that it appropriates fragments of the past “in a moment of danger,”⁵⁹ has resurfaced in some recent critical reevaluations of found footage filmmaking. This sort of discourse presupposes a binary opposition between the materiality of celluloid and the immateriality of electronic and digital media, asserting the need to reclaim the former, as the “past,” against the threatening impact of the latter, as the “present.” Curator Jane Connarty, for instance, explicitly underlines “a heightened awareness of the medium and a fascination with its material qualities”⁶⁰ as a key motivation in found footage practices. Lucy Reynolds, too, supports Connarty’s argument in her consideration of the innovative ways in which a number of paradigmatic experimental filmmakers (Bruce Conner, Jacobs, Tscherkassky, and Child, to name just a few) have interpreted the film frame as an archival document: “Found footage film is *the most extreme and visceral manifestation of cinema’s essential material nature*; its fragments not only reasserting cinema’s primal celluloid state but also revealing the fault-lines beneath its seductive surfaces, through which a multitude of histories seep.”⁶¹ Gerda Cammaer claims that found footage filmmaking is a desirable starting point for redefining cinema as a medium against the “accelerating pace of digital film convergence” that renders all distinctions between film and video arbitrary: “Found footage films expose and explore *the very same physical qualities of analogue film that pushed the industry to seek digital ‘perfection’ in the first*

place, and they celebrate all the perceptual pleasures that only analogue film can offer.”⁶²

I do not deny that the “materialist” arguments above are compelling as an explanation of the historical and ontological underpinnings of found footage films based on the material and technical attributes of celluloid-based cinema in terms of Benjaminian concepts. The underlying binarism of those materialist voices should be noted, however, which runs the risk of obscuring the dialectical aspects of the found footage practices derived from the intersection of film and the new technologies. That is, Benjamin’s dialectical method of constructing an alternative historiography, and his awareness of past objects as allegorical, can also be explored in transitional found footage practices inasmuch as they are seen to respond to the critical situation of traditional celluloid-based cinema being increasingly thwarted by the overriding power of new digital technologies. This situation deeply echoes Benjamin’s own dialectical thought on the impacts of new technologies on human sensorium and the ways in which the artwork or material of the past is perceived. It is important to emphasize that Benjamin understands the present not simply as a moment of crisis but as the “now of a particular recognizability.”⁶³ Throughout *The Arcades Project*, as well as his other studies on the mid-nineteenth-century Paris, Benjamin demonstrates that an array of technological changes—for instance, the invention of photography, panorama, and film—restructured the ways in which humans could unpack and grasp traditions, cultures, and objects of the past: “The perceptual worlds break up more rapidly; what they contain of the mythic comes more quickly and more brutally to the fore. . . . This is how the accelerated tempo of technology appears in light of the primal history of the present—awakening.”⁶⁴ From this perspective, new technology threatens to destroy an old regime of human perception, while also sparking a renewed awareness of the “primal history” that might otherwise remain hidden by the logic of historical progress. Benjamin’s dialectical view on technology is also maintained in his famous thesis of the “destruction of aura.” Technological development of artistic production and reproduction, including the invention of photography and film, collapses a spatiotemporal distance that once endowed works of art with an atmosphere of uniqueness and inapproachability; this “destruction of aura” brings about both a new form of art and a structural change in the way that all previous artworks are perceived.⁶⁵ In this

sense, Benjamin's underlying idea of the "loss of aura" anticipates the dialectical aspect of cinema's post-media conditions—namely, electronic and digital technologies do not merely destroy the celluloid-based properties of the cinematic past, but also present potentials for a renewed perception of the past in the present—as it counters the teleological voices declaring the "death" of cinema, as well as their underlying binary view of celluloid and digital.

Given Benjamin's dialectical view on the impact of new technology on preexisting art forms and objects, transitional found footage practice can be seen as a particular mode of filmmaking that emerges in the moment of the "destruction of aura," and thus finds itself on the technological, aesthetic, and ontological conditions of the "now of recognizability." These practices testify to the destabilization of film on all levels—that is, film's post-media conditions—inasmuch as their images take on the quality of film copies. As discussed in the case of Girardet and Müller, the transition of a film from celluloid to electronic signal or digital pixel, occurring in conjunction with the development of playback technologies from the VHS to the DVD, undoubtedly matches the concept of "destruction of aura," since it eliminates components of film such as screen size, aspect ratio, vividness of color, chemical texture, and so on. For this reason, transitional found footage practices bear witness to the fact that cinema as a celluloid medium is inevitably superseded by rapid, dramatic improvements in electronic and digital technologies, which tend to obliterate the material specificity of any medium. But this auratic demise, too, provides multiple opportunities for revitalizing cinema with respect to the displacement of the filmic image from its traditional material and experiential conditions (celluloid, mechanical projector, theatrical viewing, etc.; i.e., all that guarantee the uniqueness of the filmic image as defined by the photochemical inscription of the real in the past, as well as that of the filmic experience, in which the viewer sees the moving image of the world in the past projected on the screen).

In one of her recent writings, Russell ponders how the development of digital reproduction technologies contributes to the Benjaminian "awakening" of film history: "New media has not reinvented cinema as an auratic object but as a complex and multifaceted form of experience. . . . We may finally come to understand its significance to our own ongoing historical catastrophe."⁶⁶ This argument is applied not simply to the viewing experience dimension, as

Russell envisions, but to that of production and creativity as well. Sven Lütticken claims that viewing copies of a film or an artwork, produced by virtue of new reproduction technologies, provide a great capacity for transforming it—re-editing it or slowing it down—not simply for viewers but also for today's practitioners. Lütticken sees those practitioners primarily as video installation artists, who celebrate “the power of images to survive (and indeed thrive on) decontextualization and degradation,”⁶⁷ but his observation can be applied widely to include transitional found footage filmmakers, who aspire to extend their celluloid-based techniques of recombining and reconfiguring filmic images and to seek a renewed investigation of their forms and meanings. As I have discussed, Girardet and Müller transpose the technical, aesthetic, and instrumental ideas developed in their celluloid-based filmmaking to all levels of electronic and digital technologies, from their material substrate to their operational interface. Considering Russell's and Lütticken's perspectives, I argue that transitional found footage practices are as “dialectical” in Benjamin's sense as purely celluloid-based found footage filmmaking. Despite their respective differences in the emphasis of Benjaminian concepts—the latter's “materialist” undertaking versus the former's foregrounding of the “now of recognizability”—both practices are concerned with holding, to borrow Skoller's words once again, “the opportunity of creating counterhistories, not only of the cinematic canon but also of revisionist cultural histories using the accumulation of artifacts from the mass culture of the twentieth century.”⁶⁸

Which dialectical aspect of transitional found footage practices, then, contributes to the “counterhistories” of cinema? Or, from the viewer's standpoint, how can the dialectical aspect of the images in the original film be seen in the works derived from those practices? In her recent work on found footage filmmaking, Jaimie Baron coins the term “archive effect” to underline that the meaning and definition of the archival footage in found footage filmmaking should be seen less as a stable object than in terms of the viewer's experience: the effect of recognizing various documents as coming from a distant past. The archive effect is thus the product of “temporal disparity” between the documents' past and the viewers' present, “the perception by the viewer of an appropriation film or a ‘then’ and a ‘now’ generated within a single text.”⁶⁹ From Baron's perspective, digital technologies are capable of producing the archive effect by strengthening temporal disparity. They destabilize

the form of the original film in the past and the viewer's experience of the film: "Digital technologies make the difference between the cinematic original and the digital 'replica' much greater: or, to put it differently, the digital inscribes itself into the history of the film image as that image is converted into code."⁷⁰

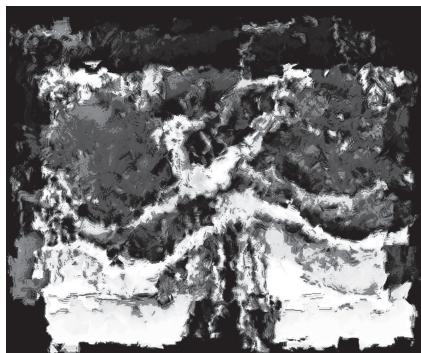
The amplified difference between the original film and its digitally transformed image undoubtedly suits the viewer's understanding of transitional footage practices as dialectical: some components of the original film are still recognizable, but others (its material and technical components) are lost or transformed. The practitioners of transitional found footage practices, then, do not consider the latter a simple loss: rather, I argue that they exploit digital technologies' capacity to amplify temporal disparity between the original and its copy, or to widen the difference between them, to extend their celluloid-based techniques of reworking and investigating the cinematic past into its post-media conditions, and thereby to construct its counterhistories. The digital found footage films of R. Bruce Elder and Ken Jacobs emblemize these three intentions most vividly.

R. Bruce Elder: The ruin of images between chemical and digital transformations

Since the 2000s, Elder has made a series of found footage works in which film and digital video are thrown into a dynamic circuit of intersections—not just an interpenetration between each medium's material properties, but also a combination of the two media's technical processes: film's chemical-mechanical process and a process derived from the pictoriality and transformativity of digital video. For Elder, the algorithmic automation of the computer-based image processing does not obliterate two key aspects of experimental filmmaking: the filmmaker's direct contact with film, grounded in his creative intent and technical virtuosity; and the medium's chemical change of state marked by its surface qualities (colors, tints, grains, glitches, emulsion, and even damages). Rather, he revamps his material and technical concepts of celluloid-based practice by incorporating them into image processing and database methods given by the computer. To this end, he devised his own

computer program that could operate a database containing a set of reference images classified according to a number of criteria (form, texture, figure, etc.), as well as information about various methods of image processing appropriate to those images. The program's applications then "choose which image processing methods to apply to the images by measuring the similarity between the target images (the images to be processed) and the reference images—target images that closely resembled the reference images were treated with processing methods."⁷¹ In this way, he succeeds in making analogue and digital technologies coexist, in such a way that one does not negate but affects the other.

A found footage film grounded in extremely sophisticated montage, *Crack, Brutal Grief* (2001, Figures 3.6 and 3.7) pushes the



FIGURES 3.6 AND 3.7 Film stills from R. Bruce Elder, *Crack, Brutal Grief* (2001), courtesy R. Bruce Elder.

viewer into a complex barrage of the scenes of violence culled from still images and audiovisual clips found on the World Wide Web—the imagery existing as digital data. Angered by the banalization of suffering provoked and diffused by the culture of the internet, Elder navigated through the Web for searching the data that matched such keywords as “suicide” and “power saw,”⁷² and amassed a wide variety of abject images, including hardcore pornography footage since the birth of cinema, pictures of torture, bodily mutilation, and deformed babies, screaming figures coming out of B-horror movies (Figure 3.6), images of war such as fighter-bombers, explosions, ruins, and the mushroom cloud of the atom bomb, etc. Encompassing sensational early cinema, documentary footage from the First and the Second World War (mostly from German newsreels), and the detritus of the postwar American media culture (the fragments of science fiction films, television news, and pop videos), the image data are processed with the computer first, then transferred to film, and made to undergo manual and chemical processes. Those overabundant images neither are organized into a coherent narrative of the history of violence nor document the political and cultural forces that motivate the historical events inscribed in them. Rather, they are viewed as allegorical in Benjamin’s sense, in that they take on the extremely fragmentary, fleeting form that reveals the debris of the human civilization in the twentieth century—while maintaining ambiguity. In this sense, *Crack, Brutal Grief* also recalls the films of Baldwin (*Tribulation 99: Alien Anomalies under America* [1991] and *Spectres of the Spectrum* [1999]) and Grimonprez (*Dial H-I-S-T-O-R-Y* [1998]) in a few ways: the images’ source is assumed as the garbage bins of the popular culture; the film privileges the iconic and metaphoric power of the images over the historical factuality of the record; and finally, *Crack, Brutal Grief* updates Baldwin’s and Grimonprez’s critique of the arbitrary manner in which televisual media appropriate, link, and discard the records of the past, by taking as its subject and its starting point of montage the internet’s accelerated and disastrous system of circulating information.

Through the combination of optical printing and video-based effects, Elder transforms a multiplicity of human figures into something like liquid entities, depriving them of their solidity, stability, and even beauty. Those figures come from both lesser-known sources (for instance, an acrobat in a vaudeville-like

primitive film, naked dancers, a training boxer, screaming people at the attack of a monster in a science fiction film of the 1950s, torturers who abuse a female victim in an exploitation movie, etc.) and familiar scenes drawn from classical films (such as the climactic conflict between Bette Davis and Joan Crawford in *What Ever Happened to Baby Jane* [1962] and the murder scene of Janet Leigh in *Psycho*). Along with the film's fragmentary, disjointed trope of montage, the total meltdown, which surfaces the screen with blurs, blotches, and dissolves, renders all the images extremely dense and degraded while also forcing their ironic details to be hardly discernable. In this way, Elder channels the viewer not simply into the moments of terror, fear, death, and loss which return from the forgotten past ceaselessly, but into a correlation of film and video in the material dimension of the images. The continuous fluidity and pixilation of video signal merges with film's emulsion effects in such a way as to intensify its inherent process of decomposition (Figure 3.7). For this reason, the image's visual texture in some sense evokes film's physical and chemical factors that determine its decay, such as faded colors, washed-out tints, blots, stains, flickers, and dusts, all that lead film archivist Paolo Cherchi Usai to proclaim that "cinema is the art of destroying moving images."⁷³ For Usai, it is film's material mortality—that film cannot prevent both destruction from external causes and its internal degradation—that makes the ontology and historicity of cinema possible. For if there is an image that is immune to decay, it "can have no history."⁷⁴ All the elements shaping the materiality of celluloid demonstrate that each film possesses an individual life span, or an organic life from birth—from the moment it is first printed and projected—to death.

Due to its foregrounding of decomposition on the material level of the images, *Crack, Brutal Grief* is in parallel to a series of recent found footage films that dramatize Usai's idea of "the death of film," films made of the gradual disintegration of celluloid by virtue of the excavation of the archive and the use of the optical printer: for instance, Peter Delpert's *Lyrical Nitrate* (1991) and several films by Bill Morrison, such as *The Film of Her* (1997), *Decasia: The State of Decay* (2002), and *Light is Calling* (2003). André Habib classifies those films in terms of Benjaminian "aesthetics of ruin," which is made up of the "impression of a rediscovered aura at the intersection of its disappearance."⁷⁵ For Habib, what the aesthetics

of ruin invokes to the viewer is a multiplicity of temporalities at work: “To the first layers of historical time (the profilmic time, the time of the image’s construction, the time of the image’s projection) has been added another time: time’s passage. This time, eroding the film material, does away with the interval between the (man-made) filming process and the (natural) chemical process that subverts and transforms the initial imprint.”⁷⁶ Habib’s insight can easily tap into Elder’s “aesthetics of ruin,” insofar as his images suggest the material traces of decay as the reminder of the process from their initial inscription on celluloid to its inevitable deterioration.

But what makes Elder distinct from Delpeut and Morrison in terms of the “aesthetics of ruin” is the complexity of the temporalities that operate in the images of decay. Given that the images of disaster and violence circulate in the form of digital files, they may maintain the “profilmic time” as a layer of “historical time” but lack the “time’s passage” that only the celluloid’s material mortality is expected to contain. Then Elder brings the images dispersed throughout the dataspace to their possible origins, origins that had been stripped of the images since they were placed into digital formats, by transferring them to film and subjecting their figural changes to its chemical life and death. It is only by allowing for the chemical decomposition that the reflection on and the redemption of those forgotten or wasted images are fulfilled. Here the fluid transformation and pixilation of digital video functions to generate two senses of degradedness simultaneously: it pushes the images into the ruin of the celluloid while at the same time rendering them to be images that lost their original visual abundance in the course of their countless circulation, compression, ripping, and repurposing in the digital realm. Elder’s achievement, then, is to attest to the exploitative operation of capitalist media assembly and thereby to appropriate its images in such a manner as to disrupt it. Then the images become what digital materialism strives to produce and manifest, glitch that serves as a “persistent reminder that the perfection-oriented goal and desires of mainstream media are all too easily fucked up.”⁷⁷ It is in this way that Elder succeeds in making the materiality of digitized images reveal their own time and simultaneously amplify the materiality and time of celluloid that their original source suggests.

The Young Prince (2007, Figures 3.8 and 3.9) provides a complicated interpenetration of life and death, of Eros and



FIGURES 3.8 AND 3.9 Film stills from *Elder, The Young Prince* (2007), courtesy R. Bruce Elder.

Thanatos. This time, Elder elaborates on his amalgamation of film and digital video by simultaneously utilizing two sorts of transformations: “electrical transformations” produced by the latter and “chemical transformations” brought about by the manual and mechanical processing of the former. All the transformations take place in the images of bodily postures and movements, varying from the sacred to the profane, from Greek and Roman statues as consummations of the idea of human beauty to grotesque portrayals of human bodies in Cubist and Fauvist painting, and from Muybridge’s chronophotography to still and moving pictures of eroticism drawn from vintage pornography

and pinup pictures. In this sense, Elder follows what Arthur has called the “the conceit of film apparatus as human body,” a tendency of North American avant-garde film to mobilize sensory impressions through an artisanal endeavor to foreground and transform film material.⁷⁸ At the same time, those transformations, in tandem with the arbitrary and fragmentary trope of montage, present the erotic, sensual images as Benjaminian allegories of the human being’s beauty that discloses itself only through a process of breaking their corporeal boundaries.

Elder’s “chemical transformation” embodies the idea of materialism as it is concerned with the pornographic film footage as the ruin of film (Figure 3.8). The footage allegorizes the representation of sexuality that lost its erotic weight, and, more significantly, the impending disappearance of film medium that has been alerted by the growing decay of celluloid. Yet Elder confirms this historicity not by redeeming the pornographic footage as it was, but by subjugating it to the various processes of disintegration. Not only are the bodily fragments decolorized (the evidence of chromatic decay), but they are also covered with the densely granular patterns and scratches. These effects of emulsion recall the passage of time, and Elder’s attachment to the film’s material texture validates his love of the disappearing image as, in the words of Laura U. Marks, “finding a way to allow the figure to past while embracing the tracks of its presence, in the physical fragility of the medium.”⁷⁹ Elder, however, appears not to be satisfied with resting on melancholia that Marks assumes as a dominant mode of the filmmaker’s emotional engagement with the dissolution of film: for the fragments of the pornographic footage run past the viewer’s eye so quickly that he is immediately taken to the onslaught of other complex transformations, both chemical and electronic-digital. The melancholic attachment is replaced by the sense of ephemerality, which substantiates the status of the footage as a lost object and at the same time helps the viewer to separate himself from the loss. Thus, unlike the cases of the films (*Lyrical Nitrate*, *Decasia*, *Light is Calling*) that historicized cinema through directly exhibiting the fatal destruction of celluloid, Elder’s melancholic recycling of the decaying image is dialectically balanced by mourning as a psychical gesture to embrace its disappearance and invest himself in new chains of found images.⁸⁰ The dialectics of these two

psychic states is inseparable from the collision between the two transformations, as Elder states:

Some of the transformations leave the image in a state close to the original; some change it so radically that the image is an image which cannot be discerned. Our response to this is curious: sometimes we long to hold onto what the image represents, and when it is lost, when it recedes behind those transformations, we are sad; but equally, we long to hold onto the abstract forms that the transformations produce, and when the representation comes to the fore, we mourn the loss of the abstraction.⁸¹

The dialectics of “loss” and “mourning” is in parallel to the way in which the “electrical transformation” and the “chemical transformation” interpenetrate each other. While complicating its own figural changes, each transformation goes beyond its material limit by pervading the other. The changing patterns of film’s decomposition such as blotches and fibrillations spill over the digital visual field, making its texture more dynamic and opaque. At the same time, Elder’s “digital transformations” have a sweeping impact on any kinds of the found images, whether painterly, photographic, or filmic, to the extent that their figures are left to the varying degrees of dissolution and morphogenesis both formally and materially. The video signal’s extreme plasticity is manifested when male and female bodies are almost reduced to the shimmering and flickering wave of electrons, on which different colors are conferred (Figure 3.9). It obliterates some key constituents of optical visuality, such as the depth of field and the boundaries between figure and ground, with such extreme complexity and subtlety that the viewer is forced to pay attention to the surface of those bodies. In this respect, Elder capitalizes on what Marks has identified as video’s medium-specific characteristics that transform the image’s surface and its texture into the field of multisensory visuality (in her own words, “haptic visuality”), such as “the constitution of the image from a signal, video’s low contrast ratio, the possibilities of electronic and digital manipulation, and video decay.”⁸² Besides this visuality of video, digital visual effects multiply each of the bodies (particularly female bodies) or slice it into different sections, while also liquefying the bodies. These

manipulations bestow on the bodies new forms (curves and cubes, for instance) and dimensions, therefore suggesting that the beauty of the figures consents to the infinite possibilities for the violent corruption of their iconic forms and for the reconfiguration of them into the corporeal forms that exceed and renew the viewer's perception. It is in this way that Elder's project of *The Young Prince* echoes Benjaminian dialectics of the "destruction of aura." Unleashing its transformative force, the digital assault activates the sensational forces of the old figures, ranging from the Greek era to the modern period in which both nonfigurative paintings and cinema flourished, through infusing into them its own material dynamism. This is also grounded in Elder's idea of what cinema is: "The cinema has the ability to show process . . . by emphasizing speed which liquefies, by stressing dynamism's ability to dissolve boundaries and lay form to ruin, by animating light's searing destructive power . . . which is the domain of mutability, instability, and ambiguity."⁸³

Due to the chemical transformation's dialectical relation to its electrical and digital counterparts, *The Young Prince* is in line with the films of Delpeut and Morrison and yet, more significantly, is distinct from them. Like Delpeut and Morrison, Elder dramatizes how the deterioration and fragmentation of film's chemical base bears witness to its historical trajectory, from as a new audiovisual technology at its inception to its status as an obsolete medium as of now. In this sense, his film mirrors what Mary Ann Doane has praised Morrison's *Decasia* for: "What is indexed here is the historicity of a medium, a history inextricable from the materiality of its base. In the face of the digital, the image is rematerialized in its vulnerability to destruction."⁸⁴ At the same time, *The Young Prince* radicalizes Morrison's achievement by considering digital video as material as much as filmstrip, and by opening up the dialectical interpenetration between the two. For this intermedial exchange challenges digital media's "fantasy of immateriality,"⁸⁵ the utopian fantasy that Doane's insight sees as annihilating the material historicity of celluloid. Instead of satisfying the demand for the perfect storage of the found images and for the systematic ordering of them, Elder's hybrid materialism propels the viewer's embodied contact with the heterogeneous temporalities of the images through revealing and transforming their material textures. In so doing, it encourages the viewer to make new associations between the

images as a way of transcending their historical origins and thereby rewriting the memory of the past in the alternative fashion of the “archival impulse.”

Film frames’ infinite lives in the digital realm: Ken Jacobs’s recent digital videos

Jacobs became widely known as a key practitioner of “recycled cinema, a tradition of using earlier films as the raw material for new works of film art”⁸⁶ after his landmark found footage film *Tom, Tom, the Piper’s Son* (1969, hereafter abbreviated *Tom, Tom*), which reworks a 1905 silent comedy of the same name by G. W. “Billy” Bitzer (hereafter referred to as Bitzer’s *Tom, Tom*). Since 1999, Jacobs has produced more than twenty short and feature-length pieces grounded in the intermedial relation of digital video software and the avant-garde filmmaking method, resulting in the technical and aesthetic hybridities of their images. These two characteristics of Jacobs’s digital films are inseparable from the two idiosyncratic aspects of his prior cinematic practices in the history of found footage filmmaking. First, in his projection performances since the late 1960s, Jacobs uses two analytical 16-mm projectors to generate a wide variety of stereoscopic three-dimensional effects from various two-dimensional media images—a series of still pictures or a segment of 16-mm film reels. He also constantly associates film with Hans Hofmann’s tradition of Cubist and Abstract Impressionist painting, concerned with rendering movements and rhythms two-dimensionally. Jacobs’s films and performances accordingly have been influenced by Hofmann’s theory of “push and pull,” a technique that creates optical effects producing “tensions” between contrasting elements (color contrasts, lines, and geometrical shapes with different orientations, etc.) to render a sensation of motion and depth “without destroying other forces functioning two-dimensionally.”⁸⁷

Some recent studies have examined the cross-disciplinary aspects of Jacobs’s cinema. Røssaak sees the co-presence of different arts and media in *Tom, Tom* as a “complex intermedia phenomenon” where what is usually called a film or cinema renegotiates its relationship to other more or less closely-related

systems of representation.”⁸⁸ Additionally, in his research on the trajectory of Jacobs’s “Nervous System” performances with regard to the influences of shadow play and modernist painting, Jonathan Walley characterizes the practices as “paracinematic”—they seek the essence of cinema outside the standardized concept of the cinematic apparatus, in ways not relegated to the modernist notion of seeking film’s medium specificity in the materiality of celluloid, a dominant tenet of avant-garde film in the 1960s and 1970s.⁸⁹ Jacobs’s embrace of digital video for reworking existing films (and sometimes still photographic images) relates considerably to his intermedial translation of one art to another—for instance, from painting to cinema, or from projection performance to single-channel moving image. This intermedial transition results in the hybrid aesthetic of the moving images in Jacobs’s digital pieces. I demonstrate in the following examples that the hybrid moving images in Jacobs’s works spring from the dialogue between his extension of the technical approaches to the digital editing that he developed for *Tom, Tom* and his Nervous System performances, and new aesthetic features afforded by digital video; and that this dialogue attests to the same dialectical-archival aspect of transitional found footage practices seen in Elder’s digital films.

In his feature-length revisits to Bitzer’s *Tom, Tom*, namely, *Return to the Scene of the Crime* (2008) and *Anaglyph Tom (Tom with the Puffy Cheeks)* (2008), Jacobs uses computer software to extend his deconstructive and analytical approaches. Techniques such as single-frame advance, extreme close-up, slowing down, and freeze-frame, which he applied to *Tom, Tom*, are deployed to unearth photographic qualities embedded in the filmstrip of Bitzer’s movie. The first quality, revealed by single-frame advance and slowing down, is the constitution of the filmstrip as a total sum of individual photographs, suggesting that the birth of cinema harks back to Muybridge’s segmentation of objects in continuous motion into a sequence of discrete units instantaneously captured at a regular given interval.⁹⁰ The second quality, revealed by extreme close-up, is the inscription of details in the filmstrip—for instance, the surface of painted backdrops, the little boy’s crotch and pants, the gesture of the female acrobat, the hand of the man who picks pockets, and so on. Given that they were filmed without the form of editing that could articulate which were more significant, these details exist as pure excess within the picture frame. In this sense, they

emblematize the temporal indeterminacy of images in early cinema, its fascination with contingency, which Doane has conceptualized as “a vast reservoir of freedom and free play, irreducible to the systematic structuring” of the rationalized representation of time in modernity.⁹¹ Jacobs presents the two photographic qualities by channeling digital video’s signal-based and pixel-based temporal manipulation into the frame-based decomposition and delay of cinematic movement. Rather than relying on fluid transition of the figures in the picture frame, Jacobs continuously introduces wide-ranging interruptions into the succession of frames in Bitzer’s film, including the highly decelerated chase sequence (less than ten frames per second) accompanying intermittent freeze-frames in *Anaglyph Tom*. In so doing, he uses the dilation of the electronic signal to increase the intervals between two successive frames. This process results in continual exchange between stillness and movement. It is here that video’s temporal flux unveils the individual frames differing in duration and the intervals between the frames, which Jacobs also attempted to make visible in his *Tom, Tom*: “There’s much more time in that time than we ever imagined, in two frames. 16 or 18 or 24 frames per second, that’s infinite time, and infinite motion is taking place, infinite numbers of events are taking place and this begins to explore that. I’ve never exhausted the time bounded by two frames.”⁹² Thanks to those durations, Jacobs’s two remake videos provide a more “complex transaction between the immediate present moment of watching and the distanced past of the film image itself”⁹³ than did *Tom, Tom*.

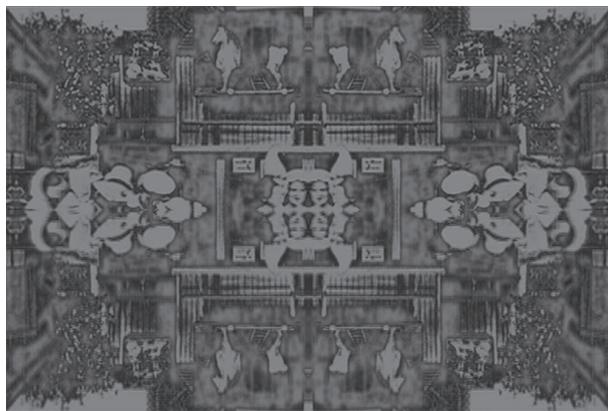
The uncovering of the photographic qualities of celluloid cinema leads Malcolm Turvey to argue that Jacobs’s use of digital editing updates the “revelationism” he initially applied in *Tom, Tom*, the idea of presenting cinema’s ability to make visible truths invisible to the human eye: “Digital software is emulating these celluloid-based techniques. Yet their function is the same—to make the easily overlooked details in the original evident by indexing and enlarging them.”⁹⁴ Despite the relevance of Turvey’s insight, however, it is important to stress that Jacobs also utilizes digital effects of spatial manipulation other than those that emulate his celluloid-based techniques, not simply to repeat the revelation of details in *Tom, Tom* but also to extend on his idea of the “infinity” of film frames. He treats the frames of *Return to the Scene of the Crime* and *Anaglyph Tom* in various graphical and pictorial ways: monochrome

colorization that strips the frames of their abundant details, turning them into informal, abstract patterns (Figure 3.10); superimposition of contiguous frames within a single plane, resulting in a trembling motion (Figure 3.11); cutouts of scenes or details that function as two-dimensional visual objects combined into possible forms of collage (Figure 3.12); reframing and rotation of details within a picture plane, or multiplication of a single frame or figure into plural segments with separate, individual scale, movement (contraction or dilation), direction, and form (rectangular or frame-within-a-frame,



FIGURES 3.10 AND 3.11 Film stills from Ken Jacobs, *Return to the Scene of the Crime* (2008), courtesy Ken Jacobs.

curved, or circular) (Figure 3.13), etc. The effects can be grouped into three main categories: (1) transformation of the filmic moving image from the figurative to the abstract; (2) dynamism of the on-screen space, characterized by confusion between two-dimensionality and three-dimensionality and by instability of the figure/ground or surface/depth relationship; and (3) reconfiguration of the film frame as omnidirectional, omnidimensional, and polymorphic. All are initially predicated upon Jacobs's endeavors to inscribe in the film medium some key aesthetic traditions of modernist painting



FIGURES 3.12 AND 3.13 *Film still from Jacobs, Anaglyph Tom (Tom with the Puffy Cheeks) (2008), courtesy Ken Jacobs.*

following Hofmann, from Cubism to Abstract Expressionism—for instance, the rendering of time and motion by means of plastic elements (points, lines, planes, and colors) and the exploration of depth effects on a flat surface by virtue of multiple viewpoints and planes. If this interpenetration touches on Walley's definition of "paracinema," a mode of heterogeneous artistic practices that expand the boundaries of cinematic effects and qualities while also seeking cinema's essence, then Jacobs's digital video facilitate his "paracinematic" encounters between film and painting.⁹⁵

Jacobs's paracinematic use of video techniques, too, aims to materialize electronic and digital technologies through which the shape and movement of photochemical images are transformed. All three categories of Jacobs's special effects pertain to the repertoire of videographic procedures since the age of analogue video—keying, layering, superimposition, etc.—to render the source image pictorial, multidimensional, and malleable. Jacobs's variation of swirling monochrome colors and distorted geometric patterns resembles the materialist works of "image-processing" video artists in that his resulting images are marked by an extreme degree of saturation and formal abstraction. At the same time, the footage of Bitzer's *Tom, Tom* takes on types of electronic and digital images identified by a group of theorist such as Yvonne Spielmann and Philippe Dubois, ranging from "clusters" ("a type of image . . . through the multiple layerings of different images or image elements, resulting in a spatial density"⁹⁶) to juxtaposed images that show both a "relative transparency [*transparence relative*]” and a “stratified thickness [*épaisseur stratifiée*].”⁹⁷ In accordance with the contradictory coexistence of two-dimensional and three-dimensional spaces—which dismantles the transparent, perspectival representation of the visual field, and is thus far removed from the photorealistic ideal of digital compositing—those patterns underscore the materiality of electronic and digital media images.

Given the wide variety of special effects that he uses to articulate the transition from pictorially conceived cinema to videographic imagery, Jacobs's two feature-length remakes of Bitzer's *Tom, Tom* recall Woody Vasulka's *Art of Memory* (1987), a videotape work that locates a multiplicity of newsreel and documentary clips and still photos concerning the traumatic histories of the twentieth century in the electronic and digital memoryscape. In this work, the photochemical images undergo constant transmutations via

the operation of special effects (keying, superimposition, wipe, etc.), taking on dense, malleable, sculptural forms that cut across the frame space in various directions. In his meticulous analysis of this piece, Raymond Bellour illustrates that Vasulka's variation of different techniques invites the viewer into a "circular dialogue that is set up between cinema and video, as well as between analog and digital representation."⁹⁸ In fact, the collision of moving and still images, the juxtaposition of two- and three-dimensionality, and the layering of geometrically distorted photochemical image and digitally processed image in this work are all features of hybridization that can also be found in Jacobs's video pieces. They demonstrate the processes of electronic transformation and digital manipulation that lead to forms of the moving image comprising the correlation of different media.

However, Jacobs is crucially distinct from Vasulka in the way that he treats found images. Marita Sturken notes that *Art of Memory* demonstrates the operation of video memory not "as a depository of images to be excavated, but rather as an amorphous, ever-changing field of images."⁹⁹ Sturken's observation points to the capacity of video technologies to reconfigure the memory of cinema through their specific properties, and is equally applicable to Jacobs. But if transformed, Jacobs's film frames are not "consumed" or "swallowed"¹⁰⁰ up by those technologies as in *Art of Memory*; rather, they proliferate relentlessly in various forms and colors, wavering between temporary stasis and varying degrees of mobility. This is another reason that for Jacobs the notion of infinity gains a particular importance. The memory of cinema that Jacobs envisions is open to endless repetition and propagation, where electronic transformation and digital manipulation work. As a result, Jacobs appears to configure the memory of cinema as the eternal lives of its frames through their electronic and digital mutations, unlike the tension between inscription and erasure in Vasulka's case. Those lives take on two broad metaphoric meanings. First is a playful celebration of the vitality of the frames and of the characters and objects occupying them. For instance, the most hilarious and extravagant moment of Jacobs's digital image processing is a scene in *Return to the Scene of Crime* in which the balls juggled by a clown in Bitzer's *Tom, Tom* are replaced by several small duplicates of the scene (Figure 3.14). Second is a "magical raising of the dead,"¹⁰¹ their ghostly presence arousing in



FIGURE 3.14 Film still from *Jacobs, Return to the Scene of the Crime*, courtesy Ken Jacobs.

the viewer a sense of the uncanny. Whether multiplied—the female acrobat’s faces filling the frame, for instance—or floating on the screen, the dead demonstrate that Jacobs’s reworking of the footage from early cinema is “anamnesis . . . [as] the recovery of anxiety-provoking incidents.”¹⁰² In either case, the viewer is able to find various types of collision and correlation between photochemical qualities and digital pictoriality, acceleration and deceleration, and two- and three-dimensionality.

In a series of short videos that he began in the 2000s, Jacobs applied “Eternalism” to his video editing, a method developed through his experiments with the Nervous System performances. It refers to the technique by which two or more image pictures, similar but slightly different, “are repetitively presented together with a bridging interval (a bridging picture),”¹⁰³ which due to the viewer’s binocular vision results in perception of stereoscopic three-dimensional imagery. The key to this method is Jacobs’s ability to achieve both sequential arrangement of the pictures and insertion of the “bridging interval” in a way that does not necessarily insist upon the material and technical limits of the celluloid-based apparatus. That is, he can blend two adjacent pictures with the self-invented projection system that he applied to his Nervous System

performances, or with algorithmic automation of image-processing software such as Adobe Photoshop or After Effects. In this sense, it is possible to consider Jacobs's application of Eternalism to digital software not simply, in the words of Brooke Belisle, as a "hybrid of stereoscopic and cinematic representation,"¹⁰⁴ but also as a hybrid exchange of avant-garde film technique and digital editing. David I. Tafler identifies two points of interrelation in this regard between Jacobs's Nervous System performances and digital media. First, Jacobs's reinvention of the cinematic apparatus by way of reciprocation between two- and three-dimensionality anticipates digital media's dissolution of the boundaries between the viewer and the screen, and between perception and representation. Second, Jacobs's treatment of film frames is similar to the ways in which artists working with digital media break down and rearrange the flow of information.¹⁰⁵ As in his videos remaking *Tom, Tom*, Jacobs's Eternalism has recently produced new knowledge about the history of the moving image since the invention of mechanical visual media, including photography and cinema, with regard to how these media have produced specific modes of perceiving space and time. His digital video pieces based on Eternalism revivify all kinds of still and moving images regardless of their mediality—whether film, video, or pictures that fit neither of the two media. In this sense, Jacobs's Eternalism is seen as a project of "media archaeology," an approach based on "an emerging attitude and cluster of tactics in contemporary media theory that is characterized by a desire to uncover and circulate repressed or neglected media approaches and technologies."¹⁰⁶

Capitalism: Child Labor (2007) unravels a profound aesthetic investigation of the photograph as an archive of history. The piece's source image—a Victorian stereoscopic photograph of a nineteenth-century factory floor—shows the faces of a handful of young boys working on cotton thread spinning machines, their seemingly flat expressions suggesting pain or fear caused by the factory's exploitative labor conditions. The boys are in sharp contrast to a couple of foremen, whose resolute visages symbolize the authority and power of industrial capitalism. Using a variety of animation effects, Jacobs highlights to the viewer the unequal relationship between the boys as slaves and the foremen as the incarnation of the complicity between capitalism and patriarchy. Initially, alternation of two slightly different frames produces a flicker effect, in which

afterimages repeat, emerging and disappearing instantaneously. Continuing this oscillation, Jacobs exploits digital superimpositions to insert a series of smaller frames of various sizes into the picture plane (equivalent to the frame-within-a-frame), which contain magnified details from the picture, such as close-ups of one child's gloomy expression and skinny legs and another's hands attached to the machine (Figures 3.15 and 3.16). All small frames acquire partial rotations, each different in interval and intensity, during vibration



FIGURES 3.15 AND 3.16 *Film stills from Jacobs, Capitalism: Child Labor (2007), courtesy Ken Jacobs.*

of the two original frames. As a result, the details appear to fold inward against the picture's larger background, thereby generating a hallucinatory, kaleidoscopic sense of volume marked by multiple viewpoints and different focuses that rapidly change positions and reside only in the moment of viewing. By varying the combination of larger frame and smaller frames, as well as the positioning of the latter within the former, Jacobs strengthens the confusion of the relationship between figure and ground, flatness and volume, and solidity and fluidity. Consequently, Jacobs's employment of digital superimposition together with the Eternalism effect blends multiple traces of the past with the viewer's perceptual experience of the present, which Skoller refers to as "digital temporal composite." This coexistence of multiple temporal planes demonstrates that in this work, "analog/digital [and] photographic/digital are already present within each other."¹⁰⁷

Given that the stereoscopic photograph positioned itself as an archetype of three-dimensional cinema in the nineteenth century, *Capitalism: Child Labor* provides the knowledge of how its material effects relate to the mechanism of cinema to generate a lifelike illusion of reality. To this end, Jacobs directly engages with the dialectics of stillness and mobility that informed photography and cinema of the period. By rendering vibrating and pulsating movement alike, Jacobs's Eternalism invites the viewer to see the ambivalent relation of photographic stillness to the cinema, which Doane and Mulvey have revisited to reconfigure cinematic medium specificity: on the one hand, the movement itself reasserts the numerous photograms in the filmstrip, on which the cinematic impression of reality necessarily depends. On the other hand, however, its vibrating character dismantles the continuity of cinematic motion, which emerges only through repression of the photograms' existence.

Moreover, Jacobs's digital Eternalism testifies to the role of digital techniques in documenting "what could be, would be, or might have been,"¹⁰⁸ by making flexible the record of the event or object in the photographic image. Jacobs's use of digital video effects with respect to still stereoscopic photographs provides the viewer with knowledge of what could have happened to the boys and foremen in the factory. The figures linger in the viewer's perceptual world like haunting ghosts. Their spectral presence is strengthened as the piece's last frames fill with the close-ups of the figures, ending

with the close-up of the leg. The figures might be considered not simply the persistence of vision, but also the persistence of the past, given the indexical function of the stereoscopic picture as the photochemical record of what existed in the history of industrial capitalism. The omnidirectional vibrations of the picture render the viewing of the piece analogous to Benjamin's "shock experience" in modernity, an experience of the enormously heightened stimuli that modern technologies impose on human subjects. Benjamin saw the factory, along with the metropolis marked by heavy traffic, as locations where technologies have "subjected the human sensorium to a complex kind of training," and film, due to its fragmentary and dynamic movements, as the medium by which this training could occur: "What determines the rhythm of production on a conveyor belt is the same thing that underlies the rhythm of reception in the film."¹⁰⁹ It is the knowledge about this affinity between cinema and modernity that the hallucinatory illusion of *Capitalism: Child Labor* takes the viewer to, in which digital imaging systems play a crucial role.

The continual blending of this knowledge with the photographic record suggests a notable ontological feature of Jacobs's intermedial configuration. French philosopher Bernard Stiegler has noted that a variety of electronic and digital special effects, including interpolation, embedding, and so on, can engender the ghostly effect of the analogue image's material trace by making "*phantoms and phantasms indistinct*."¹¹⁰ If "phantoms" refers to what the image represents in relation to its material, technical, and formal components, then "phantasms" are part of what the spectator understands, imagines, and expects from the image. Seen in this light, Jacobs's digital effects generate varying degrees of "phantasms" and merge them with the "phantoms" inscribed in the original image, as a way of questioning the original photo's status as document and investigating what lies underneath or beyond its trace.

Conclusion

The transitional found footage practices that I have attempted to define and investigate thus far encapsulate the extent to which the film image takes on a new ontological life when transferred to new media technologies for production and viewing, such as video,

DVD, and the computer. Dislodged from the image's key support, celluloid, its effects (illusion of movement, preservation of the past, generation of psychological and affective impact, formation of narrative as an object of personal and collective memory, etc.), and the codes, techniques, and conventions that produce them are now appropriated and dissected. The material, technical, and formal properties of electronic and digital media accordingly impact the film image, thereby obscuring belief in purity as an essential part of film's medium specificity. At the same time, however, the image, its effects, and its components refer back to their original state even when filtered and altered by those technologies: they are not purely filmic, but still cinematic, pulled by the gravity of the celluloid that contained them. For this reason, they are also not purely electronic or digital, even when they acquire characteristics of electronic and digital media. Thus, the resulting images in the post-media conditions of cinema waver between remainders of film in the past and new technical and aesthetic properties afforded by new technologies. Seen in this light, I argue that transitional found footage practices draw our attention to these conditions by providing us with the aesthetic forms of hybrid moving images; their practitioners enable filmic and post-filmic properties to interrelate with each other in various ways, ranging from Girardet-Müller's subtle videographic changes in the surface and temporality of classic Hollywood films to Elder's and Jacobs's complex material or formal interpenetration of film and video.

These practices, too, demonstrate how a specific mode of experimental cinema, found footage filmmaking, renews and expands on its traditional assets—its key aesthetics and techniques, its analytical and deconstructive approaches to the existing film, and its commitment to the historiography of cinema—through its encounter with new technologies. Video-based editing systems and computer interfaces serve to remediate the methods of montage and special effects developed by found footage filmmaking, while also bestowing upon them a range of new possible transformations and manipulations. Transitional found footage practitioners, including Girardet-Müller, Elder, and Jacobs, benefit from these two aspects, but also attempt to protect the territory of avant-garde filmmaking by seeking possible correspondence between their previous artisanal relation to the filmic and the opportunities allowed by the new tools and techniques. In so doing, they establish themselves as

what Hollis Frampton has called “metahistorians,” filmmakers who interrogate how material components (the filmstrip, the projector, the screen) constitute film as a machine that produces cinematic effects. For Frampton, the task of the metahistorian is motivated by “the notion that there was some exact instant at which the tables turned, and cinema passed into obsolescence and thereby into art,” and found footage filmmaking is viewed as the desirable mode for accomplishing this task: “For the history of cinema consists precisely of every film that has ever been made.”¹¹¹ While transitional found footage practitioners share Frampton’s view of the technological change from film to electronic and digital media as a moment of crisis, their choice to use the latter to seize upon and transform the former implies that perpetuating the materiality of celluloid is not the only way to pursue the task of Frampton’s metahistorians.¹¹² Considered this way, their various efforts to extend their celluloid-based techniques of decontextualizing and recontextualizing the cinematic past establish their films as illustrations of the Benjaminian “dialectical image,” in which film’s past image is continually dismantled, yet simultaneously appreciated and revivified by the post-filmic technologies in the present.

Consequently, the transitional found footage practices that I have examined in this chapter illustrate various technical and aesthetic responses to cinema’s post-media conditions, presenting the spirit of the metahistorian in the domain of avant-garde cinema. How then can these responses be applied to methods of filmmaking in the digital age other than avant-garde cinema? If the task of the filmmaker as metahistorian is grounded in his consciousness of “cinema’s passing into obsolescence,” or of its transformation by post-filmic apparatuses, how do these other filmmaking methods form and explore it? And how does this transformation affect the memory of both the image and the filmmaker? These questions will be answered in my definition and discussion of “intermedial essay films” in the next chapter.

CHAPTER FOUR

Intermedial essay films: “Memories-in-between”

Introduction: Essay films between the filmic and the post-filmic

The essay film, which emerged in postwar Europe and has been increasingly significant in contemporary film culture, is viewed as a nebulous method of filmmaking that crosses the boundaries between fiction and nonfiction cinema; documentary and experimental film; the personal and the public; and the intellectual and the poetic. Scholars who have attempted to define the essay film—Phillip Lopate, Timothy Corrigan, Laura Rascaroli, Paul Arthur, Nora M. Alter, to name just a few—commonly regard these transgressive and protean dynamics of the essay film as analogous with the literary essay.¹ This analogy is grounded not simply in the transgressive nature of the literary essay, which tends to challenge the traditional borders of literary genres, but also in its anti-systematic, digressive, fragmentary, and dispersed attributes, all of which arguably correspond to the formal and rhetorical strategies of the essay film. The transgressive, hybrid, and complicated characteristics of the essay film undoubtedly make its definition extremely divergent, suggesting that it is arguably a mode of film practices that reveals, tests, and goes beyond the structural and generic limits of cinema.

Nevertheless, “reflectivity” and “subjectivity” stand out as two features that are most frequently identified in the essay form; as

Rascaroli puts it, “an essay is the expression of *a personal, critical reflection* on a problem or set of problems. Such reflection does not propose itself as anonymous or collective, but as *originating from a single authorial voice*.² Although these two features situate the filmmaker’s authorial presence as central to the essay film, additional textual characteristics, such as digression, quotation, nonlinearity, and multiple modes of address, construct the filmmaker’s subjectivity as, in the words of Michael Renov, “a site of instability—flux, drift, perpetual revision rather than coherence.”³ Corrigan also points out that this decentralized and fluid subjectivity of the essay film is developed through its reflective processes; he identifies a testing of expressive subjectivity as one of its formulating features. The essay film foregrounds, he writes, “a real or fictional persona whose quests and questioning shape and direct the film in lieu of a traditional narrative and frequently complicate the documentary look of the film with the presence of a pronounced subjectivity or enunciation position.”⁴ Here, the filmmaker’s quests and questioning point both to the formation of his/her subjectivity as processual and destabilized, and to his/her self-reflexivity as a key condition through which he/she develops personal experiences of memory, argument, or desire. The imbrication of reflectivity and subjectivity involves an array of textual and extra-textual devices to inscribe the filmmaker’s shifting reflections on a particular subject matter. Whereas Rascaroli stresses voice-over, intertitles, and the director’s diegetic presence as primary to the essay film,⁵ Corrigan, Lopate, and Arthur regard the montage, camera movement, use of interviews, and other representational manipulations of the image as expressive of subjectivity that is multilayered, fragmentary, and unstable.⁶ Again, this variety of formal devices and materials attests to the textual richness of the essay film, which contributes to the transgressive aspects of its genre, enunciation, and media.

Taking subjectivity and reflectivity as two primary features of the essay film, in this chapter I want to investigate a group of recent essayistic projects that respond to the transition of films from celluloid to post-filmic media. The films investigated by the projects’ filmmakers encompass various archival fragments that were originally made and stored in celluloid but later displaced into videotapes, DVDs, and the internet, including movie clips, home movies, amateur films, and their own personal records. The filmmakers, then, employ the two media simultaneously when

they reflect upon the films' images, and the resulting images are characterized by the hybrid interactions of both. For these two reasons, I define these films as "intermedial essay films," examining how the filmmakers' simultaneous employment of the two media and the hybrid aesthetic of the resulting images engender and elaborate upon their essayistic strategies.

In terms of subjectivity and reflectivity, intermedial essay films foreground the filmmaker's consciousness as traversing and negotiating between two different media or as investigating particular visual images derived from the intersections between them. In this way, the characteristics of the filmmaker's subjectivity in the essay film in general, such as fragmentation, fluidity, and instability, are seen to be in line with the shifting register of the media and the complexity of images. To be more specific, the images in question are those produced by one medium and transferred to another—for instance, a filmic image based on celluloid-based film culture and displaced, transformed, and probed by the post-filmic apparatuses such as analogue and digital video. For this reason, the resulting image takes on a hybrid aesthetic marked by the coexistence and interrelation of the material and technical properties derived from film and video, respectively. It is the relationship between the two media (filmic and post-filmic) that compels me to call this type of essay film intermedial. Some intermedial essay films employ a variety of video effects to investigate how the memory trace of the image is transformed as the image is displaced from its original medium (i.e., film) and contexts, or to seek the possibility of expressing the memory associated with the filmic technology and culture. An example is the filmmaker's memory of the image that he/she shot in celluloid—by virtue of post-filmic apparatuses. Further, others develop the filmmaker's reflections regarding a particular image by presenting it as a filmic image grounded in celluloid-based cinema and later reframing it within post-filmic apparatuses (e.g., VCR or DVD), often comparing it with the imagery of analogue or digital video. In either case, intermedial essay films engender reflectivity and subjectivity, two defining aspects of the essay film in general. In these films, questioning the filmmaker's self also extends to the image that she/he filmed or found, and this process necessarily involves his/her self-reflexive inquiry into the media associated with production and circulation of the image. The centrality of the image in this type of essay film, either shot or found by the filmmaker,

validates Arthur's characterization of essay films since the 2000s as the prevailing uses of found footage: "It is tempting to cite the deployment of found footage and collage as endemic to the essay, given the multitude of films that rely on juxtapositions of archival images and present-tense commentary."⁷ In this sense, intermedial essay films are in close dialogue with the transitional found footage practices that I have examined in Chapter 3.

Maintaining and extending the methodological framework of looking at the ontology of coexistence and interrelation in hybrid moving images, I wish to explore four practitioners of intermedial essay film since the 2000s: Hito Steyerl, Lynne Sachs, Clive Holden, and Jonathan Caouette. I position their films within the broader post-media conditions of cinema, in which the previously established boundaries of images are fundamentally blurred in tandem with their transition from the filmic to the post-filmic. The four directors' intermedial essay films, then, incorporate a range of self-reflexive devices in style and technique to deal with cinema's post-media conditions. As in the cases of transitional found footage practices that rework the original filmic image with digital video's montage and special effects, these devices give rise to an array of hybrid moving images marked by the coexistence and interrelation of the material and technical properties derived from the two technologies. By examining the hybridity of these images, I shall demonstrate that the four directors' intermedial essay films respond to the instability of the memory trace inscribed in the filmic image, which is caused by the image's dislocation from its celluloid base to the post-filmic apparatus. Given the prominent role of video technologies in transforming and complicating the image originating from film, it is necessary to elucidate how they allow directors to activate certain essayistic features and formulate the memory of the filmic image differently than in filmic technology. By analyzing these two dimensions, I argue that the hybrid moving images in the directors' intermedial essay films render each filmmaker's subjectivity and his/her reflections on the filmic image as memories that dynamically traverse between film and post-filmic apparatuses, which I am calling "memories-in-between." My examination of the ways in which these memories-in-between unfold relate to different modes of the essay film, ranging from the intellectual experimental documentary (Steyerl and Sachs) to the diary film and autobiographical documentary (Holden

and Caouette). Before proceeding to the four case studies, I shall discuss video's roles in facilitating and renewing the expression of reflectivity and subjectivity in the celluloid-based essay film and define memories-in-between in terms of the intersection between filmic and post-filmic technologies.

Video, memories-in-between, and intermedial essay films

In the broadest sense, intermedial essay films date back to the traditions of cinematic responses to the impacts of new technologies on the development and variation of essayistic moving-image practices before the advent of the digital age. Since Alexandre Astruc envisaged the increasing role of 16 mm and television in enlarging the possibilities for the filmmaker's personal expressions in cinema,⁸ proliferations of lightweight camera devices (both the Super 8 mm and analogue video cameras) for shooting since the 1960s across different modes of production (documentaries, experimental films, video art, and alternative television) have significantly underpinned "the active subjectivity and public mobility of the essay film."⁹ Starting from the 1960s, celluloid formats (Super 8 mm and 16 mm) were used in making amateur and more personal films, but video technologies have played a more crucial role in the evolution of the essay film, ranging from its modes of production and distribution to its rhetorical strategies. Associating video's capacities with the metaphor of writing,¹⁰ Raymond Bellour explains why it lends itself more particularly to the pursuit of the self-portrait as an essayistic expression of the moving image: the continuous instability of the video image as corresponding to the formation of subjectivity via a chain of sentences and the ease of inscribing the artist's body directly in the image.¹¹ Bellour's emphasis on video's immediacy and intimacy as activating the essayistic modes of production concurs with Renov's observation. Addressing Jean-Luc Godard's *Scénario du film "Passion"* (1982) to demonstrate video's capability of mobilizing multiple modes of self-presentation, Renov writes: "Durable, lightweight, mobile, producing instantaneous results, the video apparatus supplies a dual capability well suited to the essayistic project: it is both screen and mirror, as well as a reflective surface on which to register the self."¹²

Bellour's and Renov's views on video underpin current speculations on the connections between digital technologies and essayistic modes of moving-image practices. Corrigan notes that through the capacities of the digital, including interactivity and the multiplication of viewing interfaces such as the DVD and the internet, "the essayistic can now fully embrace its love affair with experiential contingencies of all sorts."¹³ Similarly, Bjørn Sørensen argues that the economic availability and miniaturization of production equipment and Web-based forms of distribution (YouTube, for instance) are able to achieve Astruc's vision of *caméra-stylo*, as they "open up alternative ways and means of audio-visual expression."¹⁴ Ohad Landesman stresses the enhanced intimacy and immediacy of DV as fundamental to inheriting and updating strategies of self-reflexivity in the essay film of the pre-digital age. Examining the films of Agnès Varda (*The Gleaners and I* [2000]), Peter Mettler (*Gambling, Gods & LSD* [2002]), Chris Marker (*The Case of the Grinning Cat* [2004]) and others, he claims that DV "accommodates an improvement (or perfection) of the capabilities of older mobile cameras, entering an already explored terrain of essayistic strategies afforded by previous film equipment such as 16 mm and video."¹⁵

Although previous studies regarding the impacts of digital technologies on the flourishing of the essay film have pointed out their various capacities and breakthroughs in both production and distribution, more fundamental to intermedial essay films is video's technical ability to transform images that their filmmakers produce, appropriate, or investigate in ways that the images are perceived as fragmented, fluid, pictorial, or unstable. Returning to Bellour and Renov helps us to elaborate on this point. In his discussion on video self-portraits, Bellour notes that the video image is more "adept at translating . . . the processes of thought" insofar as it is subject to various transformations both in recording and postproduction, which ultimately render it "precarious, more unstable, and more artificial."¹⁶ Renov, too, argues that video's capacities of configuring the image as fluid and fragmentary, as well as of "shuttling between or keying in diverse image sources" serve the "essay's discursive goals."¹⁷ In these contexts, video's digitization does not simply represent an inheritance of the technical properties of analogue video (which Bellour and Renov address) to stimulate the nonlinear and fluid movement of thought in the essayistic mode. It also enlarges the expressive possibility of essayistic filmmaking

by expanding the range of images—both videographic and filmic images—and offering a variety of effects to mix and process them. As video artist Ursula Biemann puts it:

New image and editing technologies have made it easy to stack an almost unlimited number of audio and video tracks one on top of another, with multiple images, titles, running texts and a complex sound mix competing for the attention of the audience.¹⁸

Biemann's observation suggests that the scope of essayistic projects made with digital video is not necessarily limited to those exclusively composed of electronic and digital images. Rather, its capacity for stacking and dissecting "multiple images" also serves to investigate the transition of a media image (e.g., a filmic image) to another media (analogue or digital video) as the key motivation behind intermedial essay films. By updating several capacities of destabilizing the input image (keying, compositing, layering, modulating, and graphical manipulations), which are inherited from its analogue predecessor, digital video is able to transform the image originating from celluloid-based cinema in ways that inscribe its material and technical properties (for instance, pixelated noise, scan lines, pictorial fluidity, and the signal-based temporal manipulation distinct from the filmic expression of time) in the surface and temporal dimensions of the image. The resulting image, then, can bring into play the tensions caused by the differences between film and post-filmic technologies as it makes their respective material, technical, and aesthetic properties coexist and interact. Moreover, certain essay films can invite comparison between the two technologies by presenting an original filmic image and playing it with post-filmic apparatuses and formats, or by juxtaposing the filmic image with other images produced and circulated by electronic and digital media. In any case, intermedial essay films enable varying degrees of the dialogue between filmic and post-filmic images or apparatuses, and foreground images characterized by varying degrees of intermediality (i.e., a mediality by which multiple formats and apparatuses are fused while also maintaining the properties of each format or apparatus). Ágnes Pethő suggests that the images can be seen as places in which these "intermedial processes take place, and where figurations of intermedial differences are played out."¹⁹ In intermedial essay

films, directors consciously utilize these processes and express differences as they explore the transition of filmic images to post-filmic apparatuses. In this sense, such images demonstrate the emphasis on self-reflexivity as a key component of essay films in general. Given that the aesthetic complexity of the hybrid images is indebted to the directors' simultaneous employment of the two technologies and their traversal between them, they, too, serve to express the directors' subjectivities as, in the words of Renov, "a site of instability—flux, drift, perpetual revision."

Intermedial essay films since the 2000s certainly have predecessors in works by Godard, Marker, and Harun Farocki, who paved the way for the textual and rhetorical developments of the celluloid-based essayistic cinema and later extended their approaches to post-filmic apparatuses including analogue video, CD-ROM, and multichannel video installations since the 1980s. What is crucial to all these films is that their images are marked by intermedial configurations of film and video at the level of their respective forms when they convey the filmmakers' personal reflections on the changing status of cinema. For instance, in *Histoire(s) du cinéma*, the viewer is overwhelmed by a variety of images extracted from numerous films and transformed by Godard's video effects, including slow motion, wipes, superimpositions, and keying (Figure 4.1). Though they bear traces of dirt and scratches owing to their celluloid origins, the filmic images are intercut by means of video's technical procedures, which in turn allow them to have rich dialogues with a variety of photographic and painterly images that are deployed to express Godard's reflections on cinema's multiplied relationships with art and history of the nineteenth and twentieth centuries. Pethő advises that *Histoire(s) du cinéma* can be considered "not only an intermedial palimpsest reflecting on images from the history of cinema but first and foremost as a meditation upon the complex mediality of cinema, discovering in it layers of mediality and culture specific to an archaeology of cinema as a medium."²⁰ Even when agreeing on Pethő's characterization of *Histoire(s) du cinéma* as the "intermedia palimpsest," it is worth stressing that video plays a key role in realizing the passages between painting, photography, and cinema. The different images that might previously have been regarded as separate within the medium-specific boundaries—namely, film image, textual image, sound-image, painting, and photography—are juxtaposed sequentially or



FIGURE 4.1 A screen capture from Jean-Luc Godard, *Histoire(s) du cinéma* (1988–98).

superimposed within a single picture frame in a variety of ways. The flow of the video signal assimilates all of these images while simultaneously maintaining equivalence between them. Just as the filmic images appropriated and investigated by Godard are subject to various electronic transformations while also maintaining their photographic capacity of bearing witness to the history of the twentieth century, so do the videographic techniques contribute to animating still images (such as film stills, photographs, and pictures) and thereby creating various associations of them with the filmic images. Consequently, video in *Histoire(s)* should be seen not simply as a single medium, but as a “variable of the photo-cinema-video apparatus”²¹ through which any single-frame image is capable of obtaining its multiplicities and manipulability.²²

Godard’s baroque approach to video’s transformative power in his reflections on cinema is contrasted with Farocki’s analytical approach. Farocki’s two-channel video installation, *Schnittstelle* (*Section/Interface*) (1995, Figure 4.2), investigates how the aesthetic status of montage moves from film cutting to electronic video editing. It presents the process of his work on preexisting images—video footage for *Videogram of a Revolution* (1992, codirected with Andrei Ujica), film footage as the raw material of *Workers*



FIGURE 4.2 *Harun Farocki, Schnittstelle (Section/Interface) (1995), film still, courtesy Harun Farocki Filmproduktion.*

Leaving the Factory (1995), and footage from some of his early films such as *Inextinguishable Fire* (1969)—on an editing table. Given the status of the original footage, the installation signifies a transition from the film-based montage based on the sequential ordering of the filmstrip to other nonlinear relationships between image tracks, such as compositing, simultaneity, and juxtaposition, based on video-based editing.²³ Marker explores how the properties of digital technologies, such as the user’s nonlinear, multidirectional navigation of data, simulation, and layering, restructure human memory and the memory of cinema in his trans-medial essayistic projects. In his CD-ROM project *Immemory* (1997), a variety of film fragments—for instance, Hitchcock’s films—are transformed into data objects that are open to the user’s nonlinear and fragmentary navigation, although they are still perceived as filmic images that pertain to the history of cinema.²⁴ In Marker’s feather-length film *Level 5* (1997), the virtual data world named OWL (Optional World Link), accessed by the protagonist named Laura, functions as an interface to deconstruct, reconfigure, and retrieve fragments of media objects, including filmic images. It also enables Laura to traverse between the world of cinema (as a human player) and that of new media (as the game’s avatar). In OWL, nonlinear collage and layering create a dense cluster of digitally encoded filmic and photographic images and graphic and simulated ones,

thereby rendering the resulting image as expressive of intermedial relations between the two (Figure 4.3).²⁵ These intermedial relations acknowledge that digital technologies, with their capacities of simulation and interactivity, introduce a fundamental fragility of remembrance by making traces of the past unstable. At the same time, some intermedial images in OWL, including the digitally altered film footage of Okinawa's mass suicide victims during the Second World War, demonstrate Marker's belief in using the technologies' transformative and nonlinear capacities to reconstruct forgotten memories of the past in the form of a virtual museum. As Rascaroli summarizes, they "work as a commentary on the transitory nature of our technologies of memory, including each embodiment of the museum, of the archive, and of the cinema."²⁶

The intermedial essay projects of Godard, Farocki, and Marker suggest that they configure the memory of cinema, including directors' memories of it, as transformed and restructured by new media. As in transitional found footage practices, the memory of the filmic image in these projects is structured by the intersection between the trace of the past inscribed in the image and the capacities of new media to destabilize the image's aesthetic qualities or to reframe the image within new screens and interfaces different from the film screen and the projector. Thus, the resulting images

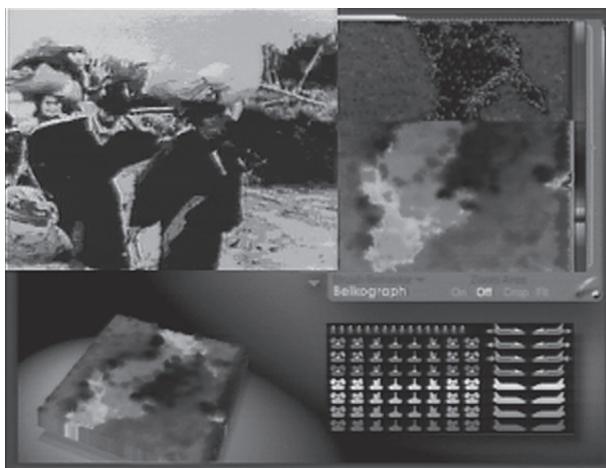


FIGURE 4.3 A screen capture from Chris Marker, *Level 5* (1997).

in works by Godard, Farocki, and Marker as memory objects of cinema take on the co-presence and interrelations of technical and aesthetic properties from both film and post-filmic technologies, articulating the directors' personal reflections as continually oscillating between the two. Developing Pethő's discussion on cinema and intermediality, I propose the concept of "memory-in-between" to describe this hybrid and oscillating aspect of an image as the trace of memory and of a director's memory of the image in intermedial essay films. For Pethő, films that explore cinema's intermedial relationships with other art forms and with electronic and digital media create the "space of 'in-between'" that is continually constructed and deconstructed by the ebb and flow of images, by their appearance and disappearance.²⁷ In other words, Pethő suggests that, as in the cases of transitional found footage practices, intermedial essay films use electronic and digital technologies to construct the memory of cinema and the director's corresponding subjectivity in a dialectic manner in response to the double consequences of post-media conditions. That is, post-filmic technologies are capable of shedding new light on the image of film, even though some of its material and technical specificities may be destroyed or altered. This dialectical operation suggests that post-filmic apparatuses may be used strategically to deploy and investigate found footage of celluloid-based essay films and to express a director's reflectivity and subjectivity. Arthur notes that essay films' textual elements (e.g., voice-over commentaries and intertitles) attached to found footage complicate the viewer's perception of time, thereby "superimposing past and present to emphasize historical gaps or tonal clashes inherent in the visual-linguistic interface."²⁸ Seen in this light, the post-filmic apparatuses deployed in intermedial essay films widen the historical gaps between the pastness of a filmic image and the presentness of the director who accesses and investigates it by transforming the image with montage and special effects. At the same time, however, this gap is also the point of departure from which the director's reconstruction of memories takes place. The director considers this gap imposed by post-filmic technologies as a condition inherent in his/her access to the cinematic image and traces of the past inscribed in it. Therefore, the director's investigation of both, with the help of their technical and aesthetic properties, necessarily takes the form of a journey between the past and present. It is during this journey

that the director's consciousness of the filmic image is seen as the memory-in-between, and the resulting visual expression based on this image takes on the aesthetic of hybridity marked by the co-presence and interrelation of the filmic and post-filmic.

This dialectical aspect of the memory-in-between in intermedial essay films suggests that we do not necessarily delimit the roles of new media in framing the memory of cinema as totally destructive. In his wide-ranging analysis of new media artworks—some of which are concerned with remapping and remaking cinema (including the works of Godard and Marker)—Timothy Murray argues that the memory of cinema “haunts the interface of digital multimedia,” even as its narrative and images are transformed and reformulated simultaneously by its effects and interactive procedures.²⁹ Similarly, Domietta Torlasco writes that digital works “not only expand but also confront, disturb, and ultimately reconstitute the memory of cinema we have inherited from the twentieth century.”³⁰ Murray’s and Torlasco’s views on the dialectics of electronic and digital media suggest that intermedial essay films, like other new media artworks based on algorithmic and interactive capabilities, are capable of investigating memories inscribed in or revolving around the cinematic image with their techniques that allow for analysis, deconstruction, and reconfiguration of it, including video-based montage and special effects. The uses of these techniques to transform and examine fragments of old media, then, relate to two modes of expressing a filmmaker’s self-reflexivity in the essay film. The first mode, exemplified by Steyerl and Sachs, is the intellectual, experimental documentary, in which post-filmic apparatuses serve as the analytical tool for investigating the transition of the filmic image or expressing the director’s intellectual thought on the distance between its pastness and his/her present. The second is personal or autobiographical filmmaking (e.g., films of Holden and Caouette), in which the capacities of apparatuses to transform the filmic image as a personal record of his/her memory paradoxically serve to retrieve it and express his/her subjectivity as fragmented and unstable.

Hito Steyerl: Politics of the “poor image”

Steyerl’s films fit many tropes of essay films, including the stylistic admixture of the documentary and experimental film, extensive

uses of found footage gleaned from various sources (e.g., political films, blockbuster and B-movies, commercials, and promotional or educational films), and deployment of different modes of address that articulate her speculations on subjects related to the impacts of images on history and culture. They are predicated upon a kind of essayistic filmmaking as a way of developing and intervening in the politics of the image, blurring the boundaries of filmmaking and foregrounding Steyerl's thoughts as formulated through her encounter with the image and its material and cultural undersides. Specifically, Steyerl's major works are viewed as prime examples of intermedial essay films insofar as they examine what happens to the image when transferred from one medium to another. In most of Steyerl's films, a group of particular images are dissociated from their original material support and signifying contexts and are reframed within a different medium that endows the image with new materiality, figuration, and interpretations.

Steyerl's engagement with the cultural and material transformation of the image in its transition through multiple media allowed her to mark the found footage in her essay films as the "poor image," a copy of an original image whose status becomes unstable in the processes of uploading, downloading, compression, and deterioration. What she refers to as the poor image includes copies of films and TV programs available in VHS or DVD format or from the internet, as well as unauthorized viewing copies of artworks (products of piracy). Though liberated from the custody of official institutions, they form the detritus of audiovisual production and consumption. As Steyerl writes, "Poor images are poor because they are not assigned any value within the class society of images—their status as illicit or degraded grants them exemption from its criteria. Their lack of resolution attests to their appropriation and displacement."³¹ Here, Steyerl makes it clear that poor images are keys to understanding the multiple impacts of digital technologies on how the image exists and what relationship it has with society. More than simply altering the form of the image, the technologies determine people's uses and perceptions of it, simultaneously inscribing in it material traces of such processes as copying, ripping, cutting and pasting, etc. It is in this sense that Steyerl defines the assemblage of digital apparatuses as "a form of life (and death) that contains, sublates and archives all previous forms of media, and the fluid media space in which images and sounds morph across

different bodies and carriers, acquiring more and more glitches and bruises along the way.”³² In summary, the poor image that Steyerl examines and simultaneously expresses in her artistic practices is the product of the post-media processes by which the image undergoes destabilization, relocation, and transformation. Thus, Steyerl’s examination of the poor image necessarily involves the intermedial reconfiguration of one media image (e.g., a filmic image) by another medium (such as VHS or DVD). This intermedial approach delves into an image’s original technical condition and cultural context to reflexively unveil the roles of post-filmic technologies in shaping its meaning and materiality.

This peculiar status of the poor image as the product of post-filmic technologies leads Steyerl to develop two strategies for dealing with the archives of memory as memory objects, more than as the material for her appropriation. First, she employs various juxtapositions of her found footage, ranging from the analytical reading of its meanings to the creation of fragmentary and nonlinear assemblages, as responses to the post-media condition of cinema under which both the unprecedented availability of images and the possibilities for combining, simulating, and manipulating them fundamentally organize reality and representation. Extending Bourriaud’s idea of postproduction, Steyerl sees such digital processes not simply as key techniques of imaging but also as integral to the “main capitalist modes of production today.”³³ Cutting and pasting afforded by video and digital technologies, Steyerl argues, allows one to reflect on conditions embedded in the fragments of images and thereby recompose them into “incoherent, artificial, and alternative political bodies.”³⁴ Second, in applying the strategy of recombination to her essayistic filmmaking, Steyerl also highlights the materiality of her recycled images in various ways, including exposure of the images as degraded copies, the use of low-fidelity postproduction technologies to analyze and recompose them, and her performative presences of dealing with technologies. These devices are grounded in her idea that the unstable attributes of poor images—their subjection to permanent circulation, ripping, copying, and degradation, as well as possibilities for the addition of new meanings—are inscribed in their materiality. Considering these attributes, Steyerl aspires to validate in her filmic practices that “to participate in an image . . . would mean participating in the material of the image as well as in the desires and forces it

accumulates.”³⁵ These two essayistic strategies, creating nonlinear montages of poor images and foregrounding their materiality and mediation, are extended into the formal organization of *November* (2004) and *In Free Fall* (2010).

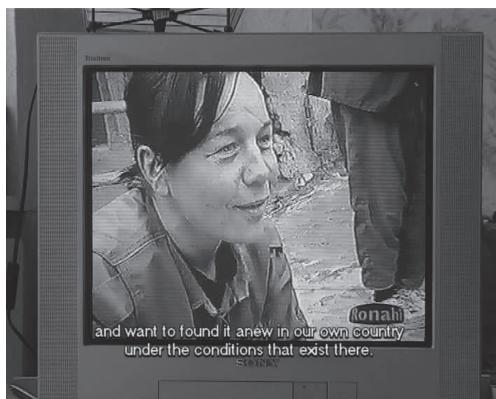
November has as its subject the images of Steyerl’s friend Andrea Wolf. They include Wolf’s figure as a tough female warrior in an amateur movie that Steyerl made with her in Germany, Wolf’s appearance in television coverage as Sehît Ronahî (a Kurdish freedom fighter), and her reappearance on placards as an icon of a revolutionary female warrior for the Kurdish resistance after her death. Characterizing all of these as “travelling images,”³⁶ Steyerl investigates how they bear different yet interrelated meanings and how those meanings are influenced by the pervasive networks of different media that dislocate and circulate them, as well as by the political and cultural contexts that mobilize operations of the networks. This extensive investigation of the traveling images, coupled with Steyerl’s voice-over commentaries, recalls Godard’s collaboration with Jean-Pierre Gorin in *Letter to Jane: An Investigation About a Still* (1972), in which a still image of Jane Fonda in Vietnam is analyzed from various angles in terms of how it is constructed and how its meanings are linked to the political and material conditions of its production and circulation.³⁷ Like *Letter to Jane*, *November* illustrates how an image’s meaning and status are uncertain in relation to specific political, cultural, and discursive practices, and Steyerl sees that the globalized media circuit of contemporary society precipitates this situation. At the same time, however, the film demonstrates that this fundamental instability of the image, which Steyerl refers to as shaping “documentary uncertainty,” constitutes “the core quality of contemporary documentary modes as such,”³⁸ by exposing Wolf’s traveling images as the mutual determination of truth and fiction, the battleground of contested meanings, and the place for alternative political constellations.

In *November*, Steyerl associates the fluid meaning of Wolf, determined by the imbrication of fact and fiction, with the technological and aesthetic transition from filmic to post-filmic media. The film starts with footage from the feminist martial arts movie that portrays Wolf as a tough and glamorous heroine (Figure 4.4). This footage accompanies a frontal close-up of a film projector emitting glaring light, which corresponds to the



FIGURE 4.4 Film stills from *Hito Steyerl, November* (2004), courtesy the artist and KOW, Berlin.

original Super 8-mm format of Steyerl's movie. Steyerl also adds the sound effect of the projector's running to the original silent clip, thereby suggesting that her act of remembering Andrea is initially bound up with the movie's celluloid materiality. The film's ensuing parts, however, focus on how Andrea's image was given an array of unexpected meanings as it was dissociated from its celluloid materiality and subjugated to the network of post-filmic apparatuses, encompassing video and the internet. Steyerl's investigation of these processes involves her analytical uses of video technology, which render the images of Wolf/Ronahî as materially intermedial. She plays the footage of Ronahî in the Kurdish resistance army, which was shot in Super 8 mm and transferred to video. Here, Steyerl presents a close-up of Ronahî's profile in the form of oscillating scan lines coupled with electronic noises and magnifies it to the extent that it is decomposed into an array of pixelated dots, thus becoming illegible (Figures 4.5 and 4.6). Given that the image comes from the videotape that Steyerl received after Wolf's death, this suggests that it is a kind of poor image with a circulation predicated on degradation caused by multiple copying and transmitting; her voice-over confirms, "Images of armed struggle spread around the globe by satellite channels." T. J. Demos neatly observes that the



FIGURES 4.5 AND 4.6 Film stills from *Hito Steyerl, November* (2004), courtesy the artist and KOW, Berlin.

exposure of video's intrinsic malleability in this scene suggests the unstable status of the Wolf/Ronahî image. “The poor quality of the video,” he writes, “owing to multiple generations of copies and to the recording of imagery directly off a TV screen, tends to derealize the video’s referents.”³⁹ Although I agree with Demos here, I would add that this derealized image seems to render Wolf’s figure as the interpenetration of Steyerl’s private memories of her and public

memories of her as Ronahî. This interpenetration structurally corresponds to the transition from filmic to post-filmic media and the intersection between the two.

At the same time, *November* suggests that Steyerl's interest in the materiality of video does more than foreground the post-filmic conditions for producing and circulating poor images, as she offers a self-reflexive demonstration of how to use it for analytical purposes. In the footage of Ronahî in Iraq, shown on a TV screen with a number of pixelated grids, Steyerl moves her video camera as if touching its surface, pulling back to present the close-up of Ronahî, who was responding to an interviewer's question regarding her comrades' activities. The camera's movement continues until it frames the TV screen and the video player with which Steyerl reviewed the video of Ronahî's footage. In this way, Steyerl's camera performs an investigation of the ways in which video technologies associated with the televisual and internet apparatuses are used both for the unpredictable flow of images and for the critical scrutiny of them. The dissolves from Ronahî's video imagery to her icon on the flag card, repeated several times throughout the film, suggest that the capacities of video technologies to extract and edit footage allude to the contemporary digital networks of circulation and appropriation.⁴⁰ Steyerl's narration summarizes this point as follows, referring to the protagonist not by her political persona of Ronahî, but as Andrea, the filmmaker's close friend: "Andrea becomes herself a traveling image, wandering over the globe, an image passed on from hand to hand, copied and reproduced by printing presses, video recorders, and the Internet."

Steyerl's use of video in *November* to recombine images also applies to her investigation into the underlying political meaning of her amateur martial arts movie and the recontextualization of it within the tradition of alternative filmmaking. The film brings together excerpts from Russ Meyer's film *Faster, Pussycat! Kill! Kill!* (1965), as well as clips from Bruce Lee's last movie *Game of Death* (1978) that portrays him as a resurrected hero fighting against Western domination. These fragments of popular movies do not simply illustrate the subtexts that inspired Steyerl's production of the amateur movie; they also are given subversive political meanings. Meyer's female warriors and Lee as icons of global proletarian and postcolonial revolutions are juxtaposed with footage from Sergei Eisenstein's *October: Ten Days That Shook the World* (1928),

Godard's *La Chinoise* (1967), and, most importantly, René Viénet's *Can Dialectics Break Bricks?* (1973), a Situationist film based on the appropriation of a Hong Kong martial arts film to describe the conflict between proletarians and bureaucrats in a capitalist state. Steyerl's incorporation of all these films stresses that video technologies can be used to recontextualize images—even poor images—as a way of developing the alternative essay film based on the methods of appropriation of the filmmaker, who considers them to be effective tools reflecting his/her engagement with political and cultural issues. Pablo Lafuente remarks concerning the use of images from popular movies in *November*, “Because of their availability and appeal within a popular culture realm, they must be approached as tools within an ideological struggle.”⁴¹ It is also worth noting that Steyerl's juxtaposition of borrowed images traverses between the formats of film and video. Although most of the movies appear as original filmic images, images of Viénet's Situationist masterpiece are populated with several scan lines, underlining the fact that Steyerl watched the film with her VHS player. The particular status of Viénet's film echoes Steyerl's method of working with found footage in *November*. It hints at her dependence on the Situationists' strategy of appropriation, by which an original image is decontextualized and given new meanings as it is linked to particular political and discursive contexts. Considered this way, the material distinction of the images from Viénet's film suggests that Steyerl adopted video technologies as an effective tool for updating this Situationist strategy as a formal technique of avant-garde filmmaking developed in the celluloid age of cinema.

In Free Fall deepens Steyerl's speculation on poor images in the post-filmic apparatuses and their underlying material and cultural dimensions. Taking as its starting point the debris of a Boeing 707 aircraft in California's Mojave Desert, this video essay explores the history of the airplane in terms of two intellectual discourses: first, how the airplane in general has been imagined and depicted in popular media, and second, how it can be regarded as a mass-produced object that has its own life cycle according to industrial or cultural use. As for the first discourse, images of plane crashes and hijackings culled from various Hollywood blockbuster films, TV trailers, and music videos allegorize the precarious political and economic conditions of the twentieth and early twenty-first centuries, including the most recent financial crisis in 2008.⁴²

Incorporating the Boeing 707 in this manner is extended into Steyerl's second discourse that considers it as an object marked by its own history. After being used for an Israeli hostage rescue operation in the Entebbe International Airport in 1976 (known as Operation Entebbe), the Boeing 707 was adapted in several Hollywood movies about terrorist hijackings and, eventually, to the famous explosion scene in Jan DeBont's blockbuster film *Speed* (1994). The concluding part of this discourse tells of the unexpected recycling of the aircraft's remnants after the explosion; they were sold to Chinese companies that recycled the aluminum in them to manufacture DVDs. Inspired by Sergei Tretyakov's "The Biography of the Object" (1929), in which he argues that any produced object includes the traces of social relationships, Steyerl interweaves the tangled, seemingly unrelated, narrative threads about the Boeing airliner into her thesis that the cultural and economic conditions that determined its uses are revealed when we focus on its multiple aspects as both object and material.

In *In Free Fall*, Steyerl deploys a range of post-filmic technologies to assemble and analyze images of the aircraft, which are consolidated into the two intellectual discourses on its traveling life cycles. As Sven Lütticken observes, Steyerl juxtaposes the images of the airplane's disastrous descent with a "post-cinematic montage indebted to MTV: new footage and appropriated footage generate a dizzying, fragmented map unfolding in nonlinear and multifaceted time."⁴³ The repetition of these images throughout the video essay suggests the catastrophic sense of history that resists the modern idea of its ongoing progression toward the future. These nonlinear, rapid, and fragmentary aspects of Steyerl's montage do not merely serve to allegorize the recurring crisis of contemporary capitalism but also to evoke Fredric Jameson's characterization of video's postmodern aesthetics (emblematized by MTV and television since the 1980s) as expressive of the schizophrenic conditions of late-capitalist media culture.⁴⁴ What is more important, however, is that Steyerl's fragmentary juxtaposition of the imagery is derived from her awareness of the images circulated by the network of post-filmic technologies as poor images. In the film's opening sequence, Steyerl presents images of disasters from Hollywood blockbuster movies in low quality (low definition and the lack of vividness in colors), thereby stressing that they were downloaded and recut from an array of digital files available from the DVD

and internet (Figure 4.7). Though her fast-paced montage of images creates a visually hallucinatory and schizophrenic experience in which the boundaries between the reality of disasters and fiction are fundamentally blurred, their overall low quality mitigates the original spectacular power grounded in the theatrical screening of the blockbuster movies from which they are extracted. Accordingly, the images create an intermedial relationship between the movies' filmic origins and the post-filmic apparatuses (e.g., DVD and internet) that liberate them and throw them into the circuit of purportedly endless circulation. In this intermedial relationship, the images of disaster are perceived as poor images that have undergone relocation, transformation, and deterioration. Steyerl highlights the images' status as poor images by contrasting them with high-definition imagery documenting the landscape of the destroyed Boeing 707 and interviews with specialists who tell of its life cycle. In doing so, she not only stresses the material conditions of the poor images but also suggests their implication in relation to the contemporary capitalist culture. In other words, the deteriorated aspect of the images in the form of low-quality files serves as a metaphor for the catastrophic situation of contemporary visual culture—the overabundance of degraded images across the digital network.

As for her second discourse developed in *In Free Fall*, Steyerl uses the DVD and low-cost digital compositing to emphasize the double status of poor images as object and material—filmic fragments that travel across and exist in different post-filmic mediations. In the middle of the film, images of crashed airliners from the opening sequence—including the explosion scene from *Speed*—are resurrected in a portable DVD player (Figure 4.8). As she complicates the status of poor images derived from the intermedial relationship between the filmic image and post-filmic apparatuses, Steyerl exposes in a self-reflexive manner the device in which her post-filmic montage is grounded—the DVD, which allows for nonlinear editing, ripping, and looping. Additionally, she strengthens her association between the poor images and their materiality by inserting a CGI animation in which the airliner is metamorphosed into a DVD disc spinning around the earth. As David Riff rightly notes, this vignette suggests that the aluminum of the Boeing 707 “can be used again and again, like the ‘poor images’ of the crash itself.”⁴⁵ Steyerl’s own comment validates this



FIGURES 4.7 AND 4.8 Film stills from Steyerl, *In Free Fall* (2010), courtesy the artist and KOW, Berlin.

point: “A VOB file on a DVD is pretty real, as it is tied to different networks and markets of raw materials, in this case, for example, metals and plastic, both of which are often recycled.”⁴⁶ Although this CGI sequence of the DVD demonstrates Steyerl’s idea of poor images as a compelling opposition to the assumption that the digital marks a shift from materiality to immateriality, her use of the digital chromatic effect—a compositing technique developed from analogue video and television—leads to another argument regarding her materialism. That is, the materiality of digitized poor images is linked to the fact that they are crystallized into different configurations in tandem with the different techniques and interfaces that circulate and transform them. In the ensuing sequence, Steyerl recites her reflections on Tretyakov’s “The Biography of the Object”

against the backdrop of rear projection, in which some excerpts of previously recycled images, including images of disasters, are played again. Her multiplication of (originally filmic) poor images in different post-filmic techniques and interfaces—first, in her post-filmic montage; second, via DVD; and finally, in digital rear projection—leads to her thesis on the relevance of Tretyakov's argument that “matter continues to exist in different forms.” Here, it becomes clear that Steyerl does more than consider post-filmic digital apparatuses responsible for the mere proliferation of poor images. She recognizes their availability to anyone who aspires to unveil traces of appropriation and manipulation and thereby recomposes them into “incoherent, artificial, and alternative political bodies.”⁴⁷

Intermedial Palimpsests in Lynne Sachs's experimental documentary films

Sachs has produced a number of short and feature-length experimental documentary films that explore the intricate relationship between broader historical experiences and her personal reflections on them. Based on this intersection of the personal and the public, Sachs's films present several formal attributes of the essay film, including her shifting presence as author via voice-over, intertitled commentaries and camera movement, the mixture of multiple time frames, deployment of multiple (poetic, reflexive, and participatory) documentary modes, and the use of collages to highlight the heterogeneity of found materials or the density of the sound-image continuum. These attributes enable Sachs's films to fit into the category of the “experimental documentary,” a term which, according to Lucas Hilderbrand, refers to the wide-ranging intersections of documentaries and experimental practices aimed at breaking “from a certain realist, objective, authentic tradition of non-fiction filmmaking.”⁴⁸ Though works pertaining to experimental documentaries are so various as to encompass several subgenres of documentaries (e.g., essay film, animated documentary, and documentary installation) that are distinct in technique or experiential platform, they expose a concern with form and mediation by drawing from the traditions of experimental

film a range of aesthetic elements. These include nonstandard cinematography, layered or painterly images, fragmented narrative structures, dissonance of sound and image, and celluloid-based or digital visual effects. Such aesthetic elements of visuality and temporality, Hilderbrand notes, “are the means through which historical revision, contemporary politics, and alternative futures are explored.”⁴⁹ Sachs acknowledged that she has utilized a variety of visual manipulations of her records and materials to introduce the elements of uncertainty and imagination. She explains that these manipulations are designed to transcend the belief in the transparent representation of history and memory and promote an understanding of them as derived from a complex mediation of past and present:

My films . . . expose what I see as the limits of conventional documentary representations of both the past and the present. Infusions of colored “brush strokes” catapult a view into contemporary Vietnam. Floating drinking glasses moving across a Muslim cemetery in Sarajevo evoke wartime without water. Pulsing, geometric mattes suspended in cinematic space block news footage of a bombing in Tel Aviv. With each project, I have had to search for a visual approach to looking at trauma and conflict.⁵⁰

Sachs’s deployment of her subjectivities in images marked by multiple relationships between shifting registers of media can be found in *States of Unbelonging* (2005), a film that offers a multilayered reflection on the violence in the Middle East by creating a dynamic exchange between the public and the private—between the public portrait of Revital Ohayon (an Israeli filmmaker killed in Kibbutz Metzer on the West Bank) and Sachs’s letters to an Israeli friend named Nir. The film starts with Sachs’s voice-over narration of her letter to Nir regarding a news report that describes the murder of Ohayon. This incident triggered Sachs to contemplate how her historical consciousness had been shaped and thereby fragmented through her personal experiences of violent events, which were seemingly repeated over time throughout the world. She writes to Nir: “Did you ever have the feeling that the history you are experiencing has no shape? Even as a teenager I was obsessed with history’s shifts and ruptures.” Sachs’s personal understanding

of history through “shifts and ruptures” is synchronized with a dense constellation of images on violence mediated by different apparatuses. The first series of images includes footage of an Israeli soldier walking the streets, which Sachs shot with digital video and edited with a blurry slow-motion effect (Figure 4.9). In the next series, we see a group of Palestinian women getting away from a terrorist attack, whose found images shot in 16 mm are out of focus and transformed into an abstract, blurred image by video effects. Despite the differences in media used to capture the images, the blurry, dense visuality common to the two series of images suggests that Sachs’s historical consciousness is founded upon blurring the edges between her personal recollection of the violence and the public documentation of it. This interpenetration of the personal and public resonates with a key aspect of essay film. The sense of obscurity in these two series, too, makes paradoxically visible the ruptures and gaps between the ruins of a past and the fragments of the present as forming a history of violence. It is amplified in the ensuing footage of news reports that cover terror in Israel, in which the oscillating scan lines and pixelated shapes signal that the fragmentary and multilayered aspects of the televisual flow structure Sachs’s own understanding of global violence. Viewed together, Sachs’s deliberate transformation of the images and her dense collages in three series appear to follow what Catherine



FIGURE 4.9 Film stills from Lynne Sachs, *States of Unbelonging* (2005), courtesy Lynne Sachs.

Russell characterizes as the “apocalyptic” imagination of found footage filmmaking in the postmodern age. Accordingly, an imagination renders the archival record of the past excessive and discontinuous as a way of challenging the linear and transparent narrative of history.⁵¹ Seen from this perspective, the opening sequence in *States of Unbelonging* posits as its formal principle the intermedial exchange of different media images (16 mm, television, and digital video), which serves as an allegory of the fragmented understanding of history in the contemporary global media age as ruins of the past that are transmitted in the present with multi-technical and multi-geographical flows.

Corrigan has written about the pivotal role of various found materials in configuring Sachs’s historical consciousness in *States of Unbelonging* as follows: “Materialized as found footage, old home movies, and rebroadcast television news, history surfaces in the course of the film as the shifting and superimposed constellations of different geographies, textualities, time zones, and imagistic fabrics.”⁵² What should be added to the formation of “shifting and superimposed constellations” is Sachs’s intermedial approach to these various medial images. In another sequence, for example, she deliberately transforms the archival filmic records related to Revital’s past life with an array of video effects and her self-reflexive evocation of the filmic and post-filmic apparatuses. This sequence starts with a young girl (Sachs’s daughter) playing in front of a picture frame; simultaneously, a television set plays a series of clips from Revital’s own films. The next series of images presents a superimposition of multiple frames in varying sizes that contain Revital’s home movies shot in Super 8 mm during different periods of his life (Figure 4.10). The collage effect of video technology is responsible for this multiplication of frames, but the overall imagery in this series is predicated on the complicated interrelations of film and video as they create a fractured montage of different pasts. The larger frame located in each image’s background is marked by the half-bleached look of Super 8 mm, which alludes to the passage of time, whereas the rest of the frames contain images characterized by video’s refined look. Moreover, the two series contrast according to delivery of the image. That is, the larger frame preserves the quality of film projection (coupled with the sound effect of a projector’s operation at the end of the series), and the rest of the frames are presented three-dimensionally as though they were part of a multi-



FIGURE 4.10 Film stills from *Lynne Sachs, States of Unbelonging* (2005), courtesy Lynne Sachs.

screen piece installed in a gallery. Viewed together, the two series create a dynamic exchange between the original record of film and its new aesthetic state mediated by post-filmic technologies. In this sense, this sequence forms a palimpsest not simply of past and present or different pasts, but also of different media. Sachs's own consciousness and memory, as well as Revital's subjectivity, are articulated in this palimpsest as thrown into a permanent state of "unbelonging." The intermedial encounter of film and video is seen to play a crucial role in shaping this state as it results in the obscured, drifting, and fragmented aspects of past images.

The Last Happy Day (2009) also offers viewers a dense palimpsest of competing categories related to essay films—the personal and public, past and present—in the form of intermedial encounters between filmic and post-filmic technologies. Sachs presents an experimental portrait of her distant cousin Sandor Lenard, a Jewish-Hungarian medical doctor who lived in a permanent state of exile: Lenard's nomadic life consisted of a series of journeys. He left Germany before the Second World War broke out, stayed in Rome under the Fascist regime, and worked for the US government as a forensic anthropologist who reconstructed skeletons out of the bones of dead American soldiers after the war's end. During his idyllic life in Brazil, he authored *Winnie Ille Pu*, a

Latin translation of *Winnie-the-Pooh*. To reconstruct Lenard's life across geographical borders and traumatic encounters with violence of the twentieth century, as well as his attempts to distance himself from the violence and find peace and meditation, Sachs deploys a variety of formal devices and materials in ways that fit into her idea of the experimental, essayistic documentary. Her filmed interviews with Lenard's son and his second wife as documentary records are intercut with the shots of her children playacting Pooh stories. She also uses heterogeneous materials that differ in format (Super 8 mm video, film stock footage, and still photos) related to Lenard's memory. By interweaving these materials, Sachs attempts to create a constellation of different memory objects as her understanding of the past.

As in the case of *States of Unbelonging*, Sachs uses a range of digital video effects in her recombination of archival documents about Lenard's life to reactivate past events as complex and obscured encounters with personal memories and history and to highlight the "shifts and ruptures" as marking and simultaneously bridging the distance between the past and her present. In the extended sequence of footage that encompasses Lenard's life in Germany, Rome, and Brazil, Sachs not only assembles its images in chronological order but also superimposes some of them digitally to configure the palimpsest of Leonard's memory as fractured and multilayered (Figure 4.11). The digital frame-within-a-frame effect applied to the scenes in which Lenard's second wife and his son are interviewed as they hold his photos creates a fundamental disparity between the past and the present—that is, between Lenard's own account and their limited memories of his life.

Sachs's intermedial approach to the archival images related to Lenard's life stands out most clearly in the sequence that depicts his traumatic experience during the Second World War. Here, the archival images of violence in 16-mm film are colored with a digitally desaturated brown, and the Super 8-mm film footage of a street in Rome is presented as digitally transformed negative imagery, at the center of which an oscillating gray line signals the footage's chemical decay as the marker of the passage of time (Figure 4.12). The coexistence of the filmic records and the digital effects complicates the ways in which Lenard's memory of the war and his life in exile are articulated. The material properties of 16-mm and Super 8-mm film give rise to the viewer's recognition



FIGURES 4.11 AND 4.12 Film stills from *Sachs, The Last Happy Day* (2009), courtesy Lynne Sachs.

of the records as archival documents from the distant past, and the digital effects added to them amplify Lenard's horror and confusion described in his letter to his relative (William Goodman). Still, these added effects spring from Sachs's imaginary approach to Lenard's troubled psyche vis-à-vis his traumatic experiences of war and exile. Sachs confesses, "Through an evolving, highly saturated visual language, I contrast the haunting confinement and violence Sandor experienced in Rome during the Nazi occupation with the verdant emptiness of his later life in remotest Brazil."⁵³ Seen in this light,

digital video's desaturation and negative effects mark the distance between Lenard's remembrances of the past (during his lifetime) and Sachs's effort to retrieve these memories in the present. The deliberate intermingling of various effects with archival documents, then, suggests that both Lenard's recollection and Sachs's recreation of it inevitably are predicated on the interpenetration of fact and imagination, resulting in the dynamic coexistence of visibility and obscurity on the image surfaces.

Intermedial processing of home movies: *Trains of Winnipeg: 14 Film Poems and Tarnation*

Uses of prerecorded, personal, and moving images in the works of Sachs examined above represent a tendency of essay-related films to rely heavily on footage of home movies from the 1990s and beyond.⁵⁴ The growing employment of the footage about the personal life of a subject—both the subject filmed and the filmmaker who films about him/herself—in the contexts of documentaries, experimental films, and essay films certainly compels us to examine how it affects modes of filmmaking and the nature of resulting films. Thus, we must speculate upon the true status of home movies. The primary reason that home movies have drawn the sustained interest of film scholars is that they are viewed as providing access to personal memories as well as marginalized histories. More importantly, the home movie is seen as existing differently from commercial or professional films, because it often remains unfinished, and because it is devoid of the technical and aesthetic devices required for the commercial or professional films. As Patricia R. Zimmermann succinctly remarks, "Home movies constitute an imaginary archive that is never completed, always fragmentary, vast, infinite."⁵⁵ These features of home movies— incompleteness, fragmentation and vastness—form the basis for certain innovative methods and aesthetics of documentary or experimental filmmaking. Zimmermann argues that amateur filmmaking is an example, inasmuch as it is capable of providing a vital access to "the more variegated and multiple practices of popular memory, a concretization of memory into *artifacts* that

can be remobilized, recontextualized, and reanimated.”⁵⁶ Since this thematic shift implies the application of more rigorous methods of utilizing home movie footage (besides adopting it for narrational and illustrative purposes), it also signals that the filmmaker’s role as editor has as much weight as his/her role as director of the film. As Marsha and Devin Orgeron suggest, “The documentary filmmaker working with extant biographical or autobiographical video material performs, then, a kind of secondary editorial role in which relevant video footage is assembled.”⁵⁷

The heightened importance of the filmmaker’s editorial role in “remobilizing and recontextualizing” home movie footage in the contexts of personal and autobiographical documentaries, I argue, has much to do with the transition from celluloid to video in the production and circulation of home movies. James M. Moran highlights as a key factor of distinguishing home video from home movie analogue video’s several capacities unavailable from celluloid: first, the ability to close the gap between production and reception, illustrated by the simultaneity of recording an event and viewing it, second, the everydayness of a VCR and domestic monitor, and finally, the VCR’s controls to “manipulate the flow of images . . . [and] . . . allow for intervention, analysis, and play.”⁵⁸ Even though Moran cites material differences between film and analogue video, his insight into the latter’s capacities points to the pivotal role of digital video in the pervasive uses of home movies in personal and autobiographical documentaries as well as in the developments of technical and aesthetic strategies to transform their footage. Such scholars as Jane Simon and Susan Aasman have argued recently that digital technologies allow for the rehabilitation of recycling home movies in the context of amateur or small-gage film practices, as they engender the unprecedented proliferation of materials in old media and make them unstable, fluid, and dynamic.⁵⁹ This view on the impact of digital technologies on the shifting status of the private archive is compelling, but it also awaits further elaboration in terms of how digital video is used to appropriate and transform the images of home movies in old media. The digital editing system can be applied to footage shot with a digital video camera as well as images shot in a variety of formats (e.g., Super 8 mm, 16 mm, VHS) in encoded forms. The latter partially maintain their material and technical traces, signifying the pastness of their records; examples include shaky camera movements, light flares, and scratches

inscribed in home movie footage shot in celluloid. The digital editing system may leave these traces in the home movie scenes intact to stress their pastness, or it may endow the scenes with a variety of visual effects to render the filmmaker's present memory of them to be fractured, multilayered, and unstable. These two approaches suggest that digital technologies situate the filmmaker working with home movies for the personal, autobiographic documentary as the editor who identifies him/herself with both old and new media. *Trains of Winnipeg: 14 Film Poems* (Holden, 2004, hereafter abbreviated *Trains of Winnipeg*) and *Tarnation* (Caouette 2003) demonstrate that a filmmaker's traversing between, and intermixing, the two media contribute to a fragmented and hybrid representation of his/her memory.

As part of Holden's cross-media project that includes a book of poems, a CD of their voice recordings, and a multimedia website, *Trains of Winnipeg* combines 14 individual short films that are consolidated into a narrative of his personal memories associated with his travels across Canada from childhood. As suggested by the project's title, Holden takes a poetic approach to the short films, not simply by adapting his self-written poems but also by creating a dense collage of the metaphoric and lyrical images that he filmed throughout his life. At the same time, *Trains of Winnipeg* is a diary film (a subgenre of the essay film) in that all of its shorts were filmed at different times during Holden's life as expressions of his personal emotions and thoughts derived from everyday observations and remembrances. As Corrigan notes, diary films "map the expressions of an individual according to different chronologies and rhythms . . . and invariably according to various rhythms usually associated with daily life and experience."⁶⁰ What is notable in *Trains of Winnipeg* is that its temporal multiplicity as a characteristic of diary film is inscribed in its formal and material layers. Holden's dense juxtaposition of images from his personal footage expresses his subjectivity as drifting and fractured, thus configuring his memories as marked by overlapping temporal experiences. More significantly, these unstable dimensions of his subjectivity and memories are materially linked to the heterogeneity of the media that he employed for shooting his personal movies. Holden employed 8 mm and Super 8 mm as well as several formats of video (VHS, Pixelvision, DVCam, Digital Betacam, etc.) for filming, mixed them via digital video editing—sometimes coupled with hand processing of celluloid—

and transferred the edited footage to 35 mm. This hybrid approach to both film and video aims to associate the formal and material differences of the formats with those of Holden's memories of the past and present (or different periods of the past) and bridge the gap between experimental film and video art. Holden himself has confessed, "I've done a lot of exploring of the differences between using film and video cameras, which offer different experiences. . . . The mixing is now very interesting to watch and be a part of. It's about much more than technology; it's two cultures blending together."⁶¹

18,000 Dead in Gordon's Head (A Found Film) (2002), the fifth short film in *Trains of Winnipeg*, guides viewers toward an intermedial traveling of film footage as a fragment of Holden's memory through the use of various media. This section consists of Holden's subjective imagery of rediscovering a lost personal movie—one that he shot in 1983—inspired by the tragic murder of a teenage girl in his hometown. Holden's poetic voice-over narrates the impact of the event on his younger self, as well as the material processes by which the film's footage was shot and later found. The footage had initially been shot in Super 8-mm film, but it remained lost for twenty years until he found the crude VHS copy—a video recording of the projection of it onto a wall. Upon his rediscovery, Holden realized that this copy provided him with evidence of his earlier attempt to visually document the place where the girl had been shot to death (in front of the Gordon Head Store). He also recognized that the history of the production and rediscovery of the copy could allude to the imbrication of memory and forgetting. Thus, he refilmed the video images in ways that highlighted the material traces of the original Super 8-mm film, with grains and glitches on its surface. Then, he edited them digitally, enhancing some of the frames and reassembling them with superimposition and looping. As Scott MacDonald explains, the resulting section "materializes the distance between now and then."⁶² Holden's original footage shot in Super 8-mm film gives testimony to his effort to capture the absent traces of the crime in the ordinary atmosphere of his hometown. We see Holden revisiting the location of the murder, cars moving along its streets, and the town's residents walking into and out of the store. All of these images invoke not simply the distant past of the murder and Holden's original filming, but also the structural affinity between his memory of the past and

his material record of it. The images' colors and shapes are blurred to various degrees, and some frames are overexposed. Along with these elements of obscurity and invisibility, the glitches on the surface underline the material decay of the original 8-mm footage (Figure 4.13). In this way, the material aspects suggest the process of forgetting inherent in Holden's memory.

The images in the footage, too, testify to a profound relationship between media and the formation of human memory, one between the traveling of Holden's record through the different media (Super 8 mm, VHS, and digital video) and the distance of time that makes his memory of it obscured. Along with the oblique, degraded images of the town, Holden inserts the Super 8-mm white leader marked by a red stripe in a pulsating rhythm. The white, abstract portions repetitively presented throughout this short film suggest the processes by which the footage—representative of Holden's original object of memory—underwent erasure through its multiple mediations. They present the blank screen as the wall onto which the original Super 8-mm film was projected, as well as several scan lines derived from the VHS quality of the film's copy. In these intermedial processes, Holden foregrounds the clashes between film and video, signaling the temporal gap between the time of original filming in Super 8 mm and that of editing the celluloid footage. Digital procedures adapted to Holden's editing, then, amplify



FIGURE 4.13 Film still from Clive Holden, 18,000 Dead in Gordon's Head (A Found Film) (2002), courtesy Clive Holden.

the material intersection of film and VHS while also producing a couple of effects on his memories of the murder. The digital looping propels Holden's intermediated images to move in and out of sync with his reading of the poem. Since its repetitive presentation of the images also suggests Holden's obsession with returning to both the moment of the murder (which he had not witnessed) and that of his visit to the place, it ultimately expresses his memories as based on the continual negotiation between recollection and forgetting. Likewise, the digital superimposition of the store and cars passing along on the street highlights the extent to which digital technologies help to render Holden's memories fragmentary and nonlinear. Although these two features are derived from templates of digital video editing, they also suggest that Holden's memories are constructed in ways that traverse between the different past moments (distinct in film and via VHS), and between the moments and the present.

In *Hitler! (Revisited)* [2004], Holden reworks a home movie from 1994 about his older brother Niall, who had suffered with mental health problems since his mid-teens. In the lingering close-up of Niall's face, the viewer is able to see the dynamic coexistence of different media properties, as in *18,000 Dead in Gordon's Head*. The close-up was initially made in Hi-8 video and superimposed with grains, stains, scratches, and lines varying in color (yellow, blue, green, pink, etc.) derived from the texture of Super 8 mm (Figure 4.14). Holden edited the mixed-media footage in DigiBeta, slowing it and emphasizing its oscillating yellow or blue lines with electronic flicker effects. The reedited footage was later transferred to 16 mm, which allow the resulting images to maintain the material and figurative differences between all the involved media. Holden calls this process "a crude version of what is now called a 'digital intermediate' process."⁶³ Holden's "intermediate process" created the discrepancy between media on the surface, suggesting not simply his shifting understanding of his relation to Niall, but also the temporal gaps between shooting and editing. In its concluding parts, Holden himself is present in front of a smaller screen onto which the figure of Niall is projected (Figure 4.14). The small screen signals the originality of the 8-mm format encompassing both film and video; Holden's action of stretching his arm onto the surface of the screen (indeed, onto the surface of his 8-mm records) represents his effort to retrieve his complicated and elusive memories of Niall.



Or ... perhaps he's just trapped without communication skills.

FIGURE 4.14 Film still from *Holden, Hitler! (Revisited)* (2004), courtesy Clive Holden.

In sum, *Trains of Winnipeg* is an intermedial essay film that features hybrid images of Holden's memories as expressive of "a collector's instinct and passion for images of 'life' and images mediated by all possible media."⁶⁴ The hypermediation of the various media involved in the production and processing of the home movies is presented by dense collages, superimposition, and juxtaposition of images that differ in format and materiality. These forms suggest the fragmented, decentered essayistic subject as obsessed with collecting and archiving in his/her shooting and editing. In terms of shooting, the different cameras incorporating Super 8 mm, 8 mm, video, and DV testify to Holden's unstable temporal and spatial journey that involves the continual encounter between remembering and forgetting. Similarly, the deliberate combination of celluloid-based processing and digital editing leads to a virtually endless flow of texts, images, voices, and sound effects as Holden's nonchronological stream of consciousness.

Tarnation, an experimental, autobiographical documentary about the story of Caouette's mother Renee, her mental illness, and his troubled relationship with her during his youth, presents a rich and complex collage of disparate materials. The film combines footage of home movies and amateur films that Caouette produced in different media (both film and analogue video) since age 11: family photos, answering machine tapes, sound recordings, and contemporary footage from digital video. These various personal domestic documents are intercut with a multitude of movie and TV

excerpts related to his fantasies and nightmares since childhood. Caouette's expansive, whirlwind incorporation of these disparate materials, as well as his admixture of different stylistic approaches, including the video diary and experimental film, testifies to his identity as, in the words of Russell, a "collagist and editor" who inscribes his self-identity in his autobiographic text as diverse, fragmented, and hybrid.⁶⁵ Although the identity as "collagist and editor" is applied broadly to autobiographical filmmakers who blend forms of documentaries with those of experimental films, it is noteworthy that Caouette's strategies for incorporating the vast amount of diverse materials and using them to reconfigure his memories as fragmented and unstable are undoubtedly indebted to his use of iMovie software.⁶⁶ Accordingly, *Tarnation*, as Anna Poletti neatly summarizes, "depicts with rare artistry and force the extent to which popular culture and autobiographical acts form a network of representational practices, which, in conjunction with the technologies of moving-image recording and editing, can result in densely collaged, relational representations of identity."⁶⁷

In *Tarnation*, Caouette adopts what Efrén Cuevas sees as two different ways of recycling home movies and other personal documents in the autobiographical documentary: "naturalization" and "contradiction." Naturalization refers to the most primary and standardized uses of personal documents, keeping their original values and qualities intact in ways that guarantee their authenticity as archival materials of personal lives from the past. Contradiction, by contrast, is relevant when the filmmaker destabilizes the meaning of original documents by questioning their truth-value or adding to them new supplementary meanings. Autobiographical filmmakers, Cuevas notes, depend upon this strategy when they narrate "traumatic events in their family past, forcing the contrast between their standard happy portraits of domestic footage and the harsh events of their family past."⁶⁸ Considering these two strategies helps us to illuminate the ways in which various audiovisual materials in *Tarnation* are perceived and signified. The footage shot with old media appears to retain its material and technical qualities as the hallmarks of home movies and videos. Such technical flaws of Super 8 mm as underexposure, flickers, scratches, and shaky camera movements are clearly noticeable throughout the footage that covers periods of Caouette's growth. Similarly, Caouette's self-documentation of his childhood is characterized by footage in low

resolution and scan lines on image surfaces, explicating the traces of VHS and Betamax. In addition to these various moving images, Caouette deals with still images related to Renee in a similar way as he does with Super 8 mm. The still images of Renee's early life cycles, which depict her childhood injury, shock treatment, and her marriage and divorce, are clearly seen to spring from analogue photographs. Those images of Renee's troubled life after the birth of Jonathan are wedded to the scratched lines, grains, and flickers—all observable in the old filmstrip of celluloid (Figure 4.15).

Even though these material signs offer viewers an archival effect so that the analogue documents are perceived as fragments of personal memories from the distant pasts of Jonathan and his mother, Caouette, too, employs a variety of digital editing techniques to create contradictory visual elements that block the viewer's transparent understanding of the documents and thereby suggests the unstable and fractured aspects of his memory. The digitally multiplied photographic images of Renee and Jonathan contribute to configuring both as split and traumatized (Figure 4.16). In addition, Caouette uses blurring and colorization effects to transform certain photos of Renee, therefore signaling that his memory of her has receded since his childhood; further, it has been distorted. These digital effects, in mirroring, decomposing,



FIGURE 4.15 A screen capture from *Jonathan Caouette, Tarnation* (2003).



FIGURE 4.16 A screen capture from *Jonathan Caouette, Tarnation* (2003).

fracturing, and multiplying the analogue materials, eventually are consolidated into the kaleidoscopic excess that frustrates any linear understanding of Caouette's memory. Instead, they render it contradictory, unstable, and subject to a process of ongoing construction. As Rascaroli relevantly summarizes, Caouette's dense surrealist collage of multiple media images via his digital effects enables *Tarnation* to be a film in which "the tendencies to narcissism, hybridism, fragmentation and instability typical of digital self-representation meet with the autoethnographer's self-inscription in his or her film as avant-garde collagist and editor."⁶⁹

Caouette's predilection for incorporating multiple images different in source and format and rendering them discordant and shattered via the technical palettes of digital editing software can be compared to Daniel Reeves's *Obsessive Becoming* (1995), an experimental documentary based on Reeves's extensive incorporation and transformation of multiple media images related to the history of his family with the help of analogue and digital video processing. As Zimmermann notes, Reeves's autobiographic video testifies to "a virtuoso manipulation of a wide range of technologies (including video, film, computers, analogue and digital editing, original and archival footage, installation and photography, single channel and multiple channels) to shred, layer and decompose

images (even archival war images) and excavate the psychic traumas entangled within their formal designs.”⁷⁰ *Tarnation* exemplifies Caouette’s “virtuoso manipulation” of a wealth of images and their corresponding media in ways that invoke Reeves’s deconstructive shattering of his personal photographic and filmic documents. More significantly, however, his intermedial fusion of images also aims less at competing a director’s private memory with the official representation of history, as in the case of *Obsessive Becoming*, than at configuring his personal self and memory themselves as complicated. His employment of these techniques suggests that the excavated images form the rich and multiple layers of himself that are derived from the dynamic exchange between traumas and recoveries, as well as from the folded circuit of the real and the imaginary. As the film progresses, the viewer is able to witness that Caouette’s excessive manipulation of his past, recorded in different media, serves to articulate his troubled self as the construction of his fantasies. In the middle of the film, there is a split screen sequence in which the past Super 8-mm documents of Renee and Jonathan are juxtaposed with the videographic self-inscription of his singing a song that expresses the fantasy of overcoming his confusion. This technique is later extended into his kaleidoscopic digital processing of not only his photographs and home movies,



FIGURE 4.17 A screen capture from Jonathan Caouette, *Tarnation* (2003).

but also a range of popular movies and music video clips that stimulated his fantasies, including the fantasy of becoming a rock star (Figure 4.17). Consequently, Caouette's intermedial approach leads to an in-between space in which photography, film, and analogue video—or, personal documents and the fragments of popular culture—are thrown into a perpetual interaction without any hierarchy to establish hybridism and instability as typical of the construction of the contemporary self and his/her memory aided by digital technologies.

Conclusion

The intermedial essay films that I have discussed and examined thus far suggest that, as in the cases of transitional found footage practices, hybrid moving images based on the technical and aesthetic intersection of film and post-filmic technologies should be read to offer various responses to the post-media conditions of celluloid-based cinema—namely, cinema's dislocation from its celluloid origins. Steyerl's self-reflexive reframing of filmic images within the video apparatus and her rigorous video-based juxtaposition of them draw the viewer's attention to their transformation into poor images as a key material condition that underlies the production and circulation of an image in the televisual and digital culture. Sachs's uses of video's special effects to transform the filmic image demonstrate her keen awareness of the enlarged distance between its past and her present as an inherent condition of the experimental documentary that reconfigures the memory and reality of the past in the post-filmic era. Holden's avant-garde poems and Caouette's autobiographical documentary, too, establish this distance as a working condition, using video's special effects to express the fundamental instability of the directors' personal filmic records and to reconstruct their memory traces as intensified dialogue between the past and present. In all cases, the four directors seek to express the technical and aesthetic hybridity of their images. Marked by the co-presence and interrelation of filmic and electronic/digital properties, these images serve not simply to deepen their reflexive approaches toward the essay film, but also to express their subjectivity as negotiating between the filmic past and the post-filmic present. Thus, their approach is as much dialectical as that

of transitional found footage practices: the technological transition of the cinema from celluloid to electronic and digital technologies makes its memory contingent and unstable, yet it is also from this contingency and instability that the technologies are able to work toward the reconstruction of memories with their transformative capacities. Building on this dialectical consequence of post-media conditions, intermedial essay films present their hybrid moving images as commentaries on the transition of cinema to electronic and digital media, as in the cases of transitional found footage practices, and on the transitory nature of our technologically mediated memories.

CHAPTER FIVE

Cinematic video installations: Hybridized apparatuses inside the black box

The gallery is not a repository for the splinters and debris of cinema, which has not so much “expanded” . . . as exploded. And video is clearly the agent that has enabled the overlap of film and gallery.¹

—CHRIS DARKE

We might not be witnessing a long death of cinema so much as a fragmented history of moments when cinema is revivified at times of crisis.²

—GEORGE BAKER

Introduction

“Between filmmakers drawn to installation art and ‘artists’ for whom movies are raw material, there pulsates an enormous and

protean mass of all kinds of installations.”³ Raymond Bellour’s remark above indicates the extent to which the mutual fascination of cinema and contemporary art has led to a vast number of experimentations with moving-image installations inside the gallery wall since the 1990s. In these experimentations, cinema is moved to museums by arthouse or experimental filmmakers such as Jean-Luc Godard, Chantal Akerman, Harun Farocki, Atom Egoyan, Isaac Julien, Abbas Kiarostami, etc., as well as by a number of visual artists and the museums and galleries that have legitimatized the art of the moving image. Dominique Païni has identified the artists’ divergent practices by classifying the different generations of video artists. The artists of the first and the second generations, encompassing Paik, Vasulkas, Acconci (who Païni terms as “pioneers”) as well as Viola, Gary Hill, and Tony Oursler (termed “painters and sculptors”), explored the material and technical properties of video to establish video art as a collection of figurative, temporal, sculptural, and performative forms distinguished from film. Meanwhile, two further recent generations are distinguished from the two previous precursors in their overt use of cinematic references. These include the “third generation” artists such as Douglas Gordon, Pierre Huyghe, and Philippe Parreno, who are characterized as “recyclers” since their installations appropriate and examine the cinema as an art form and as a social institution, emphasizing cinema’s significant and global influence in shaping their memories and artistic ideas. The “fourth generation” artists, including Sam Taylor-Johnson, Doug Aitken, and Eija-Liisa Ahtila, consider cinema as “an art to be explored outside the sensorial captivity of the traditional movie show.”⁴ In contrast to the modernist imperative common to the first two generations, the artists pertaining to the third and fourth generations channel video technologies into purposes other than the self-reflexive investigation of their properties. As a result, the technologies draw on the cinematic image and narrative, but manipulate them in various ways, so that their elements are broken down and the resulting structure and image of the installations appear to be the amalgamation of cinema and video. In this chapter, these installations will be characterized as “cinematic video installations,” in order to analyze the ways in which the medial components of cinema and video are correlated.

The burgeoning of cinematic video installations has initially gained critical attention from art critics in terms of how and why

the artists have paid attention to cinema. In this view, cinema reminds the artists not only of particular parts of certain films, but also of the filmmaking process and the creativity and deftness of the twentieth century's greatest cineastes who triumphantly controlled the collective audience. The artists' reworking of cinematic components is thus an attempt to speak retrospectively about the extent to which the cineastes' masterpieces and dexterity were influential, thereby referring indirectly to their own artistic conditions and desires. As Chris Dercon remarks, "The artists can also compensate for the lack of audience for visual art by inventing their own sympathetic and participatory audience, and making it physically present. Four chairs imitate a movie theatre in order to reinvent the presence of a sympathetic public. Here also, *secondary mimesis* plays a part."⁵ Considered in this way, the artists' moving-image installations are viewed as taking on a certain impurity caused by their appropriation and reinterpretation of cinema, insofar as they refer to cinema both as a form derived from film's material and technical components and as a discourse illustrating cinema's cultural and institutional influence on the visual arts.

This ambiguity, occupied simultaneously by cinema and the visual arts, raises a crucial ontological question not simply of "what is cinema," but also of "where is cinema,"⁶ insofar as cinematic video installations underscore the dispersal of cinematic components across institutional boundaries—that is, inside the museum—other than the movie theater, and across other forms of art (painting, sculpture, architecture, etc.) than the standardized cinematic formation rooted in the theater. The cinematic video installation works are in this sense "post-cinematic" according to the double meanings of the prefix "post"; while implying that cinematic video installations emerge "after" the heyday of the cinema as the most prominent and popular form of art in the twentieth century, the term "post-cinematic" also indicates that they are derived from and incorporate the desire to go "beyond" certain institutional boundaries that define the cinema's possibilities of forms, aesthetics, and spectatorship. However, the second implication of the term "post"—going "beyond" the cinema—must be read as more nuanced, inasmuch as the works are neither totally separated from the established mode of the cinematic apparatus nor the result of its simple migration to the space of exhibition. Despite their extreme diversity in form and content, the works guarantee an ability to

dismantle or critique the conventional model of cinematic space, time, narrative, and spectatorship or to forge an alternative model while also having an intimate relation to it. In other words, they either reside in and out of the cinema as we have known or they are grounded in an in-between space of the gallery and other media environments in which watching film occurs—the movie theater, the home theater, the personal computer, etc.

Besides this transformation of the cinematic image and apparatus, another aspect of cinematic video installations under scrutiny in this chapter is to view them in contrast to the video art of Païni's two previous generations. Chrissie Iles uses the term "cinematic phase" to differentiate the spatial nature of cinematic video installations from that of the video installations in the 1960s and 1970s, which she identifies as pertaining to the "phenomenological phase" and the "sculptural phase," respectively. According to Iles, the installations of the two phases, emblematised by the pieces of Dan Graham, Peter Campus, Bruce Nauman, etc., "transformed the exhibition space into a three-dimensional image"⁷ occupied by the viewer's physical presence. Capitalizing on the real-time closed-circuit video as a central spatiotemporal strategy, the early video artists assumed that the monitor in the gallery could furnish the viewer with the opportunity to contemplate a perceptual process of domesticated spectatorship triggered by the televisual devices within various physical positions and settings. Here, the space of exhibition was transformed into a media space that could evoke the temporality of viewing, once termed the "durational space" by Campus.⁸ For Iles, the "cinematic phase" emerged in the 1990s as video projection allowed the image to be "contained within flat screens inserted as planes into a partially lit three-dimensional space."⁹ While this technical change enabled Païni's third and fourth generation artists to mimic the spatial qualities of cinema in this way, it underscored the shift in the relationship of the video image to its surrounding space and viewer, as well as the "collapse . . . of the physical boundaries between the once opposite media of film and video."¹⁰

While taking the two discursive views on cinematic video installations—renamed here as the "remaking cinema" discourse and the "degenerated video art" discourse respectively—as a point of departure, both views will be critically examined in this chapter, each represented by Dercon and Iles, in order to argue

that cinematic video installations must be viewed as a complex hybridization of cinematic and video-based technologies. This means that each of the two views runs the risk of downplaying the role of video technologies in shaping this hybrid media formation. Dercon's view must be supplemented by considering how video serves as a key device to deterritorialize cinematic image and narrative from their institutionalized settings and transform them in ways that are not available by the material and technical features of film. In terms of Iles's view, it should be noted that the video's specific operations are still at play in this hybrid form of moving-image installations even as video merges with the same components as those of cinema. These two shortcomings suggest that a rigorous formal analysis of these installations in terms of video's embeddedness within the cinema is particularly necessary when both discursive views expose the difficulty of assessing these installations from the standpoint of either the normative cinema or modernist video art. This analysis entails viewing video not as being anchored in a limited set of its own material and technical devices (as is the case with the modernist view on video art), but as an electronic (and digital) *dispositif* which, according to Anne-Marie Duguet, affords artists "a wider range of dissemination methods (video projectors that reproduce the conditions of cinema but also monitors whose image is independent of light environment)."¹¹ Duguet's definition of *dispositif* helps us to observe video in media installations as a technology of which specificities are defined by its historical conditions as well as by its shifting relation to other media technologies and art forms.

This chapter will propose *spatialization* and *temporalization* as two key operations that video technologies carry out in adopting and altering the components and historical traces of cinema. By performing formal and technical analyses of the installation pieces by several artists or filmmakers, including Farocki, Aitken, Ahtila, Gordon, Kutluğ Ataman, Candice Breitz, and Stan Douglas, I argue that the hybridization of film and video occurs not simply in the image but also in the apparatus that frames the spatial and temporal qualities of the image and determines the viewer's relation to the image. The film and video installation works of these practitioners are founded on the aesthetic strategies of spatializing and temporalizing cinematic image, technique, and narrative. By demonstrating these strategies, this chapter suggests that cinematic video installations

should be seen as demonstrating not an assimilation of video by cinema or vice versa, but a complex negotiation between the two in the post-media age.

Between “remaking cinema” and “degenerated video art”:

Reframing cinematic video installations

The first type of discourse on cinematic video installations considers them as primarily derived from the term, “cinematic.” Here “cinematic” refers not simply to the material and technical components of the cinematic apparatus (camerawork, language of editing, dialogue, rules of organizing narrative space, the setup of the traditional movie theater, etc.), but also to its cultural, social, and institutional elements that have formed our traditional assumption, memory, and experience of cinema: individual films, their modes of practice such as the classical Hollywood cinema and the European art cinema, the director’s oeuvre, particular genres, forms of moviegoing, pleasures of viewing films, people’s shared memories of the films, etc. These key elements relate to the two views of cinematic video installations as primarily derived, and also dissociated, from the cinema. For the cinema as an institutionalized art form that dominated the last century, cinematic video installations are seen as appealing to a type of nostalgic cinephilia that summons up cinema as an increasingly outdated yet persisting object of individual and collective memories. For the cinema as the sum of heterogeneous materials and techniques, and conventions for shaping particular types of audiovisual narrative, the installations are viewed as the expansion of cinema beyond the conventional formation of the cinematic apparatus.

The term “remake,” which is originally referred to a motion picture based upon a film produced earlier in the contexts of Hollywood cinema and arthouse cinema,¹² serves as a conceptual device to link these two views on cinematic video installation. As Erika Balsom neatly summarizes, in its narrower sense the term refers to a wide range of artworks based on several aesthetic operations for reworking the elements of cinema: (1) recycling

existing footage (the works by Gordon, Breitz, Jennifer and Kevin McCoy, etc.), (2) reenacting a scenario from a film (such as Huyghe's *L'Ellipse* [1998], a juxtaposition of an excerpt from Wim Wenders' *American Friend* (1977) with the newly shot video footage of the film's leading actor Bruno Ganz, now older, acting out a scene that is not included in the original film] and *The Third Memory* [1999, an investigation of the impact of an existing film, in this case, Sidney Lumet's *Dog Day Afternoon* (1975), on the real person (John Wojtowicz) who embodies the event (bank robbery) on which the film was based]), and (3) interviewing a person whose life involved film production [Omer Fast's *Spielberg's List* (2003) and Deimantras Narkevicius' *Revisiting Solaris* (2007)].¹³ In its broader sense, the term "remake" can be applied to a number of artists (Taylor-Johnson, Aitken, Douglas, Parreno, Steve McQueen, Anri Sala, Ataman, Julien, Dominique Gonzalez-Foerster, etc.) or to the arthouse/experimental filmmakers who construct a wide variety of narrative artifacts—whether they are fiction, documentary, or the blending of the two—by transposing the conventions of building the cinematic moving image to the gallery walls with video technologies.¹⁴ Viewed together, the two definitions of remake suggest a great diversity of practices that are not reducible to a limited set of material, technical, and conceptual elements, insofar as the technologies are deeply intertwined with the cinematic in all of their dimensions.

The idea of "remaking cinema" is also reflected in two other terms coined by influential French critics who addressed the transposition and transformation of the "cinematic" in film and video installations that rework the various components of cinema. Jean-Christophe Royoux has termed these installations the "cinema of exhibition" [*"cinéma d'exposition"*], whereby exhibition itself should be seen not merely as a place that contains these installations, but as a medium that enables their existence and operation. From this perspective, the cinema becomes a specific form of "syntax of the exhibition, envisaged (as it all too rarely is) as a specific form of representation."¹⁵ Here, the exhibition as a medium involves a heterogeneous set of the installations' material and technical supports. For this reason, the installations are characterized by the variability of their operations. The "cinema of exhibition" is then viewed as a negotiation between the multiplication of artistic practices and the sustained desire to examine the components and

conventions of cinema both as a particular system of images and narrative and as a social institution. As Royoux comments, “There are numerous ways of achieving this, but the principle is always the same: to produce a kind of intensity by separating, say, the elements that usually constitute a film.”¹⁶

Bellour’s critical work since the 1980s represents the discourses on the overlap of cinema and visual arts and on the inextricable connection between film, video, and the gallery. Besides the well-known term “between-the-images” [“*l’entre-images*”] as outlined in the introduction, Bellour also coined the term “other cinema” [“*autre cinéma*”] in order to describe film and video installations in the light of their post-cinematic ambiguity—leaving behind film’s medium, apparatus, and production system but being preoccupied with and evoking the history of cinema. He writes, “These installations more or less rework the figures from which films have drawn their forms of expression. By both duplicating cinema and differentiating itself from it, the installations thus also make cinema enter into a history that exceeds it.”¹⁷ The introduction of video projection to the art of installation indicates, for Bellour, that celluloid cinema as well as the movie theater for film projection is “destroyed and redistributed,” so that what is being exhibited is “not exactly a film . . . but the equivalent of a film.”¹⁸ Here, video’s technological confluence with film makes it possible to dissociate the projection of film from its traditional setup of the cinematic apparatus while also providing new conceptual and expressive opportunities for its reconstruction outside the theater. This confluence results in a mutable and multifaceted moving image, due to the new linkage between the different images that were previously demarcated by the medium specificities of their corresponding art form—for instance, between cinema and photography, cinema and painting, or cinema and video art. Considering this promiscuity, Bellour characterizes the works of other cinema as expressing the “aesthetic of confusion,” that is, “grasping all the arts as part of one single ensemble and analyzing each work in terms of its mix of different art forms, particularly in terms of media, or the artist’s choice of confining themselves to one mechanism alone.”¹⁹

Despite this diversity of strategies for “remaking cinema” and the “aesthetic of confusion” presented by the resulting “other cinema” works, it is possible to identify a common underlying motivation for cinematic video installations. If “remaking” is seen as a cinephiliac

gesture, then the variety of its strategies and components indicates that cinema has passed into its second stage after its heyday, the first stage being that where cinema stood out as a powerful cultural artifact operating within the theater. For Royoux, the cinema is that which has entailed “the beginning of a second history” characterized by “a dis-intensification of its effect of surprise and novelty” as it entered “early maturity.” The appearance of cinema on television in the late 1950s and early 1960s signaled a moment of the second stage, and a variety of techniques for practicing “remakes” since the 1990s has marked an “inevitable post-cinematic era” which implies “a transferal and a necessary transformation of [film’s] modes of representation.”²⁰ From this point of view, the art of remake is seen as a revival of the historical remnants of cinema and a vision of its possible futures. Païni concurs with Royoux’s insight that remaking evokes and responds to the post-cinematic moment, when he suggests that the growing entrance of cinema into gallery space signals the “patrimony [*patrimoine*]” of the century. The term “patrimony” refers to how cinema has gained value as a cultural heritage that should be preserved, as it has shifted from the “industrial object” to the “art object” since the latter half of the twentieth century. Along with the construction of the *cinémathèque* and the film museum, the film and video installations of remaking cinema are seen as a patrimonial act, treating the cinema as something to be recreated and commemorated.²¹ For Païni, the popularization of new technologies encompassing video and the DVD has an ambivalent effect of endowing the cinema with a patrimonial value. The post-filmic technologies liberate the cinema from its “original terms of birth and finality: projection [in the movie theatre].” At the same time, they allow for the “passage of projection” from the traditional setup of the cinematic apparatus to the gallery space, as they are used to make certain types of installations that consist of one or more channels of the moving image. The work of remaking cinema based on the technologies’ capability to relocate projection, which is called “cinematic video installation” in this chapter, then marks both the historical products of the cinema and the results of its transformation.²²

At the other spectrum of the “remaking cinema” discourses examined thus far, a number of critics or practitioners share a modernist view on cinematic video installations. Here, this view is termed “degenerated video art” because they see cinematic video

installations since the 1990s as sharply differentiated from the film and video installations in the late 1960s and 1970s, which are exemplified by the works of Michael Snow, Paul Sharits, Anthony McCall, Graham, Campus, Nauman, and Joan Jonas, among many. All these artists and filmmakers have been revisited in several renowned exhibitions in the 2000s in light of their endeavors to investigate the material and sculptural dimensions of film and video as a medium and to promote the active and embodied viewer as an alternative to the passive, disembodied spectators of the standardized cinematic apparatus.²³ As Iles comments, building on Minimalism's phenomenological approach or on the aim of structural/materialist filmmaking to critique the cinema's illusory mechanism, the practitioners' film and video installations invited "participation, movement, the sharing of multiple viewpoints, the dismantling of the single frontal screen, and an analytical, distanced form of viewing."²⁴ Accordingly, they deployed multiple film projectors or video screens on and inside the gallery walls to draw the viewer's attention to the physical attributes of the moving image (camera, screen, the sculptural dimension of the projector beam, the implementation of video monitors as extensions of the televisual apparatus, and the exhibition space) and to call into question the "boundaries between public and private space, between the artist's studio and the gallery, and between artist, artwork, and viewer."²⁵

The switch to the cinematic video installation in the 1990s in Iles's periodization was congruent with the transition from smaller-scale, black-and-white video images to large-scale high-definition video images. As expressed by Catherine Elwes, "The video monitor . . . with the three-dimensionality of the box was lost and replaced by the spectacular, immersive experience of the cinema, sometimes enhanced by comfortable seating."²⁶ From this point of view, the use of a darkened room with diverse screen formats and various ways to transfer and transform the moving image since the 1990s has allowed artists and filmmakers to dislodge cinematic projection from its conventional theatrical settings. Moreover, just as cinematic video installations have recycled existing fragments of film or exploited a panoply of film forms, so their images could satisfy the visual abundance of pictures and the realist appeal of narrative cinema in contrast to the low-quality electronic image that characterized early video art. Neither a radical experimentation with the filmic apparatus and viewing process in the structural/

materialist film nor a deconstructive critique on the television medium in the early video art, this type of installation, according to Iles, “envelops the viewer in a more inclusive sensory experience . . . away from the object and towards a more internal, psychological experience, in which space is no longer tangible and theatrical but illusory and filmic.”²⁷

In my view, this observation of the differences between the film and video installations in the 1960s and 1970s and the cinematic video installation since the 1990s is problematic as it tends to establish a set of binary oppositions: three-dimensionality (of the media apparatus) versus two-dimensionality (of the image space), sculptural versus pictorial, materiality versus immateriality, interactive versus passive, low-fi technology versus high-definition (state-of-the art) technology, conventional cinematic viewing versus perambulatory viewing through the exhibition space, physical space versus illusory (narrative) space, time as the viewer’s durational experience of the work (real time) versus time as rendered fictionally in the work’s image (imaginary time), critical distance versus immersion, etc. Art critics such as Liz Kotz and David Joselit, as well as avant-garde film historian A. L. Rees have acknowledged these dichotomies. For Kotz, the growing popularity of video projection, and concomitantly the repression of the TV monitor, warns us that video has lost its material, physical, and procedural characteristics and has “been assimilated back into older filmic conventions.”²⁸ Joselit echoes Kotz’s negative view on video projection as follows: “Projection undermines one of the most progressive effects of the closed-circuit apparatus: its conceptualization of spectatorship as interactive. . . . Projection reintroduces a more conventionally theatrical mode of spectatorship in which the audience remains outside the media feedback loop rather than participating as actors within it.”²⁹ Kotz’s and Joselit’s references to Graham, Campus, Acconci, Jonas, Sharits, Snow, etc., concur with Rees’s evaluation of British expanded cinema and video art in the 1970s as “experiential,” “process-driven,” “material,” and “situational.” Upholding the aspirations of the UK Structural/Materialist filmmakers (such as Peter Gidal and Malcolm Le Grice) to disrupt the standardized cinematic apparatus and thereby elicit the viewer’s critical awareness of it, Rees sees the present-day video installation derived from cinema as narrative driven, immersive, and spectacular, in that “the film viewer is less a spectator than a passing visitor, whose freedom

to come and go is gained at the cost of a durational and overall experience, or one that calls for concentration.”³⁰

These dichotomies suggested by the critics are linked to an opposition between the “phenomenological” and the “virtual” framing in current discussions of moving-image installations and their spectatorship in contemporary art criticism. The panelists who participated in *October’s* round table discussion in 2003 on the burgeoning of film and video installations in contemporary art galleries contributed to reinforcing this opposition. The term “virtual” refers to a tendency by contemporary installation pieces to create “an aesthetic of emotional and psychic intensities”³¹ by relying on the illusory power of painterly, photographic, and cinematic representations. Hal Foster, a participant of the round table, calls this aesthetic tendency a “rampant pictorialism or virtualism” in contrast to the “phenomenological” works that aimed at “treating film reflexively, thinking about process, working with the apparatus.”³² Thus, this tension between the “phenomenological” and the “virtual” underscores a particular assumption shared by Foster and other panelists in their view on the migration of the cinematic into the gallery space: they repeat the conventional view of the “apparatus theory” that considers cinema as a set of technical and ideological operations that impose on spectators an immobile, sedentary viewing position in which they identify with the images detached from their body. Seen in this light, cinematic video installation, characterized by the viewer’s frontal positioning in front of its screens and its two-dimensional projected images within darkened rooms, is no more than the transposition of the normative cinematic settings and viewing conditions into the museum.³³

Admittedly, the contrast between the phenomenological (material and sculptural) and the virtual (pictorial and narrative-centered) provides a valuable framework to observe how moving-image installations since the 1990s have been aligned with cinema and how they could be compared to their predecessors in the 1960s and 1970s. However, it should be noted that the critics and theorists who set up this oppositional model are not liberated from the reductive understanding of the relation between viewer, media technologies, and space in regard to moving-image installations. As Kate Mondloch notes, their direct association of the viewer’s mobility with embodied, active, critical viewing experiences, which goes hand in hand with

their accusation of the standardized cinematic viewing situation of being disembodied, passive, and uncritical, “fails to account for the curious doubleness structural to screen-reliant media installation spectatorships, a spectatorship characterized by a wavering *between* ‘the virtual’ and ‘the real.’”³⁴ That is, just as the viewers’ physical mobility in the gallery space does not necessarily guarantee their critical reflection on the material, sculptural, and processual aspects of installation work, so their sedentary positioning vis-à-vis a standardized single-channel rectangular screen, albeit evoking the conventional cinematic viewing situation, does not always lead to their total immersion in the work’s image space, let alone turn their attention from the structure and operation of the work’s apparatus. Against this dualism in which virtuality is anchored to film in contrast to video as a medium peculiar to embodied viewing, Mondloch proposes to understand media installation art and its spectatorship as simultaneously “material (the viewer’s phenomenological engagement with actual objects in real time and space) and immaterial (the viewer’s metaphorical projection into virtual times and spaces).”³⁵ Seen in this light, while cinematic video installations primarily explore the impact of the cinema’s image and narrative on the viewer’s subjectivity by drawing his/her attention to the action and event in the screen space, this does not necessarily mean that there is no phenomenological—perceptual, physical, durational—dimension in the viewer’s relationship to the work.

Thus, the opposition between the “phenomenological” and the “virtual” could essentialize the modernist formation of video technologies as canonical video art, which consists of the low-fi monitor, the closed-circuit device, and the awkward electronic image space. To draw on Yvonne Spielmann’s view once again, the practitioners who support this dualism refer to the difference between video as a medium defined by a set of artistic practices based on the self-reflexive investigation of its properties, and video as a technology concerned “with other media forms” including cinema.³⁶ This position gives video only limited significance while dismissing its increased integration with cinematic forms and techniques, influenced by digital convergence, as being promiscuous. The dominance of projection is then frequently viewed as degenerating video from a medium to a tool for incorporating multiscreen cinemas, arguing that in this stage, the “differential specificity of video vis-à-vis film (and vice versa) all but disappears.”³⁷ As I argued

in Chapter 1 regarding videographic moving pictures, however, the material and technical specificities of video do not entirely disappear but are displaced due to video's technological changes and new uses. Considering this, it is obvious that the critics and theorists of the phenomenological/virtual dichotomy overlook two points concerning the issue of defining video as an artistic medium: first, there has been no successful attempt to relegate video to a limited set of artistic forms, and second, the forms of video art have been expanding and are flexible due not simply to its intersections with other arts, but also to its technological innovations. This dichotomy becomes weaker considering that cinematic video installations adopt and explore several key features that the critics and theorists regard as essential to video as a medium, such as three-dimensionality, physical space, and the viewer's mobility. It is argued here that these critics and theorists neglect to further speculate how the artists of cinematic video installation are consciously or unconsciously indebted to their precursors, as well as how they adopt the technological changes of video (such as its spatial and temporal attributes) and have increasingly converged them into the components of cinema in the digital age.

Taken together, both "remaking cinema" discourses (except Bellour's accounts of the "other cinema") and the views on cinematic video installation as "degenerated video art" overemphasize the cinema in their respective understanding of cinematic video installation, as they obscure video's implicit operations within its temporal and spatial structures: just as the former sometimes evades discussing video by regarding this type of installation as an immediate expansion of cinema, so the latter ignores video by denouncing it as a contaminated technology infected with and catering to cinema. In order to overcome these two shortcomings, we need to consider the relation between cinema and video in this installation as an interplay, rather than the total appropriation of the latter by the former. This means that it is not possible to assign an absolute prioritization of one medium over the other in this hybrid formation of media installation. Seen in this light, video in this formation serves as a nodal point in which cinema's digitization and the historical change of video art converge, or in which the transformation of cinema negotiates the mutation of film and video installation in the gallery. Balsom argues that the existence of the cinematic in the gallery, encompassing not just film and video installations but also exhibitions dedicated to

histories of cinema,³⁸ can be seen as “both *a part of* and *a reaction to* the increased mobility of images stemming from convergence.”³⁹ From this viewpoint, it is possible for us to discern the ambivalent ways in which video technologies serve to transform cinema and transfer it to the platform of exhibitions. Given the crucial role of the high-definition projector and other computer-based projection systems in shaping and spreading cinematic video installations, video technologies become part of digital convergence. In so doing, they are fused with cinema and take it to other cultural arenas beyond the movie theater. On the other hand, video technologies are also adopted to *react to* these phenomena, marking cinema as a lost or obsolete object to be commemorated. Taken together, these two directions suggest that we need to “relinquish the old fiction of the purity of media to interrogate the new aggregates cinema enters into today,”⁴⁰ concludes Balsom. To add to her argument, the purity of video art must also be demystified when we take a closer look at how video enters the “new aggregates” of which cinematic components is a considerable part. Understanding this aggregative condition involves an investigation of the material and technical specificities of video that have been channeled not into the modernist self-reflexive inquiry of video, but into the few major forms of “remake,” including the use of found footage, reenactment, and new narrative artifacts of engendering a perambulatory and fractured spectatorship in multiple times and screen spaces. These specificities, as shall be demonstrated in the following section, are concerned with how video technologies have served to organize and transform the spatiotemporal dimensions of the moving image and the viewer’s relation to these dimensions in ways that differ from the standardized cinematic apparatus.

Concerning the form and spectatorial mode of cinematic video installations, the most prevailing view is to see them as spatializing time in two ways. The first spatialization indicates that installing the moving image in the gallery endows the viewer with the freedom to determine, to use Mondloch’s term, “exploratory duration,” a length of time spent on viewing the work in ways “unburdened by externally imposed timetables” as in the cases of institutionalized cinema and television.⁴¹ Maria Walsh also uses the term “peripatetic mobility” to describe the “mobile trajectory of the gallery spectator who enters the space at an arbitrary point in the film, leaves at any time or stays and watches the replay of the loop.”⁴² The second

spatialization refers to a range of strategies for presenting the times of images in ways unavailable with the standardized cinematic apparatus, including multiplication, fragmentation, parallelism, looping, etc., by adding spatial parameters to the temporal features of cinematic image and narrative. Art critic Daniel Birnbaum comments on Ahtila's narrative experiments via multiscreen video projection as "an attempt to 'install time' in space."⁴³ Royoux also identifies a few technical and aesthetic strategies to provide the "immobile duration," ranging from Gordon's landmark slowing-down of Hitchcock's *Psycho* (*24 Hour Psycho*) to Gonzalez-Foerster's eight-minute tracking shot of Kyoto transferred to video in *Riyo* (1999), whereby the viewer enters and inhabits the exhibition structure.⁴⁴ All these accounts derived from the "remaking cinema" discourses tend to celebrate the two methods of spatializing time—that is, translating the time of viewing the moving image into sculptural, physical, and architectural terms, and foregrounding and transforming the time of the image—as radically liberating the formation of cinematic narrative and subjectivity from the confines of the normative filmic apparatus. Birnbaum encapsulates this view by arguing that the simultaneity of several flows of moving imagery in the multi-projection installations of the "other cinema" artists (Ahtila, Aitken, etc.) grants "the possibility not only of dense and temporally multi-layered imagery, but also of intricate constellations and juxtapositions."⁴⁵

However, it is argued here that the possibility for rendering the cinematic moving image to be multiplied and nonlinear in spatial terms is indebted to the conventions of video installation in general as a quintessentially spatial and temporal art form. John Conomos succinctly refers to this point: "Irrespective of the different material objects, video installations underscore the *spatio-temporal passage* which the body of the museum visitor has to traverse in order to negotiate them as complex, hybrid art forms."⁴⁶ In fact, Conomos's argument is mainly indebted to Margaret Morse, who claimed that video installations since the 1970s have been representative of the "presentational arts" rather than the more traditional "proscenium arts," in that they allow their visitor to occupy and experience a "*spatial here-and-now* enclosed within a construction that is grounded in actual space."⁴⁷ This *here-and-now* serves as the ground on which the visitor is asked to physically and psychologically interact with the installation's different—pictorial, performative,

sculptural, etc.—modes of presentation, while also laying the groundwork for a couple of temporal operations associated with two key categories of video installation art: first, “closed-circuit video” that plays with “*presence*,” and second, “the recorded-video art installation that can be compared to the spectator wandering about on a stage, in a bodily experience of *conceptual propositions and imaginary world, of memory and anticipation*.⁴⁸ In either case, video installation works favor the here-and-now as where the viewer visually and kinesthetically experiences the interplay between the three-dimensionality of the apparatus and the two-dimensionality of the image. Conomos’s and Morse’s views help us to overcome the dichotomies of the “degenerated video art” discourses and to see the extent to which the material and technical dimensions of video are implicitly at play in the projection of cinematic video installations in the gallery.

Paini’s assessment of the multichannel cinematic video installations by Aitken, Ahtila, and Taylor-Johnson supports the need to consider the spatiality of cinematic video installation as the fusion of the film spectatorship based on the viewer’s physical immobility (including the need to overcome it) and the implementation of media apparatuses in the gallery that has promoted the visitor’s physical mobility since the early development of film and video installation. In contrast to the other critics’ oversimplified optimism about the mobile viewing of installations as being liberated from the temporal and spatial constraints of the standardized cinematic apparatus, or to their underlying dichotomy between the cinema spectator as passive and the viewer of the installations as active, Paini observes how the perambulatory viewer’s spectatorship is predicated upon the tension between identifying with the illusory image of the installations and embodying its in-frame space and surroundings: “This renewed physical freedom is no doubt only an illusion since in one way it is very much of the correlative of the emphasis on the individual as consumer of advertising and art.”⁴⁹ He is right to suggest that the viewer’s physical mobility alone does not sharply contrast the immobility of the cinema spectator but rather resembles window-shopping, namely, the experience of consuming images on the move that the montage and camera movement of cinema created and amplified in accordance with the development of the metropolis and its commodity culture since the late nineteenth century.⁵⁰ At the same time, Paini coins the term “visitor-spectator”

[“*visiteur-spectateur*”] to describe how the mobile spectator has a different relation to the image than the immobile viewer with the standardized cinematic apparatus: “This mobile spectator has a variable vision of the size of the screen and is inclined, not to identify with the lives of the fictive characters, or to merge illusorily into the space of the set, but to enter the image.”⁵¹ Seen in this light, the spatiality and spectatorship of cinematic video installations are ambivalent: their viewer cannot be firmly described as either mobile or immobile insofar as he or she is compelled to continually oscillate between the viewing experience of mainstream cinema (he or she must remain frontal to the screen) and that of multichannel video installation (he or she must move from one screen to another, or find a vantage point from which he or she is able to see the relationship between the screens, and between them and the gallery space). Bellour certainly touches on the ambivalent nature of Païni’s concept of the spectator–visitor: “The works fixates that which one could call its visitor—but there is no right word with which to grasp this dissolved, fragmented, shaken, intermittent spectator.”⁵² Consequently, both Païni and Bellour suggest that video projection, albeit modeled after the cinematic apparatus, plays a particular role in the ambiguity of the spectatorial mode, intersecting the “spatial-here-and-now” (Morse) offered by video technologies with the illusory power of the cinematic image enhanced by them. This intersection can be observed in a number of contemporary artworks that present video’s *spatialization* of the cinematic components, including those by Farocki, Ataman, Aitken, and Ahtila.

The hybrid spatiality of cinematic video installations also relates to the ways in which video complicates the temporalities of the image, although the image resembles the filmic image at first sight. Païni has also seen how the projection of the cinematic moving image in the gallery, including the work of cinematic video installation, activates the collision of two temporalities that the “visitor-spectator” experiences simultaneously: a collision between the temporality of his perambulation and the manifestation of the temporality developed by its image.⁵³ Morse similarly identifies the two temporalities that ensure that video installation remains a form that unfolds over time: “the time a visitor requires to complete a trajectory inspecting object and monitors, [and] the time a video track or a poetic juxtaposition of tracks requires to play out, or the time for a track to wander across a field of monitors.”⁵⁴ While inheriting this overlapping of

the two temporalities from early video installations in the 1960s and 1970s, cinematic video installations undermine what Boris Groys proposes as two traditional models that allow for the viewer's control over time: the "immobilization of the image in the museum" and the "immobilization of the audience in the movie theater."⁵⁵ In the traditional museum that displays static artworks such as paintings and sculptures, the viewer is able to determine the amount of time spent on observing the artwork. Because the duration of moving-image installations is ultimately out of viewers' control, such installations rob viewers of their freedom to make an aesthetic judgment in an undetermined time of contemplation. Viewers then realize that they cannot decide where these works begin or end, thus "either to stay put or to keep moving . . . [their] choice will always amount to a poor compromise—which will later need to be repeatedly revised."⁵⁶ From the standpoint of cinema, video technologies facilitate the incorporation of the moving image into the gallery space, but they dismantle the movie theater's temporal setup that forces the viewer to stay during the entire film's running time. Seen in this light, cinematic video installations often presuppose the "viewer's lack of control over the duration of [the] attention"⁵⁷ spent on the moving image. This lack of control is particularly obvious in a group of pieces in which digital video *temporalizes* film fragments in ways that introduce to them a sense of uncertainty, inaccessibility, and interminability.

Strategies of spatialization: Farocki, Ataman, Aitken, Ahtila

Spatialization refers to a series of formal and conceptual strategies coupled with specific uses of video technologies in the gallery space to rework and expand cinema's spatial parameters that shape and delimit cinema's time-based unfolding of image and narrative as well as its mode of spectatorship. The term is used here to distinguish myself from the critics who celebrated the mobility of the gallery viewer as being liberated from the immobility of the cinema spectator in two ways. First, whereas the critics see video projection as spatializing only the duration of the film image (as in the case of Birnbaum's concept of "spatializing duration"), the

idea of spatialization here refers to other cinematic components, including framing, montage, and narrative space, remediated by the operation of video technologies. Also, the technological elements of cinematic video installations include not merely a projector of which the resolution is upgraded such that it meets the definition of the film image, but also video's sculptural and architectural elements, such as multiscreen environments for breaking a single viewpoint, the sculptural deployment of the projector and the screen (whether the film screen or the monitor), and the decentered, participatory, and embodied conditioning of the viewer. Cinematic video installations inherit these technological elements from the film and video installations of the 1960s and 1970s. Rather than manifesting those elements as video's unique properties in a self-reflexive manner, however, the artworks use those elements to promote the visitor's awareness of the cinematic components that they relocate into the gallery space. Catherine Fowler views film and video installation works in the gallery, such as pieces by Ahtila and McQueen, for instance, as the intersection of "in-frame" (elements of framing, mise-en-scène, and editing) and "out-of-frame" ("a connection to the space outside the frame").⁵⁸ To disrupt the norms of mainstream narrative cinema, these works explore some formal experiments originated from avant-garde film practices, such as nonlinear and multi-temporal narration, repetition and looping, and temporal manipulation via slow motion and freeze-frames. They also extend these strategies to the exhibition space beyond the illusionist confines of the film theater, wherein the framed space of the film image is given full attention by the foregrounding of its ends and edges: "Once the frame is connected to the space outside it can be read centrifugally," Fowler writes, "but the extension of the framed space is, once again, not out into the fictional/real world but rather into the gallery space."⁵⁹

Fowler's argument is valuable as she pays attention to the continuum between the cinematic elements and the spatial and perceptual structure of the exhibition in ways that do not assume the "cinematic turn" of the film and video installation since the 1990s as the mere adoption of the theatrical mode and of the spectacular, narrative-centered form, as in the cases of the modernist critics. Nevertheless, it should be noted that Fowler does not provide a concrete technical and aesthetic analysis of the "out-of-frame," presupposing its dimension as the exhibition space alone and

bypassing other parameters of media installation that incorporate and reframe the “in-frame” components of the cinematic image and narrative, such as material, size, space, placement, the number of screens, their technological structure and operation, and the screens’ relation to the architectonics of the exhibition space. Considering this shortcoming, in the context of cinematic video installations, it is necessary to identify the material and technical components of video that construct the “out-of-frame” space and spatialize the components of the “in-frame” space. With this in mind, I shall tease out two interrelated strategies of spatializing the cinematic components with video technologies as follows: the theatricalization of the image and apparatus, and the architectural deployment of screens.

The first strategy is indebted to Duguet’s concept of “theatricality,” which she refers to as the “*mise en scène* of the moving image.” She notes that video installations since the 1960s have developed different methods of theatricality. If the installations of early video art present monitors and videotapes as the tangible objects of the moving image, then those of the 1990s allow viewers to experience their image as screen based. In both cases, Duguet states, the moving image is “not only a two-dimensional space, but involves architecture as an extension of the image.”⁶⁰ She further suggests that in both methods of theatricalizing the image, video technologies play a pivotal role in producing a new aesthetic experience of the image under “the concept of hybridization” by serving as an interface that allows viewers to “connect, to confront, or to translate elements of a different nature into one language.”⁶¹ Seen in this way, cinematic video installations are grounded in the alliance between two types of “theatricality,” each concerned with cinema and video: a new theatrical staging of cinematic tropes, devices, and effects that are extended into the viewer’s physical and psychic experience in space, and video installation’s tradition of staging the electronic image as a constitutive part of the architectural environment. If we associate Duguet’s concept of theatricality with Fowler’s terms, then the extension of “in-frame” space into “out-of-frame” space can also be seen as theatricalizing cinema, namely, adopting and varying the parameters of video installation to define the spatial relationships between the image and the viewer, and between the apparatus and its environment. In the works by Harun Farocki and Kutluğ Ataman, this theatricalization of cinema also involves theatricalizing

the apparatus of video in the forms of three-dimensional objects, thereby leading to a dynamic hybridization of the two media.

The first strategy, theatricalizing the apparatus, necessarily implies the architectural deployment of screens as the second strategy of spatialization. Despite her negative view on cinematic video installations since the 1990s, Kotz acknowledges that video projection, albeit propelling the migration of cinematic narrative forms into the gallery space since the 1990s, is in some senses indebted to the closed-circuit video and video sculpture of the 1970s. She writes that contemporary video technologies utilize “the televisual capacity for the profuse diffusion of images” as much as the closed-circuit video, in response to those images’ “mutating relation to new forms of architectural space and subjectivity.”⁶² Focusing on the transition from close-circuit video to interactive video installation, Kathy Rae Huffman similarly notes: “A prepared physical environment was integral to the understanding of the electronic space being created with video technology.”⁶³ Kotz’s and Huffman’s views suggest that while incorporating the cinematic image and narrative, video projection does not entirely jettison other relations that have constituted video installation as an art form. Video’s privileged link to television has been weakened by projection, but its propensity for connecting its image and apparatus to the surrounding architecture is still at play in the works of Pipilotti Rist, Jane and Louise Wilson, and Ryan Trecartin, to name just a few.⁶⁴ This point also relates to the shift in the technological system that produces the video image: the monitor in the closed-circuit video installation restricted the scale of its image to its material boundaries, but the video projector’s capacity to deploy screens makes the image scalable and dimensionally variable, to the extent that the viewer cannot observe the entire structure of video images and screen spaces at a single glance and in a sedentary position. This is particularly applied to the type of cinematic video installations exemplified by Doug Aitken and Eija-Liisa Ahtila. For the two artists’ works foreground multiscreen interfaces as a way of distributing images in close dialogue with the architectural space. In this second type of spatialization, it is hereby argued that video’s material and technical specificities with respect to its three-dimensional surroundings are not eliminated but maintained. In Aitken’s and Ahtila’s works, however, these specificities are not channeled into a self-reflexive inquiry into video for the sake of reasserting its hitherto sustained expressive boundaries; rather,

the two artists use video's association with architecture to renew the images' montage and narrative space originated from cinema, whether the narrative is fictional or documentary, and to explore the images' psychological and affective impact on the viewer outside the normative cinematic apparatus.

Farocki's media installation pieces since the late 1990s are exemplary of the spatialization of montage by theatricalizing multiple monitors or projectors. As Thomas Elsaesser clearly summarizes, the evolution of Farocki's work from the cinema based on the principle of montage to media installation art has two interrelated implications. On the one hand, the implementation of video screens or monitors allows Farocki to overcome the sequentiality of filmic montage, which produces only a metonymic association of two temporally contiguous images, and to achieve "a mode of simultaneous multi-dimensional thinking."⁶⁵ Seen in this light, the screens or monitors are means to expand on Farocki's conceptual arrangements of existing or recorded material in such metaphoric ways that one image functions as a commentary on, or supplement to, the other, beyond the limit of the conventional single frame wherein one shot must appear as the substitution of the previous shot.⁶⁶ On the other hand, Farocki's deployment of the screens and monitors as the three-dimensional tangible media object serves as a type of metonym for post-cinematic media. Before his death, Farocki was preoccupied with investigating how these media permeate and structure the social, cultural, military, and everyday lives of our contemporary society, and how the image produced and circulated by these media "has withdrawn itself from the visual plane and escapes traditional representation techniques, including those of cinematic montage."⁶⁷ The media, namely the electronic and digital "vision machines,"⁶⁸ produce specific images as the scientific, educational, or administrative instruments that function to set in motion social workplaces, such as factories, laboratories, prisons, the military, shopping malls, and entertainment industries. To use Farocki's own terms, these images are characterized as "operational images," "prosthetic images," "surveillance images," "data images," etc.⁶⁹ These images internalize the ways in which the vision machines collect, display, and circulate the information in society and control human sensorium with their artificial eyes and spatiotemporal logic. In this sense, the media objects in Farocki's installations present themselves as extensions of the machines, reminiscent of

multiple monitors in the surveillance room or multiple windows in the computer-based control panel.

Due to its theatricalization of the image and apparatus, Farocki's installation work in some sense recalls the video installation works by Graham, Nauman, and Campus. His pieces operate within and configure the larger structure of electronic media to which both video artists critically responded. In this sense, Farocki asks us to perceive the video installation in the post-cinematic age as not totally being distanced from the tradition of modernist video art. Still, he performs this critique not by using the loop of live transmission or the closed-circuit system blurring the boundaries between its gaze and the observer's look, as in the cases of Graham, Nauman, and Campus, but by using the montage tropes that stitch together distant images in order to underline the assimilation of the human eyes into the automated, artificial field of vision. The viewer of the pieces, then, is granted the opportunity to aesthetically contemplate the operation of the post-cinematic apparatuses as though he/she were in front of them, thereby recognizing that the operation does not reside solely in the apparatuses' technological dimension but is coextensive with that of the workplaces as social institutions.

In his *Eye/Machine I, II, and III* (2001–03, Figure 5.1), Farocki provides a detailed analysis of "operational images," in this case



FIGURE 5.1 Harun Farocki, *Eye/Machine I, II, III* (2001, 2002, 2003), double-channel video installation, installation view, Kunsthaus Bregenz, photograph: Markus Tretter, courtesy Harun Farocki Filmproduktion.

images produced for different instrumental purposes—military surveillance, medical operation, and the automation system in a factory—and given no aesthetic values other than functional and technical. His side-by-side montage trope is initially intended to provide a comparison between different types of machines that produce their own functional images, and thereby to reveal an array of common technical operations embedded within the images: for example, the video-tracking system, which allows for the automatic monitoring of moving targets, was used for aircraft bombs in the Gulf War, for the robot controller in manufacturing, for military simulation testing sectors, and for endoscopes in operation rooms. The images produced by this system are all processed and altered by the computer's simulation and algorithm, of which the perception and gaze resemble but do not involve human hands and eyes. Farocki's montage therefore takes a genealogical approach to these operational images created and processed by the digital apparatuses, as he juxtaposes the images of an unmanned aircraft during the Gulf War with the footage of human hands dealing with a machine's components on the conveyor belt, and with the images of a missile targeting system from the newsreel during the Second World War. The two categories of montage—a comparison between different digital images, and another between the digital images and the analogue/manual operational images—become more effective in his double-screen installation version in two ways. First, for gallery visitors, the spatialized presence of two images, particularly two video and digital images, evokes different faces of the post-cinematic apparatus that form their contemporary viewing situations and subjectivity, including video monitors constantly replaying images as information, and surveillance cameras working for the disciplinary control of society on a microscopic scale. By removing all the operational images from their original contexts and placing them in the circuit of technical and functional associations, the double-channel spatial configuration alludes to the larger structure of contemporary media in which different instrumental systems of representation converge.⁷⁰ Second, within this configuration, the viewers recognize themselves as a potential operator of these images, insofar as Farocki's tropes of montage position them as though they were on an informational panel of digital interfaces. For example, in the scene in which military simulation systems are being tested, the viewers see a sequence of the operator's work side

by side with the graphic simulations of weapons and the images from the footage taken with cameras installed in the weapons. Seen in this light, the viewers' activities during their observation of the installation, including shifting focus from the left monitor (or projected image) to the right monitor and keeping their eye on the two monitors and their image tracks, resemble those of the simulation operator, who must be trained to match his eyes and hands with his immediate intellectual processing of information. As Christa Blüminger notes, by placing itself as a "theatre of seeing and perceiving," the installation allows its viewer to make "a kind of performance out of the montage."⁷¹

Deepening his exploration of the transition of image and montage from the cinematic to the post-cinematic era, Farocki's two-channel video installation, *Counter-Music* (2004, Figure 5.2), integrates a number of films built on the portrayal of the modern city—so-called "City Symphony" films, such as *Man with a Movie Camera* and *Berlin: Symphony of a Great City* (Walter Ruttmann 1927), a short extract from a US science fiction movie *Fantastic Voyage* (Richard Fleisher 1966), and fragments from industrial films—with the footage on contemporary urban life, including video-surveillance material (of streets, windows, rooms, and culverts), computer-generated images (infrared pictures of a



FIGURE 5.2 Farocki, *Counter-Music* (2004), double-channel video installation, installation view at Kunsthaus Bregenz, 2011, photo by Markus Tretter, courtesy Harun Farocki Filmproduktion.

building's entries, information graphics showing the data of the surveillance footage, architectural simulations, etc.), and images he took in Lille, France. While this selection and distribution of the two threads thematically corresponds to his *War/Machine* trilogy, Farocki's principle of organizing them differs somewhat from the trilogy: if *War/Machine* sets up a historical connection between the cinematic and the post-cinematic images in terms of the automation of human vision, then *Counter-Music* contrasts these two images according to the role of montage in characterizing their different states. While Vertov's and Ruttman's "Urban Symphony" films of the 1920s organize the visible world according to the principles of montage that require an image to be supplemented by others, the footage drawn from our postindustrial urban society lacks the "counter-shot." As Blüminger notes, this difference is related to one between the city governed by the collaboration of man and machine in the industrial age and today's urban environment controlled by the automated circulation and calculation of information in the digital age: "The perspective of the industrial film shows the working of machines as a result of the physical intervention of the workers, while the shots from the video-surveillance center indicate the superiority of a mechanical sight that can increasingly regulate itself."⁷² Seen in this light, Farocki's deployment of the two projection surfaces materializes the comparison between the two regimes of images in the three-dimensional space.

Exemplifying the theatricalization of the image and apparatus, Ataman's multichannel video installations since the late 1990s investigate the lives and histories of various social subjects in Turkey. Along with his use of projectors and LCD screens, Ataman often deploys monitors and TV sets to subvert the authentic and objective assumption of documentary filmmaking, disrupting the boundaries between actors and interviewees, and between the real (the camera's inscription of reality) and the fabricated (screenplay and editing), staging a tension between individual and collective identities, and foregrounding the process of deconstructing and rebuilding the truth of the past.⁷³ Intersecting with an array of formal strategies derived from the participatory and self-reflexive modes of documentary (such as a handheld camera, the social subject's direct address to the camera, and the disjunction between sound and image), these various deployments of multichannel screens create forking and complicated stories that surpass the

viewer's easy comprehension. While Ataman's works represent a documentary tendency of remaking cinema by theatricalizing these formal strategies of documentary and creating the multiple narrative spaces that go beyond the confines of the traditional cinematic apparatus, some of his works have a notable relation with video sculpture and video art's traditional link to television.

Ataman's *Column* (2009, Figure 5.3), a work of his *Mesopotamian Dramaturgies* series, is a video sculpture that is comprised of forty-two used TV monitors, with each one showing the facial expression of a villager from East Turkey who remains silent. While maintaining the individual differences in age, sex, occupation, etc., the monitors draw the viewer's attention to how all the villagers converge in their collective identity as the people who were forced to be silent in the political and cultural oppressions throughout the history of the region. This exchange between the individual and the collective, as well as the sense of intimacy offered by the social actors' direct address to the viewers of the TV monitors, dates back to Ataman's massive-scale multichannel installation *Küba* (2005, Figure 5.4), in which each of the forty used television sets displays an interview with a resident of Küba, an area of Southern



FIGURE 5.3 *Kutluğ Ataman*, Mesopotamian Dramaturgies: Column (2009), exhibition photo: Tanas, Berlin, 2008, courtesy of the artist.



FIGURE 5.4 Ataman, *Küba* (2005), exhibition photo: LENTOS MUSEUM, LINZ, 2009, courtesy of the artist.

Istanbul that serves as a shelter for a diverse group of marginalized people. Ataman placed a single armchair in front of each used set, allowing the viewer to have an intimate relation to each unique narrative presented on the screen and drawing his or her attention to television's domestic setting as the foundation of its social and cultural spectatorship. As the viewer moves through the space from one armchair to the next, he/she interweaves the different personal stories into a narrative of their unexpected commonalities. Therefore, the viewer's perambulatory mapping of the narrative testifies to the capacity of video technologies to spatialize all the durations of the individual testimonies while also leading to a construction of their shared identity. This double process is indebted to Ataman's theatricalization of television not simply as a three-dimensional object, but also as a social apparatus that shapes its spectatorship as being both atomized and collective.

With their various architectural uses of screens, Aitken's cinematic video installations go beyond the sequential ordering of time in the single-screen cinema and instead explore a heterogeneous temporality of narrative, one marked by an intricate web of nonsynchronous durations, each of which develops its own event in a different place with its own rhythm and pace.⁷⁴ The stories presented by Aitken's pieces reside in a world of constant flux, where different spaces, bodies, animals, or human beings are presented as fleeting, disappearing, and recurring. In both *electric earth* (1999,

Figure 5.5) and *blow debris* (2000), for example, protagonists (an African-American youth named Ali Johnson and four people on their separate journeys, respectively) travel through the urban wastelands and suburban desert landscapes of Los Angeles, looking as though in a state of dream, physical disorientation, or mental disorder. They act as the personification of a human subjectivity of which consciousness is not self-determined, but always altered by its decentered encounter with the sites and surroundings of constantly changing elements.

Aitken's configuration of the fractured subjectivity and heterogeneous temporality involves a strategy of distributing projectors and screens into the architectural environment of the exhibition space and dividing a single room into multiple projection surfaces, or requiring multiple rooms. This compositional plan produces a range of effects on the viewer's perception of the cinematic technical elements, including framing and montage, which Aitken employs to express his characters' subjectivity and the multiple temporal planes across which they drift. The individual images, albeit separated from each other, create a spatial diegetic continuum in which the characters move through, or appear simultaneously on, two adjacent projected surfaces or two different rooms, as when in *electric earth* the protagonist's automated and spasmodic dance, after his aimless walk and encounter with a Coke



FIGURE 5.5 Doug Aitken, *electric earth* (1999), installation view, eight-channel video installation, dimension variable, photo: Gert Jan van Rooij, courtesy of 303 Gallery, New York.

machine refusing to accept his dollar bill, is seen spread across different locations ranging from a Laundromat to an empty runway to a show window. Even a small group of shots that constitute a short sequence are frequently arranged in a number of different permutations, making the characters and settings travel from one screen to another. This spatial and temporal disorientation is in sync with Aitken's uses of elliptical editing and sound-image disjunction, two methods of cinematic montage that aim to destabilize the spectator's relationship with the space and time of the narrative. Seen in this light, Aitken's plan for deploying the screens inside the gallery space—including questions about how many projectors or monitors are needed, on what positions they are put—is less a backdrop against which the nonconventional editing is made visible, than an integral part that constitutes its process. That is, it is the result of the direct spatialization of cinematic montage. In *electric earth*, Aitken's polyphonic, multi-temporal narrative structure is made possible not just by the transposition of these cinematic techniques onto eight screens, but by the constitutive role of the three rooms (with the central one divided in two) in distributing images. The rooms create a sense of separation between the eight screens, therefore allowing the viewer no single vantage point from which he or she would be able to observe their images at the same time and place. More than spatializing the durations of the images on the eight screens and amplifying their audiovisual stimuli, this separation demands the mobile spectatorship, compelling the viewer to walk amid the images from one room to the other and enabling him/her to physically and psychically embody the protagonist's sense of spatial and temporal disorientation. Aitken has called this architectural spatialization of his narrative a "narrative corridor," by which he means that a narrative "can exist on a physical level—as much through the flow of electricity as through an image."⁷⁵

Eleanor Heartney notes that while today's video installations represented by Aitken appear to be "less concerned with machines or technology than with the often spectacular effects they can achieve," they also retain "early video's concerns with time, space, and body," including its "dependence on the location of the viewer in the surrounding space."⁷⁶ From this viewpoint, Aitken's strategy of multiplying narrative viewpoints and incorporating them into the work's architecture repurposes the idea of associating video technologies with architectural materials and structures in early

video art. However, unlike Campus's and Graham's self-reflexive inquiry of the relationship between video and architecture, Aitken uses video's architectural dimensions to invent a particular model of spectatorial activity, a spectator whose physical movement through the architectural space matches the work's ambulatory arrangement of images. As Alexander Alberro notes, Aitken's large-scale multiscreen installation situates the viewer as the one who "decides on the order of the cuts or montage" and thus "functions as the fourth wall, the final screen completing the narrative."⁷⁷ Ursula Frohne echoes Alberro's view on Aitken's pieces, stating that their architectural ensemble, linked to the dizzying, visceral audiovisual effects of their projected images, "literally 'frames' the mobile spectator within the emotive space of moving images."⁷⁸ Both critics' accounts suggest that Aitken's cinematic video installation attempts to connect the film spectator's psychological and sensory identification with filmic spectacle and narrative to the gallery visitor's phenomenological experience of the projected image onto the architectural space, an experience prefigured by the conventions of early film and video installation.

Aitken's massive work, *Sleepwalkers* (2007, Figure 5.6), expands his spatialized narrative created by video projection onto the surfaces of a museum (the Museum of Modern Art) against the



FIGURE 5.6 Aitken, *Sleepwalkers* (2007), installation view at Museum of Modern Art, New York, six-channel video installation, dimensions variable, courtesy of 303 Gallery, New York.

backdrop of the complex and transitory cityscape of New York midtown. Recalling the tradition of “City Symphony” as a vivid portrayal of modern urban life in the 1920s, the work restores an affinity between the cinematic gaze and the fluid, kaleidoscopic, and simultaneous views in the densely layered metropolis.⁷⁹ It does so by endowing five inhabitants of twenty-first century New York with a series of connected rhythms that yield their energies, tempos, desires, and emotions analogous to the changing landscape of the city, and by distributing their lives onto eight architectural surfaces—five are the museum’s façades, and three are the west sides of the museum’s open lot and entrance. On these eight surfaces, the viewers (the museum’s visitors and the pedestrians who pass along the street around the museum) see the five characters beginning and ending their ordinary urban lives in New York City during a single day, which consists of a series of synchronous moments from morning to night. The characters simultaneously wake up in different spaces that are nevertheless similar in their common modern style of architecture, go to work in different vehicles (getting into a car, riding a bus, mounting a bicycle, taking the subway), and are entangled in the accelerating swirl of urban culture, in which there occur a series of encounters, delays, and detours at the heart of New York City. The Museum’s building surfaces then become part of this dynamic narrative artifact by appearing as though they merge with skyscrapers, offices, and the inside and outside of apartments. The surfaces are also a constitutive part of the work’s montage in which a series of abstract figures and geometric patterns shaped by an array of objects in the city—coffee cups seen from a birds-eye-view, and the lines and curves of neon lights—simultaneously appear.

Rather than insisting on the medium-specific divide of media screen spectatorship, for example, the divide between the film spectatorship and the spectatorship of the gallery visitor, the large-scale projection in *Sleepwalkers* elicits the viewer to have various body-image relationships applied to different media screens whose spectatorship and experience are considerably determined by their locational and environmental properties. Aitken’s public projection of vertiginous urban imagery that forms a narrative on the atmosphere and texture of city life displaces the cinematic and the video screens from their established settings and repositions them within the open, outdoor situation of the street. Similar to the experience of watching a film in the theater, viewers are able

to maintain their frontal position toward the projected image. At the same time, however, they must shift their position to view the projected images on the other sides of the building, images that might remain unnoticed if they insisted on the initially established single point of view, as in the case of *electric earth*. In this sense, Aitken's use of the building surfaces as projected image spaces are derived from his previous "narrative corridors," whose arrangements of screens originate from the convention of video architecture in the gallery. Thus, while the frontality of the spectator vis-à-vis the framed virtual world inside the screen is still effective, the screen as window meets an embodied, moving spectatorial condition. For Anne Friedberg, cinema's shifting framing and camera mobility offsets its immobile body-screen relation by providing its spectator with the "bodily, haptic, phenomenological perception of an itinerant and peripatetic viewer."⁸⁰ In *Sleepwalkers*, the interplay of the cinematic mobile gaze and the viewer's physical mobility supplements the immobile spectatorial relation of the normative cinematic apparatus. The video technologies for projection, then, lie at the heart of blending the language of spectacular cinema with the convention of video installation in the gallery and relocating both in a new urban context.

Aitken's architectural deployment of screens across multiple rooms or surroundings to spatialize the fragmented narrative space and to create the unstable subjectivity and spectatorship is also the case with Ahtila's six-channel video installation *Where is Where?* (2008, Figure 5.7). Based on a real event that occurred in Algeria at the end of the 1950s, where there was a violent clash between the Algerian resistance movement and the French colonial government's hard-line countermeasures, the work intersects a narrative on two Algerian boys who killed their friend (a French boy of the same age) with a story about a female poet's encounter with the God of Death (as seen in Ingmar Bergman's film *The Seventh Seal* [1957]) who triggers her to investigate the destiny of the boys and the elusive truth of the murder. While continuing to interweave different temporal levels of a fictive narrative (not allowing a single vantage point that would otherwise assimilate them into a centralized, chronological narrative), Ahtila deploys six projectors within the gallery space in such a way that no one can capture them within a single field of vision: two screens are positioned side by side, and the other two face each other.



FIGURE 5.7 *Eija-Liisa Ahtila, Where is Where? (2008), installation view at K21, Kunstsammlung Nordrhein-Westfalen, Germany, six-channel video installation with eight-channel sound, courtesy of Marian Goodman Gallery.*

Across the four screens, there is a complicated overlap of the two temporal threads—the story of the murder in the 1950s and that of the woman who investigates the murder in contemporary New York City and her dream. The structure of the four screens resembles a rectangular room, enclosing viewers so that they must circle around the screens in order to see the extent to which the poet’s psyche is fractured, hovering between “her personal attempt to understand the events she wasn’t a witness to and the actual occurrences of death.”⁸¹ On the left side of the contiguous two screens, a single screen shows two boys interviewed by a number of people including a couple of psychiatrists who scrutinize their psychological disturbance. On the right side, the final screen presents a loop of the archival footage of cadavers, the victims of the Algerian War as the ghosts of history. These two additional screens remain not totally visible to the viewer unless they approach either of them while temporarily giving up watching the events on the four main screens.

Bringing the bond between video and architecture to her spatialization of multiple times and locations, Ahtila also uses this distribution of the screens into separate spaces to spatialize an array of cinematic techniques and forms. She draws on the strategies of art cinema, including disjunctive editing and narrative ambiguity,

enabling them to operate in dialogue with the spatial congruency and temporal synchronicity of the screens in the three-dimensional space.⁸² This interaction between the cinematic elements and the screen architecture does not simply increase the overall effect of spatiotemporal heterogeneity but also invites animation and documentary as other cinematic forms. An animated film appears on the screen at the entrance to the installation, representing an imaginary expression of the poet's psychic turbulence faced with the postcolonial trauma. This has a complementary relation to the archival footage of the Algerian War on the last screen, which serves as the indexical trace of the events that the work recreates. By associating its spatial shifts and temporal multiplicity with all the techniques and forms, the installation testifies to the status of cinematic video installation as a complex hybrid of the conventions of cinema and video. As Alison Butler neatly summarizes, "implicitly acknowledging the status of multiscreen projection as a hybrid form rather than a medium in its own right, Ahtila investigates the ways in which location and dislocation can be suggested in each of the mediums that inform the work."⁸³

Strategies of temporalization: Gordon, Breitz, Douglas

The concept of *temporalization* here suggests that electronic and digital technologies produce a different temporality than that of photography and film. An array of aesthetic features presented by those technologies, such as nonlinearity, multidimensionality, reversibility, and contraction-dilation, demonstrate that the temporality of electronic and digital technologies operates differently from the inscription of an event derived from the photochemical mediation of time, insofar as it springs from their material unit (electronic signal in video, for instance) and technical procedures. These aesthetic features also suggest that the technologies configure our sense of time in ways that go beyond our perception of time based on the photochemical media. Mark B. N. Hansen argues that digital technics in the twenty-first century (which refers to the algorithmic, processual, and interactive dimensions of computational technology) influences the experience of time in a way that is outside

the frame of the twentieth-century media: “Digital inscription of time today occurs at an infrastructural level and at temporal scales that are beneath the threshold of consciousness and perception.”⁸⁴ While acknowledging that Hansen’s view on the distinctiveness of the temporality in digital technics is compelling, it should be further noted that the changes in the inscription of time and temporal scales are not new with the introduction of computational media in the twenty-first century, but date back to video’s capabilities of shifting time, such as its production and interruption of real time, and its playback function to compress and dilate the time of the recorded image. In this sense, electronic and digital technologies are seen to inform a post-filmic temporality as distinct from that grounded in photography and film.

For Sean Cubitt, two post-filmic temporal manipulations, “playback time” (manipulation of temporal flows and their speeds) and “machine time” (a sense of time no longer subject to the natural progression and the human being’s perception of time), become “a raw material for the generation of artistic concepts.”⁸⁵ Seen in this light, the term “temporalization” is defined as a tendency of cinematic video installations to take these post-filmic temporal manipulations as their raw material to investigate cinema’s overlapping relations to time: cinema as the record of a past passing on to the viewer in his present, and cinema as a set of techniques for building our individual and collective memory and perception. The works that pertain to this tendency adopt cinema’s particular elements and transform their temporality with the help of video and digital technologies in order to conceptually examine their particular status in our idea of time. Yet it could be argued that this is not simply a restoration of the cinematic time since these works foreground a transition from cinematic time to the post-filmic time as a key condition for our reviewing of films and extensively our experiences of cinema. The artists in question, Douglas Gordon, Candice Breitz, and Stan Douglas, address the issue that cinema no longer exists in the same way it once did, by separating the fragments of cinema from its institutional context and collapsing them into the new—video-based and computer-based—technological systems that allow for both repetition and exhaustion. In this regard, their strategies of temporalization are also used for the *re-temporalization* of film.

For Gordon and Breitz, video is defined less as a medium circumscribed by the modernist association between its particular

techniques and forms of video art than as a technology comprising a series of electronic and digital devices and platforms—including the DVD and the internet—associated with a particular pattern of viewing films in a sociocultural context: a domestic, privatized, and nonlinear viewing unavailable from the collective cinematic experience guaranteed by theatrical exhibition.⁸⁶ In this context, the artists' video installations assume the methods of remaking cinema in order to interrogate both the historical meaning of film and the transformation of it into non-filmic objects and experiences. The temporality of the post-cinematic media technologies serves as a key building block of the artists' formal and aesthetic strategies. Before introducing his concept of postproduction discussed in Chapter 3, Bourriaud writes that Gordon's work is grounded in the "new approaches to time brought on by the presence of home video," labeling it as the "post-VCR art."⁸⁷ He further notes that the work of the "post-VCR art" presents itself as a "material time span which every exhibition event has to update and revive," in contrast to the artwork of the previous time as the "mark of a past action."⁸⁸ In fact, these two categories of time are not as opposed to each other in the "post-VCR" installation works as Bourriaud believes. Rather, their strategies of temporalization amount to a double exposure of two temporalities: the time of borrowed film(s) as the "mark of a past action" and the "material time span" that transforms the time of the films in various ways and thereby situates itself as a presence to the viewer. Païni also has pointed out this coexistence of the filmic and the post-filmic temporalities in his discussion of the DVD. For him, the DVD initially provides the viewer with the "spectacle of time from the repeated representation of the same sequence" in a film as an "*ideal representation of the time registered*" for a domestic spectator by allowing him nonlinear access and repeated viewing. It also potentially makes "exposed time *visibly infinite*"⁸⁹ in ways not entirely confined within the convention of the standardized home viewing. For, as we have seen in the cases of transitional found footage practices discussed in Chapter 3, the transition of a film from celluloid to the DVD impacts the film's material dimension, which results in its malleability (subject to different ways of visualization) and transportability (to different surfaces and experiential platforms). This reveals possibilities for the disjunction of two temporalities, namely a temporality of the original film and that of replaying

the film with new technologies. In cinematic video installations, this disjunction then entails the coexistence of several correlated categories that might be regarded as dualistic: film as a found object and as a new, transformed aesthetic object based on film, cinephilia and iconoclasm, the aspects of cinematic spectatorship (including the viewer's immobility) and those of post-cinematic spectatorship (including the mobile spectatorship of the gallery visitor), celluloid versus electronic or digitized data, and finally, the movie theater versus the post-theatrical viewing interfaces spanning from the customized VCR to the DVD and the computer-based projection or transmission system that enables the extraction and permutation of a film's multiple segments.

Gordon's video installations, recycling mostly Hollywood films but sometimes less known archival footage of medical or scientific research films,⁹⁰ invite the viewer to see a number of "between" relations between film and video, a film's monumentality in the movie theater and its demystification driven by the popularization of post-cinematic viewing technologies, stillness and movement, perception and memory, past and future, the self and its double, life and death, good and evil, normalcy and madness, sound and vision, etc. His installations explore the passage between the two poles of each pair, blurring their boundaries, but nevertheless refuse to stay in either of them. This is reflected in Gordon's conceptual and technical devices that reveal two types of intervals. The first is the temporal interval between two successive film frames. Many of Gordon's installations, such as *24 Hour Psycho* (1993, Figure 5.8), explore and make visible this interval between the frames with slow motion, repetition, playbacks, and fades-ins. Gordon's later works, including *Between Darkness and Light (After William Blake)* (1997), *Through a Looking Glass* (1999), *left is right and right is wrong and left is wrong and right is right* (1999) and *Déjà-vu* (2000), use multiple projectors and screens to vary the temporal conditions of the borrowed films. In these works, the spatial interstice between two screens or projection surfaces unveils a temporal interval in different ways. In *left is right and right is wrong and left is wrong and right is right*, for instance, Gordon projects Otto Preminger's film noir *Whirlpool* (1949) in its ninety-seven minutes into two screens that mirror each other, with one of them reversed. The two images of the same film eventually become discordant, marked by the



FIGURE 5.8 Douglas Gordon, *24 Hour Psycho* (1993), *video Installation, dimensions variable, installation view Le Mejan, Arles, 2011.* © Studio lost but found/VG Bild-Kunst, Bonn 2015, Photo Studio lost but found/Bert Ross, Courtesy Studio lost but found, Berlin, from *Psycho* (1960), USA. Directed and Produced by Alfred Hitchcock. Distributed by Paramount Pictures © Universal City Studios.

optical flicker effect and the stuttering distortion of its sound, as each image stems from either the odd- or even-numbered frames of the film. This sampling would not be possible without the digitized version of the film on the DVD, which allowed Gordon to compile all the odd and even frames in two different tracks.⁹¹ Thus, while foregrounding the theme of the double self, the interval between the two screens reveals the gap between the film's most fundamental units (film frames), which would remain invisible under its standardized projection.

Gordon is undoubtedly a leading figure of “post-VCR art” in a few ways: he has repeatedly declared himself as from the generation who grew up with the video player, which allowed him to be obsessed with seeing films repeatedly and mixing them freely with other cultural artifacts or media forms.⁹² In particular, the video player enabled Gordon to proclaim the “death of cinema” as the hallmark of his involvement in cinema. However, this expression does not mean the annihilation of cinema as an art form sustained by its own traditions and prospects; rather, Gordon’s “death of cinema” relays his ambivalent attitude toward cinema: nostalgia and distancing. He considers as now obsolete the idea that cinema

is a “progressive medium”⁹³ that once enjoyed its heyday when it situated itself in the movie theater as a ritualistic site for collective experience.⁹⁴ As Païni has noted in his concept of the “patrimony” of cinema, home-viewing technologies allow Gordon’s generation to review the products of film history as a mediator of collective or personal memory, while also evoking that the idea of cinema as a powerful collective form of audiovisual experience now becomes outmoded. The technologies help the generation to recognize the importance of cinema as a particular art form of the twentieth century by bringing into relief its particular formal and cultural attributes. At the same time, it is through these technologies that cinema was reestablished on the verge of disappearance, regarded as outdated, and thrown into being recycled and remembered in different ways.

VCR technologies also play a crucial role in providing a key technique for making visible the temporal interval between two adjacent frames of a single film: the extreme slow motion to dilate the time of the original film and thereby expose the components of filmic specificity that would otherwise remain unrecognized under the standardized condition of cinematic screening. Gordon explicitly remarks this point in one of his most well-known notes on *24 Hour Psycho* as follows:

In 1992 I had gone home to see my family for Christmas and I was looking at a video of the TV transmission of *Psycho*. And in the part where Norman (Anthony Perkins) lifts up the painting of *Suzanna and the Elders* and you see the close-up of his eye looking through the peep-hole at Marion (Janet Leigh) undressing, I thought I saw her unhooking her bra. I didn’t remember seeing that in the VCR version and thought it was strange, in terms of censorship, that more would be shown on TV than in the video, so I looked at that bit with the freeze-frame button, to see if it was really there.⁹⁵

Working with a commercially available Panasonic VCR, Gordon took advantage of its capabilities to slow the film (Hitchcock’s *Psycho*) down at a speed of two frames per second and guide the viewer toward his desired scenes. In particular, the video-based slow motion was certainly related to his idea on the temporal interval: “Every second of a film is made up of 24 images with

gaps-in-between. But what happens if you slightly stretch these gaps?"⁹⁶ The stretched interval made by the VCR's technical capabilities corresponds to two aspects of domestic spectatorship in contrast to theatrical viewing. First, the slow motion reflects Gordon's desire to gain control of the film that he watched (in this case, *Psycho*), when he regards the viewer's relation to the film image via the remote controller as the logical progression of the desire for his sadistic control of it: "Sadism is possible (maybe unavoidable) for our generation as we grew up with the VCR."⁹⁷ At the same time, he uses the term "post-voyeuristic state" to distinguish this spectatorial relation from the older generation for whom the movie theater functioned as a dominant viewing interface. The term then echoes what Laura Mulvey has called the "private" or "possessive" spectatorship. For her, *24 Hour Psycho* marks the shift from the voyeuristic spectator grounded in the apparatus of the movie theater to the emergence of the "fetishistic spectator," a spectator who invests himself in "repetition, detail, and personal obsession"⁹⁸ with the help of electronic and digital technologies that make it possible to delay film. The work's slow motion presents each image of *Psycho* as a quasi-still picture lingering on the screen for about half a second, and this process signifies the transition from the previously elusive image of the film to a panoply of still images in which the film's material and formal attributes are inscribed. Second, it is equally important to emphasize that the VCR granted Gordon not simply total control of the film but also a "chance encounter" with its details that might otherwise have been left unnoticed. That is, he did not expect all the effects made by the VCR's slow motion. This aleatory aspect became more evident in his works after *24 Hour Psycho*. In his multiscreen works, the post-filmic viewing technologies took him to different disjunctions between two films or a film's two divided sequences, which reveal intriguing thematic, formal, and rhythmic parallels between them.⁹⁹ This suggests that the viewer-image relationship made by the technologies does not simply serve to empower the viewer, but it has certain aspects that are out of his/her control: for example, in *24 Hour Psycho*, the 24-hour time within which the work should be viewed cannot be endured in reality.

This ambivalent aspect, offering and defying the viewer's control over the original film, relates to the hybridity of the post-filmic

temporal interval in Gordon's video installations. The temporally manipulated images in his works oscillate between film and video in terms of their material and aesthetic dimensions. As Klaus Biesenbach notes in regard to *24 Hour Psycho*, Gordon's slow motion achieves a transition from the movement-image to the time-image in a Deleuzian sense: "By slowing down the movement of Hitchcock's frames, Gordon disrupts the conventional narrative links between them and transforms *Psycho* into pure image."¹⁰⁰ As the linear progression of Hitchcock's *Psycho* is elongated, its cuts and flashbacks are dissolved. Therefore, the causal link between its series of events and the viewer's awareness is weakened. This is because the patterns of editing deployed to imply causal connections and set up narrative cues are disrupted in the slowed-down version. This is particularly evident in the original film's shower scene where the killing of Marion is shown by means of combining shots taken from different places and times at an extremely accelerated pace that contributes to build the viewer's tension. In contrast, Gordon's version maintains neither the temporal contraction nor the transitions between the different shots, which are constitutive of the Hitchcockian suspense. This suits what Deleuze would call the breakdown of the "sensori-motor scheme" as a crucial factor for disintegration of the movement-image. Gordon himself has indeed acknowledged that this is the point at which "perception breaks up or breaks down."¹⁰¹ For Deleuze, the collapse of the "sensori-motor scheme" enables the cinematic image to express a "purely optical" situation that does not extend into action but goes beyond the confines of habitual perception, one that is a "matter of something too powerful . . . but sometimes also too beautiful."¹⁰² Seen in this light, Gordon's method is to regard the interval between two adjacent frames as the most fundamental basis for the generation of cinematic movement and temporality, and based on this, to manipulate the interval with the customary playback system that supports such functions as jogging and shuttling.

The issue, then, is whether the resulting time-image is purely film based. As discussed in Chapter 1 regarding Taylor-Johnson's and Viola's extreme condensation/dilation of a filmed time, central to the encoding of celluloid into the flow of electronic signal is that the property of the interval is changed in its material and technical dimensions. In this sense, a number of paradoxical descriptions about the temporal progression of the frames in *24 Hour Psycho*,

including “a still in flux,”¹⁰³ point to the paradoxical coexistence of a filmic state and a video state, or the continual exchange between the two. Certainly, the work can be seen as a remediation of the “film stilled” as a case of videographic moving pictures in Chapter 1, because each decelerated frame exists as the bearer of the individual photograph that consists of the entire film. However, it should be noted that the exposure of these frames is ensured by the non-filmic mechanism of playback as a technique of temporalizing the fictional time of the original film, which calculates the frames and endows the transition between them with the newly extended duration (twenty-four hours). Philip Monk probably is the only commentator to pay attention to the way in which temporality changes from the automated movement of film frames via the projector to the calculation of them with video’s time-coding: “Calculated, the still is a factor of number and thus an abstract fragment; experienced, it has a qualitative duration that is whole. As a single frame held in time, the still is both an instant and a duration.”¹⁰⁴ In fact, Gordon himself has stated that after *24 Hour Psycho*, he used a computer program to “take the slo-mo a bit further by taking a split-second of cinema time (real time) and use this to produce a permanent image.”¹⁰⁵

It is thus important to determine how this extremely dilated temporality is viewed in relation to the complex interplay between the techno-aesthetic dimensions of the post-filmic apparatus and the phenomenological and mnemonic dimension of film spectatorship. The most prevailing view on *24 Hour Psycho* sees video’s capacity of extending the time of the film as a tool for gaining access to, revealing, and restoring its hidden details. For those who support this view, video’s freeze-frame and slow motion function to demystify the film’s suspense and narrativity, and thereby bring viewers to the interplay between their memory and their experience of the film’s defamiliarized version in the present of viewing the work. Giuliana Bruno, for instance, approaches *24 Hour Psycho* in terms of the opportunity to “access the work of the film apparatus itself” and for the “remapping of the cultural space of cinema.”¹⁰⁶ However, Bruno overlooks that the extended time does not simply pave the way for inviting the gallery visitor to the “possessive pleasures” of video-based cinephilia, but is experienced *as such*. That is, the viewer’s perceptual encounter with the cinema under this condition in the gallery must be viewed as more than the precondition for the

exposure of what underlies the Hitchcockian effects. Also important is that this phenomenological dimension entails the other side of the post-filmic apparatuses in regard to the temporality of the extended film. The viewing interface takes the spectators to the dimension of inhuman temporality that is out of their control yet engenders their mnemonic activities. In this way, the play of the interface in triggering and reshaping the viewers' memory of the original film demonstrates Vilém Flusser's view that "our praxis (manipulations) with electronic memories force us to admit that memory is not a thing but a process."¹⁰⁷

Thus, it is argued here that the newly given duration produced by the constant projection of Hitchcock's *Psycho* at extreme slow speed makes the viewer come closer to the film while also entailing a new post-cinematic aesthetic experience from which it is distanced. The film's fictional time made by Hitchcock's meticulous editing and experienced as vivid by the viewer in the normative cinematic situation is thus affirmed and negated simultaneously. Nancy Spector certainly sees this tension between the filmic time (on the level of the time *in* the image) and the post-filmic time (that of the time *of* the image) as she paraphrases the extended duration as a "constantly renewing now." She writes, "The view is catapulted back into the past by his recollection of the original, and at the same time he is drawn into the future by his expectations of an already familiar narrative . . . A slowly changing present forces itself in between."¹⁰⁸ This temporal ambivalence echoes the constitutive duality of the work's apparatus, which corresponds to both the original film's monumental value and the dissolution of the film into its heterogeneous components, as Balsom aptly notes: "[The work] combines the large-scale projection and collective reception of the cinema with newer, home video practices of copying and altered playback to create a hybrid aggregate that brings into relief the tension between its constituent parts."¹⁰⁹

Gordon's method of temporalization by making cinematic and video-based times operate simultaneously is also played out in Breitz's installation pieces, although there are a couple of notable differences between the two: unlike Gordon's propensity for the temporal manipulation derived from playback, Breitz extends it into the realm of editing while also intermingling it with digital compositing and sampling. Both artists' isolation of the found image and their revelation of its hidden or invisible dimensions

are akin to some of the practitioners of transitional found footage such as Girardet and Müller, who combine special effects with the montage as compiling in order to unveil the underlying gestural clichés of popular cinema and their mnemonic and affective influences on the viewer. However, Breitz is more interested in the domineering influence of entertainment culture and consumerism on the formation of mass subjectivity than in Gordon's demystifying the pantheon of classical Hollywood cinema. She frequently refers to a "scripted life," denoting "our inevitable absorption of language and behavior through exposure to the media"¹¹⁰ which permeates our daily gestural and mental activities so deeply. In relation to her strategies of copying, decontextualizing, disrupting, and reassembling with the help of digital technologies, Breitz's investigation of mass culture and media is as much in line with the contemporary art of postproduction in Bourriaud's sense as with the history of appropriation art since the modernist age: "Breitz's videos hark back to Dadaist and Constructivist procedures of montage, as well as to the more recent appropriation aesthetics of the '80s, such as the videos of Dara Birnbaum . . . and Richard Prince's re-photographs of advertisement."¹¹¹

Despite their common employment of multiple monitors, Breitz's installations are thematically divided into two categories of the "scripted lives" that circulate in mass culture and its technologies. The first type of works—*Babel Series* (1999), *Four Duets* (2000), *Soliloquy Trilogy* (2000, Figure 5.9), *Mother + Father* (2005), and *Him + Her* (2008)—address the icons of popular culture, including Hollywood stars and top pop music singers, and unveil their manner of acting, conversation, or singing by sampling and looping the footage in which they feature. For example, *Soliloquy Trilogy* truncates three films—each starring Jack Nicholson (*The Witches of Eastwick*), Sharon Stone (*Basic Instinct*), and Clint Eastwood (*Dirty Harry*), and erases every moment in which the actors are not vocally present to the viewer. The result is the harsh repetition of the three actors' vocal performances, which are disconnected from other eliminated scenes and thus sound disembodied, so that they are viewed as "a highly stylized self, pre-packaged in Hollywood and delivered via the silver screen for our immediate consumption."¹¹² Another category of Breitz's pieces is video portraits of general people: their identity is presented as fans or consumers who want



FIGURE 5.9 Candice Breitz, *Soliloquy (Sharon)* [1992–2000], from the *Soliloquy Trilogy* (2000), a short film on DVD, installation view, Castello di Rivoli, Turin, Photograph: Paolo Pellion, courtesy of the artist and White Cube, London.

to imitate the vocal and gestural characteristics of the pop icons they admire (such as Bob Marley, Michael Jackson, and Madonna), as the people are seen performing their songs (*Karaoke* [2000], *King* [2005], *Queen* [2005], and *Working Class Hero* [2006]).¹¹³

Breitz's latest installation *Him + Her* (Figure 5.10) demonstrates that her exploration of the "scripted lives" is founded in the complex *temporalization* of found images. Drawing on the oeuvres of Jack Nicholson and Meryl Streep, each amounting to 23 and 28 films respectively, the work transforms their cinematic temporality into a kaleidoscopic set of recurrences. After studying her collection of those films, Breitz distributes numerous manifestations of the characters performed by the same actor, Nicholson or Streep, across seven plasma screens, so that they look as though they are exchanging dialogue with one another. The multiple personalities, their voices speaking to or against each other, are orchestrated into a complex yet coherent story about their gendered and psychological identities, including Nicholson's figures as the incarnations of castrated or perverse masculinity in *Cuckoo's Nest* (1975), *The Shining* (1980), and *The Departed* (2006), to name a



FIGURE 5.10 Breitz, *Him* (1968–2008), seven-channel video installation. Installation view, Kunsthalle Berlin, Photograph: Jens Ziehe, Berlin, Courtesy of the artist and White Cube, London.

few, and Streep's characters as women—mother, daughter, wife—who fluctuate between firmness and fragility in *Sophie's Choice* (1982), *Kramer vs. Kramer* (1979), *Bridges of Madison County* (1995), and *The Hours* (2004), etc. Breitz calls the common editing technique used to mobilize all these characters in this manner “digital twitch,” a technique she applied to *Mother + Father*, in which she examines filmic portrayals of parenthood by isolating emotional moments of six aggressive fathers and six neurotic mothers and by making “the stuttering, jerking texture of both image and language.”¹¹⁴ The “digital twitch” undoubtedly evokes Martin Arnold’s forward-and-backward editing used for *Alone. Life Wastes Andy Hardy* (1998), given that each of the characters in *Him + Her* is shown as repeating convulsively the same sort of gestures—trembling, nodding, shaking, etc.—in a given time span. On another occasion, Breitz calls this type of temporal manipulation “re-animation,” stating that “It is more about feeding on cultural corpses, seizing a piece of inanimate footage and trying to revive it. . . . The re-animated actors . . . never acquire the fluid movement and full consciousness that we associate with ‘life.’ Like Frankenstein’s monster, they jerk and twitch their way through the narrative.”¹¹⁵ Introducing the disparity between the filmed bodies and the body of their apparatus, or making the former a type of

disembodied automata by activating the latter in such a way as to resist its standardized temporal progression, also recalls Arnold's replacement of the optical printer by the Avid editing system that must have helped Breitz to extract the purposed segments from the digitized DVD copies of the films starring Nicholson and Streep.

Breitz's idiosyncrasy, then, lies in her additional technique that complicates the interplay between the "re-animated" characters. With digital compositing, she removes the backgrounds of the original films from their segments that she had sampled. As a result, all the Nicholson and Streep characters wear the same dresses, as can be seen in the source films, but they are thrown into a black background as a backdrop for a new narrative about their similarities and differences, in which they call out and respond to each other. Thus, the characters' existence is split between the original films and the newly constructed, multiplied media space. This discrepancy is reflected in the work's temporal structure. The two stars are double bound by the time of the characters they played, including that of their psychological conflicts and traumas, and the digitally produced time that exists outside yet also controls their characters impersonally. "As the sampled actors perform for me, their digital twitches and jerks can be read as *symptomatic of their dilemma as hostages*, reluctantly dancing to *a tune they have not chosen*," says Breitz.¹¹⁶

Breitz brings the extracts of Hollywood films to the looping circle of multiple screens, making Nicholson and Streep confront a series of encounters between their different characters as avatars of their self as celebrity, and guiding the viewer toward the parallels between the characters' roles and stereotypes. Her application of the multiple-screen format to the imagined psychodrama on the splitting and multiplication of the star image is indebted to Andy Warhol's double-screen film projection, *Outer and Inner Space* (1965). Breitz explains: "[It] was at the back of my mind while making *Him + Her*. The work is a kaleidoscopic portrait of Edie Sedgwick in which four competing Sedgwicks appear simultaneously before the viewer, interacting with each other, challenging each other, drowning out each other's words, and eroding the possibility of a single authentic Sedgwick."¹¹⁷ Warhol's influence is illuminating initially because Sedgwick's images take on the similar ambivalence of uniqueness and sameness as those of Nicholson and Streep. In *Outer and Inner Space*, Warhol shot his conversation with Sedgwick with a 16-mm

camera (he remained off-screen) with her constantly confronted video image that Warhol had previously filmed. She responded to Warhol's questions while being conscious of her videotaped self-image. Her emotional trajectory vis-à-vis the image wavers between uneasiness and acclimatization, and the viewer is able to witness the recurrence of the same actress as well as the subtle differences between her images. A more important contribution by Warhol to *Him + Her* lies in his use of the double-screen projection to make visible the impact of video on film. Maintaining the differences between film and video in technique and material, Warhol engenders the confusion between them by placing on each of the two reels Sedgwick's filmed image next to her prerecorded video image played during the filming. This device signifies that Sedgwick's technologically mediated self is not just her past self-image, but also a real-time event that immediately affects her in-person subjectivity in front of Warhol's film camera, to the extent that the two selves become indistinguishable from each other. As William Kaizen states, with this simultaneous arrangement of the two images, Warhol creates "a portrait of the emergence of video caught on film, reflecting the new mode of televisual liveness erupting into and rupturing the filmic."¹¹⁸ Seen in this light, the permeability of the two media images is another key device inherited by Breitz from *Outer and Inner Space*, given that the interaction of the Nicholson-Streep characters, if divided by the monitors, is at play within the common black background. Thus, the characters, albeit coming from distinct original films, appear as if living in the same imaginary space as a stage for the kaleidoscopic display of their conflicts and contradictions.

What makes Breitz distinct from Warhol is that she underlines the fluidity of the interaction by making the appearance of the characters on different screens circular and repetitive: a particular character of Nicholson or Streep emerges in one screen, next time in another screen, or occupies more than two screens simultaneously. On each occasion, his or her dialogue is recontextualized as a voice addressing other characters on other screens, or as a type of soliloquy without any on-screen listener. All the characters continue to appear and disappear in different permutations of the fragments in which they reside, but they are ultimately confined within the same type of space, as suggested by the common black background. Given Breitz's explicit preoccupation with the consumption and

circulation of the image of celebrity as a chain of signs, the space of *Him + Her*, both multiplied and identical, is analogous to the contemporary media network in which different images of the same cultural product are replicated and come to life simultaneously. The multiple screens interconnected via the work's playback system thus correspond to the fragmentary yet ubiquitous characteristics of the network; the looped permutations of the Nicholson-Streep characters suggest the virtually infinite repeatability of the star image as the outcome of the contemporary culture industry that endeavors to perpetuate itself.

In this way, *Him + Her* extends the temporal manipulation of the image inherited from Warhol's experiment with early video technologies into the post-cinematic mediascape of consuming filmic images. The common black background initially suggests that particular segments of films, such as memorable scenes of a particular star that encapsulates his or her remarkable acting and lines of dialogue, are easily dissected and extracted from their original films and repurposed in different contexts. In addition, the looped multiscreen transmission of the Nicholson and Streep segments underlines the extent to which the temporality of media consumption transcends the chronological ordering of the films in which he or she acted: that is, today's global media network such as YouTube is able to play the films in an arbitrary manner, and allows for the simultaneous consumption of numerous audiences-users. The two actors' repetitive gestures and dialogues therefore refer to more than the audience's objects of consumption. Rather, they underscore that our acts of consumption are increasingly more affected by the psychic and affective patterns of response that the media network offers us. It is in this way that Breitz's strategies of temporalization lead to the complex hybridizations of the time of the films (and the time of the stars) and the time of consuming them with post-filmic viewing technologies.

Since the late 1990s, Stan Douglas has been producing what he has called the "recombinant" works, pieces that combine narrative units—scenes, dialogues, soundtracks, visual cues, etc.—that originate from other existing materials such as film, television, and literary or historical texts. His methodological achievement in doing so resides in the fact that he introduces a putatively infinite number of combinations between the elements of which each of the pieces consists. He first films a series of sequences, then dissects them into

smaller units—soundtrack and image track or individual scenes, for instance—and redistributes them into two or more channels that are connected to different playback devices. The length of each play version differs from the length of the original film from which Douglas derives the material, thus the synchronized operations of the devices produce different combinations of those units from loop to loop. For instance, in *Win, Place, or Show* (1998, Figure 5.11), a double-channel video installation that presents a conflict between two male protagonists set in a confined modernist apartment after the Second World War, Douglas examines the long-take and the shot-by-shot editing as two conventions of filmmaking. He then transfers his filmed scenes to four DVD players connected to a synchronous starter and an interval switcher, two technical devices with which their combination varies each time they are repeated.¹¹⁹ The result is an almost infinite and random expansion of their montages (to more than 20,000 hours for 204,203 variations), which subjects the viewer to the varying but repetitive chain of the two protagonists' conflict. Due to the changing combinations within the same setting, this conflict is represented as always fissured and unending. This “recombinant” narrative is inspired by



FIGURE 5.11 Stan Douglas, *Win, Place, or Show* (1998), two-channel video projection, DVDs, computer, color, sound, approximately twenty thousand hours for 204,023 variations, with an average duration of 6 minutes each. Installation view, Vancouver Art Gallery, British Columbia, Canada. Courtesy of the artist, David Zwirner NY/London and Victoria Miro, London.

his application of the computer to select certain elements, such as characters, situations, rules, and story paths. The installation thus produces contingency (in the sense that its elements are combined) and partial perspectives (in the sense that each viewer comprehends its spatiotemporal construct), while turning viewers' attention to its technological system that affects their perception of time. As this playback system produces such temporalities as randomness, difference, infinity, and recurrence, Douglas's "recombinant" narrative defies the notion that events happening in a fictional place unfold in a chronological order.

The innovative aspect of Douglas's recombinant works lies in their time frame within which the viewer contemplates the art of the moving image inside the gallery wall. *Win, Place, or Show*, for example, makes it impossible for the viewer to obtain the whole and coherent picture of its narrative space. For the viewer will not be able to endure the time taken by the putatively infinite number of permutations—about 6 hours for 204, 203 variations—during his/her limited time available for viewing. Instead, the viewer may watch as many different versions of the work's sequence as possible according to the moment he/she enters the installation and to the duration of viewing he/she is willing to spend. Accordingly, one visitor's picture of the work may differ from that of another visitor. In this sense, the "recombinant" works including *Win, Place, or Show* make contingent the temporal condition of the exhibition place that influences our perception of the artwork. The implication of this contingency can be understood in reference to Groys's argument on the ways in which video installations deconstruct the film's image and its control of time. That is, the capacities of electronic and digital technologies to stop, slow, and extend the time of the image demystify both film's motion and its rigid screen time. By demystifying the latter with their putatively infinite time frames, Douglas's "recombinant" works demonstrate that the digital playback system is able to re-temporalize cinematic narrative to the extent that goes beyond the viewer's threshold of perception.

Conclusion

The cinematic video installations examined herein thus far demonstrate that hybridizations are at play on the dimension of

the media apparatus that determines the perceptual and ontological conditions of cinematic images. Similar to the cases of transitional found footage practices, the operations of spatialization and temporalization in these works testify to the transition of video from its analogue predecessor to digital technologies for projection and imaging as they enable the viewer to perceive the cinematic image and narrative in more decentralized and multiple ways than projected in the normative cinematic apparatus. At the same time, this transition allows for video to intimately merge with what constitutes the cinematic—projection, narrative space and time, montage, cinematography, and the historical forms of cinema—thus leading to the ambiguous correlations of the two media. It could be stated that these artworks are in large part driven by the desire to reconfigure the cinematic, and that video in these cases serve as an apparatus rather than a distinctive medium. But eventually, their intermedial configurations on the level of the apparatus validate how video's specificities, its three-dimensional construction of media space and architecture in the works of Farocki, Ataman, Aitken, and Ahtila, and its manipulation of temporality at various speeds and in multiple durations in Gordon, Breitz, and Douglas, are maintained and reconstituted simultaneously. Video's convergence with the digital thus enables the artists to refashion the cinematic montage, narrative, and spectatorship with the multiplied spaces and times experienced by the viewer who negotiates his/her frontal attention to the images with his/her perambulatory navigation through them (as in the strategies of spatialization), or to investigate how the post-cinematic technologies transform the time of cinema as the art of formulating our perception and memory while also shedding on it new light (as in the strategies of temporalization). These two allow me to stress that hybridizations as the consequence of the post-media conditions pervade not simply in the forms of the moving image but also in the apparatuses by which they are framed and circulated.

AFTERWORD

Andrew Neumann's *Double Psycho* (2011, Figure 6.1) alternates key sequences from both Hitchcock's original movie and Gus Van Sant's 1998 remake at an extremely fast rate, such that the work's images appear as the rapid-fire cutting between the same, yet different, scenes from the films, including the famous shower scene. While it is true that this belongs to a kind of transitional found footage practice, what is notable in this work is Neumann's self-invented algorithmic process by which two (or more) signals from both encoded films could be fed into a video switcher. Neumann himself explained to me that this algorithmic process is not simply a technical feature specific to digital editing, which now can be easily accomplished with nonlinear editing, but also a conceptual artifact grounded in his digital remediation of a special effect originally available from the optical printer: "A computer connected to the switcher controlled the tempo of the cuts as well as the dissolve duration. Essentially the system operated as a 'real-time optical printer.'"¹ Accordingly, in Neumann's system, the viewer is capable of engaging with the correlation of digital editing's automated and real-time specificities and its hybridized link to the celluloid-based technique. This correlation also goes for the complexity of the resulting images in Neumann's work. While still indicating that they are derived from the two filmic versions of *Psycho*, the original images, which are similar and arranged in contiguous manner, morph into one another such that the resulting images explode into a new temporal experience given by the algorithm's automated capacity, one that goes beyond film's temporality based upon the discreteness of its filmstrip.



FIGURE 6.1 Still from Andrew Neumann, Double/Psycho (2011), single-channel video, 20–40 min, courtesy of the artist.

The double projection of both *Psychos* as film and their digitally created rapid-eyed morph in Neumann's work, I argue, provides a compelling illustration of the coexistence of medium specificity and media hybridization enabled by digital technologies: that is, a double exposure of an image form (for instance, a filmic image) that has maintained and still maintains its medium-specific possibilities and limitations, alongside emergent forms of the image that are grounded in various negotiations between the material, technical, and aesthetic components of the image form and those of the others (whether a video or digital image). This coexistence of one image form and the others fits into what Raymond Bellour has recently called the parallel between “cinema, alone” and “multiple cinemas.” Replacing his terminology of “other cinema,” which he had used to indicate the aesthetics of confusion in the cinematic film and video installations in the 1990s, Bellour’s idea of “multiple cinemas” suggests that those artworks cannot be immediately equated with the rich histories of traditional cinema, which he terms “cinema, alone,” originally indebted to Serge Daney.² For the multiple cinemas introduce new forms, materials, and experiences unavailable from the components of the traditional cinema while also appropriating and transforming those components. Bellour’s idea of “cinema, alone,” then, draws our attention to the ways in which the variable specificity of traditional cinema, long realized in its rich histories, still persists in the contemporary imagescapes of art, media, and culture, thereby stressing the demand to place traditional cinema as

a parallel to multiple cinemas. It also suggests that the cinema has maintained its specific features, such as theatrical viewing, projected images, and the larger-than-life single screen, in its multiple configurations and appearances since its birth, communicating with its neighboring arts and coping with the ongoing changes of media technologies. We might call this “One Cinema,” but only in the sense that it has enveloped and developed its own material, formal, and technical multiplicities irreducible to larger generic categories such as fiction film, arthouse film, or experimental film. While the “specific” histories, forms, and experiences of this One Cinema will remain and at the same time be diversified, they also serve as a rich, inexhaustible resource for the multiple cinemas that we have been witnessing in various media platforms—cinematic variants that give birth to a vast array of hybrid moving images. In this sense, Bellour’s idea of the parallel between “cinema, alone” and multiple cinemas testifies to the compatibility of medium specificity and media hybridity that this book has argued and demonstrated.

This book has examined various types of hybrid moving images across different platforms of art in terms of how they are derived from the hitherto unexpected interrelations of three time-based media: film, video, and digital media. More than illustrating the transgression of the borders between the different arts associated with the media, these images testify to the dialectic of medium specificity and media hybridization as an epistemological framework for understanding how these interrelations shape our complicated and even contradictory experiences of visual expressions. Grasping this ontological complexity of moving images demands the negotiation of different media-theoretical perspectives that have been centered on the historically existing regimes of the time-based media. For the artworks that I have investigated in this book ask us to consider both the theories of the ontology of photographic and filmic images in cinema studies as well as the theories of electronic and digital images in art criticism and media studies. This intermedial approach to the hybrid moving images produced by these artworks, then, serves as a compelling collaborative framework for both theories, not simply because it is an analytical tool in revealing the array of cross-references between more than two media involved in the production of an art form, but because it enables us to view how material and technical properties of a media are altered and redirected as they encounter other media and art forms.

From a broader perspective, this book rekindles debates about medium specificity as it has continually been at stake in the broader domain of social science and the humanities. The modernist medium-specificity argument assumes that a medium's pure and essential features are directly organized into a unique set of artistic objects. The current use of moving images within different forms and platforms disallows this argument as technological innovation blends and collides the properties of different media in varying combinations. There have accordingly been two major theoretical approaches to the dissolution of modernist medium specificity in the humanities. First, recent media theories contribute in reconfiguring digital media's reliance on the techniques and language of old media and in illuminating unique changes in their art forms brought by digitization. However, these media theories go so far as to raise the elimination of a medium's particular features as such by simply demonstrating that the forms and techniques of earlier media are assimilated into the computer as a universal medium. Second, the canonical trope of postmodernism in art criticism elucidates the appropriation and mixture of existing materials and techniques in contemporary art, but in doing so, this trope paradoxically has a homogenizing effect on addressing this formal and aesthetic plurality by simply bracketing it under the label of heterogeneity. In this regard, the two kinds of dichotomy each championed by these theoretical threads—the convergence of "old" media into "new" media on the one hand, and modernism versus postmodernism on the other—grossly lack a conceptual framework for tracking how material and technical properties of a medium are channeled, diverted, and altered as these properties are distributed across other media and art forms.

In this book, my remapping of the two theories on the demise of modernist medium specificity with regard to the growing impact of digitization—the "post-medium" and the "post-media" theories—has made clear how these dichotomies are still persistent in the realms of arts and humanities. As David Joselit has convincingly demonstrated in his refreshed study of video art, what is interesting in the shifting regimes of art with respect to the penetration of media technologies since the 1960s is "not the contest between art history and visual culture, but a parallel (though not identical) relation between *medium*, typically associated with the fine arts, and *media*, a term commonly associated with commercial modes of

communication like television and film.”³ Seen in this light, this book provides an extensive study of how this parallel has disseminated and varied during the last two decades through particular visual expressions that challenge three epistemological divides related to the “old/new media” and the “modernist/postmodernist” dichotomies: first, the divide between the discourses that emphasize the separation of traditional media and those that celebrate or bemoan digital convergence; second, the divide between the art criticism, which strives to protect the singularity and autonomy of artistic expression, and the strand of media theories that aim to underline the broader communicability of technological media; and finally, the divide between modernist reflexivity and postmodern relativism concerning the ontology of media in the contemporary practices of the art of the moving image. I wish that the concepts of the hybrid moving image and the dialectical negotiation between medium specificity and media hybridity that I strived to develop in this book offer theoretical and methodological frameworks for overcoming these three divides that still loom large over cinema studies, media studies, and contemporary art criticism. These two will also be a necessary springboard for leaping into the questions of when the post-media conditions will end, what will come after them, and what exactly the “post” in post-media means.

INDEX

- Aasman, Susan 228
abstract/abstraction 28, 33, 43–4, 55, 97, 100–7, 109–10, 113–28, 131–2, 134–5, 137, 139–43, 181–2, 185, 187, 222, 231, 312 n.12, 322 n.7, 323 n.16,
see also hybrid abstraction
abstract film and video 4, 97, 102–4, 107, 116–17, 126–7, 139, 143, 322 n.7
abstract painting 102, 139, 142, 181–2
clean abstraction (Zinman) 105, 126
as coexisting with representational or figurative components 101, 104–5, 118–19, 121–7, 135, 137, 139, 141–2
as complexity 143
digital abstraction 99, 109–10, 121–5
messy abstraction (Zinman) 105, 109, 115, 120, 126
Accocci, Vito 87, 242
Agamben, Giorgio 168, 332 n.51
Ahtila, Eija-Liisa 46, 242, 245, 256, 258, 260, 262, 274–6
Where is Where? (2008) 274–6
Ahwesh, Peggy 145
Aitken, Doug 46, 242, 245, 247, 256, 258, 262, 269–74, 349 n.79
blow debris (2000) 270
electric earth (1999) 269–71, 274
Sleepwalkers (2007) 272–4, 349 n.79
Akerman, Chantal 78, 242
D'Est (1993) 78
Jeanne Dielman 23, Quai du Commerce 1080 Bruxelles (1975) 80
Alberro, Alexander 272
algorithm/algorithmic 3, 12, 16, 21, 27–30, 37, 44, 102, 107–8, 110, 113, 115, 119–20, 125, 128, 143, 159, 173, 190, 265, 276, 295, 306 n.55
Alter, Nora M. 197
Anastasi, William 65, 315 n.45
Free Will (1968) 315 n.45
animation/animated image 2, 12–13, 15, 19, 22, 40,

- 49, 68, 79, 91–2, 95, 104, 106–7, 124, 181, 190, 205, 276, 289, 344 n.16
in Bill Viola's works 68
cartoon animation 13–14
computer animation 15, 22, 124
in David Claerbout's works 91–2, 95
hand-drawn/direct animation 14, 19, 104, 106–7
Antin, David 29
apparatus/dispositif 11–12, 19–20, 26–9, 32–3, 39, 43, 46, 50, 52, 74, 124, 148, 154, 162, 189, 201, 203, 220, 222, 238, 245, 252–3, 257, 261–2, 264, 269, 289, 293–4, 345 n.33, *see also* cinematic/filmic apparatus
appropriation 37, 47, 52, 150, 153, 169, 177, 216–17, 220, 243, 286, 329 n.16, 344 n.14, 351 n.92, 352 n.111
Arcangel, Cory 108
The Super Mario Cloud (2002) 108
architecture/architectural 243, 256, 262, 269–76, 294, 348 n.64
archive 43, 45, 81, 110–11, 148, 153, 158, 161, 163, 168–73, 176, 182–3, 190, 200, 207, 211, 223, 225–8, 233–5, 275, 349 n.70
archive effect (Baron) 172–3
digital archive 110–11, 153, 158, 207
film archive 148
found footage as archival 168–73, 176, 183, 200, 223, 225–7, 233–4, 275, 279
Arnold, Martin 76–7, 152, 161, 289
Alone. Life Wastes Andy Hardy (1998) 289
Pièce Touchée (1989) 76–7
artists' film 78
Arthur, Paul 145–6, 150–1, 179, 197–8, 200
Astruc, Alexandre 201, 338 n.8
Ataman, Kutluğ 46, 245, 247, 258, 261, 268–9
Küba (2005) 268–9
Mesopotamian Dramaturgies: Column (2009) 268
avant-garde/experimental film and video 2, 4, 20, 23, 27, 38, 44, 48, 56, 76–8, 85, 101, 107, 116, 127, 145–7, 149, 152, 154, 156, 161, 167, 173, 179, 182–3, 190, 194–5, 197, 209, 216, 220–1, 227, 230, 234, 247, 260, 297, 310 n.89, 319 n.80, 322 n.2, 326 n.49, 332 n.49, 341 n.54
Avery, Caroline 329 n.17
Midweekend (1985) 329 n.17
Simulated Experience (1989) 329 n.17
Baker, George 52, 75, 79, 96
Baldwin, Craig 152, 175
Spectres of the Spectrum (1999) 175
Tribulation 99: Alien Anomalies under America (1991) 175
Balsom, Erika 246, 254–5, 286
Baron, Jaimie 121, 172
Baron, Rebecca and Douglas Goodwin 44, 113, 115, 120–1, 124
Lossless (2008) 113

- Lossless* #2 (2008) 113, 120
Lossless #3 (2008) 113,
120–1
Lossless #5 (2008) 113
Barthes, Roland 80, 87, 93–4,
319 n.81, 320 n.99, 321
n.117, 321–2 n.118
his idea of *punctum* 93–4,
321–2 n.118
Bartlett, Scott 106, 323 n.15
OffOn (1967) 323 n.15
Basilico, Stefano 157
Batchen, Geoffrey 312 n.13
Bauhaus 23
Bava, Mario 121
Mask of Satan (1960) 121
Bazin, André 57, 85
Beauvais, Yann 148
Beck, Stephen 26, 322 n.7
Belisle, Brooke 190
Bellour, Raymond 26, 38–40,
56, 64, 75–6, 88, 90, 188,
201–2, 248, 258, 296–7,
310 n.92, 320 n.101
between-the-images (*l'entre-
images*) 38–40, 310 n.92
multiple cinemas 296–7
other cinema (*autre
cinema*) 248
Belting, Hans 69–70
Belton, John 58
Benjamin, Walter 16, 151,
168–72, 175–7, 179, 181,
193, 195, 303 n.39, 333
n.66, 346 n.33
and the aesthetics of
ruin 176–7, 179
and allegory 168, 170,
175, 179
and the destruction of
aura 170–1, 181
and the dialectical
image 168–70, 195
and materialist
historiography 169–70,
333 n.66
and the shock experience of
modernity 193
Bennett, Vicky (aka People Like
Us) 45, 158–9
The Remote Controller
(2002) 158
We Edit Life (2002) 158
Work, Rest, and Play
(2007) 158
Benning, James 78, 318 n.80
10 Skies (2004) 318 n.80
13 Lakes (2004) 318 n.80
Landscape Suicide (1987) 78
Ruhr (2009) 318 n.80
Benson-Allott, Caetlin 164
Bergman, Ingmar 274
The Seventh Seal (1957) 274
Bergson, Henri 75, 90
Berkeley, Busby 113
42 n.d Street (1933) 113
Biemann, Ursula 203
Biermann, Gregg 45
Labyrinthine (2010) 159
Spherical Coordinates
(2005) 159
Utopian Variations
(2008) 159
Biesenbach, Klaus 284
Binkley, Timothy 30, 312 n.12
Birnbaum, Daniel 256, 259
Birnbaum, Dara 286
Bitzer, G. W. “Billy” 182–4, 188
Tom, Tom, the Piper's Son
(1905) 182–4, 188
Blümlinger, Christa 162, 266–7
Bolter, Jay David 37–8, 310 n.89
Bonitzer, Pascal 347 n.59
Bosch, Hieronymus 68
Christ Mocked
(1490–1500) 68

- Bourriaud, Nicolas 10, 14–15, 153–4, 278, 303 n.33
relational aesthetics 14–15
- Brakhage, Stan 100
Mothlight (1963) 100
- Breer, Robert 104
- Brehm, Dietmar 107, 133, 136–7
Akt (1996/2008) 136
Berlin (1985/2009) 137
Paris (2002/2009) 137
Personal (1976/2009) 137
Praxis 5–8 (2008–09) 136–7
Rodox-1 (2002/2008) 137
Rodox-2 (2002/2008) 137
Sonntag (1995/2008) 136
- Breitz, Candice 46, 245, 247, 277, 286–92, 294, 352 n.111, 352–3 n.113, 353 n.114
Babel Series (1999) 287
Becoming (2003) 353 n.113
Four Duets (2000) 287
Him + Her (2008) 288–92
Karaoke (2000) 288
King (2005) 288
Mother + Father (2005) 287, 353 n.114
Queen (2005) 288
Soliloquy Trilogy (2000) 287
Working Class Hero (2006) 287
- Broodthaers, Marcel 13
A Voyage on the North Sea (1973–74) 13
- Broomfield, Nick 341 n.54
Aileen: Life and Death of a Serial Killer (2004) 341 n.54
- Brougher, Kerry 104
- Brown, William 112, 124
- Bruckner, René Thoreau 128
- Bruno, Giuliana 285, 307 n.70
- Buckingham, Matthew 344 n.16
- Burch, Noël 80, 347 n.59
- Burgin, Victor 75
- Butler, Alison 276
- Cameron, James 310 n.89
- Cammaer, Gerda 169
- Campbell, Jim 1–3
Home Movies 300–1 (2006) 1–2
- Campus, Peter 244, 250–1, 264, 272, 321 n.107
- Caouette, Jonathan 45, 200, 209, 229, 233–8, 342 n.66
Tarnation (2003) 229, 233–8
- Carroll, Noël 4–8, 22
- Casetti, Francesco 26–7, 307 n.68
relocation of cinema 26, 307 n.68
- Cavell, Stanley 29
- CD-ROM 204, 206, 311 n.7
- celluloid 8, 12, 20–1, 23, 33, 45–6, 55, 58, 66, 70–1, 75, 88, 100–5, 107, 110, 113, 121, 125, 128, 130–1, 136–42, 146, 148, 151, 155–6, 158–9, 163, 169–73, 175–7, 179, 181, 183–4, 189, 194–5, 199, 203, 216, 221, 228–9, 231–3, 238–9, 306 n.55, 310 n.89, *see also* film and photochemical its emulsion 100, 104–5, 107, 137–9, 141, 173, 176, 179
- physical manipulation of it 102, 107, 110, 137, 139–42, 175, 229
- Child, Abigail 152
- cinema 13–14, 20–3, 25–7, 31–2, 36–8, 40, 43–4, 46, 52–3, 56–7, 60, 64, 72–3, 75–7, 80, 86, 88, 91, 97, 121, 146, 161, 163, 169–73, 175–6, 179, 181, 183, 187–90, 192, 204, 206, 216, 242–94, 296–7, 305 n.45, 306 n.55, 306 n.59, 313

- n.24, 332 n.49, 332 n.51, 335 n.89, 340 n.24, 343–4 n.12, 344 n.14, *see also* celluloid and film art cinema 77, 165–7, 246, 275, 297, 344 n.12 cinema of stasis (Remes) 56 cinematic image 13–14, 72, 121, 247, 256, 294, 306 n.55 cinematic time 76 “death of cinema” Discourse 20–1, 281 digital cinema 21–2, 27, 31, 73, 96, 176 early cinema 80, 86, 175–6, 184, 189, 192 expanded cinema 12, 132 history of cinema 43, 175–6, 179, 204, 206, 248 Hollywood cinema 161, 163, 165–7, 176, 216–17, 246, 279, 287–92, 310 n.89, 332 n.49, 343 n.12 its narrative 242, 244–7, 251–2, 256, 260–3, 268–9, 271–6, 283–6, 294, 344 n.14 its spectacle 271–4 paracinema 26, 183, 187, 335 n.89 slow cinema 77 cinematic/filmic apparatus 12, 19–20, 26–7, 40, 75, 116, 128, 130, 146, 183, 190, 243–4, 246, 248–50, 252, 256, 258, 268, 274, 285, 294, 307 n.70 cinematic video installation 42, 46, 242–94, 307 n.70, *see also* apparatus and video installation its spatialization 42, 245, 255–76 its temporalization 245, 258–9, 276–93 cinephilia 246, 248–9, 279, 285 Ciocci, Jacob 100, 124, *see also* Davis, Paul B. and Paper Rad Claerbout, David 43, 56–7, 74, 79, 89–96, 320 n.106 *Boom* (1996) 89 *Kindergarten Antonio Sant'Elia*, 1932 (1998) 89–90 *Reflecting Sunset* (2003) 91 *Retrospection* (2000) 90, 93–5 *Ruurlo, Bocurloscheweg*, 1910 (1997) 89–90 *The Stack* (2002) 91 Vietnam, 1967, *near Duc Pho (reconstruction after Hiromishi Mine)* (2001) 90–3 cluster (Spielmann) 40–1, 187 Coen, Joel 58 *O Brother, Where Art Thou?* (2002) 58 coexistence 27, 35, 41–2, 59, 64, 70–1, 75, 89, 101, 126, 155, 199–200, 232, 296, *see also* interrelation and hybridization/hybridity Coleman, James 13–14, 19, 53, 75, 79 projected images 13–14, 19 collage 150, 156, 158, 163, 165, 185, 200, 206, 220, 222–3, 229, 233, 236, 329 n.16, *see also* montage color 58–9, 60–3, 65, 68–71, 100, 103, 106, 109, 112–13, 118, 120–3, 128–9, 134–5, 137, 139, 165, 179, 187, 225, 231–2, 235, 317 n.60 colorization 235 de-colorization 165, 179

- color grading/correction 59, 62–3, 70, 148, 314 n.34, 315 n.38
- comparative studies 18, 37, 80
- compilation film 151–2, 160–1, 165–7, 329 n.16, *see also* found footage film/filmmaking
- composite 5–6
- compositing 22, 148, 156–9, 161, 167–8, 187, 203, 206, 218–19, 286, 289, 306 n.55
- digital compositing 156–9, 167–8, 187, 218–19, 286, 289, 306 n.55
- Compression Study # 1 (Untitled data mashup)* (Davis and Ciocci, 2007) 99–101, 105
- computer/computerization 15–21, 23, 29, 32–3, 39, 65, 96, 101, 106, 108, 111, 115, 118, 124–5, 138, 173, 175, 194, 236, 255, 266–7, 276–7, 284, 292, 298, 303–4 n.39, 348 n.69, *see also* digital/digital technology/digital media
- analogue computer 106, 124
- computer graphics 8, 15–16, 31, 38, 41
- computer image 39, 266–7
- conceptual art 11, 26
- configuration 35–8, 40–1, 45, 149, 193, 294
- conjuncture (Green) 75
- Connarty, Jane 169
- Conomos, John 256–7
- Conrad, Tony 26, 116, 335 n.89
- Constable, John 62
- contemporary art 10, 15, 28, 42, 46, 48, 79, 81, 150, 153, 242, 251, 286, 298–9
- contemporary art criticism 10, 15, 251, 299
- convention 7–9, 12–13, 18, 23, *see also* medium
- convergence 19, 40, 45, 169, 253, 298–9
- Corrigan, Timothy 197–8, 202, 223, 229
- Cranberries, The (rock band) 99, *see also* O’Riordan, Dolores
- Crawford, Joan 167, 176
- Crewdson, Gregory 53, 74
- Crimp, Douglas 47–8, 78
- Cubitt, Sean 72, 277
- Cuevas, Efrén 234
- cultural interface (Manovich) 23, 306 n.59
- Daney, Serge 296, 305 n.49
- Danks, Adrian 152–4
- Danto, Arthur 48
- database 173–5, 177, 206
- databending 108–11, 115, 119, 123, 125, *see also* glitch/digital glitch video
- data compression 108–9, 111–12, 114, 120–1
- datamoshing 108–9, 111–15, 120–5, *see also* glitch/digital glitch video
- Davenport, Nancy 53
- da Vinci, Leonardo 134
- Davis, Bette 176
- Davis, Paul B. 100, *see also* Ciocci, Jacob
- Dean, Tacita 53, 79
- Disappearance at Sea* (1996) 79
- Fernsehturm* (1999) 79
- Palast* (2004) 79
- DeBont, Jan 217–18
- Speed* (1994) 217–18
- de Duve, Thierry 92
- de Greef, Willem 150–1
- Deleuze, Gilles 75, 90, 283–4
- movement-image 75, 283–4
- time-image 90, 283–4

- Delpeut, Peter 176–7, 179, 181
Lyrical Nitrate (1991) 176, 179
- Demand, Thomas 51, 53
- Demos, T. J. 213–14, 340 n.40
- de Nettetshem, Agrippa 134
- Dercon, Chris 243–4
- Deren, Maya 113
Meshes of the Afternoon
(1932) 113, 120
- Diderot, Denis 80
- differential properties 9, *see also*
Gaut, Berys
- digital/digital technology/digital
media 1, 3, 6–12, 15–21,
23–7, 29–36, 38, 40–1,
43, 49–52, 56, 58, 64, 66,
70–3, 79, 88–91, 94–7,
100–1, 105–6, 108–10, 112,
114–15, 120–1, 123, 125–7,
131, 134, 137, 140–1, 143,
145–9, 151–61, 169–74,
177, 180–1, 184, 187–90,
193–5, 202, 206–7, 209–11,
213, 215, 217–20, 228–33,
235–6, 238–9, 245, 263,
276–8, 281–2, 286–93,
295–6, 298–9, 303–4 n.39,
306 n.55, 306 n.59, 312
n.12, 314 n.33, 316 n.55,
333 n.66, 340 n.29, 340
n.40, 342 n.66, *see also*
computer, new media,
surface, and temporality
- digital art 3, 10
- digital as information 265–7
- digital code 106, 108–10, 112,
114, 121, 125, 127, 143, 173
- digital conversion/encoding 8,
30, 58, 71, 111, 146, 158,
172, 342 n.66
- digital editing 21, 155–60,
189–90, 228–33, 235–6,
286, 289, 295, 314 n.33
- digital file 100–1, 108–10,
112–15, 120–1, 152, 154,
158, 177, 217, 219
- digital image 9, 20–1, 35, 50,
173, 188–9, 218–19
- digital imaging 3, 6–7, 16, 23,
193, 312 n.12
- digital incompossibility
(Murray) 90
- digital manipulation 3, 8, 24,
29, 32–4, 43, 50, 56, 58–9,
64, 66, 70–2, 79, 89–90, 94,
97, 101, 109–10, 112, 114,
125, 131, 134, 148, 161,
180, 184, 188, 235–6, 306
n.55, 314 n.33, 316 n.55
- digital network/Internet 152,
202, 210, 213, 215, 218,
278, 291–2
- digital playback 286–93
- digital projection 20, 27, 32,
140–1, 148
- digital revolution 11–12, 31
- digitization 3, 20, 29–30, 35,
58, 64, 100, 148, 202, 281,
298, 303 n.39, 342 n.66
- digital intermediate (DI) 58–9,
61, 232
- digital mimicry (Rosen) 24
- digital video 2–3, 5, 8, 29–30,
32–4, 43–5, 49, 54–6, 58–9,
64–7, 70–3, 89–90, 95–7,
102, 107, 109–11, 113,
124–6, 128–33, 136–8, 143,
146, 173, 177–8, 181–4,
187, 190, 199–200, 202–3,
222, 225, 227–9, 231, 233,
236, 250, 255, 313 n.24,
316 n.55, 317 n.61, 326
n.49, *see also* video
- discreteness 1
- as DV 202, 233
- its frame buffering 72

- high-definition (HD) video 5, 32, 40, 64, 70, 72, 131, 137–8, 250, 255, 316 n.55, 317 n.61
 its progressive scanning 72
 its time-based correction 72
- Dijkstra, Rineke 81
- Doane, Mary Ann 21, 23, 25, 76, 85, 181, 184, 192, 311 n.11
 documentary 78, 175, 187, 197–8, 200, 209, 212, 220–1, 225, 227–9, 233–8, 247, 267–9, 276, 341 n.54
 animated documentary 220
 autobiographical
 documentary 200, 209, 228–9, 233–8, 341 n.54
 experimental
 documentary 200, 209, 220–1, 225, 236, 238
- Donenbauer, Peter 28
- Douglas, Kirk 167
- Douglas, Stan 46, 245, 247, 277, 292–4, 344 n.16
Win, Place, or Show
 (1998) 292–3
- Druckrey, Timothy 50
- dual articulation (Baker) 75, 77, 79, 89, 91
- Dubois, Philippe 336 n.97
- Duchamp, Marcel 351 n.92
- Duguet, Anne-Marie 245
- Dumont, Bruno 77
L'Humanité (1999) 77
- duration 21–2, 43, 48, 55, 57, 65–7, 74, 77–9, 81, 84–7, 91–2, 184, 251, 253, 255–6, 259, 269, 271, 284–6, 294, 306 n.55
- in film and video
 installation 251, 253, 255–6, 259, 269, 271, 284–6
- DVD 20, 24, 27, 88, 154, 171, 194, 198–9, 202, 210–11, 217–20, 249, 278–9, 281, 289, 292
- Eastwood, Clint 287
- Eggeling, Viking 102
- Egoyan, Atom 242
- Eisenstein, Sergei 80, 215
October: Ten Days That Shock the World (1928) 215
- Elder, R. Bruce 45, 149, 173–82, 194
Crack, Brutal Grief
 (2001) 174–7
The Young Prince
 (2006) 177–82
- electronic signal 28–30, 32, 34, 70–3, 90–1, 94, 114, 118–19, 125, 161, 163, 171, 176, 180, 184, 203, 205, 222, 276, 284, 313 n.24, 320 n.106, 322 n.7, *see also* video
- electronic technology/media 10–11, 17–18, 20, 27, 32–3, 39–41, 49, 51, 73, 79, 88, 95, 103, 155 106, 116, 146, 148, 169, 171–2, 178–81, 187–8, 193–5, 209, 238–9, 245, 253, 261, 263–4, 276–8, 282, 293
- Elsaesser, Thomas 24, 263
- Elwell, J. Sage 19
- Elwes, Catherine 250
- Enns, Clint 116–17
- Eros, Bradley 132–3
- essay film 45, 197–239, *see also* Intermedial essay film
 as diary film 229, 234
 its reflectivity and
 subjectivity 197–201, 204, 208–9, 212–15, 219–27, 229–38

- exhibition 243–4, 247, 255–6, 260, 270, 293, 348 n.70, *see also* installation/media installation expanded field (Krauss, Baker) 53–4, 56, 79, 97
- Farocki, Harun 46, 204–8, 242, 245, 258, 261, 263–7, 348 n.66, 348 n.69, 348–9 n.70
Counter-Music (2004) 266–7
Eye/Machine I, III, and III (2001–03) 264–6, 348–9 n.70 his idea of operational images 263–7, 348 n.69, 349 n.70
Inextinguishable Fire (1969) 206
Schnittstelle (Section/Interface) (1995) 205–6
Videogram of a Revolution (co-directed with Andrei Ujica, 1992) 205
Workers Leaving the Factory (1995) 206
- Fast, Omer 247
Spielberg's List (2003) 247
- film 2, 5, 8–9, 12–14, 16–17, 19–22, 26–31, 33–4, 36–7, 39, 41, 43–4, 47–9, 51–2, 55–6, 58–60, 62, 64–5, 67, 70–2, 74–8, 87–8, 90, 95–6, 102–3, 105, 113, 117–18, 123, 125–6, 128–30, 132, 137–40, 145–9, 152, 159–60, 169, 172–3, 176–8, 180, 183, 186, 192, 194–5, 203, 206, 212–13, 223, 232, 236, 238, 243, 247–52, 254, 257, 260, 272, 279, 283, 293–7, 299, 307 n.70, 311 n.11, 317 n.60, 320 n.99, 321 n.107, 337 n.112, 338 n.4, *see also* celluloid and cinema
- cameraless film 128, 139–40
- film footage 70
- filmic image 28, 39, 41, 58, 67, 71–2, 74, 95–6, 159, 180, 203, 206, 283, 293, 296–7
- filmic techniques 37
- film installation 14, 247–52, 254, 257, 260, 272, 296, 307 n.70
- film preservation 148
- film projection 212–13, 223, 247, 250, 294
- filmstrip 5, 12–14, 21–2, 74–6, 88, 103, 105, 129–30, 137–8, 146, 152, 183, 192, 195, 206, 295
- focus in film 71
- grain in film 71
- its mortality 176–7
- film stilled 44, 56–8, 75, 77–9, 89, 95, 284, 320 n.101, *see also* still film
- Fleisch, Thorsten 100–1, 105
Wound Footage (2003/2009) 100–1, 105
- Fleisher, Richard 266
Fantastic Voyage (1966) 266
- Fleming, Victor 158
The Wizard of Oz (1939) 158
- flicker film 5, 78, 117
- flicker effect 76, 78–9, 101, 117, 128–9, 131, 190, 232, 281
- Flusser, Vilém 285
- Fontaine, Cécile 329 n.17
Cruises (1989) 329 n.17
Two Made for TV Films (1986) 329 n.17
- Ford, John 113
The Searchers (1956) 113, 121
- Forgács, Péter 152
- form/formalism 9, 15, 35, 41, 52, 102, 109, 113, 116, 135

- Fossati, Giovanna 148
 Foster, Hal 252, 345–6 n.33
 found footage film/
 filmmaking 45,
 145–6, 149–93, *see also*
 compilation film and
 transitional found footage
 practice
 as counterhistory 172–3
 as dialectical 168–73, 183
 Fowler, Catherine 260–1,
 347 n.59
 frame 70–3, 76–9, 82, 85,
 88–90, 100, 112–14, 121,
 125, 135, 138, 154, 156,
 164, 169, 184–5, 188–92,
 260–1, 281, 283–5, 313
 n.24, 319 n.80, 344 n.14,
 347 n.59
 film frame 70–3, 76–8, 138,
 169, 184–5, 188–90, 260–1,
 281, 283–5, 347 n.59
 fixed frame 76–7, 79, 82, 85,
 319 n.80
 frame rates 70, 313 n.24
 frame time (Stewart) 73
 framed time (Stewart) 73
 freeze-frame 76, 79, 88–90,
 154, 156, 164, 260, 285
 keyframe 112–14, 121, 125
 video frame 70–2, 100,
 112–13, 260–1, 283–5, 313
 n.24, 344 n.14
 Frampton, Hollis 117, 119, 128,
 195, 336 n.90, 337 n.112
 and his idea of
 metahistorian 195
 Friedberg, Anne 20, 164, 274
 Friedrich, Casper David 62
 Frohne, Ursula 272
 Fruhalf, Siegfried A. 44, 107,
 130–2
Exposed (2001) 130
Exterior Extended
 (2013) 131
Structural Film Dissolution 1
 (2003) 130–1
 Furlong, Lucinda 28, 322 n.7
 Furstenau, Marc 154, 156
 gallery/museum 242–4, 247,
 250, 254–5, 257, 259,
 271–6, 279, 293, 307 n.70,
 347 n.59, 348 n.70
 Ganz, Bruno 247
 Gaudreault, André 24
 Gaut, Berys 7–9, *see also* nesting
 and differential properties
 Gehr, Ernie 56, 131, 145, 329
 n.17, 336 n.90
Eureka (1974) 329 n.17
Serene Velocity (1970) 56,
 131
 Géricault, Théodore 83
The Raft of the Medusa
 (1818–19) 83
 Gianikian, Yervant, and Angela
 Ricci Lucci 152
 Gibson, Sandra and Luis
 Recorder 132–3
 Gidal, Peter 251
 Gieskes, Gijs 108
 Gilbert, Charles Allan 83
All Is Vanity (1892) 83
 Girardet, Christoph and Matthias
 Müller 45, 149, 160–8,
 171–2, 194, 286, 331 n.46
Kristall (2006) 165–8
The Phoenix Tapes
 (1999) 161–5
 glitch/digital glitch video 44,
 106–8, 110, 112, 115–17,
 119, 123–7, 142–3, 177,
 see also databending,
 datamoshing, and noise
 in analogue video 116

- in film 116
 glitch as error 107–8, 127
 Godard, Jean-Luc 14, 80, 201,
 204–5, 207–8, 212, 216,
 242, 339 n.22, 340 n.29
Histoire(s) du cinéma (1988–
 98) 14, 204–5, 339 n.22,
 340 n.29
La Chinoise (1967) 216
*Letter to Jane: An Investigation
 About a Still* (co-directed
 with Jean-Pierre Gorin,
 1972) 212
Passion (1982) 80
Scénario du film “Passion”
 (1982) 201
 Godfrey, Mark 82
 Goldstein, Jack 47–8, 78
Jump (1979) 48
 Gonzalez-Foerster,
 Dominique 247, 256
Riyo (1999) 256
 Gordon, Douglas 46, 242, 245,
 247, 256, 277–86, 294, 344
 n.16, 350 n.90, 351 n.92,
 351 n.99
10ms¹ (1994) 350 n.90
24 Hour Psycho (1993) 256,
 279–86, 351 n.99
*Between Darkness and Light
 (After William Blake)*
 (1997) 279
Déjà-vu (2000) 279
Hysterical (1994/95) 350
 n.90
*left is right and right is wrong
 and left is wrong and right
 is right* (1999) 279
Through a Looking Glass
 (1999) 279
 Goriunova, Olga 108
 Gottlieb, Carl 121
Cavemen (1981) 121
 Graham, Dan 65, 244,
 250–1, 264, 272,
 315 n.45
Present Continuous Past(s)
 (1974) 315 n.45
 Green, David 57, 74–5, 86, 90
 Greenaway, Peter 40, 310 n.89
Prospero’s Books (1991) 40
 Grimonprez, Johan 152, 175
Dial H-I-S-T-O-R-Y
 (1998) 175
 Groys, Boris 259, 293
 Grusin, Richard 37–8
 Greenberg, Clement 11–12, 14,
 17, 102, 142, 302 n.27,
 322 n.2
 Gunning, Tom 57, 335 n.90
 Gursky, Andreas 51–3
 Habib, André 176–7
 Hadjioannou, Markos 25
 Halter, Ed 117
 Hamlyn, Nicky 317 n.60
 handmade film 5, 8, 13, 139
 Haneke, Michael 344 n.12
Funny Game
 (1997/2008) 344 n.12
 Hannah, Adad 43, 56–7, 79,
 83–4, 86–7, 95
4 Chairs (2002) 84
Crying (2002) 84
Museum Stills (2002) 83–4,
 86–7
Tribute (2002) 83
 Hansen, Mark B. N. 276–7
 Hansen, Miriam Bratu 333 n.66
 happening 11
 Hayles, N. Katherine 126,
 326 n.47
 Heartney, Eleanor 271
 Heath, Stephen 347 n.59
 Hilderbrand, Lucas 220
 Hill, Gary 242

- Hitchcock, Alfred 158–9, 161–5, 176, 256, 282–5, 295–6, 343–4 n.12
The Man Who Knew Too
Much (1934) 343 n.12
The Man Who Knew Too
Much (1956) 344 n.12
North by Northwest
(1959) 165
Psycho (1960) 159, 176, 256, 282–5, 295–6
Spellbound (1945) 165
Vertigo (1958) 158–9
- Hofmann, Hans 182, 335 n.87
- Holden, Clive 45, 200, 209, 229–33, 238
18,000 Dead in Gordon's Head (A Found Film)
(2002) 230–2
Hitler! (Revisited)
(2004) 232–3
Trains of Winnipeg: 14 Film Poems (2004) 229–33
- Hollander, Anne 311 n.5
- Hölzl, Ingrid 49
- home movie/home video 223, 227–38, 338 n.4
and amateur filmmaking 227–8, 233, 338 n.4
- Home Stories* (Müller, 1990) 163
- Horwatt, Eli 153–4
- Huffman, Kathy Rae 262
- Huillet, Danièle 77
- Hutton, Peter 318–19 n.80
At Sea (2004–07) 319 n.80
Looking at the Sea (2000–01) 319 n.80
Time and Tide (1998–2000) 318 n.80
- Huyghe, Pierre 242, 247, 344 n.16
L'Ellipse (1998) 247
The Third Memory
(1999) 247
- hybrid abstraction 42, 44, 101–44, *see also abstract/abstraction*
- hybrid moving image 3–4, 7–10, 19, 27, 33–9, 41–4, 59, 64–5, 74–5, 79, 93, 95, 101–2, 119, 123, 143–4, 182–3, 188, 190, 194, 199–200, 223–7, 230–3, 238–9, 294, 297–9, *see also* moving image and impurity
- hybridization/hybridity 1–2, 4–7, 9–11, 13–16, 19, 22, 24–6, 31, 33–5, 38, 40–2, 45–6, 51, 72, 78, 97, 102–7, 116, 119, 123–4, 126–7, 132–6, 143, 147–8, 151, 154–5, 160, 174–82, 188, 198–200, 204, 206, 208–9, 212, 223–7, 229–30, 234, 238, 245, 254, 256, 258–9, 261–2, 276, 283–6, 292–9, 307 n.70, 310 n.89, 323 n.15, 323 n.16, *see also* coexistence and interrelation
- in cinematic video
- installation 245, 254, 256, 258–9, 261–2, 276, 283–6, 292–4, 307 n.70
- as co-presence and exchange 2, 78, 208–9, 223–7
- diachronic hybridization 24, 27, 34, 37, 40–1
- as dialectical to medium
- specificity 6–7, 11, 33, 106
- of film and video 106–7, 126–7, 133, 135, 160, 223–7, 229–30, 283–6, 292–5, 323 n.15
- hybrid materialism 119, 143, 179, 181, 323 n.16

- hybrid revolution 16
in the media transition 147–8, 154, 198–200, 204, 206, 209, 212
as a medium’s constitutive nature 5
plastic hybridization (Vaude) 133–6
synchronic hybridization 26–7, 34, 38, 40–1, 72, 106
- Iles, Chrissie 244
image processing 4, 28–9, 103, 106, 116–19, 124, 127, 131, 143, 174, 187, 236–7, 322 n.7, 344 n.14, *see also* video image-processing video 103, 106, 116–19, 124, 127, 143, 187, 322 n.7
immaterial/immateriality 21, 107, 115, 169, 181, 219, 251
impurity 3, 9, 24, 97, 103, 120, 126, 133, 145, 194, 243, *see also* hybrid moving image index/indexicality 21–2, 24, 43, 51–2, 85, 87–8, 94, 121, 193, 276, 311 n.11
as deixis 85
as trace 85, 121
installation/media installation 11, 14, 26–7, 32, 38, 46, 48–9, 242–3, 245, 252–4, 259, 261, 319 n.80, *see also* exhibition, spectator/spectatorship, and video installation
instantaneity 43
intermedia (Spielmann) 40–1
intermedial/intermediality 24, 34–41, 56, 76, 78, 80, 96, 149, 168, 181–3, 193, 199, 203–4, 207, 211, 213, 218, 223–7, 230–1, 237–8, 294, 297, 309–10 n.86
intermedial essay film 42, 45, 199–239, *see also* essay film
interrelation 3, 9, 13, 27, 35, 41–2, 59, 70–1, 101, 126, 155, 199–200, 208, 238, 297–9, *see also* coexistence and hybridization/hybridity
intertextuality 37
interval 41, 128, 183–4, 189, 279, 284
Isou, Isidore 104
Jackson, Michael 287
Jacobs, Ken 45, 145, 149, 182–94, 326 n.49, 335 n.87, 335 n.89
Anaglyph Tom (Tom with the Puffy Cheeks) (2008) 183–9
Capitalism: Child Labor (2007) 190–3
and his “Eternalism” 189–93
Return to the Scene of the Crime (2008) 183–9
Tom, Tom, the Piper’s Son (1969) 182–6
James, David E. 103
Jameson, Fredric 29, 217, 305 n.49
Jarecki, Andrew 341 n.54
Capturing the Friedmans (2003)
Jenkins, Henry 147
JODI (artists collective) 108
Johns, Jasper 351 n.92
Jonas, Joan 87, 116, 250
Vertical Roll (1973) 116
Joselit, David 118, 251
Julien, Isaac 242, 247

- Kane, Carolyn L. 116–17
 Kentridge, William 13–14, 19
 drawings for projection
 13–14, 19
 Kiarostami, Abbas 46, 242,
 319 n.80
Five Dedicated to Ozu
 (2003) 319 n.80
 Kirby, Lynn Marie 44, 107,
 128–9
Golden Gate Bridge Exposure: Poised for Parabolas
 (2004) 128
Karate Class Exposure: Three Variations (2004) 128–9
Latent Light Excavation series
 (2003–07) 128–9
St. Ignatius Church Exposure: Lenten Light Conversions
 (2004) 128
Time-Dilation series
 (2000–03) 128
 Kittler, Friedrich A. 303–4 n.39
 Knowlton, Kenneth 124
 König, Sven 113
 Kotz, Liz 251, 262
 Krauss, Rosalind E. 10–13,
 15–17, 19, 29, 53, 85,
 303 n.39, 304 n.40, 304
 n.43
 Kubelka, Peter 129
Arnulf Reiner (1960) 129
 Kuntzel, Thierry 321 n.107
 Kurtz, Bruce 29
 Kutty, Meetali 112, 124
 Lafuente, Pablo 216
 Laitala, Kerry 323 n.16
 Landesman, Ohad 202
 Landow, George 116–18, 130
Film in Which There Appear Edge Lettering, Sprocket Holes, Dirt Particles, Etc.
 (1966) 117, 130
 Lazzarato, Maurizio 317 n.62
 LED 1–3
 Lee, Bruce 215
Game of Death (1978) 215
 Lee, Spike 344 n.12
 Lefebvre, Martin 154, 156
 Léger, Fernand 102
 Le Grice, Malcolm 25, 103, 106,
 118–19, 127, 251, 325 n.37
Berlin Horse (1970) 118,
 325 n.37
Chronos Fragmented
 (1995) 119
Digital Still Life (1984–86)
 119, 325 n.37
Little Dog for Roger
 (1967) 118
 Leigh, Janet 282–3
 Lemaitre, Maurice 104
 lens-based/live-action image 2,
 9, 22, 31, 40, 50, 52, 54, 59,
 104, 133
 Lettrist film 104
 Lewis, Mark 43, 54–6, 59, 62–6,
 71–3, 75, 79, 96, 314 n.33,
 316 n.50, 317 n.61
Airport (2003) 66–7
Algonquin Park, Early March
 (2002) 62–4
Algonquin Park, September
 (2001) 62–4
Downtown Tilt, Zoom, and Pan (2005) 67
Prater Hauptallee, Dawn and Dusk (2008) 316 n.50
Windfarm (2001) 66
 Lockhart, Sharon 53, 79
Goshogaoka (1997) 79
Pine Flat (2006) 79
Teatro Amazonas (1999) 79
 long take 54, 60, 77, 82, 292
 Longo, Robert 47–8, 78
Sound Distance of a Good Man (1978) 48

- Lopate, Phillip 197–8
Lowry, Joanna 74, 86
Lumet, Sidney 247
Dog Day Afternoon
(1975) 247
Lundemo, Trond 64
Lütticken, Sven 18, 172, 217,
305 n.45
- MacDonald, Scott 230
Mackenzie, Adrian 149–50
Madonna 287
Mangolte, Barbette 21
Manovich, Lev 10–12, 15,
17–19, 22–3, 32–3, 123–5,
142–3, 156–7, 306 n.59
Marclay, Christian 304 n.40
Video Quartet (2002)
304 n.40
Marey, Étienne-Jules 40, 76
Marion, Philippe 24
Marker, Chris 46, 76–7, 141,
206–8, 310 n.89, 311 n.7
The Case of the Grinning Cat
(2004) 202
Owls at Noon Prelude:
The Hollow Men
(2005) 311 n.7
Immemory (1997) 206,
311 n.7
La Jetée (1962) 76–7
Level 5 (1997) 206–7
Sans Soleil (1982) 141
Marks, Laura U. 72, 179–80
 haptic visuality 180
Marley, Bob 287
Mastroianni, Marcello 167
material/materiality 5–8, 10, 13,
15, 17–18, 20–2, 26, 28,
33, 43–4, 50, 64, 70–1, 73,
85, 96–7, 101–4, 105–8,
112–13, 115–16, 118–21,
124–31, 133, 137–8, 140–1,
148, 152, 157, 161–3, 168,
173, 176–7, 179–81, 183,
187, 193, 195, 203, 210–15,
225, 228, 230–2, 234–5,
250–1, 257, 278, 283–6,
296, 322 n.7, 326 n.47
of celluloid/film 20–2, 26,
70–1, 85, 96, 101, 103–5,
107, 118, 125, 127–31,
133, 137–8, 140–1, 148,
152, 157, 163, 169, 173,
176–7, 179–81, 183, 193,
195, 203, 213, 225, 228,
230–2, 234–5, 250–1,
278, 283
of the digital image 106–8,
112–13, 115–16, 119–21,
126, 127, 129, 177, 187,
210–12, 218–20, 296
of video 28, 33, 70, 73, 101,
125, 127, 161–3, 168, 173,
176, 180, 187, 212, 214–15,
228, 230–2, 234, 250–1,
257, 284–6, 322 n.7
materialism 15, 44, 100–1,
115–17, 125–8, 130, 141–2,
179, 187
digital materialism 115–17,
125–7, 142, 177, 210–12,
218–20
in experimental film and
video 100–1, 128, 130,
141, 169–70, 187
random materialism
(Bourriaud) 15
Maxwell, Stephanie 323 n.16
Mayer, Marc 32
McCall, Anthony 26, 250, 335
n.89
McClure, Bruce 132–3
McCoy, Jennifer and Kevin 247
McElwee, Ross 341 n.54
Bright Leaves (2003)
Photographic Memory
(2011) 341 n.54

- McLuhan, Marshall 304 n.43
 McQueen, Steve 247, 260
 Meaney, Evan 44, 109–11, 115,
 119, 142
Beneath the Pressure of the Sky
 (2008) 109–10
The Ceibas Cycle (2007–11)
 109–10
Ceibas: Epilogue-The Well of
 Representation (2011) 110
Ceibas: Sigma Fugue
 (2009) 109
Ceibas: we things at play
 (2010) 109, 111
Prologue: How Mayan Loves
 Might Find the Next Life
 (2007) 109
Shannon's Entropy
 (2008) 109–111
 media 3–4, 6–12, 15, 17–18,
 25–7, 32, 34–5, 40–1, 50,
 65, 106, 108, 234, 297–9
 its multiple components 3,
 5–8, 10–12
 its properties 9
 media equivalence and
 mixing 15
 as old media 8, 18, 25–6,
 34–5, 40, 106, 108,
 234, 298
 media archaeology 24, 190, 204
 media combination
 (Rajewsky) 36–7
 media incorporation 8–9, *see*
 also Gaut, Berys and nesting
 medium 3–15, 17–18, 28–30,
 37–9, 42, 47, 70–1, 74,
 147–8, 186, 210, 298–9,
 303 n.39, *see also*
 convention, Krauss,
 Rosalind E., and Rancière,
 Jacques
 as composite 5, 8, 12, 147–8
 its properties 9–12, 71
 as milieu (Rancière) 14–15
 as old supports and
 techniques 13, 17
 reinventing the medium
 (Krauss) 13, 16–17, 19
 video as medium 70
 medium specificity 4, 6–7, 9–18,
 20–1, 25–6, 28, 31, 33–4,
 42, 44–6, 48, 51–2, 55,
 58, 65, 71–5, 91, 95–7,
 102, 108, 119, 129, 132–3,
 137–42, 145, 147, 155, 157,
 171, 180, 183, 194, 204,
 248, 250–1, 253–4, 262,
 273, 281, 294, 297–9, 303
 n.33, 303 n.39, 304 n.40,
 304 n.43, 320 n.99, 335
 n.89, *see also* hybridization/
 hybridity
 coupled with metaphoric or
 symbolic meanings 132–3,
 137–42
 as dialectical to media
 hybridity 6–7, 11, 13–14,
 16, 19, 25, 28, 33, 45–6,
 96–7, 297–9
 of the digital image 108
 distinction between film and
 photography 55, 58, 73–5,
 91, 96, 204, 320 n.99
 of film 95, 100, 129, 147,
 155, 157, 171, 183, 194,
 250–1, 253, 281, 304 n.40,
 335 n.89
 as modernist thesis 4, 6,
 10–16, 18–19, 26, 29, 42,
 51–2, 71, 97, 102, 145, 183,
 273, 298–9, 303 n.33
 of video 72, 96–7, 129, 180,
 250–1, 253–4, 262, 294
 Meigh-Andrews, Chris 31
 Mekas, Jonas 145

- memory 18, 43, 45–6, 188, 195, 199–201, 204–9, 211, 214–15, 221–7, 229–39, 277, 279, 281, 285, 294, 304 n.43
memories-in-between 200–1, 208–9, 214–15, 223–7, 229–39
Menkman, Rosa 44, 107, 114–15, 120, 126, 326 n.47
The Collapse of PAL (2010) 114
Compress Process (Revisited) (2010) 114–15
Dear Mr. Compression (2009) 114
minicking lo-fi aesthetics (2011) 114
Mettler, Peter 202
Gambling, Gods & LSD (2002) 202
Metz, Christian 57, 164, 313 n.24
Meyer, Russ 215
Faster, Pussycat! Kill! Kill! (1965) 215
Michaud, Philippe-Alain 63
Mitchell, William J. 59
mixed-media abstraction 44, 106, 126–8, 131–43, 323 n.16
modernism/modernist 10–12, 18, 23, 28, 32, 38, 41–2, 48, 52, 55, 76, 91, 96, 102–3, 132, 143, 150, 156, 183, 242, 245, 249, 253, 255, 260, 264, 277, 286, 292, 298–9, 306 n.55, 329 n.16
Moholy-Nagy, László 23
Mondloch, Kate 252–3, 255
Monk, Philip 284
montage 4, 14, 23, 27, 45, 71, 86, 150–3, 155–61, 164–5, 167, 175–6, 194, 198, 200, 205–6, 208–9, 212, 217–18, 220, 223, 238, 263–7, 270–3, 275, 286, 292, 294, 329 n.16, 348 n.66, *see also* collage and video
video-based montage 14, 150, 155–61, 164–5, 167, 194, 200, 205–6, 209, 217–18, 220, 238, 286, 292
Moran, James M. 228
Moreau, Jeanne 167
Morgan, Daniel 85
Morrison, Bill 104, 176, 179, 181
Decasia: The State of Decay (2002) 104, 176, 179, 181
The Film of Her (1997) 176, 179
Light is Calling (2003) 176
Morse, Margaret 256–9
motion/movement 13, 35, 40, 43, 48–9, 51, 53–4, 56–8, 62–4, 66–7, 70, 72–6, 79, 88–9, 91–5, 131, 135, 184, 187–8, 192, 279, 313 n.24, 335 n.90, *see also* moving image
moving image 2–4, 6–9, 12, 15–16, 18–20, 22, 27–8, 31–2, 35–7, 39–40, 42–3, 48, 59, 66, 68, 74, 80, 86, 88, 109, 159, 186, 188, 190, 242, 248, 261, 299, *see also* hybrid moving image and motion/movement
as discussed by Noël Carroll 4, 6, 22
movement-image (Deleuze) 75
time-image (Deleuze) 77
moving picture (Danto, Hollander) 48, 311 n.5

- moving still (Hölzl) 49
 multi-mediating Picture (Van Gelder and Westgeest) 49
 Mulvey, Laura 88, 90, 164, 192, 282
 Murata, Takeshi 44, 121–4
Monster Movie (2005) 121–3
Untitled (Pink Dot)
 (2007) 121–3
Untitled (Sliver) (2006) 121–3
 Murnau, F.W. 135
Nosferatu (1922) 135
 Murray, Timothy 90–1, 209, 340 n.29
 Muybridge, Eadweard 40, 76, 178, 183, 335 n.90
 Narkevicius, Deimantras 247
Revisiting Solaris (2007) 247
 Nauman, Bruce 65, 87, 244, 250, 264, 304 n.40, 315 n.45
Lip Sync (1969) 304 n.40
Live-Taped Video Corridor
 (1970) 315 n.45
 nesting (Gaut) 8–9, *see also*
 differential properties and
 media incorporation
 Neumann, Andrew 295–6
Double Psycho (2011) 295–6
 new media 10–12, 16–18, 23, 27–8, 34–5, 40, 50, 171, 193–4, 201, 206, 209, 304 n.40, *see also* digital/digital technology/digital media
 new media art 28
 “new media camp”
 discourse 10–12, 16, 23
 Nicholson, Jack 287–92
Cuckoo’s Nest (1975) 288
The Departed (2006) 288
The Shining (1980) 288
The Witches of Eastwick
 (1987) 287
 noise 55, 100, 104, 106, 110–11, 114–15, 117–18, 127, 213, *see also* glitch/digital glitch video
 obsolescence 17, 145, 181, 195, 255, 281, 303 n.39
 O’Neil, Pat 329 n.17
Runs Good (1971) 329 n.17
 ontology/ontological 24–5, 27–8, 30–1, 33–5, 41–4, 49, 53, 57, 65, 80, 87, 93, 146, 148, 150, 154, 161, 170–1, 176, 193, 200, 243, 293, 297, 299, 317 n.62
 optical printing/printer 16, 76, 118, 152, 156, 161, 175–6, 289, 295
 O'Reilly, David 113
 Orgeron, Devin 228
 Orgeron, Marsha 228
 O'Riordan, Dolores 99, *see also*
 The Cranberries
 Osborne, Peter 52
 Oursler, Tony 242
 Ozu, Yasujiro 77
 Paech, Joachim 36
 Paik, Nam June 26, 65, 116, 118, 242, 315 n.45
Electronic Opera #1
 (1969) 118
TV Buddha (1974) 315 n.45
Videotape Study #3
 (1967–69) 118
 Päini, Dominique 242, 244, 249, 257–8, 278, 281
 patrimony [*patrimonie*] 249
 painting 7–8, 12–16, 33–4, 37, 41, 43, 47, 51, 53–6, 59–62, 64–5, 67–70, 72–4, 79–80, 83, 97, 102, 104, 134–5, 139, 178, 180–3, 186–7, 204, 221, 243, 248, 259,

- 311 n.5, 315 n.38, 319 n.80, 319 n.81, *see also* tableau/tableau vivant
- of Abstract Expressionism 139, 182
- of Cubist, Futurist, and Dadaist painters 102, 178, 182–3, 187
- painterly quality of the image 58, 62, 69–73, 79, 104, 180, 187, 221, 315 n.38
- of Renaissance and Baroque 83
- as tableau 80, 319 n.81
- Paper Rad (artists collective) 100, 113, *see also* Ciocci, Jacob
- Parfait, François 321 n.107
- Park, Chan Wook 344 n.12
Oldboy (2003) 344 n.12
- Parreno, Philippe 242
- Peck, Gregory 165
- Peirce, Charles Sanders 85, 311 n.11
- performance 11, 19, 26, 47, 87, 132–3, 182–3, 189
film projection performance 132–3, 182
- Nervous System performance (Jacobs) 183, 189
- video performance 87
- Perkins, Anthony 167, 282
- Pethő, Ágnes 37, 203–4, 208
- Peucker, Brigitte 80
- photochemical 9, 20–1, 24, 43, 49, 51, 62, 94, 100, 103, 105, 107, 116, 129, 134, 137–42, 148, 173, 175, 178–81, 187–9, 193, 225, 276, *see also* photography and celluloid
- chemical manipulation/transformation 100, 103, 105, 107, 116, 134, 137–42, 173, 175, 178–81
- photograph/photography 2, 3, 9, 11, 13, 15–17, 19–20, 22, 27, 31, 33–4, 39–41, 43, 47–52, 54–7, 59–61, 64–5, 67, 71–4, 76–81, 85–7, 89–97, 135, 180, 183, 190, 193, 204, 206, 235–8, 248, 297, 311 n.11, 312 n.13, 313 n.28, 319 n.80, 320 n.99, 320 n.101, 321 n.107, 321 n.117, 321–2 n.118, 335 n.90, 344 n.16
- cinematic photograph 74
- digital photography 31, 38, 50, 59, 94
- instantaneous photography 76, 335 n.90
- long-exposure photography 77
- as pensive image 87
- photographic image 3, 9, 20, 27, 71, 73, 76, 96, 135, 180, 183, 193, 204, 206, 235–7, 297
- photographic portrait 86
- post-photography 49–50, 52
as snapshot 92–3
- photorealistic/photorealism 27, 43, 55, 58, 60, 64, 71, 96, 103, 105–6, 112, 143–4, 156, 187
- Pierson, Michele 152
- pixel 1, 3, 33–4, 56, 58–9, 65, 90, 94, 99–101, 108–13, 115, 119–25, 127–8, 156–7, 171, 184, 203, 213, 215, 222, 313, 321
- Poletti, Anna 234
- Pollock, Jackson 140
- post-cinematic 20, 25–6, 46, 217, 243, 249, 263–7, 278–9, 285, 291, 305 n.45, *see also* post-filmic

- post-filmic 20–1, 23, 25–6, 44–5, 73, 89, 120, 141, 150, 164, 168, 194–5, 198–201, 203–4, 208–9, 211–13, 215–18, 220, 223–4, 238, 277, 283, 285, 292, 305 n.49, *see also* post-cinematic
- post-media condition 10, 15–23, 26–7, 29, 33–5, 39, 41–2, 44, 72, 144, 151, 155, 171–3, 194–5, 198–209, 211, 238–9, 294, 298–9
- of film 20–2, 27, 41, 44, 151, 155, 171–3, 194–5, 198–209, 211, 238
- post-media aesthetics (Manovich) 11, 15–16
- post-media condition (Weibel) 11, 15–16
- of video 29, 33–4, 41, 72
- post-medium condition (Krauss) 10–12, 16–19, 51, 298, 304 n.40, *see also* technical support
- post-minimalism 26
- postmodernism/postmodern 47, 298
- postproduction 58–60, 67, 70, 73, 128, 143, 153–4, 202, 211, 278, 286, 315 n.48
- as Bourriaud's concept 153–4, 211, 278, 286
- in digital video 59, 67, 73, 128, 202
- in filmmaking 58, 60
- Preminger, Otto 279
Whirlpool (1949) 279
- Prince, Richard 286
- Prince, Stephen 59–60, 71, 315 n.38, 317 n.60
- process art 11
- profilmic reality 5, 9, 20, 27, 39, 49, 81
- Ragona, Melissa 124
- Rajewsky, Irina O. 35, 309 n.84
- Rancière, Jacques 10, 14–15, 87, 95, 302 n.27, 339 n.22
- Rascaroli, Laura 197–8, 207, 236
- Razutis, Al 329 n.17
Visual Essay series (1973–84) 329 n.17
- readymade 150, 329 n.16, 351 n.92, 352 n.111
- real time 32, 55, 65, 85, 87, 96, 244, 290, 295, 306 n.55, 344 n.14
- realism/realist 5, 16, 38, 84, 103, 220, 250, 322 n.7
- Reble, Jürgen 44, 107, 133, 137–9
Instabile Materie (1995) 138
Materia Obscura (2009) 138–9
- Rees, A. L. 251, 322 n.2
- Reeves, Daniel 236–7
Obsessive Becoming (1995) 236–7
- remake/remaking cinema 246–9, 254–6, 278, 343–4 n.12, 344 n.14
- Remes, Justin 56
- remediation (Bolter and Grusin) 37–8, 79, 310 n.89
- as hypermediacy 38
- as immediacy 38
- remix 153–5, 160, 329–30 n.21, *see also* sampling
- Renov, Michael 198, 201–2
- Reynolds, Lucy 169
- Richter, Hans 102, 104
- Riff, David 218
- Rihanna 99
- Rimmer, David 329 n.17
Variations on a Cellophane Wrapper (1970) 329 n.17

- Rist, Pipilotti 262, 348 n.64
Bremen Lobe Of The Lung (2011) 348 n.64
Pour Your Body Out (7354 Cubic Meters) (2008) 348 n.64
- Rodowick, D. N. 6, 8–9, 21–3, 25, 65, 71, 125, 147, 306 n.55, 317 n.60
- Romero, George A. 135
Night of the Living Dead (1968) 135
- Rosen, Philip 24
- Ross, Christine 54, 65
- Røssaak, Eivind 159
- Rouyoux, Jean-Christophe 247–8
cinema of exhibition (*cinéma d'exposition*) 247–8
- Russell, Catherine 78, 149–50, 167–8, 171–2, 223, 234, 319 n.80
- Russian constructivism 23
- Rush, Michael 31
- Ruttmann, Walter 102, 104, 266–7
Berlin: Symphony of a Great City (1927) 266
- Sachs, Lynne 45, 200, 209, 220–7, 238
The Last Happy Day (2009) 224–7
States of Unbelonging (2005) 221–4
- Saether, Susanne Østby 155
- Sala, Anri 247
- sampling 153–5, 160, 286, 351 n.92, 352 n.111, *see also* remix
- Sander, August 81
- Saude, Marcy 323 n.16
- Schwartz, Lillian 124
Pixillation (1970) 124
- Scorsese, Martin 58
The Aviator (2005) 58
- screen/multiscreen 250, 255–6, 258, 261–2, 265, 267, 271–6, 279, 282, 288–92
- sculpture/sculptural 250, 256, 259, 348 n.64
- Sedgwick, Edie 290
- self-reflexivity 36–7, 39, 65, 78, 97, 102–3, 127, 139, 198, 200, 204, 209, 215, 218, 223, 238, 242, 253, 262, 309 n.86
- Shannon, Claude 111
- Sharits, Paul 26, 116–19, 128–9, 250–1
Epileptic Seizure Comparison (1976) 117
Ray Gun Virus (1966) 129
T,O,U,C,H,I,N,G (1968) 117
- Sherman, Cindy 53, 78
- Shiff, Richard 1
- Shulgin, Alexei 108
- Sicinski, Michael 129
- Siegel, Eric 28
- Simon, Jane 228
- simulation 18–19, 27, 29, 91, 107, 206–7, 265–7
- site-specific art 26
- Sitney, P. Adams 77
- Skoller, Jeffrey 168, 172
- slow motion 32, 64, 68, 70, 72–3, 76–7, 89, 138, 154, 156, 161, 204, 222, 260, 279, 281–3, 285–6
- Smith, Harry 104
- Smithson, Robert 141
Spiral Jetty (1970) 141
- Snow, Michael 85, 145, 250, 326 n.49
Wavelength (1967) 85
- Sobchack, Vivian 22

- software 15–16, 18, 23, 29–30, 59–60, 64–5, 70, 100, 107–9, 113, 115–16, 125, 128, 142–3, 147, 152–3, 157–9, 174, 182, 184, 234, 236, 314 n.33, 330 n.21
- Sokurov, Alexander 306 n.55
Russian Ark (2002) 306 n.55
- Solomon, Phil 329 n.17
The Secret Garden
(1986) 329 n.17
- Solomon-Godeau, Abigail 52
- Sørenssen, Bjørn 202
- special effect 5, 45, 152–3, 155–61, 164, 184, 187–8, 193–4, 200, 208–9, 221, 286, 295
- in avant-garde
filmmaking 152–3, 155–61, 187, 295, 320 n.101
- spectator/spectatorship 88, 90, 161, 163–5, 243–5, 250–9, 265–6, 269, 271–6, 279, 281–94, 346 n.33,
see also installation/media
installation and video
installation
and fetishism 164
in film and video
installation 243–5, 250–9, 265–6, 269, 271–6, 281–94
as illusory 252–3, 257–8
as immersion 251–3, 346 n.33
mobile spectatorship 254, 256–9, 269, 271–6, 279
- pensive spectator (Bellour and Mulvey) 88, 90, 320 n.101
- spectatorship in video 163–5, 279, 281–3
- Spector, Nancy 285
- Spielberg, Steven 310 n.89
- Spielmann, Yvonne 28, 33, 40–1, 125, 253
- Stallone, Sylvester 121
Rambo: First Blood
(1982) 121
- Stam, Robert 309 n.86
- Stark, Scott 145
- stereoscope/stereoscopic 182, 189–93, *see also* three-dimensionality/3D
- Steyerl, Hito 45, 200, 209–20, 238, 340 n.40
- her concept of the poor image 210–11, 213–14, 216–18, 238
- her concept of travelling images 212, 215, 218–20
In Free Fall (2010) 212, 216–20
November (2004) 212–16, 340 n.40
- Stewart, Garrett 73
- Stiegler, Bernard 193
- still film 44, 56–8, 75–9, 81, 85, 95, *see also* film stilled
- stillness 2, 12–14, 35, 40, 43–4, 48–9, 52–4, 56–7, 59, 61, 63–7, 73–6, 79, 82, 87–9, 91, 93–5, 131, 135, 158, 178, 182–4, 187–8, 190, 192, 205, 235, 279, 282–3, 313 n.24, 335 n.90
- still image 2, 12, 48, 59, 74, 87, 158, 182, 188, 190, 205, 235, 282–3
- still photograph/photographic stillness 2, 13–14, 40, 44, 74–76, 82, 88, 93, 178, 183–4, 187, 192, 335 n.90
- Stone, Sharon 287
- stop-motion effect 66
- Strand, Chick 329 n.17
Waterfall (1967) 329 n.17

- Straub, Jean-Marie 76
Streep, Meryl 288–92
Bridges of Madison County (1995) 288
The Hours (2002) 289
Kramer vs. Kramer (1979) 288
Sophie's Choice (1982) 288
Streuli, Beat 81
structural digital video (Enns) 116
structural film 44, 77, 102, 106, 116–17, 119, 126–8, 130–1, 152, 250, 336 n.90
structural/materialist film 103
Struth, Thomas 51, 81
Sturken, Marita 188
superimposition 185, 187–8, 191–2, 194, 204–5, 225, 230, 232–3
surface 32, 43, 55–6, 58–60, 64, 67–70, 72, 74, 90, 96, 148, 155–6, 161–2, 167–8, 173, 180, 194, 203, 235, *see also* digital/digital technologies/digital media
surface manipulation 56, 70–2, 90, 96, 155–6, 167–8, 180, 194, 203
synthesizer 28, 55, 65, 106, 116, 118, 125
tableau/tableau vivant 37, 56, 80–1, 83–5, 87, *see also* painting
single-shot tableau 80–1, 84–5, 87
Tafler, David I. 190
Tan, Fiona 43, 56–7, 79, 81–2, 84, 86–7, 95, 319–20 n.94
Facing Forward (1999) 319 n.94
Correction (2004) 81–2, 86
Countenance (2002) 81–2, 86
Tuareg (1999) 319 n.94
Tashiro, Charles Shino 162–4
Taylor, Elizabeth 167
Taylor-Johnson, Sam 43, 53–6, 59–62, 65–6, 71–3, 75, 79, 96, 242, 247, 314 n.33, 315 n.48
A Little Death (2002) 60–2, 65–6, 315 n.48
Prelude in Air (2006) 314 n.33
Still Life (2001) 60–2, 65–6, 315 n.48
technical support (Krauss) 12–13, 15–17, 304 n.40, *see also* Krauss, Rosalind E. and Post-medium condition
television/televisual 11, 20, 29, 36, 160–1, 163, 175, 201, 212, 215, 222–3, 233, 244, 249–51, 267–9, 290, 292, 299, 322 n.7, 338 n.4
Temkin, Daniel 108
temporality 21–2, 29, 31–3, 43, 54–7, 59, 62, 64–7, 72–4, 76–7, 84–91, 95–6, 148, 150–1, 155–7, 172–3, 177, 181, 184, 192, 194, 203, 229, 231–2, 254, 258–60, 270–1, 275–94, 344 n.14, *see also* digital/digital technologies/digital media
of cinema 76–7, 87–90, 96, 192, 194, 277–9
condensation of time 66, 72
of found footage film 150–1, 172–3, 177, 181
of photography 76–7, 85–90, 95–6, 192, 194
temporal manipulation 56, 64–7, 72–3, 90, 96, 150–1,

- 155–7, 184, 194, 203, 260, 276–9, 283–6, 289–94
in video installation 254, 258–9, 270–1, 275–93
theatricality/theatricalization 82, 261–9
as Duguet's concept 261–9
Thorburn, David 147
Thornton, Leslie 152
three-dimensionality/3D 182, 186–90, 192, 244, 250, 254, 257, 267, *see also* stereoscope/stereoscopic
in film and video
installation 244, 250, 254, 257, 267
Tomas, David 52
Torlasco, Domietta 209
transcoding (Manovich) 17–19, 21, 25, 33
transformation Imagery (Spielmann) 28–9, 33–4, 65
transitional found footage
practice 42, 45, 146–95, 200, 207, 238–9, 278, 286, 295, *see also* found footage
film/filmmaking
Trecartin, Ryan 262, 348 n.64
Ledge (with Lizzie Fitch, 2014) 348 n.64
Range Week (with Lizzie Fitch, 2014) 348 n.64
Tretyakov, Sergei 217, 219–20
Tsai, Ming-Liang 77
Goodbye, Dragon Inn (2003) 77
Tscherkassky, Peter 130, 152, 161
Turim, Maureen 64
Turner, J. M. W. 62
Turvey, Malcolm 184, 326 n.49
revelationism in cinema 184
Usai, Paolo Cherchi 21, 176
Utterback, Camille 105, 344 n.14
Liquid Time Series (2000–02) 105, 344 n.14
VanDerBeek, Stan 106, 323 n.15
Poem Field series (1964–7) 323 n.15
Van Gelder, Hilde 49
Van Sant, Gus 77, 296, 344 n.12
Gerry (2002) 77
Psycho (1998) 296, 344 n.12
Varda, Agnès 202
The Gleaners and I (2000) 202
variability 5–7, 32, 247, 306 n.55
Vasulka, Steina 28, 116, 118–19, 242
Violin Power (1978) 119
Vasulka, Woody 28, 116, 118–19, 187–8, 242
Art of Memory (1987) 187–8
C-Trend (1974) 119
Vaude, Johanna 44, 107, 133–6
De l'Amort (Love & Death) (2005) 134–6
Notre Icare (2001) 134
Samouraï (2002) 134
Totalité Remix (2005) 134–5
Velázquez, Diego 83
Las Meninas (1656) 83
Vertov, Dziga 23, 266–7, 306 n.59
Man with a Movie Camera (1929) 266, 306 n.59
Vésale, André 134
video 2, 5, 8–9, 11–12, 14–16, 19, 26–30, 32–4, 36, 39–41, 43–7, 49–50, 52, 55, 64–8, 70, 72–3, 86–8, 96, 99–100, 102–3, 106, 109, 113–14, 118–19, 123–6, 128, 143, 145–7, 149–52, 154–65,

- 167–9, 171–3, 175–6, 185–8, 192–4, 199–205, 208–11, 213, 215–7, 222–3, 225–38, 242–95, 299, 304 n.40, 313 n.24, 315 n.45, 316 n.55, 317 n.60, 317 n.62, 320–1 n.106, 321 n.107, 322 n.7, 326 n.49, 337 n.112, 339 n.22, 340 n.24, 342 n.66, 348 n.64, 348 n.66, 351 n.99, *see also* digital video, electronic signal, image processing, montage, and video art
- analogue video 8, 12, 28–30, 32–4, 43–5, 64–5, 72–3, 96, 102–3, 106, 114, 118–19, 123–6, 143, 187, 199, 201–4, 228, 233, 238, 291, 313 n.24, 322 n.7
- closed-circuit video 244, 251, 243, 257, 262, 264
- music video 99–100, 113, 216–17, 238
- online video platform 152
- as VCR 154, 163–4, 199, 215, 228, 278–9, 281–3
- as VHS 88, 162, 171, 210–11, 216, 228–32, 235, 342 n.66
- video camera 86, 201, 229–30
- video feedback 29, 31, 65, 114, 251, 315 n.45
- videographic effect 7, 14, 151, 164–5, 167–8, 175, 185–8, 192, 200, 205, 208–9, 222–3, 225–7, 235–6, 238, 316 n.55, 326 n.49
- video image 28, 41, 68, 203
- video monitor 245, 250–1, 253, 258, 261–9, 287–92, 348 n.66
- video playback 278–86, 284–6
- video projection 244–5, 251, 253, 256–9, 262–3, 272, 274, 279, 290, 321 n.106, 348 n.66
- video sculpture 262, 269
- video surveillance 263–7
- video art 3, 6, 15, 26, 28–9, 31–2, 34, 43, 54–5, 201, 230, 242, 244–5, 250–1, 253–9, 261, 272
- video game 38
- video installation 2, 14, 32–3, 46, 86, 172, 204, 242–94, 296, 307 n.70, 311 n.7, 319 n.94, 344 n.14, 344 n.16, *see also* cinematic video installation
- video portrait 81–2, 86–7, 201
- videographic moving picture 42–4, 49–51, 53–6, 58–97, 284
- Viénet, René 216
Can Dialectics Break Bricks? (1973) 216
- Viola, Bill 43, 54–6, 67–73, 75, 79, 96, 316 n.54, 316 n.55, 346 n.33
Ocean without a Shore (2007) 316 n.54
- The Passions* (2000–02) 67–8, 70–1
- Quintet of the Astonished* (2000) 68–70
- Quintet of the Silent* (2001) 68, 70
- Transfiguration* (2008) 316 n.54
- Virilio, Paul 305 n.49
- Wachowski, Lana and Andy 58
Speed Racer (2008) 58
- Walberg, Marin 85

- Wall, Jeff 13, 51–3, 74
 Walley, Jonathan 26, 132, 183,
 187, 335 n.89
 Walsh, Maria 255
 Waner, Tilly 157
 Warhol, Andy 56, 76, 78, 85,
 290–1
Eat (1963) 78
Empire (1964) 56, 78
Outer and Inner Space
 (1965) 290–1
Sleep (1963) 78
 Weerasethakul, Apichatpong
 319 n.80
 Wees, William C. 151–2, 157,
 160, 329 n.16, 332 n.49
 Weibel, Peter 10–12, 15
Welcome to Heartbreak (music
 video for Kanye West) 113
 Wenders, Wim 247
American Friend (1977) 247
 West, Jennifer 44, 107, 133,
 139–42
Lavender Mist Film/Pollock Film
 1 (70mm film leader rubbed
 with Jimson Weed Trumpet
 flowers, spraypainted,
 dipped and splattered with
 nail polish, sprayed with
 lavender mist air freshener)
 (2009) 139–40
Nirvana Alchemy Film (16mm
 black & white film soaked
 in lithium mineral hot
 springs, pennyroyal tea,
 doused in mud, sopped
 in bleach, cherry antacid
 and laxatives — jumping
 by Finn West & Jwest)
 (2007) 140
Skate the Sky Film (35mm film
 print of clouds in the sky
 covered with ink, Ho-Ho's,
 and Melon juice — filmstrips
 taped to Tate Turbine Hall
 ramp and skateboarded over
 using ollie,
 kick flip, pop shove-it, acid
 drop, melon grab, crooked
 grind, bunny hop, tic tacs,
 sex change, disco flip —
 skateboarding performed
 live for Long Weekend
 by Thomas Lock, Louis
 Henderson, Charlotte
 Brennan, Dion Penman,
 Sam Griffin, Jak Tonge,
 Evin Goode and Quantin
*Paris, clouds shot by Peter
 West*) (2009) 140
Spiral of Time Documentary
Film (16mm negative
 strobe-light double and
 triple exposed — painted
 with brine shrimp —
 dripped, splattered and
 sprayed with salted liquids:
 balsamic and red wine
 vinegar, lemon and lime
 juice, temporary fluorescent
 hair dyes — photos from
 friends Mark Titchner,
 Karen Russo, Aaron
 Moulton and Ignacio
 Uriarte and some google
 maps — texts by Jwest and
 Chris Markers' *Sans Soleil*
 script — shot by Peter West,
 strobed by Jwest, hands by
 Ariel West, telecine by Tom
 Sartori) (2013) 141–2
 Westgeest, Helen 49
*What Ever Happened to Baby
 Jane* (1962) 176
 Whitney Sr., John 106, 323 n.15
Lapis (1963–66) 323 n.15

- Willis, Holly 64
Wilson, Jane and Louise 262,
 348 n.64
 Erewhon (2004) 348 n.64
 Stasi City (1997) 348 n.64
Windhausen, Federico 127
Wolf, Werner 35
Wollen, Peter 76–7
Wood, Aylish 59
World Wide Web 38, 48, 175, 202
Yalkut, Jud 106, 323 n.15
 Video-Film Concert
 (co-directed with Nam June
 Paik, 1966–72) 323 n.15
Youngblood, Gene 106
Zimmerman, Patricia R. 227, 236
Zinman, Gregory 105, 123,
 129, 140
Zyrd, Michael 152

NOTES

Introduction

- 1 Richard Shiff, “Look to See by Looking,” in *Jim Campbell: Material Light*, exhibition catalogue (Ostfildern, Germany: Hatje Cantz, 2010), p. 70.
- 2 Jürgen E. Müller, “Intermediality and Media Historiography in the Digital Era,” *Acta Univ. Sapientiae, Film and Media Studies*, vol. 2 (2010), p. 25.
- 3 See, for instance, Homi K. Bhabha, *The Location of Culture* (New York and London: Routledge, 1994); Néstor García Canclini, *Hybrid Cultures: Strategies for Entering and Leaving Modernity*, trans. Christopher L. Chiappari and Silvia L. Lopez (Minneapolis, MN: University of Minnesota Press, 1990).
- 4 Yvonne Spielmann and Jay David Bolter, “Hybridity: Arts, Sciences, and Cultural Effects,” *Leonardo*, vol. 39, no. 2 (2006), p. 106.
- 5 Noël Carroll, “The Specificity of Media in the Arts,” in *Theorizing the Moving Image* (New York: Cambridge University Press, 1996), p. 28.
- 6 Carroll, “Defining the Moving Image,” in *Theorizing the Moving Image*, p. 53.
- 7 Ibid., p. 51.
- 8 Ibid., p. 52.
- 9 Carroll, “Medium Specificity Arguments and the Self-consciously Invented Arts: Film, Video, and Photography,” in *Theorizing the Moving Image*, p. 13.
- 10 Noël Carroll, “Forget the Medium!” in *Engaging the Moving Image* (New Haven, CT: Yale University Press, 2003), pp. 8–9.
- 11 D. N. Rodowick, *The Virtual Life of Film* (Cambridge, MA: Harvard University Press, 2007), p. 36.
- 12 Ibid., p. 41.

- 13 Berys Gaut, *A Philosophy of Cinematic Art* (New York and Cambridge: Cambridge University Press, 2010), p. 288.
- 14 Ibid.
- 15 Ibid., p. 19.
- 16 Ibid., pp. 291–92.
- 17 Rosalind E. Krauss, “*A Voyage on the North Sea*”: *Art in the Age of the Post-medium Condition* (London: Thames and Hudson, 1999), pp. 31–32 (emphasis added).
- 18 Lev Manovich, “Post-media Aesthetics,” in *(dis) Locations*, exhibition catalogue (Center for Art and Media, Karlsruhe and Hatje Cantz, 2001), p. 10.
- 19 Ibid., pp. 11–12.
- 20 Peter Weibel, “Preface,” in *Future Cinema: The Cinematic Imaginary after Film*, eds Jeffrey Shaw and Peter Weibel (Cambridge, MA: MIT Press, 2003), p. 16.
- 21 Rosalind E. Krauss, “Reinventing the Medium,” *Critical Inquiry*, vol. 25, no. 2 (1999), p. 296.
- 22 Krauss, “*A Voyage on the North Sea*,” p. 25.
- 23 For Krauss’s reflection on Brodthaers’s films, see “*A Voyage on the North Sea*,” pp. 44–45, 52–53.
- 24 For Krauss’s discussion on Coleman’s “projected images,” see her “... And Then Turn Away?: An Essay on James Coleman,” *October*, no. 81 (Summer 1997), pp. 5–33.
- 25 For Krauss’s detailed analysis of Kentridge’s “drawings for projection,” see “The Rock: William Kentridge’s Drawings for Projection,” *October*, no. 92 (Spring 2000), pp. 3–35.
- 26 Krauss, “Reinventing the Medium,” p. 296.
- 27 Jacques Rancière, “What Medium Can Mean,” *Parrehsia*, no. 11 (2011), p. 36. Rancière’s rejection of the Greenbergian argument on the direct association between an art form and the material properties of its medium is encapsulated in his following comment: “It is strictly impossible to present a concept of art which defines the properties common to painting, music, dance, cinema, or sculpture.... It is the concept of a disjunction—and of a historically determinate unstable disjunction—between the arts, understood in the sense of practices, ways of making” (Jacques Rancière, *The Future of the Image*, trans. Gregory Elliott [New York and London: Verso, 2007], p. 72).
- 28 See Jacques Rancière, *Aesthetics and Its Discontents*, trans. Steven Corcoran (London: Polity Press, 2009), p. 56.

- 29 Jacques Rancière, “Art of the Possible: Fulvia Carnevale and John Kelsey in Conversation with Jacques Rancière,” *Artforum International*, vol. 45, no. 7 (March 2007), p. 257.
- 30 Rancière, *The Future of the Image*, p. 42.
- 31 Nicolas Bourriaud, *Relational Aesthetics*, trans. Simon Pleasance and Fronza Woods (Paris: les presses du réel, 2002), p. 113.
- 32 Ibid., p. 18.
- 33 Ibid., p. 21. Bourriaud repeats the idea that his concept of “relational art” is predicated upon his rejection of the modernist medium specificity thesis in his book *The Radicant* (2009) as follows: “Radicant art implies the end of the medium-specific, the abandonment of any tendency to exclude certain fields from the realm of art. . . . Its own spontaneous movement would be to transplant art to heterogeneous territories, to confront it with all available formats. Nothing could be more alien to it than a mode of thought based on disciplines, on the specificity of the medium” (Nicolas Bourriaud, *The Radicant*, trans. James Gussen and Lili Porten [New York: Lukas & Sternberg, 2009], pp. 53–54).
- 34 Lev Manovich, “After Effects, or the Velvet Revolution,” *Millennium Film Journal*, nos. 45/46 (Fall 2006), p. 6.
- 35 Peter Weibel, “The Postmedia Condition,” paper given at the “Postmedia Condition” exhibition, MediaLabMadrid, Madrid, February 7 to April 2, 2006, online at <http://www.medialabmadrid.org/medialab/medialab.php?l=0&c=a&i=329> (accessed May 17, 2008).
- 36 Ibid.
- 37 Lev Manovich, “Understanding Hybrid Media,” in *Animated Paintings*, ed. Betti-Sue Hertz (San Diego, CA: San Diego Museum of Art, 2007), pp. 36–45, online at www.manovich.net/DOCS/hybrid_media_pictures.doc (accessed March 9, 2011).
- 38 Manovich, “After Effects, or the Velvet Revolution,” p. 11.
- 39 For Krauss’s Benjaminian reading of the redemptive power of an outdated technological means, see her “A Voyage on the North Sea” and “Reinventing the Medium.” In her essay “The Rock,” Krauss contrasts the Benjaminian idea of a medium’s obsolescence with Friedrich A. Kittler’s theory of the influences of the computer as declaring the teleological end of not simply the idea of medium specificity, but also the traditional definition of the medium (33). Kittler’s own writing on this point is as follows:
- The general digitization of channels and information erases the differences among individual media. Sound and image, voice*

and text are reduced to surface effects, known to consumers as interface. Sense and the senses turn into eyewash. Their media-produced glamour will survive for an interim as a by-product of strategic programs. Inside the computers themselves everything becomes a number: quantity without image, sound, or voice. And once optical fiber networks turn formerly distinct data flow into a standardized series of digitized numbers, any medium can be translated into any other. With numbers, everything goes. *Modulation, transformation, synchronization; delay, storage, transposition; scrambling, scanning, mapping—a total media link on a digital base will erase the very concept of medium* (Kittler, *Gramophone, Film, Typewriter*, trans. Geoffrey Winthrop-Young and Michael Wutz [Stanford, CA: Stanford University Press, 1999], pp. 1–2 [emphasis added]).

- 40 In fact, Krauss's writings on the post-medium condition since the mid-2000s strive to overcome her own limitation of blocking any potential of new media by embracing video, which she previously considered to eliminate film's aggregative medium-specific condition due to its constitutive heterogeneity, as a means for investigating the expressive possibilities of sync sound as an outdated technical support of film. For this revised idea demonstrated by Krauss's discussion of Bruce Nauman's *Lip Sync* (1969) and Christian Marclay's *Video Quartet* (2002), see her "Two Moments from the Post-medium Condition," *October*, no. 116 (Spring 2006), pp. 55–62.
- 41 Lev Manovich, *The Language of New Media* (Cambridge, MA: MIT Press, 2001), p. 46.
- 42 Manovich, "Understanding Hybrid Media."
- 43 Sven Lütticken, "Undead Media," *Afterimage*, vol. 31, no. 4 (January/February 2004), p. 12. Krauss herself, too, stresses that unlike Marshall McLuhan's idea of "the medium as message" that disallows any specificity of the medium, her concept of the medium refers to not simply a technical support for undergirding the very possibilities of art, but also the memory that bears a range of layered conventions that lend themselves to diverse artistic investigations into the medium's specific qualities: "'The medium is the memory' insists . . . on the power of the medium to hold the efforts of the forebears of a specific genre in reserve for the present" (Rosalind E. Krauss, *Under Blue Cup* [Cambridge, MA: MIT Press, 2011], p. 127).
- 44 J. Sage Elwell, "Intermedia: Forty Years on and beyond," *Afterimage*, vol. 33, no. 5 (March/April 2006), p. 52.

- 45 My definition of the cinema in comparison to film echoes Lütticken's idea on the "post-cinematic." He characterizes Godard's *Histoire(s) du cinéma* as post-cinematic "in the sense of leaving behind the medium, the apparatus, and the production system, but they are still suffused with the history of film; they are film's post-cinematic afterlife" (Sven Lütticken, *History in Motion: Time in the Age of the Moving Image* [Berlin: Sternberg Press, 2013], p. 35).
- 46 See Geoffrey Cheshire, "The Death of Film/The Decay of Cinema," *New York Press*, vol. 12, no. 34 (August 26, 1998), online at <http://www.nypress.com/12/34/film/film3.cfm> (accessed November 23, 2006).
- 47 See Susan Sontag, "The Decay of Cinema," *New York Times*, February 25, 1996, online at <http://www.nytimes.com/books/00/03/12/specials/sontag-cinema.html> (accessed November 23, 2006); Sylvia Harvey, "What Is Cinema? The Sensuous, the Abstract and the Political," in *Cinema: The Beginnings and the Future*, ed. Christopher Williams (London: University of Westminster Press, 1996), pp. 228–52.
- 48 See Tess Takahashi, "'Meticulously, Recklessly Worked-Upon': Materiality in Contemporary Experimental Animation," in *The Sharpest Point: Animation at the End of Cinema*, eds Chris Gehman and Steve Reinke (Toronto: YYZ Press, 2006), pp. 166–78.
- 49 See Rodowick, *The Virtual Life of Film*, pp. 163–74; Fredric Jameson, "The End of Temporality," *Critical Inquiry*, vol. 29, no. 4 (Summer 2003), pp. 695–718. The two thinkers' arguments on the change of temporality with regard to the transition from the filmic to the post-filmic era echo key writings by Serge Daney and Paul Virilio.
- 50 Anne Friedberg, "The End of Cinema: Multimedia and Technological Change," in *Reinventing Film Studies*, eds Christine Gledhill and Linda Williams (London: Arnold, 2000), p. 439. For a fascinating summary of these discourses, see also Stefan Jovanovic, "The Ending(s) of Cinema: Notes on the Recurrent Demise of the Seventh Art, Part I," *Offscreen*, vol. 7, no. 4 (April 2003), online at http://offscreen.com/view/seventh_art1 (accessed May 15, 2010).
- 51 Mary Ann Doane, "The Indexical and the Concept of Medium Specificity," *Differences: A Journal of Feminist Cultural Studies*, vol. 18, no. 1 (Spring 2007), p. 131.
- 52 Ibid., p. 143.
- 53 See Paolo Cherchi Usai, *The Death of Cinema: History, Cultural Memory and the Digital Dark Age* (London: BFI Publishing, 2001).

- 54 Barbette Mangolte, “Afterword: A Matter of Time,” in *Camera Obscura, Camera Lucida: Essays in Honor of Annette Michelson*, eds Richard Allen and Malcolm Turvey (Amsterdam, the Netherlands: Amsterdam University Press, 2002), p. 267.
- 55 Rodowick, *The Virtual Life of Film*, p. 171. To support this difference, Rodowick examines how a seemingly uninterrupted 100-minute sequence in Alexander Sokurov’s *Russian Ark* (2002) cannot be considered as one long take in the conventional sense of celluloid-based cinema. Wishing to record continuous duration, Sokurov and his team employed color filters, a perspective algorithm, and digital compositing for the production of their sequence. Although creating the sense of spatial continuity comparable to that of the long take in celluloid-based cinema, these techniques, according to Rodowick, ultimately form not blocks of duration that are derived from recording and editing, but images whose spatiotemporal qualities are discrete and variable as they are subject to a variety of algorithmic transformations. For this reason, Rodowick characterizes *Russian Ark* as a telling example of the digital event from which film’s exploration of duration and its profound temporality are absent. “Nothing endures in a digitally composed world,” he writes. “Here the sense of time as *la dureé* gives way to simple duration or to the ‘real time’ of a continuous present” (*The Virtual Life of Film*, p. 163).
- 56 Vivian Sobchack, “‘At the Still Point of the Turning World’: Metamorphing and Meta-stasis,” in *Meta-Morphing: Visual Transformation and the Culture of Quick-Change*, ed. Vivian Sobchack (Minneapolis, MN: University of Minnesota Press, 2000), p. 141.
- 57 Manovich, *The Language of New Media*, p. 302 (emphasis in original).
- 58 Ibid., pp. 78–87.
- 59 Vertov’s *Man with a Movie Camera* (1929) is quite exemplary to Manovich’s claim on the continuity of cinematic elements in the digital age. While the film’s untethered mobility of the camera and unconventional viewpoints, aimed at incorporating the new visual perception and epistemology appropriate for industrial modernity, are granted a new life by the techniques of virtual camera and 3D visualization, its superimposition of images as a hallmark of modernist technique is brought to the window interface where the user becomes the editor able to create a montage of disparate still or moving images within the same frame.
- 60 See Thomas Elsaesser, “Digital Cinema: Delivery, Event, and Time,” in *Cinema Futures: Cain, Abel, Cable? The Screen Arts in the Digital*

- Age*, eds Thomas Elsaesser and Kay Hoffmann (Amsterdam, the Netherlands: Amsterdam University Press, 1998), pp. 201–22; Thomas Elsaesser, “Early Film History and Multi-media: An Archaeology of Possible Futures?” in *New Media, Old Media: A History and Theory Reader*, eds Thomas Keenan and Wendy Hui Kyong Chun (New York: Routledge, 2006), pp. 13–26.
- 61 See André Gaudreault and Philippe Marion, “The Cinema as a Model for the Genealogy of Media,” *Convergence*, vol. 8, no. 4 (2002), pp. 12–18.
- 62 Philip Rosen, “Old and New: Image, Indexicality, and Historicity in the Digital Utopia,” in *Change Mummified: Cinema, Historicity, Theory* (Minneapolis, MN: University of Minnesota Press, 2001), p. 309.
- 63 Ibid., p. 325.
- 64 Malcolm Le Grice, “Mapping in Multi-space—Expanded Cinema to Virtuality (1994),” in *Experimental Cinema in the Digital Age* (London: BFI Publishing, 2001), p. 283.
- 65 Markos Hadjioannou, *From Light to Byte: Toward an Ethics of Digital Cinema* (Minneapolis, MN: University of Minnesota Press, 2012), p. 9.
- 66 Jonathan Walley, “The Material of Film and the Idea of Cinema: Contrasting Practices in Sixties and Seventies Avant-garde film,” *October*, no. 103 (2003), pp. 15–30.
- 67 Raymond Bellour, “The Battle of Images,” in *Future Cinema*, p. 56.
- 68 More precisely, Casetti uses the term “*re-relocation*” for this double movement: “the departure from the film theatre in search of new environments and devices (relocation); and the return to the theatre enriched by a new patrimony accumulated in the meantime (the ‘re-’ added to the relocation)” (“Back to the Motherland: The Film Theatre in the Postmedia Age,” *Screen*, vol. 52, no. 1 [Spring 2011], p. 9).
- 69 Francesco Casetti, *The Lumière Galaxy: 7 Key Words for the Cinema to Come* (New York: Columbia University Press, 2015), p. 69.
- 70 Giuliana Bruno also sees the transformation of exhibition space into rooms for film and video installation as motivated by “a drive to access the work of the film apparatus itself in relation to modes of picturing,” and in this sense the installation emblematises that “the cinema and the museum should renew their convergence in ways that foster greater hybridization” (“Collection and Recollection: On Film Itineraries and Museum Walks,” in *Camera Obscura, Camera Lucida*, p. 236, 238).

- 71 Yvonne Spielmann, *Video: A Reflexive Medium* (Cambridge, MA: MIT Press, 2008), p. 4.
- 72 Lucinda Furlong, “Tracking Video Art: ‘Image Processing’ as a Genre,” *Art Journal*, vol. 45, no. 3 (Autumn 1985), p. 233.
- 73 See, for instance, David Antin, “Video: The Distinctive Features of the Medium,” in *Video Culture: A Critical Investigation*, ed. John G. Hanhardt (Rochester, NY: Visual Studies Workshop Press, 1986), pp. 147–66; Stanley Cavell, “The Fact of Television,” in *Video Culture*, pp. 192–219; Bruce Kurtz, “The Present Tense,” in *Video Art: An Anthology*, eds Ira Schneider and Beryl Korot (New York and London: Harcourt Brace Jovanovich, 1976), pp. 234–43; Rosalind E. Krauss, “Video: The Aesthetics of Narcissism,” *October*, no. 1 (Spring 1976), pp. 50–64; Fredric Jameson, “Reading without Interpretation: Postmodernism and the Video-Text,” in *The Linguistics of Writing: Arguments between Language and Literature*, ed. Nigel Fabb (New York: Methuen, 1987), pp. 199–223.
- 74 Timothy Binkley, “Refiguring Culture,” in *Future Visions: New Technologies of the Screen*, eds Philip Hayward and Tana Wollen (London: BFI Publishing, 1993), p. 98 (emphasis added).
- 75 Chris Meigh-Andrews, *A History of Video Art: The Development of Form and Function* (New York and Oxford: Berg Publishers, 2006), p. 260.
- 76 Michael Rush, *Video Art*, rev edn (New York and London: Thames and Hudson, 2007), p. 210.
- 77 Mark Mayer, “Digressions toward an Art History of Video,” in *Being and Time: The Emergence of Video Projection*, ed. Mark Mayer (Buffalo, NY: Albright-Knox Art Gallery, 1996), p. 29.
- 78 Manovich, *The Language of New Media*, p. 133 (emphasis added).
- 79 Yvonne Spielmann, “Video: From Technology to Medium,” *Art Journal*, vol. 65, no. 3 (Fall 2006), p. 58 (emphasis added).
- 80 Ibid., p. 64.
- 81 Irina O. Rajewsky, “Intermediality, Intertextuality, and Remediation: A Literary Perspective on Intermediality,” *Intermédialités*, no. 6 (Autumn 2005), p. 46 (emphasis in original).
- 82 Werner Wolf, “Intermediality Revisited: Reflections on Word and Music Relations in the Context of a General Typology of Intermediality,” in *Essays in Honor of Steven Paul Scher and on Cultural Identity and the Musical Stage*, eds Suzanne M. Lodato, Suzanne Aspden, and Walter Bernhart (Amsterdam, the Netherlands: Rodopi, 2002), p. 17.
- 83 Rajewsky, “Intermediality, Intertextuality, and Remediation,” p. 52.

- 84 Rajewsky defines these two types of intermediality as “media transportation” and “media reference,” respectively.
- 85 Joachim Paech, “Artwork—Text—Medium. Steps en Route to Intermediality,” paper delivered at the conference “Changing Media in Changing Europe,” Paris, May 26–28, 2000, online at <http://www.uni-konstanz.de/FuF/Philo/LitWiss/MedienWiss/Texte/interm.html> (accessed January 21, 2011) (emphasis added).
- 86 See Ágnes Pethő, “Intermediality in Film: A Historiography of Methodologies,” *Acta Univ. Sapientiae, Film and Media studies*, vol. 2 (2010), p. 53. For the first category of research, see Joachim Paech, *Literatur und Film* (Stuttgart: J. B. Metzler Verlag, 1988). The second category includes so many works that it is sufficient to enlist several of them that examine the ways in which conventions of painting influence and are reworked in the representational system of cinema. See, for instance, Pascal Bonitzer, *Décadrages: peinture et cinéma* (Paris: Editions de l’Étoile, 1987); Jacques Aumont, *L’oeil interminable: cinéma et peinture* (Paris: Librairie Séguier, 1989); Angela Dalle Vacche, *Cinema and Painting: How Art Is Used in Film* (Austin, TX: University of Texas Press, 1996); Angela Dalle Vacche (ed.), *The Visual Turn: Classical Film Theory and Art History* (New Brunswick, NJ: Rutgers University Press, 2002); Brigitte Peucker, *The Material Image: Art and the Real in Film* (Stanford, CA: Stanford University Press, 2007); Ágnes Pethő, *Cinema and Intermediality: The Passion for the In-Between* (Newcastle, UK: Cambridge Scholarly Publishing, 2011); Ágnes Pethő (ed.), *Film in the Post-media Age* (Newcastle, UK: Cambridge Scholarly Publishing, 2012); Lúcia Nagib and Anne Jerslev (eds), *Impure Cinema: Intermedial and Intercultural Approaches to Film* (London: I. B. Tauris, 2013); finally, Robert Stam’s works on self-reflexivity and adaptation, for instance, represent the last category of research, in terms of how they are concretized similarly and at the same time differently in literature and film. See Robert Stam, *Reflexivity in Film and Culture: From Don Quixote to Jean-Luc Godard* (New York: Columbia University Press, 1992); Robert Stam, *Literature through Film: Realism, Magic, and the Art of Adaptation* (Oxford: Wiley-Blackwell, 2004); Robert Stam and Alessandra Raengo (eds), *Literature and Film: A Guide to the Theory and Practice of Film Adaptation* (Oxford: Wiley-Blackwell, 2004). It should be added that Stam’s works in the 2000s pertain to the growing field of adaptation studies, in which there have been numerous works that analyze the relation of film and literature from the standpoint of intertextuality and transmediality. Again, it might be the case that the works in this field might be viewed as another direction of intermedial studies, but

it is beyond the range of this book to judge whether they genuinely focus upon the intermedial translation of literary codes and conventions into those of film or vice versa.

- 87 Jay David Bolter and Richard Grusin, *Remediation: Understanding New Media* (Cambridge, MA: MIT Press, 1999), p. 45.
- 88 Ibid., p. 65.
- 89 Bolter appears to acknowledge this shortcoming in one of his writings after *Remediation*, as he puts it: “Hollywood cinema has been reluctant to remind the viewer of the multiple sources and constructed nature of the spectacle. . . . To acknowledge hybridity has been the mark of the avant-garde or ‘art’ film—e.g. the films of Peter Greenaway or Chris Marker rather than those of James Cameron or Steven Spielberg” (Bolter, “Transference and Transparency: Digital Technology and the Remediation of Cinema,” *Intermédialités*, no. 6 [Automne 2005], pp. 16–17).
- 90 Raymond Bellour, *L'entre-images: photo, cinéma, vidéo* (Paris: Éditions de la Différence, 2002), p. 14 (translation mine).
- 91 For these comparisons, see Edmond Couchot, “La mosaïque ordonnée, ou l'écran saisi par le calcul,” *Communications*, no. 48 (1988), pp. 79–87.
- 92 Bellour validates this point as follows:
 Between-the-images is that space still new enough to be treated as an enigma, and already established enough to be circumscribed. It is not my concern here to write its history (as with all mixtures, that would be hard to envision). Nor is it a matter of forming a theory, in the sense of specific concepts which between-the-images evoke and which would constitute the condition for discussing it. Instead, *the question has mainly been to try to formulate an experience, such as it has gradually constituted itself, that started when it became clear that we have entered, via video and everything that it involves, a new time of the image.* (*L'entre-images*, p. 15, translation mine, emphasis added)
- 93 Raymond Bellour, “The Double Helix,” in *Electronic Culture: Technology and Visual Representation*, ed. Timothy Druckrey (New York: Aperture, 1996), pp. 173–99.
- 94 Yvonne Spielmann, “Intermedia in Electronic Images,” *Leonardo*, vol. 34, no. 1 (2001), p. 55 (emphasis added).
- 95 Yvonne Spielmann, “Intermedia and the Organization of the Image: Some Reflections on Film, Electronic, and Digital Media,” *iris*, no. 25 (Spring 1998), p. 65.
- 96 Spielmann, “Intermedia in Electronic Images,” p. 59.

Chapter 1

- 1 Douglas Crimp, "Pictures," *October*, no. 8 (Spring 1979), p. 75.
- 2 Ibid., p. 87.
- 3 Ibid., pp. 80, 83.
- 4 Quoted in *Merriam-Webster*.
- 5 Arthur Danto, "Moving Pictures," in *Philosophy of Film and Motion Pictures: An Anthology*, eds Noël Carroll and Jinhee Choi (London: Blackwell Publishing, 2005), p. 108. In her book-length study, Anne Hollander has also used the term for her wide-ranging analysis of how painting in history depicted the subject in motion with differing styles and conventions. See Anne Hollander, *Moving Pictures* (Cambridge, MA: Harvard University Press, 1991).
- 6 Ibid., p. 103.
- 7 For instance, Chris Marker has emblematised this crossover by taking advantage of CD-ROM and multichannel video technologies, as exemplified by *Immemory* (CD-ROM project, 1997) and *Owls at Noon Prelude: The Hollow Men* (eight-channel video installation, 2005).
- 8 See, for instance, David Campany (ed.), *The Cinematic* (Cambridge, MA: MIT Press, 2007); David Campany, *Photography and Cinema* (London: Reaktion Books, 2008); Karen Beckman and Jean Ma (eds), *Still Moving: Between Cinema and Photography* (Durham, NC: Duke University Press, 2008); Eivind Røssaak (ed.), *Between Stillness and Motion: Film, Photography, Algorithms* (Amsterdam, The Netherlands: Amsterdam University Press, 2011); Neil Campbell and Alfredo Cramerotti (eds), *Photocinema: The Creative Edges of Photography and Film* (London: Intellect, 2013); Justin Remes, *Motion(less) Pictures: The Cinema of Stasis* (New York: Columbia University Press, 2015).
- 9 Hilde Van Gelder and Helen Westgeest, "Photography and Painting in Multi-mediating Pictures," *Visual Studies*, vol. 24, no. 2 (September 2009), p. 122.
- 10 Ingrid Hözl, "Moving Stills: Images That Are No Longer Immobile," *Photographies*, vol. 3, no. 1 (March 2010), p. 99.
- 11 For a key influencing account of associating the nature of the photographic and filmic images with Charles Sanders Peirce's idea of the index, see Peter Wollen, *Signs and Meanings in the Cinema* (Bloomington, IN: Indiana University Press, 1969). Mary Ann Doane's argument emblematises the position of defining

the indexical nature of film and photography as their image's connection to physical reality: "For the indexical image, through its physical connection, touches the real, bears its impression, and hence assures us that it is still there" (Mary Ann Doane, "The Indexical and the Concept of Medium Specificity," *Difference*, vol. 18, no. 1 (2007), p. 142).

- 12 For the accounts of the "abstraction" of the physical connection to the real in digital imaging in contrast to analogue photography, see Timothy Binkley, "The Quickeness of Galatea: Virtual Creation without Tools or Media," *Art Journal*, vol. 49, no. 3 (1990), p. 234; Rodowick, *The Virtual Life of Film*, p. 117.
- 13 Geoffrey Batchen has neatly summarized these two as the "epistemological" and "technological" crises of photography. See Geoffrey Batchen, "Ectoplasm," in *Each Wild Idea: Writing, Photography, History* (Cambridge, MA: MIT Press, 2002), p. 129.
- 14 For this point, see Martin Lister, "Introductory Essay," in *The Photographic Image in Digital Culture* ed. Martin Lister (New York and London: Routledge, 1995), pp. 1–27; William J. Mitchell, *The Reconfigured Eye: Visual Truth in the Post-Photographic Era* (Cambridge, MA: MIT Press, 1992), pp. 3–22; Lev Manovich, "The Paradoxes of Digital Photography," in *Photography after Photography: Memory and Representation in the Digital Age*, eds Hubertus V. Amelunxen, Stefan Iglhaut, and Florian Rötzer (Munich: Verlag der Kunst, 1995), pp. 58–66.
- 15 See Fred Ritchin, "The End of Photography as We Have Known It," in *Photovideo*, ed. Paul Wombell (London: Rivers Oram Press, 1991), p. 9; Don Slater, "Domestic Photography and Digital Culture," in *The Photographic Image in Digital Culture*, p. 131; Victor Burgin, "The Image in Pieces: Digital Photography and the Location of Cultural Experience," in *Photography after Photography*, p. 31; Timothy Druckrey, "Fatal Vision," in *Photography after Photography*, p. 86; Fred Ritchin, *After Photography* (New York: W. W. Norton and Company, 2009), p. 75.
- 16 Timothy Druckrey, "Instability and Dispersion," in *Over Exposed: Essays on Contemporary Photography*, ed. Carol Squires (New York: The New Press, 1999), p. 95.
- 17 Jeff Wall, "Frames of Reference," *Artforum*, vol. 42, no. 1 (September 2003), p. 101.
- 18 Jeff Wall, "Photography and Liquid Intelligence," in *Jeff Wall: The Complete Edition*, eds Jeff Wall, Thierry de Duve, Arielle Pelenc, Boris Groys, Jean-Francois Chevrier, and Mark Lewis (London: Phaidon, 2002), p. 93.

- 19 David Tomas, "From the Photograph to Postphotographic Practice: Toward a Postoptical Ecology of the Eye," in *Electronic Culture: Technology and Visual Representation*, ed. Timothy Druckrey (New York: Aperture, 1996), p. 151 (emphasis in original).
- 20 Abigail Solomon-Godeau, "Ontology, Essences, and Photographic Aesthetics: Wringing the Goose's Neck One More Time," in *Photography Theory*, ed. James Elkins (New York and London: Routledge, 2006), p. 268 (emphasis in original).
- 21 Peter Osborne, "Infinite Exchange: The Social Ontology of the Photographic Image," *Philosophy of Photography*, vol. 1, no. 1 (2010), p. 61 (emphasis added). See also Peter Osborne's "Photography in an Expanding Field: Distributive Unity and Dominant Form," in *Where is the Photograph?*, ed. David Green (Brighton: Photoworks/Photoform, 2003), pp. 63–70.
- 22 George Baker, "Photography's Expanded Field," *October*, no. 114 (Fall 2005), p. 138.
- 23 Christine Ross, *The Past Is the Present; It's the Future Too: The Temporal Turn in Contemporary Art* (New York: Bloomsbury Academic, 2012), p. 127.
- 24 Here I define digital video as a technology for carrying the electronic waveform by measuring it at regular intervals. This measurement involves the determination of frame rates (temporal sampling) and the frame's horizontal and vertical spacing (spatial sampling). While it shares these two sampling methods with analogue video systems, digital video adds another sampling grounded in the encoding of the picture conveyed by the waveform into numerical data (pixels) that describe the brightness, hue, and saturation of parts of the picture. For a helpful description of this technological constitution, see John Watkinson, *The Art of Digital Video*, 2nd edn (Oxford: Focal Press, 1994).
- 25 Remes, *Motion(less) Pictures*, p. 8.
- 26 André Bazin, "Theater and Cinema—Part II," *What Is Cinema?*, vol. 1, trans. Hugh Gray (Berkeley, CA: University of California Press, 2004), pp. 96, 98.
- 27 See Christian Metz, "Photography and Fetish," *October*, no. 34 (Fall 1985), pp. 81–90.
- 28 Metz clarifies his distinction between photography and cinema in terms of the stillness/motion binary, as follows: "It is not sufficient to say that film is more 'living,' more 'animated' than still photography, or even that filmed objects are more 'materialized.' In the cinema the impression of reality is also the reality of impression, the real presence of motion" (Christian Metz, *Film Language*:

- A *Semiotics of the Cinema*, trans. Michael Taylor [Chicago, IL: University of Chicago Press, 1974], p. 8).
- 29 David Green, “Making Time: Photography, Film, and Temporalities of the Image,” in *Stillness and Time: Photography and the Moving Image*, eds David Green and Joanna Lowry (Bristol, UK: Photoforum/Photoworks, 2006), p. 17.
- 30 Tom Gunning, “Moving Away from the Index: Cinema and the Impression of Reality,” *Differences: A Journal of Feminist Cultural Studies*, vol. 18, no. 1 (2007), p. 50.
- 31 John Belton, “Painting by Numbers: The Digital Intermediate,” *Film Quarterly*, vol. 61, no. 3 (Spring 2008), p. 58.
- 32 Alyish Wood, “Pixel Visions: Digital Intermediates and Micromanipulations of the Image,” *Film Criticism*, vol. 32, no. 1 (Fall 2007), p. 78.
- 33 In her behind-the-scenes comment on *Prelude in Air* (2006), a work that films a musician playing a piece of music by Bach, Taylor-Johnson has suggested her dependence on computerized manipulations in her film-based pieces: “It was shot in July 2005 and I then spent 6 months working on having the cello that’s being played digitally removed” (“Sam Taylor-Wood in Conversation with Annushka Shani,” in *Sam Taylor-Wood: Still Lives* [Baltic Centre for Contemporary Art: Steidl, 2006], p. 134). Lewis, too, has explicitly remarked that he uses a video feed during shooting, as well as the Avid software for editing. See Jérôme Sans, “Trying Not to Make Films That Are Too Long: A Conversation Between Jérôme Sans and Mark Lewis,” *Trans: Arts. Cultures. Media*, no. 7 (2000), p. 208. He later confirmed this fact once again to Michael Rush (Michael Rush, “In Depth, Briefly: The Films of Mark Lewis,” in *Mark Lewis*, ed. Karen Allen [Liverpool: FACT and Liverpool University Press, 2006], p. 28).
- 34 In the film industry, the former is called “primary grading,” a process of setting “the image’s overall color balance,” and the latter “secondary grading,” by which “specific parts of a shot are singled out for specific grading.” See Jack James, *Digital Intermediates for Film and Video* (Burlington, MA: Focal Press, 2006), pp. 293–94.
- 35 For a brief history of this lineage, and the ways in which digital color grading is integrated into Hollywood filmmaking, see Scott Higgins, “A New Colour Consciousness: Colour in the Digital Age,” *Convergence*, vol. 9, no. 4 (2003), pp. 60–76.
- 36 Mitchell, *The Reconfigured Eye*, p. 102.

- 37 Stephen Prince, “The Emergence of Filmic Artifacts: Cinema and Cinematography in the Digital Era,” *Film Quarterly*, vol. 57, no. 3 (Spring 2004), p. 29.
- 38 Ibid., p. 28. Prince regards the hand-tinted postcard quality in *O Brother, Where Art Thou?* as an example of how digital color timing produces the painterly look of the image, while at the same time not overturning its overall naturalistic appearance.
- 39 Philippe-Alain Michaud, “Mark Lewis from *September* (2001) to *Early March* (2002),” *Mark Lewis*, p. 62.
- 40 Laura Mulvey provides a detailed analysis of the function of this zoom in relation to Lewis’s other works. See her “Within a Single Shot: Continuities and Discontinuities of Time and Space,” *Mark Lewis*, pp. 82–83.
- 41 Raymond Bellour, *L’entre-images: photo, cinéma, vidéo* (Paris: Éditions de la Différence, 2002), p. 14 (translation mine).
- 42 Trond Lundemo, “The Dissected Image: The Movement of the Video,” in *Allegories of Communication: Intermedial Concerns from Cinema to the Digital*, eds John Fullerton and Jan Olsson (Rome, Italy: John Libbey Publishing, 2004), p. 115.
- 43 Maureen Turim, “Artisanal Prefigurations of the Digital: Animating Realities, Collage Effects, and Theories of Image Manipulation,” *Wide Angle*, vol. 21, no. 1 (January 1999), p. 58.
- 44 Holly Willis, *New Digital Cinema: Reinventing the Moving Image* (London: Wallflower Press, 2005), p. 7.
- 45 The artists’ seminal works that investigated video’s real-time processing and feedback include Anastasi’s *Free Will* (1968), Nauman’s *Live-Taped Video Corridor* (1970), Graham’s *Present Continuous Past(s)* (1974), and Paik’s *TV-Buddha* (1974).
- 46 Ross, *The Past Is the Present; It’s the Future Too*, p. 116.
- 47 Rodowick, *The Virtual Life of Film*, p. 138.
- 48 In an interview, Taylor-Johnson said, “It involved a nine-week filming operation. We had to make a hermetically sealed environment for it in which the light didn’t change then filmed a few frames every other hour.” (Martin Gayford, “The Moving Picture Show,” *Telegraph*, April 19, 2002, online at <http://www.telegraph.co.uk/culture/art/3576219/The-moving-picture-show.html> [accessed May 15, 2009]). This suggests that the minute changes in shading and luminosity in both *Still Life* and *A Little Death* came from post-production manipulation.
- 49 See Rush, “In Depth, Briefly,” *Mark Lewis*, p. 28.

- 50 Lewis furthers this temporal figuration in his recent work entitled *Prater Hauptallee, Dawn and Dusk* (2008). Here we see an image of a park divided into two time zones, dawn on the left and dusk on the right. An exact seam links the two zones, but does not fail to mark the image's composed nature.
- 51 John Walsh (ed.), "Emotions in Extreme Time: Bill Viola's *Passions* Project," in *Bill Viola: The Passions* (Los Angeles: J. Paul Getty Museum in association with the National Gallery, London, 2003), p. 33.
- 52 Mark B. N. Hansen, "The Time of Affect, or Bearing Witness to Life," *Critical Inquiry*, vol. 30, no. 3 (Spring 2004), p. 614.
- 53 Hans Belting and Bill Viola, "A Conversation: Hans Belting and Bill Viola," in *Bill Viola*, p. 216.
- 54 I was informed of this fact in a face-to-face interview conducted with him on July 2, 2008, when he visited Seoul, South Korea for a large-scale exhibition covering *Ocean without a Shore* (2007) and *Transfiguration* (2008).
- 55 Belting and Viola, "A Conversation," in *Bill Viola*, p. 207. Viola's association between the use of video effects and the painterly technique is attuned to his embrace of digital technologies in terms of manipulation and display alike, as he states in another interview: "They [the Old Master Painters] had this new medium and technique—oil paint—the most sophisticated imaging system at the time, the equivalent of digital high-definition video today" (Bill Viola, "Bill Viola Interviewed by John G. Hanhardt," *Bill Viola: Going Forth By Day*, exhibition catalogue [Berlin: Deutsche Bank; New York: Solomon R. Guggenheim Foundation, 2002], p. 107).
- 56 Belting and Viola, "A Conversation: Hans Belting and Bill Viola," in *Bill Viola*, p. 200.
- 57 Bill Viola, "Video Black—The Mortality of the Image," in *Reasons for Knocking at an Empty House: Writings 1973–1994*, ed. Robert Violette (Cambridge, MA: MIT Press, 1995), p. 203.
- 58 Viola, "The Porcupine and the Car (1981)," in *Reasons for Knocking at an Empty House*, p. 62.
- 59 Tim Sasso, "Bill Viola's Passions," an interview originally published online at http://www.DV.com/print_me.jhtml?LookupId=/xml/feature/2003/sassoon1103, found at a personal website of Harry Dawson, Bill's long-time cinematographer www.hedjr.com/DV.com.pdf (accessed on June 20, 2008).

- 60 Both Prince and Rodowick have raised this point. See Prince, “The Emergence of Filmic Artifacts,” pp. 30–1; Rodowick, *The Virtual Life of Film*, p. 90. In his *Film Art Phenomena* (London: British Film Institute, 2003), filmmaker Nicky Hamlyn also proposes a strong advocacy for film inasmuch as its grain has a greater degree of color spectrum and texture than video’s recording system. “Film grain seems to hold out the promise of more detail at a greater level of magnification in a way that video does not,” he claims, and “video’s tonal range, too, is only a fraction of film’s and the consequent lack of contrast within an image contributes to its lack of depth and dynamism” (p. 13).
- 61 The sharpness of focus is particularly obvious in all of Lewis’s pieces examining the language of the established shot, in which a variety of moving objects passing from left to right can be found. Each is delicately positioned in the background or middle ground of the shot, thus indicating that the seemingly static image is actually moving. The object, captured from a distance, is made more observable through postproduction and projection in a high-definition format.
- 62 Sean Cubitt, *Videography: Video Media as Art and Culture* (New York: St. Martin’s Press, 1993), p. 34. In his discussion on the ontology of video in comparison to film, philosopher Maurizio Lazzarato, too, has highlighted this point, as follows: “The video image is not an immovable still set in motion by a mechanical arrangement. Instead, it is a constantly reshaping profile painted by an electronic paintbrush. It takes its movement from the oscillations of matter; it is this oscillation itself. Video technology is a modulation of the flows—its image is nothing more than a relationship between flows” (Maurizio Lazzarato, “Video, Flows and Real Time,” in *Art and the Moving Image: A Critical Reader*, ed. Tanya Leighton [London: Tate Publishing in association with Afterall, 2008], p. 284).
- 63 Laura U. Marks, “How Electrons Remember,” in *Touch: Sensuous Theory and Multisensory Media* (Minneapolis, MN: University of Minnesota Press, 2002), p. 172 (emphasis in original).
- 64 Garrett Stewart, *Framed Time: Toward a Postfilmic Cinema* (Chicago and London: University of Chicago Press, 2007), p. 7 (emphasis added).
- 65 Ibid., p. 284.
- 66 David Green, “The Visibility of Time,” in *Visible Time: The Work of David Claerbout*, ed. David Green (Brighton, UK: Photoworks, 2004), p. 31.

- 67 David Green and Joanna Lowry, “Photography, Cinema and Medium as Social Practice,” *Visual Studies*, vol. 24, no. 2 (September 2009), p. 140.
- 68 Victor Burgin, *The Remembered Film* (London: Reaktion Books, 2004), p. 23. Campany reaches the same point as Burgin’s in his *Photography and Cinema*.
- 69 George Baker, “Reanimations (I),” *October*, no. 104 (Spring 2003), p. 35.
- 70 Gilles Deleuze, *Cinema 1: The Movement-Image*, trans. Hugh Tomlinson and Barbara Habberjam (Minneapolis, MN: University of Minnesota Press, 1986), p. 2.
- 71 Raymond Bellour, “The Film Stilled,” *Camera Obscura*, vol. 8, no. 3 (September 1990), p. 100.
- 72 See Mary Ann Doane, “Real Time: Instantaneity and the Photographic Imaginary,” in *Stillness and Time: Photography and the Moving Image*, pp. 23–38.
- 73 Ibid., p. 32.
- 74 Peter Wollen, “Fire and Ice,” in *The Cinematic*, ed. David Campany, p. 110.
- 75 Ibid., p. 109.
- 76 Gilles Deleuze, *Cinema 2: The Time-Image*, trans. Hugh Tomlinson and Robert Galeta (Minneapolis, MN: University of Minnesota Press, 1989), p. 16.
- 77 For a helpful overview of these films, see Erika Balsom, “Saving the Image: Scale and Duration in Contemporary Art Cinema,” *CineAction*, no. 72 (Spring 2007), pp. 23–31. Also, for some recent studies on “slow cinema,” see Matthew Flanagan, “‘Slow Cinema’: Temporality and Style in Contemporary Art and Experimental Film,” doctoral thesis, University of Exeter, October 2012; Ira Jaffe, *Slow Movies: Countering the Cinema of Action* (New York: Columbia University Press, 2014).
- 78 See P. Adams Sitney, “Structural Film,” in *Visionary Film: The American Avant-garde, 1943–2000*, 3rd edn (New York: Oxford University Press, 2002), p. 348.
- 79 Catherine Russell, “Framing People: Structural Film Revisited,” in *Experimental Ethnography: The Work of Film in the Age of Video* (Durham, NC: Duke University Press, 1999), p. 168.
- 80 Ibid., p. 183. To be sure, the recent landscape films of Benning (*13 Lakes* [2004], *10 Skies* [2004], and *Ruhr* [2009], to name just a few) and Peter Hutton (*Time and Tide* [1998–2000], *Looking at*

the Sea [2000–01], and *At Sea* [2004–07]), as well as some films by Abbas Kiarostami (*Five Dedicated to Ozu* [2003]) and Apichatpong Weerasethakul, who hover between experimental/art cinema and media installation art, illustrate Russell's point by revisiting the fixed frame in accordance with their engagement with or allusion to the representation of photography or painting.

- 81 Roland Barthes, “Diderot, Brecht, Eisenstein,” in *Image, Music, Text*, ed. and trans. Stephen Heath (New York: Hill and Wang, 1977), p. 70. He further coins the term “dioptric arts” to indicate that the scene, the picture, and the shot all share the tableau as a convention to organize the geometrical representation of the observed reality.
- 82 Roland Barthes, *Camera Lucida: Reflections on Photography*, trans. Richard Howard (New York: Hill and Wang, 1981), p. 32.
- 83 Brigitte Peucker, *The Material Image: Art and the Real in Film* (Stanford, CA: Stanford University Press, 2006), p. 26.
- 84 Noël Burch, *Life to Those Shadows*, ed. and trans. Ben Brewster (London: British Film Institute, 1990), pp. 155, 163.
- 85 Mark Godfrey, “Fiona Tan’s Countenance,” in *Fiona Tan: Countenance*, exhibition catalogue (England: Modern Art Oxford, 2005), p. 75.
- 86 Mary Ann Doane, *The Emergence of Cinematic Time: Modernity, Contingency, the Archive* (Cambridge, MA: Harvard University Press, 2002), pp. 162–63.
- 87 Daniel Morgan, “Rethinking Bazin: Ontology and Realist Aesthetics,” *Critical Inquiry*, vol. 32, no. 3 (Spring 2006), p. 452.
- 88 Mary Ann Doane, “The Indexical and the Concept of Medium Specificity,” *Differences: A Journal of Feminist Cultural Studies*, vol. 18, no. 1 (2007), p. 136.
- 89 Ibid., p. 137.
- 90 Malin Walberg, *Documentary Time: Film and Phenomenology* (Minneapolis, MN: University of Minnesota Press, 2008), p. 92.
- 91 Rosalind Krauss, “Notes on the Index: Seventies Art in America,” *October*, vol. 3 (Spring 1977), p. 80.
- 92 David Green and Joanna Lowry, “From Presence to the Performative,” in *Where Is the Photograph?*, p. 59.
- 93 Ibid., p. 58.
- 94 This interest drove Tan to produce *Tuareg* (1999) and *Facing Forward* (1999), two video installation pieces that recycle and

project fragments of film footage taken by tourists and colonists. The fragments show the ethnographic record of groups of people from Africa and Asia, and in some of them the subjects are posed frontally to the camera, in the same way that they might be aware that they were having their photographic portrait taken.

- 95 Joanna Lowry, "Portraits, Still Video Portraits, and the Account of the Soul," in *Stillness and Time*, p. 72.
- 96 For an excellent study of this tension, see Anne M. Wagner, "Performance, Video, and the Rhetoric of Presence," *October*, no. 91 (Winter 2000), pp. 59–80.
- 97 Jacques Rancière, "The Pensive Image," in *The Emancipated Spectator*, trans. Gregory Elliott (New York and London: Verso, 2009), p. 108.
- 98 Barthes, *Camera Lucida*, p. 91.
- 99 Barthes clarifies this idea of the difference between film and photography in temporality and spectatorship as follows: "Film can no longer be seen as animated photographs: the having-been-there [of photography] gives way before a being-there of the thing [in film]" (Barthes, "Rhetoric of the Image," *Image, Music, Text*, p. 45).
- 100 Barthes, "The Third Meaning: Research Notes on Some Eisenstein Stills," in *Image, Music, Text*, pp. 67–68.
- 101 Raymond Bellour, "The Pensive Spectator," *Wide Angle*, vol. 9, no. 1 (1987), p. 9. He elaborates on the uses of these techniques in his essay entitled "The Film Stilled," in which he claims that they add up to a film that includes a form of image marked by the intermedial encounter between cinema and photography, a type of moving image permeated by the "trance of the negative and the specter of photography" (p. 120).
- 102 Ibid., p. 10.
- 103 Laura Mulvey, *Death 24x a Second: Stillness and the Moving Image* (London: Reaktion Books, 2006), p. 186.
- 104 Green, "The Visibility of Time," in *Visible Time*, p. 38.
- 105 David Claerbout and Lynne Cooke, "Conversation," in *David Claerbout: Video Works, Photographic Installations, Sound Installations, Drawings: 1996-2002*, exhibition catalogue (Kunstverein Hannover, August 24–September 29, 2002, Brussels: A Prior, 2002), p. 53.
- 106 Claerbout explains how he came up with this combination: "I have noticed two different approaches to [video]: one considers its roots as video signal, and the other attributes monumental/architectural

- qualities to the surface of the projection. As the older form of the video-as-signal shifts to that of the pixel artists like myself think of digital projection in terms of square centimeters and no longer solely as video/television signal” (David Claerbout and Christine van Assche, “Interview,” in *David Claerbout: The Shape of Time*, ed. Christine van Assche [Zürich: JRP Ringier, 2008], p. 13).
- 107 As François Parfait points out, the spatial layering of this temporal simultaneity dates back to Peter Campus’s image processing works and Thierry Kuntzel’s videos pioneering exploration of the relationship between photography and film. See Parfait, “Cloudy, Becoming Mostly Sunny by Late Afternoon,” in *David Claerbout: The Shape of Time*, p. 27.
- 108 Gilles Deleuze elucidates his concept of “incompossibility,” in *The Fold: Leibniz and the Baroque*, trans. Tom Conley (Minneapolis, MN: University of Minnesota Press, 1992) and his essay “The Actual and the Virtual” (published in Gilles Deleuze and Claire Parnet, *Dialogues*, trans. Barbara Habberjam, Janis Tomlinson, and Eliot Albert [New York: Columbia University Press, 2002], pp. 148–52).
- 109 Timothy Murray, “Digital Incompossibility: Cruising the Aesthetic Haze of the New Media,” *CTheory*, January 13, 2000, online at <http://www.ctheory.net/articles.aspx?id=121> (accessed on July 14, 2010).
- 110 Ibid.
- 111 Green, “The Visibility of Time,” in *Visible Time*, p. 32.
- 112 Thierry de Duve, “Time Exposure and Snapshot: The Photograph as Paradox,” *October*, no. 5 (Summer 1978), p. 117.
- 113 Ibid., p. 121.
- 114 Here I agree with Damian Sutton’s view that this work explores “how the traumatic exists in the everyday details also picked up by the camera” (Damian Sutton, *Photography, Cinema, Memory: The Crystal Image of Time* [Minneapolis, MN: University of Minnesota Press, 2009], p. 224).
- 115 Barthes, *Camera Lucida*, p. 27.
- 116 Claerbout and Cooke, “Conversation,” p. 42.
- 117 Barthes himself has called this medium-specific view of photography “the chemical revelation of the object” (*Camera Lucida*, p. 10).
- 118 Barthes himself suggests this unintentionality in his emphasis upon the private nature of the viewer’s encounter with the *punctum*: “Each photograph is read as the private appearance of its referent”

(*Camera Lucida*, p. 98). For the strongest case of highlighting the photographer's unintentionality as integral to the concept of *punctum*, see Michael Fried, "Barthes's *Punctum*," *Critical Inquiry*, vol. 31, no. 3 (Spring 2005), p. 546.

119 Claerbout and Cooke, "Conversation," p. 53.

120 Rancière, "The Pensive Image," p. 132.

121 Baker, "Photography's Expanded Field," p. 136 (emphasis in original).

Chapter 2

- 1 Clint Enns, "Escaping Time: An Interview with Thorsten Fleisch," *Incite!: Journal of Experimental Media*, Back and Forth: Interview Series, online at <http://www.incite-online.net/fleisch.html> (accessed July 1, 2015).
- 2 For a helpful summary on the influence of the Greenbergian modernism on the idea and practice of avant-garde cinema, see A. L. Rees, *A History of Experimental Film and Video*, 2nd edn (London: BFI Publishing, 2011), pp. 8–14.
- 3 See Rees, *A History of Experimental Film and Video*, pp. 27–29.
- 4 Standish D. Lawder, *The Cubist Cinema* (New York: New York University Press, 1975), p. 49.
- 5 Malcolm Le Grice, *Abstract Film and Beyond* (Cambridge, MA: MIT Press, 1977), p. 152.
- 6 David E. James, *Allegories of Cinema: American Film in the Sixties* (Princeton, NJ: Princeton University Press, 1989), p. 241.
- 7 For instance, critic Lucinda Furlong notes that central to the aesthetic of image-processing videos is their "treatment of the electronic signal as a plastic medium, a material with inherent properties that can be isolated" (Lucinda Furlong, "Tracking Video Art: 'Image-Processing' as a Genre," *Art Journal*, vol. 45, no. 3 (1985), p. 234). Furlong's voice echoes Stephen Beck's artist statement on the ways in which the developments of the abstract forms produced with video imaging instruments or synthesizers allowed him to manipulate the electronic signal: "[Electronic imaging techniques], as applied to television, utilize the inherent plasticity of the medium to expand it beyond a strictly photographic/realistic, representation aspect which characterizes the history of television in general" (Stephen Beck, "Image Processing and Video Synthesis,"

- in *Video Art: An Anthology*, eds Ira Schneider and Beryl Korot [New York: Harcourt Brace Jovanovich, 1976], p. 184).
- 8 Kerry Brougher, “Visual-Music Culture,” in *Visual Music: Synaesthesia in Art and Music since 1990*, ed. Kerry Brougher (London: Thames and Hudson, 2005), pp. 112, 117.
- 9 For the helpful information that complies the digital slit-scan videos, see Golan Levin, “An Informal Catalogue of Slit-Scan Video Artworks and Research,” online at http://www.flong.com/texts/lists/slitr_scan/ (accessed May 1, 2015).
- 10 Camille Utterback, “Project Description: *Liquid Time Series*,” online at <http://camilleutterback.com/projects/liquid-time-series/> (accessed June 1, 2015).
- 11 Gregory Zinman, “Getting Messy: Chance and Glitch in Contemporary Video Art,” in *Abstract Video: The Moving Image in Contemporary Art*, ed. Gabrielle Jennings (Berkeley, CA: University of California Press, 2015), p. 99.
- 12 Ibid.
- 13 Malcolm Le Grice, “Color Abstraction—Painting—Video—Digital Media,” in *Experimental Cinema in the Digital Age* (London: BFI Publishing, 2001), p. 267.
- 14 Gene Youngblood, “Cinema and the Code,” *Leonardo*, Supplemental Issue, vol. 2 (1989), p. 28.
- 15 The film-video or film-computer hybrids of those artists include Bartlett’s *OffOn* (1967), VanDerBeek’s *Poem Field* series (1964–67), Whitney’s *Lapis* (1963–66), and Yalkut’s collaborations with Nam June Paik, such as the works of *Video-Film Concert* (1966–72). An earlier discussion of some of these pieces, including Bartlett’s and Whitney’s, can be found in Youngblood’s *Expanded Cinema* (New York: Dutton, 1970). For an excellent study of these pieces, see Gregory Zinman, “Analog Circuit Palettes, Cathode Ray Canvases: Digital’s Analog, Experimental Past,” *Film History: An International Journal*, vol. 24, no. 2 (2012), pp. 135–57.
- 16 Other filmmakers who have experimented in the combinatory use of film and video to achieve the material hybridization of abstract imagery but who are not discussed in this chapter include Kerry Laitala, Stephanie Maxwell, and Marcy Saude, to name just a few.
- 17 Rosa Menkman, *The Glitch Moment(um)* (Amsterdam, The Netherlands: Institute of Network Cultures, 2011), p. 9.
- 18 Olga Goriunova and Alexei Shulgin, “Glitch,” in *Software Studies: A Lexicon*, ed. Matthew Fuller (Cambridge, MA: MIT Press, 2011), p. 111.

- 19 Alexander R. Galloway, *Protocol: How Control Exists after Decentralization* (Cambridge, MA: MIT Press, 2004), p. 213.
- 20 For a detailed explanation of the techniques of databending applied to the different picture and video files, see Rosa Menkman, “A Vernacular of File Formats: A Guide to Databend Compression Design” (Amsterdam, August 2010), online at <http://www.slideshare.net/r00s/rosa-menkman-a-vernacular-of-file-formats-4923967> (accessed June 1, 2015).
- 21 Evan Meaney, “On Glitching,” *INCITE: Journal of Experimental Media*, no. 2 (Spring-Fall 2010), online at <http://www.incite-online.net/meaney2a.html> (accessed July 15, 2015).
- 22 Clint Enns, “From 16mm to 16-bit: An Interview with Evan Meaney,” *INCITE: Journal of Experimental Media*, no. 2 (Spring-Fall 2010), online at <http://www.incite-online.net/meaney.html> (accessed July 10, 2015).
- 23 For a detailed account of Shannon’s theory of entropy and noise, see Susan P. Ballard, “Information, Noise, et al.,” in *Error: Glitch, Noise, and Jam in New Media Cultures*, ed. Mark Nunes (New York: Continuum, 2011), pp. 59–79.
- 24 William Brown and Meetali Kutty, “Datamoshing and the Emergence of Digital Complexity from Digital Chaos,” *Convergence*, vol. 18, no. 2 (2012), p. 168.
- 25 Rebecca Baron and Douglas Goodwin, “The Rest Is Noise: On Lossless,” in *On Not Looking: The Paradox of Contemporary Visual Culture*, ed. Frances Guerin (New York: Routledge, 2015), p. 66.
- 26 Ibid., p. 71.
- 27 Hugh S. Manon and Daniel Temkin, “Notes on Glitch,” *World Picture*, no. 6 (Winter 2011), online at http://www.worldpicturejournal.com/WP_6/Manon.html (accessed May 1, 2015).
- 28 Marianne van den Boomen et al., “Introduction: From the Virtual to Matters of Fact and Concern,” in *Digital Material: Tracing New Media in Everyday Life and Technology*, eds Marianne van den Boomen et al. (Amsterdam, The Netherlands: Amsterdam University Press, 2009), pp. 9–10.
- 29 For this technical procedure, which is also known as “drift and roll,” see Sherry Miller Hocking, “The Grammar of Electronic Image Processing,” in *The Emergence of Video Processing Tools: Television Becoming Unglued*, eds Kathy Hight, Sherry Miller Hocking, and Mona Jimenez (London: Intellect, 2014), pp. 465–66.
- 30 Carolyn L. Kane, “Compression Aesthetics: Glitch from the Avant-garde to Kanye West,” *InVisible Culture: An Electronic Journal for*

- Visual Culture*, no. 21 (2014), online at <http://ivc.lib.rochester.edu/compression-aesthetics-glitch-from-the-avant-garde-to-kanye-west/> (accessed June 1, 2015).
- 31 Clint Enns, “Structural Digital Video,” *INCITE: Journal of Experimental Media*, no. 3 (Fall 2011), online at <http://www.incite-online.net/enns3.html> (accessed May 1, 2015).
- 32 Ed Halter, “The Matter of Electronics,” in *Vague Terrain*, last modified February 3, 2010, online at <http://vagueterrain.net/content/2010/02/matter-electronics> (accessed May 5, 2012).
- 33 Ibid.
- 34 For a detailed survey of these errors, see Johannes Gfeller, Agathe Jarczyk, and Joanna Philips (eds), *Compendium of Image Errors in Analogue Video* (Zürich, Switzerland: Verlag Scheidegger and Spiess, 2013).
- 35 David Joselit, *Feedback: Television against Democracy* (Cambridge, MA: MIT Press, 2007), p. 48.
- 36 For a detailed survey of the Vasulkas’ works and their technical operations, see Yvonne Spielmann, “Video and Computer: The Aesthetics of Steina and Woody Vasulka,” The Daniel Langlois Foundation, 2004, online at http://www.fondation-langlois.org/media/activites/vasulka/Spielmann_EN.pdf (accessed February 1, 2015).
- 37 Regarding his *Digital Still Life*, Le Grice clarifies this point as follows: “In *Digital Still Life*, like in *Berlin Horse*, representational images . . . have been transformed, mainly in respect of color values. However, in the digital work, I wrote a program which achieved this transformation across a much broader base for discriminating regions of the image than was possible in the essentially two-component ‘matte’ of *Berlin Horse*” (Le Grice, “Color Abstraction—Painting—Video—Digital Media,” pp. 268–69).
- 38 Jaimie Baron, *The Archive Effect: Found Footage and the Audiovisual Experience of History* (New York: Routledge, 2014), p. 158.
- 39 Zinman, “Getting Messy,” p. 110.
- 40 Lev Manovich, *Software Takes Command* (New York: Bloomsbury Academic, 2014), p. 266.
- 41 Brown and Kutty, “Datamoshing and the Emergence of Digital Complexity from Digital Chaos,” p. 171.
- 42 Furlong, “Tracking Video Art,” p. 233.
- 43 Jacob Ciocci, Takeshi Murata, and Melissa Ragona, “From Bell Labs to Best Buy: Takeshi Murata and Jacob Ciocci in Conversation

with ‘PREDRIVE: After Technology’ Curator Melissa Ragona,” online at <http://rhizome.org/editorial/2008/nov/26/from-bell-labs-to-best-buy/> (accessed June 1, 2015).

- 44 Rodowick, *The Virtual Life of Film*, p. 135.
- 45 Yvonne Spielmann, “Analog to Digital: Artists Using Technology,” in *The Emergence of Video Processing Tools*, p. 526.
- 46 Manovich, “After Effects, or the Velvet Revolution,” p. 19.
- 47 N. Katherine Hayles, “Print Is Flat, Code Is Deep: The Importance of Media-Specific Analysis,” *Poetics Today*, vol. 25, no. 1 (Spring 2004), p. 72. Citing Hayles’s view, Menkman argues that “Glitch genres perform reflections on materiality not just on a technological level, but also by playing off the physical medium and its non-physical, interpretative or conceptual characteristics” (Menkman, *The Glitch Moment(um)*, p. 56).
- 48 Rosa Menkman, “Glitch Studies Manifesto,” in *Video Vortex Reader II: Moving Images beyond YouTube*, eds Geert Lovink and Rachel Somers Miles (Amsterdam, The Netherlands: Institute of Network Cultures, 2011), p. 346.
- 49 Federico Windhausen, “Assimilating Video,” *October*, no. 137 (Summer 2011), p. 78. Malcolm Turvey also examined Michael Snow’s and Ken Jacobs’s use of digital video effects to continue and extend the desires that they had long developed since their pre-digital avant-garde filmmaking, such as Snow’s desire to control space and time, and Jacobs’s desire to reveal what lies beneath the forgotten frames of early cinema. See Malcolm Turvey, “Dr. Tube and Mr. Snow,” *Millennium Film Journal*, vols. 43–44 (Summer 2005), pp. 131–40; Malcolm Turvey, “Ken Jacobs: Digital Revelationist,” *October*, no. 137 (Summer 2011), pp. 107–24.
- 50 Malcolm Le Grice, “Art in the Land of Hydra-media,” in *Experimental Cinema in the Digital Age*, p. 283.
- 51 Ibid., pp. 308–09.
- 52 René Thoreau Bruckner, “Travels in Flicker-Time (Madre!),” *Spectator*, vol. 28, no. 2 (Fall 2008), pp. 61–62.
- 53 See Michael Sicinski, “Incremental Framebusting: The Paragon Example of Lynn Marie Kirby,” in *California Video: Artists and Histories*, ed. Glenn Philips (San Francisco, CA: Getty Research Institute, 2008), pp. 138–41.
- 54 Zinman, “Getting Messy,” p. 101.
- 55 Jonathan Walley, “Materiality and Meaning in Recent Projection Performance,” *Velvet Light Trap*, no. 70 (Fall 2012), p. 32.

- 56 Ibid., p. 20.
- 57 Johanna Vaude, “Greffé, fusion, hérédité: L’hybridation dans le cinéma expérimental contemporain,” *Corps* 1/2009 (n° 6), p. 110 (translation mine).
- 58 Stan Brakhage, *Metaphors on Vision*, ed. P. Adams Sitney (New York: Film Culture, 1963), p. 1.
- 59 Jürgen Reble, “Chemistry and the Alchemy of Colour,” *Millennium Film Journal*, nos. 30/31 (Fall 1997), p. 13 (emphasis added).
- 60 Jürgen Reble, “Project Description: *Materia Obscura*,” online at <http://www.filmalchemist.de/films.html#obscura> (accessed October 1, 2014).
- 61 Jennifer West, “Acting Out: The Ab-Ex Effect,” *Artforum*, vol. 49, no 10 (Summer 2001), p. 133.
- 62 The film’s full title is *Skate the Sky Film (35mm film print of clouds in the sky covered with ink, Ho-Ho’s, and Melon juice—filmstrips taped to Tate Turbine Hall ramp and skateboarded over using ollie, kick flip, pop shove-it, acid drop, melon grab, crooked grind, bunny hop, tic tacs, sex change, disco flip—skateboarding performed live for Long Weekend by Thomas Lock, Louis Henderson, Charlotte Brennan, Dion Penman, Sam Griffin, Jak Tonge, Evin Goode and Quantin Paris, clouds shot by Peter West)*.
- 63 Quinn Latimer, “The Film Looks Like a Licked Sunset: A Conversation with Jennifer West,” published in eastofborneo.org, March 3, 2011, online at <http://www.eastofborneo.org/articles/the-film-looks-like-a-licked-sunset-a-conversation-with-jennifer-west> (accessed January 15, 2015).
- 64 Zinman, “Getting Messy,” p. 105.
- 65 The film’s full title is *Spiral of Time Documentary Film (16mm negative strobe-light double and triple exposed—painted with brine shrimp—dripped, splattered and sprayed with salted liquids: balsamic and red wine vinegar, lemon and lime juice, temporary fluorescent hair dyes—photos from friends Mark Titchner, Karen Russo, Aaron Moulton and Ignacio Uriarte and some google maps—texts by Jwest and Chris Marker’s Sans Soleil script—shot by Peter West, strobed by Jwest, hands by Ariel West, telecine by Tom Sartori)*.
- 66 Latimer, “The Film Looks Like a Licked Sunset” (emphasis added).
- 67 Lev Manovich, “Abstraction and Complexity,” in *MediaArtHistories*, ed. Oliver Grau (Cambridge, MA: MIT Press, 2007), pp. 339–54.

Chapter 3

- 1 Paul Arthur, Brian Frye, Chrissie Iles, Ken Jacobs, Annette Michelson, and Malcolm Turvey, “Round Table: Obsolescence and American Avant-garde Film,” *October*, no. 100 (Spring 2002), p. 122.
- 2 Cecilia Hausheer and Christoph Settele, “Introduction,” in *Found Footage Film*, eds Cecilia Hausheer and Christoph Settele (Luzern, Switzerland: VIPER/zyklog verlog, 1992), p. 5.
- 3 David Thorburn and Henry Jenkins, “Introduction: Toward an Aesthetics of Transition,” in *Rethinking Media Change: The Aesthetics of Transition*, eds David Thorburn and Henry Jenkins (Cambridge, MA: MIT Press, 2003), p. 11.
- 4 Rodowick, *The Virtual Life of Film*, p. 41.
- 5 Giovanna Fossati, *From Grain to Pixel: The Archival Life of Film in Transition* (Amsterdam, The Netherlands: Amsterdam University Press, 2009), p. 107 (emphasis added).
- 6 Ibid., p. 127.
- 7 Yann Beauvais, “C'est toujours du cinema” (translation mine), an essay published in the Catalogue for Taipei Golden Horse Film Festival, 2005, online at http://manou16.phpnet.org/article_us.php3?id_article=190 (accessed on July 10, 2010).
- 8 Catherine Russell, “Archival Apocalypse,” in *Experimental Ethnography: The Work of Film in the Age of Video* (Durham, NC: Duke University Press, 1999), p. 241.
- 9 Ibid., p. 264.
- 10 Scott Mackenzie, “Flowers in the Dustbin: Termite Culture and Detritus Cinema,” *CineAction!*, no. 47 (1998), p. 27.
- 11 For the valuable collection of those discourses, see David Evans (ed.), *Appropriation*, (Cambridge, MA: MIT Press, 2009).
- 12 Paul Arthur, “Bodies, Language, and the Impeachment of Vision: The Avant-garde at Fifty,” in *A Line of Sight: American Avant-garde Film Since 1965* (Minneapolis, MN: University of Minnesota Press, 2005), p. 140.
- 13 Paul Arthur, “The Status of Found Footage,” *Spectator*, vol. 20, no. 1 (Fall 1999/Winter 2000), p. 63 (emphasis added).
- 14 Willem de Greef, “The Found Footage Film as An Art of Reproduction,” in *Found Footage Film*, p. 81.
- 15 Ibid., p. 83.

- 16 For Wees, “collage” is the most genuine method of montage inasmuch as it dates back not simply to the Soviet transition of cinematic montage but also to the early twentieth century’s modernist aesthetic exemplified by the work of readymade and assemblage in visual arts, both of which provoked the viewer to recognize visual representations as nontransparent, fabricated, and fragmented. The collage films are in this sense distinguishable from “compilation films” which, according to Wees, follow “a clear, linear development” of borrowed images and do not question their “representational nature” (William C. Wees, *Recycled Images: The Art and Politics of Found Footage Films* [New York: Anthology Film Archives, 1993], p. 52). And they also differ from “appropriation films” although those two have something in common: both collage and appropriation “present images as images, as representations of the image-producing apparatus of cinema and television, but collage also promotes an analytical and critical attitude toward its images and their institutional sources” (*Ibid.*, p. 53).
- 17 Wees, *Recycled Images*, p. 25. The found footage films based on this mode, according to Wees, include those made by Al Razutis (*Visual Essay* series [1973–84]), Chick Strand (*Waterfall* [1967]), Pat O’Neil (*Runs Good* [1971]), David Rimmer (*Variations on a Cellophane Wrapper* [1970]), Caroline Avery (*Midweekend* [1985], *Simulated Experience* [1989]), Cécile Fontaine (*Two Made for TV Films* [1986], *Cruises* [1989]), and Phil Solomon (*The Secret Garden* [1986]), along with a few seminal films such as Ernie Gehr’s *Eureka* (1974) and Jacobs’s *Tom, Tom, the Piper’s Son* (1969).
- 18 Michele Pierson, “Special Effects in Martin Arnold’s and Peter Tscherkassky’s Cinema of Mind,” *Discourse*, vol. 28, nos. 2 and 3 (Spring and Fall 2006), p. 33 (emphasis added).
- 19 Michael Zyrd, “Found Footage Film as Discursive Metahistory: Craig Baldwin’s *Tribulation 99*,” *The Moving Image*, vol. 3, no. 2 (Fall 2003), p. 51.
- 20 Adrian Danks, “The Global Art of Found Footage Cinema,” in *Traditions in World Cinema*, eds Linda Badley, Steven J. Schneider, and R. Barton Palmer (New Brunswick, NJ: Rutgers University Press, 2006), pp. 243–44.
- 21 For the discussion about remix’s role in blurring the boundaries between commerce and culture, as well as about the economic and legal issues that it raises, see Lawrence Lessing, *Remix: Making Art and Culture Thrive in the Hybrid Economy* (New York: Penguin

Press HC, 2008). Critic Eduardo Navas, who has managed his website *Remixtheory.net*, has written a number of valuable essays widely addressing key topics related to remix, including the impacts of software and web applications on cultural production, types of remix spanning across different media and arts, and remix as a mode of critical thinking and practice. For other valuable resources on remix, see, for instance, Paul D. Miller (a.k.a. DJ Spooky), *Rhythm Science* (Cambridge, MA: MIT Press, 2004); Lev Manovich, “Remixability,” in *After the Digital Divide: German Aesthetic Theory in the Age of New Media*, eds Lutz Koepnick and Erin McGlothlin (Rochester, NY: Camden House, 2009), pp. 43–51.

- 22 Nicolas Bourriaud, *Postproduction, Culture as Screenplay: How Art Repograms the World*, trans. Jeanine Herman (New York: Lukas & Sternberg, 2002), p. 40.
- 23 Eli Horwatt, “A Taxonomy of Digital Video Remixing: Contemporary Found Footage Practice on the Internet,” in *Cultural Borrowings: Appropriation, Reworking, Transformation*, ed. Iain Robert Smith (Nottingham, UK: Scope, An Online Journal of Film and Television Studies, 2009), p. 76.
- 24 Martin Lefebvre and Marc Furstenau, “Digital Editing and Montage: The Vanishing Celluloid and Beyond,” *Cinémas: Journal of Film Studies*, vol. 13, nos. 1–2 (2002), p. 73 (emphasis added).
- 25 Ibid., p. 75.
- 26 Ibid., p. 82.
- 27 Susanne Østby Saether, “Between the Hyperrepresentational and the Real: A Sampling Sensibility,” in *The State of the Real: Aesthetics in the Digital Age*, eds Damian Sutton, Susan Brind, and Ray McKenzie (New York and London: I. B. Tauris, 2007), p. 60.
- 28 Manovich, *The Language of New Media*, p. 139.
- 29 Manovich, “After Effects, or the Velvet Revolution,” p. 14 (emphasis added).
- 30 Lev Manovich, “What Is Digital Cinema?,” in *The Digital Dialectic: New Essays on New Media*, ed. Peter Lunenfeld (Cambridge, MA: MIT Press, 1999), p. 180.
- 31 Tilly Wanes, “Story without End?: Found Footage in the Digital Era,” *Movement* (online journal) 1.1 (2009), online at http://www.movementjournal.com/issue_1.1_futures_of_cinema/01_story_without_end_walnes.html (accessed June 16, 2014).
- 32 See Stefano Basilico, “The Editor,” in *Cut: Film as Found Object in Contemporary Video*, exhibition catalogue, Milwaukee Art Museum (2004), curated by Stefano Basilico, pp. 29–46.

- 33 Wanes, “Story without End?”.
- 34 Manovich, *The Language of New Media*, p. 158.
- 35 Røssaak, “Algorithmic Culture: Beyond the Photo/Film Divide,” in *Between Stillness and Motion: Film, Photography, Algorithms*, ed. Eivind Røssaak (Amsterdam: Amsterdam University Press, 2011), p. 196.
- 36 Wees, *Recycled Images*, p. xx.
- 37 John Tozer, “Notorious, Alfred Hitchcock, and Contemporary Art,” *Camera Austria International*, no. 67 (1999), p. 179.
- 38 In this sense, Federico Windhausen suggests that *The Phoenix Tapes* falls under the category of the “psychological tradition” within found footage practice. See his “Hitchcock and the Found Footage Installation: Müller and Girardet’s *The Phoenix Tapes*,” *Hitchcock Annual*, no. 12 (2003-04), p. 104.
- 39 Christa Blüminger, “On Matthias Müller’s Logic of Appropriation,” in *The Memo Book: Filme, Videos und Installationen von Matthias Müller*, ed. Stefanie Schulte Strathaus (Berlin: Vorwerk 8, 2005), pp. 83–85.
- 40 Charles Shino Tashiro, “Videophilia: What Happens when You Wait for It on Video,” *Film Quarterly*, vol. 45, no. 1 (Autumn 1991), p. 7.
- 41 Scott MacDonald, “Interview with Matthias Müller,” in *A Critical Cinema 5: Interviews with Independent Filmmakers* (Berkeley, CA: University of California Press, 2006), p. 291.
- 42 Tashiro, “Videophilia,” p. 16. See also his “The Contradictions of Video Collecting,” *Film Quarterly*, vol. 50, no. 2 (1997), pp. 11–18; “Home Video and Film: The Case of Who Framed Roger Rabbit,” *Journal of Film and Video*, vol. 48, nos. 1–2 (Spring-Summer 1996), pp. 58–66.
- 43 Anne Friedberg, “The End of Cinema: Multimedia and Technological Change,” in *Reinventing Film Studies*, eds Christine Gledhill and Linda Williams (New York: Oxford University Press, 2000), p. 444.
- 44 Caetlin Benson-Allott, “‘Before You Die, You See The Ring’: Notes on the Immanent Obsolescence of VHS,” *Jump Cut*, no. 49 (Spring 2007), online at <http://www.ejumpcut.org/archive/jc49.2007/bensonAllott/text.html> (accessed May 1, 2014).
- 45 See Laura Mulvey, “The Possessive Spectator,” in *Death 24x a Second*, pp. 161–80.
- 46 Müller suggests this point as follows: “At the beginning of the project, we established themes that we wanted to treat in individual segments. With these themes in mind, we watched the forty films and recorded a detailed protocol of them” (MacDonald, “Matthias Müller,” p. 299).

- 47 Blüminger, “On Matthias Müller’s Logic of Appropriation,” p. 81.
- 48 MacDonald, “Interview with Matthias Müller,” p. 299.
- 49 William C. Wees, “The Ambiguous Aura of Hollywood Stars in Avant-garde Found Footage Films,” *Cinema Journal*, vol. 41, no. 2 (Winter 2002), p. 4. Wees’s argument aims to substantiate that this kind of film represents the ambivalent relationship that avant-garde cinema has had with its mainstream counterpart—for example, Hollywood cinema, against a line of critical discourses that assume a clear separation between the two. For other claims that stand in line with Wees’s, see David James, *Allegories of Cinema: American Film in the Sixties* (Princeton, NJ: Princeton University Press, 1989), p. 24; Paul Arthur, “The Last of the Last Machine: Avant-garde Film since 1966,” *Millennium Film Journal*, nos. 16–17–18 (1986–87), p. 70.
- 50 Ibid., p. 13.
- 51 Catherine Russell, “Dialectical Film Criticism: Walter Benjamin’s Historiography, Cultural Critique and the Archive,” *Transformations* (online journal), no. 15 (November 2007), online at http://www.transformationsjournal.org/journal/issue_15/article_08.shtml (accessed on March 18, 2010). Interestingly enough, for Agamben, cinema is the very medium that due to its movement “leads images back to the homeland of gesture,” to its dynamic force (Giorgio Agamben, “Notes on Gesture,” *Means without End*, trans. Vincenzo Binetti and Cesare Casarino [Minneapolis and London: University of Minnesota Press, 2000], p. 56).
- 52 For Benjamin’s key works that deploy his concept of allegory, see *The Origin of German Tragic Drama*, trans. John Osborne (New York and London: Verso, 2003); “Surrealism,” in *Walter Benjamin: Selected Writings Vol. 2: 1927–1934*, eds Michael W. Jennings et al., trans. Rodney Livingstone et al. (Cambridge, MA: The Belknap Press of Harvard University Press, 1999), pp. 207–21.
- 53 Jeffrey Skoller, *Shadows, Specters, Shards: Making History in Avant-garde Film* (Minneapolis, MN: University of Minnesota Press, 2005), p. 7 (emphasis in original).
- 54 Russell, “Archival Apocalypse,” p. 252.
- 55 Walter Benjamin, *The Arcades Project*, ed. Rolf Tiedemann, trans. Howard Eiland and Kevin McLaughlin (Cambridge, MA: The Belknap Press of Harvard University Press, 1999), p. 462.
- 56 Ibid., p. 475.

- 57 Russell, “Archival Apocalypse,” p. 263.
- 58 Emma Cocker, “Ethical Possession: Borrowing from the Archives,” in *Cultural Borrowings*, pp. 92–93.
- 59 Walter Benjamin, “On the Concept of History,” in *Walter Benjamin: Selected Writings Vol. 4: 1938–1940*, eds Howard Eiland and Michael W. Jennings, trans. Edmund Jephcott et al. (Cambridge, MA: The Belknap Press of Harvard University Press, 2003), p. 391.
- 60 Jane Connarty, “Introduction,” in *Ghosting: The Role of the Archive within Contemporary Artists’ Film and Video*, eds Jane Connarty and Josephine Lanyon (Bristol, UK: Picture This, 2006), p. 10 (emphasis added).
- 61 Reynolds, “Outside the Archive: The World in Fragments,” in *Ghosting*, p. 22 (emphasis added).
- 62 Gerda Cammaer, “Film: Another Death, Another Life,” *Incite!: Journal of Experimental Media and Radical Aesthetics* (online journal), Issue 1 (Fall 2008), <http://www.incite-online.net/cammaer.html> (accessed on June 6, 2014) (emphasis added).
- 63 Benjamin, *The Arcades Project*, p. 463.
- 64 Ibid., p. 462.
- 65 See Walter Benjamin, “The Work of Art in the Age of Its Technological Reproducibility [Third Version],” in *Walter Benjamin: Selected Writings Vol. 4: 1938–1940*, eds Howard Eiland and Michael W. Jennings, trans. Edmund Jephcott et al. (Cambridge, MA: The Belknap Press of Harvard University Press, 2003), pp. 251–83.
- 66 Catherine Russell, “New Media and Film History: Walter Benjamin and the Awakening of Cinema,” *Cinema Journal*, vol. 43, no. 3 (Spring 2004), p. 84. Even Miriam Bratu Hansen, who has developed the most elaborate “materialist” interpretation of Benjamin’s key concepts and thus maintained a critical view on the digital modes of image production and reception for their elimination of the materiality of photographic media, leaves certain room for considering the digital as the means for the reorganization of collective sense perception in the post-industrial, information society: “I don’t think Benjamin would have gone Luddite in the face of digital technology, inasmuch as it opens up for human beings another, dramatically enlarged *Spielraum*, a virtual space that significantly modifies the interrelations of body- and image-space and offers hitherto unimaginable modes of playful innervation.” (Miriam Bratu Hansen, “Room-for-Play: Benjamin’s Gamble with Cinema,” *October*, no. 109 [Summer 2004], p. 41).

- 67 Sven Lütticken, “Viewing Copies: On the Mobility of Moving Images,” *e-flux journal*, no. 8 (September 2009), online at <http://www.e-flux.com/journal/view/75> (accessed on April 20, 2010).
- 68 Skoller, *Shadows, Specters, Shards*, p. 172.
- 69 Baron, *The Archive Effect*, p. 22.
- 70 Ibid., p. 158.
- 71 Aysegul Koc, “An Interview with R. Bruce Elder,” *CineAction*, no. 61 (Spring 2003), p. 38.
- 72 This information is quoted from filmmaker Brett Kashmere, see his “In the Realm of Mystery and Wonder: R. Bruce Elder’s *Book of Praise*,” *Take One*, no. 45 (March–June 2004), pp. 36–39, online at <http://www.brettkashmere.com/elder.htm> (accessed April 3, 2010).
- 73 Paolo Cherchi Usai, *The Death of Cinema: History, Cultural Memory, and the Digital Dark Age* (London: BFI Publishing, 2000), p. 7.
- 74 Ibid., p. 41.
- 75 André Habib, “Ruin, Archive and the Time of Cinema: Peter Delpent’s *Lyrical Nitrate*,” *Substance*, vol. 35, no. 2 (2006), p. 132.
- 76 Ibid., p. 134.
- 77 Hugh S. Manon and Daniel Temkin, “Notes on Glitch,” *World Picture*, no. 6 (Winter 2011), online at http://www.worldpicturejournal.com/WP_6/Manon.html (accessed May 3, 2012).
- 78 Arthur, *A Line of Sight*, p. 157.
- 79 Laura U. Marks, “Loving a Disappearing Image,” in *Touch: Sensuous Theory and Multisensory Media* (Minneapolis, MN: University of Minnesota Press, 2002), p. 96.
- 80 For the difference between mourning and melancholia, see Sigmund Freud, “Mourning and Melancholia,” in *On Murder, Mourning and Melancholia*, trans. Shaun Whiteside and Maud Ellman (New York: Penguin Classics, 2005), pp. 201–18.
- 81 Koc, “An Interview with R. Bruce Elder,” p. 38.
- 82 Laura U. Marks, “Video Haptics and Erotics,” in *Touch*, p. 9.
- 83 R. Bruce Elder, “The Foreignness of the Intimate, or the Violence and Charity of Perception,” in *Subtitles: On the Foreignness of Film*, eds Atom Egoyan and Ian Balfour (Cambridge, MA: MIT Press, 2000), p. 341.

- 84 Doane, “The Indexical and the Concept of Medium Specificity,” pp. 145–46.
- 85 Ibid., p. 148.
- 86 Scott MacDonald, “Ken and Flo Jacobs,” in *A Critical Cinema 3: Interviews with Independent Filmmakers* (Berkeley, CA: University of California Press, 1998), p. 364.
- 87 Hans Hofmann, *Search for the Real and Other Essays* (Cambridge, MA: MIT Press, 1948), p. 44. One example of Jacobs’s remarks on Hofmann’s lesson is as follows: “Spatial anomalies were becoming evident, where the optical effects of motion and color would cause lesions in what I knew were flat surfaces. Yet Hofmann was saying the worst thing a painter could do was ‘make holes’. Compound or multiple depth *readings* of surface signs was desirable. Subtly planted signifiers that made for solid/open-area interchange vitalized the picture-plane” (Ken Jacobs, “Painted Air: The Joys and Sorrows of Evanescence Cinema,” *Millennium Film Journal*, nos. 43–44 [Summer 2005], p. 44) (emphasis in original).
- 88 Eivind Røssaak, “Negotiating Immobility: The Moving Image and The Arts in Andy & Larry Wachowski’s *The Matrix*, Ken Jacobs’s *Tom, Tom, the Piper’s Son*, and Bill Viola’s *The Passions*,” doctoral thesis submitted to the University of Oslo, December 2007, p. 78 (emphasis added).
- 89 See Jonathan Walley, “Ken Jacobs—Paracinema and Ideas of Cinematic ‘Experience,’” in “Paracinema: Challenging Medium-Specificity and Re-defining Cinema in Avant-garde Film,” Doctoral Dissertation Submitted to University of Wisconsin-Madison, 2005, pp. 110–196. Based upon his study of Jacobs along with the non-standardized cinematic experiments by Paul Sharits, Tony Conrad, and Anthony McCall, Walley defines paracinema as an array of non-filmic (but cinematic) experiments that go beyond the material limits of film but still seek to explore cinematic qualities and effects outside the parameters of filmic medium specificity. See Jonathan Walley, “The Material of Film and the Idea of Cinema: Contrasting Practices in the Sixties and Seventies Avant-garde Film,” *October*, no. 103 (Winter 2003), pp. 15–30.
- 90 For Muybridge’s influence on the invention of cinema, see Gunning, “Never Seen This Picture Before: Muybridge in Multiplicity,” in *Time Stand Still: Muybridge and the Instantaneous Photography Movement*, ed. Philip Prodger (Oxford: Oxford University Press, 2003), pp. 223–72. As Gunning points out, Muybridge’s pioneering effort to expand the limits of the photographic medium, his dialectical conception of the relation between the still image and motion, his

predilection for abstraction and repetition, and his scientific approach to the human figure, all provided a model for some structural filmmakers (Frampton and Gehr) and Minimalist painters (264–68).

- 91 Mary Ann Doane, *The Emergence of Cinematic Time: Modernity, Contingency, the Archive* (Cambridge, MA: Harvard University Press, 2002), p. 11.
- 92 Ken Jacobs, “Interview with Ken Jacobs,” in *Films That Tell Time: A Ken Jacobs Retrospective*, ed. David Schwartz (New York: American Museum of the Moving Image, 1989), p. 32.
- 93 Tom Gunning, “Films That Tell Time: The Paradoxes of the Cinema of Ken Jacobs,” in *Films That Tell Time*, p. 10.
- 94 Malcolm Turvey, “Ken Jacobs: Digital Revelationist,” *October*, no. 137 (Summer 2011), p. 121.
- 95 Jacobs’s comment on digital technologies corroborates this point: “I can imagine the Futurist delighting in digital. . . . But for a cubist painting to work [in the digital] I think the weight of the figure, the gravitational pull of its presence must remain pulling at the shards in their light-play. That’s its drama.” (Jacobs, “Addenda to Interview,” in *Films That Tell Time*, p. 61).
- 96 Spielmann, “Intermedia in Electronic Images,” p. 57.
- 97 Philippe Dubois, “La question video face au cinema: déplacements esthétiques,” *Cinéma et dernières technologies*, eds. Frank Beau, Philippe Dubois, and Gérard Leblanc (Paris : INA, De Boeck Université De Boeck & Larcier, 1998), p. 196. For Dubois, the first term points out that “each superimposed image appears as a translucent surface through which one can see another picture,” while the second refers to a “sedimentation of successive layers” in the single picture frame. (*Ibid.*, translation mine).
- 98 Raymond Bellour, “The Images of the World,” in *Resolutions: Contemporary Video Practices*, eds Michael Renov and Erika Suderburg (Minneapolis, MN: University of Minnesota Press, 1995), p. 151.
- 99 Marika Sturken, “The Politics of Video Memory: Electronic Erasures and Inscriptions,” in *Resolutions*, p. 12.
- 100 *Ibid.*, p. 5.
- 101 Paul Arthur, “Cinematic Spectacles from Dross: The Chimeric Cinema of Ken Jacobs,” *Film Comment*, vol. 33, no. 2 (March/April 1997), p. 61.
- 102 *Ibid.*
- 103 Ken Jacobs, “Eternalism: A Method for Creating an Appearance of Sustained Three-Dimensional Motion-Direction of Unlimited

- Duration, Using A Finite Number of Pictures,” United States Patent Application Publication, No. US 2006/0187298 (August 24, 2006), p. 2.
- 104 Brooke Belisle, “Depth Reading: Ken Jacobs’s Digital, Stereoscopic Films,” *Cinema Journal*, vol. 53, no. 2 (Winter 2014), p. 12.
- 105 See David I. Tafler, “When Analog Cinema Becomes Digital Memory,” *Wide Angle*, vol. 21, no. 1 (January 1999), p. 189.
- 106 Jussi Parikka, “Archaeologies of Media Art: Jussi Parikka in Conversation with Garnet Hertz,” *CTheory.net*, January 4, 2010, online at <http://www.ctheory.net/articles.aspx?id=631> (accessed on July 10, 2014). See also Siegfried Zielinski, *Deep Time of the Media: Toward an Archaeology of Hearing and Seeing by Technical Means* (Cambridge, MA: MIT Press, 2006), pp. 1–38.
- 107 Jeffrey Skoller, “Reanimator: Embodied History, and the Post-cinema Trace in Ken Jacobs’ ‘Temporal Composites,’” in *Pervasive Animation*, ed. Suzanne Buchan (New York: Routledge, 2013), p. 234.
- 108 Mark J. P. Wolf, “Subjunctive Documentary: Computer Imaging and Simulation,” in *Collecting Visible Evidence*, eds Jane Gaines and Michael Renov (Minneapolis, MN: University of Minnesota Press, 1999), pp. 281 (emphasis in original).
- 109 Benjamin, “On Some Motifs in Baudelaire,” *Walter Benjamin: Selected Writings Vol. 4*, p. 328.
- 110 Bernard Stiegler, “The Discrete Image,” in Jacques Derrida and Bernard Stiegler, *Echographies of Television: Filmed Interviews*, trans. Jennifer Bajorek (London: Polity Press, 2002), p. 153 (emphasis in original).
- 111 Hollis Frampton, “For a Metahistory of Film: Commonplace Notes and Hypotheses,” in *Circles of Confusion: Film, Photography, Video, Texts 1968-80* (Rochester, NY: Visual Studies Workshop Press, 1983), p. 113.
- 112 In fact, despite his identification of the differences between film and video in the light of material and movement, Frampton does not exclude a possibility for the two media to correlate with each other: “Video confirms, finally, a genetic eroticism. That eroticism belongs to the photographic cinema as well, through the virtually tactile and kinesthetic illusion of surface and space afforded by an image whose structure seems as fine as that of ‘nature,’” (Frampton, “The Withering Away of the State of the Art,” in *Circles of Confusion*, p. 165.)

Chapter 4

- 1 Phillip Lopate, "In Search of the Centaur: The Essay-Film," *The Threepenny Review*, no. 48 (Winter 1992), pp. 19–22; Paul Arthur, "Essay Questions: From Alain Resnais to Michael Moore," *Film Comment*, vol. 39, no. 1 (2003), pp. 58–62; Nora M. Alter, "Translating the Essay into Film and Installation," *Journal of Visual Culture*, vol. 6, no. 1 (2007), pp. 44–57; Laura Rascaroli, "The Essay Film: Problems, Definitions, Textual Commitments," *Framework*, vol. 49, no. 2 (Fall 2008), pp. 24–47; Laura Rascaroli, *The Personal Camera: Subjective Cinema and the Essay Film* (New York: Wallflower Press, 2009); Timothy Corrigan, *The Essay Film: From Montaigne, After Marker* (New York: Oxford University Press, 2011).
- 2 Rascaroli, "The Essay Film," p. 25 (emphasis added).
- 3 Michael Renov, "The Subject in History: The New Autobiography in Film and Video," in *The Subject of Documentary* (Minneapolis, MN: University of Minnesota Press, 2004), p. 110.
- 4 Corrigan, *The Essay Film*, p. 30.
- 5 See Rascaroli, "The Essay Film," pp. 37–38.
- 6 See Corrigan, *The Essay Film*, p. 30; Arthur, "Essay Questions," p. 39; Lopate, "In Search of the Centaur," pp. 19–20.
- 7 Arthur, "Essay Questions," p. 39.
- 8 Astruc's envisioning of the proliferation of 16-mm format and television as a breakthrough for the democratic and personal uses of cinema is as follows: "A Descartes of today would already have shut himself up in his bedroom with a 16mm camera and some film, and would be writing his philosophy on film . . . With the development of 16mm and television, the day is not far off when everyone will possess a projector, will go to the local bookstore and hire films written on any subject, of any form, from literary criticism and novels to mathematics, history, and general science" (Alexandre Astruc, "The Birth of a New Avant-garde: *la caméra-stylo*," in *The New Wave: Critical Landmarks*, ed. Peter Graham [London: Secker & Warburg, 1968], p. 19).
- 9 Corrigan, *The Essay Film*, p. 66.
- 10 See Raymond Bellour, "Video Writing," in *Illuminating Video: An Essential Guide to Video Art*, eds Doug Hall and Sally Jo Fifer (New York: Aperture/Bay Area Video Coalition, 1991), pp. 421–43.
- 11 Raymond Bellour, *Eye for I: Video Self-portraits* (New York: Independent Curators Inc., 1989) p. 10.

- 12 Michael Renov, “The Electronic Essay,” in *The Subject of Documentary*, pp. 185–86.
- 13 Corrigan, “Expression, the Essayistic, and Thinking in Images,” online at <http://www.facstaff.bucknell.edu/efaden/ms5/corrigan1.htm> (accessed July 1, 2015).
- 14 Bjørn Sørensen, “Digital Video and Alexandre Astruc’s *caméra-stylo*: The New Avant-garde in Documentary Realized?,” *Studies in Documentary Film*, vol. 2, no. 1 (2008), p. 58.
- 15 Ohad Landesman, “Reality Bytes: Reclaiming the Real in Digital Documentary,” dissertation submitted to the Department of Cinema Studies, New York University, January 2013, p. 187.
- 16 Bellour, *Eye for I*, p. 10.
- 17 Renov, “The Electronic Essay,” p. 188.
- 18 Ursula Biemann, “The Video Essay in the Digital Age,” in *Stuff It: The Video Essay in the Digital Age*, ed. Ursula Biemann (Vienna and New York: Springer, 2003), p. 9.
- 19 Ágnes Pethő, *Cinema and Intermediality: The Passion for the In-between* (Newcastle, UK: Cambridge Scholarly Publishing, 2011), p. 294.
- 20 Ibid., p. 324.
- 21 Bellour, “The Images of the World,” in *Resolutions*, p. 151.
- 22 Jacques Rancière aptly summarizes this point in his take of *Histoire(s) du cinéma*: “Video should offer Godard its new capacities for making images appear, vanish, and intermingle; and for forming the pure kingdom of their co-belonging and the potentiality of their inter-expression ad infinitum” (Rancière, *The Future of the Image*, p. 66).
- 23 For a detailed discussion on this transitional aspect of Farocki’s montage in this work, see Christa Blümlinger, “Incisive Divides and Revolving Images: On the Installation *Schnittstelle*,” in *Harun Farocki: Working on the Sightlines*, ed. Thomas Elsaesser (Amsterdam, The Netherlands: Amsterdam University Press, 2004), pp. 61–66.
- 24 For a helpful discussion on *Immemory*, see Erika Balsom’s “Qu’este-ce qu’une madeleine interactive?: Chris Marker’s *Immemory* and the Possibility of a Digital Archive,” *Journal of E-media Studies* (online journal), vol. 1, no. 1 (2008), online at <http://journals.dartmouth.edu/cgi-bin/WebObjects/Journals.woa/xmlpage/4/article/289> (accessed July 1, 2015).
- 25 For a detailed discussion on the interrelations of film and the computer in *Level 5*, see Yvonne Spielmann, “Visual Forms of

- Representation and Simulation: A Study of Chris Marker's *Level 5*," *Convergence*, vol. 6, no. 2 (June 2000), pp. 18–40.
- 26 Rascaroli, *The Personal Camera*, p. 78.
- 27 Pethő, *Cinema and Intermediality*, p. 9.
- 28 Arthur, "Essay Questions," p. 60.
- 29 Timothy Murray, *Digital Baroque: New Media Art and Cinematic Folds* (Minneapolis, MN: University of Minnesota Press, 2008), p. 143. In this sense, he also argues that what is most notable in Godard's *Histoire(s) du cinéma* is the conflation of cinema with the sense of crisis from television and video, which compels Godard's cinema to be aligned with "the coda of a new baroque aesthetic caught between clashing systems of visual projection and digital information" (*Ibid.*, p. 88).
- 30 Domietta Torlasco, *The Heretical Archive: Digital Memory at the End of Cinema* (Minneapolis, MN: University of Minnesota Press, 2013), p. xiv.
- 31 Hito Steyerl, "In Defense of Poor Images," in *The Wretched of the Screen* (Berlin: Sternberg Press, 2012), p. 38.
- 32 Hito Steyerl, "Too Much World: Is the Internet Dead?," in *Too Much World: The Films of Hito Steyerl*, ed. Nick Aikens (Berlin: Sternberg Press, 2014), p. 34.
- 33 Hito Steyerl, "Cut! Reproduction and Recombination," in *The Wretched of the Screen*, p. 183.
- 34 *Ibid.*, p. 187.
- 35 Hito Steyerl, "A Thing Like You and Me," in *The Wretched of the Screen*, p. 54.
- 36 See Hito Steyerl, "November: A Film Treatment," *Transit*, vol. 1, no.1 (2004), pp. 1–15.
- 37 For a helpful comparison of these two films, see Pablo Lafuente's "In Praise of Populist Cinema: On Hito Steyerl's *November* and *Lovely Andrea*," in *Too Much World*, pp. 83–85.
- 38 Hito Steyerl, "Documentary Uncertainty," *A Prior* 15 (2007), p. 304.
- 39 T. J. Demos, "Hito Steyerl's Traveling Images," in *The Migrant Image: The Art and Politics of Documentary during Global Crisis* (Durham, NC: Duke University Press, 2013), p. 82.
- 40 Demos, too, observes "the dissolution of such distinct filmic elements as they succumb to the endlessly fluctuating economy of images and flexible networks of power that constitute our new digital milieu." ("Hito Steyerl's Traveling Image," p. 81).

- 41 Lafuente, “In Praise of Populist Cinema,” p. 89.
- 42 For an illustrative reading of this film in this context, see Paolo Magagnoli’s, “Capitalism as Creative Destruction: The Representation of the Economic Crisis in Hito Steyerl’s *In Free Fall*,” *Third Text*, vol. 27, no. 6 (2013), pp. 723–34.
- 43 Sven Lütticken, “Hito Steyerl: Postcinematic Essays after the Future,” in *Too Much World*, p. 29.
- 44 See Fredric Jameson, “Video: Surrealism without the Unconscious,” in *Postmodernism, or, the Cultural Logic of Late Capitalism* (Durham, NC: Duke University Press, 1991), pp. 67–96.
- 45 David Riff, “Is this for real?: A Close Reading of *In Free Fall* by Hito Steyerl,” in *Too Much World*, p. 136.
- 46 Rosemary Heather, “Hito Steyerl Speaks to Rosemary Heather,” *AP Engine*, posted on September 22, 2010, online at <http://www.apengine.org/2010/09/hito-steyerl-speaks-to-rosemary-heather/> (accessed December 20, 2014).
- 47 Steyerl, “Cut! Reproduction and Recombination,” p. 187.
- 48 Lucas Hilderbrand, “Experiments in Documentary: Contradiction, Uncertainty, Change,” *Millennium Film Journal*, no. 51 (Spring/Summer 2009), p. 7.
- 49 Ibid., p. 6.
- 50 Lynne Sachs, “Experimental Documentary Questionnaire: I Am Not a War Photographer,” *Millennium Film Journal*, no. 51 (Spring/Summer 2009), p. 41.
- 51 See Catherine Russell, “Archival Apocalypse,” in *Experimental Ethnography*, pp. 239–45.
- 52 Corrigan, *The Essay Film*, p. 177.
- 53 Lynne Sachs, “Last Happy Day: Lynne Sachs Director’s Statement,” published in April 2010, online at <http://www.lynnesachs.com/2010/05/18/last-happy-day-lynne-sachs-directors-statement/> (accessed December 10, 2014).
- 54 To be sure, this tendency encompasses disparate films and directors affiliated with certain genres of the documentary and avant-garde cinema, including Ross McElwee’s autobiographical documentaries about his family and personal life (*Bright Leaves* [2003], *Photographic Memory* [2011]), Andrew Jarecki’s portrayal of the story of a Long Island family in *Capturing the Friedmans* (2003), Nick Broomfield’s biographical documentaries (e.g., *Aileen: Life and Death of a Serial Killer* [2004]), to name a few.

- 55 Patricia R. Zimmermann, “The Home Movie Movement: Excavations, Artifacts, Minings,” in *Mining the Home Movie: Excavations in Histories and Memories*, eds Karen L. Ishizuka and Patricia R. Zimmermann (Berkeley, CA: University of California Press, 2008), p. 18.
- 56 Ibid., p. 1 (emphasis added).
- 57 Marsha Orgeron and Devin Orgeron, “Familial Pursuits, Editorial Acts: Documentaries after the Age of Home Video,” *Velvet Light Trap*, no. 60 (Fall 2007), p. 47.
- 58 James M. Moran, *There’s No Place Like Home Video* (Minneapolis, MN: University of Minnesota Press, 2002), p. 43.
- 59 See Jane Simon, “Recycling Home Movies,” *Continuum: Journal of Media & Cultural Studies*, vol. 20, no. 2 (June 2006), pp. 189–99; Susan Aasman, “Saving Private Reels: Archival Practices and Digital Memories (Formerly Known as Home Movies) in the Digital Age,” in *Amateur Filmmaking: The Home Movie, the Archive, the Web*, eds Laura Rascaroli, Gwenda Young, and Barry Monahan (New York: Bloomsbury Academic, 2014), pp. 245–56.
- 60 Corrigan, *The Essay Film*, p. 131.
- 61 Scott MacDonald, “Interview with Clive Holden,” in *Adventures of Perception: Cinema as Exploration, Essays/Interviews* (Berkeley, CA: University of California Press, 2009), pp. 141–42.
- 62 Scott MacDonald, “Poetry and Avant-garde Film: Three Recent Contributions,” *Poetics Today*, vol. 28, no. 1 (Spring 2007), p. 35.
- 63 MacDonald, “Interview with Clive Holden,” p. 140.
- 64 Pethő, *Cinema and Intermediality*, p. 345.
- 65 Russell, “Autoethnography,” in *Experimental Ethnography*, p. 277.
- 66 Caouette has confessed as to how his acquisition of iMovie affected his approach to making *Tarnation* as follows: “I began to obsessively digitize everything I’d shot on Super-8 and on VHS and Betamax, maybe a hundred and forty hours of stuff, including photographs that I’d recorded on Hi-8 video. I digitized the audio diaries that I’d kept as a kid” (Scott MacDonald, “Jonathan Caouette,” in *Avant-doc: Intersections of Documentary and Avant-garde Cinema* [Berkeley, CA: University of California Press, 2014], p. 212).
- 67 Anna Poletti, “Reading for Excess: Relational Autobiography, Affect and Popular Culture in *Tarnation*,” *Life Writing*, vol. 9, no. 2 (June 2012), p. 170.
- 68 Efrén Cuevas, “Home Movies as Personal Archives in Autobiographical Documentaries,” *Studies in Documentary Film*, vol. 7, no. 1 (2013), p. 23.

- 69 Laura Rascaroli, "Working at Home Movie: *Tarnation*, Amateur Authorship, and Self-Inscription in the Digital Age," in *Amateur Filmmaking*, p. 241.
- 70 Patricia R. Zimmermann, "Processing Trauma: The Media Art of Daniel Reeves," *Afterimage*, vol. 26, no. 2 (1998), online at <http://www.experimentaltvcenter.org/processing-trauma-media-art-daniel-reeves> (accessed January 15, 2015).

Chapter 5

- 1 Chris Darke, "Cinema Exploded: Film, Video, and the Gallery," in *Light Readings: Film Criticism and Screen Arts* (London: Wallflower Publishing, 2000), p. 160.
- 2 Malcolm Turvey, Hal Foster, Chrissie Iles, George Baker, and Matthew Buckingham, "Round Table: The Projected Image in Contemporary Art," *October*, no. 104 (Spring 2003), p. 76.
- 3 Raymond Bellour, "Battle of the Images," in *Future Cinema: The Cinematic Imaginary After Film*, eds Jeffrey Shaw and Peter Weibel (Cambridge, MA: MIT Press, 2003), p. 59.
- 4 Dominique Païni, "*le retour du flâneur*/The Return of the Flâneur," *Art Press*, no. 255 (March 2000), p. 39.
- 5 Chris Dercon, "Gleaning the Future from the Gallery Floor," *Senses of Cinema*, no. 28 (September to October 2003), online at http://www.sensesofcinema.com/contents/03/28/gleaning_the_future.html (accessed May 16, 2014, emphasis in original).
- 6 Chris Dercon, "Still/A Novel," in *Screen-based Art*, eds Annette W. Balkema and Henk Slager (Amsterdam, The Netherlands: Rodopi, 2000), p. 101.
- 7 Chrissie Iles, "Video and Film Space," in *Space, Site, Intervention: Situating Installation Art*, ed. Erika Suderburg (Minneapolis, MN: University of Minnesota Press, 2000), p. 253.
- 8 Campus, "The Question." Quoted in Iles, "Video and Film Space," p. 255.
- 9 Ibid., p. 260.
- 10 Ibid., p. 261.
- 11 Anne-Marie Duguet, "Dispositifs," *Communications*, no. 48 (1988), p. 227 (translation mine).
- 12 The history of remakes in Hollywood is well-known, including Hitchcock's self-remake (*The Man Who Knew Too Much* in 1934

and 1956), a film remade by another director (for instance, Gus Van Sant's 1998 adaptation of *Psycho*), and the transnational remakes of Asian genre and auteur films (for instance, *Ringu/The Ring* [1998/2002], and Spike Lee's 2013 remake of Park Chan Wook's *Oldboy* [2003]). However, there are also notable examples of the remakes in the context of arthouse cinema, such as Michael Haneke's self-remake (*Funny Game* in 1997 and 2008).

- 13 See Erika Balsom, *Exhibiting Cinema in Contemporary Art* (Amsterdam, The Netherlands: Amsterdam University Press, 2013), pp. 116–21.
- 14 To be sure, the concept of remake in the context of video installations does not necessarily delimit itself to the works that appropriate and rework the components of cinema, including particular excerpts from existing films, film narrative, conventions of editing, the images of archival time, etc. That is, although this chapter focuses upon the works of “remaking cinema,” the concept of remake can also be applied to the works that investigate the capacity of video’s real-time processing to alter the temporality of the images that do not necessarily have the components of cinema. For instance, in Camille Utterback’s interactive installations *Liquid Time Series* (which I discuss briefly in Chapter 2), video’s real-time image processing assembles multiple images captured from a single street and at different moments into a single image plane. This transformation can be seen as a “remake” of the images of multiple times coming from different picture frames into a single image marked by the spatial sections of those times. I am grateful to Francisco J. Ricardo for indicating this point.
- 15 Jean-Christophe Royoux, “Towards a Post-Cinematic Space-Time (From an Ongoing Inventory),” in *Black Box Illuminated*, eds Sara Arrhenius, Magdalena Malm, and Cristina Ricupero (Sweden: IASPIS and Propexus; Finland: NIFCA, 2003), p. 111.
- 16 Jean-Christophe Royoux, “Cinema as Exhibition, Duration as Space,” *Art Press*, no. 262 (November 2000), p. 26. In this sense, this view is also applied to numerous artists or filmmakers who draw on multiple media elements or art forms and set up their cross-referencing to one another, for instance, Huyghe (live-action film, animation, puppet play, mixed-media installation), Gordon (video installation, feature film, drawing), Douglas (film and video installation and photography), and Matthew Buckingham (film and video installation, slide projection, photography), to name just a few.
- 17 Raymond Bellour, “Of An Other Cinema,” in *Black Box Illuminated*, p. 41.
- 18 Raymond Bellour, “Challenging Cinema,” in *Screen-based Art*, p. 37.

- 19 Bellour, “Battle of the Images,” p. 58.
- 20 Jean-Christophe Royoux, “Remaking Cinema,” in *Cinéma Cinéma: Contemporary Art and the Cinematic Experience*, exhibition catalogue (Rotterdam: Stedelijk Van Abbemuseum Eindhoven/NAI Publishers, 1999), p. 21.
- 21 Dominique Païni, *Le temps exposé: le cinéma de la salle au musée* (Paris: Cahiers du cinéma, 2002), p. 29 (translation mine).
- 22 Ibid., p. 30 (translation mine).
- 23 The key exhibitions are as follows: “Into the Light: The Projected Images in American Art 1964–1977” (Whitney Museum of American Art, New York, October 18, 2001 to January 6, 2002) and “X-Screen: Film Installation and Actions of the 1960s and 1970s” (Museum Moderner Kunst Stiftung Ludwig Wien, Vienna, December 13, 2003 to February 29, 2004).
- 24 Chrissie Iles, “Between the Still and Moving Images,” in *Into the Light: The Projected Image in American Art 1964–1977*, ed. Chrissie Iles (New York: Whitney Museum of American Art, 2001), p. 33.
- 25 Iles, “Video and Film Space,” p. 254.
- 26 Catherine Elwes, *Video Art: A Guided Tour* (London: I. B. Tauris, 2006), p. 151.
- 27 Chrissie Iles, “Issues in the New Cinematic Aesthetic in Video,” in *Saving the Image: Art after Film*, eds Tanya Leighton and Pavel Büchler (Glasgow: Centre for Contemporary Arts, 2003), p. 132.
- 28 Liz Kotz, “Video Projection: The Space between Screens,” in *Art and The Moving Image: A Critical Reader*, ed. Tanya Leighton (London: Tate Publishing, 2008), p. 376.
- 29 David Joselit, “Inside the Light Cube: Pierre Huyghe’s *Streamside Day Follies* and the Rise of Video Projection,” *Artforum*, vol. 42, no. 7 (March 2004), pp. 154–55.
- 30 A. L. Rees, “Projecting Back: UK Film and Video Installation in the 1970s,” *Millennium Film Journal*, no. 52 (Winter 2009/2010), p. 69.
- 31 Baker, “Round Table: The Projected Image in Contemporary Art,” p. 85.
- 32 Foster, *Ibid.*, p. 75 (emphasis added).
- 33 Foster encapsulates this view as follows:

The viewer feels that she’s having an absolutely immaculate experience with no sense of the apparatus or the space, all effectively *virtualized*. . . . In media culture at large now, we’re so used to being *dematerialized*, and what disturbs me is the way that some projected images have a similar effect. Go to the top of

the Guggenheim now to the Bill Viola piece, and you'll find what Walter Benjamin calls the "blue flower in the land of technology," an experience of spiritual immediacy effected through *intense media immersion*. (*Ibid.*, pp. 80–81, emphasis added).

- 34 Kate Mondloch, "Thinking through the Screen: Media Installation, Its Spectator, and the Screen," doctoral dissertation, Department of Art History, University of California, Los Angeles, 2005, p. 58 (emphasis in original).
- 35 Kate Mondloch, *Screens: Viewing Media Installation Art* (Minneapolis, MN: University of Minnesota Press, 2010), p. 17.
- 36 Spielmann, "Video: From Technology to Medium," p. 64.
- 37 Kotz, "Video Projection," p. 382.
- 38 The examples of this type of exhibition include "*Passages de l'image*" (1990, Centre Georges Pompidou, 1990), "*Hall of Mirrors: Art and Film since 1945*" (1996, Museum of Contemporary Art Los Angeles), "*Alfred Hitchcock: The Exhibition*" (2000–01, Montreal Museum of Fine Arts), "*Jean-Luc Godard: Voyage(s) en utopie*" (2006, Centre Georges Pompidou), "*Les mouvements des Images*" (2006, Centre Georges Pompidou), among many.
- 39 Erika Balsom, "Screening Rooms: The Movie Theatre in/and the Gallery," *Public*, no. 40 (2010), p. 26 (emphasis in original).
- 40 *Ibid.*, p. 35.
- 41 Mondloch, *Screens*, p. 41.
- 42 Maria Walsh, "Cinema in the Gallery—Discontinuity and Potential Space in Salla Tykkä's Trilogy," *Senses of Cinema*, no. 28 (2003), online at http://www.sensesofcinema.com/2003/28/salla_tykka_trilogy/ (accessed February 13, 2014).
- 43 Daniel Birnbaum, *Chronology* (New York: Lukas & Sternberg, 2005), p. 68.
- 44 See Royoux, "Cinema as Exhibition, Duration as Space," pp. 27–28.
- 45 Birnbaum, *Chronology*, p. 60.
- 46 John Conomos, "Collage, Site, Video, Projection," in *Mutant Media: Essays on Cinema, Video Art, and New Media* (Sydney, Australia: Artspace/Power Publications, 2007), p. 121 (emphasis added).
- 47 Margaret Morse, "The Body, The Image, and the Space-in-Between: Video Installation Art," in *Virtualities: Television, Media Art, and Cybersculture* (Bloomington: Indiana University Press, 1998), p. 159 (emphasis added).

- 48 Ibid., p. 162 (emphasis added).
- 49 Dominique Païni, “*le cinéma expose: flux contre flux/Movies in the Gallery: Flow on Show*,” *Art Press*, vol. 287 (2003), p. 29.
- 50 See Païni, “*le retour du flâneur*,” p. 41.
- 51 Païni, “*le cinéma expose*,” p. 24.
- 52 Bellour, “Of an Other Cinema,” p. 42.
- 53 See Païni, *Le temps exposé*, p. 17.
- 54 Morse, “The Body, The Image, and the Space-in-Between,” p. 170.
- 55 Boris Groys, “From Image to Image File—and Back: Art in the Age of Digitalization,” in *Art Power* (Cambridge, MA: MIT Press, 2008), p. 86.
- 56 Boris Groys, “On the Aesthetics of Video Installations,” in *Stan Douglas: Le Détroit*, exhibition catalogue, ed. Peter Pakesch (Basel: Kunsthalle Basel, 2001), unpaginated.
- 57 Groys, “From Image to Image File—and Back,” p. 87.
- 58 Catherine Fowler, “Room for Experiment: Gallery Films and Vertical Time from Maya Deren to Eija-Liisa Ahtila,” *Screen*, vol. 45, no. 4 (Winter 2004), p. 343.
- 59 Ibid., p. 333. In another essay, Fowler elaborates on her use of the term “out-of-frame” by drawing on discussions of “off-screen space” by Pascal Bonitzer, Noël Burch, and Stephen Heath. For Fowler, the “out-of-frame” space—she also uses the term “off-frame” to indicate it—is referred to as a concrete, material kind of the space outside the framed diegetic space, which is differentiated from the “imaginary or fictional” off-screen space. “Once the frame is either emphasized or connected to the gallery space that surrounds it,” she writes, “so the off-frame can be configured differently and the off-screen is highlighted as a space where we confront the limits of representability.” (Catherine Fowler, “Into the Light: Reconsidering Off-frame and Off-screen Space in Gallery Films,” *New Review of Film and Television Studies*, vol. 6, no. 3 [December 2008], p. 253).
- 60 Anne-Marie Duguet, “Scenography of the Image,” in *Screen-based Art*, p. 81.
- 61 Ibid., p. 83.
- 62 Kotz, “Video Projection,” p. 383.
- 63 Kathy Rae Huffman, “Video and Architecture: Beyond the Screen,” in *Ars Electronica: Facing the Future*, ed. Timothy Druckrey (Cambridge, MA: MIT Press, 1999), p. 137.

- 64 The works of architectural or sculptural video by those artists include *Pour Your Body Out (7354 Cubic Meters)* (Rist, 2008), *Bremen Lobe Of The Lung* (Rist, 2011), *Stasi City* (1997, Wilsons), *Erewhon* (2004, Wilsons), and Trecartin's collaborations with Lizzie Fitch, which were incorporated into multichannel sculptural theaters in the gallery (as in the cases of *Ledge* [2014] and *Range Week* [2014]).
- 65 Thomas Elsaesser, "Harun Farocki: Filmmaker, Artist, Media Theorist," in *Harun Farocki: Working on the Sightlines* (Amsterdam: Amsterdam University Press, 2004), p. 24.
- 66 In an interview with Rembert Hüser, Farocki himself explains the relationship between the dimension of the editing table and that of double projection surfaces or monitors as follows: "You are dealing with two images! On the right is the edited image; on the left, the next image to be added on. The right image makes a demand, but is also being criticized by the left one, sometimes even condemned. This made me experiment with double projection works." (Rembert Hüser, "Nine Minutes in the Yard: A Conversation with Harun Farocki," in *Harun Farocki: Working on the Sightlines*, p. 302).
- 67 Elsaesser, "Harun Farocki," p. 22.
- 68 The term "vision machine" is indebted to Paul Virilio.
- 69 Antje Ehmann and Kodwo Eshun, "A to Z of HF or: 26 Introductions to HF," in *Harun Farocki: Against What? Against Whom?* eds Antje Ehmann and Kodwo Eshun (London: Raven Row, 2009), p. 211. Of all the terms the "operational image" is the most central and inclusive to Farocki. Media artist and theorist Jordan Crandall also uses the term "operational media" in the same way as Farocki: "Operational media is motored by the need for an instantaneity of action, where time delays, spatial distances, and 'middlemen' are reduced through computational systems that facilitate the sharing of human and machinic functions." (Jordan Crandall, "Operational Media," *CTheory.net*, published on January 6, 2005, online at <http://www.ctheory.net/articles.aspx?id=441> [accessed on June 17, 2014]).
- 70 Concerning this, Farocki has once remarked that the installation version of *Eye/Machine* contributes to "displacing" all the found images into the newly designed media environment open to the viewer's embodied perception and contemplation: "When I saw *Eye/Machine* for the third time in an exhibition, in a gallery in New York, both images appeared on a white wall, side by side. The work had a large space to itself and I liked the displaced character of all the images we had gone to great trouble collecting in research

centers, public relations departments, educational film and other archives. Mostly operational images spent in technical execution, necessary for one operation and later erased from the data collector one-way images. That the US Army command showed operational images during the Gulf War, images that were produced for operational reasons and not for edification or instruction, is also an incredible displacement and is also conceptual art." (Harun Farocki, "Cross-Influence/Soft Montage," in *Harun Farocki: Against What? Against Whom?*, p. 74).

- 71 Christa Blüminger, "The Art of the Possible: Notes about Some Installations by Harun Farocki," in *Art and the Moving Image*, p. 279.
- 72 Blüminger, "Memory and Montage: On the Installation *Counter-Music*," in *Harun Farocki: Against What? Against Whom?*, p. 106.
- 73 For a detailed account of these ambivalent aspects in Ataman's works, see T. J. Demos, "Kutluğ Ataman: The Art of Storytelling," in *Kutluğ Ataman: The Enemy inside Me*, ed. Esin Eskinat (Karaköy, İstanbul: İstanbul Modern, 2010), pp. 30–36.
- 74 This summary is indebted to Birnbaum's eloquent description of the temporality in Aitken's works. For Birnbaum, central to them is "no longer a question of pushing the linear model of time to the verge of collapse, but rather of suggesting more sophisticated and complex networks that allow for temporal heterogeneity in a multiplicity of non-synchronous connections, delays, and deferrals" (Daniel Birnbaum, "That's the Only Now I Get: Time, Space, and Experience in the Work of Doug Aitken," in *Doug Aitken*, ed. Daniel Birnbaum et al. [New York and London: Phaidon, 2001], p. 51).
- 75 Doug Aitken, "Amanda Sharp in Conversation with Doug Aitken," in *Doug Aitken*, p. 16.
- 76 Eleanor Heartney, "Video Installation and the Poetics of Time," in *Outer & Inner Space: Pipilotti Rist, Shirin Neshat, Jane & Louise Wilson, and the History of Video Art*, ed. John B. Ravenal (Richmond, VA: Virginia Museum of Fine Arts, 2002), p. 16.
- 77 Alexander Alberro, "The Gap between Film and Installation Art," in *Art and the Moving Image*, p. 427.
- 78 Ursula Frohne, "Dissolution of the Frame: Immersion and Participation in Video Installations," in *Art and the Moving Image*, p. 369.
- 79 Aitken was well aware of this point in conceiving this work: "To me, the act of watching a film has an affinity with walking through a city. I see the moving image like a street, and you're going down this street making constant decisions about what to see." (*Doug*

- Aitken: *Sleepwalkers*, exhibition catalogue [New York: The Museum of Modern Art, 2007], p. 65).
- 80 Anne Friedberg, *The Virtual Window: From Alberti to Microsoft* (Cambridge, MA: MIT Press, 2006), p. 173.
- 81 Elizabeth Bronfen, “The Fragility of the Quotidian: Eija-Liisa Ahtila’s Work with Death,” in *Eija-Liisa Ahtila*, exhibition catalogue, Jeu de Paume, Paris (January 22 to March 30, 2008), published by Hatje Cantz, p. 174.
- 82 In an interview with Iles, Ahtila has acknowledged the influence of Godard and Ingmar Bergman on her work. See Chrissie Iles, “Thinking in film: Eija-Liisa Ahtila in conversation,” *Parkett*, no. 68 (2003), p. 59.
- 83 Alison Butler, “A Deictic Turn: Space and Location in Contemporary Gallery Film and Video Installation,” *Screen*, vol. 51, no. 4 (Winter 2010), pp. 322–23.
- 84 Mark B. N. Hansen, “Technical Repetition and Digital Art, or Why the ‘Digital’ in Digital Cinema is not the ‘Digital’ in Digital Technics,” in *Technology and Desire: The Transgressive Art of Moving Images*, eds Rania Gaafar and Martin Schulz (London: Intellect, 2014), p. 79.
- 85 Sean Cubitt, “The Chronoscope,” in *Screen-based Art*, p. 70.
- 86 For instance, Gordon says: “I haven’t been interested in exploiting the medium . . . but what I am interested in is in the status of the medium.” Graham Fagen, “The Exact Vague History,” in *Douglas Gordon, Déjà-Vu: Questions & Answers, Vol. 3, 1999-2000* (Paris: Musée d’art moderne de la ville de Paris, 2000), p. 86.
- 87 Bourriaud, *Relational Aesthetics*, p. 75.
- 88 Ibid., pp. 75–76.
- 89 Païni, *Le temps exposé*, p. 76, (translation mine, emphasis added).
- 90 For instance, *10ms⁻¹* (1994) presents a man who is trying to stand up but crashes to the ground over and over again because of some powerful trauma caused by the First World War in which he participated as a soldier. Gordon’s interest in the interpenetration between the physical and the psychological dimensions of human subjectivity is evident in *Hysterical* (1994/1995), another piece that uses the medical footage of a woman undergoing the procedure of healing her hysteria.
- 91 For the technical details of the work, see Philip Monk, *Double-Cross: The Hollywood Films of Douglas Gordon* (Toronto, Canada: The Power Plant, 2003), pp. 149–51.

- 92 For instance, Gordon considers DJs as pertaining to a new generation of readymade, linking them to such artists as Marcel Duchamp and Jasper Johns who paved the way for it: “In appropriating extracts from films and music, we would say, actually, that we are creating time readymades, no longer out of daily objects but out of objects that are a part of our culture. Take the music industry in general and DJs in particular. They sample words and riffs and make that something personal by the way they use them.” (Christine Van Assche, “Douglas Gordon: A New Generation of Readymades,” *Art Press*, no. 255 (2000), p. 30).
- 93 Van Assche, “Entretien,” in *Douglas Gordon, Déjà-Vu: Questions & Answers, Vol. 1. 1992-1996*, exhibition catalogue (Paris: Musée d’art moderne de la ville de Paris, 2000), p. 85.
- 94 “The theatre is not just a means of projecting images, it is a communal space for common focus and on a scale that is not possible, or desirable, in my opinion, in a museum.” (*Ibid.*)
- 95 Quoted in Amy Taubin, “24 Hour Psycho,” in *Spellbound: Art and Film*, exhibition catalogue (London: Hayward Gallery in collaboration with British Film Institute, 1996), p. 70.
- 96 Harold Fricke, “As Beautiful as a Barnett Newman,” in *Douglas Gordon, Déjà -Vu: Questions & Answers, Vol. 2, 1997-1998*, exhibition catalogue (Paris: Musée d’art moderne de la ville de Paris, 2000), p. 133.
- 97 Nancy Spector, “This is All True, and Contradictory, If Not Hysterical,” in *Douglas Gordon, Déjà -Vu: Vol. 2*, p. 75.
- 98 Mulvey, *Death 24 × a Second*, p. 103.
- 99 Martin Gayford, “Playing Hide and Seek,” *Modern Painters* (Winter 2002), p. 23. In this interview, Gordon explains how video meant not a medium for distinguishing an artist’s intent and technical mastery but a medium for the “discovery” and realization of his conceptual ideas on recontextualizing films as follows: “I’d been doing various experiments with trying to hold two films in my head at the same time, and run them concurrently. Then I went to Paris to show *24 Hour Psycho* at the Pompidou Centre years ago. . . . [The Pompidou Center] cancelled the opening and said we’ll just have a party in a café—could you do something for it? So I said ‘Ok, could you get me two projectors and two video players, I’ll find something.’ And I went out to the shop and found *The Exorcist*. . . . Then I found *The Song of Bernadette*, which was a much more appropriate thing to use. The coincidence of images and dialogue between the two are absolutely incredible. . . . Most of it’s *discovery*” (emphasis added).

- 100 Klaus Biesenbach, “Sympathy for the Devil,” in *Douglas Gordon: Timeline*, exhibition catalogue (New York: The Museum of Modern Art, 2006), p. 15.
- 101 Quoted in *Douglas Gordon: Kidnapping*, exhibition catalogue (Stedelijk Van Abbemuseum, Eindhoven, 1998), p. 34.
- 102 Deleuze, *The Time-Image*, p. 13.
- 103 Simon Sheikh, “Art Is Merely an Excuse for Communicating,” in *Douglas Gordon, Déjà-Vu: Vol. 2*, p. 22.
- 104 Monk, *Double-Cross*, p. 88.
- 105 Marie de Brugerolle, “Seeing Is Believing,” in *Douglas Gordon: Déjà-vu, Vol. 1*, p. 98.
- 106 Bruno, “Collection and Recollection,” p. 236.
- 107 Vilém Flusser, “On Memory (Electronic or Otherwise),” *Leonardo*, vol. 23, no. 4 (1990), p. 399.
- 108 Nancy Spector, “Trust Me,” in *Douglas Gordon*, ed. Russell Ferguson (Cambridge, MA: MIT Press, 2001), p. 16 (emphasis added). Other critics call it the “terminal present” in order to designate this extended duration. (De Brugerolle, “Seeing Is Believing,” p. 96).
- 109 Balsom, *Exhibiting Cinema in Contemporary Art*, p. 142.
- 110 Jessica Morgan, “A Scripted Life,” in *Candice Breitz: Multiple Exposure*, ed. Octavio Zaya, exhibition catalogue (Museo de Arte Contemporáneo de Castilla y León, León Spain, 2007), unpaginated.
- 111 T. J. Demos, “(In) voluntary Acting: The Art of Candice Breitz,” in *Candice Breitz, Mother + Father/Monuments*, exhibition catalogue (Monaco: Prince Pierre of Monaco Fondation, 2007), p. 16. Breitz acknowledges the influence of this tradition as follows: “To appropriate and sample existing material is to draw on a long avant-garde tradition. . . . The fundamental difference now is that using found or readymade material in one’s work no longer seems like just an option—rather, at this point, it is an inescapable condition.” (Louise Neri, “Candice Breitz and Louise Neri: Eternal Returns,” in *Candice Breitz*, ed. Louise Neri, exhibition catalogue [London: White Cube, 2005], unpaginated).
- 112 Jennifer Allen, “Candice Breitz: From A to B and Beyond,” in *Candice Breitz: Re-Animations*, ed. Suzanne Cotter, exhibition catalogue (Oxford: Modern Art Oxford, 2003), unpaginated.
- 113 Undoubtedly, those two “scripted lives” are viewed as interdependent and less distinguishable from each other. Breitz demonstrates this point in a fourteen-channel installation *Becoming*

(2003), where each short sequence of seven Hollywood actresses, including Julia Roberts in *Pretty Woman* and Reese Witherspoon in *Legally Blonde*, is placed side by side with its corresponding reenactment clip by Breitz herself.

- 114 Morgan, “A Scripted Life,” unpaginated. The six actors and six actresses whose fatherhood and motherhood are cast by *Mother + Father* include Faye Dunaway, Diane Keaton, Shirley MacLaine, Julia Roberts, Susan Sarandon, and Streep (for *Mother*), as well as Tony Danza, Dustin Hoffman, Harvey Keitel, Steve Martin, Donald Sutherland, and Jon Voight (for *Father*).
- 115 Neri, “Candice Breitz and Louise Neri,” unpaginated.
- 116 Nicholas Chambers, “Candice Breitz: *Mother + Father*, Interview with Nicholas Chambers,” *Artlines* (Queensland Art Gallery, South Brisbane, Volume 2: 2005), p. 13 (emphasis added).
- 117 Gerald Matt, “Sound Minds: Gerald Matt in Conversation with Candice Breitz,” in *Candice Breitz/Inner + Outer Space*, ed. Angela Rosenberg (Berlin: Temporaere Kunsthalle Berlin, 2008), unpaginated.
- 118 William Kaizen, “Live on Tape: Video, Liveness and the Immediate,” in *Art and the Moving Image*, p. 266.
- 119 For a detailed description of how the work is installed, see Hans D. Christ, “Stan Douglas, Win, Place, or Show,” in *Present Continuous Past(s): Media Art, Strategies of Representation, Mediation and Dissemination*, eds Ursula Frohne, Mona Schieren and Jean-François Guiton (Vienna and New York: Springer, 2005), pp. 124–31.

Afterword

- 1 Andrew Neumann, in an email conversation with the author (September 7, 2015).
- 2 Raymond Bellour, “‘Cinema, Alone’/Multiple ‘Cinemas’,” trans. Jill Murphy, *Alphaville: Journal of Film and Screen Media*, no. 5 (Summer 2013), online at <http://www.alphavillejournal.com/Issue5/HTML/ArticleBellour.html> (accessed July 1, 2014).
- 3 David Joselit, *Feedback: Television against Democracy* (Cambridge, MA: MIT Press, 2007), p. 34 (emphasis in original).