1-1-2010

Distributed Cinema: Interactive, Networked Spectatorship In The Age Of Digital Media

Erik Wayne Marshall
Wayne State University

DISTRIBUTED CINEMA: INTERACTIVE, NETWORKED SPECTATORSHIP IN THE AGE OF DIGITAL MEDIA

by

ERIK MARSHALL

DISSERTATION

Submitted to the Graduate School

of Wayne State University,

Detroit, Michigan

in partial fulfillment of the requirements

for the degree of

DOCTOR OF PHILOSOPHY

2010

MAJOR: ENGLISH

Approved by:

_____

Advisor Date

_____

_____

_____

DEDICATION

To my parents:

Dennis

(in memoriam)

and

Gabriella

ACKNOWLEDGMENTS

I would like to acknowledge the members of my committee for comments and encouragement during this long process. Robert Burgoyne, the advisor to this dissertation and my mentor, has been an incredible influence, and I thank him for keeping faith in this project. Kirsten Thompson's attention to detail and vast knowledge of film studies helped provide context for this project. Steven Shaviro, whose interests have strangely overlapped mine for years, provided feedback even before agreeing to be on the committee. Nicholas Rombes was gracious enough to sign on at a fairly late date, for which I am thankful.

Without the help and support of fellow graduate students, I would not have been able to finish this dissertation. For forwarding relevant articles, listening to me complain, and just generally being available to me over the years, I would like to thank my entire support network, especially Mark Aune, Tara Hayes, Joe Helminski, Kim Lacey, Scott Nokes, Debra Peterson, Nick Schlegel, Gary Schneider and Hilary Ward.

I am also grateful for the support of my friends and family, who, although they haven't always understood what I was doing or why, have been unflinchingly supportive. Among these are my parents, Dennis and Gabriella, my sister Yvette, and longtime friends Steve Landra, Kevin Larsen, Rob Robinette, Steve Sharon, and Rob Weldon. I would also like to acknowledge Bernadette Kovach for bearing with me and helping to guide me through this sometimes laborious and painful process, and Molly Laich for believing in me and staying by my side in some of the more difficult parts of this, even as we drifted in other ways.

TABLE OF CONTENTS

Introduction

Over the course of the last several decades we have witnessed the shift of moving images from the big screen of the cinema to the home via cable television, the VCR, video-on-demand, and now to digital video recorders and computers, and to smaller devices such as phones. We have witnessed the growth of the internet, of what Lev Manovich (2001) calls database logic, of increased speed and ubiquity of communication (whether text, voice or moving image). In the field of cinema studies, the addition of the "M," for Media, to the Society for Cinema and Media Studies (SCMS) in 2003 is one significant early example of the accelerating struggle to redefine an already fairly new field's object(s) of study.

The status of the image, the change of the environment of media/film/cinema/visual studies, the shifting media practices of just about everybody leave scholarship in flux. While few seem to agree on precisely what is happening with digital media, most agree that *something* is happening. In his seminal article "What is Digital Cinema?" (1995) Lev Manovich lays out 5 criteria linking film to painting and animation, and suggesting the database as the new controlling logic of the cinema. D.N. Rodowick explores the status of the image and its (lack of) power to depict duration. Ron Burnett posits the notion of thinking images.

In the pages that follow, I explore some of the phenomena emerging from various practices wihtin digital media, ranging from theoretical debates about the status of the image, to the use of networks in the distribution and display of media. I look at the proliferation of tiny screens and the incredible popularity of video games. While each of these chapters can stand alone, I hope at their intersections, I will be able to draw a picture of the digital user, the (post)cinematic subject. I will argue that cinema as we know it is not dead, but has mutated, proliferated and gained access to our daily lives as we walk around, work, travel and play. The

typical (or, perhaps, ideal) user is fragmented, distributed, and connected to other users in novel ways. The cinematic object is likewise distributed, digitally enhanced, interactive, and, in many cases, more immersive, first by being bigger and more spectacular (and sometimes in 3D), and then simply by being everywhere.

This dissertation, broadly speaking, examines the changes in spectatorship attendant with the rise of digital media in the late twentieth and early twenty-first centuries. More specifically, I will argue that the role of the spectator, or the relationship between spectator and image, has changed profoundly coincident with the rising ubiquity of digital media. I will examine the role of various technologies in this change: networked media, by which I mean primarily the Internet; digital photography and cinematography, and the role they play in our trust in and relationship to images; small, portable devices and other screens that are placed increasingly in public spaces; and video games and other interactive media. By examining representative examples of each of these media, I will show that our relationship to images now involves different conceptions of interactivity, virtuality, space and mobility.

By sampling earlier theoretical approaches in film studies conjunction with these examples of new media, I hope to demonstrate that the cinematic experience as practiced for the last century has changed to accommodate a new subjectivity. Our relationship to moving images reflects a postmodern late capitalist subjectivity in ways that some early scholars signaled but could not completely foresee. The movement of global capital mirrors the production, distribution and consumption of media objects, including but not limited to studio-produced feature length films.

The new subjectivity I want to explore manifests in the habits and actions of Youtube users, Alternate Reality Game (ARG) players, and peer-to-peer (p2p) users, to name a few. The

ARG is perhaps the place where the shifting landscape of mobility and space interacts most with moving image technology. The ubiquity of media in everyday life has reached a point where we interact with it differently, or even treat it s a completely natural part of the environment, ignoring it.

I wish to investigate how new media impact the cinema and how cinema incorporates them into its practices, subsuming them in some cases, but changing in the process. I wish to revisit cinema theory of the last century, recontextualizing or remobilizing it in light of current developments in technologies of representation. By embedding myself in cinema studies (film theory, spectator theory, etc.), I hope to expand the field by addressing networked, mobile media, and to treat these media from within the framework of a century of scholarly precedence in cinema studies. Despite the proliferation of media in various contexts and the dizzying speed of technological change, the cinema as classically conceived remains the touchstone, the center of the media landscape. Media practices can be understood from within the rubric of cinema, while cinema must be understood as a changing medium, or set of media, influenced by the plethora of emerging media and practices that do not necessarily constitute cinema as classically defined.

I will reexamine some fundamental scholarship on film to show that many of these concepts are not new, but have changed mainly in terms of degree. In particular, I will revisit Kracauer and Benjamin to talk about the concept of distraction, which, I will argue, is just as important as it was when they wrote. I will use Andre Bazin's writings to examine the role of indexicality in digital imagery and look at scholarship on early film to find parallels to video game interactivity and ride film virtuality.

Any attempt to describe or delineate the digital world will fall short, not only because the landscape is so large, but also because it changes at incredible speeds in largely unpredictable

directions. By grounding the study not only in cinema, but in cinema studies, I provide a framework for understanding not only this ever-changing landscape, but for predicting and understanding the changes that quickly turn much description on its ear. I will attempt to describe a snapshot of a particular piece of a specific time in our digital environment, but, more importantly, I will describe a historical lineage for some of the emerging practices and media, to understand the continuity between what was once perhaps a little less problematically called "cinema" and the distributed, transcodable, instantaneous media in which we are immersed. So, this study is not an attempt to catalog every instance of digital media, or even every instance that impacts (digital) cinema, but an attempt to historicize and theorize some of it in the context of the scholarship and practices of the last century.

The upshot of this approach, I hope, is to provide a framework to understand media practices in the present and to contextualize future developments. I will make no grand claims of media revolution, but I cannot say that all new media are simply a continuation of current practices. Cinema as it has been practiced for the last century has worked. It has been part of the economic juggernaut of Western imperialism, it satisfies particular needs, and it has the power and desire to subsume any new technology that threatens it. Many new media, then, are developed in a way commensurate with traditional cinematographic practices, and in the service of the industry.

Science fiction often contains the kernels of technological truth about an era. Indeed, *The Matrix* (Wachowski Brothers, 1999) contains the blueprint for much of the ideas I explore herein. Even ten years after its release, the film resonates with current anxieties and developments. It provides an example for many of the concepts that come to bear on the current state of cinema and cinema studies, all in a Hollywood blockbuster, including the idea of the simulacra,

virtuality, movement through networks, and a digital subjectivity. Also informative are parts of William Gibson's oeuvre, particularly his first novel, *Neuromancer* (1984) and his later novels *Pattern Recognition* (2001) and *Spook Country* (2007). The trajectory of thought throughout these novels provides a useful literary roadmap of the conceptual and practical developments of the last several decades. We have moved with William Gibson from *Neuromancer* to *Pattern Recognition*, from wandering through geographically represented virtual space to traveling through actual space inhabited by virtual representations, where we try to piece together films from fragments stored across different servers. In Gibson's latest novel, *Spook Country*, locative media, hooked up with GPS coordinates and special gear, become the latest in real-world/virtual art. The convergence of visual media and GPS devices, the untethering first from the cinema, then from the home, has inaugurated the possibility of media created for the moving masses. Virtual tour guides made with GPS, maps of traffic and speed traps, notifications of bad neighborhoods make use of the physical location of the user and visual data. The concepts presented in these three works, spanning almost 30 years, might be said to be a map of digital media over three decades, and represent an increasing fragmentation of images/data, as well as a move of images from theater to home to street to palm to headset. This dissertation moves through many of these conceptual shifts in much the same order, analyzing not fictional devices but actual texts and media over the last two decades.

Applications that connect people by geography are on the rise (Twinkle, etc.). Along with this come new games like Alternate Reality Games (ARG) and geocaching. The ARG may be the best example of the potential for a combination of geography, movement, and electronic connection and movement. Users find clues on the internet, but often travel to locations to collect physical clues, to meet and collaborate, and to move on in the game. The scavenger hunt returns

in the ARG in a potentially global and intricately networked and interactive way. Images overlay data onto our perceptual apparatus as we search to reconstruct fractured narratives and images. Projected images tell us where and who we are, reconnect us with history in a perverse sense. Locative media give us a sense of physical mastery of an environment, and split our (tele)presence into ever-fragmenting pieces.

In Chapter 1, I explore the debate over whether digital images can be said to be indexical, and whether it matters. I look at the works of Andre Bazin in order to establish a history of thinking about the photographic image as indexical, or evidentiary. I then look at more recent debates, and attempt to retheorize the notion of indexicality and explore how the altered sense of causality in photorealistic images changes the way we watch film. While avoiding, I hope, depicting earlier theorists, such as Bazin, as naïve realists, I argue that for most of the twentieth century, photographic film was seen as indexical, or as evidence of the profilmic events and objects depicted. With the emergence and popularity of digital photography, I argue, we no longer assume that images have not been manipulated, or that they provide evidence of anything outside the photograph. I agree with Lev Manovich that digital photography is closer to painting and animation than to photography, and I argue that this distinction has significant repercussions for representation and expression in film. The loss of the indexical ushers a shift from an objective cinema to a subjective style. The use of narratives and techniques for portraying the inner life of characters became pronounced in the late 90s, signaling an anxiety about the reliability not just of photography, but of computers as well. I outline some movies, such as *The Matrix, Fight Club, Memento, Eternal Sunshine of the Spotless Mind* and others that feature what I call subjective sensibilities, where the internal aspects of the characters – whether dreamlife, psychosis, or memory – are portrayed as objective reality. I also take a close look at the use of

rotoscoping in Richard Linklater's work (*Waking Life* and *A Scanner Darkly*) to suggest a use of technology that depicts subjective a dreamlike state not readily available to straight photography, and made much easier through digital technologies.

In chapter 2, I examine the notion of interactivity. I look at the rise of video game technology, and explore the ways in which video games borrow from traditional cinematic codes, and vice versa. Different norms of cinematography and editing accompany this shift from passivity to interactivity. I will argue that, contrary to models of passive cinematic reception, the desire for interactivity precedes our era, going back at least to the birth of cinema, and explore that media like video games are in some ways realizations of the dreams of early interactive filmmakers and audiences In particular, Lauren Rabonivitz's discussion of *Hale's Tours and Scenes of the World* (1904-1911) shows that even in the beginning of the 20th century, pioneering media purveyors attempted to create ride films that invite an active spectator. I also examine the ways in which the movie industry markets films by producing video games that extend narratives and provide useful tie-ins for what is usually perceived as the main product – the feature length, theatrically-displayed film. The interactivity of the video game allows spectators to imagine themselves as the characters and gives an illusion of control over an otherwise static media object.

The emerging practice of Machinima, or the creation of videos from video games, allows users to create narratives with game engines, essentially entering the world of animation without having to draw a thing. The availability of video game engines gives rise to an entire new mode of entertainment, created primarily by users and enthusiasts. The aesthetics of these movies is directly connected to that of the game from which they are made; they give the user agency in terms of creating narratives by appropriating the characters, environments and physics of the

game. In this way, consumers of media become generators of new material.

In chapter 3, I examine how network protocols serve as metaphors for the ways in which spectators interact with each other and with the works they access.[1] Rhetorics of movement through space dominate representations of networks, from science fiction novels like *Neuromancer* to films like *Hackers* and *The Matrix*. These metaphors echo some of the observations made by modernist theorists about the structures of urban life. By revisiting some of these writings, specifically those of Walter Benjamin and Siegfried Kracauer, I show some parallels between interacting with networked media and wandering through city streets of the early twentieth century, as imagined by these theorists. Wendy Chun's work on network protocols helps orient the discussion in this chapter of spatial metaphors and the types of communication and participation allowed and prohibited by these protocols.

I argue that networked visual media, or moving images accessible by digital networks, accelerate and amplify the distracted attention found in the early writings of Benjamin and Kracauer. Playing on an alternate translation of the word "Zerstreuung," which is usually translated as "distraction," I argue that the notion of "dispersal" serves as a useful notion for thinking about identity in a networked world, as online identities spread out the communicative abilities of users, as well as their social identities. This dispersal can be seen in many places, including the use of fan community chat boards, sharing of Netflix queues, and peer-to-peer networking. Access not only to media but to other users creates a global spectatorship where media and community are available on-demand.

Traditional, established media conglomerates have tried, sometimes successfully, to contain and control the rapid and largely "wild" expansion of networked media. See, for example, Rupert Murdoch's purchase of Myspace, and the "airing" of *Quarterlife* in conjunction

with the social networking site, or the Cease-and-Desist orders against websites and Youtube videos due to alleged copyright violations. Throttling of p2p services by Comcast is also a good example of the attempt to control particular interests in a rather ham-handed way.[2].[3]"Networked cinema studies" might get closest, implying as it does the cinematic production apparatus as well as newer networked technologies.

In Chapter 4, I analyze two phenomena, The Alternate Reality Game and Peter Greenaway's *The Tulse Luper Suitcases*, as examples that combine the major concepts of the earlier chapters: indexicality, interactivity, and distributed, networked spectatorship. The Alternative Reality Game is a game that usually begins on a website, and then travels through other sites, and, often, into the “real” world. I will look at NIN's *Year Zero* as an example of an ARG that plays with networks and interactivity to construct a community of followers and players. *The Tulse Luper Suitcases* is a series of three films directed by Peter Greenaway, with several websites and a video game as ancillary media, all of which, taken together, help the viewer construct the greater meaning of the project. I analyze the films themselves as works that borrow from computer aesthetics, play with indexicality, and attempt to create a diffuse viewer through the use of multiple interfaces on the theater screen itself, and then on computer screens. By examining these phenomena, I hope to draw some conclusions about the networked, distributed, interactive spectatorship I have been working towards in the previous chapters.

Taken together, the analysis I provide of each of these phenomena provides a unique perspective on media in the late 20th and early 21st centuries. While scholars have written about each of these concepts, the combination of them allows us to look at spectatorship as an activity that is often active and collaborative, begging a sort of skepticism. The unhinging of the image from the real allows filmmakers to more easily explore fantastic, dreamlike and subjective states,

but also puts production tools into the hands of those who would formerly have been merely consumers. The empowerment of consumers to become producers and the distrust of the indexicality digital images go hand-in-hand, but the combination of this insight with the awareness that alternate distribution methods have emerged that not only change the ease with which one can disseminate a product, but also allow people to make altogether different types of works, whether an Alternative Reality Game or a Machinima series, leads to an altogether different conception of spectatorship. The ideal spectator for 21st century media expects interactivity, and is aware that any media artifact can not only be duplicated, but might exist across different media registers. The new spectator is potentially a producer, a detective, a cocreator, a parodist, or a thief.

The flip side of this empowerment is that the wash of data that encourages a more critical stance towards images as well as easy production and distribution also threatens to annihilate the individual in the service of aggregated data. Data acquisition has taken on the role of the modern city and of the Fordist production processes that accompanied them by making everyone anonymous and interchangeable. My exploration of the mass ornament in Kracauer indicates a model for participation in an activity that makes sense only to someone else in a different vantage point, and only insofar as that participation is coordinated with other participants. In other words, the work that one does makes sense only in a greater whole, for a third party to interpret and use. The use of proprietary systems for communication, whether in watching and producing video, emailing friends and family, or participating in online social networks produces data that can be used to sell advertising, tailor or censor content, or determine all sorts of actions by the data providers and users. Looking at potential spectators as members of a networked mass ornament allows us to see how our activities online can ultimately serve other purposes, even

without our consent.

As seen through the various analyses in this project, spectatorship in the digital age has come to signify not only a consumption of images, but also a potential to produce and to become a tool of production and the movement of capital through a system. In looking at Alternative Reality Games and *The Tulse Luper Suitcases*, we see participants who may produce new works, must be intrepid detectives to get the full meaning and experiential value out of an artifact, but who, like characters in video games, are often channeled by other media producers into a particular type of behavior, shattering the illusion of the independent actor, and underscoring both the possibilities and restrictions brought about by interactive, networked media.

ENDNOTES

1 I look at media that is distributed via or dispersed across networked media. I make the distinction between the generic term “network” and the more specific “Internet” primarily to signal that the communication that takes place in the works I examine does not have to take place in the wider arena of the internet, but might exist in Local or Wide Area Networks, and over other protocols besides what we now know as the Internet, which can be looked at as a network of networks. That said, most of my examples and discussion will draw from works that originate on or are distributed through the Internet in some way. I examine several different works that are produced for and sometimes in networked environments, and are distributed through the Internet.

2 In 2008, the FCC found Comcast guilty of slowing down, or throttling, peer-to-peer networking traffic on its networks. http://www.eff.org/deeplinks/2008/08/fcc-rules-against-comcast-bit-torrent-blocking

Chapter 1: The Loss of Indexicality and the Rise of Subjective Narrative

In his famous essay “The Ontology of the Photographic Image,” Andre Bazin compares the photographic image to mummification, suggesting that film's primary attribute is its indexicality, its main function to preserve reality.[1] In other words, the main factor that makes film special is its unique cause-and-effect relationship with the reality it records. For Bazin, it was the automatic nature of photography, its divorce, even if momentary, from human intervention that lent it objectivity. “For the first time, between the originating object and its reproduction there intervenes only the instrumentality of a nonliving agent. For the first time an image of the world is formed automatically, without the creative intervention of man.”(13) While he does make allowances for postproduction manipulation, he minimizes it: “Although the final result may reflect something of [the photographer's] personality, this does not play the same role as is played by that of the painter.”[2] From the fact of the artist's absence, Bazin concludes “This production by automatic means has radically affected our psychology of the image. The objective nature of photography confers on it a quality of credibility absent from all other picture-making.” (13)

It is precisely this psychology that I wish to explore in this chapter. If traditional photography has been seen primarily as indexical, evidentiary, credible, as a “fingerprint” of the real, as Bazin suggests (13), then how should we view the image in the 21st century, when the assumption of indexicality is diminished due to the use of digital technology? In the era of digital media, the relationship between photographic image and reality has changed in many ways, and the notion of indexicality has become fraught. In some respects photography has remained the same. Select a subject, light it, aim a camera at it, and shoot.[3] In many, however, it has changed. Digital manipulation techniques make post-production effects trivially easy, and the means to

create photorealistic images continues to improve and become more widespread. I will argue that, regardless of the technology used, what Bazin called the “psychology” of the image has changed in the digital age. This change comes as much from the popular conception about digital images as from a change in technology, but it is nonetheless real, and has effected many changes in cinematic aesthetics.

The comparison Bazin makes to painting is prescient in many ways. With digital media, however, the comparison is reversed, as several scholars have noticed that digital images are closer to painting than to traditional photography. William J. Mitchell, for example, shows that while a photograph taken with chemical processes holds an "indefinite amount of information," a digital image holds a specific amount of information, encoded in pixels, which are really only approximations of actual color. One can enlarge a chemical photograph indefinitely, to reveal new details, but once a digital image is enlarged to the point where one can see individual pixels, further enlargement will yield no new information, but larger squares, or pixels (4-6). Furthermore, manipulation of digital images is simpler and can be done more finely than with a photographic image, bringing the digital as close to painting as to photography (6-7). The implications of this distinction are many, and cast doubt on whether and how a digital image can be said to imitate reality, when, in fact, it may have no relation whatsoever to any actually existing object. As images become digital approximations of reality, holding finite amounts of easily manipulable visual information, their fidelity to reality becomes questionable.[4] Lev Manovich (2001) also notes this shift, asserting that moving-image technologies, of which photographic film is but one, derive from a design background that shares as much with painting as photography, and that digital media return film to these roots. For him, animation was the original function of cinema, which was then taken over by photography, and now has the chance

to return to its original vocation.

The differences between digital and analog photography are many. The digital spectator is savvy, discerning, technologically fluent, and, increasingly, also creates and manipulates digital images, still and moving. This latter characteristic affects the relationship between images and viewers in interesting and important ways. With the rise of digital photography, more people are learning that reproduced images, even if automatically or chemically recorded, are manipulable, not static, untouchable records, but images that can be touched up, fixed, distorted, cropped, red-eye removed, and otherwise adjusted. Thus, images are no longer indisputable records of the past, if they ever were.[5] The changed relationship to images comes not from a fundamental change in images – one could always dodge and burn, distort, double-expose and otherwise change a photograph or moving image – but in a popular conception of the ease and speed with which these can be changed. The average film viewer is intimately aware that recorded images are what Manovich calls "…raw material for further compositing, animating and morphing. As a result, while retaining visual realism unique to the photographic process, film obtains the plasticity which was previously only possible in painting or animation" (1995).

But what of the creation of images that never existed in front of the camera? In many cases such images are said to be realistic despite their lack of objective existence. Stephen Prince attempts to sidestep the issue of indexicality by introducing a correspondence-based model of realism that relies on interaction between the spectator and the moving image, as opposed to relationship between the image and the profilmic event. He demonstrates that digital imaging can produce a "perceptual realism," where the image corresponds with the ways in which viewers experience three dimensional space. The more an image, whether photographically or digitally produced, acts in accordance with generally agreed-upon behaviors

of objects in space, the more it can be said to be perceptually real. Taken further, digital realism refers to the phenomenon of objects appearing to behave and interact with other objects, virtual or real, in ways that are consistent in the universe posited in the film. This model of digital imaging technologies posits a new type of spectatorship: "Digital imaging alters our sense of the necessary relationship involving *both* the camera and the profilmic event" (124, italics in original). This altered sense results in a relationship between spectator and film that rests on "the application of internally valid perceptual correspondences with the 3D world," which establish the credibility of the digital image, and "establish bridges between what can be seen and photographed and that which can be 'photographed' but not seen" (124). This last statement allows Prince to preserve a sense of photography without relying on the indexical, or even on the independent existence of the photographed object, thus shifting the criteria for realism to the phenomenological perception of the spectator.

Asbjoern Groenstad reacts to this phenomenological approach by asserting that photographic and digital imagery are ontologically distinct, and that the latter abandons film's ontological project of preservation, as elaborated by theorists like Bazin. For Groenstad, the materiality of film is important, and digital imagery constitutes a forgery. He claims that audiences are "…twice duped. Not only is the world on the screen – which the viewer processes as perceptually 'real' – not constituted by particles of actual reality, it is not even composed of chemicals and light but of a chain of computerized algorithms" (18). In this case, he argues, digital technology achieves not a perceptual realism, but a "hyperrealism (in Baudrillard's sense) in relation to what for a lack of a better term could be referred to as post-cinema" (18). Like Manovich, he proposes that digital manipulation is closer to painting than photography, but he argues that because of this, digital imagery does not share photographic film's capacity to record,

and charges that digitally created imagery transforms reality, rather than representing it. While photography deals with the external, digitally produced images are created internally (17-18). As cinema moves from documentation to simulation, the relationship between spectators and images changes: “the space of CGI is entirely in the realm of simulation; what it manipulates is not profilmic reality itself but rather our consciousness of the relation between an event and its representation” (19). For Groenstad, the digital brings forgery, trickery, distrust and loss of the recording function of photography, and changes the spectator’s position in relation to the moving image to one of skepticism.[6]

These critics seem to share one important viewpoint: that digital imagery has changed the status of film, and that one can no longer automatically trust that an image represents a particular object that existed in space and time. Whether one views the change in the status of the image as ontologically and ethically disruptive or as simply a novel way to present information that yields similar perceptual cues, the phenomenon undoubtedly changes the ways in which we relate to images, which has further consequences in aesthetics, narrative and other aspects of film production and reception. If we follow Manovich and others in recognizing that the digital media environment foregrounds creative processes and more painterly concerns, we must then think about how this foregrounding manifests in recent films and other media, and what it does to the act of viewing.

Knowledge of the plasticity of images can invoke a sense of awe, not only at the images produced but also at the technology behind it. The Hollywood industry keeps technological wizardry and malleability in the foreground with behind-the-scenes footage of technological advancements, popular 3D animation such as the feature-length films of Pixar and Dreamworks, and DVD extras (which often only reproduce the made-for-TV behind the scenes featurettes).

This serves to keep the moving image consumer in awe of the Hollywood dream machine, even as the same tools are increasingly available to the serious consumer.

Once the image is detached from its referent, meaning rests in the mind of the spectator, which is not to say that the spectator independently creates meaning, but the weight of the responsibility for doing so shifts so that meaning-making becomes a negotiation between the critical viewer and the suggestive image. In a cultural environment where any image can be created to fool the viewer into thinking it is recorded, spectators must either learn to discern the invented from the recorded, or be suspicious of all images, and expect increasing realism from created images. In any case, the spectator becomes much more active in determining the meaning of the image, its reality status, its effectiveness. In many ways, the viewer is caught between a belief in perceptual realism as outlined by Prince, and the outright disbelief Groenstad posits.[7]

Digital Media and the Rise of Subjective Narration

Digital media have encouraged an aesthetics that privileges verisimilitude but does away with realism, resulting in wholly created images that look real, and, perhaps more importantly, realistic images (digitally manipulated or not) that are revealed to be unreal in the context of the narrative. A strong tendency in the digital age is to create worlds that seem to exist subjectively. This occurs in the recent spate of films with unreliable narrators, for example, as well as through dream sequences, interstitials, title sequences and other non-narrative devices that represent internal states. Various techniques may come together to create a subjective space that mixes the indexical and the created, the real and the imagined, in ways meant to confuse the viewer and destroy the boundary between objective and subjective.

The advance of imaging technologies in science, particularly in medical technology, reveals ways in which indexicality has changed and may give some insight into prevalent

conceptions of digital images. Brain scan imagery, for example, makes the workings of the brain on a magnetic and chemical level visible. Brain scans use colors superimposed on a model of the brain to simulate electrical or chemical activity, as the owner of the brain thinks, solves puzzles, or sleeps and dreams. This technology promises an understanding of how the brain, and by inference the mind, works as it makes manifest the physical processes of brain activity. The images are not literal visual representations of how a brain (or lung, or liver) looks, but interpretations of chemical, thermal or electrical activity rendered visually in a way that makes them manageable. They are indexical in the sense that they correspond to, are caused by, physical phenomena, but they retain the status of the schematic, the translated, the not-quite-iconic. Although we know that the body does not literally look like that, we have faith that these representations refer to a reality that will help us understand the inner workings of the biological system.[8]

The idea that we can understand how complex mental processes work by viewing and analyzing brain signals brings up questions of individuality, mind/body interactions, and free will. It also brings up the issue of manufacturing new experiences and erasing old, simulating worlds within the brain, manipulating personalities by altering the electrical or chemical impulses in the brain. After all, if we can measure thoughts by observing physical phenomena, we can surely imitate them by imitating the physical stimulus that produces them, or so the logic goes. This idea has long prevailed in science fiction, and has taken hold even more strongly in the last decade or so in more mainstream narratives, whether science fiction or not.

When looking at representations of electronically-mediated worlds, such as *The Matrix*, *eXistenZ*, etc., we see the fantasy of an all-encompassing world, composed of sensory illusions that replace the external world of the character, and, in many cases, the viewer. This fantasy

reveals a wish for and fear of immersion, a technophilic dream of complete submersion into electronic/digital space, where everything is equal, exchangeable, changeable and masterable. It also belies a fear that the machines we have created will take over by sufficiently fooling us, by overwhelming our systems of representation and replacing the real world with something created from outside. The transgression of technological boundaries makes this fantasy both seductive and frightening.

The rise of technology that promises to alter our sense of self by changing mood and thought processes spawns a genre of films that essentially confuse inside and outside, workings of the brain/body and representations of reality. In these films, characters are controlled by machines that simulate worlds, players share a video game world through a networked system that plugs into the spinal cord, worlds are created through imbalances of brain chemistry, memory is manipulated, lost, changed through chemistry and computer technology. In other words, perceptions and memory are created and changed through physical processes, independent of ontologically verifiable phenomena. The notion of an objective, shared reality caught on film has been replaced by a more subjective sense of perception, a virtuality that relinquishes objective reality. The films I will discuss below share this characteristic, and many present the subjective material as objective physical space, often leading to a sense of confusion between the external, verifiable real and the internal, subjective experience of a particular character or set of characters.[9] The confusion between these two states, which often but not always revolves around representations of computers, results in what I call the subjective film. Subjective films, those that present characters that don't exist or subjectivities that masquerade as objective fact, represent a move in film that mirrors the shift from the indexical to the digital. As spectators view the image as manipulable, and not immutable, narratives change,

accommodating less apparently objective views in favor of clearly created and false subjectivities.

Digital Rotoscoping and Indexicality: Richard Linklater's *Waking Life* and *A Scanner Darkly*

Richard Linklater's recent work with digital rotoscoping, for example, shows a creative link between a shifting sense of indexicality and subjective narratives and imagery. In both *Waking Life* and *A Scanner Darkly*, the visual effect underscores the indexicality of the images, even while foregrounding the artistic opportunities afforded by digital imagery. Both were filmed with digital cameras, producing putatively indexical images that were then enhanced, changed, and distorted by digital rotoscoping, or tracing over characters and objects. This technique produces realistic character movements and recognizable human images, but also allows the image to more closely correspond to the internal states of the characters.

In *Waking Life* the effect is a film that plays with our ideas of the cinematic, the real, representation, and perception, to emulate a dream state. The visual style of the film supports these themes, as it works in a more associational way, seemingly random unless seen as a whole. If the focus of traditional film is the indexical relation to the real, and classical film tends towards a more realistic aesthetics, then the digital is well suited to the dream, to a more associational and fanciful state, where images are half-found and half-created. In this realm, the task of making meaning falls more to the viewer than ever before. Generally, special digital effects range from the utterly realistic, to the cartoonish, sometimes invisible to the casual observer and sometimes foregrounded as the main attraction of a film. In the case of rotoscoping, and particularly in *Waking Life*, the use of the digital remains in the foreground, serving to disorient the viewer and force her to find or make meaning in the unstable, wavy images.

Coupled with the subject matter, the technique remains in a middle-ground of representation, between the indexical and the wholly created. What emerges is as close to an expressionistic cinema yet, but with the underlying promise, or threat, of the eruption of the real, of something having really been there, in front of the camera. It is the assumption of indexicality that makes the film hauntingly real, despite its cartoonish look. Through the use of rotoscoping, this film appeals to a pre-rational affective register, inviting the viewer to feel as well as perceive the onscreen images.[10]

The dreamlike quality of the film reveals a function of film alluded to in some spectator theory, but forcibly different here. The film as dream, as pre-perceptual, un-rationally received, subject to unconscious interpretation returns here in a morphed way. *Waking Life* evokes a dream state, but ultimately asks questions about how to live in waking life. The images stay with the viewer as a lingering feeling; fragmented memories of images remain, as if upon waking from a dream. The difference, of course, is that one can replay the film over and over, each time with the same result onscreen, even if the result is different for the spectator. This leads to the question of replaying, reviewing, rewatching and reperceiving the film. Each viewing will be a little different, although the feeling remains. Of course, this is true of most films, but *Waking Life* particularly lends itself to reviewing, drawing as it does on more subjective registers. The long descent into a dreamlike state, the dynamic, changing, flowing images, the nearly invisible transitions bring us along like leaves on the surface of a river, occasionally touching the banks, but forever at the whim of the current. Each leaf is carried by the same stream, but end up in different parts of the river, nearer different banks, spinning and floating in different directions, at different speeds. This film demonstrates the new paradigm of spectatorship in the digital era.

This film enacts an interactive spectatorship both through its subject matter and visual

style. I argue that the visual style of *Waking Life* is congruent with digital aesthetics and spectatorship, which differ sharply from traditional forms of viewing. The intentional mixing of the indexical with the created foregrounds the nature of the digital image, as a hybrid between the two, and forces the viewer into a negotiated position, choosing between meanings, inferring meaning from the visual style as much as through the content of the image and sound. Several factors account for the modified spectator position in this film, which operates on various levels of exhibition. The first level concerns theatrical exhibition, where the film is played onscreen without interruption, whether in a theater or elsewhere, and where the spectator is in a more or less passive position, watching the film unfold as prescribed, with no physical interaction. At this level, the spectator must still choose between meanings, make sense of the images onscreen, decide what is real and what is artificial, and generally perceive the film as presented. The second level is that of the DVD viewer, who can now watch in any order, and with a potential combination of audio and text commentary. These latter features further change the viewing experience with metatextual information that must be processed on different registers, auditorially, and in the case of the text, with frequent pauses to be able to read the text. This creates an entirely new viewing situation, where the viewer is much more critical and attentive, even if the "original" film is obscured by the special features. These two levels of viewing positions are not unique to *Waking Life*, as most films have some level of extra features, usually including audio tracks by filmmakers. This second level comes through more forcefully in this film than in many, however, due to the subject matter and visual aesthetics of the film itself and to the more intrusive characteristics of some of the extras.

The "Holy Moment" section of the *Waking Life* illustrates some of the concepts mentioned above concerning indexicality. During this segment of the film, the main character

(Wiley Wiggins) sits alone in a theater and watches two men, Caveh Zahedi and David Jewell, talking onscreen. Zahedi describes Bazin's concept of the holy moment as Jewell more or less passively listens. As he is speaking, Zahedi's hair flows upward and his gesticulating fingers produce tiny sparks and lightning bolts. Occasionally, we get a reaction shot to Wiggins looking slightly amused, or laughing. When Zahedi talks about the frame, he draws a frame with his hands, which then becomes visible and appears to float out to the sides of the screen, literally reframing the shot, making the viewer more aware of the frame. After explaining the holy moment, he proposes that they try to create one right there, and the two stare into each other's eyes for several silent seconds. Zahedi's hair continues to flow around as the shot pushes in to close up, and we can see his pupils dilate and compress. Finally, Jewell reflects on the many layers of the experience, the so-called holy moment itself, his awareness of trying to have the holy moment, and so on. At the end of the scene, the background objects fly away and the two characters turn into clouds.

This scene is interesting in part because of its reflexivity. The visual technique of the movie theater, the projector, and the frame emanating from Zahedi's fingers remind the viewer of the materiality of the frame, but the rotoscoping gives Zahedi an ethereal look, not quite grounded in reality, which also reminds the viewer that these images have, of course, been altered. The content of Zahedi's speech also serves to point to the filmmaking process itself, and to this film in particular. He talks about Truffaut's idea that the best films do not always come from the best scripts, and refers to film as being a "slave" to narrative. It is difficult not to draw the connections to this film, with its winding, dreamlike narrative and rotoscoped images, as Zahedi talks about Bazin's notion of the holy moment, of capturing reality, and of the relationship between narrative and film. In many ways, this scene offers an analogy between film

viewing and the lucid dream state that it tries to depict. A level of awareness and self-reflective consciousness amidst a largely uncontrollable stream of images characterizes both film viewing and lucid dreaming.

Linklater's next film, *A Scanner Darkly*, uses the same technique, but within a more straightforward narrative, to much the same effect. The entire film is rotoscoped, allowing the viewer to recognize Keanu Reeves and company, but also forcing the realization that every image is created by the hand of an artist/technician. One of the differences between the printed word (e.g. a novel) and a visual representation is particularity. With print, the reader must conjure up an image, but with film, the image is there, and it often does not match the reader's creation. The use of rotoscoping in this film preserves the particularity of real humans using realistic motion (simultaneously preserving the star power of Keanu Reeves, Winona Ryder, Robert Downey Jr, Woody Harrelson, etc.), while making the image indeterminate and vague enough to let the viewer continue to fill it in with her own preconceived notions. It also makes the "special effects" of thought bubbles, bugs crawling on skin and the scramble suit more visually consistent with the style of the film.

The visual style matches the content, in that most of the characters are addicted to Substance D, a strongly addictive narcotic that leaves the user so brain damaged that he cannot think or communicate, a fact that becomes important later in the film. The deterioration of thought and development of psychosis is matched by the fantastic feel of the rotoscoping, where the viewer can sense something real underneath, but can't quite get to it. This is true also of the scramble suit, which is meant to provide anonymity for the secret agents by disguising the voice and producing images of millions of portions of human beings, rendering the user human-like yet unrecognizable. The sense of a real human being, or of anything actually existing and filmed,

combined with the inability to properly access it or apprehend its form begs all sorts of philosophical/theoretical questions, but for now it is enough to say that this aesthetic touch meshes well with the mental states of the characters.

The mental states of the characters, particularly of Bob Arctor, are important because the film presents an unreliable point-of-view through which to understand the film world. As reality and fabrication blur with the animation technology, so does the subjective reality of Arctor begin to diverge from the reality of the few non-addicted characters. Interestingly, the addicts often share the same failure of logic and perception, if not the same hallucinations.

Ultimately, we find that the deterioration of Arctor's psyche has been carefully planned by the law enforcement agency of which he is part, and that his mission is actually to infiltrate New Path, the addiction recovery facility that is using nearly brain-dead addicts to harvest the plant used to make Substance D. Arctor becomes split into a schizophrenic subject/object, as Fred watches Arctor in disgust, and begins to suspect himself of crimes. Meanwhile, other agents, including doctors and his boss, who, we find, has been posing as a potential girlfriend, have been planting ideas into his head about "blue flowers," hoping that he will remember when he's in New Path.

The film succeeds in interrogating subjectivity in the digital age through the use of technology, although this is not its primary aim. In linking digital representation with pharmaceutically induced psychosis, and placing it within a framework of self-sustaining addiction and a cycle of destruction and creation, the film ends up questioning the notion of subjectivity and, to some extent, the role of reason.

Waking Life and *A Scanner Darkly* represent a shift in narrative films that take place in an objective space to those that unfold in a subjective space. The change in our conception of the

indexicality of the films outlined above manifests in narrative. A dominant trope in late 90s/early 21st Century film is the blurring of objective and subjective, whether through technology, delusion, or supernatural occurrence. Often, the blurring takes the form of fooling the spectator into believing that onscreen events are unfolding in an objective space, and then revealing that they are, in fact, products of altered consciousness.

While these films forcefully exemplify some of the implications of both indexicality and subjectivity, in other more traditionally-shot films, a tendency towards subjective narrative emerges in various other, more subtle forms. To attempt a classification of films that question representation, one must delineate a spectrum of films that create subjective spaces, sometimes using or representing digital technology, sometimes fooling the viewer in various ways.

Unreliable Narration

The recent prevalence of unreliable narrators is a symptom of the confusion between external and internal that attends the digital era. Volker Ferenz (2005) argues that unreliable narration exists only in a small subset of films, where an identifiable narrator exists and can said to be in control of the narrative.[11] He excludes modernist works like *Lost Highway* and *Persona*, because they are too fractured to make a claim to narrative truth in the first place, and therefore cannot have an unreliable narrator. He limits the scope of unreliable narration to those films for which viewers have no recourse to other recuperation strategies, as outlined by Tamar Yacobi[12]. Among these films he includes *Fight Club* and *The Usual Suspects*. While I am not sure why his logic does not work in reverse (i.e. Why not use unreliable narration as an explanation to the exclusion of the others, using the same argument that they are unnecessary because another exists), I agree that the term unreliable narration does not hold in science fiction or avant-garde films, where the viewer is already immersed in a highly subjective, fragmented world. The

concept of unreliable narration encompasses those films where the viewer is led to believe that a particular point of view is true, or real, and finds out later that it is the result of delusion or deception. The twist, or surprise, startles the viewer and reminds her to be skeptical of narrators in general. This phenomenon is a subset of a broader movement towards questioning cinematic representation. Films that employ this technique generally use realist formal techniques, codes that viewers recognize as realistic and have come to trust, and reveal them as false in the end, usually through a controlling narrator.

Unreliable narration in film is symptomatic of a more general skepticism about representation and narration. These films present a world meant to be taken as real, using conventional techniques of realism, but turning it on its ear, revealing, usually in the end, that all we have just seen has been manufactured, often as a product of a dishonest or psychotically deluded narrator. It is necessary here to define the term “narrator” in order to better understand this phenomenon, and to delineate between the unreliable narrator and a trick of narration where there is no specific narrator. For example, Tyler Durden (Brad Pitt) in *Fight Club* or Leonard (Guy Pearce)in *Memento* figure as narrators in a fairly traditional sense, but does this also hold for, say, Malcolm Crowe (Bruce Willis) in *The Sixth Sense* or John Murdoch (Rufus Sewell) in *Dark City*, through whom the respective narrations are focalized, but who are as clueless as the viewer as to the visual trickery of the film? In other words, they also don’t know that what they see is not real, and the revelation comes simultaneously for them and the viewer. Even in *Memento* the viewer is left wondering whether Leonard’s dishonesty is intentional, and even that becomes moot when we realize that he does not and will never know about it. In this case, the viewer eventually knows much more than Leonard, who is pathologically unreliable.

The unreliable narrator, whether intentionally dishonest or pathologically unaware, is a

subset of a more general tendency toward a style that presents events as diegetically real, as really happening within the objective space of the story world, only to reveal them later as purely subjective products of a character-narrator's mind. This trend stretches from purely science fiction films, where such things are often expected, to more seemingly traditional films, many of which employ unusual style or technique (e.g. most of *Memento* is told backwards), and some of which seem more or less straightforward at first (*Eternal Sunshine of the Spotless Mind*). It is as if the fabric of filmic representation has been rent to show the true reality underneath, which is nothing but layer upon layer of psychosis, subjective musing, fantasy, and general dishonesty.[13]

This trend towards less reliable narration is an admission, a recognition of the mechanisms of representation and narration, a tip of the hat to the savvier viewer, an inclusion in the joke of fictional narrative. It is also a way to acknowledge the subjective nature of visual narration and spectatorship while piling on more layers of trickery. If we refuse to disavow the constructed nature of these narratives, we may as well enjoy as many layers as possible of trickery. In other words, if visual representation can no longer get to objective truth, if film can no longer reliably act as a footprint of the real, why bother trying, and why not revel in as many levels of fabrication and uncertainty as possible? Many of these films embrace uncertainty, refusing not only to represent the real, but challenging the possibility of ever knowing it even if we see it. *Memento* and *Eternal Sunshine of the Spotless Mind* challenge the nature of memory as a way of organizing the world, even if the latter ultimately posits a transcendent personal identity. *The Matrix* and *eXistenZ* and many others question notions of representation on the level of the visual, the lived. They encourage us to question what we see onscreen and every day, to reveal the mechanisms of belief and sensation.

Virtual or Artificially Created Geographies

Another category of subjective film includes those that create artificial geographical spaces for its characters. In these films, physical locations are manufactured to confuse or trick the character. In these films, the characters, and often the viewers, are led to believe that the environment is natural when it is, in fact, constructed by some outside force. These films primarily use mise-en-scène to construct an alternate reality, and reveal it to be manufactured as the film progresses, either piecemeal, as in *The Truman Show*, or suddenly, as in *Dark City*.

Dark City presents a world created by the Strangers, an alien race who abduct humans and make them live on a disconnected floating city, where the Strangers mix their memories, hoping to find the human soul. The film begins with a shot of the night sky voiceover by Dr. Daniel Paul Schreber (Kiefer Sutherland) briefly explaining the Strangers. After a tilt down across the sky, we immediately get a shot of the main character, John Murdock (Rufus Sewell), in a bathtub, completely unaware of his identity, as we soon discover. As the movie progresses, Murdock attempts to track down his wife and family, while avoiding both the police and the Strangers. Through Murdock we learn of the Strangers' experiments in swapping the memories of the inhabitants, and their powers to alter the cityscape, all of which is done after midnight in a city over which the sun never rises. As Murdock leads the viewer through these revelations, he begins to realize that he cannot reach Shell Beach, a place he remembers from his childhood.

Memory and place are intricately linked here, as the amnesiac main character searches not only for meaningful connections, but also for a place in his memory. Towards the end of the film, Murdock and a police officer break through a wall at the perimeter of the city, and, after a short battle, as the detective is thrown through the hole, a pan outwards to follow him reveals that the city is actually floating in space, and that there is, indeed, no Shell Beach, nor any escape

from the city. This linking of the city and memory becomes important as Murdock attempts to gain control of the city, and, hence, of the meaning-making machinery. Ultimately, he does gain control, but the film leaves one wondering what he will do with it, beyond making a beach and courting his ex-wife, whom he doesn't remember and who now has a new name and identity. While the film questions traditional modes of storytelling through mixing of genres (film noir, science fiction) and eras (it is impossible to tell the time period of this film), it unflinchingly supports the idea of monogamous romantic coupling that spans identity and memory.[14]

In *The Truman Show*, A television producer creates a world in which the main character, Truman (Jim Carrey) grows up from infancy in the presence of hidden cameras. The result is a life captured in a 24/7 television show, in which all but the main subject are actors. The audience and those in Truman's world are all in on the plot, and the narrative of film shows Truman slowly discovering that his entire life has been a setup. Truman's world is contrasted with the real world of viewers in the film, which corresponds with the viewing situation of the film's audience. The viewer simultaneously identifies with the "real world" viewers and with Truman.

While neither of these films deals explicitly with digital film, and were likely filmed more or less conventionally, they both reflect an anxiety or awareness of the potential for constructing reality at least in part through massively constructed geographical environments. The fear that something outside of one's awareness might be attempting to control and proscribe one's choices by creating an all-encompassing environment mirrors concern about virtual reality and image/media manipulation to shape reality. The physicality of these environments represents a projected virtual reality, a physical manifestation of a more subtle and insidious manipulation of reality, which leads us to the next category.[15]

Artificial sensory input/ technologically produced realities

This group includes films that depict the simulation of experiences that result from electronically stimulating parts of the brain and nervous system. The experiences presented in these films range from the playback of previously recorded images, to interactive virtual reality played out through the nervous system, to a complete simulation of entire lives.

A relatively early example of a film that imagines digital imagery replacing lived experience is *Strange Days.* In this film, people trade experiences via an apparatus that connects directly to the brain, letting the user experience exactly what the original recorder did, eventually creating a market in sex and snuff films. The film itself does not rely on elaborate digital effects, and the representations of the experiences themselves are done through typical camera techniques. The confusion in the film between lived experience and recorded media is an important indication of the ambiguous relationship spectators have with digital technology. The fear and fantasy involved in imagining digital imaging technologies completely taking over manifests in a direct implantation of experience into a user's brain. Ultimately, there is no difference between the image and experience. In *Strange Days*, the brain is simply another interface to be plugged into, used to re-create entertainment. Even in this vision of the future (of 1999, actually), the images themselves are still recordings, still bear an indexical relation to reality. Indeed, that is what makes them so valuable, that they actually happened to someone. While the viewing technology becomes totalizing, involving all the experiential, sensory centers of the brain, the media itself are not created from scratch, but are as authentic as first-hand experience. The fantasy, then, is to experience through someone else's eyes, not to control the environment, nor to revel in the fantastic creations of digital artists. There is no critical distance, no acknowledgment of codes, but complete immersion in the ultimate realism.

The Matrix is a prime example of the shift from objective to subjective reality. The

beginning of the film depicts a believable world of hackers, computers, and office cubicles, only to reveal later that everything that seemed so real, and so like the experience of the viewer, is a computer-created illusion, and the "real" world is grimy, dark place far in the future. The viewer is asked to believe that the aesthetics of the science fiction universe of the future depicts a more real world than that which looks closer to everyday lived reality. This switch represents the uncertainty of ascertaining the existence of images produced onscreen. In some ways, *The Matrix* poses the question of verisimilitude: in an age when computers can realistically represent anything, can we ever again believe what we see?

The Matrix and its sequels portray a virtual world its inhabitants believe to be real, set up in opposition to a real world, governed by more or less by the laws of physics to which we are all familiar. The world of the matrix, however, has its own set of laws, which resemble on the whole, those of the real world, except to a special few, either programs created by the matrix, or humans who have escaped it and can now reenter it at will. These characters bend the laws of physics in the matrix in elaborate fight scenes, portrayed in large part through digital imagery, in a slow, flowing style, with seemingly mobile cameras, divorced from the laws of space and time, with the ability to stop time, and pan around stationary or slow-moving characters, before resuming action at full speed. The style of digital imagery draws attention to itself as awe-inspiring spectacle (the audience invariably responds with Keanu-like exclamations of "whoa!"), but soon the spectacle is integrated into the diegetic reality of the matrix, subsumed finally by a new sense of realism, a new suspension of disbelief. The fluidity of unrealistic motion in this and other films helps reinforce its believability, as characters and objects slowly transform from beings-in-the-world to supernatural entities capable of extra-ordinary feats. The slowness of the change onscreen eases the viewer into the new physics of the matrix. Interestingly, the world of

the matrix looks much more like that of the typical late-20th to early 21st century viewer's world than that of the purportedly real world of the rogue humans. At the end of the first sequel, however, this dichotomy begins to break down, as Neo is able to use his powers outside of the matrix. The physics-bending, time-warping feats possible at first only in the matrix are suddenly available outside of its confines.

This movement of digital spectacle from the world of the matrix to that outside it mirrors in some respects the movement of cinematic spectacle from the fringes of realism to its center. *The Matrix* reveals an anxiety about the possibilities of representation, both expressing doubt about the effectiveness and validity of photographic indexicality, and fearing the possibility of absolute simulation, hard-wired in to the brain and nervous system. In *The Matrix*, the confusion of reality with electronically stimulated nerve cells speaks to the confusion between reality and perception, a line which has been blurred by digital technology. The loss of the indexical translates to a loss of the real in a milieu dominated by images and surfaces. In the first film, simulated reality actually looks more pleasing than the world of the resistance. The postmodern privileging of surfaces and the disavowal of depth becomes a valorization of simulation even as the main goal is to defeat those in charge of it. Cipher (Joe Pantoliano) chooses to stay in the simulation, while Neo and the rest actively try to defeat the control of the machines. In some ways, one wonders why? Why not just forget it, and live your simulated life? In many ways, the Matrix is a technophobic dystopia, even as it uses the latest technology to entertain and educate.

Schizophrenia, the divorce of mind and body, of action and result, becomes the norm, external becoming internal, computer becoming real life. The line between the created and the real break down completely. Everything is exchangeable, interchangeable, tradable. In the beginning there is a strict divide between here and there, us and them, but when, in the end of the

first film, Neo enters Agent Smith, this division breaks down. The trick for Neo is not to defeat the enemy with brute force, but to become him, to assimilate him, to enter him like the virus Smith claims humans to be, to destroy him from the inside, while there still is an inside and outside. The problem is that this universe is endlessly recursive, with no real outside. Zion is posited as the ultimate vestige of humanness, with dancing dark bodies writhing in the cavernous pit of refuge, but even as this comes under attack, Agent Smith finds a way to crossover, questioning the realness even of Zion, or granting the electronic a more tangible reality. In either case, the two become equal and, ultimately, indistinguishable.

Also in 1999, David Cronenberg's *eXistenZ* explores the blurry boundaries between immersive technology and lived experience. In many ways this film takes the premise of *Strange Days*, that of plugging hardware directly into the nervous system, and mixes it with video games. Now the technology does not merely reproduce previously recorded images, but simulates a created world in which anyone else plugged in can interact. Rather than an index, the media is a wholly created, participatory, networked playground, albeit one that becomes dangerous to the participants. One of the main differences between *The Matrix* and *eXistenZ* is that in the former, the problem is machine intelligence (or intelligent machines), and the nemesis is the technology itself, which actively attempts to pursue, thwart and kill the humans who try infiltrate and destroy it. In the latter, however, people willingly plug in, craving the gameplay and control within the immersion. Although inexperienced players may not at times know exactly when they are in or out of the game, there is a sense of shared, consensual play within the narrative of the game.

All of these films play with the idea of complete immersion in a digital world, and plunge the viewer into that world through the use of subjective camera techniques. In the case of

Strange Days, the representation of the recorded experiences is always in first person, and is obviously visually different from the rest of the film, the "reality" outside of the recorded experience. In *eXistenZ*, traditional cinematic techniques blur the line between representation and participation, objective and subjective, but the transitions between levels are quite apparent and serve to underscore the move from one level of experience and another. At one point, one of the characters actually comments on the nature of the transitions. *The Matrix* abounds with point-of-view shots, from the Neo's training, to the bullet-time sequences, to the revealing of the code at the end of the film. Each of these films at some point tries to replicate the subjective point of view of the characters, implying that this subjectivity is ultimately fluid, exchangeable and tradable.

Memory

The underlying theme of many subjective films is distrust of the senses and memory. This category overlaps with some of the others, and brings up questions about experience, self-representation, and perception that take up Cartesian notions of reason and perception. Two exemplary films, *Eternal Sunshine of the Spotless Mind* and *Memento*, deal with memory in ways that are mutable and fluid.

In *Eternal Sunshine of the Spotless Mind*, Michel Gondry uses creative transitions and cinematography to simulate the memories of the main character, Joel Burch. The beginning of the film presents the end of the narrative, after the main characters, Joel and Clementine, have had their memories erased, but the film gives no indication of this. For the first 15 minutes or so, the film presents two people meeting on a beach in the winter and beginning a romantic relationship. There are a few clues, such as Joel's dented car, or the ripped out pages of his journal, but otherwise, this seems like a straightforward, conventional film romantic comedy.

Only after the title credits start, unusually late in the film, does the viewer begin to suspect that something is amiss, that what has been presented onscreen does not correspond to a traditional narrative. Once the film fully enters the space of Joel's memory, the image gets blurry and the sound obtains an echo, as the memory is erased. The first memory we see is of earlier in the evening, when Joel runs into his neighbor, who talks to him about Valentine's Day. In the original experience, presented before Joel starts the procedure, the neighbor comes up to Joel at the mailboxes in the entrance of their building and says, “Hey Joel,” to which Joel responds with a dejected “Hey.” They have a short conversation about Valentine's Day cards and McDonald's, after which Joel goes upstairs to go to bed, leaving the confused neighbor alone. Once the procedure starts, the first subjective image is of this conversation, but when then neighbor say “Hi Joel,” Joel's response is a slightly more engaging, “Oh, Hi.” The difference between the original conversation and the erased memory is important, and gets repeated throughout the film, indicating that memory is not only erasable in this film, but also inherently malleable, subject to distortion. Even within the procedure, details change. In one of the first memories shown (and therefore most recent), Joel is talking to two of his friends in their home, and he has a small box wrapped in red paper, a gift for Clementine. In a flashback from that scene, Joel is in the bookstore where Clementine works, ready to present the gift to her, but he doesn't, walking out of the bookstore and back into the friends' house in one smooth shot. Later in the film this scene is repeated, but the gift is still wrapped in red, so the viewer recognizes it, but it is much larger. Here we have two memories, seemingly equal, with a distorted feature. For a point of reference, within the more objective level of the memory technicians who actually perform the procedure on Joel as he sleeps, Patrick, who has stolen Joel's effects, gives Clementine the original, small present. This shows that the original memory is more accurate, but in this film that hardly makes

a difference.

Like so many other films in the last fifteen years that deal with memory, *Eternal Sunshine of the Spotless Mind* portrays the brain as something akin to a computer storage system, and the memories as files that can be manipulated or deleted. In fact, the apparatus the technicians use looks like a rather old computer with a monochrome monitor, which simply maps the brain and deletes the appropriate memories with a few keystrokes. At the level of technology, the procedure seems both mundane and imprecise. The office resembles a small dentist's office, the workers play practical jokes on one another, date each other, and act like typical young adults working at a fast food restaurant or other workplace where the labor is unskilled or untrained. The actual hardware consists of brain scanning devices linked up to a bizzare silver helmet that looks as if it came from the props department of a 1950s science fiction film. The primitive technology combined with the apparent ease and banality of the procedure present a model of the brain and of memory as easily charted and changeable, accessible to all. The interface between the computer and the brain makes the latter more like the former, and speaks to a model of computer technology as progressing to a point of complexity where it can replace or augment the brain. In this case, the use of seemingly simple and archaic technology serves not to make the technology look advanced or complex, but to make the brain look simple by comparison. This distinction is important because popular films about memory and subjective experience are beginning to explore metaphors of memory in ways that present a model of perception and cognition that resembles both film itself, as in *Strange Days,* and computer technology, as in *Eternal Sunshine of the Spotless Mind* or *Hackers*.

In *Memento*, the main character, Leonard, has only short term memory, and in the end it is revealed that the quest he is on has been invented by someone else, and what little he knows

about his identity is false. He has been duped, his own memory used to trick him. The trick of *Memento* is that the narrative is told in reverse, with black and white interludes that move forward and correspond more or less to present time, serving to give background information about the main character. This forces the viewer into a position of confusion much like Leonard's, where at every moment the narrative changes, and new connections must be made. Like the previously mentioned films, the viewer here is forced into a perspective much like that of the protagonist, in this case one of confusion and ignorance of the past, in other words, with no memory. The space of the film does not resemble the objective unfolding in time so characteristic of traditional film, but serves to immerse the viewer in the mental space of a character. In this film and in many like it, there is a surprise ending where the viewer learns that everything presented so far was false, which marks another characteristic of these films: the distrust of the indexical, of the senses, of narrative. Even amidst the confusion of the twists and turns of the backwards narrative, the viewer is led to believe that Leonard really knows what's going on, but this turns out to be untrue, making the viewer distrust everything that came before.

Dark City could also fit in this category, as the Strangers manipulate memories chemically in their attempt to find the human soul. This film is as much about memory and identity as anything else, and my placement of the film in the “Artificial Geographies” section should not discourage the reader from thinking about the film in relation to those in this category as well.

Computer Representations, or representations of computer worlds

This section is less about subjective experience in terms of what happens in someone’s brain, but more like computers that think, like a brain scan of a computer system. The visual representation of digital systems resembles the brain scan in some ways, as it is a visual

abstraction of invisible processes. Interestingly, these representations are provide visual representations of humans interacting with computers.

In *Hackers*, when the hackers break into the file system of The Plague, the system is represented as an all-encompassing virtual world. In *Tron*, a user is trapped inside a computer system and forced to play video games until he dies. The focus here is on the prevalence of video games and the beginning of networked computers in the 1980s, both of which feature prominently in the plans that the Master Control Program has for taking over the world. The narrative is a typical computer-becomes-smarter-than-people-and-wants-to-take-over-world, but within the MCP's world, trapped programs wonder about the existence of users, whom they see as having a master plan, being all-powerful and benevolent. The programs that do not believe in users are recruited to join the MCP; others are labeled superstitious and made to play gladiatorial games until death. The metaphysical question of the existence of users is an interesting twist on the view of computer programs as strictly obedient and mindless, positing a religion that is essentially true but greatly distorted. The confusion of inside and outside is treated by representing a world within the computer as a vast electronic landscape, most of which is itself computer-generated. In this film it is clear when the characters are inside or outside due to the glowing suits and helmets they wear inside, and the fantastic backgrounds, but one of the closing shots reveals a bit of conflation, as the world of the MCP dissolves neatly into a time-lapse simulation of downtown L.A, with traffic below and planes flying overhead, the city grid resembling the electronic impulses on the geography of the MCP's territory.

The loss of indexicality creates a new cultural paradigm where one no longer assumes that images faithfully replicate an ontologically distinct object. It’s not that there is no relationship between, say, a sunset and the digitally produced photograph of it, or that this

relationship is substantially different for the viewer from that of a chemically produced photograph. Indeed, depending on the presentation of the photograph, its source, chemical or digital, is indeterminate. A chemical photograph can be scanned and presented onscreen, and even reprinted, while a digital image can be printed on photographic paper or in a magazine. Depending on the context, most people will not doubt that there was, once, a sunset that looked like this and that the photographer witnessed it and took the picture. The difference is in this indeterminacy. Whereas relatively few people have access to darkrooms and manipulation techniques to enhance or fabricate a sunset, this capability exists with a few clicks of a mouse on even the most rudimentary photo program. It is the ubiquity of image-changing and -creating technology that changes the status of the image, and this ambiguity extends to other representation techniques, including narrative. The proliferation of subjective narration is symptomatic of this more general indeterminacy that accompanies digital media.[16]

The above films play out issues of identity, authenticity and authority that have emerged in the digital, networked culture, even when they do not specifically deal with digitality. It is no surprise that many of these films do, indeed, specifically treat the digital and its propensity for fabrication, confusion, and proliferation. *The Matrix* is a good example of all three, in that the entire world is fabricated for the edification of the humans encased in their pods, there is endless confusion as to what is real, and Agent Smith proliferates abundantly in the form of a self-replicating computer virus. [17]

The explosion of subjective narration and representation in film acts as an attempt to totalize the representational ground film covers, by visually representing not only objectively observable effects, but also internal states of mind, electronic phenomena, and other physical and nonphysical spaces. In some ways, these new forms of representation leave much of the work up

to the spectator, to figure out what is real, to pick up on clues, to imagine a new space, as film competes with more participatory media such as video games, flash applications, and networked communication. The more film can emulate these forms, the closer it gets to the dominant paradigm of networked society, which includes social fragmentation, ontological uncertainty, proliferation of, among other things, global capital, a reduction of everything to ones and zeros, to exchangeable goods.

Photographing the real world is no longer enough. Filmmakers create new landscapes, new territories to colonize and represent. The instability of dominant representational modes reflects a dubiousness regarding filmic representational models, even as it reinforces film as a dominant representational model. Even within the subjective narrative, traditional realist techniques often obtain, blurring the line between objective and subjective reality. The films I mention and analyze here are not avant-garde in visual style, instead seeking to represent the internal workings of the mind/computer in realist techniques, using technologies of verisimilitude, editing style that preserves spatial continuity, and, usually, narrative techniques that uphold traditional linear narrative, even if it ends in a surprise twist that invalidates or complicates all that precedes it. They speak to an ongoing distrust of the visual representation, and, at the same time, a desire to visually represent everything, including the intricacies of the mind.

These narratives simultaneously reveal not only the interior lives, thoughts, emotions and neuroses of their characters, but also the usually invisible work of signification of the film itself. They take what the viewer assumes as true, the codes the viewer has learned to ignore, to take for granted, and de-authorizes them. This process works on the level of signification, relying on the uncertainty of indexicality, but also on cinematic narrative codes. By calling into question

traditional storytelling devices, the subjective narrative exemplifies postmodern concerns such as fragmentation, truth-status, and multivocalism, and denies a universal narrator with whom a viewer can identify, presenting instead deeply idiosyncratic characters and narrators who interact sometimes not with other autonomous agents in the story world, but with other parts of themselves, like the colored flow of electrical activity on brain scans as the subject thinks and feels.

The main theme of this chapter has been the dissolving of boundaries, namely the boundaries between film and spectator, flesh and electronic input, utterance and signification, narrator and character, objective reality and fiction. The boundaries between genres, between what we take for real and what we deem fiction is loosening. Digital media tends to make everything homogenous. The desire to cross electronic boundaries that *Tron* exemplifies continues throughout film narratives, as each new technology becomes material to exploit, to narrow the gap between human consciousness and the machines we create. In so doing, the gap between signifier and signified simultaneously grows and collapses, until all is signifier. The postmodern concept of infinitely recursive signification obtains in electronic media, and in film representations of technology. The brain is manipulable through chemicals and electronic stimuli just as machine code is mutable. The consequence is narrators who are at the mercy of their own delusions, manipulations and creations.

The emergence of the subjective film as a prevalent form of storytelling coincides also with novel forms of communication that foreground virtual connections, anonymity and confusion of public and private personae. These forms of communication foreground subjective narration in their often confessional tones and in the potential for trickery and authorial ambiguity[18]. In fact, following standard hacker tradition, “Neo” is simply a pseudonym for the

more plainly named Thomas Anderson. The fact that Agent Smith insists on calling him “Mr Anderson” sets up a dichotomy between the signifying system of the Matrix, and the reality-bending rebels. The fantasy of entering the signifying system, where communication takes place, is powerful, but certainly not new. *Alice in Wonderland* stands as an early example of getting lost in the fantasy world of a book, although Alice returns with a solid identity. *The Matrix* makes several allusions to the rabbit-hole of consciousness, aligning itself with the fantastic world she enters on some level. In this case, Neo is trying to escape signification, and ultimately master it. The winner in all of these cases is whoever plays the game best, or whoever owns the source code, or in other words, whoever gains control over the rules for making meaning. Digital indexicality rests not on a reality that an image points to, but on what or who does the pointing. These subjective narrative and aesthetic devices indicate that, in the digital age, all one can do is point, and, to paraphrase a Buddhist saying, we are looking at the pointing finger instead of the moon.

ENDNOTES

1 Parts of this chapter have been published as “Indexicality And Spectatorship In Digital Media: Waking Life As Hybrid Digital Artifact.” *Revista Ilha do Desterro*. No. 51, Jul/Dec 2006.

2 The comparison between photography and film is widespread. Cf. Siegfried Kracauer, Walter Benjamin, Lev Manovich (discussed later).

3 D. N. Rodowick contrasts digital and analog photography through temporal means, calling the digital camera “a computer with a lens as input device”. The Virtual Life of Film. Boston: Harvard UP, 2007.

4 On might argue at this point that, with increasing density of megapixels and greater storage capacity, the difference between digital and analog is less pronounced. Furthermore, the grain of analog printing techniques makes it, in fact, finite.

5 I will explore this notion more fully in my discussion of interactivity in Chapter 2.

6 Rodowick also quibbles with Prince's perceptual realism, insisting that film captures the temporal aspect of events, and that digital media is incapable of representing duration in the same way as photographic film.

7 The common practice of including “Behind the scenes” features on DVDs demystifies the processes of digital manipulation, while foregrounding its presence, even if the original aesthetic goal is to make the manipulation transparent. Viewers are invited to disavow and marvel in these manipulations. For more on DVD extras, see Chuck Tryon and Nicholas Rombes

8 Cf. Cartwright, Lisa. *Screening The Body: Tracing Medicines Visual Culture*. Univ Of Minnesota Press: 1995.

9 I am not arguing here that subjective narration is new. One can point to many modernist or avant-garde productions over the last century, such as Dali and Bunuel's *Un Chien Andalou* (1929) or Last Year at Marienbad (Alain Resnais 1961) as isolated examples of the phenomenon, but the films I discuss here represent a more profound shift.

10 Rotoscoping has been around for a long time, but the main difference between that practiced in the 19th and late 20th centuries and digital rotoscoping involves speed and automation. Digital rotoscoping still involves a certain amount of hand drawing, but much of it can be automated in ways. The extra features in *Waking Life* are most instructive on this point.

11 The issue of cinematic narration has long been fraught. For a cogent discussion and defense of the cinematic narrator, cf. Burgoyne, Robert (1990) The Cinematic Narrator: the Logic and Pragmatics of Impersonal Narration, *Journal of Film and Television* 17 (1), pp. 3-16.

12 Yacobi's recuperation strategies are: genetic, generic, existential, functional, perspectival. This last is where unreliable narration comes in.

13 cf. Garrett Stewart *Framed Time: Toward a Postfilmic Cinema* for a discussion of cinematic time and representation of consciousness with electronic media.

14 Indeed, the idea of true love enduring across identities, is a consistent theme in many of these films, indicating a longing for a mythical past where subjects were not fragmented and contingent.

15 cf. Conley, Tom. *Cartographic Cinema*. University of Minnesota Press, 2007 for a detailed discussion of maps and space in film.

16 On a broader level, uncertainty abounds in other areas that are also primarily or specifically digital, such as identity in social networking sites and dating services, authenticity of images in newsgroups and other public arenas, copyright law in online publications, and others.

17 Self-replicating nuisances or threats are popular in TV and film, but usually involve something organic, such as Tribbles or Gremlins.

18 Take, for example, the fear of online sexual predators, misrepresentations on dating sites, and other willful dissimulation.

Chapter 2: Video Games, Virtuality and Interactivity

The rhetorics and technologies of immersion that have accompanied technological advances in film exhibition have attempted to position the spectator as being passively absorbed into an increasingly all-encompassing spectacle. Larger screens, surround-sound audio, and 3-D presentation seek to draw the viewer in, to overwhelm and annihilate her. The classical model of the immobile viewer still holds to some extent in the cinematic context, but the rising ubiquity of interactive media, including but not limited to video games, challenges this model. As these technologies become more routine fixtures in everyday lives, the idea of moving images as simply recorded and re-presented fades as viewers recognize that digitally created images can be easily manipulated. The rise of video games and other interactive media has changed the model of moving images, pressuring many filmmakers to simulate the interactive aspects of new media and to release products in addition to theatrically released films that incorporate various levels of interactivity.

When users interact with media, they enter a virtual realm in which they must imagine themselves as virtually embodied. With interactive media, interactivity and immersivity battle and merge in virtuality. The immersive aspects of traditional cinema do not coincide seamlessly with the interactive aspects of video games and other media, so we must find new ways of imagining the cinematic spectator in a world of interactive media. This chapter will explore these issues by surveying various interactive and virtual media, including video games and virtual environments such as S*econd Life*, as well as industry attempts to create synergy between different media types.

I will show in this chapter that interactive media have influenced the production and reception of moving images in various ways, permanently changing the cinematic experience.

On one basic level, new interactive works incorporate techniques and themes from film, and films attempt to replicate the feel of video games. While many films have accompanying video games and vice versa, the effect of interactivity goes further than mere replication and adaptation. I will argue that, to a large extent, that all cinematic experience has become more apparently interactive by virtue of the presence of interactive media.

For all its popularity, the term “interactive” needs definition and clarification. Ryszard Kluszcynski defines interactive media as that which is co-created by the recipient. “'Interactive cinema' is essentially a term comprising an array of discrete varieties, which often differ radically. The mainspring of this differentiation is the invariance of the dispositive, conditioned by the abundance of interfaces and the profusion of applicable techniques.” (212) His insistence on studying the interfaces of media leads him to a definition of virtual reality that combines interactivity with immersivity and telematicity (213), and the conclusion that “virtual reality – enhanced by the textual qualities of film --- potentially becomes the most crucial continuation of cinema in the field of multimedia.” (213) He does not argue that interactive art is replacing cinema, but that cinema is “scattered in a diaspora,” and rather than obliteration, we are witnessing the “dispersion and dissolution among the plethora of the media increasingly remote from it.” (213) Kluszcynski links immersion with identification with the “internal (diegetic) point of view.” (fn5) and talks about a “dispersed authorship” where artists provide the context, but recipients create meaning through their choices. In a sense, meaning is co-created by the author and the recipient in interactive (postmodernist) art, in contrast to the fixed meaning of a complete text of (modernist) traditional cinema and art. (216-221). Ron Burnett (2007) expands the notion of interactivity to a desire for projection, drawing parallels between reading a novel and playing a videogame. For him, the process of interactivity involves, in part, a sense of

immersion that derives from a desire and ability on the part of the viewer to fill in the gaps of representation. The ability of a player to project himself into the screen is based in part on his ability to accept the artifice of the media art. At the core of the concept of interactivity is the notion of the interface. Erkki Huhtamo analyzes touch in art, looking a proxemics and "teleproxemics" of "touching art," using the body as part of the interface. These definitions rely in large part on projecting the mind and imagining a virtual body with which to interact with interactive work. In Burnett's case, the mind projects towards whatever work of art it encounters, while Huhtamo focuses on actual touch, even if it is instigated by someone/something distant or absent. In most of these cases, interactivity involves imagining a virtual space within which the participants interact.

The desire for immersive, interactive and virtual experiences is certainly not new, as Lauren Rabinovitz indicates in her discussion of "*Hale's Tours and Scenes of the World* (1904-1911), a railroad car featuring travel films from the point of view of a moving train where the image is coordinated with sensory and atmospheric effects such as motion and train whistles" (100). Rabinovitz traces the history of 3D, IMAX and newer ride films through the 20th century, suggesting that the historical trajectory of cinematic exhibition has foregrounded embodiment and other senses than the visual. "The rides initially made possible a modernist subject postion of visual omnipotence and the authority of panoptic surveillance because they registered them as bodily knowledge. Today, the spectacles of movie simulation nostalgically address their spectators as diegetic movie characters, who become for the moment unified subjects because they synthesize living inside of movies with the locatedness of living inside their own bodies." (121)[1]

Much of this theory posits an embodied spectator and focus on touch and other senses, as

well as on the media interface. The concept of the disembodied, passive spectator has been replaced with one who increasingly controls and/or experiences media in a more active and somatic register. I wish to move from installations, museums, and amusement parks, into the home, to demonstrate that these same types of interactive, embodied spectatorship take place with home-based consumer electronics, and to argue for a model of both spectatorship and authorship that includes a sense of sharing or dispersal.

The desire and ability to project identity and inhabit these virtual worlds can be seen in even the most obvious and ubiquitous forms of interactive visual media, such as the Graphical User Interface of modern computers. Many small children know how to use a mouse, double click, click-and-drag and manipulate onscreen images on a home computer. With the introduction of the GUI, the screen becomes interactive, as opposed to the formerly passive television or film screen. The experience of being able to manipulate onscreen objects, even if as simple as a rudimentary avatar or virtual folder, has become so ubiquitous that many media forms have sprung up around it.

The evolution of home display technology in the past several decades reveals a move toward the virtual manipulation of the GUI. Until the invention of the VCR, the presentation of filmed or recorded images was limited to the choice of the projectionist or television programmer. With the VCR, users could pause, rewind and fast-forward a film, and with two VCRs, basic mixing became possible. With the video camera, the average user could shoot, edit and display movies on a television screen, but, once recorded and placed on tape, the images remained more or less untouchable, and the screen passive. With the introduction of DVD, viewers have gained much more control. Chapter stops and index screens allow for easier, quicker access to desired scenes. Users can often choose between widescreen and “full screen”

modes, to watch the film as originally intended, or to stretch it to fit the screen. Some DVDs provide alternate scenes or endings, trivia games, multiple subtitles and dubbing options, and numerous types of special features revealing behind-the-scenes footage, deleted scenes, additional information about the cast and crew, and countless other features.

While the main purpose of these technologies is to replicate cinematic exhibition by giving the option of watching a film that can be considered whole, they do present some changes in the way we view film, even if we remain essentially passive on first viewing. Combine the interactivity of most digital media with the aesthetics of traditional film, and we get one of the more popular genres of moving image that both replicates and challenges film aesthetics: the video game. The popularity of video games, whether console, arcade or PC, has had a great impact on film aesthetics and spectatorship. Until recently, of moving image technology, the cinema exclusively offered photorealistic characters, settings and narratives, but with increased technological ability, video games have been able to compete with the verisimilitude and narrative structure of contemporary cinema. This has resulted in an aesthetic shift in some popular cinema to emulate the style of video games, even as games take on the codes of contemporary cinema. The relationship between video games and cinema is complex, involving multiple levels of meaning and technology, including subtle shifts in narrative and visual style in both genres, as well as crossovers, such as film/video game tie-ins and the relatively new narrative genre of Machinima.

The remediation that takes place between video games and cinema is bi-directional: video games look more like cinema and films look like video games.[2] Among the effects of this remediation are different forms of narrative technique, including repetitive and open-ended narratives. At the cinematic level, point-of-view shots, multiple camera angles of the same

action, and layered graphics (windows?) approximate the look of video games. As rendering techniques become more advanced and less expensive, video game graphics become more photorealistic, incorporating various cinematic techniques, such as letterboxing of non-interactive cut-scenes (tellingly called “cinematics”), and varying “camera” angles during game play.

Game Studies vs. Film studies

There is a growing movement to cordon off video games into a distinct field called “game studies”. Proponents of such a move argue that games are a distinct form, and deserve a distinct field. While I agree that games are unique in many aspects, it is impossible to ignore not only the similarities games have to cinema, but also the bilateral influence these have on each other. The most distinctive characteristic of video games is interactivity, and I will argue that it is an aesthetics of interactivity that drives some contemporary film style, and that this style calls for a spectator who understands interactivity as a basic condition of audiovisual entertainment. Mark J.P. Wolf observes that while video games are popular enough to merit a field of their own, film and television theory and media studies offer the best conceptual tools for approaching them. “The study of video games overlaps these fields in many theoretical areas, including those of the active spectator, suture, first-person narrative, and spatial orientation, point of view, character identification, sound and image relations, and semiotics” (Wolf)

Narrative

Narrative in video games often resembles that of film, but the introduction of interactivity changes the experience for the spectator, and opens up new possibilities for game makers. Some games follow fairly linear narratives, while others remain open-ended, subject to multiple plays. Many video games have a preset narrative that the player moves through without much or any

variation. These games typically involve reaching a particular part of the game or place in the map, which then introduces either a cut-scene, consisting of either a cinematic sequence that departs from the look of the game in favor of a more realistic style, reminiscent of the more photorealistic genres of (usually digital) animation, such as that of *Final Fantasy (Dir. Hironobu Sakaguchi and Moto Sakakibara. Columbia Pictures, 2001),* or an in-game interlude in which the player can typically move around, but is restricted to a particular place while something dramatic happens or another character talks and tells the player what to do next. The use of cut-scenes and highly developed back stories and other conventions in video games enact an interactive player who oscillates between spectator and agent. "As players, gamers expect certain things from a game: control of the onscreen images, outside stimuli that require physical reactions, interaction with surroundings. When gameplay ends and the audience is confronted with a cut-scene, it expects the same thing it expects from film: exposition, resolution of some causal lines, introduction of others" (Howells 118). In these games, the narrative is preset, and the player basically moves from narrative point to point by completing tasks, killing bad guys, finding objects, or arriving at designated spots.

Other video games are less linear, giving the player control over how events unfold. *Deus Ex*, for example, is a typical first-person shooter in many respects, except that the levels are fairly open-ended, and the player can interact with most other characters, choosing whether to follow the prescribed mission or to choose an alternate or opposing course. The ultimate outcome depends on choices made throughout the game. The game is not entirely open-ended, but has a branching narrative, which encourages replays to see how things may have gone differently. Another popular game, *Grand Theft Auto*, offers a more open-ended world where the player can simply walk or drive around beating people up or killing them and destroying things, or follow a

set of increasingly difficult goals that open up different areas of the city and different types of vehicles.

While these games have different levels of interactivity in terms of narrative, they all share some common characteristics. They all involve reaching goals in order to further the narrative, which makes the player pivotal in getting to the next narrative stage. Even in the cases where the narrative is preset, the player must do something, accomplish some task, in order to reveal the next sequence. The narrative pieces serve as breaks from the action as well as rewards for completing tasks. Like many classical Hollywood films, these games usually involve one main character, rather than groups of people, who must fight through the various stages. The player identifies with a character both narratively, through traditional plot devices, and often visually, through first person point-of-view or by closely controlling the movements of an avatar.

Players often use saved games to revert to an earlier point in case of death or failure. Sometimes there are particular areas where a saved game is allowed, while other times a player can save wherever and whenever desired. This results in replaying of particular levels multiple times, until the objective is achieved in a satisfactory manner. Oftentimes a player will perform the same functions several times in order to reach a specific point or kill a particular opponent before moving on to the next level. In video games with nonlinear narratives, saved games become pivotal in allowing the player to discover all of the narrative possibilities.[3] One of the differences between these nonlinear video games and film are that in the game “there are multiple narrative lines running concurrently, only one of which can be experienced by the player at any given time.” (Wolf)

Verisimilitude

As display technologies advance, verisimilitude in video games continues to become

stronger. This speaks to Prince's concept of perceptual realism, where objects refer to things that might exist, or could, in theory exist, and these objects look and act as much as possible like real objects, with physical properties, reflective properties, etc., and they interact with each other in ways that are perceptually real. As technology gets more advanced, gamemakers attempt more verisimilitude in graphics and motion. Many game review magazines include descriptions of difficult to replicate effects, such as reflections in water, realistic fire, warped views through glass and other seemingly small details.

In addition to verisimilar environments, many video games attempt to replicate a character's point of view. *Max Payne 2*, for example, introduces a character reminiscent of the hard-boiled detective genre, complete with witty dialogue, voiceovers, and other generic references. The game consists of cinematics in the form of comic book frames, and the gameplay is a 3rd person shooter, as the player follows and controls Max Payne, who wears a long leather coat and collects weapons as he moves through levels. The games physics are realistic, with objects bouncing off each other in predictable ways, and much of the action is consistent with the noir aesthetics, both in visual tone and in narrative content. There are, however, two effects in the game that are not as realistic, but are highly subjective. The first is the inclusion of a Bullettime-type effect.[4] The player can hit a button to slow down time as Max Payne shoots opponents before they can react. The other is the inclusion of dream sequences. At one point in the game, Max gets knocked out, and an elaborate dream sequence ensues. Instead of using cinematics and giving the player a break, the game forces the player to navigate through the dream with the game physics completely altered. The player must balance on narrow beams and jump impossible distances, using the controls in unfamiliar ways. The stakes are high, because if Max dies in the dream, he "really" dies, resulting in the failure for the player. The inclusion of

this bizarre dream state forces the player to identify with Max Payne's altered state of mind. First person shooters often include subjective camera work or effects, such as Battlefield 2, where a gas grenade causes the character's vision to get blurry and wavy, or Counterstrike, where a flash grenade in the character's vicinity causes the screen to go white for a period. The severity of the flash grenade is a direct effect of how close the character is and how directly he was looking at the flash grenade, suggesting a conflation of user and avatar, and encouraging further immersion in the diegetic world of the game.

Film/Video Game Crossovers

Video games that take as their subject matter popular films have been common for decades. Many of these allow the player to recreate key scenes in the film, using an avatar of the main character to replicate actions from the film. *Raiders of the Lost Ark* and *E.T.* come to mind as early examples on the Atari 2600, although many more abound. These early video games often imitate the movie plot or use the main character's attributes (Indiana Jones's whip, for example) to guide the player through additional adventures. Some video games, however, act as mini-spinoffs, advancing, complicating or fleshing out the plots of the movies. The many *Star Wars* video games, for example, take place concurrently with the universe set up in the movies, sometimes intersecting with film events and characters. *The Matrix* video games take characters with smaller parts and lead them through adventures, also concurrent with other action from the film. Many of the *Star Trek* video games also expand the universe, adding missions, introducing new characters, and generally expanding the franchise through a more interactive medium.

In the opposite direction, we have the adaptation of video games to film. An early example of this is the *Mortal Kombat* (Anderson 1995) film, which adapts a simple fighting game, giving the characters narratives outside of the simple, 2D, one-on-one fighting of the

video game. From *Mario Bros* and *Pac-Man* to *Tomb Raider*, many video games have been adapted to both the big screen and television. One of the most notable examples may be *Final Fantasy*. This film was remarkable in 2001 because it used digital technology to attempt lifelike human characters. This film relies on projection to make the characters seem real in the spectator's mind (Burnett 217-8). The animators create the characters in as much as photorealistic fashion as possible, and the spectator projects into the gaps between the image and what it is supposed to visualize (or pretend to represent). This film is remarkable perhaps only for its use of digital technology to represent realistic human characteristics and movements. That it is adapted from a video game makes the use of digital technology for the characters appropriate, as it adds realism while it takes away the interactivity of the video game itself. The "medium truly became the message" in this film (Burnett 219).

Another example of interplay between film and video game is the use of video games in film. *WarGames* (Badham 1983) and *Tron* (Lisberger 1982), as well as *Hackers* (Softley 1995) come to mind as early examples of the phenomenon of replicating the video game experience, often from the perspective of being inside the game. These films often posit video games that go beyond current programming and display capabilities, and often introduce first-person or other subjective devices as the character navigates the computer space.

Machinima

Video games and cinema remediate each other, borrowing codes from each other, becoming more and more alike. The implications of this remediation are that video games borrow the institutional validity of cinema while striving for a verisimilitude that matches it. As cinema remains the center of the media world in many ways, photorealistic representation is the holy grail of many animators and video game producers. Film, however, also borrows the

aesthetics of interactivity, such as first-person cinematography, as well as some narrative effects, like branching or repeating narratives. Machinima is an interesting hybrid of film and video games. Machinima artists basically use character movements in video games in order to create narratives, without having to use actual character actors or cameras, basically using several networked computers or console games, coupled with editing software as the entire production environment. Voice actors are still necessary for much machinima, but otherwise, everything is done in-game. The advantages include low cost and ease of use, and freedom from having to animate every frame, or, indeed, to animate anything besides character movements, many of which are already pre-programmed. The drawback is that the character movements are often crude, often with few or no facial expressions.

The audience for machinima is in some ways limited to those who are familiar with the genre of the video game. For example, the premise of the popular machinima feature *Red vs Blue* revolves around the objective of the game Halo, from which it was made. The main goal in Halo is to use character avatars, humanoids dressed in futuristic red or blue uniforms, to kill enemies and capture the opposing flag, a simple, usually unquestioned goal. *Red vs Blue* uses the Halo engine to create characters who are self-aware, and who begin to question the whole premise. In the game, there is not much of a storyline, and it is becomes self-evident that the whole goal is to kill and capture. Soldiers are nearly identical, with no personality, history, or underlying motives. In *Red vs Blue*, characters sit around questioning why they have a flag, what the flag means, and why they should even try to capture the other flag. They have inane conversations, develop ulterior motives, experience fear, and subplots involving ghosts and former lovers crop up. Very little of *Red vs Blue* involves actual battle, and most battle sequences are comical, as in the episode where one of the players doesn’t know how to drive the tank. A lot of the humor comes

from knowledge of the game, and a viewer without any experience or knowledge at all of the structure of Halo, or games in general, might be completely lost. Much of the lingo also draws from gaming communities, such as the famous phrase used when one of the characters kills someone from his own team, “you teamkilling fucktard,” which is self-evidently funny to a gamer, but probably completely incomprehensible to someone without such specialized knowledge.

The question of experience and knowledge is interesting because Roostertail Productions, the company responsible for *Red vs Blue*, draws on cinematic motifs, such as continuity editing and typical narrative arcs, to make the story comprehensible, while keeping it enmeshed in the game world. With most mainstream film, essential prior knowledge is generally limited, while in this case, the appeal consists, at least partially, of the in-jokes of a special subgenre of moving images. This type of “film” might be considered a microgenre, where the cost of production is so low that the creators can afford to aim at a very specialized audience, as opposed to big-budget film, where the ideal audience is a broad as possible.

Strangerhood, also by Roostertail Productions, appeals to a slightly more general audience, as it uses the game engine of *The Sims*, a popular video game where players control characters as they go through daily routines. In *The Sims*, there are no preset objectives. Players create characters and guide them through life, teaching them how to cook and go to the bathroom, helping them get jobs and support themselves, interact with others, date, and so on. The world of the Sims is open-ended and the possibilities are immense. *Strangerhood* plays with the premise by introducing characters who are basically amnesiac, and who must figure out where and who they are, and how to interact with each other. The major difference is that they are presented as actual characters with pre-existing personalities, not as video game characters

being controlled by players. *Strangerhood* basically starts from the premise of *The Sims*, but presents the point of view of the characters themselves, positing them as sentient beings. The narrative then takes off into a X-Files-style conspiracy theory, where the characters must solve a mystery, which results in rather humorous dialogue and consequences. Like RVB, *Strangerhood* takes the premise of the video game from which it is derived and plays with it, but unlike with RVB, a typical viewer who has no knowledge of or experience with the original video game can understand and enjoy *Strangerhood*. The other major difference is that the characters in *Strangerhood* can emote differently, as the engine of *The Sims* incorporates many actions and facial expressions that Machinima creators can exploit, as opposed to RVB, where the characters wear masks and move in limited ways related mainly to combat.[5]

The implications of Machinima for cinema include the ease of use and low cost of creating animated films. The low barrier to entry is democratizing in creating animated narratives, even if the animation is prepackaged and often crude. The editing software needed is often included on a typical home PC or available fairly cheaply, and the games themselves are also easily available and manipulable. The aesthetics of these products is entirely that of the games from which they borrow, so they rely on narrative instead of visual splendor. These films, often take place within the game world and rely on tropes taken from the games themselves. The emphasis is on character, narrative and dialogue, as the visual choices are often limited. The game is repurposed to create a different narrative, and sometimes the movements of the characters are also repurposed. For example the motion of having to go to the bathroom in *The Sims* becomes a gesture of impatience in *Strangerhood*. This repurposing can be a source of enjoyment for the viewer who is familiar with the original, but it is not necessary to understand the narrative.

Video Games and the Aesthetics of Repetition

One of the dominant characteristics of video games is that the player repeats action to gain mastery. If she fails at a task or dies she can go back to a save point and try again. Films based on new media logic beg for replays in a similar way, in the form of reviewing the film for mastery of the details. Where the film viewer seems less active than the video game player, a similar activity is taking place. The narratives of video games are far less involved, and mastery relies on actions performed. In film, mastery of detail, recognizing codes is of ultimate importance, and this often takes multiple viewings. The proliferation of multidisc DVD sets and special features invites repeat viewings that, like video games, differ from the first viewing. The audio commentary of a DVD might invite not only repeated viewings, but alternate readings of the film (Lowenstein). Video games are generally designed so that players will fail at first, and the desire for mastery combined with the goal of finishing the game impels players to repeat levels to move on.

Virtual Spectatorship, Spectacle and Realism

The differences between film viewing and game playing are many. Sue Morris outlines some of the differences between the film apparatus and that of first-person shooters in terms of technical aspects (screen distance, light projection, image quality, and sound), conditions of viewing (place, proximity to others, view, social context, etc.) and mental machinery of spectatorship (primary and secondary identification, absorption, sense of responsibility for on-screen action, and mechanism of engagement). She finds that as compared to film and television, computer game players are more involved, closer to the screen, more focused, and generally more enveloped in the text. She contrasts the dream-like state of the film viewer as postulated by psychoanalytic film theory with the much more psychologically active game player: “unlike

Baudry's spectator/dreamer, the game-player has a very high degree of control over the on-screen events – this is essential to the game, and antithetical to the dream" (89). As far as characterization, she distinguishes between single-player first person shooters, where "the player is required to adopt some degree of characterization and address as the text's protagonist," and multiplayer, where "direct characterization is absent" (93). Participants in mgamesMultiplayer players take on the identities they assume in the game to a much greater degree. While this study is limited to first-person shooters, the characteristics of identification and subjectivity she describes are fairly wide reaching in interactive digital media. The differences between gameplay and film viewing, however, become a little less clear when one introduces the idea of DVD viewing on a home television or playing a console game, again on the television. The proximity to the screen, for example, that Morris delineates (far in the cinema, medium/close for television, and very close for computer games) becomes identical with console games and DVD viewing.

The imaginary persona of the FPS is more powerful as the player can more closely identify with motions, actions, but the player avatar in World of Warcraft, Second Life. or Sim City is similar to the character in film. Animation, perfect Hollywood bodies and graphic novel aesthetics all participate in the same phenomenon – that of creating an avatar, a layer on top of reality that a spectator can observe, decode and finally identify with. In this sense, film characters are as malleable as video game characters. The avatar, as visual representation of virtual self, is changeable, manipulable, like all images in the digital age. It presents an extension of the self in the game world that the game player and others can see. The avatar may or may not represent the actual player visually or narratively, a function that is partially under the user's control. For example, a user can change gender or personality through creative uses of the avatar and actions performed in the game. Of course, avatars are customizable to differing degrees in

different games or environments. In some cases, the game persona is unsatisfying, which is why game adaptations of movies sometimes succeed better than the reverse.

> Game adaptations of films…usually have richer characters and more elaborate narratives to draw on, especially in works such as *Blade Runner* and *Star Wars* that inaugurated paradigmatic shifts in visual culture, which can be enhanced by kinetic action and new modes of identification. Even if on-screen representations of characters prove disappointing, particularly when computer-generated or second-rate stand-ins for the original stars, players can bring memories of the original actors and back-stories to the game and put them into play, as kids do with action figures. (Kinder 119)

In the case of film characters, the avatars represent not the person playing, but a recreation of the character, which the user controls. The process of identification in this case borrows from that of film in general, and the particular film in the case of adaptations. In games where the user makes her own avatar, such as World of Warcraft or Second Life[6], self-expression becomes more heavily emphasized, as the user spends more time customizing the character's physical traits, and the avatar then becomes a more personal extension, even in cases of exaggeration, misrepresentation, or role playing. Rather than identifying with a readymade character, the user identifies with a self-created, and therefore more personal, avatar.

As described in the first chapter, the loss of indexicality results in a spectator who is encouraged or empowered to oscillate between looking at and through cinematic codes that usually remain transparent, such as continuity editing or invisible digital editing. Video game play does the same thing with the constant oscillation between realism and spectacle, between game play aesthetics and cinematics. Andrew Darley draws a connection between the two: "Only now, the illusion is not just the impossible photography of digital cinema (*just as though* it had been photographically recorded), but rather of producing an experience that is *as if* one were actually taking part." (31) He also draws a parallel between video game and cinematic space:

"The semblance of realistic spatial orientation is maintained from the cinema aesthetic, but at the same time it is heightened both by the capacity of the computer to model three-dimensional space and by the control one is given to determine where one goes and what one does." (159) While he then goes on to specify the limited nature of interaction in video games, as only certain actions are allowed at certain times, his analogy to the movie camera draws a pertinent connection to the aesthetics of first-person subjectivity in video games and spatial orientation in the cinema.

With video games as with film, spectacle and realism oscillate, drawing the spectator's attention alternately to the content and the context or design. The sense of awe at the graphics or special effects reaffirms the importance and specialness of the respective medium before throwing the viewer back into the more traditional narrative structure. Geoff King also acknowledges that both film and video games rely on spectacle, but as interactivity interrupts realist narrative, and video games incorporate a high degree of repetition, video games rely more on spectacle than do films (53). The goal of the video game, then, is not primarily to present a realistic narrative, but to keep the player in awe, which serves to deemphasize narrative but entices the player to marvel at the technology itself. This oscillation between spectacle and realism, between awareness of the visual product and the technology that creates it, makes the experience of a digital product alternately transparent and opaque, as the viewer cannot help but be aware, even if only at times, of the technology used to create the ultimate effect onscreen:

> The movement from the analogue to the digital is about the transformation of one type of information to another. The process also anticipates the cultural move from the real to the virtual. The analogue era felt comfortable with representation, with the ability to relate the real to markers and signs that humans could translate from one experience to the next. The virtual era will have few of those concerns because so many of the images that will be created will be the products of human interaction with complex digital

> devices. (Burnett 72)
>
> The interactive image is currently less realistic than its photographic counterpart, but the gap is narrowing, and the distinction hardly makes a difference anymore, when even verisimilar images are often products of digital manipulation or creation.

Interactivity, however, is not limited to media in which the player actively manipulates images. All acts of spectatorship are interactive to some extent. “Interactive practices in the digital age are generally described as a function of what can be done *to* images. Interaction is also talked about as if it were a new process. Rather, interaction is fundamental to the creation of audiences.” (Burnett 90) Interactivity is about how the spectator changes the act of spectatorship, the relation between himself and the image. Video games, then, do not introduce interactivity, but model or simulate it. Interaction in video games manifests the negotiation of meaning that already takes place in film spectatorship, in the creation of meaning from recorded/created image to spectator. The traditional computer game is a stopping point between film and immersive virtual reality, the difference being scale and level of interaction between user and environment. As theater screens get bigger and more immersive and speakers proliferate through auditoriums to present a sensory experience of being surrounded, Hollywood films get as close to realizing VR as video games. The FPS is the position of the spectator in the digital age – a virtual representation of an engaged, involved quasi-participant. The spectator is alternately embodied and virtually projected.

The goal of VR is to create an environment that is as lifelike as possible. The desire for virtual reality is paradoxical in that the more removed from reality, the more advanced the technology, the more like real life it becomes. The move from indexical reproduction and digital

creation accompanies a desire for more complete immersion, total creation and control of the images we share. We demand that our images become more real, more lifelike, more substantial even than those of the photographic reproductions they replace. The main difference between film and other media is the promise of manipulation of images, from computer screens to VR, but truly photorealistic images are currently too complex to be controlled on any convincing level.

Films that borrow game conventions

Video games do not have a monopoly on spectacle. Andrew Darley convincingly argues that mainstream Hollywood film has moved toward an aesthetics of spectacle. Perhaps the influence of video games has helped effect this change, as Hollywood tries to keep up with a generation of spectators accustomed to quick change and awe-inspiring computer-generated spectacle. Many films, both mainstream and independent, take on video game aesthetics, both directly and indirectly.

Run Lola Run stands out as a popular film that incorporates many aspects of gaming, including the replication of first-person effects through point-of-view shots, the motif of repetition, cut-scenes whenever a character dies, the element of chance, and the oscillation between narrative and spectacle. The main character has special powers that she can apparently only use occasionally. Lola's red hair and green pants recall a video game character, and the animation between repetitions, although probably hand drawn, approximates the digitally manufactured images of a video game. Margit Grieb argues that this is not a case of simple borrowing or imitation, but that "the film reflects critically upon its own medium and attempts to relax the narrative and visual conventions of dominant cinema practices." (158) Grieb focuses on the fact that film is by nature passive and *Run Lola Run* must be content with imitating the

experience, but that video games are largely also limited by programming choices: “A game is an environment that must be navigated to some extent in the way that the creators imagined it. Only paths that are given can be explored, only items that are programmed to be there can be found, and all entities with which one interacts have previously been added to specific places and situations. The fun lies not in *creating* a narrative in a literary sense, but in *uncovering* a story through actions” (166). That said, “no game ever unfolds the same way twice” because of player interaction (166). *Run Lola Run* adheres to this by using three different narratives with different outcomes, while only Lola seems to transcend the experiences, by learning from previous attempts, such as when she does not know how to disengage the safety of a gun in the first try, but does so effortlessly in the second. Tykwer, according to Grieb, includes this narrative twist as well as other formal techniques to interrupt the narrative and keep the film in a kinetic, hypermediated state, reminding the viewer of the limitations of conventional cinema and the need to “adopt a modified style to satisfy this expanding media sensibility of viewers” (164-5).

Ultimately, spectatorship in the digital age creates a spectator with an illusion of control. Video games often involve a limited number of options, DVDs include alternate scenes and many other features, but the film itself remains the main artifact, with everything else being simply extra. Films that replicate the first-person experience and mimic the schizophrenic nature of spectatorship often put it all back together in the end. Spectatorship is still passive, with the fantasy of control. (Until we get ad-blocker for product placements, this will remain the ideal situation for corporations and the film industry).

Intermediation

Adam Loewenstien locates the text as suspended between the novel, the theatrically released film, and the DVD with all its extras and commentaries. By rethinking Bazin and

Barthes to reintroduce surrealism into the definition of cinematic realism, he positions digital media as participating in a type of surrealism that implicates the spectator in making meaning. By employing Barthes's terms "readerly" and "writerly" he differentiates the different aspects of the DVD artifact.

Lowenstein, with the help of Dudley Andrew's research on Bazin's unpublished work, reads Bazin's "Ontology of the Moving Image" as a response to Sartre's reflections on imagination and perception. By focusing on Bazin's affinity for surrealist texts, he aligns him with Breton's notions of enlargement. He also traces Barthes's thought to some of the same impulses, and uses his notion of "third meaning"," or "the filmic" to talk about Atom Egoyan's *The Sweet Hereafter* as an intermediated text, suspended between the novel, the theatrically released film, and the DVD with all its extras and commentaries. He suggests that the audio commentaries and chapter selections of the DVD allow the text to oscillate between, in Bazin's terms, the readerly and writerly, sometimes asserting the author's intent, while at other times letting the viewer participate in constructing the meaning of the film.

One useful approach to studying the interplay of interactive media and film come from Bolter and Grusin's concept of "remediation," where new media borrow from and adapt older media, and vice versa. Viewed through the lens of remediation, the adoption in film of video game techniques, such as simulated interactivity and repetitive narrative are ways in which the older media can look and feel like the newer. Remediation also involves a rapid oscillation between immediate and hypermediate modes, where the modes of communication are alternately visible and hidden, a condition I notice in DVD technology as well as digital special effects. N. Katherine Hayles introduces the concept of "intermediation" into media studies in order to go beyond the specific "locality and medium" proposed by Bolter and Grusin, "in order to expand

its denotations to include interactions between systems of representations, particularly language and code, as well as interactions between modes of representation, particularly analog and digital" (33). The concept of intermediation may be useful in exploring texts that exist across media, such as *The Sweet Hereafter*, as well as *The Matrix* and other texts mentioned here, as media objects that exist not in one(a particular film, DVD, game, etc.) artifact but across representations. The implications of looking at media in this way include decentralizing film as a dominant medium and emphasizing the interplay between media forms. Media specificity becomes diffuse, as each type of media has strengths and weaknesses, but media objects are able to persist through them.

Examining *Lara Croft: Tomb Raider* as a primary example of a video game that became a movie and spawned many different marketing and press connections, from mobile phone sponsorships to soundtracks to websites, P. David Marshall argues that "the player is moved by electronic games beyond filmic narrative identification into a hybrid state of 'game play' subjectivity" (73). He argues that the multimedia text is an intertext that exists somewhere between these hypercommodified extensions of a brand. As intertextual commodities become more popular, he argues:

> The audience is not defined by narrative relationships of pleasure and mastery of the text, but a form of interactivity with cultural forms. Narrative is part of this new mix, but not as central as it has been in the golden eras of television and film. In ascendancy is a new subjectivity that is derived from the transformative agency of games and the playful development of the Web 'user.' (80)

The audience for the intertextual commodity revels in play and interactivity, not only of the text itself, but in the interplay between different media representations of a decreasingly central text or narrative.

Film spectatorship is now influenced by more interactive modes of presentation

technologies, most notably video games, but also interactive DVDs. The presence of metatexts such as director's commentary gives the viewer new tools with which to interpret a given film, either by accepting or rejecting the interpretations of the director. The expectations of director's commentary also allows directors to retain interpretive control over the product even after theatrical release. Deleted or extended scenes have become so *de rigueur* that consumers expect them, and directors often shoot scenes with the expectation that they will end up on the DVD instead of the completed theatrical release of the film. Cinemagoing is still an event unto itself and will not disappear soon, but home viewing technology creates a consumer that will both see the film theatrically and, if the film is good or interesting enough, will buy the DVD both for repeat viewing and for the extras. While most DVD extras fall short of allowing the viewer to navigate space in real time, as video games do, the impulse to control or to explore is similar, and many DVD extras give the consumer this illusion while maintaining the integrity of the original theatrical release.

DVD extras, video game spinoffs, and other interactive media do not make film interactive in the sense of giving the viewer power to change the narrative. The narrative remains essentially unchanged, with small variations in meta and paratexts. As Elsaesser, Darley and others argue, current games and films fall short of true narrative interactivity, as the player can choose only among a limited set of actions. Everything is still prescribed for the player. Even if narrative interactivity is a myth, or is a partial experience, not fully living up to the hype, there still exists the expectation of being able to manipulate virtual objects in space in time, an experience that traditional film does not allow.[7] When one speaks of a film, one generally means the original theatrical release, or in some cases, the director's cut or uncut/unrated version. When speaking of deleted scenes, director's commentary or other extras, these are usually referred to as

just that --extra. The mode of interactivity comes not so much on the level of narrative as on that of meaning. The viewer has at her fingertips the means to multiply interpretive acts via metatexts that are built into the product itself.

In some respects, I don't think cinemagoers want the interactive experience. The idea of passively watching others enact fantasies is powerful, and cinema acts as an escape from having to do things oneself. Even most video games give only an illusion of complete control, as the player can enact only certain actions at certain times (Darley). There is some comfort in knowing the rules, and acting within them. *Second Life* may be an exception to that, as it presents a rather open world, where many things are possible, where there are no explicit goals or conflicts. Users can simply be virtual flâneurs, strolling about the world watching others, interacting from time to time, creating or using objects as they please. In *Second Life*, users create avatars to interact in a virtual world. The avatars become a virtual identity with which to interact with others, an idealized self, perhaps. The openness of the world, the range of possibility, far outstrips that of conventional games, which is part of the appeal and perhaps part of how daunting the world is for some users. Between the goal-oriented video game and the more passive cinema event, *Second Life* is an entirely digital world, as close to complete virtuality as it comes right now. But it is not that much different from real life, or first life, where we interact with digital artifacts all the time, at the grocery store, in airports, on our phones. *Second Life* makes sense as a logical step to a less embodied communication. I wonder if people will enter spaces like *Second Life* in order to go to a virtual cinema to watch movies with a virtual audience. One could look around and see other avatars staring at the screen, maybe nudge somebody or chat about the movie in progress. In the spirit of DVD viewership, perhaps players could control the movie presentation, pausing, watching extra features, or indulging in alternate endings.

With the media described above, spectators have learned to be more interactive and more explicitly virtual. The apparatus may still produce a dreamlike state, but it is more like a lucid dream, where the spectator has an illusion of control. While cinema still holds a strong cultural value, it shares some of its attention with other media forms, many of which production companies exploit to create a more distributed, intermediated text. The usual strategy is to allow one part of the text to stand in for the rest, and this part is almost always the feature-length film. One can understand *Lara Croft: Tomb Raider*, for example, as a film without ever having played or seen the game. The same can probably be said about the game, although the cultural implications of having Angelina Jolie play the lead in the film probably intrude on the experience. Likewise, one can fully appreciate *The Matrix* as a film franchise without playing the games or watching the *Animatrix* films, but these latter enhance and extend the narrative and aesthetic universe of the films. Playing the games and watching the animated films without ever seeing the films is certainly possible, but I suspect something would be missed without the central organizing narrative of the films (or at least the first film).

The camera acts as a virtual body, virtual eyes for the spectator. Video games take this a step further and add an illusion of agency, but the basic function is similar. With the loss of the index, moving images are no longer necessarily evidentiary, so all images are in some sense virtual. As new technologies further the cause of complete virtual reality, cinema may attempt to compete by imagining more dystopic virtual spaces and moving toward more immersive technologies, such as larger screens and better, more immersive sound. Indeed, one could read *The Matrix* as a reaction against more interactive forms of media. The protagonists are stuck in a complete simulation by machines bent on feeding on their bodies. The world of the matrix resembles virtual reality in that it is completely immersive, and users interact with each other and

the environment based on established rules, although the inhabitants are not aware that the rules have been generated by all controlling machines. The machines themselves seem motiveless, except that they want to control humans in what seems to be a race for resources. As far as anyone can tell, they control because they can. The film becomes, in this sense, a warning against immersive technology and virtual reality that seems too real, lest we forget that it is virtual. As immersed as game players and film viewers become in their respective media, they want to remember that there is still an outside, and that the media are just portals into imaginary worlds. The fear of complete immersion and loss of control and the desire for identification and agency compete in our imagination of the virtual.

ENDNOTES

[1] Rabinovitz also posits these technologies as responding to the "threat" of digital imagery "to undermine the subject's ability to *determine* whether or not an image has a real world referent – whether it is a truthful or faithful image" (121)

2 J. David Bolter and Richard Grusin define "remediation" as a mutual borrowing of aesthetic devices across newer and older media. Bolter, J. David and Richard A Grusin. Remediation : Understanding New Media. Cambridge, Mass.: MIT Press, 1999.

3 DVD viewing also invites repetition, with different commentaries and extra features.

4 Bullettime is the trademarked effect of slow motion used first by the Wachowski brothers in *The Matrix*.

5 Interestingly, the creators of Halo incorporated a feature in a newer version of the software that allows the player to holster the weapon, a move that can only be justified by a desire to make Machinima easier, as there is no reason in game to put down a weapon, but in Machinima it makes movement and verisimilitude easier.

6 Whether or not Second Life is a game still needs to be decided

7 The film *Clue* may serve as a example to narrative interactivity, where several endings were filmed, and viewers/players would choose one based on gameplay. In some ways this also mirrors the practice of test audiences, who determine the ending, pacing and other elements of many feature films.

Chapter 3: Distracted Attention and Networked Media

While cinema remains a cultural dominant for displaying moving images, its hegemony has eroded since the invention of the VCR, and, later, DVDs. With more media existing on hard drives and servers, and accessible via networks, the ways in which moving images can move into homes, workplaces, public spaces, and even movie theaters has drastically changed. Couple this mobility of media with the increasing popularity of small devices, and we find an increased mobility of spectators as well. Networked media currently hold a similar position that cinema did in the early twentieth century, as a marginal yet increasingly ubiquitous form of entertainment and communication. An examination of some early writing on film and culture will yield some relevant insights into this developing medium. The writings of Siegfried Kracauer during the Weimar period are of particular interest to this study, in part because, as Patrice Petro suggests, he wrote about the cinema as an institution when it was still marginal, as networked media are now (135). It is in these early writings that he describes the multivalent function of distraction in modern life, which offers a suitable theoretical model for discourses and practices of media distribution today. I will also examine Walter Benjamin insofar as he elaborates on Kracauer and offers further reflection on the phenomenon of networked media.

Movement

The increasing urbanity and denser populations of cities present unique challenges for theorists of modernity such as Kracauer and Benjamin, for whom movement and mobility are important tropes. Miriam Hansen notes Kracauer's writing on "wanderings" through urban streets and squares (as in his 'Memory of a Paris Street)" as well as his shift from third to first person (73). Elsaessar (1987) also stresses the importance of travel in Kracauer's work: "the history and victory of capital, making time and space variables of money and labor in the form of

rationalization, to which correspond the increasingly available apparatuses of mechanical reproduction." (76) The preoccupation with mobility is particularly apparent in Benjamin's *Arcades Project*, in the formulation of the flaneur as the symbol of a modern subjectivity, a figure invoked by later film theorists as a model for spectatorship.[1]

One might locate in Benjamin and Kracauer the locus of distraction precisely in the ability to move about a city full of strangers. The shock of cinema is analogous to traveling through a city with cars and trains, billboards and marquees. Kracauer examines the spaces of modernity and how they help construct the subjective experience of its inhabitants. The cinematic experience is one of these spaces. The sense of choice in mobility affects the spectator's experience.

Distraction

Kracauer and Benjamin pose similar theories about the mental apparatus necessary to cope with emerging modernity and urbanity, and both see the cinema as providing potential for liberation, or at least as a model for that new type of apperception. For both, distraction is an important component. Distraction is the state of mind needed to navigate the modern world of masses, cities, and film, and to expose the reality of the fragmented social situation of the capitalist system.

In "The Cult of Distraction," Kracauer argues that the overwhelming architecture of movie palaces and the introduction of programs of live entertainment in conjunction with film create a bourgeois illusion of wholeness and unity that deprives film of its productive potential, its two-dimensionality, its fragmentation, its ability to reflect to the audience members their true state. Film itself, he says, acts as distraction that has revolutionary potential: "Here, in pure externality, the audience encounters itself; its own reality is revealed in the sequence of splendid

sense impressions. Were this reality to remain hidden from the viewers, they could neither attack nor change it; its disclosure in distraction is therefore of *moral* significance." (326) In fact, Kracauer hails distraction as the condition that will reveal to audiences the state of disintegration, which will in turn "enable them to evoke and maintain the tension that must precede the inevitable and radical change" (327) According to Kracauer, movie theaters instead attempt to follow a "thespian objective" of presenting film as an organic whole, which Kracauer calls a "*reactionary* tendency" (327) that masks reality and upholds the prevailing order. "Distraction – which is meaningful only as improvisation, as a reflection of the controlled anarchy of our world – is festooned with drapery and forced into a unity that no longer exists" (327-8).

Heidi Schlüppmann summarizes Kracauer's take on distraction well:

> Every attempt to resurrect traditional artistic practices in the cinema must be considered reactionary. The moral task of the medium is no longer the symbolization of the ethical, but rather the mirroring of the enslaved, damaged quality of life. Illusion has aesthetic significance not as the veil of truth but in the uncovering of a reality which lacks any true coherence. Distraction goes beyond the mere cultivation of superficial glamor; it presents what is incoherent and chaotic as such to the eyes and ears of the audience. Instead of conveying humane ideas, distraction sharpens the senses for an antagonistic reality. (102)

For Kracauer, modern society was fragmented and chaotic and film was uniquely positioned to show this, and "the fact that these shows convey precisely and openly to thousands of eyes and ears the *disorder* of society – this is precisely what would enable them to evoke and maintain the tensions that must precede the inevitable and radical change." (327, italics in original) Further emphasizing the symptomatic aspect of distraction in film, Ben Highmore summarizes Kracauer's take on distraction as "a symptom of an alienated and modern form of life, where tradition is continually blasted by modernity" (70). Later, he posits: "But cinema also allows for a new form of seeing that might be characterized as distracted; this form of attention (or non-attention) not only is appropriate to the modern everyday but might also provide for potentially

critical articulations of it" (70). For Kracauer, it is the experience of going to the movies itself that holds the power of radical transformation, so long as films are allowed to reveal the distracted state of society, without being forced into a false coherent unity.

Kracauer's focus in the early writings is often not the text of a particular film, but its interface, the edifices and spectacles surrounding and mediating it.[2] Particularly in "The Cult of Distraction" Kracauer does not address the content of films, but the way in which they are presented, the interface. Schlüpmann notes:

> What Kracauer finds really significant and worthy of interrogation is not the immediate experience of film, but rather the visit to the movie theaters considered as a highly mediated activity, as a form of waiting. As a writer Kracauer was not concerned with the status of distraction as an amusement and could thus avoid having to either enthusiastically celebrate this pleasure or to critically condemn it. Rather, faced with the crisis of meaning and the social suffering which was intensifying to the point of destruction, he considered the active passivity of the cinema spectator to be the appropriate exertion of the aesthetic capacity. (108)

The distracted mode of attention or "active passivity" is engendered by the cinematic experience itself, not necessarily by the content of the film. The simple act of going to the movies exposes the spectator to the aesthetics of distraction. The experience consists of more than sitting in a theater watching a film, but includes getting to and entering the theater, navigating the architecture and mise-en-scène, so to speak, and sitting through the other parts of the program in addition to the screening. These factors make up what I call here the interface of a theatrical screening, the mediating factors between the screening and the spectator.

> Elsaesser also notes the emphasis of exhibition in Kracauer, and its relation to distraction: The mode of perception and attention appropriate to modernity would thus be present in an exemplary form in the cinema, where technology and the conditions of production permeate the content and penetrate the representational material even prior to any ideological construction of narrative and the image (82)

As others have noted, Walter Benjamin shares Kracauer's concern with distraction, as well as an emphasis on the cinematic interface.[3] Elsaesser points out that, for both early

Kracauer and Benjamin, the “exhibition value” of film is its primary attribute, and is subject to manipulation:

> Kracauer and Benjamin were interested in the cinema insofar as the priority of 'exhibition value' was the condition of its existence, its raison d'etre. […] For Kracauer, as for other thinkers, the question was essentially whether distraction and the mass ornament would establish themselves as the 'norm' of popular entertainment and spectacle, and thus retain a measure of symptomatic historical truth-value, or whether its power of disjuncture, surface effect, immediacy and pure presence would, on the contrary, be harnessed and organized into an illusion of coherence, taken in charge by 'art,' and turned into an instrument of ideo-logical manipulation. (83-4)

For Benjamin, though, distraction is not simply a mirror for the disordered state of society. The shock effect of film also trains the spectator to view the world differently. He contrasts a distracted mode of attention to more sustained concentration; “In the decline of middle-class society, contemplation became a school for asocial behavior; it was countered by distraction as a variant of social conduct” (238). The shock effect of film, he says, must “be cushioned by heightened presence of mind” (238). Distraction is a way to mediate the shock of film: “Reception in a state of distraction, which is increasing noticeably in all fields of art and is symptomatic of profound changes in apperception, finds in the film its true means of exercise. The film with its shock effect meets this mode of reception halfway.” (240) Film and distracted attention seem mutually constructed: new forms of perception are necessary for understanding film, but film “meets this mode of reception halfway.” Benjamin suggests that distraction is a mode of perception engendered by various aspects of modernity, and film is an appropriate way of engaging it.

Benjamin and Kracauer both identify distraction as a state of mind consistent with and symptomatic of modernity, and one that film is uniquely suited to engage. For Kracauer the cinematic has the power of revelation, to alert spectators to their conditions of distraction and

fragmentation. For Benjamin, the shock effect of film perfectly represents and meets distraction halfway. For Benjamin, film has the greatest potential to exploit its shock effect in montage and avant-garde aesthetics, which engage distracted spectators and work toward resistance.[4]

When Kracauer and Benjamin suggest that the cult of distraction represents a fragmentation and loss of individuality that are part of the expression of capitalism in early twentieth century, they are referring to a world before the instantaneous global transfer of funds and media, before networked communication and satellite transmissions of television shows. This fragmentation has increased and accelerated. One of the main characteristics of postmodernism is fragmentation, and one could argue that the emphases on performativity, the local, and the contingent so popular in postmodern/poststructuralist texts are the apotheosis of the fragmentation that Kracauer and Benjamin noticed.[5]

If distraction was the mode of perception necessary to navigate film theaters and view film programs, the online networked media environment prevalent in the beginning of this century must demand/reflect a much deeper, faster sense of distraction, a hyper distraction. As editing gets faster and media often get shorter, the ability to switch from one activity or media object to another is paramount, for with networked media, the interface never disappears.[6] Indeed, the interface and the content become almost inseparable, and demand a perpetual switching of attention. A close look at a typical YouTube page illustrates this point.[7] The typical Youtube page has a video window on the left side, about halfway down the page. It takes up maybe 30% of the screen. On top of the page is the YouTube logo along with navigations links. Under that are more navigation tabs and a search bar, followed by the title of the video. Next to the video on the right is a box with the profile of the user who uploaded the video, a short synopsis of the video, and options to link or embed the page. Under that is a small banner

inviting users to share the video as an e-card, and under that is a box with recommendations for other videos. Under the video itself are options to “Share,” “Favorite,” “Add to Playlists” or “Flag,” followed by rating options and number of views, and then other users currently watching, and finally, at the bottom, comments on the video. Sometimes the video window itself will contain advertising overlays, and when the video has ended, links to other videos pop up in the video window itself, inviting the user to continue watching videos on the site. The main focus of attention, the video itself, takes up only a portion of the page, which is filled mainly with meta-information and tools that invite the user to surf elsewhere on the site.

This collage-like layout reinforces the status of the video as one product in a network of users and other videos. The imagined community of the YouTube page includes the user who posted the video, others currently watching, and those who chose to comment, as well as the aggregate rating. The video itself is linked to other videos, likely based on keywords, user statistics and other common characteristics, creating loose associations between videos and setting up a sense of flow from video to video. These associations are not chosen by the video posters, but instead are the product of algorithms implemented by the site designers.[8]

This shows that, in the 21st century, networked media reveal and demand a distracted attention to a much greater extent than in the early days of cinema. In the intervening period, mainstream film has attempted to take on the status of art, and directors often aim for coherent, unified works that hide distraction. The level of distracted attention needed to surf YouTube videos, to find reviews of films, to watch and interact with the increasing amount of moving images and text becomes overwhelming. Distraction in this case is not only a reflection of the dominant perceptual apparatus of networked media, but also a necessary attribute for navigating the interface. If the rapid, densely populated, diasporic interface of media on the internet meets a

mode of perception halfway, as Benjamin claimed of film and distracted attention, that mode of perception might be called hyper-distracted.

The Mass Ornament and Networked Media

In "The Mass Ornament," Kracauer describes an elaborately choreographed floor show in which the individuals become nearly invisible in relation to the larger production. The production is significant for him because it reveals the state of human relations under capitalism, where individuals are instruments in a larger system, much like the factory assembly line. It is not only in "The Mass Ornament" that Kracauer notices the subsuming of individuality into a group. The ornament is not visible to its participants, but only to outside observers, the masses, who are themselves organized in a similar fashion, "arranged by the stands in tier upon ordered tier" (76).The ornament exists only to be understood by outside observers, the spectators, and the individuals who make it up lack individual identity and agency in it: "Although the masses give rise to the ornament, they are not involved in thinking it through…[N]obody would notice the figure at all if the crowd of spectators, who have an aesthetic relation to the ornament and do not represent anyone, were not sitting in front of it" (77).[9] The mass ornament is "the rational and empty form of the cult, devoid of any explicit meaning…a relapse into mythology…" (84)[10] In "The Group as Bearer of Ideas," Kracauer examines the role of the individual in a group and how ideas take over individuality. In this Kracauer saw "not only the collective form of reception, but a fundamentally different manner of self-representation and identity" (Elsaesser 78). The self-representation revolves around the pleasurable understanding of self as visual spectacle, as represented by the mass ornament, or inclusion in a group.

For Kracauer, the distinction between public and critic collapses. According to Miriam Hansen, "If, in practice, the consumers are largely complicit, the boundaries between them and

the critical intellectual are not fundamental but gliding and relative." (75) She goes on to say that Kracauer saw modernity as "an already disintegrating, yet still incomplete project – a project that, for Kracauer at least, necessarily entailed the democratization of culture." (76) With the conflation of the public with the intellectual, the masses would engage in what Linda Hutcheon would later call "complicit critique." (1988) For Kracauer this would lead to a mass action, once these critics saw their conditions mirrored in the cinema and other popular culture. The complicit critic would engage in an "active passivity" that would allow a critical stance (Schlüpmann 108).

Networked databases work in a similar way to the original ornament Kracauer describes. "Community and personality perish when what is demanded is calculability; it is only as a tiny piece of the mass that the individual can clamber up charts and can service machines without any friction" (Kracauer 78). Users may not be literally clambering and servicing, but they are being subsumed, en masse, into a consumer culture that turns them into transcodable, calculable data points. The mass ornament of early modernity obtains in an abstract way on the internet, as individuals are subsumed into an anonymous mass, visible from the outside as statistics.

One example of this networked ornament is aggregate film review sites. While mainstream print reviews remain popular and even more accessible with newspapers including more content online, nonprofessional review sites flourish, ranging from the edgy Rotten Tomatoes to epinions.com, where users can get paid for traffic generated by their reviews. Yahoo! Movies has a feature that aggregates the ratings given both by critics and users, synthesizing them into a letter grade. Netflix has a feature that allows users to share mini-reviews with friends, and suggests movies based on ratings you've given to films you have seen. A company called Flixter has created an application for the popular social networking website

Facebook that allows users to rate movies and compare their tastes with that of their friends. Traditional word of mouth has extended beyond professional reviewers in print and on TV, beyond casual conversations between friends, to a more formalized, ubiquitous and easier to manage and measure form of communication. [11]

The blending of the public and the intellectual and the passive and active spectator comes to function in many forms with networked media. The critic and the public merge in many ways, in the form of the fan, the casual critic, the blogger. The connectivity of new media objects, of networks, resembles the mass ornament in its ability to subsume the individual into a mass, to be enjoyed not for visual pleasures this time, but for the usefulness of the aggregate. In both cases, the assembly into a larger group brings pleasure and allows the spectator to be involved, to participate, "confirming the spectators' own existence" (Elsaesser 79). The mass ornament mirrors the conditions of capitalism to the viewer.

The active spectator Kracauer looks for takes form in new media in the space between user and viewer, in the fan, the prosumer, the viewser.[12] Film theory after Kracauer posits a stationary, largely passive spectator, but new technological advances have forced the spectator to take a more active role, reprising the notion of the engaged spectator. For Wendy Chun, "pulling up an image is an event – it creates the user (248).

Netflix, the popular DVD rental company, has a friends feature that lets people add each other to a list, so that friends can see what others are renting, how much they like the movies they have seen, and recommend movies to others, as a group or individually, There is also a compatibility rating for friends based on how each user rates movies. Beyond that, each film has an overall rating based on all raters, and a "Best Guess" rating based on "Raters Like You." Using n approach similar to James Surowiecki's idea of the a wisdom of crowds, the site tries to

predict how much a user will like a film based on others that have rated movies similarly.[13] Some of these features rely on algorithms to compute recommendations, using data supplied by other users, who remain anonymous and function only in the aggregate, while others are more personal, human to human. The movie watcher becomes connected to other discrete humans, personally known or unknown, and also to the entire dataset of other users, with the vast majority of whom the user will never directly interact.

The phenomena described above may be understood as analogous to the popular networking protocol of peer to peer (p2p) transactions. In p2p file sharing, each user becomes a node in a network, directly sharing files with all other peers. With social networking functions like those of Netflix, each user also becomes a node in a network, not for sharing files, but for data culled from ratings, reviews, rental history and the like. The peers are important as discrete suppliers of data, but the collective database becomes more than just the sum of its parts, transcending any particular user or his or her friends, much like the mass ornament, which also exists for a larger mass, and not for the users who participate in it.

The casual user of aggregate review sites like Netflix becomes part of a mass ornament, but the ornament is no longer presented for the visual edification of an audience, but made into a huge database, used for prediction and targeted marketing. Users in the internet age are part of this mass database ornament in that they become data points to be aggregated into usable formulae for prediction, which comes across not only in recommendations on Netflix, for example, but also in targeted advertising based on browser history and participation in online surveys or rating surveys. The casual user who searches for reviews of current movies, or who idly rates movies on Netflix can hardly be called a fan of a particular show, movie, director, or genre, and contributes to a knowledge space on a nearly barely active level. This casual user

becomes anonymous on the one hand, as data are aggregated into a larger whole, and targeted on the other, as other users can see specific ratings, and suggestions keep piling up. The more nuanced or passionate responses one might have to a particular media object get reduced to a 5-point ratings system, while mini-reviews and forum postings by more active users escape the automated aggregation. More active users, or fans, participate in a culture shared by other humans, and can generate credibility or reputations built on reviews, comments and critiques, but the more typical, passive users simply get added to the ever-growing databases of trends and preferences.

The quickly changing terrain of networked media, including websites and protocols designed for the presentation and distribution of moving images, provides a platform for the operations of (virtual) mobility, distraction and the mass ornament in a radically faster and more global manner. The streets and cities of modernity certainly still exist and play similar roles in contemporary life to those imagined by Benjamin and Kracauer, and visual media have been dispersed into these spaces as well as many other venues. Cyberspace takes on many of the symbolic functions that the city streets held for earlier theorists, and the movie theater, though still an important locus of theatrical display of films (and, increasingly, live events) has become one avenue in a sprawling geography of moving visual media.

Metaphors of movement through networks abound. When Lev Manovich likens internet users to flâneurs, he adds that “[n]ew media spaces are always spaces of navigation” (252). Users are said to “go” or “surf” to websites, but the topography of the internet is difficult to define, and has little to do with the popular metaphors of movement through space. One popular metaphor is that of cyberspace, first coined by William Gibson, and which he defined as a “consensual hallucination” that allows communication over a spatially imagined interface

(*Neuromancer* 65). Wendy Chun usefully points out that unlike the names of other media, "cyberspace erases all reference to content, apparatus, process, or form, offering instead a metaphor and mirage, for cyberspace is not spatial" (39). Unlike film, radio, and other technologies, cyberspace does not define a specific type of hardware or transmission, but the relationship between the user and data. The conflation of the Internet with cyberspace is useful in many ways, even if it has limitations. Although the current internet has little physically or representationally in common with cyberspace as described by Gibson, its popular representation contains a sense of navigability (Chun 46-8) as well as of shared knowledge and interaction. The idea of the internet as imagined space is pervasive, but erroneous, "a *desire* to position Gibson's fiction as both an origin of and an end to the Internet – a desire stemming from cyberspace's seductive 'orientation,' its seductive *navigability*." (Chun 42, italics in original) While the internet consists of connected computers whose physical locations are of little importance, the metaphor of space persists in popular representations.[14]

This model is compelling, but has limitations. Drawing on Benjamin and Tom Gunning, Chun suggests the better model for users is the gawker rather than the flâneur or detective, because the latter are independent while the gawker depends on an ongoing flood of information, and is vulnerable to the gaze of others, as part of a crowd (61-2). Today's spectator is trackable, not as easily able to disappear into a crowd. The internet user always leaves a trace, whether through cookies or IP logs and referrals (Chun). The spectator, the viewser, has become a string of numbers, coordinates indicating preferences and likely paths, interests defined by interactions across sites. Often nameless and faceless, the typical internet user still has an identity, pieced together in code through browsing habits. Sustained attention is replaced by glances[15], but the glances are recorded and tracked for predictive purposes, to tease the user into following a

different path, one that looks like the one she's been on the whole time. Freedom and anonymity on the internet are largely illusory, as the backbone of the network intrinsically incorporates technologies of tracking, and users can do only what the software allows.[16]

Even when the user is physically stationary, which is but one option, she can still move virtually through networks and other imaginary geographies. The concept of navigability implies mobility and a degree of freedom, but this mobility is limited to publicly allowed spaces or in online communities to which one belongs, or to which one has the password. Cyberspace is an emergent property of theoretically universal access to networks of constructed visual spaces.[17] The sense of space is, as Chun indicates, metaphorical and illusory, but the imagined spatiality creates a virtual public arena.[18]

The spatial representation of the internet and the fantasy of navigability, whether technically accurate or not, corresponds to various theories of film spectatorship. Spectator theories have long posited stationary viewers who imagine themselves moving in identification with camera techniques, such as tracking shots. While apparatus theory imagines a stationary spectator looking at images projected from behind in a dark theater, this mode of viewing has become but one of many. By navigating network interfaces, the networked spectator could be said to resemble the flâneur in two different senses. On the one hand, networked spectators take on the perceptual positioning of what Friedberg calls the "mobilized virtual gaze," a sort of virtual flanerie invoked in narrative cinema by particular cinematic modes, and in the networked imaginary by metaphors of movement. On the other, spectators have actually become much more mobile as personal portable viewing devices become more prevalent.

Modes of Distribution, or How Media Get Into the Home

The emergence of a plethora of distribution methods and more diverse display hardware

changes the way media moves into various places, altering the ways media objects are produced and consumed. In the last two decades, more people watch films at home than in the theater, and theatrical display accounts for only ¼ of global revenue of Hollywood films (Klinger 4-5). This increase in home viewing creates different viewing practices, even as studios attempt to preserve the theatrical screening as a privileged site for film viewing by using a windowed release system (Klinger 7). As discussed in Chapter 2, the popularity of the DVD, with its extra features and director commentary, changes the viewing experience and allows the studios to continue to profit from a property long after the theatrical run is over. This "repurposing" or "horizontal integration" makes a film not only a singular cultural event but also a potentially daily presence in the life of the consumer. The presence first of the VCR and then of DVD players allows the sale of movies after their run, but also increase the chances for piracy, which is made easier with digital media and networked computers. The translatability of the image between media simultaneously makes for more business opportunities and the danger of copyright violation, which may also partially explain the continuing practice of the windowed release schedule. If a film is available digitally while still in theaters, viewers might just opt to stay home and watch it for free rather than pay exorbitant prices and brave going into public to watch it with a roomful of strangers. Indeed, this is how many home viewing technologies are marketed: as a way to stay safe and comfortable in one's own home (Klinger). While going to the cinema still remains a cultural event, other viewing practices have become as or more popular.

The ways in which movies get into homes have multiplied. Movies are now available to the average internet user not only as DVD purchases or rentals, but via digital delivery, both legal and illegal, centralized and decentralized. A popular example of a hybrid of the DVD rentals and internet technology is the DVD-by-mail service. The most popular of these is Netflix,

followed by Blockbuster and Greencine, among others, but they all operate in basically the same way: the user compiles a list of DVDs to order, and the service sends a set number for rental, with no due dates. When the user has finished with the DVD, she sends it back in a prepaid envelope (or returns it to the Blockbuster), and receives another by mail to replace it. Netflix has recently rolled out a new service called “Watch Now,” where a user can watch movies via streaming video, a certain number of hours of which are included in the price. This latter feature provides instant gratification, even if the quality can be compromised by a slow connection. This service resembles On-Demand and Pay-per-View services offered by many digital cable companies, but takes place over the internet, on a computer.

Also popular, even if often illegal, are peer-to-peer sharing networks such as BitTorrent and Limewire. These technologies take digitally stored copies of movies from individual users’ hard drives and share them among other users. When downloading a movie, a user will download different parts from different peers, until a complete copy arrives, at which point the downloader can then seed, or share the completed movie. Despite the possibility of punishment for copyright infringement, this method remains a popular choice for obtaining films. It should be noted here that the technology itself is not illegal, and many producers and consumers use it for legal purposes. Besides the implications for piracy, this technology decentralizes the distribution of films and other media, allowing users to share obscure, independent, international, or unreleased materials. The transference of analog film to digital media makes the artifact easily transferable and replicable over the internet, without moving anything physical. Film is now information, to be shared and distributed with ease. There is no fundamental difference anymore between the Word document this chapter is stored in, a video game, or a feature length film, as all can be converted into information that travels the same pathways, to be transmitted, distributed or

shared in the same way. This transcodability makes the media more portable and mobile.

Display options, or, How Media Get Out of the Home

While digital technology has changed the modes of distribution, display technologies have also changed. On the one hand, HD widescreen televisions, along with surround-sound systems, give the home viewer an experience more like that of the theater (hence the term “home theater). This no doubt initially contributed to an increase in the sales of DVDs, as consumers no longer wish to fight crowds and high ticket prices, and deal with loud patrons and the smell of nacho cheese. In fact, as Barbara Klinger notes, home theater systems have historically been advertised as superior options to theatrical display, both for convenience and safety (21-28).

When watching a DVD on a computer, the setup is not much different from a TV, unless background processes like instant messaging or error messages pop up, breaking the immersion. Otherwise, one can watch a film in full screen, with full surround-sound and many of the amenities of a home theater system. One can also shrink the DVD player window, making the movie one among other objects on the screen. On a typical dedicated home theater system, this is not possible, unless one uses picture-in-picture technology to watch television while watching a film. The relegation of a DVD to just another process or program makes the film equal with other visual or computational activities such as word processing, web surfing, instant messaging, and any number of other activities. I often play a DVD in the background in order to listen to audio commentary, which frees me up to do other things. When the commentator says something interesting that demands my attention, I switch to the DVD screen to watch, and then switch back to whatever I was doing. In this scenario, immersion in the film is not optimum, and this mode of viewing allows the viewer to resist immersion in order to extract only interesting information. This arrangement sets up a sort of windowed collage, of which the film is but a part.

These new display technologies change home viewing, making it more fragmented.

The breach of the public/private divide in bringing the cinema to the home works more efficiently and totally today, but it also works in reverse. The home theater allows the formerly public experience of cinemagoing to take place at home, but home computers bring the whole world in, from personal communications to information gathering. The proliferation of portable viewing devices allows people to take their personal spaces with them, immersing themselves in audiovisual works anywhere. What is commonly called ubiquitous computing has also become ubiquitous viewing.

In addition to changing home viewing practices, new displays have moved viewing back out of the home, although not necessarily into the cinema. In a reversal of the trends with VCRs, video images abound in public. Kracauer's distraction moves from the ornate lobbies of movie theaters into everyday life. LCD screens have begun to proliferate in other places as well, from grocery stores and bank lobbies to the backseats of minivans to purses, pockets and backpacks. Devices like the video iPod, the PSP, laptops and cell phones can now carry full motion video, allowing viewers to take their media with them. I can watch movies and television shows on the 3.5" LCD on my Zune while waiting for my next class to start, or download and watch movie trailers on my phone while deciding what to do for the evening.

The proliferation of display technologies counterbalances the bigger-is-better mentality of theaters, home or otherwise. As digital moving images are but information, the same movie can be transcoded from a DVD to a file for use on my laptop, or to a smaller format for a portable viewing device. Again, the transcodability of digital media makes not only distribution, but conversion for different screens much easier. The ease with which films can be transferred to other formats makes them versatile, and further threatens the hegemony of both the movie

theater and the home theater as the main site of spectatorship. Rather than sit in a darkened theater, or even at home, for the duration of a film, viewers now have the ability to be mobile, watching films wherever they are. The in-flight movie has become the in-drive movie for small children, the in-between classes movie for students, the in-line movie for everyone. Media have become much more personal, from the cinema, to the home, to the pocket.

Watching a movie on a small device is a much more personal experience than going to the movie theater, or watching as a group at home. The size of the screen makes it virtually impossible to share the viewing experience, as the screen must be placed closer to the viewer's face, and the sound is often delivered through headphones. The spectator has become both more mobile and solitary. Whereas with DVD and home theater systems the formerly public viewing practices of cinemagoing became private, with these devices, the private reenters the public realm, while remaining in most cases personal. Klinger uses the metaphor of the fortress for home viewing, and cites devices like the PSP or other personal devices as "minifortresses," further fragmenting the home into smaller private realms (10). Where she is concerned with the public entering the private, the reverse also works. As these devices are portable, the metaphor seems to hold in public spaces also, with users carrying around minifortresses wherever they go.

In a reversal of the movie palaces, video on portable devices strips away the decorum and even the special viewing location of spectators. While Kracauer argues that movie palaces are sources of distraction for workers (and this still obtains in different ways at the cinema), these mini-cinemas distract viewers from daily life on a more constant basis. Cinema spills out into the streets, so the flâneur no longer watches people and events in the city, but stares blankly into a screen, or screens.

The combination of easily recorded and distributed digital video has spawned many new

media practices, including the video podcast, or vlog (short for video log or video blog). Video podcasts are easily distributed short videos to which a user can subscribe, so that each podcast is delivered to the appropriate application as soon as it is available. One popular podcast is Rocketboom, a humorous 3-minute program published daily. One could subscribe to the vlog in, for example, iTunes, and have it automatically download to her iPod and have a new episode to watch every morning on the subway ride to work, without revisiting the website. Video podcasts are generally short, due to bandwidth and storage limitations and presumably to the amount of attention a podcast viewer may want to give. While it is possible to watch feature length films on these devices, most users probably would not want to stare at the small screen for that long, except perhaps in extreme instances such as long flights.

Nick Rombes remarks that with small portable screens, "[i]nstead of the cinema of attractions, we have the cinema of distractions," concluding:

> If yesterday the spectator was trapped—a happy prisoner—in the dark in the theater beneath the magnificent screen, then today it is all reversed: it is the screen which is trapped by us. Rather than larger-than-life characters—literally!—we have smaller-than-life ones, reduced to the size of Happy Meal figures.

The prevalence of spatial metaphors for the internet can be seen forcefully in popular filmic representations, which often take on the same characteristics as physical spaces (*The Matrix*, *Hackers*…). Given the positive valence often given to mobility, the image of the hacker as liberating figure makes sense in the networked world. It is no surprise that the heroes of cyberpunk and science fiction films and novels are misfits who somehow, either through skill and practice or innate ability, become able to navigate the imaginary spaces between nodes of the network. Many popular films, such as *Tron*, *Hackers* and *The Matrix* portray cyberspace as a visual construct, navigable only by those with the power and know-how. The evolution of these representations from a distinct place one can choose to enter (*Tron*, *Hackers*) to a dystopian

illusion perpetrated by evil computers (*The Matrix*) speaks to the immersive network environment and the fear that this environment will rob people of their ability to discern reality from illusion. That Neo is a hacker, able to bridge the gap between the communal world of the Matrix and the much dirtier and dangerous real world of the rebels and Zion, makes him the ideal hero. He represents the dream of complete mobility, of breaking down , or at least recognizing, the boundaries between cyberspace and lived geographical reality and being able to navigate in/between both, in order to escape the constant surveillance of the networked machines. To use Chun's terms, Neo represents a desire to return from the status of gawker to that of the flâneur.

These films stage a resolution to the fragmentation brought about by the ubiquity of networked communication by imagining mastery over it and a return to an eventual coherent whole. As the Tiller Girls represented the subsuming of the individual into a mass, The Matrix posits humans as anonymous food sources. As film can alert the viewers to their alienation or hide it, perhaps the portrayal of the fragmentation of internet media can do the same. Indeed, the Tiller Girls for Kracauer are "…no longer individual girls, but indissoluble girl clusters whose movements are demonstrations of mathematics." (75-6)

Fan Culture

Henry Jenkins has also pointed out that participatory, interactive spectators have existed for a long time, in the form of the fan. Long before the internet became an ubiquitous form of communication, fans have arranged conventions and other meetings, published newsletters and written and distributed fan fiction. The fan is the uber-spectator, the viewer who has taken the act of watching to a new level of interaction, creating community and taking partial ownership of media production. Klinger takes fans for granted, calling them a standard function of film culture, a normative force that mediates between the producer and consumer (13). Fans are often

the driving force behind changes in media, and keep franchises alive, and many studios and other media producers try to cultivate a sense of fandom around their products.

One major difference the internet brings to video watching is speed. As noted earlier, many of the fan-based activities that now take place on internet discussion boards and other venues had already been happening, and still often do, via mail and in-person meetings or conventions. The rating or recommendation of films that friends and interest groups often indulge in are also not new, but faster and more efficient and powerful. The distribution of independent media, including shorts and other nontraditional media, had been taking place via mail, friends copying videos for friends, and film festivals, but has moved in large part to YouTube and other sites, as well as email (South Park started as a video "holiday card," a short one-off VHS tape copied and circulated amongst industry friends).

With the introduction of networked computers, fan culture has become much faster, more immediate, and potentially broader, as a fan can immediately discuss a movie or television show and reach a potentially global audience. Fans can also use cheap and readily available editing programs to create their own spinoff, parody, or homage films, which they can easily post to the web. The edited *Star Wars: Phantom Menace*, which re-edits the Episode I to exclude Jar Jar Binks, is one of many famous examples. Jenkins shows that fan cultures sometimes influence works, as in the case of *Xena: Warrior Princess*. He also points to bloggers as facilitating communication about media, amongst fans and from regular users to producers. The empowerment of fans and the distribution of the locus of meaning create a media environment that encourages active spectators, and makes popular media a dialogue instead of pure broadcast.

Jenkins links online fan communities to the notion of what Levy calls "collective intelligence" or "knowledge space," which fosters communication and shared knowledge

unbound by geographical constraints. This makes sense for fans, who are arguably the most active and visible of spectators, but for the average spectator who is less intentionally involved in a community of knowledge, the internet still fosters a sense of inclusion and participation, even if the user is less witting.

When Jenkins contrasts Levy's "collective intelligence" with a "hive mind" where "individual voices are suppressed" (140), the distinction works with regards to blogs, discussion boards and other fan activities, but the hive mind mentality can be seen on the internet, and in film-related activities in particular, in many instances. Many of these sites follow an approach related to James Surowiecki's concept of "wisdom of crowds," which states that given the right factors (diversity of opinion, independence, decentralization, and aggregation), groups can make more effective decisions than any of its members alone.

Users in the internet age become data points to be aggregated into usable formulae for prediction, which comes across not only in recommendations on Netflix, for example, but also in targeted advertising based on browser history and participation in online surveys or rating surveys. The casual user who searches for reviews of current movies, or who idly rates movies on Netflix can hardly be called a fan of a particular show, movie, director, or genre, and contributes to a knowledge space on a barely active or conscious level. This casual user becomes anonymous on the one hand, as data are aggregated into a larger whole, and targeted on the other, as other users can see specific ratings, and suggestions keep piling up. The more nuanced or passionate responses one might have to a particular media object get boiled down to a 5-point ratings system, while more active users who provide mini-reviews and forum postings escape the automated aggregation, to be read primarily by other users. More active users, or fans, participate in a culture shared by other humans, and can generate credibility or reputations built

on reviews, comments and critiques, but more passive users simply get added to the ever-growing databases of trends and preferences.

ENDNOTES

1 Most notably, Anne Friedberg, Tom Gunning, Wendy Chun, and Lev Manovich invoke the figure of the flâneur as a (post)modern spectator.

2 In “Film 1928” and “Little Shopgirls Go to the Movies” Kracauer addresses the subject of popular films, pointing out their superficiality and unwillingness to address the present. One could argue that this tendency has not changed much in 80 years.

3Among others, Miriam Hansen and Heidi Schlüppman forcefully draw this connection.

4 While Benjamin favors montage and the avant-garde (especially surrealism) as ways to engage the distracted spectator, Highmore point out his lack of specificity beyond that: “...the kinds of films that might mobilize distraction for the political aims that Benjamin has in mind isn't made clear.” (70)

5 The cult of self-expression prevalent in blogs and social networking sites seems to be a counterpoint to this, but the ease with which one can hide such things as race and gender, and the rapidity with which one can delete an entire existence, make identity fleeting and superficial.

6 Over the years editing gets faster. A good example of changed aesthetics in digital media is music videos made for mobile devices.

7 Youtube page accessed April 3, 2009

8 The exception to this is the video response, where another user posts a video in response to another, which shows up on the pages for both the original and the response video.

9 In this essay, Kracauer characterizes capitalism as a step in a process of demythologization, a move from uncritical acceptance of nature to a more rational state, where individuals arrange themselves by function instead of organic communities. The problem with the state of

capitalism he describes is that it has stalled, and only seems to be rational, retreating instead into the abstract, into a capitalist Ratio, which “rationalizes not too much, but too little”.

10 Juliet Koss (1996) describes Kracauer’s description of the mass ornament, and of mass culture in general as “engaged ambivalence” (82)

11 Benjamin notes the importance of statistics in modernity: “This is manifested in the field of perception what in the theoretical sphere is noticeable in the increasing importance of statistics. The adjustment of reality to the masses and of the masses to reality is a process of unlimited scope, as much for thinking as for perception” (“Work of Art” 223)

12 Both of these terms are portmanteaux describing a more active spectator or consumer. “Prosumer” combines producer and consumer. Dan Harries (2002) introduces the term “viewsing,” a portmanteau of “viewing” and “using” for instances when the two activities merge.

13 “Wisdom of Crowds” refers here to the concept popularized by James Surowiecki, in the book of the same title, that groups of people can often make better decisions than any single member of the group.

14 In his essay on photography, Kracauer explores the spatialization of time...

15 cf John Ellis (Visible Fictions: Cinema, Television, Video. London: Routledge, 1992.) on the glance vs the gaze.

16 The glut of films revolving around paranoia about network surveillance (e.g. *The Net* (1995), *Antirtust* (2001), *Enemy of the State* (1998) …) speak to the disappearance of anonymity and the anxiety of surveillance.

17 It is interesting to note that many new technologies begin necessarily with text and move to images. Early PCs were almost entirely text based. Early websites were text-only, phones

were, until recently, completely alphanumeric.

18 While Chun's observations about the near impossibility of anonymity and the usually hidden transactions that take place under the surface of web browsing are compelling, the experience for the user is that of navigating spaces. The user manipulates the interface, not the network.

Chapter 4 – The Tulse Luper Suitcases and Alternate Reality Games

This chapter seeks to examine Peter Greenaway's *The Tulse Luper Suitcases* as a synthesis of the issues and concepts explored in the previous chapters. I will argue that *The Tulse Luper Suitcases* represents a fitting endpoint to the trends and tendencies begun with the advent of the digital technologies I have thus far described. *The Tulse Luper Suitcases* encapsulates many of the concepts I employ in the previous discussion, serving as a snapshot of the possibilities of the current state of networked visual media, even while opening up more problems and questions that attend the digital age. *The Tulse Luper Suitcases* exemplifies the possibilities opened up by the freeing of images from the causal prisons in which they were once trapped; the rise of the interactive, dispersed image; the invention of distribution of small networked devices; the ascendance of the video game and the increased capacity of the internet to enable these things to interact and connect.

Alternate Reality Games

Before describing *The Tulse Luper Suitcases*, I will discuss the Alternate Reality Game (ARG) as a an example of the use of the various media I describe for a sort of collective performance art. I will argue that *The Tulse Luper Suitcases* shares some characteristics of the ARG, but serves as a better example of the type of media current technological practices and mechanisms encourage. ARGs can utilize most of the technologies mentioned in the previous sections. They rely on the internet; they are dispersed; they result in networked communities of strangers, united by their desire to play the game; they are interactive; they can invite players outside into the world to complete tasks that are not, themselves, electronic, digital, networked or even image-based.

The ARG is an example of technology use that illustrates the dispersion of media and

consumers/players across space. An ARG uses different media to guide players through websites, video games, films, phones, and actual space. ARGs are not specifically visual, but they show the possibilities of networked media to mobilize spectators and create a single dispersed media object.

Year Zero

For the lead up to his album Year Zero, Trent Reznor invented an alternate reality game called *Year Zero*. This ARG seems to center around a particular media commodity, the *Year Zero* album, but takes on a life of its own in certain ways. An entire narrative unfolds, in which spectators become participants. The game began in February 2007, when people noticed that the inside of a Nine Inch Nails tour T-shirt contained capitalized letters that spelled out “"I am trying to believe,” which led people to iamtryingtobelieve.com, a website describing, through fake news paper clippings, a fictional hallucinogenic drug. This site led to others, which together described a dystopian future 15 years in the future.

“Things matter more when you have to work for them. This matters to me. I want it to matter future. As partial explanation, Reznor includes this in one of the websites: “Things matter more when you have to work for them. This matters to me. I want it to matter to you, too, so I’m going to make you work.”[1] A few days later, a USB drive containing an mp3 of a Nine Inch Nails song is found at a concert in Portugal, which, on careful spectrogram analysis of static at the end of the track, is found to contain a clue. Another is found in Spain a few days later, with more clues. Many of the clues, including the USB drives, fliers handed out at a concert in Paris, and small print on DVD cases, encoded messages in music videos and Garage Band files, heat-activated messages on CDs, lead eventually to websites that serve as clues, further completing the narrative. These clues ultimately lead to some players being given cell phones on April 13,

2007, and receiving calls a few days later announcing a meeting, which turns out to be a faux resistance meeting and free Nine Inch Nails concert.

The important aspects of the game are the dedication of the players, the variety of media involved, and the amount of communication amongst players needed to complete the task. As others like it, the game combines real-world coordinates and artifacts (concerts, t-shirts, cell phones) with virtual, interactive sites (websites, discussion boards, videos). Users created their own communication networks to share clues and analysis.

These hyper-fans are the model spectators for new, dispersed, networked media, and that the variety of media involved speak to the transcodability not only of media itself, but of the experience of media objects. In my discussion of small screens, I point to more traditional media being consumed in novel places, but in this case the media itself is the participation, or participation is part of the experience of this media, some of which must be experienced in a particular place at a specific time. This ARG is a allegory for the cinema of today, where some of the activity takes place in specially designed places at specific times, but much of it is time-shifted and universally accessible.

Tulse Luper Suitcases.

The Tulse Luper Suitcases illustrates the potential of the phenomena I mention in the previous chapters. It is a transmedia project that Greenaway originally conceived as consisting of 3 or 4 feature-length films, a video game, 92 CD-ROMs or DVDs and several websites and discussion boards, an opera and a book. Currently the project spans 3 films, a video game, and several websites, including discussion boards. The films portray a man, Tulse Luper, who has a propensity to become imprisoned, and who disappeared in 1989, leaving 92 suitcases around the world, each containing something different (frogs, etc.). Rather than move chronologically, the

films flow from one of the 92 suitcases to another, revealing something new about Tulse Luper's character with each.

The Tulse Luper Suitcases as post-indexical

The aesthetics of the films speaks to the dubious status of mimetic representation in contemporary media, as I outline in Chapter 1. The use of windowed interfaces recalls or remediates both the computer screen and the canvas, as does the use of text in conjunction with images (which Greenaway does in *The Pillow Book* and other films as well). The jarring use of overlapping and repeated sounds indicates a sort of sampling, a technique prevalent in electronic music. In one scene, text of a screenplay scrolls across the bottom of the screen while, in a window above, the actors recite the lines. At first, the screenplay is out-of-sync, running behind the spoken words, but they eventually sync up as the dialogue repeats. The inclusion of this scene foregrounds the artificiality, the constructedness of the film, and an impossibility of originality, naturalism or faithful representation in any given medium.

Another provocative theme of the project is its reflexivity with other Greenaway films. At several points, the narrator refers to other films, while footage from the film plays in a window somewhere onscreen. These references to and excerpts of films such as *A Zed and Two Naughts* or *Belly of an Architect* serve as "historical" evidence to support an interpretation of Tulse Luper in the context of the current film (indeed, the name "Tulse Luper" does occur in some of these films). Heidi Peeters focuses on the self-reflexivity of *The Tulse Luper Suitcases* as a "mediatic essay, into the nature of *immediacy, transparaency* and *hypermediacy."*(Peeters, italics in orginal) One of the goals of *The Tulse Luper Suitcases*, she says, is to become hypermediate, a state "by which signs focus attention on themselves, hence on the medium's reality as being a construction." The images and sounds of the films, then, refer primarily to their own

construction, to their signification processes.

History and *The Tulse Luper Suitcases*

This use of reflexivity, windowed interfaces, juxtaposition of text and image, obvious and primitive-seeming electronic effects and obviously artificial sets all point to a post-indexical filmmaking style, privileging the artificial and obviously fake. Greenaway uses this style to construct a meditation on the use of media as historical investigation. “Rather than limiting the mediatic focus to the signifier-side of the project and the historical focus to the side of the signified, Greenaway proves the two to be intrinsically intertwined in a more complicated way.” (Peeters) *The Tulse Luper Suitcases* attempts to make history hypermediate, inseparable from the media that attempt to constitute it; it “dissects history as itself a mediated construct....” In drawing these conclusions, Peeters suggests that Greenaway is participating in an attempt not only to depict a character in a story, nor only a historical era, but to reveal the mediatic and epistemic constraints of historical discourse.

I would like to draw a connection between Greenaway's post-indexical style and the subjective narratives I describe earlier. The structure of *The Tulse Luper Suitcases* introduces a novel approach to historical discourse, weaving the personal, the fictional, and the factual in a decentered narrative spread across media. This approach to history recalls the subjective narrative prevalent at the end of the 20th century, brought on, as I argue earlier, in part by the loss of indexicality that digital imagery brings. This project is possible by virtue of the technologies available today, even as it reflects the limitations and contingency of these technologies. As the rise of subjective filmmaking attends an anxiety about the loss of the truth-value of digital images, Greenaway seems to be positing a thesis that even historical representation or exposition is subject to the radical disruption in the status of the image, but that rather than destroy the

possibility of historical representation and reflection, these new media reveal what was always there, but disavowed – that history is always mediated. "*The Tulse Luper Suitcases* does not so much position its own mediacy against the absolute stability of history, but on the contrary dissects history as itself a mediated construct, while at the same time stressing the self-legitimizing truth value of art" (Peeters).

The Tulse Luper Suitcases foregrounds not only its own representational strategies but those of any mediated attempt to portray a historical event. The hypermediated character of the project points emphatically to the impossibility of narrativizing history in any meaningful way, due to the ever growing amount of data pertinent to historical events. That *The Tulse Luper Suitcases* is told non-chronologically, organized instead around 92 suitcases, in each of which can be found objects that contain their own stories, indicates a skepticism about narrative when it comes to telling history (or perhaps in representing anything at all, for that matter).

***The Tulse Luper Suitcases* as interactive and virtual**

The search for/revelation of each suitcase suggests a game, a narrative structured around revealing/finding objects to move on to the next level. Indeed, an early scene in the first film *The Moab Story* depicts young Tulse playing a game with a playmate, amongst cardboard cutouts that resemble the brickwork of early Mario games. In other places, Greenaway uses computer-graphic technologies that suggest video games, as in the case of a out-of-place neon-looking outline of a car in the desert.

Richard Grusin notes that *The Tulse Luper Suitcases* participates in a "cinema of interactions" remediating other interactive media, such as video games, in a distributed network of media. He is talking about the media interacting with other, and remediating more interactive media. My question, and the question informing this dissertation is: how does the spectator,

newly equipped with a different set of competencies, interact with the narrative of something like *The Tulse Luper Suitcases* project?

Recall Ron Burnett's definition of interactivity as the property that asks the user to fill in details, and *The Tulse Luper Suitcases* becomes the ideal interactive artifact. The project demands an active spectator, one who will search for clues and attempt to put the narrative together out of disparate pieces. One could simply watch the feature films, and understand most of the narrative, but even that would take a large effort in piecing together chronology and the loosely associated themes sprinkled throughout the films. To fully understand the films, though, the ideal user will also play the online video game and traverse the discussion boards.

The most obvious interactive aspect of *The Tulse Luper Suitcases* is the video game *The Tulse Luper Journey*. The game consists of various puzzles that unlock new suitcases or other areas of interest. The user travels from place to place looking for clues, assembling them into a more coherent whole. While many video games that tie in with movies add new storylines but do not substantially affect the main narrative of the film, this game helps connect the disparate elements of the films, offering a more complete picture of the life of Tulse Luper.

The Tulse Luper Suitcases **as networked/dispersed**

Peter Greenaway's project resembles an ARG in many ways, although, strictly speaking, it may or may not be classified as one. It is a compelling example, nevertheless, of a dispersed artifact, using theatrically-displayed material (movies), internet communities, dispersed websites, and a video game.

If we look at *The Tulse Luper Suitcases* as a transmedia artifact, issues of authorship (and viewership) arise.[2] The video game is a product of a contest. Discussion boards are multi-

authored. Do the discussion boards count as part of the text? This text is very open, with meaning cohering between the media.

Can this project properly be called database narrative, in the sense that Manovich means in his popular book *Language of New Media?* Like Manovich, Greenaway does seem to be interested in the idea of media as language, and *The Tulse Luper Suitcases* certainly subscribes to much of the description of database narrative that Manovich lays out. Benjamin Noys describes *The Tulse Luper Suitcases* as an example of a new media artifact that creates a compromise between Lev Manovich's notion of the database form and traditional narrative. The project, Noys claims, resembles a database with many interfaces, but strives for a coherent narrative, which, he says, it can never achieve. The principle of exhaustion inherent in networked media creates a "New Media Baroque," where the form borders on parody. "We can have no faith in the database as structure but only as a network that threatens to exhaust the world." (Noys) Perhaps the tension between these impulses cannot be resolved. As data is continuously added, the narrative extends in time and scope, but can never encompass the flood of new data.[3]

Audience

We could begin by asking who would be the ideal spectator for *The Tulse Luper Suitcases*. As the films were not widely distributed, festival-goers and intrepid cinephiles, those who generally go to art films, would be the target for the films. These films are not easily accessible, neither in material nor aesthetic terms. Given the multi-media components of the project, the ideal spectator would also be computer-savvy, internet-capable, and willing to traverse various media to find or create meaning in the text. The near impenetrability of the films invites a close read as well as an active construction of meaning on the part of the engaged spectator.

The project has the sense of “incompleteness” that Tryon writes about, or “openness” that Burnett sees in interactive media. This incompleteness is compounded by the number of suitcases and the various ways to uncover them, in film, video game and networked media. Each medium by itself leaves a palpable sense of incompleteness, which leads to a desire to use each medium, to go across media, to achieve a sense of a complete whole. In this way the project takes part in a network era aesthetics, even while holding out the promise of a modernist completion of the work of art. It is doubtful, however, that even playing all the games, etc., will lead to a complete understanding or comprehension of the project.

Incompleteness

One of the salient features of this project, and a thread that has implicitly run through this dissertation, is that of incompleteness. An interactive work is incomplete in some senses until the user takes action. The networked artwork is forever incomplete, as additions can be made ad infinitum. Nick Rombes and Chuck Tryon address the issue of incompleteness in DVD presentation, and I would argue that it is a characteristic of much media in the network age. Greenaway has taken this characteristic and stretched it to its breaking point. Tulse Luper is inherently and incessantly incomplete. Greenaway has created a character, and a narrative, that threatens never to resolve itself. In doing this, Greenaway is saying something about history and about contemporary media practices and technologies. His use of windowed interfaces and multiple media points to an awareness of the ever-expanding, uncontainable character of digital images and communication.

In many ways, this is a history of media, through various media. *The Tulse Luper Suitcases* did not end up as expansive as Greenaway had planned, or perhaps it hasn't *yet* grown to that point, but his original ambition says something about the scope of media representation

and the different ways in which various media communicate. By distributing the narrative (or history) of Tulse Luper over so many media, Greenaway not only plays with the sense of incompleteness and representation, but also implies that it is impossible to tell a history in only one medium. Tulse Luper's history is fragmented, incomplete and mysterious, and Greenaway's use of media reflects this fragmentation and incompleteness, never entirely lifting the veil of mystery, except perhaps to the most tenacious user.

The notion of incompleteness corresponds roughly to an idea of openness which recalls McLuhan’s descriptions of hot and cool media. The metaphorical temperatures of media, for McLuhan, indicate a level of openness to interpretation or making of meaning. Hot media are full, with little room for audience participation, while cool media allow (or invite) the spectator to fill in information. Networked, incomplete media like *The Tulse Luper Suitcases* are the ultimate in cool media. They create endless opportunity for filling in, for spectator participation. *The Tulse Luper Suitcases* is consciously cool, creating aporia that can be filled only by participating in all the media that comprise the work, and even then the threat of incompleteness remains.

The Tulse Luper Suitcases offers a model for networked media practices generally. In an era of consolidation, media conglomerates can publish entertainment packages across media, and use news outlets and entertainment channels, as well as social media sites, to promote them. These media giants can use crowdsourced marketing techniques to simulate grassroots, spontaneous participation, and spread the media across video games, websites, television and large screens in theaters.[4] To the cynical-minded, this spreading out represents nothing more than an attempt to capitalize on a brand, to sell more products based on the same initial product. A more charitable assessment might contend that these are attempts to extend a storyline or

narrative universe in order to entertain or inform audiences beyond the initial work. The truth likely lies somewhere in the middle, as the creative arms of large media companies strive for the latter in order to ensure the former for the parent company. At any rate, experiments in incomplete, networked expansive media rarely reach the level of uncertainty or ambition that Greenaway attempts in *The Tulse Luper Suitcases*, which can serve as an example of the possibilities inherent in current media, regardless of current practices. *The Tulse Luper Suitcases* is intended for a small audience, and the chances of the project turning any sort of profit are slim. Indeed, due in part to limited release of the films, both theatrically and on DVD, relatively few people have heard of the project, and even fewer have actually seen or participated in it.

Another difference between *The Tulse Luper Suitcases* and a franchise like *The Matrix* is that the latter began as a fairly closed text in the form of the first feature film, and later grew through sequels, video game tie-ins, etc., all controlled by an overarching corporate author, whereas the former operates under the aegis of a more independent filmmaker and a community of fans, spectators and artists. Granted, various companies are involved in creating, distributing, and hosting various aspects of the project, but even this is likely dispersed across entities The structure of *The Tulse Luper Suitcases* is more rhizomatic than hierarchical, in that each node is independent of yet connected to the others, with no central controlling medium. The end of the first *The Matrix* film gives closure, even if it is reopened in the sequels, whereas in *The Tulse Luper Suitcases* there is no sense or promise of closure.

If we accept that the films are not meant to be the center of the *The Tulse Luper Suitcases* world, we get closer to the structure of networked media I describe in Chapter 3, where the feature film is but one of many media objects comprising a larger product. This said, it is difficult to imagine attempting to understand *The Tulse Luper Suitcases* only by reading the

discussion boards and playing the video games, and without seeing the films. The meaning(s) of the project seem to cohere in between its nodes. Each node contains part of the information, a piece of the picture, but not in the sense of a puzzle in which, once all the pieces are put together it gives a complete picture, but more like a series of views on the same topic, like a kaleidoscope.

Distraction, Detection and ARG spectatorship.

There seems to be a conflict between the notion of the distracted viewer, unable or unwilling to give sustained attention, always flitting from one topic to the next, and the sort of tenacious spectatorship expected by a project like *The Tulse Luper Suitcases*, and seen to some degree in some other media, such as fan communities. This contradiction can be resolved by thinking about attention both in terms of a moment-by-moment phenomenon of consciousness, and as a persistent quality of identity.[5] On an immediate basis, the postmodern subject is fragmented and drawn from stimulus to stimulus almost continuously. Benjamin saw that film editing demanded and catered to such a sense of distracted attention, and quicker editing over the years as well as television commercials, pause buttons, and internet spectatorship have accelerated the need for such attention. Within this phenomenon, however, there is a tendency to piece together disparate pieces of information, to make some sort of coherent whole, and this tendency, coupled with distracted attention, creates a dispersed attention that manifests itself sometimes in dispersed identity or identities.[6]

Tulse Luper represents the networked subject, as his narrative is dispersed across media, across suitcases, and across much of the twentieth century. The dispersal of his identity requires a dispersed attention. The spectator of *The Tulse Luper Suitcases* becomes the ideal user by searching across media to assemble Tulse Luper's life, creating an identity for herself in so doing, by registering for websites, communicating with others, etc. The dispersed attention of Kracauer

and Benjamin allows the networked subject to construct a more or less coherent identity, but one that others must construct for themselves, based on investigations of their own across various media. *The Tulse Luper Suitcases* attempts to exploit the facets of communication that encourage fragmentation and dispersal, illustrating the type of attention required to make sense of the world in the 21st century.

The Tulse Luper Suitcases is a good example of how network culture has turned everyone into detectives. The ideal spectator for *The Tulse Luper Suitcases* resembles Case and the community of film collectors in William Gibson's *Pattern Recognition,* piecing together fragments found dispersed across the web in order to assemble a complete project. The level of dedication and collaboration involved in such an endeavor surpasses spectatorship as classically conceived, bordering on the obsessive. In Gibson's case, however, there is a whole film, an endpoint towards which the participants travel. With Greenaway, there is little sense of a completed artifact, but endlessly growing clues to an identity that may be finite, but is never completely knowable. His project resides somewhere between a fragmented whole that can be reassembled, and an ARG, which takes place in physical space as well as in virtual worlds. The former requires detectives to piece together the mystery, while the latter requires player/actors to perform the functions of the plot. Like the film in Gibson's novel, *The Tulse Luper Suitcases* currently exists in a finite number of places, but it has the potential to keep growing, forever eluding a completion point. Unlike an *Year Zero*, it continues to exist without audience participation, and one can choose to explore it at will, even now, in much the same way as the original participants did – that is, so long as the servers stay up.

ENDNOTES

1 http://anotherversionofthetruth.com/0/.

2 For more on transmedia storytelling, cf. Jenkins, Henry. Convergence Culture: Where Old and New Media Collide. New York: New York University Press, 2006.

3 Can this project properly be called database narrative, in the sense that Manovich means in his popular book *Language of New Media?* Like Manovich, Greenaway seems to be interested in the idea of media as language, and *The Tulse Luper Suitcases* certainly subscribes to much of the description of database narrative that Manovich lays out.

4 The term "crowdsourcing" is a combination of "crowd" and "outsourcing" and refers to efforts to use crowds of people to solve a problem. It first appears in Howe, Jeff. "The Rise of Crowdsourcing" *Wired* Vol 14 No 6 (June 2006).

5 cf. Crary, Jonathan. *Suspensions of Perception: Attention, Spectacle, and Modern Culture*. MIT Press, 2001 for an overview of attention in art, and Beller, Johnathan, *The Cinematic Mode of Production: Attention Economy and the Society of the Spectacle*, Dartmouth, 2006 for an analysis of cinema as a model for attention.

6 The use of social networking sites is an interesting place to see such dispersal.

REFERENCES

Print

Bazin, André. “Ontology of the Photographic Image.” What Is Cinema? trans Hugh Gray Berkeley,: University of California Press, 1967.

Beller, Jonathan, The Cinematic Mode of Production: Attention Economy and the Society of the Spectacle. Hanover, N.H.: Dartmouth, 2006

Benjamin, Walter. The Arcades Project. Trans Howard Eiland and Kevin McLaughlin**.** Cambridge, Mass: Belknap, 1999.

---. “The Work of Art in the Age of Mechanical Reproduction.” Illuminations. Trans Harry Zohn, ed Hannah Arendt. New York: Harcourt, Brace and World, 1968.

Bolter, J. David and Richard A Grusin. Remediation : Understanding New Media. Cambridge, Mass.: MIT, 1999.

Burgoyne, Robert. “The Cinematic Narrator: the Logic and Pragmatics of Impersonal Narration.” Journal of Film and Television 17.1 (1990): 3-16.

Burnett, Ron. How Images Think. Cambridge, Mass.: MIT, 2004.

Cartwright, Lisa. Screening The Body: Tracing Medicines Visual Culture. Univ Of Minnesota Press: 1995.

Carroll, Lewis. Alice in Wonderland. New York, W.W. Norton 1971. Orig 1865.

Chun, Wendy Hui Kyong. Control and Freedom: Power and Paranoia in the Age of Fiber Optics. Cambridge, Mass: MIT Press, 2006.

Conley, Tom. Cartographic Cinema. Minneapolis: University of Minnesota Press, 2007.

Crary, Jonathan. Suspensions of Perception: Attention, Spectacle, and Modern Culture. MIT Press, 2001

Darley, Andrew. Visual Digital Culture Surface Play And Spectacle In New Media Genres . London ; New York : Routledge, 2000.

Elsaesser, Thomas. “Cinema -- The Irresponsible Signifier or ‘The Gamble with History’: Film Theory or Cinema Theory.” New German Critique 40, Special Issue on Weimar Film Theory (Winter, 1987), 65-89.

---. "Digital Event: Deliver, Event, Time." Cinema Futures : Cain, Abel or Cable? : The Screen Arts in the Digital Age. eds. Thomas Elsaesser and Kay Hoffmann. Film Culture in Transition;. Amsterdam: Amsterdam University Press, 1998.

Ferenz, Volker. “Fight Clubs, American Psychos, and Mementos: The Scope of Unreliable Narration in Film.” New Review of Film and Television Studies 3.2 (November 2005): 133-159.

Friedberg, Anne. Window Shopping: Cinema and the Postmodern. Berkeley: University of California Press 1993.

Gibson, William. Neuromancer. New York: Ace Books, 1984.

---. Pattern Recognition. Berkley, 2004.

---. Spook Country. Putnam Adult, 2007.

Grieb, Margrit. "Run Lara Run". Screenplay: Cinema/Videogames/Interfaces. eds. Geoff King and Tanya Krzywinska. London ; New York : Wallflower Press: 2002.

Groenstad, Asbjoern. "Back to Bazin? Filmicity in the Age of the Digital Image." Popular Culture Review 13.2 (2002): 11-23.

Grusin, Richard. “DVDs, Video Games, and the Cinema of Interaction.” Ilha do Desterro. 51 (July/Dec 2006): 69-91.

Hansen, Mark B.N. New Philosophy for New Media. Cambridge, Mass.; London: MIT, 2006.

Hansen, Miriam. “Decentric Perspectives: Kracauer's Early Writings on Film and Mass Culture.” New German Critique 54, Special Issue on Siegfried Kracauer (Autumn, 1991): 47-76

Harries, Dan. The New Media Book. London: BFI Pub, 2002.

Hayles, N. Katherine. How We Became Posthuman : Virtual Bodies in Cybernetics, Literature, and Informatics. Chicago, Ill.: University of Chicago Press, 1999.

Highmore, Ben. Everyday Life and Cultural Theory. New York and London: Routledge 2002.

Howe, Jeff. “The Rise of Crowdsourcing” Wired 14.6 (June 2006).

Howells, Sacha A. " Watching a Game, Playing a Movie : When Media Collide." Screenplay: Cinema/Videogames/Interfaces. eds. Geoff King and Tanya Krzywinska. London ; New York : Wallflower Press: 2002.

Huhtamo, Erkki. “Twin—Touch—Test--Redux: Media Archaeological Approach to Art, Interactivity, Tactility.” MediaArtHistories. Ed Oliver Grau. Cambridge, MA; London: MIT Press 2007.

Hutcheon, Linda. The Politics of Postmodernism. New York and London: Routledge 1988.

Jenkins, Henry. Convergence Culture : Where Old and New Media Collide. New York : New York University Press, 2006.

Kinder, Marsha. " Narrative Equivocations Between Movies and Games." The New Media Book, ed Dan Harries. London: BFI 2002.

King, Geoff. "Die Hard / Try Harder : Narrative, Spectacle and Beyond, From Hollywood To Videogame ". Screenplay: Cinema/Videogames/Interfaces. eds. Geoff King and Tanya Krzywinska. London, New York : Wallflower Press: 2002.

Klinger, Barbara. Beyond the Multiplex : Cinema, New Technologies, and the Home. Berkeley : University of California Press, 2006.

Kluszcynski, Ryszard. “From Film to Interactive Art: Transformations in Media Arts.” MediaArtHistories. Ed Oliver Grau. Cambridge, MA; London: MIT 2007.

Koss, Juliet. “Hooked on Kracauer.” Assemblage, 31 (December 1996): 80-89.

Kracauer, Siegfried. The Mass Ornament: Weimar Essays. Trans and ed and Thomas Y. Levin. Cambridge, Mass: Harvard University Press, 1995.

Lévy, Pierre. Collective Intelligence : Mankind's Emerging World in Cyberspace.Cambridge, Mass. : Perseus Books, 1997.

Lowenstein, Adam. "The Surrealism of the Photographic Image: Bazin, Barthes, and the Digital Sweet Hereafter Source: Cinema Journal 46, no. 3 (2007): 54-82

Marshall, P. David. " The new intertextual commodity." The New Media Book, ed Dan Harries. London: BFI 2002.

Manovich, Lev. The Language of New Media. Cambridge, Mass: MIT Press, c2001.

---. “What is Digital Cinema?” 1995. http://www.manovich.net/TEXT/digital-cinema.html

Mitchell, William J. The reconfigured eye : visual truth in the post-photographic era.Cambridge, Mass. : MIT Press, 1992.

Morris, Sue. " First-person shooters : a game apparatus." Screenplay: Cinema/Videogames/Interfaces. eds. Geoff King and Tanya Krzywinska. London, New York : Wallflower Press: 2002.

Noys, Benjamin. “Tulse Luper Database: Peter Greenaway, the New Media Object and the Art of Exhaustion.” Image and Narrative. Issue 12: Opening Peter Greenaway's Tulse Luper Suitcases. ed. Gray Kochhar-Lindgren. August 2005.

Peeters, Heidi. “The Tulse Luper Suitcases: Peter Greenaway's Mediatic Journey through History.” Image and Narrative. Issue 12: Opening Peter Greenaway's Tulse Luper

Suitcases. ed. Gray Kochhar-Lindgren. August 2005.

Petro, Patrice. “Kracauer's Epistemological Shift.” New German Critique, 54 (Autumn 1991): 127-138

Prince, Stephen. "The Discourse of Pictures: Iconicity and Film Studies." Film Quarterly 47.1 (1993): 16-28.

Rabinovitz, Lauren. “More Than the Movies: A History of Somatic Visual Culture through *Hale's Tours*, Imax, and Motion Simulation Rides.” Memory Bytes : History, Technology, and Digital Culture. eds. Lauren Rabinovitz and Abraham Geil. Durham : Duke University Press, 2004.

Rodowick, D.N. The Virtual Life of Film. Boston: Harvard, 2007.

Rombes, Nicholas. “BraintrustDV Roundtable.” November 2005. http://www.braintrustdv.com/roundtables/ipod.html##Rombes. Accessed April 13, 2009.

Schlüpmann, Heide. “Phenomenology of Film: On Siegfried Kracauer's Writings of the 1920s”. New German Critique, 40, Special Issue on Weimar Film Theory (Winter, 1987), 97-114.

Stewart, Garrett. *Framed Time: Toward a Postfilmic Cinema*. University of Chicago Press, 2007.

Surowiecki, James. The Wisdom of Crowds: Why the Many Are Smarter Than the Few And How Collective Wisdom Shapes Business, Economies, Societies, And Nations. New York: Doubleday, 2004.

Tryon, Chuck. Reinventing cinema : movies in the age of media convergence. New Brunswick, N.J. : Rutgers University Press, 2009.

Wolf, Mark J. P. The Medium of the Video Game. 1st ed. Austin: University of Texas Press, 2001.

Yacobi, Tamar. "Authorial Rhetoric: Narratorial (Un)Reliability, Divergent Readings:

Tolstoy's *Kreutzer Sonata*." In A Companion to Narrative Theory, ed. James Phelan and Peter J. Rabinowitz, 108-123. Malden, MA: Blackwell, 2005.

Non-Print Media

The Animatrix. Various Directors. Warner Home Video, 2003. DVD

Battlefield 2. 2005 [computer game]. Sweden: Digital Illusion CE.

Half Life: Counterstrike. 2000. [computer game] Sierra Studios.

Dark City. Dir. Alex Proyas. New Line Home Video, 1998. DVD.

E.T.: The Extraterristral. Dir. Steven Speilberg. Universal Pictures, 1982.

Eternal Sunshine of the Spotless Mind. Dir. Michel Gondry. Universal Studios, 2004. DVD.

eXistenZ. Dir. David Cronenberg. Buena Vista Home Entertainment, 1999. DVD.

Fight Club. Dir. David Fincher. 20th Century Fox, 1999. DVD.

Final Fantasy: The Spirits Within. Dir. Hironobu Sakaguchi and Moto Sakakibara. Columbia Pictures, 2001.

Hackers. Dir. Iain Softley. MGM, 1995. DVD

Lara Croft: Tombraider. Dir. Simon West. Paramount, 2001.

The Matrix. Dir. Andy and Lana Wachowski. Warner Bros, 1999.

Max Payne 2: The Fall of Max Payne. 2003 [computer game]. Rockstar Games.

Memento. Dir. Christopher Nolan. Sony Pictures, 2000. DVD

Mortal Kombat. Dir Paul W.S. Anderson. New Line Home Video, 1995. DVD.

Raiders of the Lost Ark. Dir. Steven Spielberg. Paramount, 1981.

Red vs Blue. Dir. Matt Hullum. Rooserteeth Productions, 2003.

Run Lola Run. Dir. Tom Tykwer. Columbia Tri-Star, 1999. DVD

Second Life. Linden Research. www.secondlife.com. Accessed June 11, 2009.

A Scanner Darkly. Dir. Richard Linklater. Warner, 2006.

The Sims. 2000. [computer game]. Dir. Will Wright. Electronic Arts.

Star Wars Episode I: The Phantom Menace. Dir. George Lucas. 20th Century Fox, 1999.

Strange Days. Dir. Kathryn Bigelow. 20th Century Fox, 1995. DVD

Strangerhood. RoosterTeeth Productions. Accessed January 2007.

Tron. Dir Steven Lisberger. Disney, 1982.

The Truman Show. Dir. Peter Weir. Paramount, 1998. DVD.

The Tulse Luper Suitcases, Part 1: The Moab Story. Dir. Peter Greenaway. A-Film Home Entertainment, 2003. DVD.

The Tulse Luper Suitcses, Part 2: Vaux to the Sea. Dir. Peter Greenaway. Stardis Pictures, 2004.

The Tulse Luper Suitcses, Part 3: From Sark to the Finish. Dir. Peter Greenaway. 2003.

Waking Life. Dir. Richard Linklater. CBS/Fox Home Video, 2001. DVD.

War Games. Dir. John Badham. MGM, 1983.

World of Warcraft. 2004. [computer game]. Blizzard Entertainment.

ABSTRACT

DISTRIBUTED CINEMA: INTERACTIVE, NETWORKED SPECTATORSHIP IN THE AGE OF DIGITAL MEDIA

by

ERIK MARSHALL

May 2010

Advisor: Dr. Robert Burgoyne

Major: English

Degree: Doctor of Philosophy

Digital media has changed much of how people watch, consume and interact with digital media. The loss of indexicality, or the potential infidelity between an image and its source, contributes to a distrust of images. The ubiquity of interactive media changes aesthetics of images, as viewers begin to expect interactivity. Networked media changes not only the ways in which viewers access media, but also how they communicate with each other about this media. *The Tulse Luper Suitcases* encapsulates all of these phenomena.

AUTOBIOGRAPHICAL STATEMENT

Erik Marshall was born in Illinois on June 11, 1972. He graduated high school in Garden City, Michigan in 1990, and completed his B.A in French and English at Wayne State University. He worked as a high school teacher and a support technician for a software company before returning to graduate school.