

VENDING MACHINES, PUNISHMENT POLLS, DATABASE AESTHETICS: THE  
TECHNOCULTURAL LEGACY OF INTERACTIVE CINEMA

By

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To my family and committee members

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## LIST OF ABBREVIATIONS

IC	Interactive cinema
TLC	<i>Tender Loving Care</i> (David Wheeler, 1998)
TWU	<i>The Weathered Underground</i> (David N. Donihue, 2010)

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This project proposes new ways of interrogating the largely unexplored terrain of interactive cinema (IC), and identifies their place in the development of cinema and media culture at large by analyzing their varying reception contexts. These new frameworks are particularly effective for analyzing IC's hybrid and liminal modes of spectatorship, and for rethinking the role of film narrative in contexts of national economies, transcultural exchange, and globalization.

Interactive media attempt to empower their consumer by promising more creative control; by contextualizing major genres of IC, I expose how this democratizing fantasy is deeply rooted in contemporary sociopolitical responses to media. I also explore how IC's reception practices reflect the spirit of collaboration as well as the (paradoxical) individualism and exclusionary politics of contemporary media culture, which I compare to related media behaviors such as crowdsourcing, collective intelligence, groupthink, and taboo role-playing. My subsequent analysis of the ways in which IC attempts to train and reorient viewer behavior offers insight into the pedagogical potential of interactivity, especially through extreme examples that test the boundaries of both interactivity and representational images.



While concepts of interactivity are generally bound to mythologies characterized by rhetoric of empowerment and/or user manipulation, I focus on historically, socially, and politically specific sub discourses associated with interactivity. These particularities enable me to approach interactivity as more than a technologically oriented phenomenon, and—significantly—to understand it outside of the developmental path that leads to (and typically ends with) digital media. The close analysis of site-specific installation work and performance-oriented cinema raises crucial questions about the marginalization of certain aspects of the piece, historical determinism, and the lack of emphasis on heterogeneous viewer responses.

Ultimately, I find that my own process of rediscovering and contextualizing ephemeral interactive media makes a powerful case for considering the inherently political nature of film preservation and restoration, and for regarding the practices of archiving and digitization (creating digital versions of older media) as cultural processes that produce and codify cinematic heritage.

## CHAPTER 1 INTERACTIVE CINEMA: EXPANDING THE FIELD OF FILM AND MEDIA STUDIES

### **Introduction: Project Overview and Contextualization**

“A unique cinematic experience,” “a breakthrough,” “not just a movie,” “cinema with a twist,” and the now clichéd “the first interactive film ever.” These are catchphrases commonly used to promote the novelty of the media hybrid interactive cinema (IC). Despite significant differences with regard to when they have been released (mid-20th century up to the present), production and marketing (big budget, avant-garde, B-picture), and the media involved (celluloid, video, digital formats, theater, and more), interactive films make use of diverse strategies to differentiate their performances from other kinds of viewing experiences. Interactive films attempt to incorporate the audience into their execution by integrating elements such as live performance, audience voting, and motion sensors to create a participatory multimedia experience. Such practices are evident in IC endeavors ranging from: experimental works (such as Radúz Činčera’s *Kinoautomat*, 1967, which incorporates audience voting to generate a choose-your-own-adventure narrative), to Expanded Cinema (Roman Kroitor’s *Labyrinth*, 1967, featuring a traversable architectural space for viewers to walk through), to art installations (Lynn Hershman’s *Lorna*, 1979-83, which lets visitors interact with media to uncover the story of an agoraphobic woman), to popular commercial movies (William Castle’s *Mr. Sardonicus*, 1961, featuring a punishment poll that decides the villain’s fate at the film’s end).

IC is a notably productive area of inquiry for contemporary film and media studies that has not yet been explored in depth. It has the potential to not only generate new ways of thinking about cinema and its relationship to other media, but also to elicit

reconsiderations of established paradigms and canons in media theory and history. This project investigates new modes of interactive filmmaking and interactive spectatorship, looking back at the most productive historical approaches to cinema and to emerging analytical frameworks that relate to aspects of IC's hybridity. I propose new ways of theorizing and interrogating this largely unexplored set of practices, and identify their place in the development of cinema and media culture through analysis of their reception contexts. These new perspectives are particularly effective for analyzing IC's hybrid and liminal modes of spectatorship, and for rethinking the role of film narrative in contexts of national economies, transcultural exchange, and globalization.

Interactive media purport to empower their viewer by offering him/her more creative control. By recontextualizing major genres of IC, I expose how this democratizing fantasy is deeply rooted in contemporary sociopolitical responses to media. Specifically, the human longing for a sense of belonging and the simultaneous desire for autonomy are at the core of our interactions with all forms of media; these are the foundations of media's social meaning and expression, and IC is based on these in distinctive ways. I also explore how IC's reception practices (audience behavior during interactive screenings) reflect the spirit of collaboration as well as, paradoxically, the individualist and exclusionary politics of contemporary media culture. On the one hand, interactive media facilitate the emergence of collective intelligence and grassroots communities; on the other, they place the individual at the center of the interaction by foregrounding individualized content and features of customization. These contradictory tendencies are reflected and amplified during interactive screenings, and I compare them to related media behaviors such as crowdsourcing, collective intelligence,

groupthink, and taboo role-playing to indicate the ways in which a study of IC may inform other areas of media culture.

My analysis of the ways in which IC attempts to train and reorient viewer behavior offers insight into the pedagogical potential of interactivity, especially in the extreme examples of IC that test boundaries of both interactive and representational images. Ethically problematic interactive works such as Stanton Audemars's interactive rape video *Stockholm: an exploration of true love* (2008), and humorous choose-your-own-adventure films like David Donihue's *The Weathered Underground* (TWU, 2010) present moral and didactic aspects of interactive play in relation to theories of identification, affective/ somatic spectatorship, the sociology of virtual acts, and the psychosomatic (re)conditioning of the interactive spectator.

In my research, I focus on historically, socially, and nationally specific sub discourses associated with interactivity, which transcend the typical discourses on interactivity centered on rhetoric of empowerment and/or user manipulation. These particularities enable me to approach interactivity as more than a technologically defined phenomenon, and thus to consider its cultural and ethical implications. Through cross-contextual and cross-disciplinary analysis, I approach IC from productive areas in established frameworks in film and media studies, and also through newer critical paradigms from the digital humanities and other fields. The aim of this approach is to establish connections between marginalized practices and canonical approaches to film and media studies, and also to indicate the relevance of IC to the study of digital culture.

The retrospective aspect of my method includes relating IC to the history and sociology of other cinemas such as Expanded and early cinemas. These have arguably

aimed to condition through repetition (among other techniques) the viewers' bodies to new forms of sensations, acknowledging thus the importance of bodily training in the formation of modern citizens. An exploration of cinema and interactivity's potential for training and reorienting user behavior offers profound (and, at times, disturbing) insights into the pedagogical ethos of interactivity. This project also addresses new forms of software-generated cinema that blend interface/screen reading and web navigation with audiovisual processing to create hybrid modes of spectatorship and interaction. These new forms are particularly useful in rethinking the role of narrative, materiality and, more broadly, human creativity in the digital age.

### **Interactive Cinema as Productive Liminality**

Interactive films interrogate and expand conventions of filmic language and spectatorship. They compel us to conceptualize cinema beyond traditional definitions, as well as beyond established theoretical approaches. Rejecting the marginalization of IC from mainstream film theory and history, as I do in this project, challenges traditional canons and compels us to conceptualize alternative trajectories in the development of cinema. Noah Wardrip Fruin and Nick Montfort, in their discussion of the 1950–60s New York Happenings, consider critical uncertainty as a positive attribute, saying that “perhaps this ambivalence and influence is the mark of true ‘intermedia’ work” (Wardrip-Fruin & Montfort 2003: 83). While most forms of IC do not strictly fall under the category of intermedia—a term first used by Fluxus member Dick Higgins to describe work produced during the specific cultural moment of the Happenings—they do inhabit a comparably liminal space. Wardrip-Fruin and Montfort conclude that intermedia work was “greeted with ecstasy *and* rejected with horror as it threatened to overflow, and even wash away the boundaries between disciplines that the ‘total forms’ (such as

opera) had only subsumed and reinforced” (Wardrip-Fruin & Montfort 2003: 83). Along similar lines, the media hybridity and variability of ICs makes it difficult to classify them into familiar categories of genre, form, and historical contexts.

That IC occupies a liminal space in its hybrid form, materiality, mediation, aesthetics, reception practices, and exhibition contexts, should make us, in fact, more aware of its demonstration of the “impure” nature of the cinematic medium generally. As André Bazin has pointed out, cinema has been a complex and derivative medium from its inception, borrowing freely from traditional arts such as literature, photography, and theater; cinema is in this sense an irreducibly remediated art form (Bazin 2004). Now, I would add, cinema is particularly mixed because it also appropriates elements from newer media such as the graphical user interface (GUI), video games, and immersive computing technologies. A study of IC is therefore useful in investigating the complex connections between film and its relationship to earlier and newer media.

Theorists and artists interested in alternative cinemas, such as Gene Youngblood, typically see the digital field as an expansion of cinematic language and epistemology, rather than a departure from these aspects. In his essay “Cinema and the Code,” Youngblood combines his own thoughts on the cinematic implications of digital imaging with input from artists Peter Weibel, Woody Vasulka, and Steina Vasulka (Youngblood 1989). The artists observe that “it is important [for them] to separate cinema from its medium, just as we separate music from particular instruments.” The tentative definition of cinema they propose is that of “the art of organizing a stream of audiovisual events in time.” Youngblood argues that, even though the ontology and epistemology of the image change according to the medium which contains/ projects it,

its phenomenology—what Vasulka identifies as “the performance of the image on the surface of the screen”—remains constant across media, even as its emphases change with each new medium (Youngblood 1989: 27). This definition aims at a distillation of the essence of cinema into tangible characteristics that remain constant despite technological and material changes.

Accordingly, IC’s interactive dimension offers us an expanded definition of cinema. The convergence of multiple modes of communication in IC—such as celluloid with cell phones, and live performance with multi-screen projection—allows us to reconsider the notion of medium specificity, and redefine it in terms of multiple materialities irreducible to an invariable essence. Metaphors that draw attention to the malleability and algorithmicization of film, such as *software cinema* (a term used by Lev Manovich, Richard Maltby, and many others), and concepts that draw attention to a non-spatially confined concept of spectatorship, such as Anne Friedberg’s “mobilized gaze,” shift the critical focus from ontological questions about cinema (what cinema *is*) to reception contexts (what cinema *does*) (Friedberg 2004).

The term “interactive” is widely applied nowadays, making it difficult to understand what exactly it means. I would argue that the term “cinema” is similarly problematic, which is why I feel it necessary to outline the scope of the objects of study in this project. All of the films I will analyze fall under the broader category of motion picture narrative experiments with an expanded component—where the interaction enters the picture, as it were—ranging from prosthetic devices (such as data gloves and voting consoles), to theatrical props essential to the narrative, to multi-screen projection.

In this project, “narrative” in the context of IC is used to refer to storytelling methods and to means of organizing audiovisual (and sometimes tactical) information in the context of cinema. Cinematic narrative is understood as the reflective manner in which meaning, comprehension, and structure are organized and interpreted in cinematic encounters. In broader terms, narrative is understood as “a dynamic process that constitutes both the way that we organize the events and experiences of our lives to make sense of them and the way we participate in creating the things we make sense of, including ourselves” (Anderson 1997: 212). By analyzing film narrativity—that is, the presentation and interpretation of a story by way of film—we can arrive at conclusions regarding the existential significance of narrativizing; I will be analyzing this argument in relation to new paradigms of film authorship and spectatorship in digital realms. In the conclusion to my analysis of software cinema and generative cinema, I will ultimately consider the transcultural, transnational, and posthumanist potential of digital filmmaking tools (such as databases, interfaces, and artificial intelligence engines) that aim to universalize—by perhaps de-humanizing—the language and experience of storytelling.

At the onset of this project, it seems imperative to at least propose a tentative and broad definition of IC, although such a definition can only be conditional; some attributes of it will inevitably be challenged by some examples, while others will be reworked and nuanced as more forms of IC are examined. Found footage remix, Expanded Cinema, narrative-based video games, and certain virtual reality environments are just a few of the modes which have been identified by their creators and by critics as IC. By this point it becomes obvious that IC runs the risk of being



mistaken for nearly anything outside of the most conventional cinematic production, reception, and exhibition practices. Even a simple online search under the keywords “interactive cinema” generates a multitude of seemingly irreconcilable definitions and an overwhelming array of cited examples.

What I am proposing is not so much a comprehensive definition of IC, as a bare outline of the range of interactive practices in particular on which this study will focus. My primary emphasis—in addition to recent digital forms—will be on remediated versions of originally publicly screened narrative fiction films that extend beyond single-screen projection and—especially—openly invite viewers to interact with the work (that is, to influence its narrative logic) in various ways. Such films expand the screening space by adding elements such as theatrical performance, audience voting, and motion sensors, and integrating those components into the cinematic experience. To further clarify the scope of the project, I am using the term “remediated” as shorthand (and for lack of a more adequate term) for secondary or intermediate versions of these films; my use of the term overlaps with Jay David Bolter and Richard Grusin’s definition of remediation as a process of collation or convergence of mixed media films into a definite work in a digital medium, such as a DVD or a CD-ROM (Bolter & Grusin 2000). The remediation of these often large-scale and site-specific interactive films is meant to facilitate their accessibility and their distribution to a wider market.

The remediation of theatrical releases and works from other screening environments (including festival and museum showings) into digital formats such as DVDs and streaming media should lead us to question whether this “marks a fundamental change in the aesthetic status of the cinematic artifact. This digital cinema

of interactions is not a pure, new digital, interactive medium but a distributed form of cinema” (Grusin 2009: 76). Considering this alongside the concept of trans/cross-media production, we can detect a change not only in the technological foundation of contemporary cinema, but—perhaps more importantly—“a change that is distributed across practices of production, screening, exhibition, distribution, interaction, use, and spectatorship” (Grusin 2006: 214). Therefore, discussion of remediated versions of interactive events can provide fertile ground for inquiry into potentially novel cinematic objects and mobile audiences.

In order for my analysis of IC’s variant forms to remain as current as possible, I will also discuss recent interactive film releases, such as *TWU* and Dawid Marcinokowski’s *Sufferrosa* (2010), which exist only in digital form and were released with a nontheatrical context in mind. These films are treated as partially an extension of pre-digital and mixed media ICs, and partially as belonging to a distinctively digital category of IC. Paradoxically, the distinguishing characteristics of such films are achieved through transparent appropriation and pastiche of earlier forms and aesthetics. Close analysis of these new types of IC might therefore cause us to radically revise, expand, or even completely abandon the notion of film specificity in the context of increasingly diverse filmmaking practices and reception. Conversely, practices of reappropriation and pastiche can help us define an aesthetic philosophy for digital cinema, where the reflexive and playful amalgamation of past traditions serves as the future digital equivalent of the index. Moreover, the software glitches and web navigation tools associated with these new cinemas add elements of contingency and

randomness into domestic spectatorship that may even become the primary mode of interaction in some contexts of spectatorship.

A central yet, surprisingly, seldom noted problem regarding the study of IC is how we may interrogate site-specific interactive works and public IC screenings when opportunities to (re)experience them are limited. Even though these works can be accessed through websites, photographs, and video-recordings, original aspects of interactivity in their performances are difficult, if not impossible, to convey through typical practices of archiving. In remediated versions, interactivity is often transformed into a different type of interaction, as the considerations shift from public screening to private viewing. Part of my study will reflect on difficulties of gaining access to such works, and what is lost and gained when accessing them indirectly through the frameworks of other media (websites and DVDs) and from a remote context. My own research materials are mostly remediated versions (primarily DVDs and CD-ROMs) of originally mixed media films.<sup>1</sup> As these versions are more accessible to a global market, readers of my project can more easily obtain access to these films if they wish to study them directly.

### **Is there an “I” in Interactive?**

This project also investigates the ways in which remediated forms of IC may function as digital archives of events, cultural experiences, and even obsolete technologies. As scholars and educators, we often have to rely on information about these works that cannot be verified directly. This complicates the task of writing about

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<sup>1</sup> The only exceptions are interactive exhibits (including one at the Zentrum für Kunst und Medientechnologie Karlsruhe, ZKM, in Germany) that I have had the chance to personally attend in order to compare different means of gaining access to these works.

IC, and of trying to convey an interactive experience to an audience of readers that have not had the opportunity to encounter the work. Moreover, each interactive encounter is meant to be unique, either in the manner by which each body phenomenologically responds to the work, or in each viewer's mental assessment of what is presented to him/her. This puts subjectivity at the forefront of the IC experience, both during the screening and in retrospective meditations.

The fact that the majority of interactive works emphasize the uniqueness of each encounter directly challenges a general theorization of IC, which is why I examine varying contexts in IC practices—including public, domestic, and web-based interactive settings—to explore different tendencies and circumstances. IC makes literal and obvious what is at the core of all film viewing in general: that each experience is singular and unrepeatable. This shifts the focus from the film content to the film experience, and more specifically to the non-uniformity of spectator responses.

Dawid Marcinokowski's *Sufferrosa* (2010) is an apt example of an interactive film that reflexively reminds us that what we bring into the filmmaking experience—as both viewers and users—shapes our responses to the film, in addition to more general ideological or auteurist considerations. *Sufferrosa* is a neo-noir non-linear movie that expands the definition of film narrative by amalgamating animation, videos, literature, music, and the Internet into a customizable story. The viewer is placed in the position of a detective trying to find a missing woman. The viewer has to navigate a youth rejuvenation clinic located on a secluded island in hopes of finding answers to an elusive mystery, as the goals of the interactive experience are never fully disclosed. In essence, the viewer pursues his/her own quest as he/she absorbs and interacts with a

work that pastiches diverse influences, ranging from French New Wave cinema to pop cultural icons, and a variety of media ranging from videos to three-dimensional puzzles.

The viewer of *Sufferrosa* is made aware of the intertextual layers of meaning to different extents depending on his/her prior knowledge of art, music, history, and pop culture. For instance, viewers unfamiliar with Jean-Luc Godard's *Alphaville* (1965) are inevitably unaware of all the intertextual references to this film. In this respect, the ephemera of each viewing—such as the navigation sequence and the random discovery of hyperlinks—mark each version of *Sufferrosa* as inimitable. Applying to *Sufferrosa* Malcom Le Grice's view of narrative as a representational model of existential modes, Jenna Ng sees “the form of *Sufferrosa* in its *modus operandi* of chance and randomness as a plangent echo of how we might perhaps understand the world today” (Ng 2011). The influences from which the content of the film is derived speaks to contemporary culture's emphasis on remix and appropriation as prominent forms of expression and communication. The interactive viewer is, in a sense, remixing the film's content on the spot, to create new forms and stories, and thus actively partakes in the production of meaning.

The emphasis on the film's impact on the individual viewer does not just pertain to recent interactive narratives. The first 3D and immersive film trailers (mostly B-movie horror and action films), for instance, do not focus on a summary of the film's plot and are thus similar to trailers of interactive DVDs from the 1990s and 2000s. These films directly acknowledge the presence of the spectator, and focus—albeit in a reductive way—on viewer reaction the films are meant to trigger. A look at the promotional material of early Warner Bros 3D films, for example, indicates the different ways in which these

works purported to incorporate the viewer into the mechanisms of the film—mostly through immersion, rather than interaction. André De Toth's *House of Wax* (1953) was the first feature-length 3D film with stereoscopic sound produced by a major studio, and is a useful case study in the evolution of a viewer-oriented—rather than narrative-based or auteur-oriented—approach to film reception. Some of the promotional posters and the trailer for the film emphasize the “astounding” picture that comes “straight at you” and makes “YOU... part of the living drama.” Robert Montgomery's *Lady in the Lake* (1947) used a different technique to achieve viewer immersion—an approach that was hailed by MGM a “startling and daring new method of storytelling... Mysteriously starring Robert Montgomery and YOU!” Using a constant POV vantage point, the film tries to involve the spectator in the action by encouraging the viewer to identify with the male protagonist's perspective, rather than his bodily form. (Although we as viewers become acutely aware of what Marlowe looks like through occasional glimpses of his reflection and through how people, especially women, respond to him). In essence, viewers are literally seeing things through Robert Montgomery/Marlowe's eyes, but the mixed audience reactions to the narrative technique indicate that not everyone sees (or wants to see) the same.

William Castle's *The Tingler* (1959) took identification to the level of psychosomatic immersion by implicating the spectator's body into the narrative development, thus creating the illusion of a back-and-forth interaction between the screen/film and the viewer. *The Tingler*, like many of Castle's (in)famous gimmick-based films, attempts to immerse the audience in the world of the film by adding a somatically interactive component to the screening. Reportedly, some seats in the movie theater

were equipped with electric buzzers attached to their undersides. Whenever the Tingler in the film tried to attack the audience, the buzzers were activated and the audience was encouraged (through a voiceover) to “Scream for your lives!” to ward off the Tingler, which allegedly manifests inside people who suppress their fear.

While the audience’s reaction could not influence the narrative direction of the film, the film still encouraged audience members to vocally—that is, *bodily*—respond to what they saw on the screen in hopes of avoiding the impending electrical shock that prompted the desire to scream in the first place. This kind of audience involvement was meant to immerse spectators psychosomatically in the narrative of the film, and was made even more prominent through the narrative significance of the Tingler: the monstrous manifestation of suppressed psychosomatic trauma. At the same time, encouraging audiences to scream completely goes against conventional movie theater conduct, which discourages patrons from making loud noises and interacting with each other. The film encourages the audience to adopt a synergistic approach to film interaction typical of participatory ICs: everyone working together to accomplish a common goal. In this case, the audience is collectively screaming loud enough to scare off the Tingler, even though the “real time” of the action is not in sync with the pre-filmed movie sequence and thus the screams have no real impact.

The physically and psychologically immersive type of interactivity that films such as *The Tingler* try to accomplish brings up questions regarding the concept of immersion. As the example of *The Tingler* demonstrates, affective immersion does not automatically imply interactivity – at least in the sense of a back-and-forth interaction between the medium (film) and the consumer (audience). In any case, and at this point

in time, it could be argued that Hollywood, in particular, is more inclined towards producing immersive, rather than participatory, works. This can be seen, for example, in the proliferation of 3D films in the first decade of the 21st century. This reasoning is also manifest in the work of critics that review the film adaptations of video games. For instance, in discussing the film adaptations of video games such as *Lara Croft: Tomb raider* (Simon West, 2001) and *Final Fantasy: the spirits within* (Hironobu Sakaguchi & Motonori Sakakibara, 2001). Sabine Himmelsbach argues that the “participative potential” of such games cannot be emulated in cinematic adaptations of the same texts because “Hollywood cinema remains trapped in the tradition of illusory spaces that per se exclude participatory strategies, for participation destroys the perfection of the illusion” (Himmelsbach 2003: 533).<sup>2</sup>

In light of the above, works that strive to achieve bodily immersion have an essentially unrealistic goal, not just because identification is a challenging engineering problem, but also because our bodies and cognition restrict our total immersion into an external sphere of artificial consciousness. This argument overlaps with much of the criticism of the immersive potential of Virtual Reality (VR) and the biological fact that human bodies cannot be fully physically and psychologically immersed in even the most realistically mimetic environments.

Video artist Woody Vasulka asserts that the “radical” dimension of interactive works is located in the “idea of giving the space, the art, the narrativity, the storytelling to the audience, apart from your own personal position as author.” He notes that a

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<sup>2</sup> Conversely, though, there are plenty of examples (especially outside Hollywood) that experiment with counter-illusory techniques that deliberately break the myth of narrative totality and closure. *Run Lola Run* (Tom Tykwer, 1998) and *Rashômon* (Akira Kurosawa, 1950) are just a few examples that play with forking narratives and various vantage points that deconstruct a master narrative and draw attention to the construction of the work (which could be interpreted by some as a “narrative” in itself).



relinquishing of authorial control is not only something that the audience may desire (the marketing of these films promises such a turnabout), but also an “inevitable” goal for artists (Vasulka 2008: 396). Could this relinquishing of control also signal a relinquishing of certain traits of the cinematic, at least in how they have been generally defined? Paradoxically, despite its emphasis on co-authorship and of relinquishing narrative control to the viewer, IC also emphasizes how central unpredictability is to the cinematic experience. In the same vein, interactive artist Tony Dove points out that if the viewer is given complete control over a work’s construction then the outcome will be boring because the element of surprise will be lost (Dove 2003: 236). After all, if the viewers were able to control every aspect of the film, then they would become filmmakers.<sup>3</sup>

Through close analysis of various examples of IC, some binary categories associated with film reception, including the commonly held distinction of passive/active spectatorship, will need to be re-assessed in terms of the liminal space in which the interactive viewer responds to the work. Similarly, the IC viewing experience fluctuates between a participatory state and a state of recognized (and even self-willed) passivity. In light of this, the viewer occupies multiple fluid subject and object positions in a complex process of identification, automation, and alienation. Distinctively, IC acknowledges that every interaction with cinema varies from individual to individual viscerally, cognitively, psychologically, culturally, and so on.

Vivian Sobchack has argued for the integration of phenomenology into meditations on the cinematic experience. Her phenomenological reflections remind us

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<sup>3</sup> In fact, some types of IC promise viewers the chance to step in the director’s or the actors’ shoes by providing affordable editing and filming tools. Yoostar Entertainment Group’s commercial failure YooStar: Be Scene (2009-2011) was an entertainment system that allowed viewers to insert themselves into iconic film and television scenes using green screen technology. The product website is now obsolete.

of what is typically neglected in mainstream film theory: “the film’s lived-body,” that stretches beyond concerns of materiality, and “the spectator’s uniquely situated and embodied consciousness.” Sobchack ultimately asserts that:

any objective description of the experience of phenomena cannot be truly objective unless it also accommodates the subjective mode of that experience and addresses the life-world in which we live as sensible and significant beings.

(Sobchack 1992: 308)

This philosophy alerts us to the existence of a network of multi-directional filmic encounters (prereflective, reflective, embodied) and to the impossibility of a uniform and completely predictable mode of interaction.

However, in many cases, the possibility of multiple and diverse interactions is downplayed for the sake of privileging the author’s interaction with the film as the primary, or even the only, locus of interaction. New media theorist Mark Hansen is one of the authors who use their experience with interactive artworks to aid in the application of their theory. Though Hansen’s analysis of his affective responses to the works is useful in supporting his theory, it also makes the reader aware that he/she is unable to replicate (and verify) this response because he/she is only indirectly accessing these works by way of Hansen’s analysis (and possibly by looking them up on the Web and in other sources). The impossibility of direct access means that we can only experience these works vicariously, through a record (textual, photographic, moving-image) of someone else’s encounter with them. Hansen’s insistence on the precedence of affect-laden embodied experience is, in a way, subverted by the impossibility of his reader’s having the very encounter that Hansen asserts as the basis for his claims. In analyzing Jeffrey Shaw’s interactive and immersive projects, for example, Hansen’s analysis presupposes that all bodies will affectively and haptically respond to the work in a

uniform (and even predictable) way. Hansen states that: “the body is the precondition not just for vision, but for sensation as such. This is where there is sensation at all” (Hansen 2006: 27). And yet, how can we effectively and collectively analyze corporeal/ haptic/ visceral/ affective response, given that our bodies—that even our experience and understanding of embodiment—are irreducibly varied, and may respond inconsistently at different times and places?

The unavoidable argument that all cinematic encounters must seem incomplete once they are translated into words or images is countered by a relatively recent wave of theories that advocate somatic intelligence—that is, the possibility of the body making sense of films before the mind does (albeit without fully explaining how or what exactly falls into the realm of prereflective reception). Sobchack’s pioneering amalgamation of phenomenology with theories of corporeal vision and cinesthetics paved the way towards an embodied approach to spectatorship. Sobchack’s work, while groundbreaking in many respects, is usually revised and reworked in ensuing theoretical models.<sup>4</sup> Part of the reason why theories of embodied (cinematic) perception are often unsatisfactory has to do with an issue many film studies scholars face: that of not having the scientific background to explain how the organism of the body works—biologically, neurologically, cognitively, and so on. Consequently, any discussion of somatic intelligence from a film studies perspective is bound to contain more philosophical insights than scientific or empirical observations on how cinema might actually engage the physical senses. But, with any theoretical discussion of the

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<sup>4</sup> Barbara Kennedy’s book *Deleuze and Cinema: the aesthetics of sensation* (2000) is an example of such revisionist approaches.

relationship between the body and cinema, there is bound to be some abstraction and approximation because sensation cannot be adequately expressed or recaptured through words. Nevertheless, Sobchack's ventures into insufficiently theorized aspects of film reception, as well her foray into unusual areas of film inquiry, offer valuable leads for further exploration, especially when combined with other models that privilege nontraditional approaches to film analysis.

On the surface, theories of embodiment seem well suited to ICs that directly invite the spectator's body into the performance of the film. However, I would argue that many types of IC deconstruct the notion of embodiment by either taking the role of embodiment to the extreme, or by using interactive formats to challenge the very possibility of an embodied experience. In these cases, the body plays a central role, while the mind is often neglected, as the emphasis is typically placed on the viewer's physically active role in the composition of the work. In goal-oriented interactive films, the viewer can become too invested in trying to complete the task of piecing together all the narrative fragments to engage with other dimensions of the film such as its aesthetics and subject matter. In films where narrative closure is seen as the ultimate—and often frustratingly elusive—objective, other aspects are undermined. Conversely, the spectator's hypothetically active body—or, more specifically, active hand in cases of interaction via the remote—is rendered re-active by a process of interactivity that requires automation, memorization of the same moves, or a type of conditioning that trains the viewer in specific modes of repetitive interaction. This adds complexity to a discussion of aesthetics of embodiment where the body is the existential ground of (and for) perception, the result of “the relationship between vision and the body, the role of

movement and tactility in that relationship, and the connection of this complex to affective experience” (Rutherford 2003).

The majority of classical film theory has taken for granted the spectator’s physical immobility before the screen of conventional cinema, and has equated it with the state of passive reception. Jean-Louis Baudry’s theory of the cinematic apparatus, for example, is limited in the sense that it places the “dream-screen” of the darkened theatre at the core of all film experiences. According to this theory, the conditions of exhibition “evoke the conditions of dreaming and virtually assure that spectators will abandon their critical faculties” (Kepley 1996: 534). Apparatus theory takes into account one specific version of film exhibition—that of the darkened theatre and its mechanisms of projection—and formulates it into a universalized archetype for cinematic experience at large, without taking into consideration historical conditions, cultural contexts, and bodily variations that must play a role in embodied reception, and alternative screening sites such as installation spaces, televisions, and mobile interfaces.<sup>5</sup>

Nevertheless, Baudry’s and, subsequently, Christian Metz’s approach to the institution of cinema helped expand the notion of identification. For Baudry and Metz, primary identification in cinema does not have to do with relating to the characters or situations on the screen, but with the mechanisms of projection. According to Metz, the spectator primarily “identifies with himself, with himself as a pure act of perception”

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<sup>5</sup> See for example Christian Metz’s *The Imaginary Signifier: Psychoanalysis and the cinema* (1982). With regards to historical conditions, Judith Mayne posits that “the ease with which the cinematic apparatus fits into the broad lines of the culture of consumption and consumerism suggests that the problem is not a *lack* of historical specificity per se, but rather the *kind* of historical specificity that is implied” (Mayne 1993: 50). Mayne is here referring to the debatable historical coincidence of the birth of cinema coinciding with the popularity of psychoanalysis and the emergence of consumer culture. However, even Mayne herself is unsure whether historicization alone can challenge apparatus theory’s “appeal to mechanistic homologies” (21). She is more preoccupied with apparatus theory’s attempt to propose a “master discourse” in the form of a theory that explains and demystifies everything (51).

(Metz 1982: 49). By problematizing film theory's fixation on representational analysis and questioning the primacy of the text in film studies, apparatus theory shifted the focus to perception and materiality, albeit in a mechanistic manner of inquiry that ultimately undercut its productive potential. Despite its flaws, apparatus theory acknowledges the instability of the object of study, and emphasizes the interplay of technology, spectators, and filmic texts. Apparatus theory served to highlight the importance of reception and material conditions in film studies, even though its methodology lacked substantial empirical research and consideration of audiences beyond a universalized and homogenizing model of spectatorship. In addition, apparatus theory did not allow room for the possibility of cross-identifications that go beyond bodily limits and psychic mechanisms, as that would challenge some of its psychoanalytically oriented assumptions.

The common objection to apparatus models like Baudry and Laura Mulvey's is that they assume a mostly homogenous or even a collectively shared spectator response. As Judith Mayne rightly points out, "what is not altogether clear is the critical and theoretical difference that a heterogeneous, as opposed to a homogenous concept of spectatorship, would make" (Mayne 1993: 53). As the work of Mary Ann Doane has demonstrated, even many films that encourage strong female spectatorial investment actually confirm, instead of contest, the institutional qualities outlined by Mulvey. In a similar way, Baudry's theory can be criticized for presuming a cinematic institution so prevalent and dominating that it homogenizes all spectatorial responses, or that the implied spectator is too immersed (or even complicit) in the myth of cinema that apparatus theory aims to dismantle. Adding more variables to the definition of the

cinematic institution does not, therefore, guarantee the dismantling of fantasies of fusion and regression.

The majority of ICs—whether of mainstream or experimental origin—attempt to appeal to viewers who are searching for something outside of conventional cinematic exhibition and reception modes.<sup>6</sup> IC usually denounces conventional cinematic experiences as unsatisfactorily passive, and frequently alludes to the darkened theater and the immobilized spectator as the culprits for this passivity. In a crucial sense, though, this description of IC's advantages over other forms of cinema supports the same fantasies of fusion and regression as apparatus theory, just as it is attempting to deconstruct some of them by providing alternatives. The introductory clip to Bob Bejan's *I'm Your Man* (1992), for example, promises that “what you are about to see is completely different from any cinematic experience you ever had” and juxtaposes images of powerless spectators futilely yelling at the screen with promises of viewer empowerment through interactivity.<sup>7</sup> In this regard, IC accepts some of the conditions and conclusions of apparatus theory by positioning itself as radically contrary to (a reductive version of) traditional cinema. Material engagement with the interactive film—by way of the mediation of the IC interface—does, however, encourage us to examine the body as more than a site of reception. Ironically, though, cinemas catering to mobile

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<sup>6</sup> For instance, Roman Kroitor's *Labyrinth*, featured during Expo '67 in Montreal, is one of the many examples in which Kroitor attempts to develop new forms of storytelling. In Kroitor's words, “people [were] tired of the standard plot structure,” which is why he decided to construct a cine-labyrinth where visitors could physically traverse his work's architecture in order to gain access to the multiple screens and projections of the expanded cinema installation (Kroitor in Martin & Zapp 2002: 39).

<sup>7</sup> A noteworthy similarity between these promotional campaigns and the art circuit is manifest in the promotional rhetoric of interactive art exhibits. ZKM's promotion of the “YOU\_ser: The Century of the Consumer” exhibition (Karlsruhe 2007-09), for instance, emphasizes the empowering potential of interactivity. The exhibition's pamphlet features curator Peter Weibel's essay, “User Art”, that ends with Weibel proclaiming that: “The visitor is at the center of the exhibition as user, as emancipated consumer. YOU are the content of the exhibition!” (Weibel 2007: 6).

viewers are still prone to being criticized for rendering audiences passive, albeit in a different sense than classical film theory defines passivity.

### **The Many Meanings of Interactivity**

In some definitions, the meaning of interactivity overlaps with that of mental inertia. Lev Manovich argues that interactivity is a problematic or reductive term, because we tend to associate it with externalized interactivity, rather than psychological interaction (Manovich 2001). In other words, interactivity is arguably thought of as more of a physical than cognitive interaction with a product. Applied to some kinds of IC, interactivity often entails users physically interacting with the work: pushing buttons, using a remote control to navigate through different narrative fragments, and other types of somatic involvement. This kind of interaction is standardized in the sense that all users have to use the same medium or instrument for that interaction (e.g., a remote control or a touch screen). In such cases, interactivity is not only confined (at least empirically) to its instruments, but also to instrumentality—the purposive use of a mechanism without consideration of the complex psychological and somatic feedback system of the body and mind that is enacted by way of the mechanism.

In this respect, interactive narratives make users aware of the construction of the work, but usually only in superficial ways, directly as a consequence of their standardized actions. That is, some works let the viewer choose from pre-existing choices in order to determine the development of the storyline, but do not allow him/her to actually construct the pool of narrative options from which a particular sequence may be selected. Tactile interactivity can shift the user's awareness of what is taking place from a purely cognitive realm: thinking about what she or he sees and hears, to the physical dimension of interaction: thinking about which buttons to push and thus



adapting to a more game-like structure where outcomes of these operations are more important than the narrative(s) they may also produce.

However, this quasi-automated or conditioned response to some types of interactive films does not necessarily support models of object-oriented subjectivity (or *objectivity*), where the human element is eventually taken out of the equation and replaced by processes of automation. Such software-machine interaction is envisioned but not fully executed in the experimental projects of Lev Manovich and his design team. Manovich and his team call these works “soft(ware) cinema:” a form of recombinant narrative where audio and picture tracks are inserted into a database, and are then automatically remixed to generate movies. In this case, the software becomes the enabler for the interaction between humanly programmed algorithms and an initially indiscriminating database interface.

Interactivity has been studied in various disciplines, ranging from psychology to computer science (e.g., Manovich 2001; Vorderer et al. 2001). Yet, the extensive multi-disciplinary critical discourse on interactivity has not arrived at a consensus as to how it can be defined and measured. Various scholars propose an understanding of the concept of interactivity through differences between human and medium interactivity (e.g., Stromer-Galley 2000; Chung & Yoo 2008). As Deborah S. Chung and Chan Yun Yoo summarize, medium interactivity is determined by communication through the medium and the ways in which users can exercise control over the communication process and how they make choices through the medium; an example of this are user-customizable news headlines (Chung & Yoo 2008). Conversely, human interactivity refers to the communication between individuals that occurs through a medium; for

example, online chatrooms that allow users to virtually connect with each other from a distance. Chung, among others, assigns different degrees of interactivity to each of these categories. Middle-ground interactivity, for instance, is comprised of features that facilitate both interpersonal and medium interactivity and is the kind of interactivity that usually applies to IC works (Chung 2008).

Another contested aspect of these problems in the literature is how to effectively measure the degree of interactivity. Some criteria that have been proposed are: frequency of user activity, the importance of the impact of such activity, and the number of effective choices offered to the user (Bucy 2004). From this, another concern arises: that of how to decide which kinds of interactivity are more interactive. Jennifer Stromer-Galley (2000), for instance, sees human-to-human interactivity as more interactive than human-to-medium interactivity, especially when it can provide the basis for public reflection (Stromer-Galley 2000). According to Stromer-Galley's reasoning, then, subjectivity seems to be the condition of "true"—as in, meaningful and psychologically fulfilling—interaction, where the interaction takes place between subjects, not between an inanimate object and a subject. Erik Bucy similarly proposes that interactivity be measured within a socio-psychological context (Bucy 2004). Jenkins advocates a hypercontextual approach that does not focus exclusively on technological activity. Instead, he argues, the focus should be on interactions on several different but overlapping registers: those that take place among and between media consumers, the exchanges between producers and consumers, and the interactions between consumers and media texts (Jenkins 2002).

Following Jenkins' hypercontextual approach, I will be studying the social impact of interactivity in public screenings to explore the audience dynamic and individual behavior during interactive encounters. The critical focus on audiences becomes more pronounced if we think of IC as moving pictures and audio that respond to actions. Accordingly, Wardrip-Fruin and Montfort propose that an analysis of interactive media must transcend theories about image representation and explore images as "procedural" (Wardrip-Fruin & Montfort 2003: 626).

Torben Grodal argues that the primary objective of interactivity is "changing the mental states of the experiencer, whether that occurs through changing certain objects in the world or by altering his or her point of view or experience" (Grodal 2009: 175-6). Grodal's argument shifts the focus from the mechanisms of interactivity to the human experiences created in interactive contexts. This perspective offers a broader understanding of interactivity that is not technologically oriented or technically determined.

It should be noted that what users associate with interactivity may not coincide with manufacturers' or producers'—or, for that matter, media theorists'—definitions of the concept and its applications. Even though Oliver Quiring and Dominik Leiner state that users mostly relate the interactivity of media to marketing terms, it has also been suggested by critics such as Jenkins that some users define interactivity in social and individual terms, for example associating the word with what can be achieved through activities they characterize as interactive, such as participation (Quiring & Leiner 2008; Jenkins 2002). Although researchers like Bucy insist that social and unmediated interaction is not of the same kind as mediated interactivity, others extend the definition

of interactivity to include social and inborn desires (Bucy 2004). For example, Sundet and Ytreber suggest that people are naturally inclined to participate, so interactive media can help fulfill the inborn desire for participation and communication. According to this reasoning, three main motives for interacting emerge: socialization, emotional engagement, and experimentation with new technology (Sundet & Ytreber 2009). Basic principles of IC would seem to support the above-mentioned reasoning. Although many works of IC are digitally based, examples in analog film also emphasize social and psychological performativity.

Furthermore, there are many levels and definitions of interactivity in contemporary varieties of cinema, such as computer-generated, software-driven, physical interactivity, cognitive interactivity, and immersive interactivity. A single definition of any of these kinds can, of course, be contested. Another criterion that complicates the measuring of interactivity is the different degrees of participation: installation artist Miroslaw Rogala points out that the viewer is sometimes not in control, “but simply aware of his or her complicity” (Martin & Zapp 2002: 112). If the viewer is implicated as a participant in the performance of the film, then this type of viewer is akin to the viewer that is the subject of reception theory and cultural studies. Reception and cultural studies presume that audience response is and has always been active: viewers are always interacting with the film on some level—cognitive, physical, emotional, and so on. Even in non-interactive forms of cinema, audiences mentally construct heterogeneous meanings from elements of a given text and thus assume an active role in the meaning-making process (even though, of course, this role is often limited and response is determinately guided by aspects of the filmic text and its

ideological intertexts). When the notion of interactivity is generalized to this extent, then there is the risk of reducing the usefulness of the term and overlooking the particularities of IC in relation to other forms of cinema.

### **IC Historiography, Archives, and Ephemera**

The promotion of IC as a novel experience, bordering in important respects on other experiences of contemporary computer culture such as gaming or immersive user interfaces, mistakenly implies that IC also marks a radical break from prior forms of cinema. The tendency to brand IC as absolutely distinct from non-interactive cinema is evident in both the promotional hype surrounding ICs, and in much of the scholarly discourse devoted to IC, and in related speculations about the future of cinema. Film theorist Edward Small, for instance, speculates that the future will produce a product distinct from film and video (Small 1994). Small's prediction confirms Grusin's observation that "academic discussions of interactive cinema often indulge the desire for a radically new cinema along the lines of hypertext fiction and other new media art" (Grusin 2006: 213).

In reality, however, most forms of IC adhere to a general logic that Bolter and Grusin have termed *remediation*, in which no new(er) medium operates as a discrete entity, but instead derives from, reworks, and absorbs elements of earlier media (Bolter & Grusin 2000). Consequently, the history of one medium is inextricably tied to the development of other media—not just in technical terms, but also in terms of aesthetics and sociocultural reception. Grusin proposes that new forms of cinema "will not be marked (as many digital enthusiasts contend) by the emergence of a distinctly new digital medium... but rather by the emergence of multiply networked, distributed forms of cinematic production and exhibition" (Grusin 2006: 209). This model of remediation

signals that forward-looking criticism also has to retrospectively acknowledge the complex and mixed origins of media hybridity. In light of this, IC's development could be traced back to influences of earlier media, such as pre-cinematic serial media, the introduction of stereoscopic techniques in photography and early cinema, the Happenings, and Expanded Cinema.

IC is often treated as a progeny of digital video and computer gaming, and thus a medium that is distinct from cinema. However, the fusion of interactivity with cinema was envisioned long before the advent of digital technologies of recording and projection, as is evidenced in mixed media performance works during the 1950s and 1960s. Going even further back in time, IC's development can also be traced within the tradition of immersive art (such as German panoramas in the 1800s), as art historian Oliver Grau reminds us (Grau 2002). Because I am primarily trying to locate IC's place within the development of the cinematic medium, as well as within the purview of cultural studies and film theory, the period of development covered in this project will begin with some of the first publicly screened self-proclaimed interactive movies of the 1950s and 1960s (in both mainstream theaters and experimental film festivals), and will conclude with recent digital releases up to 2011.

This project partly arises, therefore, from the need to properly trace the influence of IC on the development of cinema at large as well as on current trends in digital culture. This will inevitably force us to reconsider the rubric of "new media" and associated misleading claims of novelty and digital (non)materiality.<sup>8</sup> That said, we

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<sup>8</sup> Notable books that redefine new media beyond digital origins include Lisa Gitelman and Geoffrey B. Pingree's *New Media, 1740–1915* (2003), and Jonathan Crary's *Techniques of the Observer: on vision and modernity in the 19<sup>th</sup> century* (1992).

should bear in mind that a complete developmental path of IC is, for the most part, impossible to fully reconstruct. There have been a variety of ICs, branching out into diverse areas of artistic practice, and the historical documentation of important early examples of IC is difficult to find because of a lack of rigorous archival practices.

Consequently, the interpretive communities and rituals built around the production and consumption of IC *sui generis*—including its sharing and distribution—have not amounted to a significant or influential cross-section deemed worthy of thorough investigation, apart from cases where IC is studied under the umbrella of digital media.

The marginalization of IC from mainstream film theory and history is exacerbated by increasing skepticism regarding the reliability of archives, particularly in light of an ongoing deconstruction of the critical-historical status of archives and databases. The reliability of the archive and its relationship to the past has been repeatedly contested by theorists, which consequently shifted the analytical focus from the storage potential and institution of the archive to its function as an catalog of evolving attitudes towards subjective time in art and science.<sup>9</sup> Inevitably, nineteenth and early twentieth century confidence in the archive's objectification of historical progression was challenged by an increasing skepticism of historiographical methodologies in general. In media studies, media historiography has been criticized for its favoring of implausible causality and for progressively narrativizing the inconsistencies of media development. Theorists like Bolter and Grusin suggested that finding "historical affiliations or resonances" is a more realistic goal for media theorists than searching for elusive origins to explain instances of media convergence and remediation (Bolter & Grusin 1999: 21).

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<sup>9</sup> An essay anthology edited by Charles Merewether that chronicles these changing attitudes and criticism is *The Archive* (2006).

Erkki Huhtamo proposed the less problematic notion of “media archeology” as an alternative methodology to historiography that draws attention to the fragmentary and incomplete record of the past histories of media (Huhtamo 1997). Media archeology has become a more realistic approach for theorists and media historians, and has even been advocated as part of a new historiographical model by theorists such as Thomas Elsaesser (Elsaesser 2004). More than a decade after Huhtamo’s suggestion, Chris Funkhouser used the term “archeological excavation” to describe his efforts to obtain and operate prototypical digital poetry that had not yet been historicized through archival records and documentation (Funkhouser 2007: 6). Funkhouser’s use of the term excavation resonates with Huhtamo’s understanding of media archeology. However, there is inevitable overlap between historiography and archeology, even if in theory they have contrasting objectives. Once the paths of an archeological excavation have been documented—as in Funkhouser’s collection of previously undiscovered digital poetry—then the focus is on what has been found, instead of on what else could have been discovered. Although archeology does not try to recreate events in a strict sequence of development and impose causality, it is concerned with chronology in more subtle ways. Funkhouser’s record of digital poetry, for instance, forges its own canon in the technological periodization of computer-generated poetry prior to the advent of the WWW. While Funkhouser allows room for other non-historicized works to enter the canon of pioneering forms of digital poetry, the analytical focus is inevitably dictated by what he was able to retrieve through emulators, second-hand documentation, and other methods of recovery.



The retrievable—that which is accessible, especially in a reproducible form—is often what ends up being historicized through the process of canonization. Admittedly, the close analyses in my own research have been largely structured around the objects—or, the reproductions and remediations of those objects—I have been able to obtain and study firsthand. My objects of study serve to highlight ruptures in film history and forgotten discourses (or, in Foucaultian terms, discursive objects) that can inform contemporary media theory, regardless of their commercial and/or critical success or their artistic merit. Along these lines, inventions such as Smell-O-Vision and Percepto are often dismissed as commercial and technological failures, but if they are alternatively regarded as dream machines then they resonate within discourses related not just to immersion, but also to earlier frameworks of cinematic embodiment. As Huhtamo argues,

registering false starts, seemingly ephemeral phenomena and anecdotes about media can sometimes be more revealing than tracing the fates of machines which were patented, industrially fabricated and widely distributed in the society, let alone the lives of their creators, if our focus is on the meanings that emerge through the social practices related to the use of technology.

(Huhtamo 1997: 221)

Huhtamo proposes a fairly convincing counterargument to periodization as chronological coherence in claiming that media archeology entails the study of “recurring cyclical phenomena which (re)appear and disappear and reappear over and over again in media history and somehow seem to transcend specific historical contexts” (Huhtamo 1997: 222). These phenomena are oriented by their representation in discourses rather than being materially grounded in artifacts. Huhtamo proposes we think of these discursive formulations and media traditions as “webs of signification” that encompass, in a non-hierarchical manner, the social and ideological dimensions that

contribute to our multifaceted understanding of them (222). While this proposal appears tenable in theory, in practice—as my case study of *Kinoautomat* in Chapter 2 will illustrate—it is very difficult to weave together the contradictions (methodological, ideological, critical, and so on) that often accompany the excavation of media relics into a unified web of signification. The challenge is acutely felt when some significations consciously attempt to nullify others, or when some significations are so rigidly bound to their historical context that they resist being co-opted into the arguably cyclical logic of a media history that transcends historical specificity—with the concept of history in this case encompassing considerations of culture, ideologies, and social contexts.

The above issues complicate the task of media analysis. As media scholars, should we focus on problems of technological obsolescence, the analysis of the retrieval part, the recovery of the primary object, or some balance of all three (and probably other aspects besides these)? Writing with classic video games and hypertext narratives in mind, Terry Harpold and Matthew Kirschenbaum add more questions to the mix, such as: how do we take into account effects of the operating system of the computers on which interactive media is run, and how do we distinguish between versions and builds of successive releases of executable code? (Harpold 2009: 177–79; Kirschenbaum 2008: 22). These kinds of information are frequently documented in fan writing (as in online gaming sites), but they are often ignored in scholarly analysis. Some of these considerations must also apply to the executable code of IC – do we need to be aware of them when analyzing the potential convergence of IC with gaming?

Kirschenbaum argues that “new media cannot be studied apart from individual instances of inscription, object, and code as they propagate on, across and through

specific storage devices, operating systems, software environments, and network protocols” (Kirschenbaum 2008: 23). At the same time, Lev Manovich proposes that we should examine new media objects not only in “the way twentieth century critics would examine a novel, a movie, or a TV show, [as that] will only tell us some things about the experience that we would get when we interact with this [object] via software” (Manovich 2008: 17). Others, such as N. Katherine Hayles, argue for a media-specific response that pays attention to the particularities of the object’s medium (including details of its hardware, applications, and operating system) only when it can enhance our understanding of that object. And then there is the critical position that asks for a distinction between the contributions of artists and creative software engineers to any given work of digital art. Huhtamo, for example, privileges the “cultural consciousness, ethics and the politics of representation” surrounding particular works over technical aspects such as digital code (Huhtamo 1995: 85).

Alternatively, Terry Harpold suggests that “it is not necessary to track every change in the conditions of reading in order to grasp salient differences between how a work signified then and how it may signify now. But,” he adds, “it seems advisable at least to register these differences where that can be done, and to attend to what they might reveal of the historical arc of our reading” (Harpold 2009: 3). Harpold’s proposal that it is necessary to attend to the specific, material “conditions of reading” could very well apply to how we read indirect versions or partial remediations of interactive installations. This also applies to the mutable “reading surface” emphasized by Harpold, which—for the digital archive—includes the screen layout, scrolling controls, and navigation tools. But, should the reading surface be a secondary concern, or is it

already—in the case of online remote access—one of our primary concerns since we can never fully attain the primary objective (i.e., direct and physical experience)? The reading surface in digitized versions of large-scale or performance-based interactive works not only provides indirect access to the original work, but also creates a new interactive encounter, where navigation tools become part of the interactive experience.

In attempting to address these concerns, we face yet another problem: what happens to ephemeral, mixed or intermedia events that cannot be recaptured through documentation? This is where an archive of digital works can be useful, even if only as an inventory or a record of ephemeral traces. As Sven Spieker states:

archives do not record experience [nor the memory of experience] so much as its absence; they mark the point where an experience is missing from its proper place, and what is returned to us in an archive may well be something we never possessed in the first place.

(Spieker 2008: 3)

In light of this comment, should archives of interactive experiences function as placeholders for something—an irreducible element of the performance of the work—that can never be recaptured? Wendy Hui Kyong Chun suggests that, in the digital, there is a “conflation of memory and storage that both underlies and undermines digital media’s archival promise” (Chun 2008: 148). The attempt to archive the remnants of an experience – whether through writing, blogging, photographs, or videography—helps remind us that that experience actually happened. I argue that it helps us remember (or learn) that that experience *was*, even if it does not fully explain *how* that experience was.

Paolo Cherchi Usai argues that the disappearance of the objects of study—not just in the sense of material erosion but also in terms of contextual proximity—is what drives historicization, because “history can only explain why these images had

disappeared, and their hypothetical value in the cultural memory of an epoch; it is their manner of disappearance that induces a periodization” (Marks 2002: 93). In some ways, disappearing objects call for new forms of remembrance through periodization or canonization more so than readily available media, which explains why digital media are often seen as either ahistorical (existing in the now) or as potential archives of older media.

Siegfried Kracauer argues that memory aids or perceived mnemonic prosthetics such as photographs simultaneously enact and destroy mnemonic experience. Overly documented objects not only tend to lack historical depth because of their constant availability, but also—according to Kracauer—deprive memory of its selective function (Kracauer 1995: 58). His argument aptly applies to the digital era and the increasing obsession with documenting every mundane detail of our lives for others to see; the frequent lack of selectivity and filtering that accompany this act obscure its potential as a process of self-archiving. Kracauer goes on to conclude that “the resemblance between the image and the object effaces the contours of the object’s ‘history’ [...because] the *contiguity* of these images systematically excludes their contextual framework available to consciousness” (58).

Kracauer therefore sees the productive aspect of emphasizing gaps over other aspects such as traces and excess. In juxtaposition, Elsaesser’s perspective on historical gaps complements Kracauer’s views on excessively photographed objects, and extends his theory to other archival methods that prompt historical writing and discovery. Elsaesser notes that sometimes gaps in our understanding of the past are seen as gaps in our knowledge but, he warns, “one would be careful not simply to fill in

the blanks with new ‘facts’ before considering that a ‘missing link’ may well have its own meaning—as a gap” (Elsaesser 2004: 104). This consideration will become particularly useful in my close readings of important interactive films, and will help justify their resistance to full coherence within existing frameworks.

Within the study of digital media, IC theoretically coheres as the next logical step in the convergence of cinema with interactive technologies. IC is often linked to new media genealogically, rather than archeologically. Although genealogy and archeology can be seen to have overlapping objectives (discovering the past, to put it simplistically), their ultimate goals—if archeology even has an ultimate one—oppose each other: genealogy “tries to trace back a continuous line of descent from the present to the past,” while archeology “knows that only the presumption of discontinuity and the synecdoche of the fragment can hope to give a present access to its pasts” (Elsaesser 2006: 18).

Wolfgang Ernst—an historian, classicist, and archeologist—posits that “even when we claim to perform media-archeological analysis, we easily slip back into telling media stories” (Ernst 2006: 105). However, these media stories can be insightful if we consider the underlying objectives, agendas, and ideologies that generate them. Consequently, this conceptual move would bring the notion of chronology closer to its etymological roots. In Classical Greek, chronology is derived from words χρόνος (= “time”; extended to also mean “period” in Modern Greek) and λόγος. The word λόγος has multiple meanings, but, when combined with χρόνος, it encompasses the acts of inquiry and discourse, as related to the *study* (rather than the *organization*) of time. The etymology of chronology thus reminds us to look beyond the historical determinism that often becomes erroneously bound with chronological notions and processes.

In culmination, Harpold's notion of *historiation* proposes a multilayered notion of contextual analysis that takes into account varying reading conditions. As previously mentioned, Harpold incorporates the reading surface/interface as well as the varied individual textual encounters into a broader understanding of a media(ted) object's history. By insisting on the uniqueness of each medial interaction, Harpold highlights the overall inconsistency of an interactive object's meaning, which is bound to the irreducibly subjective character of each interaction, paradoxically carried across other interactions:

each moment of the reading encounter is the inconsistent aggregate of other moments, stimulated – consciously and unconsciously – by marks and patterns of marks that evoke others and thus generate meanings that are specific to the encounter. I propose to characterize these operations, which are bound to, and capable of anticipating and generating new responses to, visual-textual traits of the reading surface, by the term *historiation*.

(Harpold 2009: 56)

Historiation is useful in the analysis of cross-contextual, cross-platform, and interpersonal modes of media encounters, and informs my development of an analytical framework that takes into consideration the inconsistent and multilayered nature of IC experiences in social, domestic, and virtual reception contexts. While concepts of interactivity are generally bound to mythologies characterized by rhetoric of empowerment and/or user manipulation, I focus on historically, socially, and politically specific sub discourses associated with interactivity. Such an approach is instrumental in examining overlooked paths in the development of cinematic spectatorship and reception contexts, and compels us to ponder other omissions in consensual canonization and media historiography.

## CHAPTER 2 INTERACTIVE CINEMA FROM VENDING MACHINE TO DATABASE

### **Introduction: Pre-digital Interactivity and Digital Studies**

The study of ICs—ranging from mixed media prototypes to those in digital formats—is gradually becoming integrated into contemporary media studies, especially digital studies and new media theory. Since interactivity is, arguably, one of the distinguishing characteristics of new media, it is no wonder that IC is being rediscovered within the scope of digital studies, and is becoming associated with the form of database cinema<sup>1</sup>—a cinema that renders transparent the processes of selection and recombination characteristic of digital databases in an arguably similar manner as the selection and recombination processes characteristic of pre-digital ICs.<sup>2</sup> However, what is often neglected in this rediscovery of database narrative’s supposed archetypes are the actual narrative aesthetics and reception contexts of these works, which often convey invaluable cultural and social insights.<sup>3</sup> Although some of these works lack substantial records of contemporary viewers’ impressions of the experience, close readings and formal analysis of such works can still provide useful information about their contexts of reception, as well as insight into sociopolitical ideologies driving the use of the

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<sup>1</sup> Marsha Kinder defines database narratives as structures that expose or thematize “the dual processes of selection and combination that lie at the heart of all stories and that are crucial to language: the selection of particular data (characters, images, sounds, events) form a series of databases or paradigms, which are then combined to generate specific tales” (Kinder 2002b: 6). Mike Figgis’s *Timecode* (2000), as an example, illustrates the database aesthetic in the form of four split screen sections displaying overlapping actions shot in the style of real-time surveillance footage.

<sup>2</sup> Lev Manovich identifies interactivity as one of the traits of new media, and argues that this interactive nature is what allows the user to become “the co-author of a work” (Manovich 2001: 49). But, later on in his book, Manovich admits that “to call computer media ‘interactive’ is meaningless—it simply means stating the most basic fact about computers” (55).

<sup>3</sup> Edward Branigan’s definition of narrative as “a way of organizing spatial and temporal data into a cause-effect chain of events with a beginning, middle and end” is a useful starting point for thinking about narrative as a mode of cultural production and a means of comprehending the world (Branigan 1992: 3).



interactive format. Such an approach problematizes the typical reading of interactivity as a transhistorical, transnational, and digitally defined phenomenon.

Approaching interactivity as more than a technologically oriented phenomenon helps us understand it outside of the developmental path that leads to (and typically, too often, ends with) digital media. In this Chapter, I expand the concept of discontinuous and variable media(ted) history through rigorous cross-contextual analysis of both undiscovered and pioneering interactive films such as the aforementioned Czechoslovakian film *Kinoautomat*. This film is an early example of Expanded Cinema: it attempted to expand the cinematic space through a live performance component, and to promote an expanded consciousness of cinema by redefining the role of the spectator to that of an active participant. As a retrospectively acknowledged example of the 1960s Czechoslovakian New Wave, the film and its interactive performance simulated a powerful critique of the Communist Party's democratic pretensions. Through multifaceted analysis of *Kinoautomat* and consideration of both its nationally-specific and (post)humanist implications, I develop a framework for approaching a diversity of other interactive projects such as the artificial intelligence documentary-generator *Terminal Time* (Steffi Domike, Michael Mateas & Paul Vanouse, 1999–2003) and the practice of software-generated cinema to be analyzed in Chapters 3 and 4.

### **Transnational or Non-historicized? Hypercontextual Film Analysis**

In the rediscovery of IC through the lens of new media theory, close analysis of formal and narrative elements is often neglected for the sake of focusing on mechanisms of interactivity and mediation. Undoubtedly, it is easier to apply new media theory to the recent digital films I will analyze in Chapters 4 and 5 (e.g., *Stockholm* and *TWU*), as they can be productively examined under the rubric of digital cinema (i.e.,

distinct from IC). Contemporary feature-length Hollywood films such as Christopher Nolan's *Memento* (2000)—as well as some internationally acclaimed films such as Tom Tykwer's *Run Lola Run* (*Lola rennt*, 1998)—evoke aspects of gaming in the way the film conveys its narrative to the audience. Although these films do not directly implicate the audience into the expression of the filmic narrative to the degree that IC does, they are interactive in other ways.<sup>4</sup> In some cases, these films can be classified as interactive by virtue of their thematic content; for instance, interactivity is seen as a dehumanizing operation in *Run Lola Run*, particularly felt in the audiovisual parallels drawn between the characters and avatars or automata.<sup>5</sup> Alternatively, some contemporary films are considered interactive in terms of the intellectual engagement they require of the viewer; for instance, *Memento* demands that an alert viewer reassemble elements of the narrative together while trying to keep up with the film's suspended temporality.<sup>6</sup>

It is even more tempting to see interactive films as adhering to a videogame or hypertext logic, especially ones that turn actors into viewer-controlled avatars, and/or

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<sup>4</sup> Perhaps the most obvious cases of evoking a sense of interactivity through filmic techniques are cinematic adaptations of video games, such as *Lara Croft: Tomb Raider*, and *Doom* (Andrzej Bartkowiak, 2005). Notably, Gus Van Sant's use of the subjective POV characteristic of first-person shooter games in *Elephant* (2003)—a film mostly about a high school shooting—reveals the ominous undertones of the shooter-mode and turns the playful technique into something of a cultural taboo, especially in the midst of multiple incidents of high school shootings in the U.S.

<sup>5</sup> These films can also be called *interacted* because the viewer gets to see how the narrative(s) play out—and is thus made acutely aware of the films' resemblance to video games (primarily console, first-shooter, and MMORPG)—but the pseudo-player in this case has no control over how narrative paths evolve. The majority of criticism regarding such films sees them as symptomatic of an increasingly digital age, and as paradigmatic of the hype/skepticism dichotomy of discourses of interaction from the 1990s onwards. However, this time period (reflecting a 1990s mentality) seems precarious if we consider earlier films that draw inspiration from computer games (like Steven Lisberger's *Tron*, 1982) and arcade games (like Agnes Varda's *Kung-Fu Master!*, 1988). My point here is that the comparison to video games should not be the only, or the primary, lens through which IC is examined, especially when the gaming aspect tends to become conflated with a reductive understanding of contemporary medial identity and dubious arguments about how new technologies rewire the human brain and introduce new modes of interaction.

<sup>6</sup> In "Narrative Equivocations between Movies and Games," Marsha Kinder discusses cinematic adaptations of video games such as *Tomb Raider*, and also reminds us that video games borrow from cinema just as cinema borrows from video games (Kinder 2002a).

focus on goal-oriented or choose-your-own adventure-style interactions. The critical reception of David Wheeler's interactive movie *Tender Loving Care* (1999) in Australia is indicative of the tendency to categorize interactive films as games, especially those films which are released in DVD-ROM or CD-ROM format: the CD-ROM version of *TLC* was banned in Australia because it was considered a computer game in which non-educational nudity is unjustifiable. A further reason why IC remains under the radar is that some interactive films are reviewed on gaming websites rather than featured on film websites and databases. Granted, sometimes it is hard to draw the line between film and game, as well as between viewer and player—hence the prevalence of portmanteau terminologies that draw awareness to a multi-layered interactive process of image consumption.

And certainly, in many recent interactive films, interactive aspects of the film's projection and consumption take precedence over otherwise unremarkable narrative or aesthetic content. *Cinema 3.0*, a phrase coined by Kristen Daly, is identified as "a form of cinema where navigating, intertextual linking, and figuring out the rules of the game provide the primary pleasures" (Daly 2010: 83). According to this definition, narrative pleasure is derived chiefly from interactions with cinematic objects; much of that pleasure for viewers lies in the active discovery of narrative(s) instead of narrative comprehension and other conventional modes of spectatorship. In her definition of cinema 3.0, Daly primarily has in mind examples of Web cinema for which the viewer is also the navigator. Films that demand the viewer to interact intellectually with the story also share attributes she describes; such films fall into the *mind-game film* category, wherein how the story is told is (at least initially) more important than the story itself.

Thomas Elsaesser asserts that, in mind-game films, “the spectator’s own meaning-making activity involves constant retroactive revision, new reality-checks, displacements, and reorganization not only of temporal sequence, but of mental space, and the presumption of a possible switch in cause and effect” (Elsaesser 2009: 21).

Mind-game films, like cinema 3.0, are mostly commended for the unusual ways in which they tell stories and engage viewers. Mind-game films such as the paradigmatic *Memento* and *The Sixth Sense* (M. Night Shyamalan, 1999) are more remembered for their manipulations of conventional cinematic temporality, cause and effect, and parallel planes of reality, than their often derivative plots. Elsaesser goes as far as to suggest that mind-game films transcend national cinema because they can raise universally resonant epistemological doubts and ontological concerns. Mind-game films address philosophical issues on the fringes of human perception, and therefore their sometimes disorienting formal structures could be tied to the uncertainty on how to organize and adequately convey such unresolved concerns. Mind-game and cinema 3.0 films have in common with interactive films that they are all frequently regarded as symptomatic of the role of the moving image in an increasingly networked and digital world; the demands they make on the viewer are consonant with the “new multitasking personality” emerging out of an arguably postmodern or posthuman condition (Elsaesser 2009: 29).

Therefore, even if these films do not fully cohere causally and temporally within conventions of narrative cinema, historical reception and cultural formations can make accessible, at least on some level, even those films most resistant to interpretative

legibility.<sup>7</sup> In the case of interactive films as well as cinema 3.0 and mind-game films, their debatable reflection of universal sensibilities and conditions (including pathologies such as schizophrenia and obsessive-compulsive disorders, which are usually amplified by erratic editing patterns and style) makes them engaging on a human level that is capable of transcending aspects of reception such as national heritage or gender. However, the contextualization of these filmmaking trends and themes within the evolutionary framework of technological developments can lead to deterministic assumptions about the impact of technology on the aesthetics of cinema and on cultural or global perception at large. Moreover, such interpretations contribute to a limited understanding of contemporary identities, whereby the medial distinction of the “digital” is used to reconcile variants of human experience and expression, such as national, cultural, and phenomenological differences.

Timothy Corrigan suggests that historical and cultural distance can produce new interpretations of films (Corrigan 1991). However, in the case of IC prototypes such as *Kinoautomat*, it seems that the justification of their contemporary relevance in retrospective analysis actually reveals an ahistorical and depoliticized excavation of these works for the sake of (retroactively) historicizing the roots of digital media. In attempting to place digital media within the broader context of media evolution, purported precursors of these media run the risk of being reductively re-historicized (or *miscontextualized*) in that they are valued primarily for their relation to new(er)—that is, subsequent—media, and for the way they illuminate current media trends and discourses. Ironically, in trying to provide a broader understanding of new media by

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<sup>7</sup> For instance, contemporary reception, contextual information, and aesthetic or narrative-formal understandings of a film can stimulate possible reading approaches.

locating their roots in earlier traditions, the particularities and distinct traditions of older media are often distorted or overlooked.

Consider, for instance, what is at issue in recent digital media theorists' "rediscovery" of avant-garde and Surrealist directors like Dziga Vertov and Luis Buñuel as database filmmakers. Manovich and Marsha Kinder, among others, argue that the methods of these visionary filmmakers adhere to a database logic that is paradigmatic of the ways in which the digital culture organizes and interacts with information.<sup>8</sup> In forging such a parallel between older, (contested) equivalents to database logic and to digitally oriented ways of structuring the selection and combination of information, the database metaphor risks losing its contextual particularity in both historical periods. If indeed what is now identified as database logic can be traced back to pre-digital methods, then it is more indicative of a sociocultural evolutionary process of relating to information than an emblem of the ways we now interact with new media.

Lev Manovich describes Vertov's landmark *Man with a Movie Camera* (1929) as "a database of new interface operations that together aim to go beyond simple human navigation through physical space," declaring that "the avant-garde became materialized in a computer" (Manovich 2001: xxx–xxx). While we can agree that commands like cut, copy, and paste are homologous in some respects with analog practices such as the Dadaist cut-up technique and avant-garde collage, the association between them is not as straightforward as Manovich proposes; an algorithmic approach to filmmaking undermines the traditions from which distinct and interrelated cinematic movements arise. Manovich likens the montage practices of Vertov and the New Vision

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<sup>8</sup> Marsha Kinder cites Buñuel's cut and paste method of non-linear screenwriting as exemplary of the mechanism of the digital database (Kinder 2002b).

movement of the 1920s to the arguably transcultural, globalized database interface of contemporary, post-GUI computing. He claims that the only area in which the connection between storage media and database forms is universal is cinema, whereby “the storage media support the narrative imagination” (233).<sup>9</sup>

In classifying *Man with a Movie Camera* as predominantly database cinema, and hence proclaiming it the “most amazing catalog of film techniques,” Manovich underrepresents other aspects of the film’s historical and political particularity (241). The only reference Manovich makes to the socio-political context of the film in his analysis of the film’s organizational techniques is when he cites, in passing, Vertov’s philosophy of the kino-eye as “the communist decoding of the world” (241). Even though the film was not intended to be a conventional realist documentary, it nonetheless retains part of its referentiality to an external reality of early twentieth century Soviet life. Admittedly, it is difficult to distinguish between certain tenets of socialist realism, indexical value, and artistic experimentation in Vertov’s work, but by limiting analysis of the film to its database-like qualities we run the risk of distorting its historical significance and reception. Manovich speculates that “the original viewers of Vertov’s film probably experienced it as one long special-effects sequence,” but he does not elaborate on how these effects acquire meaning in light of Vertov’s *Kino-Glatz* [Cine Eye] sensibility (241). Manovich’s reductive interpretation of the film’s contemporary reception undermines crucial factors such as the film’s resonance within the industrial-urban mythology of Communist Russia, and the film as a testament to—and commentary on—technical

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<sup>9</sup> It should be noted that Manovich’s views on the relationship between narrative and database are not consistent if we take his entire body of work into account. Sometimes he sees the two as contradictory, while other times he sees them as supplementary.

modernization. Furthermore, the anachronistic assertion that the film looked like “one long special-effects sequence” undermines other possible interpretations of its contemporary reception, such as the uncanny effect experienced by local audiences when seeing familiar city places in a possibly new light. Although Manovich could be mentioning the “special effects” of the film in order to propose an expanded definition of the digital, he myopically approaches the stylistic and technological innovations of avant-garde filmmaking by only considering them in relation to their contemporary digital parallels.

The database metaphor also undermines the film’s distinctive temporality, as the database is largely seen as atemporal or possessing a malleable temporality. However, even in *Man with a Movie Camera*, there is a sense of temporally motivated progression. The sequences amounting to a day in a Soviet city (actually, various cities) in the late 1920s are framed or intercut by mise en abyme sequences of audiences watching the film and of the film being edited, but this does not interrupt the temporal flow from dawn to dusk that motivates the film-within-a-film’s narrative progression. Regarding database cinema as a cinema that “forces the viewer to imagine there could be other configurations” can be a productive analogy, but only if we go beyond the computing metaphors of the filmic text and explore the polysemic text itself and—by extension—its multiple reception contexts (Daly 2010: 90).

Surprisingly, Umberto Eco’s proposed subcategory of “work in movement”—a category of the open work in art—has not been extensively applied to hypertext or interactive works, despite the fact that it appears to be a more apt description than database narrative or the broader category of the open work. Work in movement refers



to works where the author “offers the performer the opportunity for an oriented insertion into something which always remains the world intended by the author ...the author offers the interpreter, the performer, the addressee a work *to be completed*” (Eco 1989: 19). Keeping in mind the presence of an author(s) reminds us that interpretations and narrative trajectories are finite, not unlimited or automatically generated.<sup>10</sup>

Used in similar contexts as the notion of the open work in academic categorizations of interactive art, Deleuze and Guattari’s rhizome is another popular concept that is often used to envision the web-like structure of interactive works. Deleuze and Guattari posit the rhizome as different than arborescent structures that branch out from a single point. They state that “there are no points or positions in a rhizome, such as those found in a structure, tree, or root” (Deleuze & Guattari 1987: 8). The most important characteristic of the rhizome is that “it has multiple entryways” and is comprised of plateaus that “can be read starting anywhere” and can be related to each other at any point (Deleuze & Guattari 1987: 12, 22). This definition has inspired new media theorists to speculate on the unlimited creative potential of digital media, and has also given rise to speculations on new modes of film production and reception. D.N. Rodowick, for instance, argues that, “with respect to digital technologies, cinema is reinventing itself—just as it has done in previous periods of technological transition—by producing stylistic innovations” (Rodowick 2007: 30). Rodowick, along with other film theorists, asserts that these new advancements render the “spectator no longer a passive viewer yielding to the ineluctable flow of time” (177). This coincides with Eco’s mention of Belgian composer Henri Pousseur. According to Eco, Pousseur has

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<sup>10</sup> “Author” here is used in a hypothetical sense to remind us that these works originate from somewhere and someone.

observed that the poetics of the open work tends to encourage “acts of conscious freedom” on the part of the performer, and place him at “the focal point of a network of limitless interrelations” (Eco 1989: 4).

The allusion to “limitless interrelations” certainly has rhizomatic undertones, and may lead us to the conclusion that both the open work and the rhizome might describe the navigation and reception of interactive films and other artworks. However, Deleuze’s concept of the rhizome seems more aptly suited to forms of new media that are *not* cinematic. It characterizes the hypertextual and multi-tasking mode of surfing the Web, but cannot be neatly applied to existing forms of IC (or even to most genres of digital literature).<sup>11</sup> Most interactive films must, in fact, begin from a specific place—typically an introductory clip and/or instructions that orient the viewer on how to interact with the film. Remote-controlled interactive works, for example, usually begin with an instructional video on how the viewer must repurpose the control buttons of their remote control in order to successfully navigate the ensuing film.

A suitable example that does not quite fit into the above-mentioned paradigms is North America’s first interactive film, *Late Fragment* (2007), directed by Daryl Cloran, Anita Doron, and Mathieu Guez. The film centers on three main characters whose lives

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<sup>11</sup> Peter Weibel’s paraphrase of the Deleuzian rhizome sums up its appropriateness within the logic of new media. Weibel sees the rhizome as synonymous to a network, and argues that “a network in which every point can be connected with any other point is a precise description of communication in the multi-user environment of the World Wide Web and the allusive, open-ended image and text systems derived from it. These narrative systems have a rather algorithmic character” (Weibel 2002: 50). The only erroneous aspect of Weibel’s analysis is that the words “narrative” and “communication” become conflated—a common mistake that has led to the equating of all forms of digital communication with that of new media narratives. This conflation is also evident in Eco’s *The Open Work* (1987), where he applies information theory to the aesthetics of some open works to test whether “in the end, a work of art can be analyzed like any other form of communication” (Eco 1987: 68). Deleuze and Guattari’s rhizomatic structure is actually more applicable to the film and media studies discipline as a whole, rather than specific objects of study. Like a rhizome, the discipline “ceaselessly establishes connections between semiotic chains, organizations of power, and circumstances relative to the arts, sciences, and social struggles” (Deleuze & Guattari 1989: 7).

loosely interlock during a restorative justice meeting. The viewer is put in the position of uncovering their backstories in order to find out how and why they ended up at the meeting. In home viewing, the viewer uses the remote control to unlock additional scenes involving the character(s) whose story the viewer wishes to learn more about. Viewers may “enter” scenes from different points, which can lead to the omission of significant details.<sup>12</sup> Although some narrative information may escape the viewer—especially if the viewer is not patient and methodical enough to devote several hours interacting with the DVD—all the pieces of the narrative puzzle have been planted by the writers/ directors. The interpretation of some events in the film might vary in its profundity, but the film is still less open-ended than the metaphors of the open work and the rhizome suggest.

In *Late Fragment* and many other interactive films, the viewer must assemble a predetermined sequence of events. In some cases, if the viewer fails to accumulate the information planted by the directors, the film loops back to decisive moments that the viewer must not miss, thus further undermining the freedom of the viewer to control the reconstruction of the story. In addition, *Late Fragment's* navigational scheme disempowers the viewer more than straightforward choose-your-own-adventure-style films such as the children's animated film *Choose Your Own Adventure: the abominable*

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<sup>12</sup> An example is the recurring scene where a daughter and father are watching TV together in the family living room. At some points, the scene begins and/or ends with a static shot which only shows the two of them. However, the complete, longer version of the scene reveals that the mother, Faye, is actually standing by the doorway, listening in on their conversation. This is a subtle hint that the mother is aware of the father's sexual harassment of her daughter, but chooses to take no action to prevent it. The more scenes from Faye's story the viewer watches prior to the full version of the aforementioned scene, the more meaningful this interaction becomes. However, the scene selection appears to be somewhat random (even if the viewer consciously clicks on specific moments in a scene to change the trajectory), as the full scene may occur towards the beginning of the film, thus not allowing the viewer to read more into the editing and mise-en-scène.

*snowman* (Bob Ducette, 2006). *Late Fragment's* viewer is never fully aware of how his/her interaction determines the narrative sequence. In the instructional video preceding the film, the viewer is simply told to click on the character(s) she or he wishes to learn more about; by clicking on a character as she or he appears on the screen, the viewer accesses more of that character's back-story scenes. If the viewer does not use the remote during a character's scene, then she or he is shown a scene from another character's story right after. However, if the viewer continues to favor one character over the others by clicking Enter on the remote control during that character's scenes, then after a while (typically after 2–4 scenes) the film automatically switches to another character's scene. Thus, the instructions on how to navigate film (as laid out in the introductory video) are provisional, and not always applicable to the overall structure of the film. Perhaps this is where the rhizome metaphor would be appropriate: the viewer does not create a rhizome through interactions with the film – the viewer simply navigates a pre-existing rhizomatic or maze-like structure. Unlike digital media such as the Internet, where the user can actually *add* branches (or plateaus) to an expanding rhizome (for example, by building a web site and linking it to other web sites), the majority of interactive films do not allow the viewer to add to the film's content.<sup>13</sup>

For theorists such as Lunenfeld and Jenkins, a rhizomatic structure is better suited to distribution and reception patterns of open works, rather than their aesthetics. Lunenfeld points out that there is too much focus on interactivity within narrative, and within the vehicle of the narrative (i.e., its medium), rather than on the hypercontexts

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<sup>13</sup> Fan practices that often involve remixing existing content to create new narratives constitute an exception to this, and also expand the definition of interactive cinema (although they are more willingly accepted as “interactive” than “cinema” by traditional film theorists). In addition, Thomas Elsaesser uses the Deleuzian term “rhizomatic” to describe films that gain an online fan following (Elsaesser 2009: 11, 23).

that demonstrate how a text interacts with “a rhizomatic and dynamic interlinked communicative community” (Lunenfeld 2004: 383). This approach inevitably expands the definition of interactivity to include non-interactive cross-media works such as *The Blair Witch Project* (Daniel Myrick & Eduardo Sanchez, 1999) [Lunenfeld’s case study] and *The Matrix* (Andy Wachowski & Lana Wachowski, 1999) and *Star Wars* (George Lucas, 1977) franchises [Jenkins’ case studies].<sup>14</sup> Hypercontexts draw attention to paratextual and extra-textual dimensions of a film or television show, such as promotional products, varied fan communities, and systems of distribution. Erkki Huhtamo similarly argues that if we are to use interactivity to define our relationship to technology, then we must relate this notion to wider social and ideological formations that succeed modernity (Huhtamo 2000).

In order to dispel the ahistoricity that is characteristic of some new media theories of interactivity, we must ground our critical discourses materially and contextually rather than just theoretically. Contextually here does not refer to a chronological framework consisting of simply identifying the predecessors of new media to argue that they are not actually *new* (and thus point to the obvious fact that the time frame implied by the term “new media” is precarious). As Huhtamo states, “we should resist the temptation to look at things in the past merely as an extended prologue for the present” (Huhtamo 2000: 110). Rosemarie Scullion’s argument that “films can display their historicity by capturing and conveying the sensibility of a certain age” is too simplistic to account for multivalent plural notions of film histories that inevitably include teleological, historiographical, and temporal considerations (Scullion 2011: 128).

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<sup>14</sup> According to Jenkins, cross/transmedia storytelling refers to the unfolding of a narrative across various media platforms that aid the concurrent development of various facets of that narrative (Jenkins 2006b).

Nevertheless, films should not be denied their potential for historical specificity just because it is now becoming customary—and easier—to privilege newer methodologies that resonate with emerging fields such as the digital humanities (such as distant reading and data text mining methods, to be discussed in Chapter 3).

With the objective of fully grounding the discourse of IC historically, we must also investigate the specificity of socio-cultural contexts and philosophies of interactivity. In other words, while there is a consistent—and, even, transnationally and transhistorically resonant—mythology attached to the term interactivity, there are also subordinate discourses associated with the term that have historical, social and/or political particularities. These particularities enable us to regard interactivity as more than a technologically oriented phenomenon, and to examine interactivity beyond the deterministic developmental and ontological path that leads to—and typically ends with—digital media. Such an approach would also enable us to conceptualize media history as more than the history of media: as the history *in* media, a history that encompasses much more than just the technological development of media, and—above all—a discontinuous history that allows for contradictory or non-compatible visions of the past.

### ***Kinoautomat* as Case Study for Hybrid Analytical Frameworks**

A productive place to begin establishing early IC's variable and inconsistent nature is *Kinoautomat: Člověk a jeho dům* (*Kinoautomat: One Man and His House*). The film was originally produced in 1966–7 by a Czech team led by the filmmaker Radúz Činčera and is significant for a number of reasons. First of all, it is often cited as one of the prototypes of IC because of its use of an interactive voting system that allowed the audience to use their green (= Yes) or red (= No) buzzers (or sometimes voting cards)

to determine the development of the story.<sup>15</sup> The film is retrospectively acknowledged as an early example of Expanded Cinema: it attempted to expand the cinematic space through a live performance component, and to promote an expanded consciousness of cinema by redefining the role of the spectator. The 1967 International and Universal Exposition (Expo 67) in Montreal, where *Kinoautomat* was showcased along with other influential works, inspired Gene Youngblood's *Expanded Cinema* manifesto (1970), which proposed his synaesthetic notion of cinema as expanded consciousness. *Kinoautomat* is also an early demonstration of the myths associated with interactive technologies, anticipating ahead of its time the mainstream hype surrounding interactivity in the 1990s.

*Kinoautomat* is regarded as a prototypical example of the database logic of IC. The name *Kinoautomat* draws inspiration from the idea of a movie (*kino*) vending machine (*automat*), from which a narrative trajectory is selected out of a store of options. Vending machines let the consumer see the options available (either through a glass or as images) prior to making a selection. Today, movie vending machines such as the ubiquitous Redbox are perhaps an example of the modern convergence of database and vending machine because they present all the options available to the viewer visually and in an informational database through which the user makes a selection. Therefore, it is easy to make superficial connections between the database and the vending machine, even though the analogy is problematic. Perhaps the only critic who openly notes the connection is Chris Hales, in observing “the often raised

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<sup>15</sup> In theaters equipped with custom electronic voting consoles (including the space at Expo 67, and more recent screening locations), the viewers' color-coded votes were displayed along the periphery of the screen. In conventional theaters, including Prague screenings, the voting was done using color-coded cards.

criticism that making choices in an interactive narrative made from pre-made segments is hardly more sophisticated than pressing the required combination of buttons on a hot-drink vending machine” (Hales 2005: 64). Hales does not equate the organizing principles of the vending machine with the logic of a narrative database, but instead draws a parallel between the limited (inter)actions they both allow their users. Thus, Hales taps into another Czech meaning for kino-automat, one that centers on the process of automation; in this respect, the user’s role is either that of a bystander in the automated narrative-vending process, or that of a component in the automation (in that he/she is needed to insert currency and push buttons to initiate the vending process, but has no control of the mechanisms behind the delivery of the product). The possibility of the user executing (or becoming part of) the machine’s logic resonates with Huhtamo’s view of interactive media as a type of convergence of the “two earlier models of the human-machine system: they adopt from mechanized systems the constant interplay between the ‘worker’ and the machine, sometimes to the point of ‘hybridization’ ” (Huhtamo 2000: 107).

*Kinoautomat*’s interactive connection not only makes the film relevant to recent discussions of new media interactivity, but also is the defining trait that made it internationally appealing in the context of Expo 67. Expo 67 in Montreal, Canada, featured cutting-edge artworks from several countries, and assigned different locations (pavilions) for each country’s display. The overall theme of the Expo was cosmopolitanism, and was materialized in networked projects that encouraged mobile spectatorship and stimulated new worldviews. Paradoxically, the geographical locale of the exhibit caused the Expo to become inextricably associated with Canadian



nationalism and localism. The impact of the Expo on Canadian cultural citizenship has been the focus of recent rediscovery projects of Canadian origin and sponsorship. Such projects either tend to marginalize the international contributions to the Expo by emphasizing Canadian aspects of the showcase, or examine the rest of the contributing countries' films *in relation to* Canada's emerging cosmopolitan identity.

The term "Canadian cosmopolitanism" seems oxymoronic, and yet this inherent contradiction enables us to examine the emerging notion of transnational cinema in the context of Expo 67. Much like Canada was treated as nationally distinctive *and* a globalized nation, the films at the Expo were regarded as national products (symbolically displayed in each country's assigned pavilion) and also transnationally appealing. In theory, a transnational film is one that is able to reach international audiences while retaining its national flavor. Theorists Elizabeth Ezra and Terry Rowden envision a collectively referenced transnational cinema that "imagines its audiences consisting of viewers who have expectations and types of cinematic literacy that go beyond the desire for and mindlessly appreciative consumption of national narratives that audiences can identify as their 'own'" (Ezra & Rowden 2006: 5).

Ezra and Rowden's definition allows for the possibility of multivalent film reception, but – at the same time – suggests that, for local audiences, transcending the national might also mean denying the aspect of the personal that is inextricably linked to the national, and thus denying an aspect of the political that is entwined with the national. In trying to avoid the fetishism or exoticization that comes with the "mindlessly appreciative consumption of national narratives" that are not our "own," Ezra and Rowden unintentionally contribute to the *othering* of the national. The possibility of a

transnational audience (or even the validation of the theoretical notion of transnationalism) rightfully indicates that the national is a category that is prone to oversimplification and generalization. The conceptualization of the term transnational also tends to imply some kind of homogenization—in methodology, theorization, categorization, geopolitical scope, and so on. Arguably, many films are conceived as transnational precisely because they downplay, either consciously or in their reception contexts, the nationalism and political character of their production for the sake of crossing economical and geographical boundaries.

At first sight, *Kinoautomat* fits into a multifaceted understanding of transnational cinema in the sense that it has been framed as a national product of Czechoslovakia, while its conventional and light-hearted story, as well as the novelty of the interactive format, render it appealing to a potentially global audience. The film expands on the Czech-originated tradition of the *Laterna Magika* that began in Prague in the late 1950s. To this day, *Laterna Magika* is considered a distinctively Czech theater experience that uniquely amalgamates dance performance, nonverbal film, and visual effects. In turn, *Kinoautomat* fused live performance, audience participation and film to create a hybrid cinematic experience.<sup>16</sup> *Kinoautomat*'s avant-garde approach to cinema has helped the film become acknowledged as part of the 1960s Czechoslovak New Wave.<sup>17</sup>

*Kinoautomat* may be rooted in Czechoslovakian art traditions, but the diachronic appeal

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<sup>16</sup> Historical information paraphrased from Chris Hale's article, "Cinematic Interaction: From *Kinoautomat* to *Cause and Effect* (2005).

<sup>17</sup> I chose to cite the New Wave movement as "Czechoslovak," rather than the more internationally common "Czech" New Wave, for reasons of historical accuracy. Film historian Peter Hames's authoritative book, *The Czechoslovakian New Wave* (1985) draws attention to the political correctness of using Czechoslovak instead of Czech to collectively refer to the movement. I prefer to use the term Czechoslovak because it more accurately encompasses both the Czech and Slovak counterparts to this movement, even if Czech is the language used in the majority of these New Wave films.

of interactivity enables it to transcend national and even historical boundaries. However, a closer examination of the sociopolitical context in which *Kinoautomat* was made not only reveals a more complex condition of its narrative, but also suggests the possibility of a more varied and nuanced understanding of interactivity and of the notion of nationhood expressed by way of an interactive format.

*Kinoautomat's* film, titled *One Man and his House*, revolves around Mr. Novak—played by the famous Czech personality Miroslav Hornicek—and his interactions with other tenants that live in his building. In the film, Mr. Novak is several times caught up in morally ambivalent situations. During public screenings, the audience was asked to take a vote and pick one out of two proposed options to tackle Mr. Novak's dilemmas. At several climactic moments in the film, the live performer/moderator would ask audience members to press the green or red button on their seats, and the majority vote would determine how the narrative proceeded. Both contemporary and recent English-language accounts of *Kinoautomat* mostly focus on the general outcome of the film's interactive format, and assign it universally applicable motives. Anne Jagemann from the Art Margins Online journal, for instance, observes that the film was “rooted in its time” because it reflected the “general movement of the society, politics, and culture of the 1960s to democratize everyday life and, along similar lines, to create possibilities for greater participation in art.” In the same article, the lesser-noted sociopolitical interpretation of *Kinoautomat* is also mentioned: Jagemann exposes the film's converging narrative paths, a structure that undermines the illusion of choice because all trajectories ultimately lead to the same conclusion that allows Mr. Novak to be morally acquitted for allegedly setting his building on fire. Voting whether or not to let a

semi-clothed female neighbor Vera Svobodova into Mr. Novak's apartment, for example, does not change the fact that Mr. Novak's wife still suspects him of infidelity. Jagemann rightfully argues that the illusion of choice can be assigned a "specifically political" purpose because it acts as "an ironic parable of the socialist system that was still possible in 1967 Czechoslovakia, a year before its brutal end" (Jagemann 2009). This contextually specific meaning of interactivity is something that most critics gloss over in their analyses of *Kinoautomat* because they are more concerned with how the film fits into the conjectural development and critique of interactivity, rather than with how its specific historical and ideological context complicate the problematically universalized connotations of the term.<sup>18</sup>

The tendency of assigning universal and digitally centered meanings to interactivity is also manifest in the ways other works from Expo 67 have been treated. While the nationalist elements in the films clearly identified as Canadian have been highlighted in subsequent critiques (with perhaps the most nationalist being the Circle-Vision 360 degree film *Canada 67*), the localism in certain international films at the Expo has not been fully explored. An example of selective interpretation pertains to *We Are Young*, a six-screen short film by the Czech avant-garde filmmaker Alexander Hammid and the American painter and filmmaker Francis Thompson. The film was overtly marked as Canadian by being displayed in the CPR/ Cominco pavilion, and sponsored by The Consolidated Mining and Smelting Company of Canada (controlled by the Canadian Pacific Railway). Surprisingly, local elements of the film have been

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<sup>18</sup> A notable exception to this tendency is Nico Carpentier's book, *Media and Participation: A site of ideological-democratic struggle* (2011), which contains a well-rounded analysis of *Kinoautomat*.

downplayed for the sake of promoting a more positive and universal interpretation of 1960s youth culture. Most other Canadian-associated films at the Expo have been analyzed in terms of their discussion of the challenges faced by urbanization in the 1960s, and the ones that featured the Expo's host city of Montreal have been additionally associated with preoccupations that specifically relate to Montreal, rather than solely valued for being anticipatory of the digital architectures of the late 20<sup>th</sup> and early 21<sup>st</sup> centuries (Marchessault 2007).

*We Are Young* has been discussed in terms of its multi-screen aesthetic and Cubist connotations, as well as in terms of how its free-spirited content fit the form. Critics have related the depictions of Canadian youth to more globally applicable youth-related themes and concerns. Anthony Kinik has recently pointed out a significant oversight in the retrospective analysis of the film: the fact that it takes place in Montreal. Kinik posits that the locale of the film contributes in the subversion of the optimistic message that many audiences and critics have taken from the film (Kinik 2012). The localism in the film is not limited to the indexical footage of Montreal in the 1960s; it extends to local concerns pertaining specifically to that city. Kinik argues that, beneath the universal theme of the vitality of youth, the film betrays somber anxieties regarding accelerated modernization that undercut Montreal's urban dynamism in the 1960s. Kinik's localized focus contributes to a more problematic interpretation of the film, the Expo's globalizing aspirations and, by extension, the retrospective rediscovery of expanded cinema projects. Kinik's case study demonstrates what is at stake when films are rediscovered under broad-ranging discourses (for instance, relating to modernity, urbanization, globalization, and technological experimentation) that tend to overlook the

local—or, the local within the national—for the sake of proposing universally resonant (or academically popular) concerns.

Kinik's consideration of the content, context, and locale of *We Are Young* acknowledges the significance of narrative and formal aesthetics for problematizing overarching discourses that may ignore smaller-scale specificities. It should be noted, however, that many of the retrospective sweeping generalizations about the narrative content and formal aesthetics of works featured at Expo 67 are prefigured in the difficulty of gaining access to them now, especially those works that were site-specific, large-scale and multi-part installations. In the case of *Kinoautomat*, the initiative to restore and digitally remediate the film originated from the filmmaker's daughter, who had a personal investment in the resurrection of a multi-mediated film that was in danger of becoming orphaned and possibly forgotten.

### ***Kinoautomat*: Remediated Reading(s)**

A closer analysis of the ethical dilemmas posed by *Kinoautomat*'s narrative reveals that it is not only the film's interactive format that serves as a critique of the Communist Party's impact on Czechoslovakian society. As Mr. Novak's apartment building grows increasingly chaotic, there is mention in the film of the need for practical systems to run things smoothly, which could be read as an allegory for the inefficient government organization in Czechoslovakia at the time. Questions about the right to intrude upon someone's privacy, posed by the moderator to the audience, might also serve as a thinly veiled reference to police surveillance. If the audience chose to have Mr. Novak intrude the privacy of his neighbors by forced entry into their apartment, then Mr. Novak met his punishment in the form of his neighbors falsely accusing him of having an affair.

Nevertheless, the moral code underlying the film is not consistent, and the didactic potential of the film is superseded by the semi-looping structure that governs it. For example, when Mr. Novak is chasing after his wife in his car, a policeman tries to pull him over for speeding. Whether the viewer decides to have Mr. Novak ignore the policeman or not, Mr. Novak gets into trouble with the law. The film's converging paths bring to the surface a fatalism behind the apparent freedom of narrative possibility; this is particularly felt towards the end, when *Kinoautomat* autonomously (that is, without the viewer's control) fast forwards through various alternative combinations to show the viewer that the fire would have happened anyway, and thus exposes the viewers' agency as an illusion. The performer/live actor in the digitally restored English dubbed version commends the viewer(s) in the usual tongue-in-cheek manner, proclaiming that, out of the "thirty two different stories that could be told, you have picked the nicest combination," before admitting that she says that to everybody. This is in contrast to how Mr. Novak in the original film would introduce each newly selected scene by telling the audience: "You have made an excellent choice. I'm not just saying this. I do this every day and you really did make an excellent choice" (Naimark 1998).

Conversely, by allowing the vending machine to take over—essentially allowing *Kinoautomat* become a *kino-automat*—and reveal in fast motion what are supposedly other possible narrative configurations, the film also perpetuates the illusion of agency. A viewer would have to watch the film at least twice to confirm that the "alternative" endings revealed in fast motion near the end of the filmic performance are, indeed, not built into the pool of options from which the viewer may choose in the interactive segments the film. Nevertheless, even a first-time viewer may be clued into the

absurdity of the kinoautomat sequences. The endings that the kinoautomat movie machine zooms through at the end appear visibly doctored, as a number of conspicuous “special effects” are introduced, including arrows that seem to have been painted onto the celluloid, sepia tinting and other color filters, computer sound effects, and mathematical symbols. At this point, the film is conspicuously interacting with itself: altering its black and white cinematography and its materiality by painting onto the celluloid, and altering its established rhythm by introducing ultra fast-motion. The computer sound effects are meant to draw attention to the automatically recombinatory nature of kinoautomat, and it would not be hard for new media critics to read this move as anticipatory of the aesthetics of database and soft(ware) cinema.

Because the film’s pace and formal elements change radically and abruptly during the fast-motion sequences, the viewer is now consciously aware of the status he/she has been occupying all along: a passive observer of the narrative progression and a witness to a predetermined narrative conclusion. The alternative scenarios themselves additionally challenge their own feasibility. One of the supposedly optional endings played in fast motion, for instance, concludes with Mr. Novak being set on fire by a group of terrorists—an implausible, almost cartoonish, narrative exaggeration that, in itself, appears to mock the possibility of Mr. Novak—and, by extension, the viewer—being anything more than a pawn in a predetermined scenario. In fact, as the film progresses, Mr. Novak’s agency appears to be gradually taken away from him; he goes from providing the seemingly omniscient voiceover in the opening scene of the film to being reduced to a victim of circumstance in the film’s conclusion.



Retrospectively, it is quite clear that Mr. Novak never possessed any agency in the first place, and this draws our attention to the fact that the film's disjunctive temporalities are never actually reconciled. In light of this realization, the voiceover belonging to Mr. Novak in the opening scene of the film is retrospectively recognized not as omniscient, but as extra-diegetic. In the opening scene, Mr. Novak's voice is set against the backdrop of a fire being put out in his apartment building. The voiceover matter-of-factly introduces his neighbors one by one as they are fleeing the building to escape the fire. After this scene, the narrative—with the help of the live performer—moves back in time to the events leading up to the fire. The fact that the film begins (nearly) at the end of the narrative makes narrative *choice* seem pointless. This futility becomes even more apparent once we consider that the viewers' choices are framed as if they might influence the *future* outcome of the story—even though the outcome, the fire, has already “taken place” on screen. Although there is the suspended mystery of who is actually responsible for setting the building on fire, the film does not place the viewer in the role of the detective (as does *Sufferrosa*, discussed in Chapter 1).

In other words, *Kinoautomat's* narrative options are not meant to help the viewer uncover what led up to the fire through trial-and-error, but are placed in a temporally and narratively disjunctive *present* to give the illusion of the film being assembled in “real time.” Moreover, the point of giving the viewer options to choose from is never actually made clear: are we meant to be helping Mr. Novak discover why the fire really happened (and possibly acquit him of arson), or are we meant to alter the present-turned-future outcome (the fire) through Mr. Novak's past-turned-present decisions? Mr. Novak's self-accusatory tone in the film's opening scene leads us to believe that we

are supposed to “try to find his mistake” that caused the fire, but that does not justify why we are given multiple options on past events that are presumably non-alterable because they already happened. The cause-and-effect of the viewer’s choices is never fully disclosed and thus never fully motivated; this move is deliberately reflective on the filmmakers’ part, and its objective converges with the objective of deliberately inconclusive puzzle films. Marshall Delaney, in a 1967 article on Expo 67, quotes a Czechoslovak press release which states that the audience’s inability to change the ending of the film is meant to reflect “the experience of man in our modern society: life continues along the road of destiny irrespective of Man’s decisions” (Delaney 1967). The inability to change the outcome of the narrative may seem unjustified or gimmicky within the narrative context, but it resonates experientially. In turn, this prompts another extra-diegetic hypothesis: if the ineffective majority vote in *Kinoautomat* is meant to simulate democratic decision-making, then is the performative aspect of the film suggesting that democracy is incapable of changing the end result of a societal process? This is a question that I will return to as I examine the activist and democratic promises of IC from a participatory culture framework.

The multiple and disjunctive temporalities are apparent from the film’s opening scene—not to mention the live performance that keeps interrupting the narrative flow—and yet most of the existing critical approaches to the film have not made note of it because they have been more concerned with meta-filmic analysis and technological considerations. However, noticing the discrepancies in the narrative chronology and the non-sequentiality in the sequences extends beyond the textual level, and helps elucidate the New Wave sensibility of *Kinoautomat*. Deliberate forgetfulness,

retrospective revision of past recollections, and indirect sociopolitical critique form aesthetic motifs and ideological tropes in many socially conscious New Wave films, including the influential works of Miloš Forman. The opening scene of *Kinoautomat* subtly incorporates mnemonic failure and/or past obliviousness into the subtext of the film, its mechanisms, and its allegorical dimension. On a narrative level, Mr. Novak's voiceover is technically occurring post fire, yet he does not appear to possess knowledge of events that happened in the past nor does he know who really set the building on fire because he (erroneously) blames himself. The detachment of Mr. Novak's voiceover from his physical image appearing on the screen becomes more apparent when the voiceover says he never actually met his neighbor, whereas in the interactive "flashback" the two have not only met, but also got into a heated argument. The disjunction is more noticeable when Mr. Novak's image on the screen is symbolically doubled and then spread out into a split-screen in order to introduce the first two narrative options to the audience.<sup>19</sup>

The uncanny moment Mr. Novak first appears on the screen twice shatters any remaining illusion of narrative immersion and draws attention to formal manipulation. Rather than attributing the chronological inconsistencies and the disjunctive temporalities of the film to a failure in its narrative structure or to its incomplete loops, however, we should alternatively consider their epistemological purpose. The term "looping" has been widely used to describe *Kinoautomat's* structure, but—as is evident on close analysis of the filmic narrative—this categorization is inaccurate. The insistence

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<sup>19</sup> In the digital version of the film, the repetitive (and presumably unintentional) glitch that momentarily freezes the film when the hall porter is introduced contributes an additional layer of disjunction that undercuts any effort towards narrative immersion. This draws attention to the materiality of the DVD and the remediation process from celluloid to disc.

on the film's loops in recent accounts attests to the tendency of reducing the original con-*texts* to aspects that cohere with the operative logic of new media rather than to narrative, historical, and reception considerations. Instead of loops, the film's structure can more accurately be analyzed in terms of convergent narratives, inverse forking paths, and—simply—motifs and repetitions.

The way the film is narratively (dis)organized points to a tension between “knowledge as an ongoing process and a known outcome” (Munster 2006: 81). The doubling of images, the rendering of characters into robotic automata, the splitting up of narrative into paths, and the repetition of certain moments in the film is, to apply Anna Munster's theory, “producing a deliberate reimagining of the past rather than a faithful but tired attempt to authenticate through resemblance” (Munster 2006: 81). This reasoning extends beyond the narrative level, especially when the digital restoration and DVD remediation of *Kinoautomat* are taken into account. In this case, the above-mentioned rationale dismantles, at least partially, the burden of representation of an “original” performative film because “when the digital is harnessed to the forces of realism it inevitably fails to match up to the past” (Munster 2006: 81).

In some ways, *Kinoautomat* resembles the non-hierarchical (dis)organization of multiple-draft or forking path films like *Rashomon* (Akira Kurosawa, 1950), *Blind Chance/ Przypadek* (Krzysztof Kieslowski, 1981), *Sliding Doors* (Peter Howitt, 1998), and *Run Lola Run*, which feature initially competing yet ultimately compatible versions of virtual or parallel realities. Alternative versions of a story are presented in these films as co-existing and equally feasible possibilities, especially since an external point of reference and/ or an unequivocal or “objective” point of reliable narration are

conspicuously absent.<sup>20</sup> The motif of multiple paths that characterizes these films present new ways of manifesting or accessing reality: not as determined and singular, but as multivalent and irreducible to a single truth. This reasoning applies to *Kinoautomat's* initially diverging narrative paths, and even to the eventual convergence of all narrative trajectories into one ending—and more acutely so if the viewer is unaware that there is only one ending to the film. Furthermore, the various possible interpretations of *Kinoautomat's* metacinematic aspects—such as its critical reception, political impact, and historical value—construct the film and its surrounding discourses as equivocally multifaceted.

Presumably, the film's dialogue and subtext could not be too directly referential to their political context, lest this should get the film banned in Czechoslovakia (as it eventually happened anyway). The majority of spoken critique in the film comes from the dubious character of an ex-soldier named Captain, a mysterious figure whose sanity seems doubtful (unless his paranoid behavior can be attributed to post-traumatic stress disorder, if he is indeed a World War II survivor); this, in turn, makes his tirades seem out of place in a film where most characters are primarily—but perhaps also allegorically—concerned about their individual interests. The most direct reference is when the Captain laments the chaotic system of the apartment building, and articulates the need for an efficient “East and West bloc(k)” to “orientate ourselves.” It is impossible for past and present viewers familiar with European history to dismiss the Captain's urge for

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<sup>20</sup> These films differ from multiple-perspective films that ultimately attempt to present the “full” picture from various perspectives in that they do not eventually settle on one version of the “truth.” *Amores Perros* (Alejandro González Iñárritu, 2000), for instance, describes the converging and diverging lives of three dog owners in order to present interweaving plots. Similarly, *Vantage Point* (Pete Travis, 2008) tells the fictional story of the staged assassination of the American president from the perspective of witnesses and participants in order to cumulatively present a complete picture of the sequence of events from all possible angles.

reform as simple banter, especially given the politically turbulent context. The connotations of the (dubbed) words “East and West bloc(k)” alert viewers that there is more to the film than fiction and entertainment. To more modern viewers, the film—and especially the Captain’s warnings in response to dreaded chaos—might even seem to be prophetic (by only a few years ahead) of the Prague Spring and the Warsaw Pact invasion of Czechoslovakia in 1968.

The interactive format provided a less conspicuous way to critique and simulate the democratic pretensions of the Communist Party without the film facing immediate state censorship; the interactive structure had the potential of escaping—albeit temporarily—the censors because it was a novel and unregulated technique at the time. The film’s origins make it a national product, whereby nationhood is not perceived as a unifying force, but—rather—as an ongoing process of negotiation that encompasses internal tensions and sociopolitical segregation. Moreover, as Alan Williams has observed, cinema is an essential part of the process of defining national identity, and of stimulating debates over the meaning of “nation” (Williams 2002: 4). *Kinoautomat*’s nationally specific critique, as well as its domestic reception, attests to the complex relationship between cinema and nation. According to recently publicized Czech reports, the film was popular with its audiences in Prague, where it was successfully performed from 1971 to 1972. The local success of the film—perhaps due to its sly subversion of state ideology—and the fact that the creators behind *Kinoautomat* were, along with other New Wave filmmakers, considered a political threat, was what prompted the ruling party to ban the film in 1972.

Interactive media consumption was, at the time, a practice that had not fully undergone social and commercial regulation. However, in the case of *Kinoautomat*, the interactive concept of the film was considered state property under the Communist regime, which meant that interested Hollywood executives were not permitted to license the technology.<sup>21</sup> The desire to regulate, institutionalize, and patent the very concept of interactivity indicates how “the opening up of new spaces of apprehension is tied to the contradictory forces of capitalist media expansion: these produce a greater democracy of image production and consumption, and greater social and economic control over images” (Marchessault 2008: 39-40). This might explain why the not-yet-mainstreamed experimental approaches to IC make use of taboos and morality as a testing ground for proposing new cinematic ethics and new criteria for the regulation of interactive production and consumption.

The introduction of interactive ways of film viewing as testing ground for new modes of perception is not a novel one, especially if we broaden interactivity to the work of pre-digital filmmakers like Vertov. Sergei Eisenstein influentially recognized the potential of cinema in transforming public consciousness through the dialectical struggle of visual elements, which results in the production of a “graphically undepictable” third element that lies between sensuous image and abstract thought (Eisenstein 1997: 30). Additionally, film historians Vanessa R. Schwartz and Leo Charney have associated early cinema with the culture of modernity (Schwartz & Charney 1996), while Tom Gunning has argued that early recorded attractions such as virtual rollercoaster rides prepared viewers for facing the shocks of modernity (Gunning 2004). More recently,

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<sup>21</sup> Factual information taken from Ian Willoughby's article, “Groundbreaking Czechoslovak Interactive Film Revived 40 Years Later” (2007).

Michael Cowan has historicized Weimar *rebus films* (moving picture puzzles) by linking the universal activity of puzzle solving to a “forum for testing new modes of distracted perception and divided attention particularly appropriate to the urban environment [in the 1920s]” (Cowan 2010: 200).<sup>22</sup> Cowan’s interpretation of rebus films is the modernist equivalent to Expo 67’s arguably posthumanist objective of broadening modes of perception in the wake of a new cosmopolitan awareness. Approached from this angle, *Kinoautomat* adheres to the overall theme for the exhibition, and can accordingly be seen as an advocate of new ways of traversing the world through its expanded spectatorship model (albeit to a lesser extent than the works featured in The Labyrinth pavilion at Expo 67).

However, if the aforementioned allegorical dimension of *Kinoautomat* is taken into account, some significant discrepancies arise between Expo 67’s democratizing objectives and, by extension, *Kinoautomat* as “world cinema.” In fact, the analysis of *Kinoautomat* fluctuates according to context and historical or theoretical motives—from exploring new modes of subjectivity and introducing a new cinematic perception, to reflecting how audiences behave socially (for example, reflecting social powerlessness in the predetermined voting results). The environment of Expo 67 no doubt endowed the performance and reception of *Kinoautomat* with democratizing and globalizing intentions. However, the experience of the film takes on different meanings if we consider other exhibition contexts, such as those in Prague in the years following the Expo. While in the years before 1970 *Kinoautomat* could be seen as a clever attempt to critique the status quo by outwitting the censors, in the 1970s the power of the

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<sup>22</sup> Paul Leni’s *Rebus Film Nr. 1* (1925) is an example of a rebus film.



Communist media had fully waned and a general apathy on the public's behalf meant that nobody even tried to outwit the censors anymore.<sup>23</sup>

*Kinoautomat* seems to anticipate this apathy, urging people to take control of the media they consume, but also betraying a tone of resignation in the predetermined outcome of this apparent agency. In his account of the post normalization status of Czech media in the early 1970s, journalist Jan Čulík says that the media's primarily emotional campaigns "blotted out all meaningful discourse, but the meaning of these campaigns was purely ritualistic—no one believed what was being said. The medium was the message. What mattered was that rituals were being carried out" (Čulík 2008).

This account shifts the focus from the original intentions attributed to *Kinoautomat's* interactivity (both within the context of Expo 67 and Czechoslovakia in the mid-1960s) to an additional possibility behind the use of interactivity; it raises the question whether the utopianism partially attached to *Kinoautomat's* interactivity is meant to ironically reflect the utopianism in Socialism and Communist ideology. Conversely, is the potential cynicism that undercuts this utopianism (and consequently undermines the film's humorous conclusion) a sign of reservation about a Socialist alternative, especially given the growing apathy of the public—including the intellectual elites—in 1970s Czechoslovakia?

Robert Rosenstone is among the historians who have argued that a film's performative aspects do not necessarily hinder its potential to present a compelling

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<sup>23</sup> The most passionate (and overtly biased) accounts of the growing apathy among the public are documented by contributors including Tomáš Pecina on the Czech political and cultural online website *Britské listy* (British letters). Even though the listy is notorious for publishing exposés and conspiracy theories, it is also known for its risqué and uncensored opinion pieces, which make it more reliable as a historical discussion of Czechoslovakian politics in the 1960s and 70s than the contemporary government-sanctioned reports.

argument for historical mythmaking as an integral part of history (Rosenstone 1995). This is an idea that has been explored in interactive works concerned with the relationship between the personal, the historical, and the fictional; examples include *Bleeding Through: Layers of Los Angeles 1920–1986* (Norman Klein & Andreas Kratky, 2003) and *Terminal Time* (to be discussed in Chapter 4). Films such as these have managed to transform the previously oxymoronic genre of “interactive documentary” by reconciling “interactivity” and “documentary” in order to spearhead the newly emerging practice of i-docs. The inconsistent meaning(s) of *Kinoautomat* is thus something that may be more historically valuable than aspects such as the indexical value of footage from the streets of Prague in the 1960s, the interactive mechanism, and even the political commentary.

Even within the context of *Kinoautomat*'s performance, the idea of rewriting and revising the past is explicitly presented to the film's audience. At one point, the performer asks the audience to reconsider their decision, and offers them the chance to re-cast their vote. The performer reminds viewers that they “now have an opportunity to do something that in real life wouldn't be possible, [and] decide what has already been decided.” Although the film does not truly allow the audience to actively rewrite the outcome of the narrative—and only partially allows for the re-sequencing of the master narrative—the audience is still able to revisit and question some events that were previously taken for granted, such as Mr. Novak's involvement in the outbreak of the fire. The power to “decide what has already been decided” does not lie within the realm of narrative control, but is instead located in the viewer's ability to retrospectively rethink and reflect on prior understandings of the film and, by extension, meditate on notions of

chance, fate, agency, and cultural politics. The feature of narrative interactivity—with its connotations of reordering, temporal manipulation, and diegetic control—corresponds to, and expands, Rosenstone’s argument that film increases the awareness “that we can never truly know the past, but can only continually play with, reconfigure, and try to make meaning out of the traces it has left behind” (Rosenstone 2006: 164).

After a few viewings, it becomes irrefutably clear that the film is organized around a master narrative, and that even most of its performative aspects are largely scripted. In contrast, the creation of a foundational historical narrative is hindered by the fact that past contexts of *Kinoautomat* are themselves unstable—which is, of course, a claim that can be made for any work of art or cultural artifact. Historians who argue that “only through the textual [and, in this case, filmic and technological] residues of the past can we recover putative contexts,” point out that the result of this approach “is an inevitable circularity between texts and contexts that prevents the latter from becoming the prior determining factor” (Jay 2011: 558). Historian Martin Jay contends that:

we may not be able to understand a text or document without contextualizing it, but contexts are themselves preserved only in textual or documentary residues, even if we expand the latter to include nonlinguistic traces of the past. And those texts need to be interpreted in the present to establish the putative past context that will then be available to explain still other texts.

(Jay 2011: 558)

This assessment is particularly apt when applied to the process of digital remediation and recontextualization of *Kinoautomat*, and once again eases the burden of representation and reorients the objectives of media historiography.

### **From *Kinoautomat* to Digital Repository? An Applied Study of Media Excavation**

As a case study of IC, *Kinoautomat* stimulates further areas of inquiry when its recent digitization and international circulation are taken into account. In 2007, forty

years after *Kinoautomat*'s debut at Expo '67, the original film (including its performance component) was re-released to the international public via a limited series of screenings.<sup>24</sup> A digitized DVD version of the film then followed, and was made internationally available a few years ago. My first encounter with the film was through the DVD version. Before this, I had had the impression that the film itself was formally and narratively unremarkable because none of the critiques I had read mentioned anything more than the basic plot premise that motivates the interactive component. Upon watching the dubbed English version of the film for the first time, I was surprised to discover the sophisticated editing techniques and caustic humor that actually made the film engaging to watch as a conventional film, entirely apart from its interactive mechanism.

The DVD version of *Kinoautomat* includes the original feature film and a newly recorded performance by a moderator (with the option of purchasing a copy dubbed in either English, German, or Italian; the dubbed English version features an English-speaking moderator). Apparently, the typical Czech humor characteristic in films from the 1960s does not translate well to other languages, or at least was not detected by a non-Czech viewer such as myself in the dubbed version. This makes me suspect that the original version was not faithfully dubbed, just as the original speech of the moderator was adapted for a digitally savvy audience.

The DVD version visibly reflects on the process of digitization and restoration; attentive modern viewers will be aware of the fact that they are watching the “translation” of a performative cinematic event into a digitally compacted object. And

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<sup>24</sup> After the film's 1972 ban in Czechoslovakia, the film was last screened as a performance piece at Expo 74, and briefly broadcast on Czech television in the 1990s to an unsatisfied public.

that object, in turn, is—at least superficially—meant to generate an event of its own: an interactive experience (re)tailored for domestic and, even, individual viewing. In fact, the restored version is more concerned with contextualizing the *Kinoautomat* experience than transparently (re)mediating the film, and thus turns it into a historical artifact meant to be studied and appreciated, rather than to be watched and interacted with. The moderator first appears on the television screen to introduce the film as an example of “prehistoric interactivity” and stress its historical importance to modern viewers. Throughout this presentation of the film, the desire—and, certainly, the burden of both historical and technological representation—to convey to modern audiences the original screening conditions interferes with the attempt to produce a relatable digital product, much less a satisfactory viewing experience.

In my estimation, if the viewer has not experienced a *Kinoautomat* public screening, then she or he will be largely unable to tell which “original” aspects of the performative film have been preserved for domestic viewing in this new format. The moderator’s speech is clearly geared towards modern audiences, as it draws attention to issues of materiality and mediation that resonate with contemporary discourses of digital/ analog, database/ narrative, and other dichotomies. The film begins with the illusion that the projector is broken and the film reel is damaged—which does not apply to the home DVD viewing experience. The moderator attempts to explain this glitch (or, in this case, simulated glitch) in asking: “can the film of a computer be broken? Most likely not,” and goes on to say that every *Kinoautomat* performance in the 1960s and 70s began with this pretend—yet at the time plausible—malfunction.

The moderator in the *Kinoautomat* DVD bears the responsibility of not just moderating the viewer's voting process, but also conveying the extra-filmic dimensions of the performance to a modern audience. The restoration of the film to the public and its recognition as part of the Czechoslovakian New Wave has made it (retrospectively) a national(ist) artifact. Yet, the English version of its DVD downplays its cultural significance by lifting it from this national-political context, and focusing almost entirely on its notional forward-thinking use of technology. In fact, the promotional trailer for the DVD edition does a better job contextualizing the film in its historical moment, paradoxically through the use of digital remixing.

The trailer for the digitally restored *Kinoautomat* can be examined through the twin lenses of the mashup and the trailer re-cut: two digital remixing techniques usually associated with context collapse, inauthenticity, and ahistoricity. Mashups typically fuse discrete found footage sources into a derivative work that gives "original" material a new meaning. Mashups combine footage from seemingly incongruent sources, and have the ability to efface political, cultural, and other specificities for the sake of presenting a unified argument through continuity editing and montage. Trailer re-cuts use voiceover and re-editing to change the original genre of a film and create new subtexts; for instance, a romantic comedy can be re-cut into a trailer for a horror film where the subtext inevitably changes. There is no original *Kinoautomat* trailer, nor does its digital trailer fully reflect the mashup aesthetic; nevertheless, the trailer mimics some of the techniques argumentatively used in both mashups and re-cuts. First of all, the trailer remixes documentary footage of the Communist congress with a new voiceover that mashes up the original audio of the congress proceedings with audio from an interactive

*Kinoautomat* screening. In this sense, the trailer collapses the boundary between documentary footage and fictional narrative to draw attention to fictions of Communism, as the editing points to the film's complex relationship between fiction, entertainment, and allegory.

*Kinoautomat's* digital remix trailer achieves two objectives that are usually seen as irreconcilable in the context of digital remixing: the trailer loosely places the film in context and makes it relatable to the digital generation. The trailer appeals to international online audiences via its use of digital language tools and viral circulation through sites like YouTube. Eli Horwatt suggests that digital remixing exemplifies how found footage image (re)making "has become relevant to new generations through the appropriation of contemporary images in an effort to address pertinent socio-political issues" (Horwatt 2010: 80).

Nonetheless, the appropriation and re-contextualization of original sources and the historical moments they represent occurs in a simplified and reductive form. Linda Hutcheon argues that, thanks to the element of parody inherent in the film's digital remix, audiences come to terms with the texts of "that rich and intimidating legacy of the past" (Horwatt 2010: 87). As with many processes of retroactive contextualization, the past is articulated in terms that are particularly resonant for present-day viewers. The ideological heavy-handedness of the *Kinoautomat* trailer is evident, for starters, in the introduction text that prefaces both the trailer and the historical status of *Kinoautomat* in terms that are understandable to current international audiences *and* that coincide with the mythologies of interactivity. Through the mash-up of documentary footage and audio from *Kinoautomat's* performance, the trailer reflectively addresses how the film was

intended “to demonstrate the absurdity of the [Communist] regime in contrast to free voting in a film,” and simultaneously reinforces the fantasy of control associated with IC.<sup>25</sup> The trailer does not dwell on the problematic aspects of “free voting” in the film—which itself provides another layer of complexity to the film’s underlying commentary. In fact, the trailer suggests that the film’s democratic “free voting” was contradictory to the Communist Party’s decision-making process. The way the film worked with the dynamics of a live audience, however, is far more complex than the trailer’s attempt to summarize how the film was performed (and definitely more complex than how the performers originally explained it to contemporary audiences).

Apart from its representational (in)accuracies, however, the trailer is still valuable for the media archaeologist. The editing techniques used to compile the trailer—the mash-up and the re-cut—have been traditionally used to subvert existing meanings and oppose teleological interpretation. In light of this, the trailer appropriately renders the film’s history *malleable* by subverting contextual fixity. The trailer hints at the uncertainty of conclusive contextualization and posits its own multi-platform and cross-contextual (yet not open-ended) mode as an alternative means of mediating the history of media.

Simply put, the film—like its digital trailer—deliberately tricked the audience into thinking it had control over the direction of the narrative, albeit superficially (the recontextualized digital version hints at contemporary audiences’ disbelief regarding *Kinoautomat*’s promises of narrative control). In actuality, there was only one possible (happy) ending to the story, and even the trajectories “chosen” by the audience reached

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<sup>25</sup> Of course, this “intended” ideological purpose was not obvious in *Kinoautomat*’s original exhibition contexts, nor was it ever publicly confirmed by the film’s creators (although Činčera’s daughter and others have spoken about it in interviews given after his death). The political dimension of the film was toned down during the 1960–70s in both international expos and local screenings.



the same conclusion at the end of each scene. There were even some speculative guesses, where the performer asked the audience to make a guess with no influence on the direction of the story. The film's quasi-looping (rather than branching-out or rhizomatic) design adds a more complex dimension to the subversiveness of the work—a dimension that cannot fully be conveyed through the trailer, or even fully grasped during a home viewing of the DVD. This is because the social and performative aspects of the work cannot be fully conveyed in the archival form; they can only be remediated. The main intention behind the use of interactivity was to simulate the illusion of a free vote with real consequences; in Communist Czechoslovakia even entertainment was censored, hence the futility of majority voting.

The DVD edition of *Kinoautomat*, released in 2008, as well as recent public screenings, makes the illusion of free voting more transparent than original screenings of the film. The re-recorded accompanying performance to the dubbed version of the film often hints at the audience's limited role in the construction of the film, and—at the beginning of the introduction—outright poses the question of whether *Kinoautomat* can ever play what you choose. If in doubt, the viewer watching the DVD at home can easily replay the film (although the impossibility of rewinding scenes makes it less easy to navigate) and, after trying out various combinations, confirm that all paths lead to the same ending. By contrast, *Kinoautomat's* contemporary audiences watched the performance in a public setting, and had a different experience than the modern home viewer. Contemporary audiences were probably left in doubt as to the actual impact of the voting process, especially if they only got to experience the film once.

Nonetheless, part of the social value of the film was seeing *how* the majority voted, especially when it came to morally ambiguous situations that made Mr. Novak choose between being a dutiful citizen and chasing after his wife. Furthermore, the public performance of the film makes for an altogether different experience than a domestic/individual screening, especially because the question of choice (real or imagined) becomes a collectively negotiated process. The ethical dilemmas in *Kinoautomat* are more nuanced and less polarized than those presented to the audience in later choose-your-own-adventure films such as *TWU*, discussed in Chapter 3, and required some deliberation on the audience's part. In public screenings of *Kinoautomat*, the deliberation process might have been more significant than whether or not individual—and, by extension majority—votes count. Initially, Činčera and his team did not anticipate the impact interactivity would have on the audience's social dynamic. After the first few screenings at Expo '67, the live show was adapted to not only acknowledge the audience as part of the performance, but to also enhance interaction among audience members. In a 1967 interview with *LIFE* magazine, Činčera commented on aspects that would later preoccupy empirical studies on interactivity as well as revisionist approaches to cinematic identification. After observing early audience response to *Kinoautomat*, Činčera declared the work a “sociological and psychological study about group behavior,” and a means of “learning that people decide not on a moral code but on what they like to see” (Krappler 1967: 28C). Seeing *Kinoautomat* as both social experiment and historical artifact shifts the focus from the mechanics of interactivity to the *impact* of the film's ethical dilemmas on the audience dynamic, and thus to interactivity as a stimulus for social interaction.

Unfortunately, very little information has survived regarding how contemporary audiences responded to specific scenarios they encountered in the film, and how those scenarios affected the audience dynamic. This might be because the film-as-performance was primarily enjoyed as a transient experience, and thus there was no lasting record of detailed audience voting patterns. The few collective voting preferences that have survived are those considered noteworthy at the time in terms of generating more attention for the film, such as the fact (or rumor, depending on the source) that the only time audiences voted No to Mr. Novak allowing his half-naked neighbor into his apartment was when a group of nuns was in the audience.<sup>26</sup>

The fact that the surviving audience responses to *Kinoautomat* have been quantified speaks to the wider tendency in film reception studies, whereby the results that forge trends in viewing habits (or the ones that form notable exceptions to those patterns) are those that usually find their place in historical records. In a sense, the historical does not take into consideration the individual that is part of the collective. More specifically, film history does not consider individual experiences that are part of a collective (and often abstract) “body” of spectatorship. Vivian Sobchack notes that, in the practices of both mainstream cinema and in theories of spectatorship, “the *particular* human lived-body (specifically lived as ‘my body’)” is missing because it is “in excess of the historical and analytic systems available to codify, contain, and even negate it” (Sobchack 1992: 147). Thus, the lack of significant audience response analyses to *Kinoautomat* point to irreparable yet unavoidable gaps in studies of film reception,

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<sup>26</sup> Anecdotal information regarding noteworthy voting patterns is also all the audience reception information that has survived about audiences of early mainstream IC films such as Castle’s *Mr. Sardonicus*.

extending beyond empirical records and indicating the crucial omission of phenomenological and biocultural considerations from the notion of spectatorship.

The fact that the interactive component overshadows all other contextual and narrative considerations (which traditional film analysis would otherwise consider) in the recent scholarship of *Kinoautomat* is indicative of what is at stake when new methodologies shift the priorities of existing fields of study. In this case, claims of *Kinoautomat's* “new medianess” introduce distinct and significant problems: certain of its formal and performative resemblances to operations of digital media have prompted its academic excavation and association with digital discourses, but at the cost of marginalizing other equally valuable aspects of the work such as historical significance, audience reception, and sheer *film* appreciation. Subsequently, if these aspects were to be fully integrated into digital media studies, then the scope of media studies—as well as the notion of “digital culture”—would be informed with more complexity and cross-cultural perspectives, and would receive some necessary historical (rather than just historiographical) grounding.

The fragmented rediscovery of influential works like *Kinoautomat*, along with the difficulty of broad-ranging historical analysis that encompasses sociopolitical factors and is not limited to the retroactive mythmaking that has dominated related discourses, is an object lesson in how film and media studies should (re)constitute and productively engage with the material-procedural diversity and inconsistencies of both digital and filmic encounters, without necessarily conflating the two. In order to prevent the obsolescence of such remarkable techno-artistic experiments, an “object” of study needs to be understood in broader terms that not only involve material and

technological concerns, but also encompass critical discourses of cultural studies, political-economic history, audience reception, and archive studies. As Gitelman and Pingree assert, when the histories of each medium are forgotten or ignored, “we lose a kind of understanding more substantive than either the commercially interested definitions spun by today’s media corporations or the causal plots of technological innovation offered by some historians” (Gitelman & Pingree 2003: xv). Ultimately, *Kinoautomat* makes a powerful case for considering the inherently political nature of film preservation and restoration, and for regarding the practices of archiving and remediation as cultural processes that produce and codify cinematic heritage.<sup>27</sup>

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<sup>27</sup> Caroline Frick demonstrates these principles through cross-cultural comparative study and extensive examination of American film preservation practices in her book, *Saving Cinema: the politics of preservation* (2011).

CHAPTER 3  
PARTICIPATORY INTERACTIVITY, ISOLATIONIST CONNECTIVITY, AND  
SOFTWARE CINEMA

**Introduction: Interactivity and Participatory Culture**

Many of the premature conclusions regarding interactivity—such as the primacy of a mechanical or prereflective response on the viewer’s part—can be refuted through empirical observations of specific IC genres. Yet, some interactive films deliberately simulate these conditions or myths of interactivity in order to initiate ethical and aesthetic reflection and experimentation. Marsha Kinder observes that “interactivity tends to be used as a normative term—either fetishized as the ultimate pleasure or demonized as a deceptive fiction” (Kinder 2003: 351). Why do ICs—ranging from the avant-garde to the mainstream—continue to present themselves in a way that appeals to the public’s constructed desire to participate in the creative process of the work? Even though IC’s participatory myths can easily be disproved, dismissing them as falsifiable does not diminish their affective resonance. The aspirations embedded in discourses of interactivity indicate to us—as Oliver Grau points out—a “fraction of the imaginings that all tell us something, often something unsettling, about the utopian dreams of their epochs” (Grau 2003: 351). This is yet another reason why IC is worthy of more careful critical analysis than it has received, as many of its basic tenets have been disputably traced in new media forms that are not conceived as cinematic.

It is tempting to overestimate the power of user agency in types of cinema that require viewer participation in order to reach their objective. The frequent use of neologisms in discussions of IC, such as the portmanteaus *prosumer* (a fusion of producer and consumer), *viewser* (viewer and user, to be used as a shorthand for active participation in my analysis henceforth), and *interactor* (interactive and spectator),

indicates a desire on the part of creators and critics to redefine and expand the role of consumers, users, and spectators in the emerging digital landscape.<sup>1</sup> The illusion of the spectator being in the coveted director's chair is one of the most frequent promises associated with IC.

As an example, the Brazilian film *Novo Idea Adventure* (Fiat, 2006) was reportedly the first interactive film to be screened in commercial movie theaters. Even though *Novo Idea Adventure* did not originate as an installation, it did have an expanded cross-media dimension, as it incorporated viewers' cell phones in the screening, allowing them to determine narrative outcomes by real-time voting via text messaging. Interestingly, *Novo Idea Adventure's* tagline is not about the plot of the film, but focuses on how the film is meant to be experienced: "Now it is your turn to play God and experiment with several destinies to this adventure." The tagline thus invites viewers to participate, and also promises them directorial/authorial control. The film managed to attract 62% of movie theatergoers in São Paulo and Rio de Janeiro, which implies that the interactivity gimmick was mostly successful, at least from a marketing standpoint, given that the film itself seems to be otherwise unremarkable.<sup>2</sup>

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<sup>1</sup> The portmanteau *prosumer* has the most extensive history out of these three neologisms. The term was first coined in the late 1970s-early1980s by futurologist Alvin Toffler. It has been criticized for its ambivalent connotations but, for the purposes of this dissertation, I will be using the term as shorthand for active (i.e., *productive*), non-corporate consumers/viewers, in order to distinguish from corporate modes of production. I am using the term *prosumer* (and *prosumption* as its derivative noun) as shorthand in order to draw awareness to the fluctuating status of modes of media consumption. It should, however, be noted that the term *prosumer* is deceptively vague for a number of reasons, some of which coincide with the falsifiable mythologies of interactivity. The first reason why this term is problematic lies in the uncertainty of where to situate prosumers: do they operate within the logic of consumer culture, or do they retain a certain independence from mainstream economies? Another issue with the term is that *prosumer* misleadingly suggests that a prosumer is equally a producer and a consumer, whereas in fact this is rarely the case. A prosumer is either more of a producer or more of a consumer. The same reasoning can be applied to subsequent neologisms like *viewer* and *interactor*.

<sup>2</sup> At least that is the impression I got from reading English (and some Spanish) reviews of the film, most of which focus on the interactive aspects of the film; none provides even a basic plot summary.

The aim of creating works that can engage large numbers of people coincides with one of the desired objectives of participatory culture. According to Henry Jenkins, a participatory culture is one

with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing one's creations, and some type of informal mentorship whereby what is known by the most experienced is passed along to novices.

(Jenkins et al. 2006: 3)

In theory, members of a participatory culture are made to feel that their contributions matter, and creatively thrive under a collaborative model of artistic exchange. Relatively recent advancements in interactive modes of media production, consumption, and marketing prompt participatory culture enthusiasts like Jenkins to see this paradigm as increasingly achievable in the near future.<sup>3</sup>

Consequently, the roles of the media producer and consumer had to be revised within the participatory culture framework in order to reflect changes in models of production and consumption. The need to come up with neologisms and portmanteaus to define the rise of new modes of media consumption not only suggests that the traditional role—or, at least, the traditional view—of the media consumer has changed, but that it cannot be consistently and accurately contained within existing theoretical frameworks due to its unpredictability. The cultural critique that emanates from participatory culture frameworks calls for a reconfiguration and reconsideration of socio-political dynamics emerging from participatory uses of interactive technologies.

Equally significant, preoccupation with a creative work's ultimate meaning—from

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<sup>3</sup> Jenkins cites relationship marketing, permission-based marketing and viral marketing as examples of marketing based on a collaborative process between producers and consumers that can pave the way towards more participatory cultural exchange (Jenkins et al. 2006).



both a creative and a consumer standpoint—is not as central anymore. In general, many artists are beginning to actively value their audience’s active role in the construction or performance of their works, just as many industries are capitalizing on the cultural desire for pro-active consumption. Brett Gaylor’s *Rip! A Remix Manifesto* (2008) is an example of a work that uses prosumption to mark out an activist stance in media culture. The free-to-remix film tackles ethical and cultural concerns regarding copyright in the digital era, and uses found footage to audio-visually enhance the filmmaker’s position against the corporate control of cultural property. Gaylor initially adopted a name-your-own-price distribution system, but then embraced the alternative distribution system of Internet piracy and allowed his film to be shared free of charge. He is the creator of Open Source Cinema, a collaborative resource for people who wish to remix existing content (including footage from *RiP!*) and share media in order to make a statement. All content is licensed under a Creative Commons license—which allows for the work to be copied and distributed freely—in order to avoid lawsuits and copyright infringement. Gaylor is one of the many advocates of a Do-It-Yourself (DIY) approach to film production and distribution, where artists seek alternative and low-budget distribution channels for their work and are often very receptive to feedback and contributions from the public.

The implications of a participatory approach to filmmaking and reception are manifold. A recurrent thread of discussions of the empowering potential of interactivity is that these media permit the creation of works that, in artist Lynn Hershman’s words, “talk back” to the artist and the audience. Hershman’s objective of transcending the “one-sided discourse” of non-interactive [superficially defined, of course] works is

shared with many installation/ interactive artists.<sup>4</sup> Hershman's coveted "craving for control...longing for liveness [and] drive toward direct action" makes it sound as though it is not only audiences that long for "direct action," but also the artists (Hershman 2003b: 643). This is a claim that is more problematic than it may initially seem, because interaction-as-conversation implies a back and forth (or a common ground) between the medium and the producer and/or consumer that transcends automated feedback mechanisms.<sup>5</sup> In the exhibition context of most works, for example, the work itself is not equipped with the intelligence (artificial or otherwise) to carry on a satisfactory back and forth spontaneous exchange. Nonetheless, just as the active consumer of a work can influence how the work looks, feels, and develops through interactive functions, the work can also influence responses of the user even if it cannot intelligently talk back to him/her. More accurately, the interaction between the work and the user is what actually talks back to the user's interpretation of the work. It can also be said that the artist talks back to the user through the medium of his/her work.

The participatory aspiration embedded in artists' desire to create interactive works often conflicts with practical issues of access and distribution. This conflict is evident in Lynn Hershman's intentions for her work versus the reality of limited public accessibility. Hershman is interested in "going beyond the screen, using new technologies to enliven and empower viewers, to create an experience that uses

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<sup>4</sup> The assumption that a work can "talk back" evokes debates on artificial intelligence – an area too vast and problematic to even try to tackle here in satisfactory depth. Hershman's *DiNA* (2004) is a step towards fulfilling this objective. *DiNA* is – or, rather, was, since the original website does not exist anymore – an artificially intelligent presidential candidate bot running for Telepresident. *DiNA* was designed in a way that she can process Internet information in real time and respond to users' questions about current issues.

<sup>5</sup> Of course, despite participatory culture enthusiasts (like Henry Jenkins) who argue that most audiences wish to prosume, some audience members simply want to watch a film. Not everyone wishes to interact with—and remix their own versions of—a film.

moving images to defy conventional structure” (Hershman 2003a: 220). Her installations –which usually consist of multiple projection screens, interfaces, and touch screen monitors–defy the conventional mode of film projection on a single screen. Since these installations are large-scale and cannot be mass produced and mass distributed, technological limitations and high (re)production costs hold them back from engaging a wider and more globally participatory audience.

The fact that these installations are often large-scale, site-specific, and confined to museums, galleries and university-owned spaces indicates that these works are not accessible for mainstream consumption, but they are still consumption-driven in important ways. Intentionally or not, these works convey an aura of exclusivity and target a certain “elite” audience that is able to afford to visit the exhibition sites and/or travel to the festivals where these works are showcased.<sup>6</sup> Hershman, like many other artists, acknowledges the fact that her works are in this way participatory in a limited sense. She admits that “creating a truly interactive work demands that it exist on a mass scale, available and accessible to many people” (Hershman 2003b: 646). In actuality, her interactive works are hard to find and difficult to access remotely. *Lorna*, the first interactive art videodisk, for example, was developed as a research and development guide, but it is generally inaccessible to the public. The CD-ROM version came out in a limited edition consisting of only twenty-five copies, of which only fourteen now exist.

*Lorna* is still occasionally installed in galleries and museums, and was repackaged in a

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<sup>6</sup> Visitors have to be able to pay the museum fee as well. Moreover, even though visitors can sometimes see installations exhibited in galleries for free, there are many galleries that charge an admission fee. This is because installations have found a temporary home in both museums and galleries – where the space is more used for displaying the works rather than selling them (unless the admissions fee is counted as part of the consumption of the works). Museum and gallery spaces have become, in a sense, interchangeable when it comes to exhibiting works because nowadays both places are penetrated with the agendas of corporations and issues relating to the commodification of art.

HyperCard program that could be accessed on Macintosh computers before HyperCard became obsolete. Since Hershman is apparently not interested in making profit from globally selling DVD/CD-ROM versions of her installations—and survives instead on grants, sponsorships, research fellowships and revenues from her films and publications—she has not made an attempt to make available interactive versions of these works via her website.

The participatory aim often conflicts with how such works are actually circulated, due to factors such as the relative novelty of interactive art, the uncertainty on how to promote and distribute such works, and technological constraints (especially in terms of mass production). In their material form, interactive installations (especially those set up in paid venues) are exclusionary experiences limited to select groups of people. If we look at IC experiments as “innovations geared towards greater participation and interactivity on the part of filmmakers and spectators,” then it is perhaps inevitable to also see these cinematic expansions as “tied to the contradictory forces of capitalism” (Marchessault 2008: 39). In other words, while multimedia experiments may be associated with greater plurality in the modes of consumption and production of images, they are also subject to greater economic and social control over the images they produce.

The collaborative ethos reflected in the act of giving the audience a stake in the shaping of the film experience relates to the crowdsourcing and collective intelligence paradigms characteristic of current digital media culture, and to a cultural and political outlook with democratic and empowering undertones.<sup>7</sup> Andrew Cameron uses the term

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<sup>7</sup> As discussed in, for instance, Howard Rheingold's *Smartmobs: the next social revolution* (2002), and James Surowiecki's *The wisdom of crowds* (2005).

“the politics of interactivity” to characterize the political and democratic promises of interactive infrastructures, and relates those to distributed communication networks such as the telephone system:

If the politics of a change in representation is centered on the move away from narrative with its baggage of authority, certainty and closure, the politics of interactivity at a more general level are about the end of mass culture. Interactive television or video telephony promises profound transformations in cultural and political life by fundamentally reordering the communications infrastructure away from a broadcast architecture in favor of a fully distributed network like that of the telephone system. Interactive infrastructure seems to promise liberation from authoritarian political control.

(Cameron 1995: 4)

Cameron sees the features of customization and individualization characteristic of interactive technologies as equivalent to wider cultural and political trends that redistribute power to the masses, which are now seen as networks of interconnected individuals. Furthermore, new technologies of inscription and preservation have ushered in new methods of archiving—and redefining—knowledge and information, as exemplified by collaborative intelligence paradigms such as Wikipedia. However, interactive infrastructures do not usually live up to their revolutionary potential, nor do they always produce the cosmopedic vision embedded in Pierre Lévy’s notion of *collective intelligence*, where individual contributions synergistically add to communal goals such as problem-solving and innovative inventions (Lévy 1997).

Participatory models in business, advertising, and communications have resulted in a shift in our perception of human subjectivity—including, and often stemming from, a re-consideration of the role of the media consumer and producer in light of advancements in interactive technologies. The rhetoric of participatory culture—largely inspired by the writings of Lévy and popularized in academic circles by key figures such

as Henry Jenkins—prefigures narratives of contemporary media audiences having the agency to regulate and dictate media production depending on their individual and collective preferences. Organizational behavior theorist Harold J. Leavitt proposes a counterargument to theorists who argue that participatory, DIY, and grassroots paradigms are seriously undermining hierarchically structured, top-down models (Leavitt 2004). Leavitt argues that vertical hierarchy is still the inevitable cornerstone for large organizational structures, and that—in order to improve the productivity and viability of hierarchies—we must acknowledge their presence in even the most seemingly horizontal paradigms. Leavitt’s approach calls for a reconsideration of the subversive potential Cameron attaches to decentralized network systems, especially in light of expanding cloud computing infrastructures that could possibly surpass distributed networks and reinforce capitalist hierarchies if the services provided remain under the control of a select few conglomerates like Google.

The possibility of decentralized systems eventually reverting back to a centralized structure, as suggested by Leavitt, can undermine the transformative potential of participatory approaches to mainstream production and consumption models (although for Leavitt this is not a downside). Conversely, incorporating consumer input into corporate decisions has the capacity to create platforms that transcend conventional consumption/production paradigms. Even though producers often set the parameters and provide the resources, the availability and accessibility of the tools of production enables consumers to become prosumers through appropriation, repurposing, and extending these existing platforms. Mirko Tobias Schäfer argues that the boundaries between industry-driven consumption and the domain of the user are

becoming increasingly blurred. Schäfer asserts that the terrain of participatory culture is currently the most fertile ground for collaborative innovation between individuals, conglomerates, and technology (Schäfer 2011). Beta “trial” versions of software, for instance, are released to a limited number of users who pilot the software and offer feedback for improvement to the producers, or even create their own mods (modifications) which are then susceptible to co-opting by the corporate producers.

The democratization of interfaces, infrastructures, and platforms can also give rise to subversive and rebellious activity on the users’ part. Hacktivism, a neologism that refers to the process of hacking for an activist and political purpose, is one example where conventional practices—in this case, filing and archiving—assume a different or subversive significance than their original purpose. *The File Room*, a project initiated by artist Antoni Muntadas and originally hosted by the non-profit Randolph Street Gallery, is an interactive archive of cases of artistic censorship ranging from Ancient Greece to the present.<sup>8</sup> *The File Room* is a powerful example of counter-archival practices, and a demonstration of the productive potential of the fusion of artistic vision and activist purpose. The project originated as a physical installation at the Chicago Cultural Center in 1994, and has since expanded into a collaborative interactive archive that welcomes contributions from everyone. The installation mimicked governmental filing systems and databases, and used that familiar structure to question their authority and expose their exclusionary politics. The online mission statement states:

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<sup>8</sup> To access *The File Room* website, visit <http://www.thefileroom.org/> (accessed 10.12.2012).

*The File Room* claims no scholarly, editorial or scientific authority, but instead proposes alternative methods for information collection, processing and distribution, to stimulate dialogue and debate around issues of censorship and archiving.

(Muntadas 2001)

*The File Room* puts forward an open-system model for the cultural production of knowledge and the collective negotiation of information. This refashioned approach to non-hierarchical archiving takes advantage of the relative freedom of artistic expression in cyberspace to put forward cases where on- and offline freedom has been taken away.

The fact that *The File Room's* open-system model is only feasible and expandable in an online environment suggests that the Internet has the potential to promote a globally reaching digital democracy, provided that all world citizens possess the same basic online communication skills and have equal access to the infrastructure. As Jenkins observes, new distribution channels and accessible production tools have lowered entry barriers into the marketplace of ideas; "these shifts place resources for activism and social commentary into the hands of everyday citizens" (Jenkins 2006a: 293). Open access to online platforms can sometimes result in bypassing the organizing principles of representative democracy, where democratically elected representatives act as spokespeople for their voters. Digital democracy, in some ways, cuts out the middlemen and allows for more direct forms of democracy to formulate.

The notion of digital democracy is more problematic when it is treated as a synonym for equality; although in theory, everyone with Internet access gets a "vote" and the right to potentially contribute to decision-making processes, those in the minority of majority-voted decisions (let alone those with no Internet access) do not have their voices heard on a large scale because their opinions do not align with the



choices of the majority. Exclusionary politics, marginalization of certain minorities, discrimination, and bullying do not magically disappear online; the anonymous and risk-free aspects of online participation can exacerbate socially condemnable behaviors.<sup>9</sup> Furthermore, the right to vote—and therefore the right to participate—is not always desired by people, especially ones who have no stake in the decisions in question.

The *File Room's* censorship cases stand as a reminder of the restrictions of freedom of expression:

As the debate over free and open telecommunications grows, so too will *The File Room* reflect decisions of why, how, when, where an individual point of view may be removed, can't be seen, heard, or read – each decision resonating with the implications throughout past and future of new technologies, marketing strategies, political decisions, and...“moral” control.  
(Muntadas 2001)

*The File Room* exposes the limits of a participatory culture discourse that dwells on freedom of expression and equality of access to new and old technologies. The archive envisions hacktivism as a mode of civic activity, whereby a nonconformist act is transformed into a legitimate means of creating new infrastructures, stimulating inquiry, and supplementing or challenging existing knowledge. The downside to uncensored and unregulated freedom of expression is that such an open system could lead to anarchy and chaos, which is why the Internet is not exempt from strategies of moral control and social gatekeeping. Nevertheless, a new form of citizenship emerges from the hacktivism paradigm: that of the citizen as hacktivist (an extension of the prosumer role), whose civic responsibilities have shifted to the realm of counter-hegemonic production.

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<sup>9</sup> In *Convergence Culture: Where old and new media collide* (2006), Jenkins analyzes multimedia citizen participation in the 2004 US presidential campaign as a case study that partially affirms the democratizing promises of participatory culture, and partially exposes the darker and anarchist undertones of a participatory approach to politics.

The paradox of *The File Room's* uncensored censorship cases—once hidden, now publically accessible—extends to the often contradictory emphases of participatory culture: individualism and collectivism. The domain of contemporary participatory culture—a significant portion of which is located online—is public and private at the same time; it brings to the surface complex dynamics of an on-going negotiation between social conduct and unregulated individual behavior. With this consideration in mind, I will explore the tension between private expression, self-censorship, and social conditioning in the terrain of IC practices, and compare the audience dynamic in public screenings to the intimate parameters of home viewing. I argue that IC models reflect the collaborative workings and individualist or exclusionary politics of participatory culture at large, and—when collectively analyzed—reveal the tensions and contradictions that arise from a participatory approach to media prosumption. The human longing for a sense of belonging and the simultaneous desire for autonomy become paradoxical driving forces behind our complex and often conflicting engagements with interactive media.<sup>10</sup>

### **Interactive Fan Practices and Participatory Culture Theories**

Despite egalitarian appearances, many participatory models can actually reinforce capitalist structures by strengthening a privately owned economic system in which modes of production and distribution are geared primarily towards generating profit. If we consider the economy and ecology of the entertainment media landscape as the peak of participatory activity, then prosumer contributions are prone to being

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<sup>10</sup> Andrew Keen proposes a similar argument using multiple case studies from social and corporate media to predict the future of Web 3.0 in his book, *Digital Vertigo: how today's online social revolution is dividing, diminishing, and disorienting us* (2012).

coopted into capitalist rather than socialist work ethics. Schäfer notes that the initially celebratory tone of participatory culture discourses was undercut by subsequent considerations of the implications of integrating prosumer activities into corporate platforms and services (Schäfer 2011).

The integration of prosumer labor into capitalist structures is perhaps most noticeable in cases where the industries (as mainstream producers) become platform providers for consumers-turned-prosumers. A popular culture case study that ostensibly demonstrates this type of integration is the interactive promotion of NBC's television show *Heroes* (2006-2010).<sup>11</sup> *Heroes* is a science fiction TV series that revolves around ordinary people with extraordinary abilities, and follows their struggles as they try to cope with the responsibilities that come with their remarkable powers. The height of the show's popularity occurred about the same time that participatory culture discourses were gaining a footing in academic circles. *Heroes'* cross-media format—stretching beyond the TV screen to the Internet, cell phones, graphic novels, and other media—enabled the implementation of participatory platforms into the storytelling process.<sup>12</sup> The marketing of *Heroes* capitalized on the popularity of interactivity with media audiences. The peak of audience participation was reached when NBC launched the *Heroes*

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<sup>11</sup> Case study information and analysis taken from my article, "Spoiling Heroes, Enhancing Our Viewing Pleasure: NBC's *Heroes* and the reshaping of the televisual landscape" (2010).

<sup>12</sup> New media offer unlimited opportunities for promotional and narrative tie-ins, and make consumers feel as though they have discovered new facets of their favorite television and film narratives on their own by stumbling upon them via random access. Transmedia or cross-media storytelling—that is, when a narrative flows across a variety of media such as television, magazines, and websites—is now a commonplace promotional tool in TV and the movies. Transmedia storytelling relies on contributions to the main storyline from several media outlets, but there is usually one medium that is considered the main contributor to the story. A noteworthy example of transmedia storytelling is the HBO *Voyeur Project* (2007). HBO incorporated multiple media outlets into the storytelling, and implicated viewers into the process of discovering narrative fragments on social networking sites and other forums. The project is archived here: <http://archive.bigspaceship.com/hbovoyeur/> (accessed 09.22.2012).

Theories contest. The contest, launched during Season One of the series (2006), asked viewers to submit videos of their predictions of what will happen on the show to the *Heroes* website, with the winning entries being broadcast on television.

The *Heroes* Theories contest has, in a sense, recontextualized the meaning of *spoiling*. The spoiling of TV shows used to be an unsanctioned community-building activity, where fans would share their knowledge and predictions about the shows through independent forums such as fan websites and fanzines (“Caution! Spoiler alert!” is a common warning prefacing a posting to an online venue that gives away some crucial plot element).<sup>13</sup> Informal spoiling practices could be considered a communal practice because discussion forums act as sites of inquiry where fans collectively share and negotiate spoiler information. NBC’s *Heroes* Theories contest has, to an extent, legitimized (or mainstreamed) spoiling by encouraging consumers to solve the show’s enigmas during Season One, rather than discouraging the potential leaking of information. At the same time, *Heroes* Theories eradicated a substantial part of the community element in spoiling practices by pitting fans against each other. Although some fans offered constructive feedback on other fans’ Theories vlogs (video blogs), the competitive nature of this kind of spoiling—combined with the coveted prize of TV broadcasting—removed the fundamental community-building element present in traditional spoiling practices.

Fan communities typically revolve around the principles of interdependence and reciprocity, and have the potential of providing alternative models of exchange

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<sup>13</sup> In *Fans, Bloggers, and Gamers: Exploring participatory culture* (2006), Henry Jenkins explores the often-antagonistic relationship between fans and producers. Jenkins’s case study of the CBS reality TV show *Survivor* particularly demonstrates the lengths fans can go to in order to uncover secrets about the show and, conversely, the lengths producers can go to in order to prevent the leaking of information.

(including gift economies) to the self-interests of a formal economy. However, with the convergence of grassroots and formal sectors, the “loyalty and [...] sense of ‘identity’ or ‘belonging’” characteristic of grassroots communities is no longer contradictory to the corporate principle of “forming ties on the basis of calculation, monetary or otherwise” (Jenkins 2006a: 280). As an applied case study, the *Heroes* Theories contest validates Jenkins’s theory. NBC’s promotional video for the contest celebrates the aesthetics of convergence and posed as a means of bridging producer interests with amateur production.<sup>14</sup> The video encapsulates the convergence of fan-made videos with the aesthetics of television. The corporate co-opting of DIY aesthetics typical of amateur videos indicates the formation of a new dynamic between audiences and producers, where audiences are allowed a more active input into peripheral aspects of mainstream products.

Simultaneously, corporately owned platforms raise issues of intellectual property and cheap/free labor. The Theories contest rules, for instance, stated that all submissions were the intellectual property of NBC, and yet this did not deter prosumers from preferring to exhibit their videos on an official network website rather than more apparently participatory sites such as YouTube. The Cisco Systems sponsorship announced at the end of the Theories promo video, with its emphasis on “the human network,” disturbingly hints at the commodification of human labor and its (re)distribution through networked technologies.

The latest television example that illustrates the evolution of the human network is the ABC reality show *The Glass House* (2012). *The Glass House* was promoted by

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<sup>14</sup> The video is available on YouTube, visit <http://www.youtube.com/watch?v=VupiADrchmA> (accessed 09.30.2011).

ABC as the most interactive show in the history of television. On the show, fourteen contestants were placed in a fully wired, cutting-edge house made of glass, with their every move recorded and streamed on a live feed on the show's website. The last person voted off the show was rewarded with \$250,000. Viewers were encouraged to partake in decisions involving the contestants through the ABC website and social networks like Twitter. The decisions ranged from which contestants to send home, to what outfits each contestant should wear. ABC provided additional opportunities to interact with the contestants, such as the chance to ask them questions via Twitter during the live feed, or respond to private questions asked by individual contestants. For decisions affecting the show's outcome, viewers were given a list of possible options to choose from, which meant that ABC set the parameters for the extent of control the viewers' majority vote could exert over the contestants. The show's tagline, "Your Vote Will Become Reality," suggests similar promises of agency to prototypical interactive entertainment systems such as *Kinoautomat*. Similarly, only majority votes by viewers determined each narrative outcome, and voting options were limited.

Still, preoccupations about the extent of interactivity and what qualifies as truly interactive are less relevant here than the system forged via the interactive format of the show. In this interactive entertainment economy, audiences are partially generating and shaping the content of the show without monetary compensation. Erkki Huhtamo points out that "in a world where the development of new technology has been subordinated to the interests of the market, the military and governments, the wonderful promise and 'democratizing' potential of interactive technology may be a camouflage for something else" (Huhtamo 1995: 99). In addition to the potential of interactivity to steer audiences

towards certain agendas and ideologies though the aesthetics of play, this “something else” Huhtamo alludes to also includes cheap labor. As with Fordist automation where “the real motive was not the elimination of work but its displacement,” the participatory promise may just be a front for creating a low-paid workforce under the façade of the gift economy (Huhtamo 1995: 100).

A gift economy does not completely transcend capitalism, especially when it takes place on corporate turf. In fact, the infrastructure of a gift economy can at times help capitalist systems migrate from one locale to another, such as the World Wide Web. In the case of *The Glass House*, the gift-givers—that is, the network executives “gifting” the interactive platform to viewers and online audiences—expect something in return. Conversely, the gift-receivers—that is, the audience—are expected to reciprocate by interacting with the platform as a commodity, thus becoming gift-givers themselves in generating more content and more revenue for the show. Furthermore, *The Glass House* gives the illusion that humans are controlling other humans through interactive technologies—a scenario eerily predicted and amplified in sci-fi films like *Gamer* (Brian Taylor & Mark Neveldine, 2009), where remotely controlled inmates fight against each other to win their freedom. *The Glass House*'s human-to-human interaction is achieved through social media, and regulated by the ABC network. The glass house namesake of the show metaphorically refers to the show's attempts to make the infrastructure of the interaction as transparent as possible, so as to enhance the illusion of contact between the players and the audience, and thus make the immediacy of control more plausible to interactive viewers. The resulting dynamic brings to the surface the aspect of

interactivity that is directly linked to immaterial labor, surveillance, and corporate control of intellectual—and, in this case, bodily—property.

Maurizio Lazzarato's definition of immaterial labor helps explain the reason why value is accorded to agency and choice in postindustrial societies. Lazzarato defines immaterial labor as "the labor that produces the informational and cultural content of the commodity" (Lazzarato 2006: 133). Immaterial is not to be conflated with nonmaterial work, as Lazzarato makes sure to address both material and intellectual aspects of immaterial labor. The term encompasses two different facets of labor. One aspect refers to the commodity's "informational content" and, more specifically, the increasing role of cybernetics and computer skills involved in the workers' labor processes in large industries. The second aspect includes the commodity's "cultural content" that expands the understanding of work to activities that are not typically categorized as labor, such as activities that define and regulate artistic and cultural standards, tastes, fashions, and public opinion (Lazzarato 2006: 133-4).<sup>15</sup> Participatory entertainment programs such as those mentioned earlier belong to this category, which explains why many cultural studies theorists focus their case studies on popular culture.

Lazzarato points out that, even though the capital relation does not essentially change, processes of immaterial labor alter the phenomenology of capital. Subsequently, immaterial labor alters the organization of capitalism, since intellectual property is gaining currency over material property. In other words, immaterial capital is not mainly measured and identified in material or fiscal terms, but in terms of the

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<sup>15</sup> It should be noted that immaterial labor is not limited to postindustrial societies, but also encompasses domestic labor such as care giving, chores, and sex. See for example, Leopoldina Fortunati's article "Immaterial Labor and its Machinization" (2007).



production of new, commoditized forms of subjectivity. According to Lazzarato, subjectivity ceases to function as mainly an instrument of control in commercial hierarchies (if it ever was purely that), and becomes directly involved in the production of a social relation; subjectivity is the raw material of immaterial labor. The resulting relationship is not only one of production and consumption, but also a social one, revolving around collective invention and feedback-based innovation. Lazzarato argues that only if immaterial labor successfully produces this social relationship, does it translate into economic value. More importantly, immaterial labor “makes immediately apparent something that material production had ‘hidden,’ namely, that labor produces not only commodities, but first and foremost it produces the capital relation” (Lazzarato 2006: 138). Under the conditions of immaterial labor, subjectivity becomes “directly productive” because, Lazzarato argues, postindustrial societies aim to construct the consumer as communicator, and to construct this role as active (Lazzarato 2006: 143).

Lazzarato’s critique of postindustrial labor can be criticized as extreme, especially in parts where he suggests that corporations take the laborers’ subjectivity into consideration only to “codify it in line with the requirements of production,” and to homogenize the individual and collective interests of the company and its workers (Lazzarato 2006: 136). While this interpretation is certainly applicable in many cases—for example, the television series mentioned above and the industrial settings Lazzarato has in mind—the social space is diverse enough to allow for other interpretations. Here I would like to use two different readings of Lazzarato’s theory in order to draw attention to distinct paradigms at work in interactive processes and outcomes.

The first reading is the more extreme—one that I will later relate to the routinization of play and behavioral conditioning that occurs in domestic types of IC. In this reading (which deliberately isolates specific aspects of the author’s text), Lazzarato’s use of the term “active” relates to the interpretation of “interactive” that associates it with the word “reactive.” Lazzarato seems to acknowledge the (inter)active consumer/communicator as a product of the workings of postindustrial capitalist systems, rather than a potentially autonomous and willingly instigating agent in the production of immaterial labor. Consequently, the meaning of “directly productive” acquires a contrived and limited sense of agency in the context of Lazzarato’s interpretation of the worker. Is Lazzarato’s description of postindustrial labor an evolutionary model of Theodor Adorno and Max Horkheimer’s culture industry, where in this case subjectivity, rather than mass culture, is at the center of industry? Instead of rendering the so-called masses passive, the subjectivity industry is rendering individuals active—but this process of producing active consumers still suggests a degree of manipulation, massification, and standardization reminiscent of Adorno and Horkheimer’s discussion of the culture industry. These connotations can be inferred from the language used and the way the process of producing and commodifying subjectivity is described, although elsewhere Lazzarato has ostensibly disassociated his theory from the Frankfurt School’s media theories (Lazzarato 2004). In fact, Lazzarato’s work has prompted critics to interpret it in polarized ways. Media theorist Mark Deuze, for instance, splits the implications of Lazzarato’s theory into two extremes by asking whether “the attitudes, behaviors, and choices of an individual [are] simply the product

of socialization into the existing order of things,” or if they can exist independently of existing organizations and enterprises (Deuze 2007: 85).

A second, less absolute reading—prompted by a consideration of Lazzarato’s earlier writings—sees the possibility of immaterial labor surpassing the disciplinary and reproductive character attached to the organization of labor in Marxist and neo-Marxist frameworks, and transforming into invention. In my own discussion of some types of IC, I am emphasizing the disciplinary aspect of immaterial labor (focusing on leisure activities and gameplay as quasi-institutionalized sites) by way of social and behavioral conditioning. But, if we consider immaterial labor as event and as invention, instead of reproductive labor (of material goods en masse, and of ideologies), then we open up the possibility of a type of labor that is uniquely productive (in that both event and invention are inimitable) rather than repetitively reproductive. This productive labor relates to the Marxist understanding of productive labor in that it is psychologically satisfying because the worker is not alienated from the act of production nor is he/she reduced to an instrument or object of production. The immaterial worker is able to productively apply aspects of human nature that are not employed in repetitive tasks, such as inventive thinking and recreational gratification.

For the purposes of the discussion of IC, Lazzarato’s notion of the event needs to be expanded and tailored to contexts that are not typically perceived as sites of immaterial labor, including the movie theater. Unconventional sites of labor that are associated with entertainment, such as IC exhibition spaces, have the capacity to generate a type of recreational labor. In the context of recreational labor generated by IC, the event (the interactive experience) generates a material product (the resulting

film) and, in the process, ideally stimulates intellectual thought regarding the interactive experience. Conversely, as I will illustrate in the close analysis of the interactive rape video *Stockholm*, the opposite can happen; in goal-oriented interactive films organized by loops and repetitions, the viewer's response tends to be limited to acts of selection and task completion. In this context, the viewer's behavior towards the interactive text becomes habitual, as it is routinized into patterns of button pressing, mouse clicking, and so on. During this prereflective response, aesthetic appreciation of the content of the film is subordinated to the procedural tasks set by the film's interface.

### **Face to (Inter)face: Algorithmic Authorship and Generative Cinema**

The premise of immaterial labor indicates more ways of conceptualizing the impact of interactive activities on the viewer—with the viewer being both the executor of the film and the interactive consumer of the viewing experience. The active investment of the viewer in the progress of the film endows him/her with the ability to determine an outcome and, subsequently, grants him/her the ability to decide. If the viewer perceives himself/herself as an integral agent of the interactive experience, then he/she comes to think of the interaction as meaningful, and therefore perhaps psychologically satisfying. The prospect of predicting, dictating, and changing the course of the filmic narrative alters the basis of the cinematic encounter, and reorients the source of cinematic pleasure. Interactive artist and theorist Grahame Weinbren pinpoints one of the foundational aspects of cinema in arguing that:

the impossibility of impacting on the cinematic is one of the sources of our pleasure in it: should Lila Crane in *Psycho* be able to heed our cries of 'don't go up (/down) the stairs' and turn back, the entire effect of the horror film would dissolve. Much of cinema's power over us is our lack of power over it, and, in this sense, suspense is a paradigm of cinematic response.  
(Weinbren 1995)

Weinbren adds that, in most multimedia narratives, interactivity involves “trivial ‘point and click’ actions” on the user’s part. These arguably superficial engagements with an interactive text are promoting an “elevation of interface over content and meaning,” where content is subordinated to “a product of software dominating narrative form” (Weinbren 1995). Jenna Ng suggests that, in online interactive videos, the point and click actions assume a more profound significance than Weinbren’s analysis allows. In Ng’s view, online interactive films should be examined as a separate IC category because the viewer-text dynamic differs from the forms of spectatorship in other interactive contexts such as the audience-film dynamic in public screenings. According to Ng, the dynamic between the viewer and online interactive videos is in a constant flux that orients the interaction around “the ephemera of discovery” (Ng 2011).

In some cases of film interactivity, the cinematic is subsumed into the interactive, and pleasure becomes located in the active discovery and performance of the narrative rather than in the process of narrative comprehension or in the identification mechanisms. Nevertheless, there is still a degree of unpredictability even in highly interactive and participatory contexts. The lack of (full) control over the narrative development becomes relocated into the realm of film aesthetics. As interactive viewers, we may be able to dictate a narrative trajectory and choose our own adventure, but we still do not possess full control over how that choice will unfold, how it will sound, how exactly it will look, and so on. Even if we are able to determine the narrative outcome (the hero gets the girl, for example), we are never put in the fully creative position where we get to design that outcome (*how* the hero gets the girl). Instead, we

choose to navigate a customizable sequence of someone else's imaginative vision, someone else's adventure.

Through close analysis of *Soft Cinema* films (Lev Manovich & Andreas Kratky, 2005) as primary examples, I explore cases of film interactivity where the cinematic is subsumed into the interactive; in this instance, interactivity takes place between the software and its execution by the computer hardware.<sup>16</sup> Software-generated, automatically recombinatory narratives—where the software generates new narratives through the random selection and combination of discrete audio, visual, and/or textual tracks—(im)materially alienate the viewer from the creative process by focusing instead on the interaction between hardware and software. Here, the element of unpredictability that is part of cinematic pleasure lies in the recombination of discrete elements (audio, visuals, subtitles and so on) and the unexpected ways the software edits those elements together.

In database narrative engines such as those envisioned by Lev Manovich's collaborative *Soft Cinema* experiments, the notion of authorship is perceived by the viewer as procedural and the resulting film(s) appear to be spontaneously assembled in "real time." The vision behind the work's art aesthetics, however, remains in the hands of the (human) creators who devised the concept, its visualization, and its practical execution. In *Soft Cinema*, authorship is transferred from the artists and programmers to the artificial intelligence of the system. Still, the authoring of the overall narrative effect remains in the hands of the (human) creators who came up with the concept, its visualization, and its practical execution.

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<sup>16</sup> For more information on the *Soft Cinema* projects, see <http://www.softcinema.net> (accessed 08.30.2012).

## Code as Creative Design and Narrative Generator

Michael Mateas and Andrew Stern argue that the creative role of the new media author must extend to creating code and making expressive use of the procedurality of digital works. This “procedurally literate authorship” enables artists to think within computational structures and “understand the interplay between the culturally embedded practices of human meaning-making and technically mediated processes” (Mateas & Stern 2010: 183). Mateas and Stern consider code as a species of writing that produces its own procedural aesthetics, rhetoric and poetics. They therefore propose that code be understood on the level of rhetoric and poetics, rather than just operational flows. They argue that code should constitute an added criterion to analyzing the relationship between authorship and audience reception (Mateas & Stern 2010: 184).

The consideration of code in the critical interpretation of a work overlaps with the notion of generative art, and expands the idea of procedural authorship to include non-digital contexts of algorithmic invention. Philip Galanter defines generative art as:

any art practice where the artist uses a system, such as a set of natural language rules, a computer program, a machine, or other procedural invention, which is set into motion with some degree of autonomy contributing to or resulting in a completed work of art.

(Galanter 2003)

Galanter’s definition is not confined to computer art; it also includes art that adheres to preset instructions or imposed patterns (such as those found in Islamic tile work), Tibetan mandalas, and various modes of textile production dating back to Jacquard’s punch card loom in the 19<sup>th</sup> century. To this list, I would add rule-bound constrained writing exercises (such as those devised by the Oulipo) and creative obstructions self-imposed by authors and filmmakers. An example of print-based generative poetry is

Oulipian Raymond Queneau's mathematically inspired *Cent mille milliards de poèmes* (1961). The book is a collection of ten fourteen-line sonnets, printed with each line on a separated strip of paper. The strips can be manually pulled back and forth to reveal new combinations of sonnet lines compatible across the entire textbase, resulting in 100,000,000,000,000 different sonnets. Lars von Trier and Jørgen Leth's *The Five Obstructions* (2003) is an example of a regenerative filmic exercise to remake Leth's *The Perfect Human* (1967) five times, each time with a different obstruction or limitation imposed by von Trier, resulting thus in five different films of the "same" narrative.

On the level of reception, the cognitive/imaginative authoring of individual stories emerging from the authorial concept depends on the viewer. *Soft Cinema* randomly (or semi-randomly) combines the ingredients for a movie, but it is up to the viewer to perceive narrative threads and infer stories, thus cognitively turning software into developed narrative. In his introduction to *Absences*, one of the *Soft Cinema* movies, co-creator Andreas Kratky says that the software cannot prescribe an aesthetic; it simply provides "an associative tool" for the artist to use as a platform for developing his aesthetics:

The machine is looking at—or, to put it into machine terms—is processing this material without any esthetic preconception and this allows for new structures to arise from an initially indiscriminate database. So while at the end it is an algorithm that tells the display part of the *Soft Cinema* software to show a certain sequence of film fragments, this algorithm is the result of an authoring process. Only through the creative decisions about which clips belong to the database, which parameters to select from, how to weight them and which rhythm in the temporal development to follow, the final film takes on meaningful esthetic qualities.

(Kratky 2005)

Where Marsha Kinder has argued that that database narrative "exposes or thematizes the dual processes of selection and combination that lie at the heart of all stories,"



Kratky emphasizes the role of (an authorial) artistic vision in the generation of software narrative forms (Kinder 2002a: 120). His emphasis counterbalances the common assumption that authors of database narratives are more concerned with the “speed of engineering” than the development of “possible genres” (Rieser & Zapp 2002, xxv-xxvi). This approach to *Soft Cinema* suggests that, even though the software-generated films appear to lack a unified authorial source—and thus actively resist the notion of auteurism—the author is still *somewhere* in the resulting work, perhaps in its foundational aesthetic qualities.

In one respect, database operations antagonize classical narrative paradigms in *Soft Cinema* by omitting or minimizing dramatic elements such as conflict, resolution, catharsis, and character development. But in another respect, the convergence of narrative and database that is possible in software cinema may result in new understandings of the operations of cinematic narrative that coincide with Carl Boggs and Tom Pollard’s definition of postmodern cinema(s) “characterized by disjointed narratives, a dark view of the human condition, images of chaos and random violence, death of the hero, emphasis on technique over content, and dystopic views of the future” (Boggs & Pollard 2001: 159).

Narratively, the loosely structured premise of *Mission to Earth*, one of the software narratives, fittingly complements the film’s disjointed and interrupted form. The synopsis accompanying the film gives the viewer an abstract sense of its narrative potential. The film is about the experiences and altered subjectivity of a female alien who is seeing, hearing, and reacting to Earth for the first time. Appropriately, the audio tracks are processed and sampled by the software as discrete data, while the various

sized screen windows are also seen as discrete; together, all these elements are combined in various configurations and grouped under a single encompassing screen (the computer screen, the TV monitor, or the installation screen) so that they can be simultaneously presented to the viewer. Although the combinations and recombinations of discrete audiovisual elements might resemble random software operations to the viewer, Manovich notes that some visuals are hard-wired in some parts of *Mission to Earth* in order to express a particular effect that the creators wish to convey (Manovich & Kratky 2005).

As viewers of the film, we may initially be unable to follow a fully developed story, but we are still able to have an immediate affective response to the sense of alienation and disorientation felt by the main character, Inga (Ilze Black). This sense of alienation and disorientation is not narratively conditioned: we do not empathize with Inga because there is not sufficient character development or depth, but we can share something similar to her experience of lost bearings. In their introduction to the film, Manovich and Kratky mention that Inga's alien experience is evocative of "both the Cold War era and of the contemporary immigrant experience that is so frequently the norm for inhabitants of 'global cities.'" The multi-frame and unpredictable layout of *Mission to Earth* appears intended to affectively correspond to nuances of "variable identity," a fluid, nuanced, and elusive concept of subjectivity that—according to the creators—encompasses "the trauma of immigration, the sense of living parallel lives, [and] the feeling of being split between different realities" (Manovich & Kratky 2005: 20).

The explicit association of these encounters with the history of the Cold War adds allegorical depth to *Mission*—a depth that is probably not perceivable to the viewer

if she is unaware of this intended allegorical dimension to the film (and, in auteurist terms, Manovich's personal investment in this topic as a Soviet immigrant). On purely technical registers, variable identity is formally constructed as the effect of algorithmic processes; it is a product of combinations of data/info-subjectivity in the digital field or postindustrial society. On the other hand, some qualities of Inga's culturally and technologically backward planet, Alpha-1, suggest—by way of the Cold War metaphor—that hybrid identity is not always the result of new or progressive operations of mind and technology, but may also encompass past psychological trauma, especially when that trauma (re)emerges as the result of a life-changing cultural, sociopolitical, and/or technological transition.

This juxtaposition of machinic and programmable processes, juxtaposed with human-centric and historical concerns, drives software film's implicit argument that relatable feelings (human affect) can be stimulated—and possibly even simulated—by software operations. At the core of *Mission's* software are cultural and transnational—that is, *human*—concerns that resonate through the combination of formal and structural elements. The immigrant point of view in the film can thus be relatable in diverse reception contexts; it can be translated in broader terms as the experience of being in an unfamiliar place, the experience of navigating hybrid modes of subjectivity and, by extension, hybrid modes of spectatorship. In this respect, then, the narrative spills out into the affective realm as our bodies literally try to *make sense* of this new cine-software experience. Software cinema is thus, against all appearances of being driven primarily by inhuman computer operations, a cinema of effects and affects. While watching software cinema, we are receptive to the primal visceral appeal of moving

pictures but, unlike cinema's first audiences, we work within new frameworks for relating to images that are not just moving, but are also pixelated, digitized, and interactive.

Tom Gunning's dismantling of the myth of the incredulous and frightened early cinema spectator has led to a wider critical awareness of not only the importance of film history in the formulation of film theory, but also—as a secondary point that is nonetheless more significant here—a critical emphasis on the material conditions of spectatorship and how they influence reception (Gunning 2004). As historians of early cinema have pointed out, the very conditions of early film projection and exhibition prevented the spectator's narrative or aesthetic immersion into the spectacle of moving pictures. Many early screenings took place in social settings, such as plazas and the Grand Café in Paris (famous for hosting the first documented public screening in 1895), which encouraged social interaction among spectators, but not immersion into the world of the film. In addition, the film projector was noisy and its mechanical operations were impossible to ignore during screenings. The subsequent additions of an accompanying musician or orchestra were made not only to add sound to the image but also to conceal the sound of the image projection machinery. These distractions, I argue, had a counter-immersive impact on viewer responses comparable to that of the viewer's awareness of the procedural character of software cinema.

In *Soft Cinema*, the spectator does not slip into full narrative immersion because her attention is on surface mechanisms of the film's assemblage—the multiple navigation windows, overlapping soundtracks, and so on—which in turn are representative of internal operations of software and hardware, and of graphical user interface (GUI) and human-computer interactions. The overlapping sound and visuals in the software films

correspond to—and for the viewer, appear to figure—operations of software database. The viewer’s attention, therefore, is drawn to audiovisual evidence of the film’s ongoing recombinatory operations, manifest in the automatic generation and recombination of multiple movie windows and overlapping audio tracks. Like the noisy projector and the noticeable surface of the projection screen in early screenings, the visualized materiality—or, the materialized-visually metaphorized immateriality—of the software mechanisms of digital projection in *Soft Cinema* make viewers constantly aware of the apparatus’s role in the performance of the film.

Thus, the *Soft Cinema* viewer is not “absorbed” into the film’s projected space; she is fully conscious that there are working mechanisms and infrastructures producing that which audiovisually (de)materializes on the screen. The viewer occupies a liminal space: cinema here is neither a field of illusion or, in conventional terms, narrative verisimilitude. In the context of *Soft Cinema*, the spectator takes on the additional role of reading data input as it appears on the interface. He/She engages in a hybrid practice of spectatorship that blends interface/screen reading with techniques of information processing and audiovisual, cognitive labor.

### **Reorienting and Remixing Reception Modes**

Software cinematic spectatorship is thus not primarily temporally or narratively motivated, but it still does not fully elude the gradual process of accumulating narrative information. The primary source of narrative information about Inga’s mission to earth comes from the main audio track rather than the visual elements and short clips that are asynchronously and (seemingly) arbitrarily paired with the audio. The fact that narrative information is accumulated aurally and progressively through the audio track sutures the viewer’s experience to this register of continuity in the work, while at the same time

undermining the primacy of visual continuity. In *Mission*, the overwhelming and disorienting images have a decentering and affectively disarming effect, while the consistent audio refocuses the viewer's narrative comprehension by shifting it to the realm of sound. This re-hierarchized sensory mode of spectatorship nearly isolates narrative comprehension to the auditory aspects of the film.

Nevertheless, *Mission's* audio does not necessarily determine or limit the viewer's interpretation of the visual material, and vice versa; sometimes audio and picture appear to complement each other, while at other times the images veer off into a different direction than the more focused auditory narrative component. In fact, after prolonged or repeated viewing, it becomes evident that some audio sequences of *Mission* have been hard-wired into the database, so that they appear in predetermined orders. For example, all versions of Inga's story begin with an audio track that strategically conveys important background information about Inga. From the very first sentences, we know that Inga the alien likes going through the automatic car wash because it reminds her of her home planet, Alpha-1.

In all recombinant versions of *Mission*, the opening scene remains the same. The more versions of the film that are watched, the more information is accumulated about Inga's life on Earth. The information conveyed in each version does not contradict previous viewings; instead, the attentive viewer amasses more narrative information each time, chiefly through the audio track. Everything we can possibly know about Inga's personality and life on Earth is conveyed through a robotic and monotonous male voiceover. The monotone male voice brings to the surface power relations of patriarchal societies, and makes them applicable to postindustrial societies in which human

interactions are being replaced by—or conveyed through—electronic and digital processes of standardization and automation. The repetition and overlap of audio and visual tracks, for instance, results in déjà-vus that contribute to the sense of circularity, repetition, and mundane routine that not only characterizes Inga's earthly life, but also organizes the way her life is conveyed to the viewer through data repetition, looping, and algorithmic recombination.

In a realm in which relations of data literally conjure the presentation of film subjectivity, the imaginative production of cinematic art is organized according to the logic of the computer's database. Delegating a large portion of the assemblage of the film image and sequence to a computer results in a liminal media object that exists “between narrative and a search engine” (Manovich 2004). Thinking of filmic narrative as combinatory and sufficiently quantifiable to be navigated with a search engine evokes other methods of data visualization, distant reading, and macro-analysis. The immersive art installation *T\_Visionarium* is, in some ways, a digital motion picture parallel to text mining and distant reading practices.<sup>17</sup> The installation was conceived and designed by a team of digital artists and programming engineers for the iCinema Center's Advanced Interaction and Visualization Environment (AIVE). The installation contains a database of televisual information (with added film data in the second installment, *T\_Visionarium II*) that is mediated to viewers via a virtual reality environment. In this three-dimensional interactive space, viewers can explore and edit over 20,000 video clips tagged with descriptors and metadata relating to gender, emotions, editing pace, and actions performed. During projection, the viewer is virtually

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<sup>17</sup> For detailed description and documentation, visit iCinema's *T\_Visionarium* website [http://www.icinema.unsw.edu.au/projects/t\\_visionarium](http://www.icinema.unsw.edu.au/projects/t_visionarium) (accessed 05.16.2012).

surrounded by 250 video clips that are distributed around AIVE's encompassing circular interface. The viewer is able to select, organize, and connect the clips based on thematic and other associative connections. Tagging and metadata archive the clips based on thematic clusters that emphasize their most prominent features. The associative and thematic connections that link a clip to a cluster of other clips bring to the surface underlying and unintentional connections that are not determined by narrative context and linear storytelling.

This extraction of isolated aspects of audiovisual texts—a form of data mining à la Moretti—can result in a technique of subtext interpretation oriented by database structures like records, fields, tables and so on.<sup>18</sup> While this data standardization and categorization can make vast amounts of information easily accessible, non-quantifiable information and interpretative methods risk becoming permanently lost; these omissions can, in time, be forgotten because the vastness of the database typically implies inclusiveness, thus masking omissions that do not fit into its storage and retrieval capacity. Alan Liu perceives the standardization of information as “the separation of content from material instantiation or formal presentation” that is at the core of the postindustrial imperative of making discourse mobile, automated, and transformable (Liu 2008: 216). But what happens to aspects of discourse that cannot be automated, compartmentalized, and recontextualized?

Manovich likens twentieth century cinema to a machine that mimicked the industrial era's Fordist automation and assembly lines. He argues that, like Ford's

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<sup>18</sup> Kathryn Schulz gives an overview of Moretti's methodology and incorporates some counterarguments to Moretti's extreme approach to literary analysis in her article, “The Mechanic Muse: what is distant reading?” (2011).



assembly line “relied on the separation of the production process into a set of repetitive, sequential, simple activities,” cinema’s machinic logic revolved around “a sequential narrative and an assembly line of shots that appear on the screen one at a time” (Manovich 2004). Accordingly, Manovich likens formal and organizational elements of the information age to the logic of software cinema: a cinema tailored for individual interface viewing and hypertextual browsing. The loops, repetitions, and intertextuality of *T\_Visionarium* and *Soft Cinema* draw awareness to the organizational logic and shared elements that shape, recycle, and regenerate narratives.

### **Data-Subjectivity and Posthuman Awareness**

In the case of software films, paratexts such as *Mission to Earth’s* online synopsis can provide narrative direction that helps the viewer forge causal links where other cues are missing. Trans- or cross-media film spectatorship, where information from multiple media is amassed to extend and enhance the comprehension of the principal film(s), is now the typically interactive way of understanding movies in our culture; software narratives are no exception, as viewers can discover background information from sources other than the films or their immediate paratexts, with which to contextualize the (software) film experience. Even obscure cinematic experiments such as Manovich and Krakty’s *Absences* make more “sense” when the viewer is aware of the artistic and theoretical aims of the work. The background knowledge, for instance, that *Absences* does not have a predetermined narrative frees the viewer from hermeneutic expectations that circle back to authorial intention. This allows the viewer to respond to the sequences or the unexpected aggregates of visual and aural elements without having to figure out their significance within a narrative scheme.

The audio and visual tracks of *Absences* are usually abstract and difficult to decipher. The ambiguous text track accompanying windows on the screen and the overlapping ambient sounds determine our interpretation of the notional coherence of the film's projection. Although *Absences* is neither narratively nor logically conditioned, the readable text track serves as a (often-misleading) captioning device for what is seen and heard. For example, when the text underneath the window mentions that footsteps were heard, this element is hard-wired with video of the shadow of a man slowly walking towards an unknown destination (in one version, the text mentions a wedding ceremony as a possible destination for the shadow that could belong to the groom). This is also accompanied by inscrutable ambient sound; once the text is read, though, the sound will appear to resemble footsteps because of the caption. In other words, the text track narrows and specifies our perception of less easily decipherable elements by suggesting associative connections between these aspects of the projection. This mode of spectatorship, which is almost the opposite of free association, could be considered as the software-simulated equivalent to the Kuleshov Effect, whereby audiovisual pairings assume meaning and tone through software-produced editing arrangements in this computer-age definition of montage.

Importantly, lags, loops, and glitches of the software are more easily perceived when narrative expectations have been suspended, and disjunction becomes the defining mode of film reception. Are the lags, glitches, and loops of digital interactions software versions of affects, corresponding to how humans somatically and perceptively experience digital encounters? Anna Munster, echoing Brian Massumi, locates affective bodily sensation in the lag or time period between the "bodily beginning of an event and

its completion in an outwardly directed expression of emotion” (Munster 2006: 140). Here, we might observe that affective sensation that occurs in the in-between interval of an event’s bodily sensed beginning and its outwardly manifested emotional expression must resonate with the lag which occurs between the software sending the command to the hardware, the hardware’s reception and execution of that command, and the human body’s sensation of the performance of this process. Before theories of affect and digital embodiment gained academic momentum, Linda Williams predicted in her essay “Film Bodies: Gender, Genre, and Excess” that the deployment of sensations in cultural forms such as the cinema is only just beginning to be understood and analyzed (Williams 1991). She argued that filmic identification does not just involve the bodily reproduction of the sensations displayed by bodies on the screen, but also (or instead) encompasses a complex network of triggers and sensations that include the filmic apparatus. If, as Manovich has repeatedly asserted in his body of work, software is the new cultural form and database is the metaphor through which our daily interactions are understood, then the hybrid mode of spectatorship produced by software cinema further expands the nuanced and expanded meaning of embodied identification suggested by Williams.

Thus, if we regard the data-subjectivity simulated by—and emerging from—software cinema as an aspect of spectatorship at large, we may compare the screen’s reproduction of the body of the software to Williams’s notion of screen bodies. Our perception of the materialized (as in, audiovisualized) body of the software/database on the screen results in varying degrees of investment in and detachment from what is shown and heard, which must vary considerably in relation to the sequences and disjunctions with which it is shown and heard. In light of this, (software) cinematic

identification is keyed to distancing and difference—rather than empathy and situational identification—and is accentuated by our perceptive and sensate awareness of the repetitive glitches and lags that mark the software as different from our biological processing of audiovisual information. By extension, digital embodiment is a “differentially produced mode of living or experiencing the body” because, as Munster argues, we are not just somatically experiencing forward-moving temporal speeds but also periods of asynchronicity punctuated by intervals or lags; “these delays occur because both code and the body fall short of the other’s speeds” (Munster 2006: 64).

Peter Krapp argues that glitches and lags—rather than immediacy and seamless communication—are an integral part of an ongoing digital embodiment that is “immanently capable of becoming both sensate and virtual”(Krapp 2011: 17). Krapp clarifies that he is not advocating technological determinism by proposing an understanding of human-computer interaction centered on the glitch or the software exploit. Alluding to Alexander Galloway, Krapp argues instead for a posthumanist approach that points out the cultural importance of “any code that runs counter to the perceived mandates of machinic execution, such as the computer glitch or the software exploit” (Krapp 2011:91). In other words, the analytical emphasis is not on a machine-centric logic that explains why malfunctions happen. It is, rather, a posthuman understanding of how these perceived malfunctions productively help us conceptualize them as an integral part of the culture of mediation and interaction in the programmable and digital era.

Glitches, lags, and loops establish their own rhythm, and, through prolonged viewing of software films, our bodies may become accustomed to that mode of

interaction in the same way we have become acclimated to the lags and loading times of Internet surfing and, prior to that, to the 1990s MTV-style fast-paced editing patterns of television and film, and so on. Although we become accustomed to this interrupted and hypertextual mode of watching movies, the evidence on whether we fully internalize this mode in ways that permanently rewire our brain remains inconclusive. One view argues that the sensory overload of multiple and simultaneous non-linear operations places overwhelming demands that cannot be adequately processed by the human brain.<sup>19</sup>

The counterargument is that frequent exposure to new modes of processing information trains the mind and body to adapt to demands of new technologies. This argument has been taken up by scholars in disciplines ranging from the humanities to neuroscience, who support the line of research that is indicative of new technologies retraining and repurposing our neural circuitry in psychosomatic ways. More recently, Hayles has applied this line of reasoning to electronic literature case studies (Hayles 2012). Her approach partly draws from Andy Clark's neural constructivist viewpoint, which claims that in our habitual interactions with the world, "we remain open to quite profound kinds of neural (cortical) growth and rewiring" that render us adaptive cyborgs by nature (Clark 2003: 31). The cognitive impact of hypertextual forms of reading on the learning process is being extensively researched, evaluated, and reassessed in light of new methods for interactive pedagogy and self-training tools.<sup>20</sup> In the near future, genres of software cinema have the potential of stimulating similar academic inquiry on

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<sup>19</sup> For more information on how this reasoning pertains to interactive cinema, see Nitzan Ben Shaul's *Hyper-Narrative Interactive Cinema: Problems and solutions* (2008).

<sup>20</sup> Motoko Rich's article, "Literacy Debate: Online R U really reading?"(2008) offers a comprehensive synopsis of early responses to new modes of reading.

multimodal film's impact on the human brain. Such investigations may productively expand theories of narrative comprehension in film to cover robustly hypertextual conditions of spectatorship.

At the risk of falling into the trap of historical and technological determinism or cinematic essentialism, I would argue that—despite its emerging and changing technics and aesthetics—software cinema retains one of the socio-pedagogical functions of the cinema: that of training audiences to receive and buffer contemporary medial sensations. Michael Cowan recently reiterated cinema's status as “training ground for the modes of distracted and divided attention adapted to the conditions of the urban milieu” in light of his rediscovery of the Weimar “rebus films” (crossword puzzle films) of 1925 to 1927. According to Cowan, rebus films “used the onscreen game format, and the affective experience of play, precisely in order to facilitate the assimilation of that new milieu” (Cowan 2010: 209). Just as early cinema arguably prepared audiences and worked as a buffer for shocks of technological and industrial modernity, software cinema trains the viewer in new modes of film spectatorship, and new modes of narrative and affective subjectivity, that correspond to the hypertextual ways in which we interact with digital technologies.

Research has indicated that the habitual actions associated with web interactions—such as moving the cursor, clicking the mouse, and using multiple browser tabs—have the potential to retrain and repurpose our neural circuitry. Just as reading has been shown to profoundly impact brain functioning, learning to read—and, in this case, to watch films—differently can potentially rewire or expand the brain's cognitive abilities.<sup>21</sup> If

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<sup>21</sup> For a sample of diverse approaches to the benefits and drawbacks of new modes of reading and expanded cognition, see: Nicholas Carr's *The Shallows: What the Internet is doing to our brains* (2010),

we approach software cinema from this perspective, then its objective of expanding viewers' cognitive skills by expanding the dimensions of spectatorship correlates to expanded cinema's stated objective of extending consciousness by expanding and ultimately transcending the apparatus of classical cinema.

By stripping film narratives down to their raw elements of dialogue, images, and audio (or at least the digitized and processed equivalents of these), does software cinema also herald the death of cinema as we (think we) know it? Is software cinema turning cinema into software? Or is software cinema expanding cinema in the way that flicker films expanded the definition of cinema by stripping it down to some of its fundamentals? The most notable flicker film is Tony Conrad's *The Flicker* (1965), an experimental film consisting of only five frames, two of which are constantly alternated to create the flicker effect. The "Warning" frame that opens the film, warning audiences that *The Flicker* may cause epileptic seizures or mild shocks, literally turns the metaphor of cinema as a buffer for the shocks of modernization on its head. Instead of training audiences to tolerate the shocks of modernity, *The Flicker* induces shocks to audiences through its flickering effects. By breaking cinema down to its elemental form consisting of frame juxtaposition and light projection, flicker films expand the definition of cinema by contracting cinema to some of its basic elements and primal sensations.<sup>22</sup>

Accordingly, *Soft Cinema* orchestrates the film experience around the contraction or distillation of the internal operations of software into visualized aspects such as the appearance of multiple windows and the simulation of overlapping actions, thus

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John Palfrey and Urs Gasser's *Born Digital: Understanding the first generation of digital natives* (2010), and Andy Clark's *Supersizing the Mind: Embodiment, action, and cognitive extension* (2010).

<sup>22</sup> A similar argument is developed by Chrissie Iles in relation to gallery films in the 1970s in "Inside Out: Expanded Cinema and its relationship to the gallery in the 1970s" (2009).

expanding the language of cinema to include vicissitudes of the procedures of digital media.

The constant experimentation with form, style, and perspective reflected in the changing and recombinatory aesthetics of database cinema suggests that data-subjectivity is impossible to pin down to a consistent aesthetic style. Data-subjectivity is what Manovich defines as “the subjective experience of a person living in a global information society” (Manovich 2005). The creators of *Soft Cinema* wanted to visualize this data-subjectivity in a unique way exclusive to this type of filmmaking. The notion of data-subjectivity assumes an additional meaning to that ascribed to it by Manovich. The films do not only attempt to convey the complex plurality of human data-subjectivity, but also generate or simulate their own object-oriented data-subjectivity, forged from the data input and information remix. Data-subjectivity seems to partially suggest that this subjectivity is data-produced or invoked, and humanly perceived (rather than humanly produced).

The two-fold meaning of the human-machine orientation of data-subjectivity raises the question whether procedural and automated systems can be integrated into processes of human subjectivity-formation. If so, then this might lead to a level of posthuman awareness where the construction of a posthuman sensibility has less to do with literal cyborgs and nonbiological components, and more to do with the formation of subjectivities. Hayles suggests that the posthuman is not technologically determined, and that its complex psychology should not be reduced to “mechanistic models equating humans and automata” (Hayles 1999: 70). At the same time, she acknowledges that technology can stimulate reflection on what it means to be human in the current



technocultural intersection (Hayles 1999: 4). While technology does not determine or dictate the essence of posthuman condition, the posthuman is perpetually entangled with notions of technological identity and the conditions of the information culture from which it arguably emanates.

Although, as Hayles notes, the posthuman condition is often reductively understood in terms of automation and mechanization, I propose that we should not exclude cybernetic processes—including data recombination and programmable authorship—from the consideration of spectatorial subjectivity. In her recent work, Hayles considers more closely the cybernetic processes of artificial intelligence machines and reading software. She takes into account the complex meshing of the temporalities of machine operations and human cognition. Humans establish synaptic connections rapidly, and process narrative at a slower rate; machines process bit reading and logic gates rapidly, and load complex programs slowly (Hayles 2012). Applying Hayles' theory, *Soft Cinema* exposes these cross-modalities by visualizing them, and aesthetically thematizes the “different time scales in which human and machine cognitions intermesh” through its incongruent rhythms and varying processing speeds (Hayles 2012: 13). The result is what Anna Munster calls informatic affect, which is “a process of subjective bodily recomposition that occurs in relation to the alterity that pattern and code renderings open up for us” (Munster 2006: 142). In other words, the perceived difference between our minds/ bodies and code/ pattern configurations results in an affectively driven mode of subjectivity that is partially oriented by the cybernetic conditions in which that subjectivity emerges and is enacted.

## Generative Cinema as Distant Viewing?

*Soft Cinema's* meditation on, and mediation of, the (post)human condition begins with the authoring process. Software cinema creates the illusion of automatically generated authoring processes, even if that procedural or algorithmic authorship requires the intelligence of programming engineers. Illusory or not, the belief that a machine generates the raw elements that humans turn into narratives is the literalization of Roland Barthes' "death of the author," and the reincarnation of the author as software. If human life experiences provide the raw materials for narratives then procedural authorship turns the creative process of experiential narrativization into a recombinatory machinic process, which in turn is meant to simulate and stimulate experiential narrativization on the viewer's part. In a sense, the viewer's initial approach to software films resembles a gamer's approach to a computer or video game: the focus is more on the (automatically) interactive platform and its potential for generating content, than on traditional film reception and cinephilic aspects such as auteurist appreciation and classical paradigms of identification.

In responding to the proposition that databases will overtake narrative as the new dominant cultural form of meaning-making, Hayles argues that both apparatuses are essential in understanding the symbolic world because each contributes to that world with distinct and irreplaceable particularities. Hayles notes that database technology relies on "the interoperability of databases, whereas narrative is tied to the specificities of individual speakers, complex agencies, and intentions only partially revealed" (Hayles 2012: 198). She goes on to suggest that narratives resist the standardization that characterizes databases, and this resistance is what makes them a uniquely human invention. *Soft Cinema*—and the broader trend of software cinema—attempts to reconcile

these two forms, narrative and database, by using the sorting and standardization features of the database to generate software narratives.

The driving force behind database authorship and readership tools is to facilitate and expand creative and pedagogical processes; more than that, these technologies are capable of (re)generating creative processes in an apparently spontaneous and unlimited manner that seems to overcome human setbacks such as writer's block and imaginative sterility. It remains to be seen whether artificial intelligence engines can become sophisticated enough to autonomously compose nuanced generative narratives that are compelling enough to become "cinema." Another uncertainty regarding generative narratives is whether the components of storytelling can ultimately be broken down into formulas that can be standardized, simulated, and infinitely remixed by automated algorithmic processes, and thus be free of the cultural, genre, and linguistic conditions that shape master narratives. If so, then software cinema could possibly become the new form of world cinema: a cinema using the common language of software and the (almost) globally resonant aesthetics of the database.

CHAPTER 4  
AUDIENCE PARTICIPATION, COLLECTIVE AUTHORSHIP, AND PSYCHE-  
GENERATED CINEMA

**Introduction**

Despite claims to the opposite, the promises of many interactive films to reposition the viewer in the role of the director are unrealistic. At best, the viewer assumes the role of a co-projectionist, as in the case of *Mr. Sardonicus* and *Kinoautomat*, where the projectionist would cover and uncover the lenses of different projectors so that the reel selected by the audience could be projected. Consequently, if the viewer concludes that the actual power to control and perform the outcome or direction of the film is illusory, then he/she might perceive himself/herself as a marginalized contributor to the process of the film's narrative development. This sense of alienation typically stems from a lack of true—that is, psychologically or narratively fulfilling—participation, although many interactive films and artworks deliberately simulate this state of alienation in order to incite social and intellectual reflection.

In this respect, the constrained agency of the viewer—which often translates to or results from an inability to physically and materially manipulate the content and progression of the film (and other aspects related to the film's material performance)—can productively generate a more critical response to the actual purpose of the interaction. In other words, if the purpose of the interaction comes to be perceived as something other than (or more than) narrative and/or material control of the film, then what comes to be perceived by the viewer as ritualized behavior within the context of the interaction—such as pushing buttons or voting with other audience members—acquires a more profound significance. In a limited position of authority over the film's development, especially in public and mass screenings, the viewer may be inclined to

think beyond the stated goals of the performance: beyond saving a damsel in distress, beyond exposing a federal conspiracy, and beyond the immediate goal of generating a customizable film. We should keep in mind, however, Nico Carpentier's argument that pioneering IC experiments such as *Kinoautomat* did not profoundly transform the format or the dynamic of the typical movie-going experience, which is still mostly based on "active interpretation and passive immersion, and without active co-decision-making. Carpentier says that the "right to create in mainstream theaters remains the author's" (Carpentier 2011: 303).

The concentrated power of the few versus the distributed power of the masses remains a central preoccupation in scholarly and popular discourses of the participatory dynamics of consumers and audiences. In the context of convergence culture and hybrid media ecology, it is difficult to draw firm conclusions regarding shifts in authority and changes in public perception. It is even more difficult to verify whether changes in entertainment structures translate into real changes in the sociopolitical realm. Henry Jenkins brings up two alternative views in assessing forms of participatory culture in the entertainment realm. Applying W. Lance Bennett's dual paradigms of "disengaged youth" and "engaged youth," Jenkins argues that audience participation in entertainment media—particularly in online forums such as YouTube—can be seen through a negotiation of these two critical lenses. The disengaged youth paradigm sees active engagement in popular culture as a means of distracting emerging citizens from participation in real-world institutions, while the engaged youth model alternatively sees play with popular culture as enabling young people to find their voice and to subsequently deploy it in activist and sociopolitical movements (Jenkins 2006a: 93-94).

Audience participation in the performance of entertainment media is an integral part of cultural production and consumption, but does not automatically translate into participation in a rigorously sociopolitical sense. IC simulates some of the principles of participatory culture, while at the same time tests the boundaries of those principles. IC public screenings exemplify some of the synergistic dynamics that Jenkins sees as an integral part of fandom communities—a dynamic that could be transferrable to the interactive viewing habits of a mass public. In the interactive screenings I have conducted in a classroom setting, I have noticed that on several occasions students would try to vote in groups to sway the majority vote to their collectively desired narrative outcome.

Conversely, IC public screenings also have the capacity of exposing the limitations of a democratic approach to media consumption by making the audience aware of the boundaries and impracticalities of collective action, in ways similar to the first screenings of *Kinoautomat*. The difference between recent public screenings and the first screenings of *Kinoautomat* (particularly those in the heavily media-regulated communist Czechoslovakia) is that now audiences are accustomed to a much higher degree of control and customization in many of the media they consume. Therefore, adding interactivity to the film experience in a movie theater or public exhibition space might seem like the next natural procession of cinema to audiences accustomed to smart phones, e-readers, digital 3D cinema and immersive gaming systems, rather than the potentially revolutionary and empowering innovation it was in the context of Expo '67. Furthermore, compared to the degree of customization and interactivity offered by

other media such as computers, televisions and videogames, the interactivity in public IC screenings differs from the interactivity afforded by other media.

Nevertheless, the interactivity in IC—however that interactivity is simulated—makes apparent and viscerally felt culturally engrained impulses intensified by technological advancement and post industrialization: the desire to choose, foresee, and determine outcomes in the performance of media, as free agents. The objective of free agency constitutes part of a secular perspective on life that runs counter to fatalism and religious determinism. On the one hand, the aforementioned lure of playing God and experimenting with “several destinies” put forth by *Novo Idea Adventure* and echoed in many other forms of IC contrasts with a deterministic philosophy of how we navigate our lives. On the other hand, the idea of free agency and unlimited control places the individual in an unrealistic position of power that the technology—as a simulation of the universe—cannot sustain.

The viewer playing director is ostensibly a more feasible objective for IC than the viewer playing God (!), and coincides with participatory culture theory’s emphasis on collaborative authorship and collective intelligence. Interactive films challenge the primacy of the author/ director in the construction and execution of narrative by placing the reader/viewer at the core of the authoring process. As Söke Dinkla asserts, “an interactive media work is not only potentially open-ended, it does not exist unless there is interaction” (Dinkla 2002: 33). Dinkla further observes that “imagination is no longer the creative achievement of a privileged individual, but is instead defined as the ability to organize abstract orders sensually, [and that] it is the user, not so much the artist, who is required to perform the imaginative act” (Dinkla 2002: 37). Dinkla’s perspective

echoes Roland Barthes's narrative of the death of the Author and his reincarnation as a scriptor of the text—akin to the director/producer of the interactive narrative – rather than a meaning-inducing entity outside or beyond the text (Barthes 1977).

Eco's aforementioned concept of the open work and the democratization of a work's critical interpretation are relevant here. Beyond his analysis of the open work and its multiple reception contexts, Eco proposes that uncertainty concerning the intention of a work "invites us to consider *why* the contemporary artist feels the need to work in this kind of direction, to try to work out what historical evolution of aesthetic sensibility led up to it and which factors in modern culture reinforced it" (Eco 1989: 4). The proliferation of open works in participatory culture intensifies such preoccupations, even as these works continue to displace and undermine the author as the supposed center of creativity and meaning.

Elsaesser's notion of mind-game and puzzle films is related to the idea of interactive authorship, although in this context interactivity is not materially or outwardly manifested, meaning it is not manifest in the sense that the viewer actively reorders or impacts the film on the screen. Instead, the viewer is cognitively in charge of the co-authoring process when he/she is asked to make sense of deliberately elusive plot structures. The jumbled up temporalities, suspended storylines, and postmodern aesthetics of these complex narratives "could be seen as indicative of a 'crisis' in the spectator-film relation" because the classical ways of theorizing the spectator as voyeur, observer, and witness no longer adequately account for the complex modes of spectatorship that emerge from multimodal narratives (Elsaesser 2009: 16). The crisis Elsaesser refers to could also extend to the relationship between directors and viewers,



particularly in the context of filmic narratives that alienate viewers from authorial presence in the form of unified closure (within the film or in its commercial paratexts such as biographical information and director interviews). A recent example is commercial auteur Christopher Nolan's refusal in interviews to offer a conclusive interpretation to the ambivalent ending of his film *Inception* (2010), thus effectively allowing viewers to determine the film's ultimate narrative closure(s) instead of relying on the director as the sole provider of ultimate coherence.

The above-mentioned dispersed modes of authorship seem to move away from traditional auteur discourses that "base themselves on the multifaceted belief that films, though usually produced collectively, are most likely to be *valuable* when they are more or less conspicuously the product of their directors" (Grant 2000:101). Thomas Schatz's reexamination of the studio era is an example of some of the first critical moves away from traditional auteur theory. Schatz's focus on "the whole equation of pictures" placed emphasis on the synergistic aspects of filmmaking, and thus expanded the figure of the auteur to a collaborationist notion (Schatz 1988). In addition to Schatz, other theoretical revisions of auteur theory emerged that placed emphasis on various aspects of collective and decentralized systems of authorship that went beyond the process of film production. In the late 1980s and early 1990s, Timothy Corrigan and Meaghan Morris's expansions and deconstructions of auteurism in the context of commercial film culture reached the conclusion that film consumption "did not have to involve the viewing of a film" because the promotional paratexts of a film—including trailers and advertising—constitute the primary means of auteur film circulation that refashion auteurism as "cultural and commercial intersubjectivity" (Grant 2000: 103). The revisited auteur of the

1970s to the 1990s was dispersed across promotional media and commercial industries, rather than primarily deciphered in camera style and other qualities exclusive to filmmaking techniques.

Questions of authorship and author(ity) reemerge in plural form in discourses of participatory culture that celebrate the creative power of the many and critique the authoritarian control of those who try to control meaning and creative resources. Nicholas Rombes, for instance, has blogging and other social authoring activities in mind when he says that “the elevation of the personal and private to the public level has only compounded the cult of the author. We are all authors today. We are all *auteurs*” (Rombes 2008: 437). To characterize the massification of authorship platforms as a democratized form of auteurism is an exaggeration that devalues the charisma and unique perspective of an auteur (which is, in turn, open to questioning). Auteurs possess a distinct signature style that comes off in the aesthetics of their work without over-determining filmic interpretation like other forms of authorship do, such as autobiography. Still, Rombes’s general statement about contemporary authorship can be validated in practices that promote do-it-yourself (DIY) ethics and egalitarian ideology. Examples include fan videos and found footage remix practices that testify to interactive authorship being a re-authoring process that is constantly in flux because the meanings and subtexts of texts are constantly being renegotiated and communally debated as they are being rewritten and publicly shared.

The proliferation of digital filmmaking technologies, the multiplication of distribution channels, the blurring of distinctions between the cinematic space and alternative viewing spaces, the revised notion of intellectual property, and the more

participatory role of the audience reconfigure traditional producer-consumer roles. But does this process of renegotiation and reconfiguration of conventions apply to cinema in the same ways it does to other social media and digital spheres? The move towards the relinquishment of authorial control invites us to rethink cinematic authorship in the fluctuating contexts of mobility, performance, collaboration, and immateriality.

In addition to the two-fold emphasis on collective authorship and viewer intervention, ICs ultimately reveal how central unpredictability is to the cinematic experience and, in this respect, rework and reinforce the presence of the author-as-producer within participatory contexts. Furthermore, by inviting the viewer to become the author of the narrative, IC producers do not fully resign their authority over the text; most of the time, producers simply redistribute and reassign selected elements of this power dynamic. The impossibility of a complete reversal or transcendence of the conventional relationship between author/director and reader/viewer in the context of IC highlights dimensions of the cinematic that endure despite changes undergone by cinematic media. In many types of IC, authorship becomes a power struggle between audience and author or system. In majority-ruled IC screenings, audiences attempt to exert control over a conjectural Author and also struggle for power among themselves, thus performing a competitive aspect to interactive authorship.

When audiences grow conscious of their limited control over an interactive film they begin to decipher an underlying direction or agenda that they associate with the work's authors – or, in the case of *Kinoautomat*, with the sociopolitical realities of their time and/or New Wave ideology. I will analyze a case where the filmmaker's agenda of steering the viewer towards outcomes that are socially deemed as morally acceptable is

achieved through deliberately exaggerated, transparent, and conspicuously reflexive techniques that deconstruct the utopian aspects of interactive ethics.

**“Now Prepare to Fawk up Someone Else’s Life”: Responsibility, Behavioral (mis)Identification, and Dissociation<sup>1</sup>**

Despite efforts for a more egalitarian approach to making and distributing art, Dinkla argues that “participation is located along a fragile border between emancipatory act and manipulation;” this dynamic extends to industry regulations as well as social and political contexts (Dinkla 1996: 290). Many examples of IC capitalize on this desire to control and overpower the agency of technology, while masking the fact that film aesthetics are controlled by the authors (including programmers and software engineers) of the interactive narrative. A recent interactive film that exemplifies the “fragile border” Dinkla is referring to is David Donihue’s DVD movie *TWU*. The film requires the viewer to assume the avatar of Eric, the 21-year-old protagonist, and to make decisions regarding Eric’s behavior in specific scenarios.

The genre of the film changes depending on the choices the viewer makes. The story could culminate in over 30 different endings, although narrative options at certain points in the film are usually limited to two or three distinctly outlined possibilities. The opening of the film provides the viewer with instructions on how to interact, and highlights the viewer’s decision-making power. However, this decision-making privilege apparently comes with ethical responsibility, since the introduction warns the viewer that: “if you act like a prick in the film, then you become a prick in real life.” This warning seems to be intentionally tongue-in-cheek, especially given the fact that the film itself consists of a playful pastiche of various cinematic influences and animation techniques.

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<sup>1</sup> Quote taken from the instructional video included in *TWU* DVD (2010).

Nevertheless, even if the viewer tries to “act like a prick” by choosing to have Eric skip work, stab his boss, get drunk, etc., the narrative somehow always reverts back to options that include more socially acceptable behavior (e.g., saving a damsel in distress), so as to redeem the protagonist (and presumably the “corrupt” viewer), and avoid what the film sees as deviant behavior that leads to what the filmmaker labels as “Moral Decay.” Moreover, some possible outcomes of the viewer’s actions are never realized, even if the viewer attempts to pick them from the options menu. For instance, when the viewer chooses to have a girl go back to Eric’s place, she automatically turns down his invitation and thus the viewer does not get to witness the narrative outcome that might result from her obliging Eric. The moral implications in the life choices the viewer has to make for the protagonist in *TWU* appear therefore to have quasi-didactic aims. Since the implied demographic for the film is youthful (teenage to mid-twenties in age), the film seems to be trying to demonstrate to viewers that interactivity—and, by extension, agency and free will—must be used in an ethically responsible way.

In the film, the notion of interactivity-as-escapism is ultimately exposed as a fantasy. Viewers are forced to face specific consequences on screen if they choose to use the protagonist as an avatar for acting out illegal and taboo fantasies. In this case, interactivity acts as an ethical trial-and-error game where the viewer tries to figure out how to play the film according to rules established by its creators, rather than experimenting with narrative trajectories in a less limited (and less judgmental!) manner. In a way, the viewer assumes the position of the interactive voyeur—or the voyeuristic interactor—who is not only allowed glimpses into private moments and tests the

boundaries of social taboos, but is able to partially determine which of those fantasies and taboos are enacted in the story world of the film.

*TWU* can be regarded as a meta-interactive film (or even an anti-interactive film to an extent), since it maintains an openly reflective position on cinema and interactivity throughout. In some ways, the film provides an amplified and technologically updated film experience that is reminiscent of the spectator impact of Alfred Hitchcock's *Rear Window* (1954). Although the two films are conspicuously dissimilar in terms of context, production values, cultural influence, and storyline, they both acknowledge the role of the viewer in the reception of the film. Both films mirror "the process of filmmaking and the experience of film spectatorship" by reflexively utilizing the very conventions they expose (Cowie 2005: 476). *Rear Window* has been extensively analyzed by critics and theorists, so I will not go into detail on how the film functions as a commentary on filmmaking and spectatorship. Elizabeth Cowie sufficiently summarizes the workings of *Rear Window* in saying that what is central to the film is "a look that sees without being seen, and it is the desires, and consequences, involved in such looking that are explored in the film" (Cowie 2005: 476). Further, Cowie likens the nearly immobilized (because of a leg injury) protagonist, Jeff, to the film spectator because both watch action unfold at a distance but are not able to act directly.

In *Rear Window*, Jeff's love interest Lisa acts on his behalf, thus becoming the agent of his voyeuristic tendencies.<sup>2</sup> When Jeff suspects his neighbor, Lars Thorwald, of murdering his (Thorwald's) wife, it is Lisa who climbs into Thorwald's apartment for

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<sup>2</sup> With this interpretation, I am not excluding alternative interpretations of the film that see Lisa as an autonomous agent and feminist prototype rather than Jeff's puppet. The film is ambivalent enough to accommodate the coexistence of diverse readings.

evidence because Jeff cannot leave his apartment, only watch from a window facing Thorwald's apartment. Similarly, in *TWU*, Eric is supposed to act on the viewer's behalf by executing the narrative trajectories picked by the viewer. When Eric and Jeff's behavior crosses ethical boundaries—whether by intruding a neighbor's privacy or stabbing one's boss—they are symbolically punished within the narrative realm of the film. In Jeff's case, he is doubly *cast-rated* by the end of the film: not only does he injure his other leg, but it becomes quite clear that it is Lisa who literally wears the pants in their relationship.

In a sense, the interactive viewer of *TWU* resembles the viewer of *Rear Window*—or any other film, if we take *Rear Window* as a general metaphor for film spectatorship. Both viewer and viewser indulge their voyeuristic—and, in the case of *TWU*, sadistic—tendencies through the intrusive perspective of the film, and, for *TWU*, the intrusive interactions in the film, with no real-life consequences. Viewer and viewser leave the film experience unscathed, with the only “punishment” being that the film has ended, thus ending the vicarious pleasure in watching and interacting. The reflexive and playful filmmaking in both films seems devoid of a serious reprimanding tone or an overt moralizing function. Alternatively, if we see film as a (rear) window to real life, then the ending of a film does not signal the end of voyeuristic pleasure; it simply extends the voyeurism to activities in other realms such as the digital (online stalking and so on).

The tongue-in-cheek style of *TWU* exposes utopian myths associated with the notion of interactivity in popular culture. In the film, there are moments where Eric articulates his fear and suspicion of being manipulated by an unknown force (presumably the viewser). Tellingly, Eric only expresses these suspicions when his life

takes a turn for the worse – that is, when the user has made “bad” choices for Eric (including opting to have Eric stab his manager and flee from a cop). If the viewer makes too many of these “unethical” decisions for Eric, the film tries to give the viewer one last chance to redeem himself/herself by giving Eric some agency to control his destiny. During one trajectory, for instance, Eric pleads for a chance to call his ex-girlfriend and ask for help. At this point, the following text appears on the screen, in front of Eric’s silhouette:

Eric **thinks** he has a **choice**. He is attempting to take away your pre-purchased right to **control** what he does. Do you let him call his ex-girlfriend or do you continue to attempt to control his body? You **choose**.  
[words in bold as they appear on the screen]

(*TWU* 2010)

Interestingly, the word “attempt” is not highlighted, and yet it is key in this case because the user ultimately does not gain control of Eric’s body regardless of the trajectory chosen. Seeing Eric “think” for himself makes us aware of the epistemological terrain of interactivity discourse, where the intertwined notions of (post)human agency (here in the sense of a convergent techno-human subjectivity) and technological determinism are philosophically interrogated.

*TWU*’s parodic take on choice and agency is reminiscent of one of the most commercially successful early CD-ROMS: Mike Saenz’s interactive erotica *Virtual Valerie* (1990). As Harpold observes, *Valerie* does not have much complexity as an interactive text because there are limited narrative trajectories, and how the user is able to realize the “putative goal of the program—a sexual assignation with Valerie—is severely constrained...” (Harpold 2000: 136). In Valerie’s virtual living room (the first room in her apartment that the user gets to see), the explicit control buttons (meant to act as responses to Valerie’s questions) are labeled as follows: “Yes,” “No,” “Huh?”



("No" and "Huh?" result in the same outcome). Underneath those responses is a Panic button; clicking on this button turns the computer screen into a simulation of a statistical analysis program, though, according to Harpold, it more resembles a parody than an actual program (Harpold 2000: 139). The purpose of this button seems to be to hide the game if someone you do not expect walks by your screen.<sup>3</sup> However, as Harpold points out, this Panic button is not available anywhere else in the game, much less the bedroom, where more explicit sexual interactions can take place. Through the option of the Panic mode, *Valerie* offers the illusion that the user cannot only control what happens in the game, but also that he (or she) can control how the program behaves. The Panic mode temporarily brings the player outside the narrative dimension of the game and into the game's programming functions (albeit through a false projection), and thus resembles some of the strategies used in *TWU*. These strategies aim to foster meta-textual (and meta-filmic) awareness to the viewer by simulating fantasies of control and agency before completely stripping the viewer of any control or agency within the film and its navigation.

Most of the closing sequences to the various narrative trajectories in *TWU* accentuate the viewer's powerlessness: the fast forward option is disabled, thus forcing the viewer to retreat (if we consider this move a recoil) into the position of the viewer and watch the film with no intervention until the end credits if he/she wishes to play again. Having to sit through long sequences, such as the surrealist-inspired animation sequence that leads to a romantic ending, the viewer might feel a sense of unease, anticipation and, frankly, boredom. The closing sequences typically last longer than the

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<sup>3</sup> Harpold offers other possible interpretations of the "Panic" button in his article, but for now I will focus on this one because it relates more closely to the analysis of *TWU*.

segments in between interactive parts, and consequently disrupt the balance between the interchangeable activities of viewing and participation. Based on my personal interactions with the film, as well as from empirical observations gathered from public screenings with students, the film is more enjoyable—or, as some would put it, tolerable—as an interactive narrative, rather than a sit-back-and-watch kind of film. The general consensus that the interactive parts are more entertaining than the played-out sequences explains why the non-interactive scenes seem drawn-out and unnecessarily prolonged to most viewers. This might be why the majority of critically acclaimed interactive films, including *Late Fragment* and Morten Schjødt's *Switching* (2003), adhere to a structure of brief scenes connected by interactive segments featuring multiple choice trajectories and loops.

The interactive mode of watching these films usually overtakes more cinephilic aspects of spectatorship such as aesthetic appreciation. This mode often reorients the physiological and psychological experience of cinema to one that is physiologically centered on pushing buttons to try and control the navigation of the narrative, and psychologically focused on short-term narrative goals. However, the goals posed in choose-your-own-adventure films such as *TWU* are not straightforward, and fail to convey a sense of overall purpose to the viewer in the way that goal-oriented videogames do. Not having a clear sense of direction and goal typically result in the viewer's disengagement and disinterest in both the film as film and the film as game.

In both noninteractive films like *Rear Window* and interactive movies like *TWU*, the viewer remains a viewer (and listener) in the physical sense of the word, at least in some parts of the film. Even when viewers actively choose a narrative trajectory for the

IC protagonist, they still have to sit back and watch how that trajectory unfolds because the established rhythm of the film takes precedence over the viewer's putative agency. All forms of moving image spectatorship imply a certain degree of physical passivity in response to what is shown and heard. In fact, interactivity is usually incorporated into a film when the images remain static, are looped, or have exhausted their appeal to the viewer—that is, when the moving audiovisual images are no longer interesting to the viewer and he/she chooses to move to another sequence, as in the case of multi-screen or split screen interactions in Mike Figgis' *TimeCode* (2000). *TWU* slows down or pauses the moving image and audio track to cue the moments where viewer interaction is required in order for the storytelling to resume. This mode of interrupted spectatorship does not allow enough time for narrative engagement to develop to the point where empathy, immersion, and other identification mechanisms can operate.

### **The Collective Consciousness: Public Interaction and Conformist Behavior**

The viewer's lack of interest in the filmic narrative or lack of investment in the narrative outcomes—particularly when the viewer realizes that interactivity does not equal narrative control—can shift the focus from the storytelling aspects of film to the social domain of interactive spectatorship. In individual, domestic screenings of the film, the viewer might be able to have a more fulfilling filmic interaction because he/she has more control over short-term decisions that affect the film's progression and does not have to take into account other viewers' choices. In public screenings, the dynamic between the viewers, the film, and its performative aspects noticeably changes. In social IC settings such as movie theaters, the focus shifts from the situations on the screen to the audience's reaction to collective response on interactive choice.

At this point, Činčera's realization that *Kinoautomat* functioned as a "sociological and psychological study about group behavior" needs to be reiterated because it applies to the dynamic of other kinds of IC screenings. After observing the first audience responses to his film, Činčera became aware that people did not vote based on moral criteria, but on what they would like to see on the screen (Kappler 1967: 28C). The filmmaker had previously not taken into account the possibility of an audience dynamic emerging from the audience's interaction with the film and the live performer; this is because the audience's social interaction is hard to predict in detail, even when the audience's narrative choices are as predictable as choosing to further torture Mr. Sardonicus in Castle's film. This might explain why IC reception analyses typically focus on the relationship between viewer (or plural viewers in a homogenized form) and the interactive work, rather than the inter-audience dynamics stimulated by interactivity.

In order to obtain some empirical observations that are currently lacking from academic discussions of IC, I adapted *TWU* for student screenings in three undergraduate courses on film analysis and media studies. The film was screened based on majority vote decisions, and then repeated screenings were made to try out other options (the runner-up options) and explore other possibilities, particularly for scenarios where the votes were almost equally split between two or three possible trajectories. Since *TWU*'s postmodern aesthetic comprises a pastiche of influences rather than in-depth character development and fully developed storylines, situational or empathetic identification between Eric and the audience was not established. *TWU* displays its devices for the viewer to perceive, and makes it difficult to identify with characters and situations because the film insists on turning viewer expectations on

their head. An example where the viewer is duped is when he/she is asked to pick a girl at the bar for Eric to whom Eric should talk. The viewer is given three options in this case: a blonde, a goth, and a girl who appears to have a cold sore. The film frames the blonde girl as the most attractive of the three by focusing on features such as her nice hair, making the other two seem unapproachable or unsuitable for Eric by not dedicating as much screen time to them and thus implicitly dismissing them. By zooming in on the cold sore, aggressively framing the goth girl, and keeping a strategic camera distance from the blonde, the film makes it almost too easy to arrive at a decision based on mainstream aesthetic criteria. In the class screenings, the majority voted for the blond girl, who turns out to be a kinky cross dresser. The second popular option was the girl with the cold sore, whose cold sore turns out to be just crumbs on her face, and—without the misleading cold sore—she turns out to be the most suitable choice for Eric.

In order to encourage processes of identification, some aspects of a film need to be consistently developed, including character depth, situational realism, relatable camera angles or coherent editing. *TWU's* attempt to interweave viewing mode with interactive mode results in preventing both modes from fully engaging the viewer. The interrupted mode of spectatorship, amplified by the film's deliberate inability to commit to a consistent style or genre of filmmaking (perhaps commenting on the ADD generation that is its subject matter), further prevents viewers from developing sustained interest in Eric's predicaments. In fact, students tended to pick the opposite of how they would behave in the given scenarios, thus confirming Činčera's conclusion that narrative pleasure did not have to align with moral beliefs. In all three screenings, students almost unanimously had Eric skip work, stab his boss, and do drugs. The

students who voted against those options were ridiculed by the rest of the class for picking the safer options. The fact that most students enthusiastically voted for Eric to drink alcohol and do drugs was perhaps an indication of the pro-alcohol and drug attitude students adopt socially in order to fit in, or a desire to subvert conventional expectations by voting for the most risky possibilities.

The most dividing choice among participants was whether to have Eric throw a brick at a barking dog chasing him or, alternatively, run away from the dog. Most male students and non-animal lovers picked the brick-throwing option, much to the dismay of—and dirty looks from—the majority of female students and from animal lovers (male and female). Consequently, this narrative dilemma resulted in an animated debate among students that extended beyond the narrative and into the realm of ethics and animal rights.

These preliminary empirical observations from actual screenings suggest that technological interactivity can indeed stimulate social interaction and even lead to collective ethical inquiry. The observations on uniform voting patterns indicate suggest a different outcome of interactivity, one that is related to social control and self-regulation. The polarizing questions implicitly or explicitly asked by *TWU*—such as the drug-related narrative trajectories—indicated uniform voting patterns akin to herd mentality or peer pressure. In other words, the individual viewers voted alike in scenarios where they could assume that their classmates would vote along similar lines. Since the audience consisted of late teens to early twenties college students, some responses were predictable, even when considering the educational context of the IC experience. That is, students did not try to impress their instructor by picking the safest or most morally

acceptable options; instead, they tried to align their votes with the votes of the majority of their peers. Voting for Eric to do drugs, for instance, could either be a form of vicarious experience for students who recreationally enjoy drugs, or it could be a means for students to give in to a form of implicit peer pressure without actually doing drugs. Voting for someone to do drugs in a fictional realm still reflects back on the individual viewer's social persona and tells the crowd something about that person: either that person is pro-drugs or is easily influenced by the consensus, to put it simply; alternatively, this could just be an attempt to pick what is perceived as the most interesting narrative option. These are just speculative interpretations of the overall dynamics of the experience, and the classroom setting should be taken into account so as not to generalize these as wider trends in reception. The observed patterns do, however, correspond to reception tendencies in other areas.

In the case of more heterogenous audiences, uniform responses are more difficult to quantify and assess. Yet, when the audience or certain groups in the audience socially present themselves in a certain way, then the rest of the audience expects their voting habits to predictably align with their social persona. The social activity of predicting voting patterns and closely monitoring and/or imitating audience reaction can thus become part of the IC experience. The case of the nuns who allegedly were the only group to vote No to Mr. Novak allowing his half-naked neighbor into his apartment during a 1960s *Kinoautomat* performance is still cited as a noteworthy anomaly in recent critiques of the film. The status of the nuns and social preconceptions about their behaviors are reflected in their uniform voting decision. In this case, the

nuns' vote adheres to religious expectations that dictate their social behavior, and does not necessarily represent what they individually would like to see on screen.

Činčera's aforementioned comment about the audience voting based on what they would like to see rather than on culturally sanctioned codes of behavior takes on more complexity once we consider specific voting patterns in public settings. The examples of the nuns and the college students indicate that public behavior in IC screenings—and, by extension, other social settings—is a compromise between individual desires and the self-projection of a public persona. The social interaction promoted by IC public performances is less spontaneous and more context-regulated than individual and domestic screenings because in social settings viewers are conscious of how others interpret their interaction with the film.

Cinema as a communally shared experience has the potential to encourage ritualized behavior. Nowadays, the multiplex experience is much more regulated than cinema's first public venues and plazas. Ushers regularly patrol the theater, viewers are repeatedly reminded to turn off their cell phones, and purses are checked for outside food items prior to entry. All these restrictions remind viewers that they inhabit a shared and regulated space and must behave accordingly. Norman Holland likens the behavior of the movie audience to that of a mob:

You turn over part of your mental functioning – your defenses – to that collective mentality. If the rest of the audience laughs, you feel licensed to laugh. If they cry, you will feel free to cry. If they are restless and noisy, you will share their rejecting the movie. If they hiss and boo, you feel free to join the chorus. You don't decide what's okay to do in the theater; they decide for you.

(Holland 2011)



The “they” refers to the crowd or group mentality of the audience, where the most dominant or active personalities are the ones that dictate or negotiate the boundaries of social interaction in that public space.

John A. Bargh and Ezequiel Morsella’s expanded definition of the unconscious mind relates to ritualized forms of conduct in public places. Bargh and Morsella challenge the “conscious-centric” bias embedded in conventional notions of the unconscious in cognitive psychology, and argue that the unconscious is not necessarily synonymous with the subliminal but, instead, encompasses pre-reflective and independent behavioral guidance systems. These guidance systems are evaluative, motivational, and perceptual, and their resulting outcomes precede conscious reflection (Bargh & Morsella 2008: 73). In some ways, this notion overlaps with Sobchack’s aforementioned notion of the “lived body” that pre-reflectively or somatically thinks (or, more precisely, feels) for itself and bypasses cognitive thought processes for immediate visceral sensations. Bargh and Dijksterhuis’s automatic perception-behavior is relevant to Holland’s mob mentality metaphor because automatic perception-behavior results in default tendencies to emulate the behavior of those around us (Bargh & Dijksterhuis 2001). Automatic perception-behavior suggests that, as a starting point or default option for one’s own behavior, one unconsciously or blindly adopts what others are doing, particularly in unfamiliar settings and new encounters with strangers.<sup>4</sup>

Holland supports the reasoning that, since movie theaters are typically environments in which the audience engages in minimal voluntary motor activity, the

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<sup>4</sup> For empirical and sociological behavioral studies of the perception-behavior link, see Tanya L. Chartrand, William Maddux, and Jessica L. Lakin’s essay, “Beyond the Perception-Behavior Link: the ubiquitous utility and motivational moderators of unconscious mimicry” (2005).

viewer's cognitive systems take precedent over systems associated with motion and physical control. Holland adds that the subcortical parts of our brain that regulate emotions release some of their control, and impulses to act become less guarded; this explains why our inhibitions become lowered and we are thus more susceptible to imitating the crowd's response of laughter, gasping, and so on in the movie theater. Bargh and Morsella add that the unintentional imitation of others' behavior and mannerisms increases social bonding and likeability among individuals, serving as a type of "social glue" (Bargh & Morsella 2008: 76). This is certainly true in the interactive screenings with students described earlier, where peer pressure, collectivism, and social personae become interchangeable.

In his analysis of social networks and paradigms of collective intelligence/stupidity, Keen wonders whether networked behavior—which I am extending here to IC collective audience actions—encourages herd behavior and social conformity to a larger extent than it does innovative and independent thinking. Keen's speculations echo Jonah Lehrer's insights on the downsides of collective thought and collaborative action, referred to by the neologism *groupthink*:

While the Web has enabled new forms of collective action, it has also enabled new kinds of collective stupidity. Groupthink is now more widespread, as we cope with the excess of available information by outsourcing our beliefs to celebrities, pundits and Facebook friends. Instead of thinking for ourselves, we simply cite what's already been cited.

(Lehrer 2011)

Lehrer sees groupthink as a means of cultivating herd mentality rather than a way of thinking for oneself within a group. People coming together by way of networks and forming collective actions can have a productive and influential chain reaction, as recently demonstrated by the Arab Spring and the Occupy movements. Such actions

show the power of decision-making mechanisms within a crowd when they are mobilized towards a common cause. Even if herd mentality unites for a positive cause, individuals within the herd undergo self-regulating in order to fit into the shared mentality of the group. This self-regulation typically entails downplaying facets of one's identity that do not cohere with the aims of the herd and, in extreme cases, promotes fanaticism and anarchy, as in the mob mentality behavior exhibited during the Greek riots of 2008 that escalated to police attacks and defacement of public property.

Referring to microblogging social networking site Twitter's process of externalization and condensation of thoughts, *The New York Times* critic David Carr tweeted that "mass externalization of thought creates hive mind".<sup>5</sup> The hive mind composed of tweets, organized and thematized by hashtags, generates visualizations of vast collections of random, trivial, and spontaneous thoughts shared on a collective networking platform. Twitter provides a platform where people can externalize, verbalize, and share their thoughts—which can then be categorized into groups via hashtags. In comparison, public interactive screenings demonstrate the external actions of hive mentality that becomes homogenized into collective decisions: mass voting or other participatory actions typically amount to a single outcome on the screen, thus visibly eliminating dissonance because only one narrative trajectory at a time can be chosen and shown on the screen, even in multi-projection contexts.

The interactive film performance *Cause and Effect* (*Przyczyna I skutek*, 2004–2007), created by Chris Hales and Teijo Pellinen, creates interactive encounters that

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<sup>5</sup> Carr's full tweet, posted on Twitter on October 24<sup>th</sup> 2009, is as follows: "Twitter = a conversation of charming exhibitionist w/a lot on their minds. Mass externalization of thought creates hive mind," <https://twitter.com/carr2n/status/5123780518> (accessed 11.04.2012).

physically and mentally condition the audience members to react alike and act as one. The film acts as a platform for audience participation, whereby audience members can remotely manipulate the content of the film via motion sensors and by using datagloves. The film consists of loosely linked and unrelated mini-narratives that have crowd participation as their primary goal, rather than the presentation of fully developed stories. *Cause and Effect* is, as its title suggests, more of a platform to demonstrate the filmic impact (effect) of the audience's actions (cause) and a means of assessing the mainstream potential of interactive film technologies.

The film performance incorporates types of voting, where the audience is asked to choose from two possible options, but most of the interaction focuses on the collective impact of audience reaction. The audience is asked to engage in physical actions that have a corresponding influence on events in the film. If the participants scream loud enough, their collective volume breaks the glasses depicted in the film and thus moves the story to the next scene. If the participants rhythmically clap when the screen splits into several parts, each part of the split screen alternates frames to the beat of the combined clapping. If the participants collectively and synchronously lift their arms up and push their palms forward towards the screen, their action corresponds to synergistically pushing a woman on the screen back into the tub water from which her head initially surfaces.

By directing the audience's attention towards a specific objective and mostly focusing the interaction on the physical realm, the film limits interaction to shared goals and physical motions. Actions become ushered and synchronized towards a single, unified objective and thought processes are externalized and directed towards certain

short-term goals that forego profounder individual reflection. The moment in *Cause and Effect* where all audience members lift up their arms and push their data-gloved hands forward to symbolically drown a woman is emblematic of the heights that cinema's cultivation of crowd mentality—and, in this case, herd activity—can reach. Perhaps interactivity is the means to finally realize Luis Buñuel's unfulfilled objective of using cinema to mobilize the masses—except, in the case of IC, mobilization will not culminate in “a passionate call to murder” that shocks the masses into awareness, but in the pacification and massification of audiences working towards a common, unquestioned, and probably trivial goal...

### **History is in Your Hands: *Terminal Time* as Collective and Subjective Historiography**

Collectivism and individualism are two competing and polarizing tendencies at the core of audiences' engagements with interactive media. On the one hand, interactive media facilitate the emergence of synergistic processes such as collective intelligence and grassroots communities. On the other hand, they place the individual at the center of the interaction by offering more individualized content and features of personal customization. Communications technology has the power to both connect and isolate. At times, self-oriented media converge with networked communities; for instance, social interactive media like Facebook are routinely used as both a platform for self-promotion and for connecting with others. In experimental IC practices, particularly those in a public setting, the degree of agency offered via interactive involvement with the film is often undermined by the fact that this decision-making has to be shared with others. Individual viewers in public interactive screenings participate

both for themselves and with/for others; their individual choices become part of the collective impact on the film, thus connecting participants in filmic and extra-filmic ways.

In many public screenings, the individual subjectivities of interactive audience members are merged into a hive mindset that is then applied to the most popular options on the movie screen. As I have shown, in *Cause and Effect* standardized and uniform action takes over the hive mentality and transforms it into something akin to mob or herd mentality. While herd mentality involves social processes such as peer pressure and adopting the group's dominant behaviors, hive mentality is a state of mind(s) consisting of plural opinions precariously assembled together but without necessarily being co-dependent.

A film that explores the dynamic resulting from the tension between herd mentality and the hive mind is *Terminal Time*. *Terminal Time* is an interactive film performance centered on mass externalization of internal biases and their compilation into a single, linear mockumentary. In this performative film, the dual tendencies characteristic of interactive media—collectivism and individualism—are merged and forced into compatibility and standardization for the production of a revisionist mock-historical documentary that reconstructs history according to audience's prejudices and desires. *Terminal Time* is powered by an artificial intelligence engine that combines historical events, documentary conventions, ideological rhetoric, and consumer polls to produce a customizable film experience that rewrites history according to responses of the audience majority. An applause-meter is used as an audience response-measuring device that calculates the most popular answer to multiple-choice poll questions according to the volume of applause each option receives; the winning answer is the

one that receives the loudest applause. The documentary assemblage is 30 minutes long, and the film is paused at certain points to ask questions that determine the direction of the rest of the documentary. The *Terminal Time* film machine responds to audience feedback accordingly and compiles an ideologically biased rewriting of major historical events.

The answers to the multiple-choice questions influence the events that are selected to be shown to the audience as part of the documentary; these events and their sequencing are meant to reflect and exaggerate the audience's desires and biases. Sample poll questions include asking the audience whether life was better in the time of their grandparents or if it keeps getting better every day, and what the most pressing issue in the world is today (out of four possible answers). Thus, history in *Terminal Time* is rendered malleable, as the tentative past becomes both personalized and collectively negotiated. The resulting fictionalized histories conspicuously respond to audience feedback, but the artificial intelligence (AI) system also puts a spin on the poll results by pushing the story into extreme conclusions; for instance, if audience members decide that the most pressing issue in the world is the fact that machines are becoming more intelligent than people, the AI engine generates a dystopian history where machines take over every aspect of human life, thus magnifying the audience's possible anxieties regarding a machine-oriented future. If the audience majority picks the statement that men are becoming too feminine and women too masculine as the world's most pressing issue, then the system generates a version of history where gender roles are completely reversed, thus magnifying the (majority) viewers' possible gender-related insecurities.

The creators of *Terminal Time* explain that audiences are not directly asked what kind of history they wish to see; instead, they are asked questions about their own “psychographics” such as their cultural biases, work status, and sociability: “the resulting history is like holding a funhouse mirror to the audience; it reflects an exaggerated and distorted view of the audience’s biases” (Mateas et al. 2000). In addition to experimenting with interactive technology, the film’s creators approached *Terminal Time* as an investigation of audience dynamics. They noticed that during the poll segments audience members sometimes compete for control of the winning choice by shouting and clapping to score high on the applause-meter, or laugh when an unpopular choice is met with silence. As the viewers watch the resulting documentary, they loudly express reactions such as gasps, groans, and laughter (Mateas et al. 2000). The audience reactions tend to increase as the ideological bias underlying the documentary becomes increasingly noticeable.

*Terminal Time*, as an artistic experiment in the collective revision of history, both indulges in and critiques the empowering rhetoric of interactivity. On the one hand, the film’s interactivity, coupled with the seemingly objective conventions of documentary cinema, makes the rewriting of history seem not only possible, but mandated by technologies that actively prompt users to customize, remix, and recontextualize. On the other hand, *Terminal Time* highlights the subjective processes of negotiation, selectivity, and causality that underlie historiographical processes. As in the case of *Kinoautomat*, the participation of audience members in seemingly democratic procedures does not alter the course of “actual” events or the status quo. However, what recombinatory films such as *Terminal Time* do is question the very notion of objective and consensually



formed history, and make audiences more reflective of the very tools that construct, selectively archive, and reinvent shared historical formations and collective belief systems.

By incorporating, exaggerating, and standardizing the audience's subjectivity in the interactive performance of the film, *Terminal Time* produces a tentative history that is the result of an authoring process generated and/or facilitated by digital technologies, and archived as prosthetic cinematic memory. Russell J. A. Kilbourn, building on Jonathan Long's theory of modern subjectivity, asserts that subjectivity is now "dependent on external mnemotechnical prostheses," resulting in a "collective, thoroughly *artificial* memory." By relying on external storage and mnemonic devices such as film and digital archives, memory becomes de-ontologized, with "its grounding in social reality and its representations rather than an extra-cinematic, subjective interiority" (Kilbourn 2012:77). *Terminal Time* draws attention to the politics of shared memory and historicized narratives by using transparent propaganda techniques—such as a biased voiceover and exaggerated poll results—to inquire into the ways in which audiovisual and interactive technologies subjectively reconstruct the past as malleable present.

The film conspicuously and reflexively presents shared history as a process of cinematic memory that is more immersive than functionally interactive. The gradual subversion of both documentary conventions and collective decision-making processes in *Terminal Time* draws attention to the ways in which, to apply Kilbourn's theory, audiovisual and interactive media either supplement or, at worst, destroy " 'natural' memory by naturalizing the technical and artificial, providing a seemingly 'universal'

objective visual language for the representation of subjective (re-)experience of the past” (Kilbourn 2012: 77). *Terminal Time* intertwines questions of collective memory, cine-history, and interactivity in order to present the distant past as immediate present. Through interactivity, historical information is brought to the present in order to be re-edited, collectively negotiated, and reimagined; questions regarding the ontology of knowledge in the information age transform into questions regarding the function of information in the production of knowledge. The fact that *Terminal Time*’s artificial intelligence engine ultimately dictates the final version of events (such as the account of the first Crusades) undermines the agency that individuals—and, collectively, humans—generally associate with interactivity.

The combination of encyclopedic and participatory features at work in *Terminal Time*—characteristics first associated with interactive digital environments in Janet Murray’s work (Murray 1998)—makes a broader statement about the utopian promise of interactive media. User participation in an interactive system implies that the system directly responds to the user’s actions, and masks the fact that this interaction is limited and preprogrammed by the system’s designers (think of the limitations of search engine parameters, for instance). Equally, the encyclopedic nature of interactive systems suggests that they have vast, if not infinite, capacity for the storage and retrieval of information. Because of this potentially infinite information storage capacity and the search and navigation tools that render it accessible to the user, the user might be misled into thinking that the information contained within the system is comprehensive and thus be unable to recognize the limitations in the forms of interaction allowed within the information database. Likewise, *Terminal Time* initially promises its viewers the

agency to indirectly change the course of a potentially infinite world history by directly changing the course of the historical documentary. History is presented as a recombinatory database of footage consisting of audio and video tracks that are paired and recombined according to the poll results. The more time the audience spends interacting with the film, the more aware they become of the information excluded from the history database (evident in the repetition of a narrow selection of events shown from different perspectives), and begin to question why only certain forms of interaction are allowed. Ultimately, *Terminal Time* illustrates a productive definition of history precisely because it lacks a conclusive version of historical events and because it combines the objective (as in, programmable and automatic) authoring processes of the AI engine with the functions of the database and the exaggerated subjectivity of the collective audience.

Each particularized interactive pathway that asks for new insights on the past creates a form of procedural authorship that brings localized and customizable meaning to otherwise remote and unverifiable historical events. In a sense, the film conflates three distinct temporalities into a singular experiential mode: what has happened (documented history), what is happening (polls and documentary assemblage), and what can happen in the past (revisionist approach to consensually accepted facts). In other words, the past becomes present, and the present is once again constructed as the past, that is, as the present revision and audiovisualization of past histories replayed and (re)lived through the cinematic event. Lynn Hershman argues that “the very act of viewing a captured image creates a distance from the original event. The captured image becomes a relic of the past” (Hershman 2003b: 646). In *Terminal Time*, the

documented images of recreated events create an illusory proximity to the past and simultaneously exclude the prospect of an objective and complete understanding of history from a present standpoint.

Since *Terminal Time* is a variable film performed in front of a live audience, performance studies theory can be useful in broadly understanding IC as performative cinema. Performance studies theorist Richard Schechner argues that the uniqueness of an event is in its interactivity rather than its materiality;

in that uniqueness, interactivity always remains in the *now*. It cannot be repeated. It cannot be exchanged. It cannot be reproduced. It cannot be saved. It cannot be recorded. The temporality of pastness in non-interactive cinema is derived from the relationship between the photographic image and reality in terms of a physical *trace* (of light reflecting off the object onto a light-sensitive surface) and in the closed nature of its narrative.

(Schechner 2002: 288)

Although *Terminal Time* does not have a large-scale social influence on the revision of documented history and methods of historiography, Schechner says that the moving images of IC lead “not to the pastness of what had gone on before but to the futurity of what outcome might emerge from it” (288). Philosopher Claude Romano’s notion of “advenant” refers to the experiential modality that transcends traditional subject positions because an advenant is interactively immersed in the event as it is happening –in this case, the event being the participatory process of revision of historical events (regardless of how illusory viewer agency is). Romano argues that “what happens to the advenant is existentially transformative, because the event that occurs cannot be indifferently witnessed from the outside” (Romano in Jay 2011: 565-6). This is especially true in the process of re-historicization since *Terminal Time* asks personal questions to viewers which are then used to generate subjective recombinant histories. History then, in the context of *Terminal Time*, concerns less momentous events and

facts about the past, and more the ways in which viewers are personally implicated into the emerging narrative of history represented in the film (in the sense of their recognition of the narrative impact of their poll results). The emerging hybrid spectatorship and the subjective regeneration of the historical past-as-present implicate viewers in filmic historiography in ways that illustrate how individuals are innately, culturally, and socially conditioned into accepting various modes of narrativization that relate to identity, memory, and shared history.

### **Watch What You Wish For: The Interactive Psyche**

“We only see each other through the subconscious of some other system,” said Stan Vanderbeek in reference to his visionary design of the spherical theater Movie-Drome in 1963 (Vanderbeek in Youngblood 1970: 350). Vanderbeek’s Movie-Drome involved people lying down and being surrounded by floating, three-dimensional movie images. The conceptual architecture of the theater was meant to offer a transcendental experience that united viewers with the world and outer space. The potential of cinema to not only influence behavior, but to also condition the mind and body to new experiences was at the core of expanded cinema experiments such as Movie-Drome. Vanderbeek’s Movie-Drome had the metaphysical objective of extending the mind and body into the cinematic architecture and subsequently extending the cinematic architecture outwards into the universe in an act of global connectivity.

Janine Marchessault uses the term “sensory training ground” to describe expanded cinema works that can be interpreted as attempts at training target audiences—the future citizens of a global community—to simultaneously process various multi-sensory stimulants (Marchessault 2008: 47). By expanding cinema to its architectural space, such works propose a definition of cinema-as-space, cinema-as-

body, and cinema-as-world. In comparison, most types of IC *contract* and invert these analogies into space-as-cinema, body-as-cinema, and world-as-cinema, thus rendering the metafilmic as filmic (i.e., the metafilmic reflexivity reverts back into the filmic realm). In other words, the outer periphery of the cinematic apparatus—the screening space, the social context, the spectator’s body and so on—is absorbed or funneled *into* the cinematic realm through interactive techniques, rather than projected outwards (in both a literal and metaphorical sense).

Films such as *Terminal Time* use interactivity to expand the audience’s consciousness of large-scale notions such as world history, but then revert those notions back into how they relate to the individual and/or the collective audience. Instead of connecting individuals externally to the cosmos and to global history at large, as expanded cinema attempted, individual audience members internally perceive *Terminal Time*’s history as personalized, selective, and deliberately myopic. *Terminal Time* externalizes the mind, but not in the universally or outwardly expanded metaphysical sense of expanded cinema; instead, *Terminal Time* presents a magnified version of the audience’s biases and desires, thus rendering abstract feelings into a narrative (hi)story that resonates within the particular interactive event. In *Terminal Time*, aspects of the mind and human disposition are compartmentalized and broken down into objectified processes of standardization such as opinion polls and their respective movie-generating algorithms that, in turn, correspond to audiovisualized reenactments of historical narratives.

According to Lev Manovich, processes that objectify and externalize the mind—in this case, in the form of biases that manifest themselves through exaggerated

audiovisual narratives—correspond to the “larger modern trend to externalize mental life” (Manovich 2002: 57). To extend this reasoning to social networking platforms, it is worth mentioning that the current status update prompt for Facebook profiles is “What’s on your mind?”—a phrase that invites users to externalize and publicly share selective thoughts. In addition, hyperlinking is used by Manovich as an example of how interactive media objectify some central thought processes by externalizing mental processes of problem solving, reflection, association, and recall, and then standardize those inner processes by equating them to link clicking, page navigation, and other Web surfing functions. According to Manovich, the externalization of these basic cognitive functions in hyperlinking does not leave individual room for reflection and independent action; if all users use the same interactive formats, then there is inevitably a degree of standardization and automation in user interactivity even if the end result of each interaction may be materially different.

Manovich’s observations about the cultural emphasis on externalizing the mind through new technologies can be traced back to Hugo Münsterberg’s theories on the psychology of cinema, first published in 1916. Münsterberg combined psychological research with aesthetic analysis, and used the term *photoplay* to describe the cinema effect which “tells us the human story by overcoming the forms of the outer world, namely, space, time, and causality, and by adjusting the events to the forms of the inner world, namely, attention, memory, imagination, and emotion” (Münsterberg 2001: 129). Cinema’s photoplay reproduces, externalizes, and objectifies the inner workings of the mind; for instance, flashbacks/cut-backs objectify mnemonic function by externalizing, visualizing, and making retrospectively linear the process of memory recollection.

According to Munsterberg, the photoplay does not respect the temporal structures of the physical universe. Instead, the photoplay reminds us of the mind's ability to bring the past to the present through the association of ideas, and of cinema's ability to visualize and narratively organize abstract and subjective mental processes. As an extension of the photoplay techniques, *Terminal Time's* rewriting of historical events in real time renders history as an experience of biased mnemonic recollection and collectively negotiated individualization.

*Terminal Time's* customizable version of history has the potential to encourage social interaction among the participants of this social experiment. Interactive films tailored for home viewing, however, tend to focus more on isolationist aspects of technology by placing a single user at the core of the personalized interaction. In films that demand a single viewer, the interactive narrative is not only generated by an individual, but also revolves around the individual's innermost thoughts and desires, thus making the interactive experience exclusively personal and intimate.

David Wheeler's *TLC* is an example of a customizable movie that attempts to generate "a fantasy built from the very stuff of your own mind." Unlike the collaborative approach of IC public performative screenings, *TLC* is specifically tailored not just for home viewing, but for individual viewing, since its ostensibly psychoanalytical approach to narrative generation promises that "no two people will experience [the film] in exactly the same way."<sup>6</sup> The film revolves depicts the relationship between Michael Overton and his wife Allison, who are coping with the death of their daughter. Allison is so acutely traumatized that she lives in denial of her daughter's death, and pretends she is still alive. The couple's therapist, Dr. Turner, recommends nurse Katherine Randolph to

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<sup>6</sup> Quotes taken from the *TLC* DVD sleeve (1998).



help Allison recover from her loss. Katherine's unorthodox treatment methods create tension and misunderstandings among the couple. The viewer's response to series of psychoanalytical multiple-choice questions is meant to determine how the complex dynamic between the Overtons and Katherine develops by customizing the most psychologically satisfying version for each viewer; depending on the viewer's overall responses to the questions, the story fluctuates from a love triangle horror film to an erotic lesbian fantasy.

In essence, *TLC* is a suspense thriller that puts the viewer in the dual position of a psychiatric patient and a detective. The viewer is asked a series of multiple-choice questions at the end of each variable scene in order to determine the content of the scene that follows. In other words, the viewer's response to the questions shapes the unfolding arc of the story, even though the viewer cannot directly predict exactly how the answers orient the narrative. The questions are based on the Thematic Apperception Test (TAT), which features various apperception exercises that directly or indirectly relate to the development of the film. As an example of TAT-based customization, the selection of mostly queer-oriented answers (ranging from the viewer confessing an attraction to people of the same gender, to a queer interpretation of ambivalent classical paintings) generates a version of the film that is laden in lesbian subtext and includes a love scene between the two principal female characters of the film.

The viewer is additionally placed in the position of a detective since he/she has the ability to snoop around in a digitally animated simulation of the Overton house. In the simulation, the viewer can move around each room and click on objects to reveal

hidden secrets about the house's occupants. However, the main contributors to the story's development are the TAT-based sections; the exploration of the house simulation is elective and does not add substantial information to the story. The TAT sections are essentially forced upon the viewer, since the story cannot progress unless all the questions in each section are answered. Although the concept of generating a film based on unconscious fantasies is as intriguing as the idea of neurocinema—the method of using neuroscience to measure viewer response to specific aspects of a film in order to improve its cognitive and visceral appeal—the disruptive and time-consuming TAT sections might initially appear to the viewer as interactivity for interactivity's sake. This forced—or not immediately purposeful—interactivity relates to Lazzarato's observation that Western societies mandate that all modern citizens “become subjects,” and sees participative initiatives as “production for production's sake” (Lazzarato 2006: 135). For Lazzarato, the Western mandate that individuals “become subjects” sustains an authoritarian discourse: “one *has to* express oneself, one *has to* speak, communicate, cooperate, and so forth” (Lazzarato 2006: 135). Accordingly, *TLC* serves as a condensation of the postindustrial tendency to mass-produce active subjects and to commodify individualism. Furthermore, *TLC*'s psyche-oriented movie-generating system draws attention to the aspect of interactive communications that focuses on the externalized expression, standardization, and surveillance of the mind.

*TLC* produces variable combinations of pre-existing scenes in response to individual answers to multiple-choice questions in order to create narratives that purportedly reflect the viewer's (unconscious) desires. The idea behind this recombinant and changeable film aims to place the viewer at the center of an emergent

individualized narrative, while at the same time using AI and algorithmic processes to make this individuality quantifiable. Although the viewer's reception is at the core of the interactive experience, this experience differs from the model of inclusive spectatorship in studies of minority representation. Inclusive spectatorship not only incorporates otherwise marginalized subjects into the production of the film narrative, but also posits the viewer as active interpreter of the film and author of the film's subtext in open-ended and ambivalent narratives. The idea of cognitively and subjectively including the individual in the interpretation of the film narrative was initially advocated by avant-garde filmmakers as an alternative to established paradigms of mainstream spectatorship. The spectator's interpretation of morally ambivalent and ethically open-ended narratives—such as the lyrically presented love triangle in Agnes Varda's *Le Bonheur* (1965) and Varda's non-judgmentally depicted romance between a mother and her daughter's young classmate in *Kung-Fu Master!* (1988)—is determined by the viewer's personal biases and socially constructed morals.<sup>7</sup> Films that demand inclusive spectatorship remind viewers of the various factors contributing to their construction as filmic and, by extension, *social* subjects: biological, cultural, societal, historical, psychological, and so on.

*TLC* can be considered as both an interactive equivalent and a counter-paradigm to inclusive spectatorship. *TLC* resembles inclusive spectatorship in its attempt to psychologically and subconsciously immerse the viewer's subjectivity into the movie. However, unlike inclusive spectatorship and like *Terminal Time*, the subjectivity of the

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<sup>7</sup> For an application of bell hooks' notion of critical and inclusive spectatorship, see Ruth Hottell's article, "Including Ourselves: The Role of Female Spectators in Agnès Varda's *Le Bonheur* and *L'Une chante, l'autre pas*" (1999).

viewer is intermingled with the movie-generator's AI and algorithms. In a way, *TLC* narrativizes and compartmentalizes facets of the human psyche; the interactive film projects the viewer's quantifiable psychological test results and automatically converts data from the human soul into an audiovisual landscape generator. Unlike inclusive spectatorship, where the viewer can cognitively decide (through imagining/ interpreting) the film's ethical orientation and overall meaning, *TLC*'s interactively inclusive spectatorship prioritizes the film's projection—and consequent estimation or reductive interpretation—of the viewer's predisposition.

After all the TAT portions have been completed, the viewer's data is gathered and the entire variable movie is played with no interruptions, letting the viewer figure out how her or his individual TAT answers contribute to the production of the variable narrative. Therefore, the viewer's perceptions and opinions are externally expressed via multiple-choice answers, sorted into categories that correspond to designated movie portions, and funneled into the cinematic realm in the form of an introversive movie fantasy. Consequently, the introversive movie experience is contained within the cinematic realm, instead of the cinematic serving as a means to expand the mind and body into other realms of awareness and planes of physical, sociocultural, and metaphysical realities.

CHAPTER 5  
DIDACTIC INTERACTIVITY AND SUBVERSIVE FANTASY

**Crime and (Virtual) Punishment: Sociopedagogical Interactivity**

The psychological interaction and social behavior of viewers in public screening spaces is seen by Norman Holland as more restricting than viewing experiences in more private settings. The IC collective screenings described earlier adhere more to frameworks for the analysis of crowd mentality in public theaters than the psychology of an individual viewer watching a DVD at home. This is because public experiences are controlled and regulated; in the case of the IC experience, the behavioral regulation can originate from the film (as it does in *TWU* and *Cause and Effect*) and extend to regulating rituals dictated by majority responses (such as felt or imagined peer pressure on how to respond and behave, and mirror-reactions that correspond to the rest of the group's actions). The way audiences socially behave during interactive screenings such as those of *Cause and Effect* can sometimes provide evidence for a social-constructivist paradigm of film response. Although contemporary film theory now takes into account evolutionary-biological factors and innate biological mechanisms to produce an expanded theory of embodiment, we should still consider the possibility of the social self as either an extension or a socially adjusted projection of an innate self.

Interactive films that incorporate collective consensus into the experience by majority-regulated narratives can trigger forms of social conditioning and even herd mentality. Although, as discussed earlier, physical and material interactivity sometimes stimulates intellectual (inter)activity, at other times it can be used to direct behavior in predictable patterns. When the behavioral regulating mode of interactivity converges with the conditioning aspects of cinema, cinema is removed from its visceral and

primordial aspects and, instead, subsumed it into interactive frameworks that focus on the cultivation and regulation of social behaviors and attitudes.

The connection between cinema and its effect on individual and collective mentality has been debated since the medium's inception. The impact of the cinematic apparatus on the unconscious has been scrutinized within psychoanalytical frameworks, the function of cinema as propaganda has been analyzed in historical and sociocultural contexts, and viewer reception and identification patterns have been approached from several disciplines including communications and race studies. Influential theorists such as Walter Benjamin regarded cinema as a disciplinary machine that trained viewers' senses in preparation for the shocks of modernity and urbanization, and/or as a buffer that provided a training ground for viewers to realign their bodies to the fast-paced demands of modernization.

The vast potential of cinema as a psychosomatic training ground is also reflected in the history of film censorship and commercial licensing of the film industry in response to cinema's potential of influencing viewers. Early on in the history of the medium, cinema's visual appeal during the silent era was considered by cinema reformers (such as the kinoreformer of 1910s Germany) a potent suggestive mechanism that could exert influence over naïve viewers if it depicted imitable deviant behavior. Hollywood's Motion Picture Production Code (the Hays Code) morally censored and regulated film production in the US from the 1930s until the late 1960s. The Code forbade the depiction of deviant behavior (which at the time included suggestions of homosexuality and interracial romance) on screen lest audiences choose to imitate that behavior in real life. The fear that impressionable spectators

might internalize the images on the screen and then replicate them in reality overlaps with grievances about cinematic influence from several marginalized groups for collective underrepresentation, marginalization, or misrepresentation in popular media and culture at large.<sup>1</sup>

Before the development of film propaganda, some early cinema subgenres focused on socializing, training, and disciplining audiences on how to behave in the public milieu of cinema and beyond. Elsaesser categorizes these silent films as “rube films”: comic movies about countrymen as naïve viewers who encounter cinema for the first time and are so astonished by its verisimilitude that they behave inappropriately by violating the tactile space between spectator and screen (Elsaesser 2006). Examples of the rube subgenre include the British film *The Countryman’s First Sight of the Animated Pictures* (Robert W. Paul, 1901) and the Edison-produced *Uncle Josh at the Moving Picture Show* (Edwin S. Porter, 1902). By poking fun at naïve rubes’ attempts at making tactile contact with cinema, rube films favored visual pleasure and equated that pleasure with physical distance from the screen and suspension of disbelief.

Elsaesser wonders whether rube films “construct their meta-level of self-reference in order to ‘discipline’ their audience,” not mainly by showing negative examples of viewer conduct but, rather, “by a more subtle process of internalized self-censorship” (Elsaesser 2006: 213). The fact that uncle Josh is eventually chastised for his behavior by the projectionist, for instance, could be seen as an allegory for the opposite of cinematic pleasure (tactile proximity), as well as an attempt to provide

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<sup>1</sup> The counterargument to this reasoning has been expressed in multiple disciplines. One of the most relevant in film studies is by Noel Carroll, who has argued that viewers have fixed emotional and moral positions that cannot be altered by fictional representations. According to Carroll, fictional films reinforce and offer deeper insights into viewers’ already-adopted attitudes (Carroll 1998).

audiences with models on how not to behave socially (look but don't touch). As a films-about-films subgenre, rube films discourage a materially and physically defined form of interactivity, while IC encourages material and somatic forms of interactivity but usually only within preset parameters. Elsaesser's reasoning suggests that interfaces and installations are subsuming the diegetic space of the narrative under interactive mechanisms that retrain viewers as users, viewersers, players, witnesses, participants, and even rubes.

The use of interactive formats to achieve pedagogical and socio-psychological training objectives is certainly not limited to theatrical and mobile cinema contexts. For instance, an independent British crime-prevention non-profit organization called Crimestoppers released the interactive video "Choose a Different Ending" (2009) on YouTube and other digital platforms so as to educate and train viewers on how to make decisions to prevent violence.<sup>2</sup> The viewer is ostensibly placed in situations that could escalate to violence if the wrong decision is made. The viewer can, for example, choose to join an argument, take a knife, and stab someone else in the chest; all of these choices are conspicuously marked as "wrong" since they result in the viewer's death in each setting. The accompanying video description claims that "you decide whether to live or die," with the implied aim of the interaction being to survive...and the only way to achieve that is by selecting the pacifist route. Interactivity is once again presented as a framework for autonomous choice, yet the consequences to each decision mark that choice as either "wrong" (= death) or "right" (= life). The most interactive component to this video series is the fact that it enables user feedback in the

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<sup>2</sup> To watch the "Choose a Different Ending" video, visit <http://www.youtube.com/watch?v=JFVkzYDNJqo> (accessed 08.10.2012).



form of comment posting. While the most popular YouTube comments (that is, the ones that received the most thumbs up and follow-up replies) tend to praise the campaign's crime awareness agenda, other comments criticize the simplicity of the film's scenarios, the unrealistically polarized options, and the possibly racist elements in the videos (most of the criminals happen to be black, and the victims are white).

Videos such as "Choose a Different Ending" have fallen victim to parodies that mock their didactic and activist purposes and exaggerate characteristics of interactive frameworks. Totally Sketch, a comedy group that releases videos on social networking sites, has created several interactive videos that poke fun of the condescending tone that permeates these educational interactive works. Totally Sketch's "Interactive Hook-up" (2010) humorously exaggerates the manipulation of the viewer's decisions in interactive films by forcing the [presumed male] viewer to save himself for marriage, instead of having sex with the scantily clad female in the video.<sup>3</sup> Through the interactive format, the viewer is "free" to choose from three different options, with the option of abstinence ultimately deemed as the "right path" by the voiceover. Even the "safe sex" option leads to negative consequences, such as a clingy and manipulative girlfriend.

The online examples mentioned above put their own spin on the didactic and/or training potential of interactivity. Interactive DVD and CD-ROM formats are commonly used to facilitate the learning of languages, improve course material, and train skills such as eye-movement coordination. In the field of education, the capacity of interactivity in enhancing learning is currently being explored in a variety of ways. Interactive functions such as clicking on icons and typing in the right answers to learning

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<sup>3</sup> To watch the "Interactive Hook-Up" video, visit <http://www.youtube.com/watch?v=JKxee9vqTPA> (accessed 05.20.2011).

exercises constitute examples of learning-based interactivity. Even the choose-your-own-adventure interactive practice has been adapted to learning environments; an example of this is McGraw-Hill Higher Education's *Reel Society* (2006), an instructional CD-ROM for sociology students. The CD-ROM features interactive video sections where the user gets to pick different scenarios that correspond to applied aspects and questions about sociological theories. In such cases, the pedagogical aspect of interactivity is intended to make learning a more visual and participatory experience—two features that arguably maximize educational potential and cognitive engagement in students.

The dynamic combination of interactive technology with educational tools (also extending to military training simulations) is an aspect that interactive videos and films build on in their own endeavors, whether those objectives are artistic, pedagogical, or comical. The disparate examples mentioned indicate that interactivity places the act of [illusory] choice at the heart of ethical and aesthetic practice, and thus takes the educational and (re)training potential of interactivity to the extreme by illustrating transparent attempts at brainwashing the viewer under the guise of narrative pleasure and task completion. These types of instructional films turn the pedagogical objectives of educational and training-oriented interactive systems into motifs to be played with, modified, and subverted.

The tendency for interactive films to be accompanied by instructions for their use—similar to the rube films' instructions on how now (not) to behave as viewer and social subject—points to the reorienting of the cinematic experience towards a process of retraining the viewer as a user, and shifting cinema from spectacle to production. This

process of cinematic (re)production usually involves the viewer following sets of instructions; the adherence to rules extends the notion of the screening space as a regulated milieu with its own spoken and unspoken rules (in modern-day movie theaters, the rules also extend to cell phone use). In a way, interactive spectatorship undermines the primacy of vision—and, to an extent, hearing—in cinema by focusing more on the physically and/or intellectually obtained outcomes of the interaction. In other words, the main focus shifts from audiovisual absorption to interactive (re)production through motion, selection, or thought.

Jonathan Crary has provided a pioneering study of the decline in the primacy of the Cartesian model of objective vision during the nineteenth century and the emergence of subjective vision, encouraged through new forms of spectatorship and shifts in the social perception of the modern observer (Crary 1992). Crary's extended inquiry into the biological and epistemological components of subjective vision helps us formulate a corporeal notion of vision by compelling us to consider the possibility of (in)sight being derived internally from within our subjectivity and corporeality, rather than triggered by what we see in our external realities.

The shifting of modalities is a prevalent objective in the work of experimental artists such as the Austrian multi-media artist Valie Export. A particularly fitting example of rethinking the primacy and ontology of vision in cinema is Export's *Tap and Touch Cinema* (*Tapp- und Tast-Kino*, 1968-71). *Tap and Touch Cinema* was a feminist performance piece staged by Export and Peter Weibel. The piece was performed in ten European cities between 1968 and 1971, and consisted of Export inviting passersby to touch her breasts through a curtained portable contraption meant to symbolize the

cinematic apparatus. The objective of the performance was to criticize and reverse gaze theory by turning gaze into touch and theory into manual application.

*Tap and Touch Cinema* isolated and intensified the sense of touch, since the mostly male passersby could not see the female breasts, they could only feel (and assume it was) them. By emphasizing the tactility of the cinematic gaze, Export reorients the cinematic experience around the sensation of touch, which makes all other senses subordinate to it and provides the main trigger for the participant to materially and, by extension, cognitively piece together the “movie” in the darkened space. *Tap and Touch Cinema* is relevant to the discussion on retraining and reorganizing the senses involved in the cinematic experience because it relates to Laura U. Marks’ notion of haptic visuality. Marks defines haptic visuality as the tactile quality of vision: touching with one’s eyes (Marks 2002). Export’s *Tap and Touch Cinema* reverses this notion of haptic visuality to produce a kind of visual tactility: seeing with one’s hands. In retrospect, Export’s work expands Crary’s notion of subjective vision in that it extends and temporarily isolates cinematic vision to the realm of tactility. Through different strategies, interactive films also subsume vision into more materially/ haptically interactive senses such as touch and bodily motion. Without the fear of being chastised for being rubes, interactive audiences are encouraged to interact directly, bodily, with the apparatus and, more broadly, restructure the sensual hierarchy of their cinematic encounters.

The raw, immediate, and uncensored reaction towards early cinema that is critiqued and mocked through the rube draws awareness to the fact that cinema, in its full capacity, viscerally appeals to the senses it cannot represent through its technology

(touch, smell, taste).<sup>4</sup> Moreover, the notion of voyeurism explored through the trope of the rube draws awareness to the fact that, as Elsaesser and Malte Hagener observe, voyeurism “depends on forms of disembodiment, especially the idea of not having to take responsibility for one’s bodily presence in a given space or at a given time” (Elsaesser & Hagener 2010: 85). The pleasure in watching slapstick rube films is therefore located in identification via the recognition of difference and in the vicarious enjoyment of watching someone else break the rules and physical boundaries of cinema without the viewer suffering the consequences of this subversion.

The social training aspect of rube films extends to expanded cinema’s efforts to train viewers as new global citizens that are able to simultaneously process multiple sensory stimulants. Expanded cinema included the physical immersion of spectators into the cinema’s architectural space. In Kroitor’s *Labyrinth* (1967), visitors were able to walk through a cine-labyrinth in order to gain access to the multiple screens and projections of the expanded cinema installation. Kroitor’s cinema was part of Expo 67’s effort to train the new global citizen to process various multi-sensory stimulants by letting visitors wander about freely within the architectural space of the film, rather than confine them to their seat. It was an attempt to deconstruct the primacy of vision in the cinematic encounter, and reorient the cinematic experience around physical navigation. By reorienting and conditioning through repetition the viewers’ bodies to new forms of cinema, expanded endeavors such as *Labyrinth* acknowledged the importance of bodily

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<sup>4</sup> Experiments in VR attempt to collapse the barrier between sensual representation and physical sensation. An example of this collapse is the idea of teledildonics, which refers to the technology used to achieve the remote transmission of tactile sensations through VR gear (such as bodysuits and gloves) for virtual sex.

training in the formation of modern citizens—a feat that bears Foucauldian overtones. By extension, sociologist Marcel Mauss's anthropological inquiry has demonstrated the sometimes-overlooked yet nonetheless pervasive power of physical behaviors in the formation of cultural and social structures (Mauss 1973). Physical emulation as a significant factor in social development has been demonstrated by numerous studies on the establishment of gender roles through, for example, conscious and unconscious imitation of sociocultural behavioral models.

Although in the interactive citizen-training videos such as those discussed earlier the transparent manipulation of the viewer happens in a deliberately tongue-in-cheek manner, it nonetheless brings to the surface more sinister undertones associated with the framework of interactivity: the aforementioned notion of cheap labor and commodification of the body, as well as the compartmentalization of the senses to induce the weakening of self-control and ethical judgment. Interactivity as a disciplinary tool could be another source of concern for those skeptical of the ideology behind interactive pedagogy. Matt Garite expands pedagogy beyond the realm of institutionalized education, and into the sphere of recreational video games. Garite argues that the interactivity in digital games “generally manifests itself as a relentless series of demands, a way of disciplining player behavior.” Garite makes the connection between the binary choices featured in games to the testing that is “the primary means by which contemporary disciplinary mechanisms construct standardized, routine models of behavior suitable to the working conditions of late capitalism” (Garite in Imre 2009: 29). In this view, to paraphrase Imre, interactivity functions as the opposite of agency

and freedom: it becomes a means of surveillance and control whose institutional façade is the educational system (Imre 2009: 30).

Mitchell Waldrop concisely reiterates an argument frequently associated with the uses of interactive technologies in saying that their real significance was in

how the technology was woven into the fabric of human life—how computers could change the way people thought, the way they created, the way they communicated, the way they worked together, the way they organized themselves, even the way they apportioned power and responsibility.  
(Waldrop 2002: 342)

The interactive features of computers that are designed for human control have the capacity, according to Waldrop and others, to change their user during and after each interaction. As mentioned earlier, evidence of the long-term impact of computers on the human brain and body is inconclusive, and so is evidence on particular areas of interface-based activities such as online reading. The argument, for instance, that computer games, nonlinear mind-game films, and hypertextual navigation help viewers develop new cognitive skills and autonomously figure out how to interact with automated systems is debatable.<sup>5</sup> However, the fact that there are strong arguments supporting the pedagogical capacity of interactive technologies speaks to interactivity's potential of training users to think and behave in specific and/or new ways.

Echoing and expanding sociologist Roger Caillois's skill-cultivating aspects of human play, Henry Jenkins advocates the culture-changing potential of playful interactivity (such as online activist political parodies) in stating that "we are trying out through play patterns of interaction that will soon penetrate every aspect of our lives"

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<sup>5</sup> An example of this line of reasoning is Steven Johnson's *Everything Bad is Good for You: How today's popular culture is actually making us smarter* (2005), which received mixed reviews regarding many of its core arguments. The counterargument claims that interactivity in realms of play is equal to passive forms of entertainment that have no transformative power on cultural and political institutions.

(Jenkins 2006a: 135).<sup>6</sup> These patterns of interaction have the capacity of establishing behaviors that transform cultural mentality in both productive and counterproductive ways. An exploration of the notion of training and reorienting user behavior in IC can offer profound insights into the pedagogical potential of interactivity, especially through extreme examples that test the boundaries of both interactivity and cinematic representation.

### **Extreme Interactivity: *Stockholm* and the Ethics of Play**

Stanton Audemars's interactive DVD, *Stockholm: an exploration of true love*, immerses the viewer in a subversive fantasy that, according to the filmmaker, is geared towards broadening the definition of romance and counterbalancing Hollywood's sugarcoated love stories. If, as Vanderbeek thought, the international medium of cinema is the ideal vehicle for penetrating the global unconscious, then it would make sense that some ICs focus on training viewers in premeditated ways that aim to endorse specific agendas. For interactive filmmakers dealing with risqué subject matter, interactivity can easily be seen as a pretext to indulge in libidinally charged fantasies that impose specific agendas onto viewers using a controlled form of interactive play.

*Stockholm* is an interactive video in which the viewer is asked to assume the persona of a kidnapper in order to act out scenarios from case studies of the Stockholm syndrome. *Stockholm* is not only a useful case study for discussing the subversive potential of video practices, but can also provide insight into the use of interactivity as a mechanism for testing moral ground and for restructuring viewer interaction around the

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<sup>6</sup> In his work, *Les jeux et le homes: le masque et le vertige*, Caillois divided human play into the structural categories of competition (*agon*), simulation (*mimicry*), chance (*alea*), and vertigo (*ilinx*), with each category leaning towards fantasy (*paideia*) or skill (*ludus*).



ethics of play. *Stockholm* is analyzed here as an extreme example of both subject matter and use of interactivity to test how far interactive encounters can push ethical and representational boundaries, and to what degree they can condition user response and, even, reshape the viewer's perspective.

On a superficial level, it can be assumed that the film employs interactivity to explore the paradoxical nature of the Stockholm syndrome, in which the victim develops an emotional attachment to his/her captor through a form of traumatic bonding. Yet, the syndrome is turned into a game where the objective becomes to expose the social conditioning we undergo as members of civilized communities by enforcing its own conditioning—a perverse logic, if you will, wherein perversity is defined as *productive* deviance. Through socially condemnable behavior—kidnapping, gassing, and raping—the film presents a sadomasochistic definition of love that both runs counter to, and to some extent exaggerates, Hollywood's idealized depictions of romantic love. Through enactment of perverse scenarios, the interactive experience of *Stockholm* attempts to create a progressive participatory spectacle in which social taboos and condemnable practices are turned into a behaviorally transformative and, debatably, enlightening form play.

By implicating the viewer into the kidnapping and subsequent molestation of the female victim, the film not only creates a perverse spectator, but also a willingly participatory instigator of the spectacle. Here I am using the term “perverse spectator” in the sense that Janet Staiger uses it in her work (Staiger 2000). Staiger argues that perversion can suggest a willingly subversive mode of spectatorship, but it can also imply an inability to adopt any other position, for instance due to an externally imposed

(by the film/filmmaker) perverse viewpoint. As Staiger points out, perversion—as a turning away from the typical film reception patterns—does not necessarily result in politically progressive deviance. *Stockholm* begins with a talking sock puppet that makes a mockery out of the explicit content warning preceding the introduction. The mockery of the explicit content warning alludes to the cliché of the susceptible viewer and that of the impressionable videogame player. *Stockholm's* tongue-in-cheek approach to changing the viewer's ethics and predispositions (assuming that those do not align with the filmmaker's in the first place) both parodies and attempts to use interactivity as a form of willful conditioning.

Following the rationale of thinkers such as Caillois and Johan Huizinga, that new ethics and cultural perspectives emerge out of play, *Stockholm* attempts to act as a “simulation that challenges what you've been taught love is supposed to be. The point of *Stockholm* is not that kidnapping is the right thing to do. The point is that we need to reexamine our definition of love.” By using notionally ludic play as a form of social training and ethical re-alignment, *Stockholm* exemplifies Caillois's view of *ludus* as a formalized, regulated, and institutionalized activity. The video attempts to impose the filmmaker's agenda on the viewer through its videogame aesthetics, and establish its own norms and ethics regarding the use of interactivity and, more broadly, the idea of romantic love. The video's ludic aesthetics are not ethically or politically progressive enough to be considered playful resistance, but they do challenge the viewer to a transgressive form of gameplay that bears the burden of representation. If Audemars's goal of broadening viewers' perspective on love is successful—or at least if it implicates the viewer into this sadomasochistic idea of love—then, as Miriam Hansen speculates,

the spectatorial activity “focused on the acquisition of skills and memorizing of moves [could] vindicate Adorno’s verdict against the ‘sportification of play’ as a form of internalized social discipline” (Hansen 2004: 44).

The goal of the film is to make the kidnapped girl fall in love with her abductor through various methods of assault, ranging from sexual harassment to gassing. While *TWU* mostly discourages users from making unethical choices for the protagonist by steering the narrative towards more socially acceptable outcomes (such as heteronormative romance, monogamy, and chivalry), *Stockholm* encourages the viewer-slash-kidnapper to take advantage of the interactive format to molest the victim in the name of “love.”<sup>7</sup> If the viewer tries to be gentle with the abused girl and refrain from gassing her, then the film reaches an abrupt ending that is equated with losing at a video game—an ending similar to (yet less extreme than) the virtual slap in the face in the first version of *Virtual Valerie*, where the forced computer reboot indicates that the player has lost the game of sexual courtship with Valerie (Harpold 2000: 137). In both cases, the moment where the viewer loses—and is thus forced to restart the film (or, in *Valerie*’s case, the computer)—serves as the ultimate deconstruction of interactive agency: the player has no choice but to start from the beginning, in hopes of making it further next time. In the case of *Stockholm*, this is also the moment where the film’s nature culminates in a paradox: it becomes both a non-interactive (or, typical) film with a

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<sup>7</sup> Here it should be noted that even *TWU*’s ethical consistency is doubtful at times—at least for more conservative viewers. In two of the faster-paced sequences in the film, there is some anti-Republican rhetoric casually thrown into the conversation, which might go unnoticed if the viewer is preoccupied by anticipating the next moment of choice. The film also wavers in its stance towards drug use, and imposes an implicit hierarchy that ranks LSD and cocaine as the more punishable drugs; the punishment for allowing Eric to consume or be around these drugs leads to a tragic ending for the protagonist. On the other hand, marijuana use is not overtly criticized; it could even be argued that marijuana is depicted in a positive light in the majority of the film, since it inspires a surrealist love sequence that leads to a happy ending.

finite ending, and an anti-film in the sense that its “Game Over” closure is derived from the conventions of closure in video games rather than from conventions of movie endings.

Nonetheless, even just for the mere fact that *Stockholm* comes in the form of a DVD—and is thus, as the medium dictates, meant to be watched like a movie, not played like a console game—might prompt viewers to retrospectively reflect on how the interactive format reorients their viewing experience and their relationship to the moving and looping images. The more a viewer wishes to successfully play according to the film’s rules, the more he/she comes to regard the film as a game. As the viewer assumes the role of the player, he/she also becomes vicariously and haptically (via the remote control) implicated into the task that is literally at hand: to complete the sadomasochistic depiction of love.

In my experience of the film, the more focused one is on the goal of making the girl fall in love through abusive means, the less concerned one becomes with the ethical implications of this symbolic violation. Disturbingly, repetitive losing can make one even more determined to win, regardless of what is ethically and allegorically at stake in winning. Psychological and narrative closure is dually achieved within the film once the viewer manages to make the victimized girl fall in love with him/her. Psychological closure is achieved in the sense that the Stockholm syndrome comes full circle, and thus the psychological phenomenon is fully demonstrated (gaining love through abuse), albeit through the filmmaker’s reductive interpretation of it.

The film has been accused of gratuitous violence and unmotivated taboo acts. Regardless of accusations, the film is intended by the filmmaker to illustrate the

paradoxical nature of the Stockholm syndrome, whereby the hostage develops a positive emotional bond with their captor in mistaking cruelty for kindness. In many ways, the video's reputation precedes its content, for it is nearly impossible to avoid extra-textual information about the work; even on the *Stockholm* website, the work is introduced as “the controversial masterpiece that was banned from Amazon,” thus alluding to the video's notoriety.

### **Mimetic Interactions and Virtual Reactions**

The strong reactions that *Stockholm* has provoked speak to its mimetic potency. The case study of *Stockholm* illustrates that—despite their unconventional approaches to filmmaking—interactive works are still, to some extent, assessed by mimetic criteria and measured against standards for ethical cinematic representation when it comes to depicting sensitive issues related to gender, sexuality, and violence. The critical reception of *Stockholm* and the campaigns to boycott it validate this argument. *Stockholm* has drawn comparisons to the controversial and no longer commercially distributed 3D Japanese *RapeLay* (2006) video game that allows players to stalk, molest, and rape girls. Illusion, the production company for *RapeLay*, defended the game by arguing that virtual rape is a lesser crime than the symbolic acts of murder commonly instigated in action-driven videogames.

In a similar vein, Audemars has defended *Stockholm* against critical backlash by arguing that the film depicts a more realistic portrayal of love than the sugarcoated romances viewers are accustomed to seeing on TV and Hollywood movies. If we apply Linda Williams's classification of sadomasochistic pornography, then it can indeed be argued that *Stockholm*'s “suspension of pleasure over the course of prolonged sessions of dramatic suffering [...] offers a particularly intense, almost parodic enactment of the

classic melodramatic scenario of the passive and innocent female victim suffering at the hands of a leering villain” (Williams 1991: 8). Paradoxically, then, *Stockholm* subverts patriarchal structures of pleasure through the interactive depiction of female abuse that does not end with the typical “money shot” of male ejaculation typically signaling the ending of pornographic videos, but with an animated graphic informing the viewer that he/she has won the game. In this sense, the film denies male—and, by extension, sadistic—pleasure on- and off-screen by only showing fragmented sexual scenes (consisting of extreme close-ups on body parts with lack of establishing shots, muffled ambient sounds, and dim lighting) that do not culminate in the predictable manner of most formulaic porn. This subversion of certain conventions does not, however, result in any type of female empowerment on- or off-screen; it is subversion without progression or revision of existing structures because the conclusion veers away from filmic images and into the realm of computer graphics and video game closure, thus abstaining from profoundly engaging with—and possibly deconstructing—the heteronormative patriarchal structures it evokes.

The initial vendor for the video, Amazon.com, has discontinued distribution of *Stockholm* from its website, and many critics labeled the video as misogynistic and unnecessarily graphic. The backlash that *Stockholm* received, especially from feminist critics who opposed the video primarily due to its premise (they refused to purchase and interact with it first-hand), partially validates the argument that the mainstream hype surrounding interactive media is often a pretext for a profounder degree of manipulation. In the case of film, interactivity can become a two-fold way of crossing debatably ethical lines of filmic representation by rendering the viewer complicit in the process of image

(de)construction. Thus, viewers-turned-players become part of the construction of the filmic text, not just manipulated by or absorbed into its ideological apparatus, as classical film theories would suggest.

Torben Grodal suggests that, in some film theories, subjectivity is linked with perversions such as fetishism and voyeurism because such conditions “activate sex-related phenomena but block the acting out of the desires elicited, so that the viewer experiences a saturated activation of sexual associations without the tension associated with acting out those desires” (Grodal 2009: 248). Conversely, in interactive videos like *Stockholm*, the viewer is invited to act upon the taboo desires imposed on him/her by the narrative of the video. Therefore, the viewer is aware of his/her complicity in the virtual performance of sadomasochistic acts, even as he/she is unable to interact with the video beyond predesigned, goal-oriented parameters (and cannot even interact with the video as conventional pornography, since the “money shot” is ultimately suspended and the pornographic sequences are filmed from canted angles that disorient the viewer and discourage erotic pleasure).

The majority of *Stockholm* is conveyed through POV shots in which the captured woman is the focal point. The kidnapper’s point of view is mediated to the viewer as seamlessly as possible, presumably to facilitate identification with the goal of the video or, even, a superficial immersion into the kidnapper’s mentality. The gender of the vicarious kidnapper in the video is deliberately unclear, since the formless avatar does not speak and is not attached to a visible on-screen body; the only filtering we are aware of is the POV shots, but there is no visible on-screen body attached to those POV shots (although there is a detached and seemingly artificial penis in more

advanced stages in the film, which leads to more gender confusion). Even the kidnapper's commands are conveyed in written form so as to directly appeal to the viewer without the means of audible, gender-coded sound.

The way *Stockholm* is framed is reminiscent of first-person shooter games, where the form of the shooter's avatar is never fully revealed to the player controlling it. The first-person shooter resemblance does not end with filming techniques and avatar resemblance; it extends into connections with the training potential of those games. Penny argues that first-person shooters enable their players to develop skills such as marksmanship that can be transferrable to non-virtual realms. He goes as far as to argue that such games have "the potential to build behaviors that can exist without or separate from, and possibly contrary to, rational argument or ideology" (Penny 2004). The goal-oriented, game-like structure of *Stockholm* means that viewers invested in completing *Stockholm's* objective might be inclined to bypassing representational questions (including concerns about simulated rape and misogyny) for the sake of prioritizing the gaming aspects of the video.

A goal-oriented focus can compel the viewer to forego the act of critical reflection on what is depicted on the screen and, more significantly, on what the symbolic implications of the interaction signify. To an extent, the more one interacts with images in a material way (such as through a touch screen or a remote control), the less one reflects on them; a certain degree of distance, lack of control, and physical detachment from the screen might actually imply a higher degree of reflective engagement with moving images, which in this case counters the argument that



material/ physical interactivity encourages cognitive engagement as, for instance, in the case of strategy-oriented games.

Even if the viewer cognitively develops a strategy for winning *Stockholm*, habitual gameplay contains aspects that are pre or post reflective—that is, they are outside the realm of active and premeditated thought—and fall into other processes such as sensory-motor repetition (as in repeatedly clicking a cursor) and memorization. Sherry Turkle argues that a winning strategy “involves a process of deciphering the logic of the game, of understanding the intent of the game’s designer, of achieving a ‘meeting of the minds’ with the program” (Turkle 2003: 502). In *Stockholm*, the notion of authorial intent and the logic of the video/game are fused together in order to produce a particular kind of subjectivity that dictates the scope and direction of the interactive experience. The looping and repetitive structure of the video facilitates the trial-and-error memorization of right and wrong selections in the way that players learn from their mistakes in a game and try to pursue alternative routes instead. With habitual interaction, the viewer learns that, for instance, gassing the kidnapped girl makes her more susceptible to the kidnapper’s commands; this means that the viewer who wishes to play the film to its preordained conclusion begins to instinctively select the “Gas her” option before any other, to increase chances of the girl complying with commands such as taking off her clothes. For someone invested in winning *Stockholm*, those commands become increasingly less literal and less shocking with every interaction because the primary goal is to move further along in the video/game.

Hayles’s theory about interactive texts is applicable to *Stockholm*’s kind of interactivity. Hayles argues that an interactive hypertext is materially performed before it

is cognitively read. An interactive text's material performance is, according to Hayles, "necessarily prior to whatever cognitive processing the user performs to read and interpret the text" (Hayles 2006: 185). This means that the reader—or in this case, viewer—is initially concerned with bringing the interactive text to life by helping it unfold through tools of interaction such as the cursor, the remote control, the keyboard, and the menus. Hayles therefore says that a more fitting term for an interactive text is "process," instead of the typical term of "object" applied to print literature and, in this case, most non-interactive films. In light of this rationale, the term "object" in this context bears connotations of a static materiality and of a pre-completed state, whereas "process" implies progression and creation in real time.

The performance of an interactive text occurring before the text's cognitive processing is a compelling argument that could explain why some viewers might be inclined to interact with *Stockholm* before reflecting on the symbolic implications of their interaction. The video can thus be regarded as a form of conditioning in the sense that the viewer is asked to (inter)act before he/she thinks, and then to subsequently think in terms of gaming mechanisms and strategy rather than in extra-textual ways. Penny would term this kind of conditioning as anti-intellectual training, which occurs when an activity is introduced methodically and/or repetitively by cultivating bodily behavior that ultimately becomes automatic or reflex. Penny refers to anti-intellectual training in the context of sports, martial arts, and military training, but then extends his argument to video games as training simulators. By comparison, *Stockholm's* looping and repetitive structure includes recurring commands such as that of gassing the victim which, when repeated, become almost automatically selected by the viewer in order to progress in

the game (meaning, the viewer gradually learns that choosing the gassing option before selecting any sex-related actions makes the victim more submissive and moves the game further along).

Aniko Imre also supports this reasoning in alluding to Julian Stallabrass's argument that computer games mechanize the human body through repetitive motions and goal-oriented processes, and links the logic of computer games to the conditions of global capitalism and the fragmentation or loss of the self in labor-intensive tasks. Imre contends that such models impose on their subjects a limited and controlled notion of subjectivity that is defined by external factors rather than internally formulated. In the case of ethically polarizing contexts such as the controversial premise of *Stockholm*, compartmentalization is also essential in order to align—through play and participation—the viewer's views with the ideology of the video. In other words, if the viewer's moral values are incompatible with the principles of the game, then the viewer must either forgo critical and ethical reflection when interacting or refrain from interacting with *Stockholm*. As an example of affective play—that is, play that is arguably more instinctive than logic-driven—Imre cites Benjamin's analysis of gambling as a combination of affective engagement and automatic or habitual action (Imre 2009: 29).

The viewer's conditioning in *Stockholm* begins by initiating tactile interactivity with the video (pressing buttons on the remote control), and then aims to more profoundly reorient the viewer's perception of notions such as love and art. The possibility that the viewer leaves the interactive encounter unchanged does not necessarily undermine the fact that interactive media hold great potential to literally and figuratively change people's minds and bodies even more so than non-interactive media

because they implicate the user into their processes. This relates back to the conditioning aspect of early cinema (notably the rube films) and to subsequent social concerns about the influence of cinema—and, later, interactive media such as videogames—on impressionable viewers. In public screening contexts, factors such as socialization and audience dynamic can impact the process of audience training. However, since *Stockholm* is only released for home viewing, the privacy of the domestic setting could mean that the viewer might be more inclined to interact with a taboo film than he or she would be in more public domains (similar to the logic behind the shift of pornography from theatrical to home viewing in the 1980s). In this case, the privacy afforded by the domestic setting for the viewing creates an environment where the viewer might be more receptive to the experience, even out of sheer curiosity, without worrying about public criticism.

*Stockholm* attempts to reorient, expand, and problematize the notion of romance by inviting the viewer to participate in this deconstruction. In this way, the video is rewiring the viewer's interaction with a taboo scenario to which the normal or expected reaction would be to disprove of it, but now, instead, the prompted response is to help this taboo materialize on the screen fragment by fragment, level by level. The video is thus trying to prime the viewer by repeating acts of "love" in hopes that, if repeated enough times, the subject will become desensitized and, even, accepting of that version of love, or at least the reasoning behind it; alternatively, if desensitization is not what occurs during the interaction, then what occurs could be a different form of sensitization: eliciting a positive response from the scenario. The repetition of the disturbing acts of sadomasochism until they become more acceptable within the framework of repeated

externalized interactivity is reminiscent of how certain attitudes and ideas become normalized through sociocultural conditioning and routinized activities.

What is at stake in “winning” *Stockholm*? What is ethically and psychologically at stake in a video that equates narrative and psychoanalytical closure to the act of winning a game? More so, what is at stake when that success is brought about by vicariously performing acts of sadomasochism that infringe on basic human rights? The intention behind interactivity becomes even more problematic and even less convincing when the symbolism in the performative acts becomes too overwhelming to dismiss as “just a game” or “only a movie.” Penny articulately expresses the representational and performative burden that controversial interactive images and their respective acts bear in his analysis of an extreme example of interactive art. *Kan Xuan* was an interactive installation by artist Alexander Brandt of a life-size image of a naked Asian woman, which Penny had visited in 2000.<sup>8</sup> The virtual woman was positioned lying face up on a crumpled cloth in a dark corner. As Penny describes, “the only possible mode of engagement presented to the user” was to stomp on the virtual woman who, in response, recoiled in pain and eventually faded away if the stomping was persistent (Penny 2004). Brandt’s work essentially invites the audience to enact unprovoked violence against a defenseless woman of color.

The *Kan Xuan* installation might, like *Stockholm*, have profounder intentions behind this seemingly unmotivated act of cruelty, but it nonetheless presents a powerful example of “the potential of electronic representations to encourage or reinforce behaviors in the real world, in this case racist and/or misogynist behaviors” (Penny

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<sup>8</sup> The installation is not well documented online. For a basic description and images, visit the Feipingguo website, <http://www.feipingguo.com/Kan%20Xuan.htm> (accessed 02.02.2013).

2004). The intention behind extreme mimetic images and interactions might be to provoke critical thinking, but can the intention behind a symbolic enactment of violence negate the very act of violence? Penny notes that, in embodied interactive practices, theories of visual representation are not sufficient to account for interactive enactment because “an interactive ‘representation’ is more than a representation” (Penny 2004).

The more one is physically implicated into the execution of a symbolic act, the more the interactive action moves towards the literal realm. As Penny argues,

the persuasiveness of interactivity is not in the images per se, but in the fact that bodily behavior is intertwined with the formation of representations. It is the ongoing interaction between these representations and the embodied behavior of the user that makes such images more than images.

(Penny 2004)

When interactivity engages the individual in physical ways (such as the kinesthetic playing of Wii games, where physical motion directly corresponds to on-screen movement), then symbolism becomes submerged into a more literal terrain, depending on the degree of physical immersion and film-human motion coordination.

Although *Stockholm* cannot be fully classified as an example of embodied interactivity because the viewer's physical participation is limited to a narrow haptic order (pushing buttons on the remote control), the video subjects the viewer to a type of moral realism. According to Thomas M. Powers, moral realism takes into account the intentions and causes of actions more than the actual outcome of those actions (Powers 2003: 197). In other words, if there is malicious intention behind an act, then the act itself can be deemed malicious regardless of whether or not it has real-life impact. Moreover, if a simulated act evokes genuine feelings in the person performing it, such as guilt and shame, then that makes the simulated act appear more real to the interactor. Virtual worlds and reality are not mutually exclusive realms, but performative

acts in virtual contexts can translate to social interaction equivalents, as in the case of bullying and cyberbullying. This reasoning elicits yet again long-standing debates about simulation and its influence on user behavior. Furthermore, this restates the question whether interactive technologies—and communication media in general—provide a buffer from real-life consequences and socially acceptable behavioral norms.

Feminists and others opposing the circulation of *Stockholm* would certainly agree that accountability for our decisions is part of our existential condition as human beings, regardless of what realm those decisions take place in. Scholars studying the influence of video game simulations and life-like robots claim that these simulations are a means of training and, in some cases, desensitizing people for the real thing.<sup>9</sup> The mixed and polarized reactions *Stockholm* has received partially confirm the argument that both film and interactivity can exert influence over their consumers, but can they literally change their minds in a lasting way? It remains to be seen whether the combination of film and interactivity will result in technology that can meaningfully alter consumer behavior and impact the collective unconscious.

### **Postscript**

Due to the fact that IC is still very much a practice in development—in its several incarnations that range from art installations to fan videos—it is difficult to arrive at conclusive conclusions about IC as whole. As this project has demonstrated, there are various dimensions and degrees of interactivity that continue to expand alongside the new media landscape. Consequently, theoretical and analytical models must continue to expand in order to address the various mutations of this multifarious genre. The

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<sup>9</sup> See for example Sherry Turkle's connections between virtual pets, video games, and military simulations in *Alone Together: Why we expect more from technology and less from each other* (2012).

changing and convergent paradigms of cinematic spectatorship—exemplified by the multifarious nature of IC spectatorship and reception modes—require new research methods and expanded tools of documentation in order to adequately encapsulate the plurality of the interactive media landscape and to prevent the omissions in future canons of potentially significant interactive experiments.

As demonstrated throughout this study, a critical and theoretical survey into the history of both cinema and interactivity reveals that they are entwined with notions of training the masses and conditioning prescribed behaviors. Therefore, the plurality of IC can provide us with valuable insights into human behavior that corresponds to larger cultural trends and social contexts. These insights are not necessarily disproved or negated by reception studies, but instead act as complementary approaches to examining audience responses on both individual bases and as a collective. Like IC's hybrid and derivative nature, IC as an object of study both assimilates and revises several key theories pertaining to both its filmic and interactive constituents. IC's constraints regarding the user's freedom within the realm of the interaction expand to aspects that transcend the textual: the rediscovery of IC within the broader frameworks of the history of cinema and new media reveals historical, political, ideological, cultural, and ethical constraints that illuminate its marginalization from mainstream versions of film and media histories.

My overall skepticism regarding the empowering and democratizing potential of interactive media extends to the current hype surrounding new methods of analyzing media texts. While new trends such as data text mining and computational approaches can expand our understanding of a media object, solely focusing on newer interpretative



models can produce insights that are just as myopic as focusing on so-called outdated analytical paradigms. Throughout this project, I advocate a hypercontextual approach that takes into account interactions on multiple levels (consumption, production, circulation, distribution, access) and synthesizes the most productive aspects of both established and emerging analytical frameworks. As I demonstrate through detailed case studies, close readings and formal analysis of media works can still be useful in the critical study of hybrid media objects. A hypercontextual and hypertheoretical approach not only provides sociopolitical insight and historical depth, but also problematizes the notion of interactivity as a primarily digital phenomenon and instead relates it to the nuances of the human condition that are influenced by—but are also instrumental in shaping—the digital age.

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