MISSING IN ACTION: AGENCY AND MEANING IN INTERACTIVE ART[1]

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A legend of interactivity

Cynthia Mailman fell through the roof of a garage on which she was dancing as a participant in Al Hansen's "Hall Street Happening" (1963). Bleeding and hurt, she screamed for help but initially no one came to her rescue; participants and viewers alike presumed her action was part of the happening and ignored her pleas for assistance. Writing about the event several years later, Hansen (1965: 17) remarked,

> I ran out into the warm midnight-Brooklyn slum street and looked up and down each way—my first impulse was to hitchhike to Mexico and forget the whole thing. Then an ambulance and the police arrived…It was a fine bit of mayhem and quite abstract. (Hansen 1965: 17)

For better or worse, only a few happenings resembled Hansen's "Hall Street Happening" in its obliteration of the tangible, objective difference between aesthetic and ordinary events, artist and spectator. This slippage is one reason why Allan Kaprow abandoned happenings less than a decade after theorizing them in the mid-1950s. Even though the aims he outlined for happenings included keeping "the line between art and life…as fluid, and perhaps indistinct, as possible," and "eliminat[ing] audiences entirely," Kaprow found that audiences were culturally unprepared to interact responsibly in constructing a work of art (Kaprow 1965, reprinted in Stiles & Selz 1996, pp. 709, 713; Kaprow 1966). While little has changed in the public's capacity to interact in art or life, fostering audience agency remains a utopian activist goal for many artists and is presented as an ineluctable formal quality of digital multimedia. Yet, the extent and quality of interaction by which an individual actually participates in and contributes to the process of creating meaning remains troublesome.

Using "Hall Street Happening" simultaneously as both a model and an anti-model of interactivity, this essay asks: "In what ways, or to what degree, is interactive art meaningful?" We begin with a consideration of the commercialization of the notion of interactivity and its rhetoric of "the new," marketing and discourses that aim to transform technology into ideology in order to promote commercial interests, be they those of industry or art. Next, we turn to the role of agency in interactive digital multimedia, its humanist underpinnings, and several artists whose works take into account myths of technologically mediated agency and interactivity. Finally, we consider interactivity in terms of its meaningfulness with respect to responsible action in a social context.

The "new" in interactivity

In the 1990s, the concept of interactivity became a marketing mantra of Silicon Valley, a phenomenon that Simon Penny described as "consumer commodity economics" (Penny 1995: 47). He pointed out that three years after Canadian artist Nancy Paterson completed "Bicycle TV" (1990), an interactive laser disc that interfaced with a bicycle and its rider, "exercise cycles were available with simulated travel on graphic displays" (Penny 1995: 48). [Fig 1.1.1] Since much of the extensive, heterogeneous history of interactive art has pursued a decidedly anti-commercial direction, we pose the rhetorical question: In what ways does such commercial saturation of interactive multimedia challenge its ability to resonate with artistic meaning?[2]

Throughout the 1960s and 1970s, performance, process, installation, environmental art, video, and other experimental tendencies provided a fertile and interconnected ground for the evolution of interactive art.[3] Artists developed interactivity as a means to widen the social base for art, and as an exercise in active interconnection with cultural and political milieus.[4] But as sophisticated interactive installations using laser disc, virtual reality, and telematics emerged, concentration on the newest technologies, rather than on the quality of interaction, tended to diminish the activist dimension of much interactive art. In many cases, such art served the interests of industry by popularizing its products and endorsing the ideology of interactivity and agency, which already had been co-opted by commercial concerns.

In an era marked by the proliferation of digital technology, widespread social passivity, political conservatism, and awakening public awareness of massive technological surveillance, the augmentation of individual agency—however superficial—offered a veneer of imagined personal control to consumers, and it insured instant cash rewards to the technologists who brought interactive merchandise to market. Advertisements for digital media (ranging from CD-ROMs to VR—virtual reality and webcams) emphasized novelty, interactivity, and the enhancement of personal agency. In the 1990s, industry journals (which often were difficult to distinguish from advertisements) hawked these technologies as heralding a new social paradigm of interactive community and global consciousness. Artists nominated themselves to be the architects of interactive contexts in which a presumed, ever-eager public would be able to generate its own images, identities, and experiences. The rhetoric of "the new" promoting digital technologies in the 1990s was as rampant in propagandizing electronic multimedia as it was in the 1980s

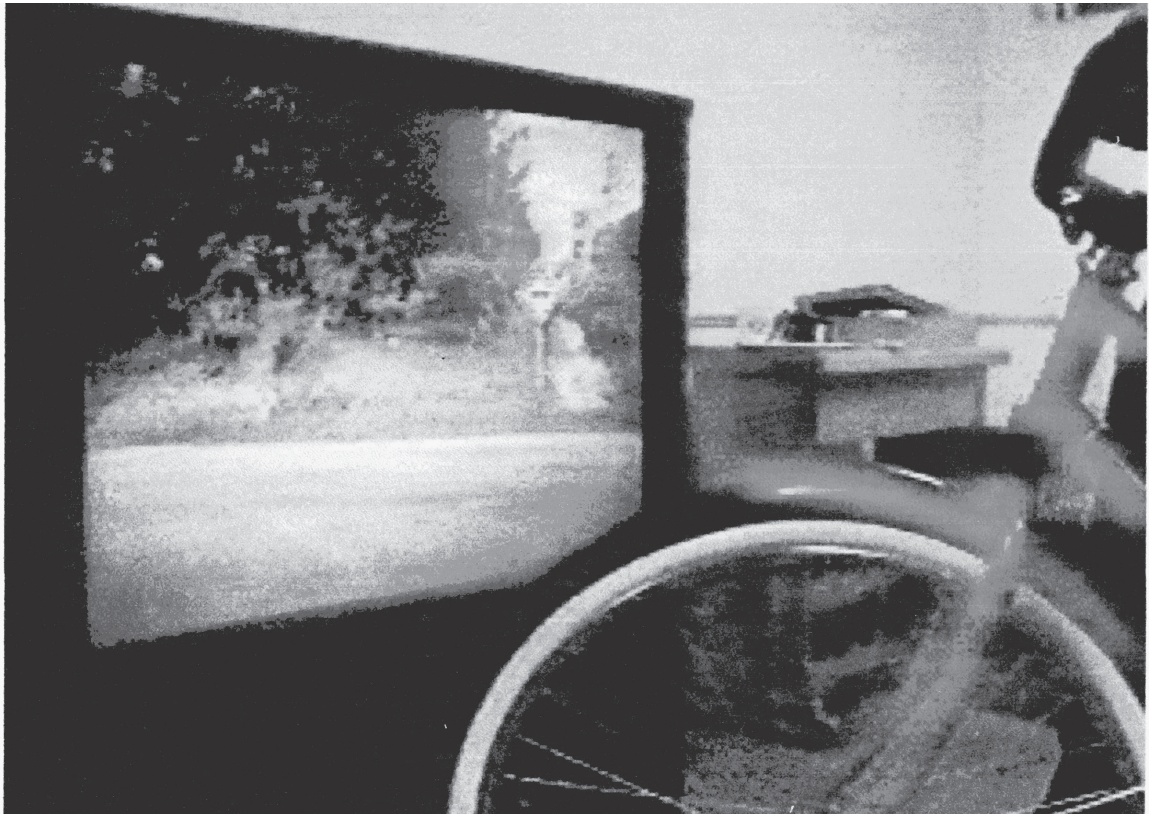

Figure 1.1.1. "BicycleTV: Some Interactive Exercise," Nancy Paterson (1989). The handlebar and pedals of the interface bicycle provide the viewer interactive control over the direction and speed of travel. Cycling is transduced into the virtual environment, distilling the active body in the virtual scenario. A video projector or large screen is used for display. The arrows on the screen indicate choices to the rider. The image is from an exhibition (curator Luc Courchesne) in Montreal titled "TeleVisions" at PRIM in 1991.

when critics made equally exaggerated claims for Postmodernism. In the introduction to his influential book *Postmodernism or, The Cultural Logic of Late Capitalism*, Fredric Jameson breathlessly sited such constellations as Postmodernism's "new international division…vertiginous new dynamic…new forms of media interrelationship…new structure…new system…'new structure of feeling'…new technological prerequisites of the 'new long wave' of capitalism's third stage…the psychic *habitus* of the new age," to quote from only two of many paragraphs (Jameson 1991: xix–xx). Following a similar cultural logic, in the 1990s and 2000s, the appropriation of the concept of interactivity as a novel feature of specific technologies falsely implied that interactivity did not exist before or without those technologies.

Novelty drives the cultures and economics of both technology and art, making multimedia doubly bound to the doctrine of "the new." Thus, the purported qualities (agency) and conditions (empowerment) of the "new" digital media served as proselytizing slogans for the social imaginary and the cultural and industrial marketplaces. Combining capitalist strategies with the symbolic means of art, the rhetoric of "the new" has been used to sell interactivity as technology when it is more properly an effect of ideology. As Dieter Daniels has observed:

> Due to the interweaving of human society and its digital back-up, it is becoming increasingly difficult to tell whether we are communicating with machines instead of people, or with people by means of machines, or talking to people about machines, or to machines about people. This entails a blurring of the boundary between ideology and technology, and technology is indeed a central part of ideology in the '90s. (Daniels 2000)[5]

In this regard, John T. Caldwell pointed out that, "When Time-Warner merged with AOL in January 2001, many analysts announced that this marriage of two worlds—'old media' and 'new media'—would usher in the final arrival of 'convergence'" (Caldwell 2003). In these ways, Postmodernism and multimedia have proven themselves to belong to what Harold Rosenberg had already described nearly half a century ago as "the tradition of the new" (Rosenberg 1960). One might argue that their claims for novelty reveal the continuation of a trope that remains sexy despite having grown long in the tooth.

Interactivity has become inextricably and commercially paired with technology as "new," market-chic, engaged, and thus, empowering, while non-digital forms of conventional, experimental, and interactive art are presented, by comparison, as old-fashioned, passive, and lacking structures for empowerment. Founded on false binary oppositions, such representations exacerbated widespread critical claims since the 1960s that art (especially painting) was dead and that the avant-garde lacked social purpose. Paradoxically, many critics who proclaimed originality still-born and the avant-garde dead also invoked the postmodern "new" but scorned interactive multimedia art. Artists and critics from within the new media community who theorized such art as related to Postmodernism and its tropes of the loss of aura, death of the author, stylistic pastiche, and so on, did so strategically, in order to ally the marginalized field with an already academically empowered discourse. Surely, many elements of interactive art lend themselves to such interpretations, often even more fittingly than examples drawn from conventional fine art. However, as the periodicity of Postmodernism becomes ever more clear, continuing to draw parallels between multimedia and Postmodernism undermines any claims for novelty and instead threatens to relegate the former to an antiquated movement and/or genre. Postmodernism, too often confused with or collapsed into poststructuralism, is more properly understood as a brief moment in aesthetic and intellectual history, while poststructuralism appears to have instituted an enduring shift from a universalizing epistemology to socially constructed systems of knowledge, institutional practices, and multiple subjectivities. It is this latter intellectual modality that offers interactive multimedia a richer field of inquiry and an altered context for the history and criticism of its practices. Thus, the innovation and significance of the concepts, basic technological functions, and ideology of personal agency being promoted as new and meaningful demand closer scrutiny, as even the rhetoric and packaging follow predictable formulas.

Agency

Agency repeatedly has been identified as a primary goal of multimedia technology. Interactive technologies and agency have become so closely connected that meaning in multimedia signifies as agency, in so far as meaning derives from the qualities that agency obtains in interaction. Meaning is purposive, entailing intention, aim, and objective result. While meaning is inherent in the semiotics of the interactive exchange among artist, artwork, and audience, in order to be *meaningful*, agency and interaction must activate semiotic signification that is literally *full of meaning*. Interactive multimedia art, therefore, can be meaningful when it enhances the fullness of agency, otherwise meaning is missing in interaction, and meaningfulness is missing in agency.

Discussions of multimedia have tended to make the concept of agency abstract by attributing meaning to its formal components and by deferring the question of meaningfulness. But the introduction into art of such formal elements as moving a trackball or clicking a mouse to recombine images and texts, moving the body to negotiate a VR environment, and/or posing questions for which there is no substantive feedback, enhances neither agency nor meaningfulness. Although works employing these limited ranges of physical and mental activities are routinely described as "interactive," if the works have meaning at all, it resides primarily in artists' decisions, rather than in participants' agency to shuffle or activate images, sounds, texts, and pattern sequences, and so on. The physical interaction by which viewers can trigger different effects may be pleasing and even surprising, such as playing with a kaleidoscope, but the visual and conceptual stakes of the work still finally reside in the artist's aesthetic choices.

Such art, then, may be astonishingly conventional regardless of its technological novelty, especially when compared to interactive Internet sites such as "Second Life" (http://secondlife.com), massively multiplayer online role-playing games (MMPORGs) such as "World of Warcraft" (http://www.worldofwarcraft.com) or the official US Army's game "America's Army: Real Heroes" (http://www.americasarmy.com), all of which not only require intense engagement in the construction of alternative realities but also have tangible effects, in so far as "Second Life" has a functioning economy and the latter two are well-known sites for military recruitment. Multimedia works, by contrast, may be meaningful for reasons that have little or nothing to do with interactivity or agency, but with the traditional qualities that have made works of art meaningful throughout history: the ability to change (or affirm) the way viewers see, understand, and act upon the world. Similarly, the interactive features of multimedia become meaningful when they engage and activate complex emotional and decision-making responses, such that interaction itself reinforces the transformative effects of the overall piece and plays a constructive role in creative change and exchange. However, given the limited forms of agency currently exercised in much interactive multimedia, it is useful to consider the concept of agency further in order to imagine different forms of engagement.

An opposition between active agent/participator (in interactive multimedia) and passive/observer (the recipient of pre-coded and unalterable meaning in traditional media) has been frequently identified in discussions of interactive art. This polarity has had the effect of sanctioning digital interactivity and discrediting non-digital interaction. Interactive multimedia is claimed to strengthen agency by allowing individuals or groups to alter the artistic composition or determine an artwork's meaning by contributing to the construction of its data content or narrative path. But as Douglas Browning pointed out nearly forty years ago, the philosophical goal of agency is to function as a locus of morality and individuality: "The concept of the agent is required in order to allow for the possibility of freedom, communication, comprehension, and mystery. "Culture in general…rests upon…agency" (Browning 1964). Agency also has been tied to the execution of volition: "a person is the agent of an event if and only if there is a description of what s/he did that makes true a sentence that says s/he did it intentionally" (Davidson 1971: 46). Agency involves the freedom to create, change, and influence institutions and events, or to act as a proxy on behalf of someone else. In both cases, agency is measured by the ability and the responsibility to have a meaningful effect in a real-world, inter-subjective, social context. Given Browning's claim that agency is necessary for the coherency of individual identity and social interaction, it is not surprising that the commercial multimedia industry has seized upon it as the principle underlying a selfcongratulatory rhetoric of promoting individual empowerment through technology and that the discourses of interactive art have adopted similar promotional strategies.

In addition, it is important to note that technology complicates agency by mediating the "accordion effect" of agents, intentions, acts, and events (Feinberg 1965: 134–160). In telerobotic systems, for example, it is expected that the intentions and acts of an active human agent (master) in location A will be executed by corresponding acts performed on his/her behalf by a passive robot (slave) in location B. Because intention is a prerequisite, robots generally have not been thought of as capable of agency, although this situation is changing. Human masters endow robotic slaves with the responsibility to act as proxies, or agents, on their behalf, presenting a conundrum regarding agency in human-machine systems. To complicate this problem further, suppose there is not a 1:1 correspondence between a master's expressed intention and a robotic event, or that a master is unable to ascertain unequivocally that his/her intended action has been executed (for more on these questions, see Goldberg 2000). A master might be said to have lost or relinquished agency in proportion to the difference and uncertainty between the expressed intention and the acts carried out by the robot. Who or what, then, are the agent(s) responsible for the behavior of the system? Attempts to consider the varying forms and degrees of agency negotiated and exchanged between artists, participants, and technologies in multimedia works of art become even more convoluted, and will pose increasingly paradoxical questions with the continued advance of artificial intelligence and genetic engineering. In this context, the contemplation and construction of meaningful interaction matters even more.

Bruno Latour, contributing to this long philosophical discussion, turns traditional notions of agency inside out. He suggests that systems comprised of humans and technologies display unique hybrid characteristics that are not properly attributable to either one or the other, and that since such hybridity characterizes human history, the concept of agency as a trait particular to humans must be questioned (Latour 1994). Thus, it could be argued that notions such as freedom, individuality, and responsibility themselves require rethinking. As in much poststructuralist philosophy, the centered, autonomous, humanist subject ceases to exist as subject *qua* subject, but it is always already constructed as a social entity in relation to technology. Technology, in turn, is inseparable from various instruments of control and the legal, moral, and religious codes embodied and reified in the cultural institutions, economic systems, and social conventions that structure human relations. In other words, the very concept of agency (and the interrelated constellation of humanist values associated with individuality, freedom, and responsibility) is complicit with systems of power and technologies of control that deny agency by demanding conformity. From this vantage, the pursuit of individual agency (in humanistic terms) amounts to doing the devil's handiwork. Rather than earnestly pursuing technological enhancements of agency, artists might instead focus attention on deconstructing the vast ideological apparatus that enlists individuals in their own subjugation. Such an effort is the starting point for a potentially rich social project that rethinks agency around tropes of collective interaction. As background for this discussion, we shall cite several very different artistic projects that used interactive multimedia as a critical device to interrogate the hyperbole of interactivity and agency.

In 1969, Kaprow created "Hello," an interactive video happening for "The Medium Is the Medium," a thirty-minute experimental television program.[6] [Fig. 1.1.2] Five television TV cameras and twenty-seven monitors connected four remote locations over a closed-circuit television network.

> Groups of people were dispatched to the various locations with instructions as to what they would say on camera, such as "Hello, I see

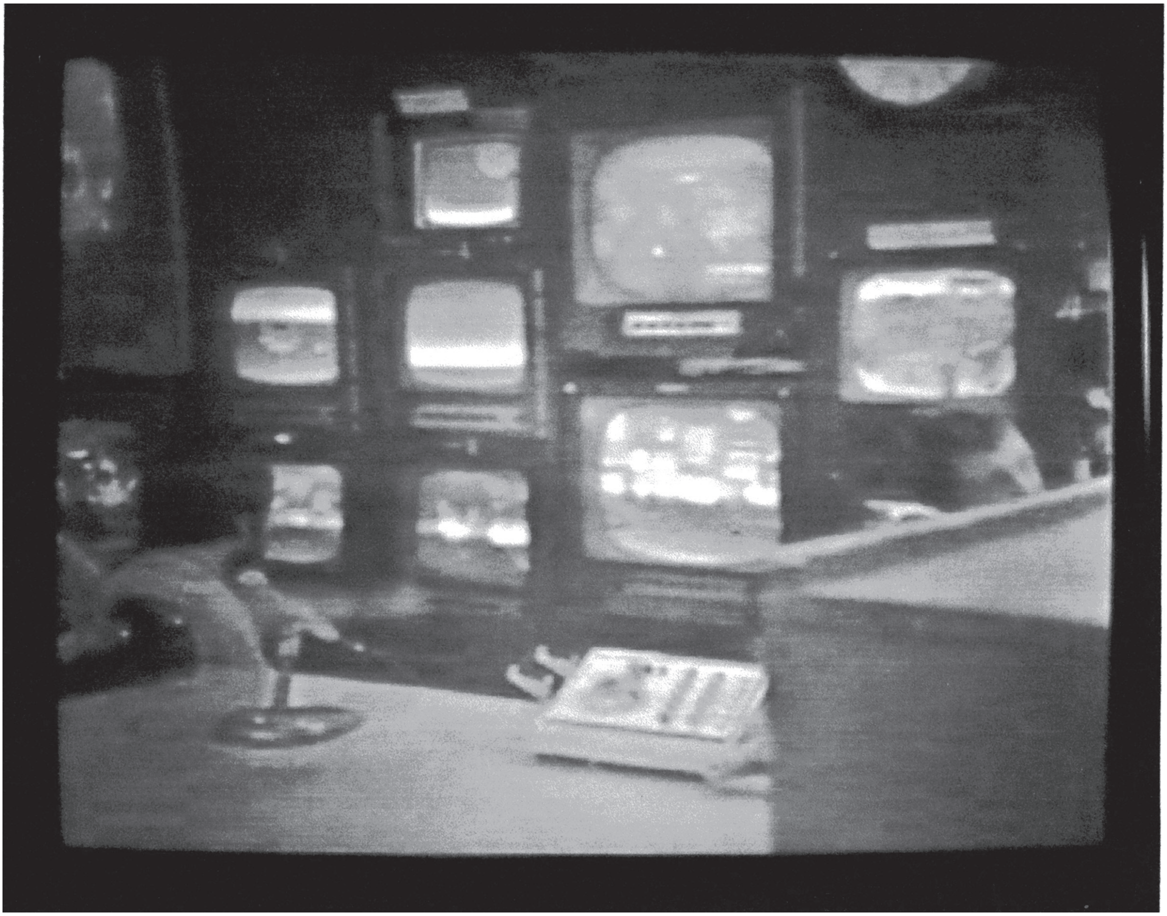

Figure 1.1.2. "Hello," Allan Kaprow, 1969. Screen grab.

> you,” when acknowledging their own image or that of a friend. Kaprow functioned as “director” in the studio control room. If someone at the airport were talking to someone at M.I.T., the picture might suddenly switch and one would be talking to doctors at the hospital.[7] (Youngblood 1970: 343)

Kaprow explained that he was interested in the idea of “communications media as non-Communications” (23 July 1998 telephone interview with author), and that the most important message was the idea of “oneself in connection with someone else” (Youngblood 1970: 343). “Hello” offered a critique of the disruptive manner by which technology mediates interaction. It metaphorically short-circuited the television network, thereby calling attention to the connections made between actual people.[8]

Following a similarly critical logic, in 1978, Peter D’Agostino proposed using QUBE (Warner Cable’s interactive television system) in a video installation that interrogated the degree of participation that QUBE advertised to offer users:

> The “interactive” system available to QUBE subscribers takes the form of a console attached to the television set that enables the home viewer to “participate” in selected programs by pushing one of five “response” buttons…the console feeds a central computer and the results of the home responses are flashed on the screen. (D’Agostino 1980: 14)

D’Agostino noted that in a 1978 program on eggs, “forty-eight percent of the homes had pressed the *scrambled* button.” [Fig. 1.1.3] Commenting on a newspaper headline that celebrated the QUBE system, the artist ironically added, “This is how viewers are ‘talking back to their television sets.’” While Warner Cable chairman Gustave M. Hauser used the rhetorics of novelty and opposition to claim that, “We are entering the era of participatory as opposed to passive television,” D’Agostino argued that such “participation is defined solely by the formal properties of the medium—rather than its content ” (D’Agostino 1980: 15). Predictably, though unexpectedly, the cable-cast component of the artist’s proposal was cancelled “due to ‘special programming’” and was never rescheduled by the network.

In 1993, Keith Seward and Eric Swensen created the CD-ROM journal “BLAM!,” a raw critique of the rhetoric of interactivity. [Fig 1.1.4] Produced at a time when CD-ROM drives were relatively uncommon, “BLAM!” attacked concepts of empowerment at the foundation of technological correctness. Wielding irony like a blunt sword, “The Ode to Interactivity” segment bludgeons users into submission with a hyper-kinetic montage of sexually explicit images and the false promises of technological utopianism. Narrated by a monotonous, rhyming soliloquy that is read in the voice of a horror show host, “The Ode” describes the narrator’s search for interactive media that will satisfy all

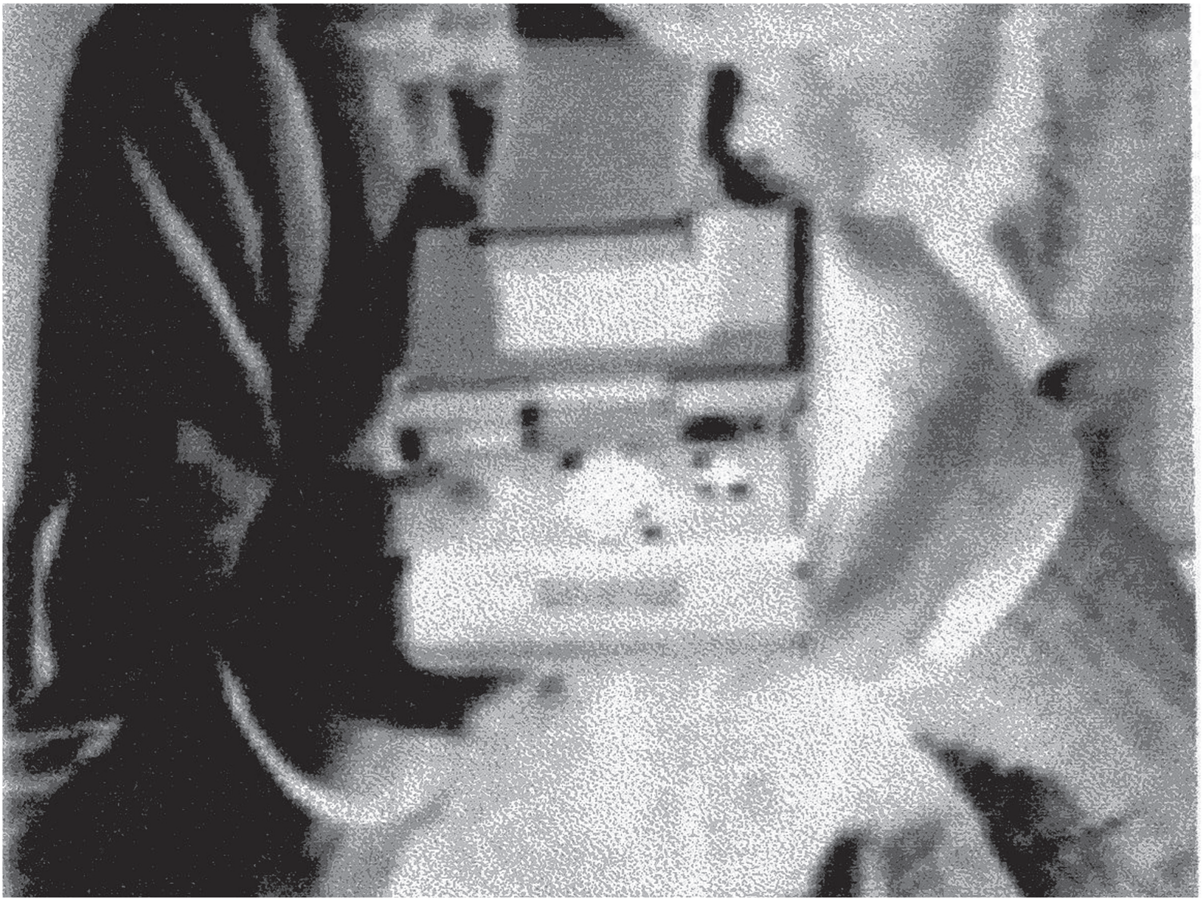

Figure 1.1.3. QUBE, detail , Peter D'Agostino, 1978. Proposal for video installation using Warner Cable interactive television system.

of his perverse sexual desires, thus making the neighborhood safe for children. The only option to experiencing the whole segment is to crash the computer. In the "Necro-Enema Amalgamated Agenda" manifesto, the authors explained their use of digital multimedia as an assault on naïve conceptions of interactivity:

> "Interactivity" is one of those euphemisms like "democracy" or "equality." There's no color to the word. It paints a grey picture of a world where used-car salesmen would give you your dollar's worth, little boys wouldn't pick on little girls, and snakes wouldn't eat cute little furry creatures…All that no-caffeine rhetoric about empowering users makes us laugh—not with

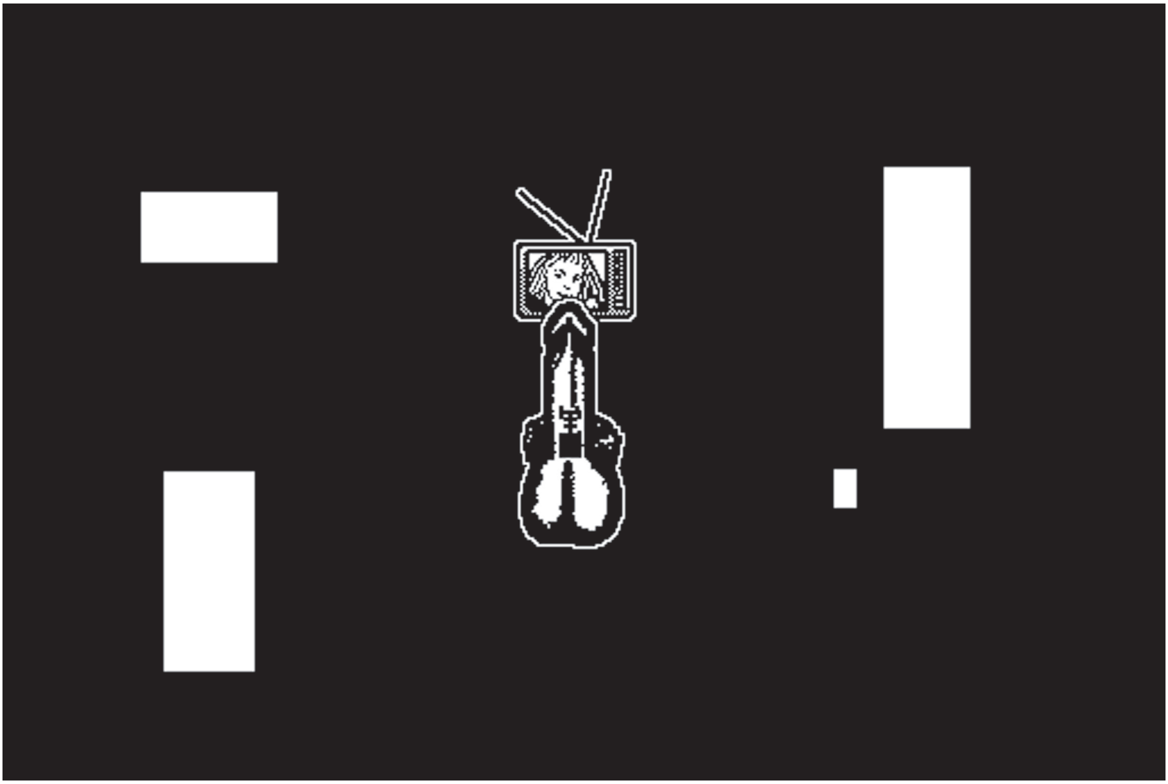

Figure 1.1.4. "BLAM!," Keith Seward and Eric Swensen, 1993, Necro-Enema Amalgamated CD-ROM, Hypercard. Screen grab,.

> but at…Giving a user more buttons to click is like giving extra links to a dog chain. Sure you can call three feet of mobility "freedom," if you want. You can think of BLAM! as empowering you, but we know that we're the ones jerking the end of your chain… We train you to use BLAM! Just as Pavlov trained dogs to salivate . (Seward & Swenson 1994)[9]

Here, technology becomes the handmaiden not of personal liberation in communal intercourse, but of an onanistic, anti-social, repressive, and degrading diatribe.

Distinguishing between agency in conventional "active—passive" telerobots (as in the master-slave relationship described earlier) and agency in "active-active" systems offers further insights into the moral conditions of interactivity (Shanken 2000). In Norman White's and Doug Back's "Telephonic Arm Wrestling" (White & Back 1986) [Fig. 1.1.5] and Paul Sermon's "Telematic Vision" (Sermon 1994) [Fig. 1.1.6] agency is symmetrically balanced between identical human-machine interfaces at remote locations. Such works may be interpreted as interrogating the hierarchical organization of occidental systems

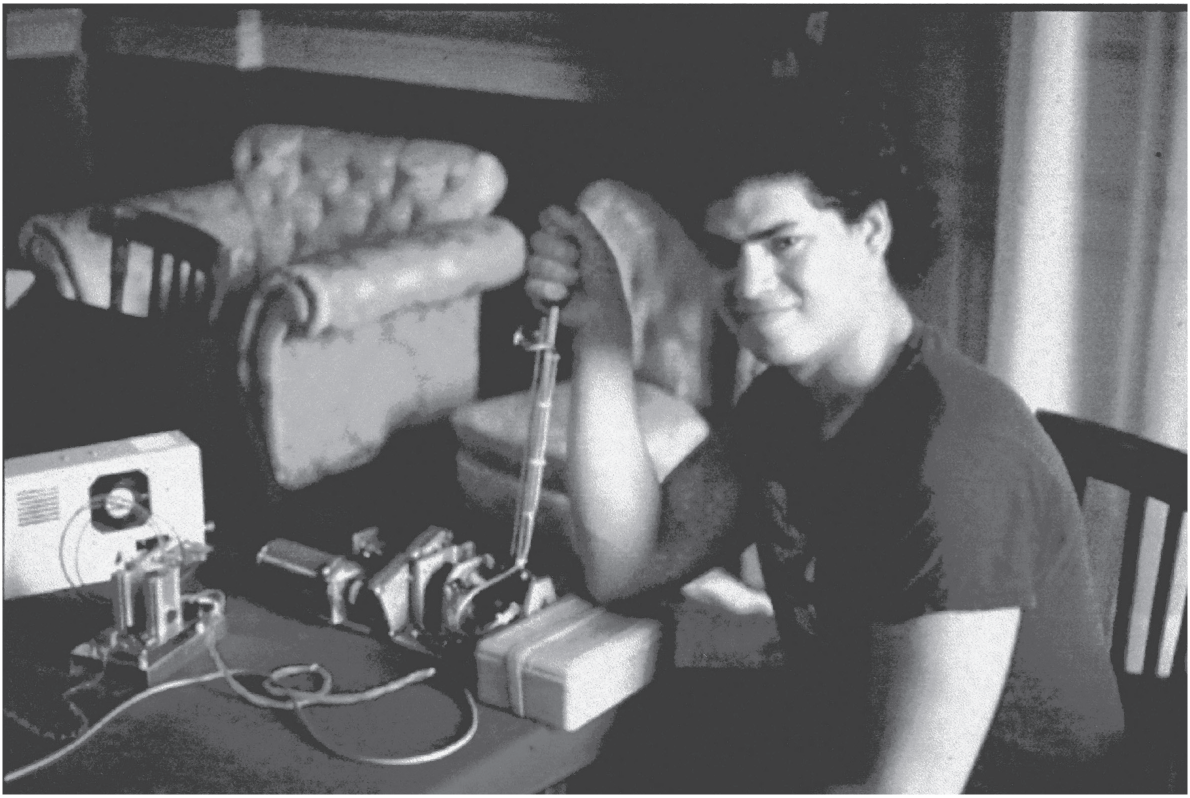

Figure 1.1.5. “Telephonic Arm Wrestling,” Norman White and Doug Back, 1986. Technician Ian McGuigan at Salerno Opera House. Dual remote installations with telephone line, force-feedback devices, electronics.

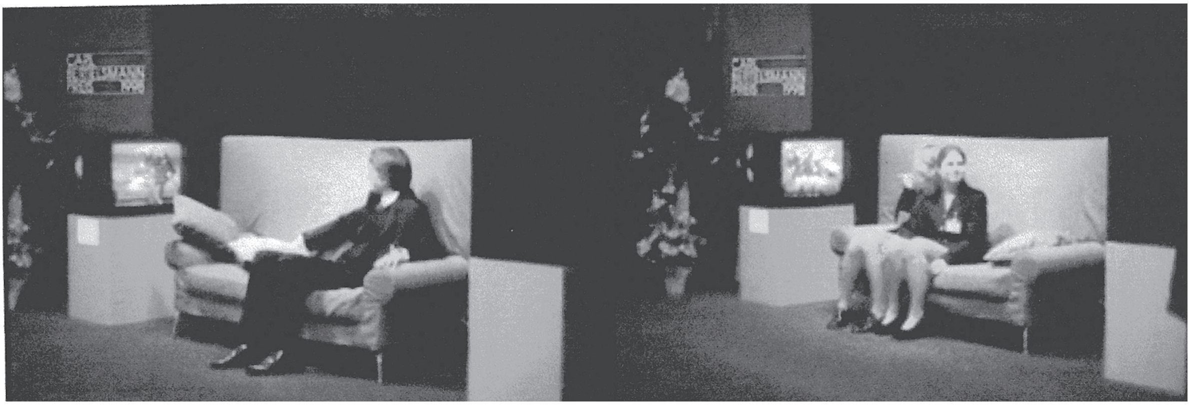

Figure 1.1.6. “Telematic Moment,” Paul Sermon, 1994. Dual remote installations with ISDN, video camera, video monitor, furniture.

of knowledge (and their embodiment in master-slave relationships from colonialism to fascism) and opening up alternative spaces for co-mutual interaction between equal partners. These philosophical issues and artistic examples demonstrate diverse forms of agency and the various ways that technology can both usurp and amplify them.

More recently, Marie Sester's "Access" (Sester 2004), a public art installation, uses Web, computer, sound, and lighting technology to spotlight individuals in public places without their consent or ability to escape the robotic spotlight being controlled by Web

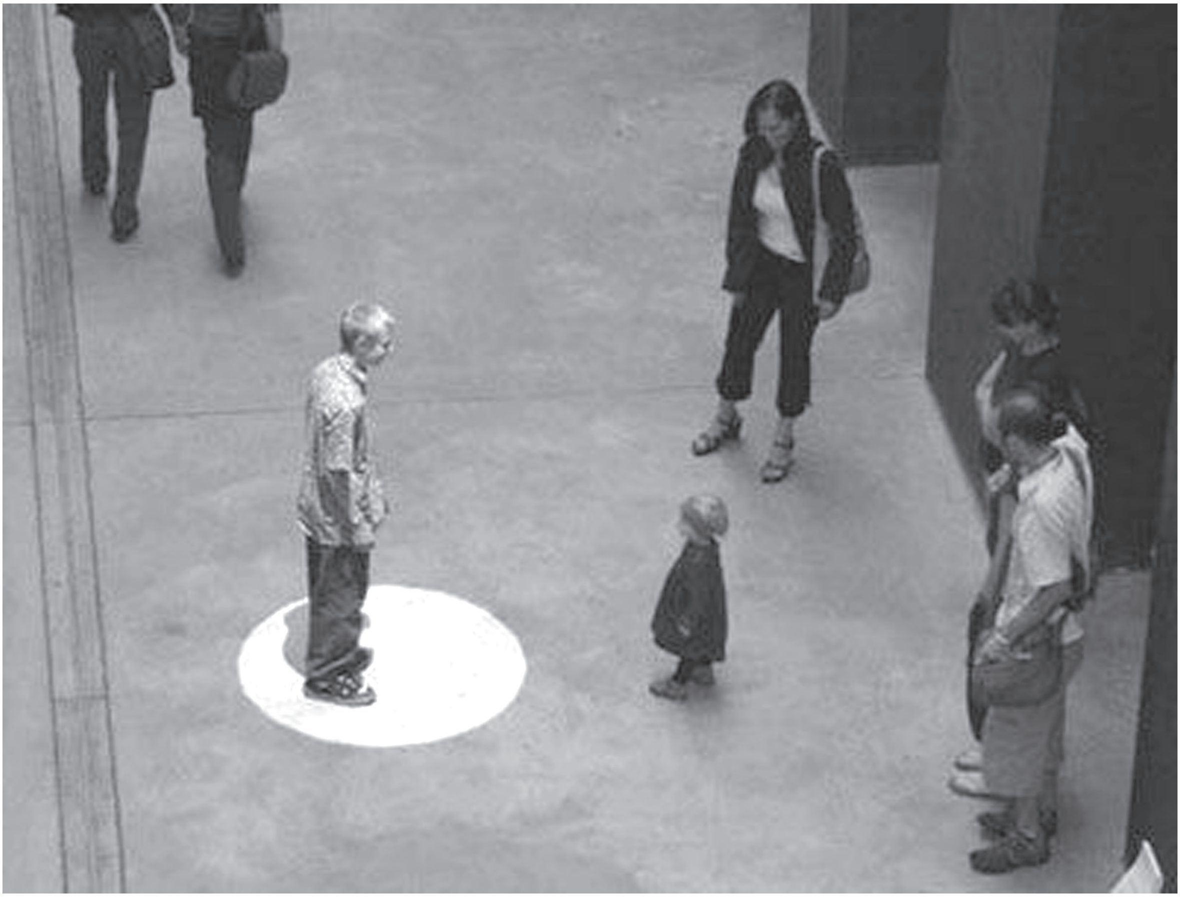

Figure 1.1.7. "Access," Marie Sester, 2001-2003/2005. Co-production: Marie Sester and ZKM (Center for Art and Media, Karlsruhe, Germany) 2005 with support from Eyebeam, and Creative Capital Foundation. "Access" lets web users track anonymous individuals in public places by pursuing them with a robotic spotlight and acoustic beam system. It explores the ambiguities among surveillance, control, visibility, and celebrity.

users. The interaction in this work was both controlled and voluntary, as some people attempted to evade the light while others basked in the public attention it brought them. In a related kind of action that did not involve interactivity, Michelle Teran's (2003) ongoing series of performances "Life: A User's Manual" (2003-present), the artist walks through urban areas and hacks into surveillance cameras to map and make visible the proliferation of the invisible, private, wireless closed-circuit television (CCTV) streams that monitor the public's movements. Such works bring into play the pervasive impact effect of surveillance technology and increasing loss of privacy after 9/11.

In addition, Maurice Benayoun's and Jean-Baptiste Barrière's "So. So. So (Somebody, Somewhere, Some time)" (2002) [Fig 1.1.8] is an interactive media installation that tracks retinal movement to create a palimpsest of memory, again, from which a viewer cannot escape. Looking through binoculars fitted with VR screens, the viewer/voyeur

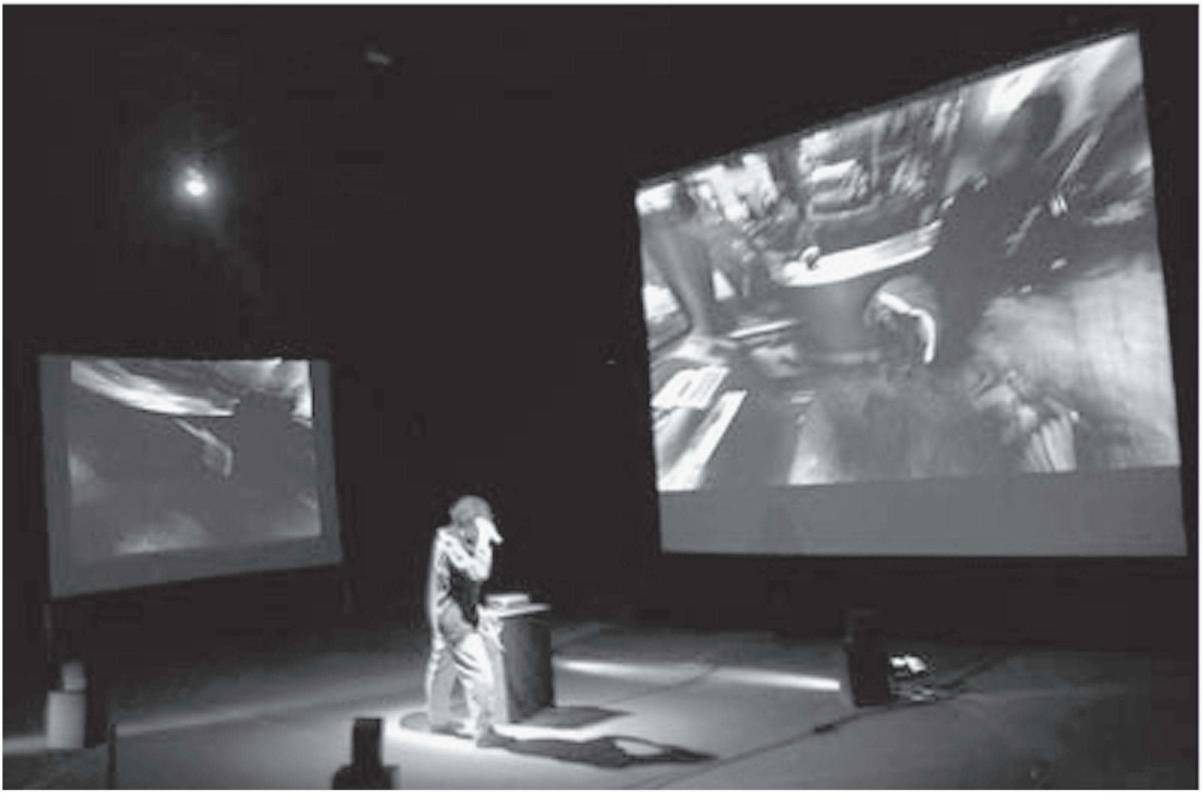

Figure 1.1.8. "So-So-So (Somebody, Somewhere, Some Time)," Maurice Benayoun, 2002. Interactive installation, Internet, VR binoculars, video projection, musical Composer, Jan-Baptiste Barriere.

searches for and hones in on a focal point. The darting of his or her eyes is recorded to what the artist calls the collective retinal memory, which registers and projects to the outside audience a visual map of the viewer's interest, thus transforming the viewer into the viewed.

If expanded forms of interactive agency are to be desired and claimed for multimedia, the following questions might be useful: How do the goals and works of contemporary artists compare with various historical efforts to produce interactive aesthetic contexts? In what ways does their use of interactive media: a) challenge or change the creative process and the ways in which artistic meaning is constructed and received? b) enable alternative or expanded roles for the viewer as a producer of meaning? c) enhance individual and collective agency as a vehicle for social change? How are the intentions of the artist and the participant related to the events that result from encounters with interactive art? Do participants have the freedom to influence real-world events or assume interconnected responsibility? Lastly, how meaningful is the act of making meaning in the context of multimedia? Such questions challenge the presumption that interactive multimedia necessarily promote agency. They demand that users reconsider the utopian instrumentality of augmenting social efficacy through technology. And they seek responsible, interdependent action amongst individuals, collectives, and their technological, cultural, political systems.

Empathy and collective interaction

"All arts can be considered interactive," Itsuo Sakane has noted, "if we consider viewing and interpreting a work of art as a kind of participation" (Sakane 1989: 3; Rokeby 1995: 134). In short, viewers of conventional artworks are not simply passive recipients of encoded messages, but active interpreters, who construct meaning through engagement with symbolic form and the materiality of its concretion. In digital art, participation in the processes of creative interaction becomes central to the content of a work, and to see one's volition materialized arguably heightens viewer involvement. The nexus where the tropes of movement and engagement meet is key to charting the intellectual history of audience involvement in art. From cave paintings to chrono-photography, virtual reality installation, and genetic art, artists have sought to represent and connect art to life through representations and presentations of movement. Movement—both virtual and real—was used by artists throughout the twentieth century to activate viewer perception and to include "the spectator in the center of the picture" (see Boccioni et al. 1910: 290). With live action and the appearance of the artist in, and as, the work of art in the 1950s, life routinely entered the frame of art. The very presentation of lived experience is itself a manifestation of corporeal engagement in the socio-political cultural sphere. At mid-century, interactive works in both technological and nontechnological media linked theories of empathy to movement in life and the motility of interpersonal relationships. Henri Bergson's influential concept of durée (duration) is significant here, for the ways in which he suggested the blurring of subject and object in the fluid, temporal continuity of consciousness (Bergson 1911; Antliff 1993). In 1902 Theodor Lipps claimed that a viewer might "imaginatively project himself [sic] into the object" in his concept of *Einfühlung* (empathy in the sense of "feeling-in"); and Wilhelm Worringer (1953) brought these notions into widespread discussion in "Abstraction and Empathy" (Barnes et al. 1997; Lipps 1902). The unity of concepts regarding empathic projection and aesthetic research in movement culminated when artists introduced the body in interaction with the viewer.[11] This conjunction augmented a structural change in art: it increased interrelation through metonymic extension, drew the physiological processes underlying visual perception into the terrain of interactive contingency, and altered the communicative means of art from a dependence on metaphor to one of virtual and actual connection.[12] This history of motion, empathy, and performance has shown that interactivity is not simply a question of media or technology but involves art audiences in the most critical conditions of political life: inter-subjective engagement and interpersonal responsibility.

Such changes in art bring us back to Hansen's "Hall Street Happening" (1963), which challenged the limits of interactivity by dissolving the boundaries between art and life so effectively as to imperil a participant. "Hall Street Happening" unleashed the anarchy of unmediated levels of the real, enabling an apparently indistinguishable interaction, and illuminating the extreme poles of agency in art. In this regard, drama theorist Geoff Pywell theorized that, "the closer to actuality the artwork approaches, and the more it behaves like the real thing, the greater is the strain on [the] mimetic contract" (Pywell 1994: 27). Not surprisingly, when Hansen's ill-fated event raised the stakes of physical interaction and personal liability to a dangerous level, the artist wanted to flee the scene. In addition to signaling the boundaries of interactivity, Hanson's happening also exposed the circumscribed codes of conduct that govern art, codes that disable empathic, responsible interactions by dictating that art must remain at an autonomous aesthetic distance. "Hall Street Happening" dissolved the boundaries between art and life in a perverse way: viewers and participants were involved in an interactive work but in so doing rescinded their agency—their humanity—to the etiquette of art. In short, indeterminate interactivity vacated agency, and with it, responsibility. Participants and viewers alike could not mobilize action, let alone empathy for and interaction with the screaming dancer, because they did not realize that her accident was not part of the happening itself. Hansen's "Hall Street Happening" is, thus, simultaneously an ideal model of interactivity (in its total synthesis of art and viewer), and a counter-model of interactivity (in its failure to activate agency at the deeper levels of meaningfulness that structure interaction). As a moral to the story of "Hall Street Happening," we suggest that agency that sets empathy in motion toward responsible interaction and constructive change is meaningful.

The meaningfulness of interpersonal engagement and the psychological stakes of interaction must be extended. Once this territory is accessed, the moral, political, and affective considerations of human activity come into question—and that is meaningful. As we noted earlier, despite exaggerated claims to the contrary, authorial power and agency in digital multimedia remain largely entrenched in the purview of artists, while viewers, as D'Agostino so astutely noted in 1978, get to select how they like their eggs cooked. Such kinds of interactivity remain tied to a paradigm of Enlightenment individualism, and are distinctly apolitical. This is especially true in the context of capitalism, in which commerce and the culture/theory industries readily co-opt artistic products. At the other end of the spectrum from capitalist individualism, communist socialism has proved equally hegemonic, as the history of the former Soviet Union so clearly demonstrated.

Between these poles, meaningful collective exchange remains a model for art to pursue. Philopsher Andrew Feenberg has noted:

> In reality subjects and means are dialectically intertwined: the carpenter and the hammer appear accidentally related only so long as one does not consider carpentry as a vocation shaping the carpenter through a relation to the tools of the trade…In such cases, the agent is its means of action viewed from another angle; they are not accidentally related. (Feenberg 1991: 65–66)

Andrew Feenberg further observed that "technology is not neutral but fundamentally biased toward a particular hegemony, [and] all action undertaken within its framework tends to reproduce that hegemony," within both "authoritarian socialism and reformist capitalism" (Feenberg 1991). Because individuals and society are not autonomous, but are interdependent, he concluded that, "a coherent conception of radical change must identify contradictions and potentialities traversing both society and its individual members in ways specific to each" (Feenberg 1991). In other words, social transformations that challenge the status quo can occur only when interconnectivity is honored and when the complicity of technology in hegemony is acknowledged and reformed.

Fluid electronic networks can enable exchange and revitalize collectivist strategies in ways that may alter entrenched structures of power and capital by waging critical philosophical and aesthetic offensives coordinated by interconnected, interdependent participants.[13] Such a potential has already been exhibited in the vitality of Internet interaction on a range of social and political issues, demonstrating how the meaningfulness of interactivity is inseparably tied to the ability of agents to change a work, the audience, and larger cultural and social milieus. In 1985, Ernesto Laclau and Chantal Mouffe imagined "a radical democratic politics" of shifting vortexes of shared power and diversified discourses (Laclau & Mouffee 1985). Fifteen years later, Michael Hardt and Antonio Negri identified political interchange in different but related terms: "Today the militant…must rediscover what has always been its proper form: not representational but constituent activity" (Hardt & Negri 2000: 413). Constituent activity implies the acts of empathy, responsibility, and interdependency demanded by contingency. To expect anything less from interactivity is to be missing in action.

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Endnotes

1. This essay was first completed in 2000 in an entirely different circumstance for the authors. In addition, much has changed since that date in art and art-historical publications on the topic of interactivity. For example, John T. Caldwell's essay "Second-Shift: Media Aesthetics, Programming, Interactivity, and User Flows" (2003: 127-144) contains views similar to those we explore in our essay but updated in the language of "digitextuality." More recently, a phenomenological method for interpreting the bodily experience of digital multimedia interfaces, particularly VR, has been proposed by Mark B. N. Hansen in *Bodies in Code: Interfaces with Digital Media* (2006), though its implications for an ethics of agency remain to be explored. While we individually hold varying views on the subject today and were able to update this essay only in very limited ways, we nonetheless believe that aspects of it remain pertinent to current discourses.

2. For further discussion of the commercialization of interactivity see, Söke Dinkla, "The History of the Interface in Interactive Art," http://www.uiah.fi/bookshop/isea_proc/nextgen/08.html.

3. Simon Penny has also acknowledged "the vast untapped knowledge base for the development of interactive media [that] exists in the corpus of Happening-Environment-Installation-Performance-Fluxus artwork of the last thirty (sic) years" (Penny 1995: 53). Actually, the history of live art dates from the early 1950s. While there is a large body of art-historical writings on such work, this research and writ-

ing has been widely ignored in Art History. A good example of early multimedia interactivity is Myron Krueger's "Metaplay" (1970), which used a computer data pad that enabled images to be sketched and combined in real-time with a video image. Krueger aimed to engage the viewer/participant directly in a work of art, a goal that came out of the nexus of research between Happenings and technology in the late 1960s. A participator in the "Metaplay" environment could observe the composite image of his/her own movements together with the artist's responsive drawings, and respond in turn. See Krueger's *Artificial Reality II* (1991: 18-24). In subsequent works by Krueger, such as "Psychic Space" (1971) and "Videoplace" (1975), computers created and altered virtual environments in response to participator behavior, producing what the artist—in the mid-1970s—termed "artificial reality." Numerous artists have transferred their interest in participatory concepts of art, to multimedia installations, among them Jeffrey Shaw, Peter Weibel, Lynn Hershman, Jill Scott, and Bill Seaman.

4. Digital art also can be seen as a technological cousin of various large-scale social and political projects such as Mierle Laderman Ukeles' "Maintenance" performances with New York City sanitary workers (1968 to the present), Tim Rollins' work with Kids of Survival (K.O.S.) beginning in 1982, Suzanne Lacy's interactive public projects for the last thirty years, including her most recent "Code 33" (1999), which brought thousands of people in Oakland, California, into the inner city to listen in to one hundred Oakland police officers and one hundred inner city youth talk to each other about in an interactive public workshop; and *Collectif d'art sociologique*, founded in 1974 by Hervé Fischer, Fred Forest, and Jean-Paul Thénot, a group organized for the purpose of augmenting interactive social contexts and public intervention in and alteration of the media.

5. See also, Jean Baudrillard's discussion of how media produce ideology in his "Requiem for the Media" (1972).

6. Produced by Fred Barzyk for the Boston public television station WBGH (Davis 1973: 90). The other artists commissioned to contribute to the show were Nam June Paik, Otto Piene, James Seawright, Thomas Tadlock, Stan Vanderbeek, and Aldo Tambellini.

7. Since his "Handing (The Austrian Tapes)," 1972, Douglas Davis has created numerous critical works dealing with the subject of interaction and the media.

8. The terrain of interaction has been widely mined by a variety of artists, but it has received much criticism by artists experimenting with technological media. Ca-

nonical in this regard is Bertolt Brecht's manifesto "The Radio as an Apparatus of Communication" (1932), which denounced the conventional unidirectionality of radio transmission (from one point to many points) and advocated a multipath model of radio communication (from many points to many points), whereby listeners became broadcasters. Such ideas have been central to diverse conceptualizations of interactive art from video and television to computer networking and multimedia (Brecht 1987: 53-4).

9. The segment "This Is Your Final Warning!" does not permit the user to leave before reading the entire piece. It punishes premature attempts to depart with a special supplement, "Devil in a Dead Man's Underwear." Only crashing the computer can stop this unbearably banal poem (accompanied by voice and annoying sound effects).
10. For a different view by art historians who have theorized the period as apolitical and "indifferent" see Moira Roth (1977: 46-53); and Francis Frascina (1999).

11. Kinetic Art and Nouvelle Tendence collectives (Groupe Recherche d'Art Visuel (GRAV) in Paris, ZERO in Germany, Gruppo T and Gruppo N in Italy, and many others), researched, practiced, and theorized audience participation in visual art. Nicolas Schöffer's "CYSP I," 1956, for example, was programmed to respond electronically to its environment, and to involve the viewer as a key component, influencing how the work behaved over time. The best, most comprehensive overviews of the history of kinetic and participatory art remain Frank Popper's *Origins and Development of Kinetic Art* (1968) and *Art – Action and Participation* (1975).

12. For a discussion of the operations of metonymy in the interconnection of subjects, see Stiles, "Synopsis of the Destruction in Art Symposium (DIAS) and Its Theoretical Significance" (1987: 22-31); and, more recently, Stiles' "Performance" (2003: 75).

13. The best example of such networks is the powerful resistance to World Trade and G8 globalization conferences. The current cultural desire for such a social, aesthetic, and political interchange accounts for why the Situationist International (SI) strategy of détournement remains so compelling. The theory of *détournement* suggests the "integration of present or past artistic production into a superior construction of a milieu...détournement within the old cultural spheres is a method of propaganda, a method which testifies to the wearing out and loss of importance of those spheres (Situationist International 1958, reprinted in Stiles and Selz 1996: 702).