

“CASE STUDIES: PSYCHOSOCIAL HAPPENINGS IN MEDIATED ENVIRONMENTS”

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Abstract

One of the virtues of our changing times is that new media has challenged us to rethink and re-examine our basic presumptions about reality and the reality that is virtually perceived. From the perspective of an electronic-media artist, I present a body of work (CASE STUDIES) of performative-like installations comprised of 3-D structures integrating video imagery with the reality of the physical, psychological, virtual, and social worlds. These structures are instigators for enticing “social happenings” whereby participants and viewers become subjects from an observational perspective, providing a simulated clinical “case study.” Raising issues of belief and perceptions of trust in the constructs of mediated environments, the demarcation between virtual risk and real risk (virtual reality and reality) breaks down.

Introduction:

With the impact of technology, it is becoming harder to distinguish between what is virtual, what is fantasy, and what is considered to be real. Is reality in a postmodern society becoming more like theater, a technodrive happening whereby our perceptions and experiences are continuous states of illusion? In current times, perhaps illusions are redefining our sense of reality.

Perspective of an Electronic-media Artist:

I am an electronic fine artist who uses new media to create virtual environments--social happenings. The works I produce (3-D video / kinetic sculpture installations) investigate the psychosocial effects in the constructs of technodrive environments. I use technology to initiate a communal exchange of reactions among both viewers and participants, thus, providing a simulated clinical “case study” through an observational perspective.

In this essay, I reference two specific works of art: *CASE STUDY 107* and *CASE STUDY 309*. These works provide a visual, conceptual, and concrete model to represent the psychosocial and physiological perceptions and responses in a mediated environment.

Positioning Virtual Reality:

Author of the text *Virtual Reality*, Howard Rheingold claims: “The heart of VR is an experience--the experience of being in a virtual world or remote location.”^[1] Sharing a similar view,

Jonathan Steuer in his article entitled “Defining Virtual Reality: Dimensions Determining Telepresence” argues the position of VR to be a “particular type of experience rather than as a collection of hardware.”^[2] These perspectives shift the focus of virtual reality from a particular hardware package to the perceptions of an individual in a mediated environment. It is from this position of mediated perceptions that I draw a parallel to a postmodern, technodrive happening whereby the virtual, the physical, and the psychological realities merge.

CASE STUDY 107:

CASE STUDY 107 (Figure 1) consists of two chairs bolted back to back, positioned directly under a suspended cinder block. With the aid of four pulleys attached to the ceiling, the cinder block is held in place by a 3/4-inch rope. The rope leads to two black boxes that encase 19-inch color video monitors. As illustrated in Figure 2, the objective is to create an optical illusion, making it appear as though the rope passes through to the underside of each black box. The physical weight and gravity of the suspended cinder block creates an illusion (perception) of stress, tension, and virtual danger--conversely, a “true” physical and emotional risk.

An eight-minute video segment displays a similar 3/4-inch rope, which gradually unravels. As each strand of rope breaks (video imagery), the cinder block overhead physically shakes. Simultaneously, the two chairs are jolted with an electronic vibration--a shock.

CASE STUDY 107 revealed the following observations:

1. *Diversion: Selective optimum stimuli*

The bystanders (the arena of viewers) appeared to believe that the people in the chairs were jumping out of their seats in fear that the cinder block overhead would fall. In actuality, the jolting chairs caused the unexpected stimulus-response. This tactic (optimum selective stimuli of diverting the expected with the unexpected) was used to maintain a level of novelty and arousal, as well as to alter expectations and perceptions of both participants and the audience.

2. *Attention Span: Mental visualization*

The video ended with a very thin thread virtually appearing to hold the weight of the cinder block. After watching the complete video segment, people proclaimed disappointment that the rope didn't break. It seemed that the slightest possibility of danger was the motive for capturing and maintaining the attention span for the entire length of the "performance." This fascination supports contemporary German philosopher Hans-Georg Gadamer's argument in that a "work of art requires imaginative activity."¹³ Interestingly, the observation of the viewers and participants seemed to include the imaginative activity and physical attraction to the element of apparent danger. In other words, it appeared the viewers were unconsciously drawn to the visual of the cinder block falling on the two participants sitting in the chairs, awaiting to see the experiential after-effects. Perhaps this desire of risk with a fascination for danger says something about our society.

CASE STUDY 309:

Sharing similar characteristics with CASE STUDY 107, CASE STUDY 309 (Figure 3) utilizes a personable language, such as kinesthesia (uniting physical sensations with sound and imagery). The installation consists of two identical structures, each measuring 12 feet high, 4 feet wide, and 4 feet deep. Once again, the invitation accommodates viewing for two participants. However, the viewing perspective (Figure 4) in this installation requires the participants to lie on their backs (a vulnerable position) on creepers and roll beneath a suspended two-foot-square black box. The boxes (as in CASE STUDY 107) encase 19-inch video monitors. The



Figure 1.
CASESTUDY 107, 1997
(video / kinetic sculpture)

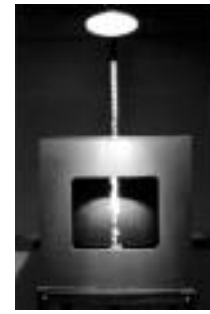


Figure 2.
CASESTUDY 107
(detail view)

objective is to synchronize the video imagery with that of physical kinetic sensations similar to CASE STUDY 107.

One of the towering structures depicts a video image of a cement brick falling in the direction of the reclined viewer. At the moment the brick breaks the glass (simulating the glass of the video screen), the box physically shakes. Similarly, a video image displays an egg being dropped, then removed by a vacuum cleaner, at which time an actual vacuum cleaner pulls the participant's hair from the headboard of the creeper. Other synchronized visual-audio, kinetic elements are images of machinery parts that correspond to vibrating motions of head-and-body massage units.

CASE STUDY 309 revealed the following observations:

1. *Sensory Adaptation: Selective optimum stimuli*

Sensory adaptation refers to a "decrease in sensory response to a constant or unchanging stimulus."¹⁴ As both stations (structures) were visually identical in construction, each provided different visuals corresponding to different physical sensations. The structures were purposely designed to be identical as to challenge predictability (sensory adaptation) and to create a momentum of curiosity and interaction between the two stations.

Research indicates that an environment designed to minimize stimulus input is not something humans generally seek out.¹⁵ Dr. Daniel Berlyne, a major figure in the study of motivation, references four valuable traits for research into stimulus selection:

novelty, uncertainty, conflict, and complexity.^[6] By altering the viewing perspective (a non-traditional approach to viewing a work of art), disorientation was a “stimulus selection” employed in *CASE STUDY 309*. Disorientation is defined as overwhelming or conflicting stimuli that complicates the brain’s correlation of information. The brain consequently sends false input to the various senses whereby the altered perceptions are, in turn, experienced as reality.^[7] The only way to view and experience *CASE STUDY 309* was to place oneself in a vulnerable position. This disoriented position involved an element of risk with plausible physical danger of the suspended video monitor falling.

2. Risk Factor: The demarcation between virtual risk and real risk

Galleries displaying *CASE STUDY 309* requested a signed release form from each participant stating the risks involved and declining liability if a mishap occurred. Obviously, this added another dimension to techno-driven virtual environments. By raising issues of belief and perceptions of trust, the demarcation between virtual risk and real risk (virtual reality and reality) breaks down.

Synopsis:

In both *CASE STUDY 107 and 309*, the sculptural contraptions took a life form all their own. The structures became instigators for enticing and facilitating a “social happening”--borrowing the term “happening” from Allan Kaprow, artist and author of *Assemblage, Environments and Happenings*. Participants and viewers were unbeknownst “subjects” from an observational perspective, a view whereby human behavior, psychosocial responses, and social interaction could be analyzed in real time.

Each case study invited participants and viewers to exchange roles. As the arena of viewers took on the role of performers, their participatory response gave additional meaning to the perception and interpretation of the mediated environment. The direct experience actually caused participants to become an even more knowledgeable viewer.

In both case studies, the following elements were points of consideration for merging the constructs framed by each reality:



Figure 3.
CASESTUDY 309, 1998
(video / kinetic sculpture)



Figure 4.
CASESTUDY 309
(detail view)

Somesthetic Senses:

Somesthetic is a combination of "soma," meaning body, and "esthetic," which means “to feel.”^[8] Somesthetic senses include receptors of the skin (touch), kinesthetic (movement), and vestibular senses (balance).

Research has discovered that “skin receptors produce at least five different sensations: light touch, pressure, pain, cold, and warmth.”^[9] Because the body has more nerve endings for the sensation of pain, the key stimuli in both case studies was that of (implied) pain, engendered by elements of perceived risk and danger. The interesting phenomena is the “sense of truth” and realism that results from creating an illusive virtual pain versus real physical pain. The physical body reacts and responds in a similar biological and physiological fashion, whether or not the pain is physical or perceptually experienced. The brain triggers the release of a chemical called beta-endorphin (similar to morphine) to combat pain.^[10] Receptor sites for endorphins are located in the same area of the brain associated with pleasure, pain, and emotions.^[11] Researchers have concluded that “there is reason to believe that pain and stress cause the release of endorphins. These in turn induce feelings of pleasure or euphoria similar to morphine intoxication.”^[12] I conclude that the physical and emotional responses resulting from the (perceived/real) stress and tension in both case studies caused these receptor sites to release endorphins, thus producing a “peak experience.” A peak experience, a term coined by American psychologist Abraham Maslow, is defined as the cognition of being, an ecstatic moment, an awareness of the body.^[13]

Humor:

In each case study, it was important for play to promote the language of humor--the ability to laugh at oneself and with others. Patricia Keith-Spiegel, a researcher in the psychology of humor, notes that there are four elements deemed by many theorists as necessary (though not sufficient) to appropriate conditions for the experience of humor and laughter: the element of surprise, the element of shock, the element of suddenness, and the element of unexpectedness.^[14]

With the use of bizarre video imagery, absurd kinetic devices, and tactics that imply risk and danger, I was able to produce these four elements in each case study. These elements enticed (triggered) the release of endorphins, and thus, created peak experiences for both the participant and the audience. It was observed that humor was the communal reaction as a result of the combination of stimulus and response, creating the appropriate conditions for social interaction. This observation of communal laughter reflects the studies of Konrad Lorenz, one of three recipients to share a Nobel prize for work on behavior: "Laughter produces, simultaneously, a strong fellow feeling among participants. . . . Heartily laughing together at the same thing forms an immediate bond."^[15]

References:

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9. *Ibid.*, 178.
10. *Ibid.*, 183.
11. *Ibid.*, 183.
12. *Ibid.*, 183.
13. See Abraham, H. Maslow, *The Farther Reaches of Human Nature* (New York and London: Penguin Books, 1971).
14. Jeffrey Goldstein and Paul McGhee, *The Psychology of Humor: Theoretical Perspectives & Empirical Issues* (New York and London: Academic Press, 1972), 9.
15. Jacob Levine, *Motivation in Humor* (New York: Atherton Press, 1969), 12.
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Risk Hunger:

An additional trait evident in both case studies was the element of risk. Immersed in a technoculture, we wrap ourselves in a cocoon of safety, comfort, and convenience to the degree that we have become bored. Ralph Keyes, author of *Chancing It: Why We Take Risks*, claims that we suffer from "risk hunger."^[16] Paradoxically, what is most revealing may not be the risks people take, but the ones they don't take. For example, for some individuals the prospect of being rejected by another poses a greater risk than engaging in an activity like bungee jumping. Could virtual environments promote an unemotional, risk-free society whereby the attachment for objects and virtual identities govern human interaction on the physical plane? Will we become a culture that lacks a social/kinetic language that builds on intuition developed from the interpretation of gestures, expressions, and body languages communicated in the physical reality?

Conclusion:

Aside from a theoretical perspective, whichever reality in which we decide to engage, I suggest that we maintain one important element: our sense of humor--the ability to laugh at ourselves and with others.