## Time as Medium

### Five Artists' Video Installations

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### OVER THE LAST 30 YEARS ARTISTS HAVE EXPLOITED TIME AS A

unique effect of video. Dissociated into segments and reconstituted in diverse ways, video time is an expressive element in the installations of Bruce Nauman, Nam June Paik, Dan Graham, Bill Viola, and Gary Hill. Although not motivated by scientific paradigms, video-makers' work often bears on the evolving concept of time in twentieth century science.

the mid-1960s, when the introduction of the Portapak video camera to the consumer market initiated video as an art form, the ideas of critic Clement Greenberg were well known within the artistic community [1]. His analysis of Modernism stipulated that each discipline must search for and determine what is unique and irreducible to that art. Many of the artists who tried their hand at video were modernist in the Greenbergian sense. They focused on the effects peculiar and exclusive to video.

In their experimentations with the medium, video-makers pointed their cameras at the live picture on the monitor and discovered the recursion phenomenon popularly known as feedback. They colorized black-and-white sequences and rearranged the digital image on the screen by modulating the video signal. In addition, various forms of interactivity, such as using a magnet to warp a television image, added a new dimension of "nowness" to the exploratory works of these artists.

A fuller study of time resulted from the interplay between the viewer, the live camera, and prerecorded video material. Time was speeded up, slowed down, frozen, and otherwise mangled within a context that allowed viewer participation. The ability to split time into segments and reconstitute them within the actual flow of the present moment is unique to video.

The course of real time—the order of events and their duration—is identical to that of video time. Anyone with a portable television at a football game would confirm that the action on the set temporally matches the play on the field. The correspondence leads viewers to perceive any modification to the normal flow of video events as a tampering with real time. Thus artists discovered in video time a medium with expressive qualities. In transfiguring the ribbon of time that is video, artists worked directly with an elusive idea that has engaged philosophers for millennia. The resulting art, like the ideas put forth by science, underscored the complex character of time.

At the beginning of this century, Newton's notion of absolute time (a reference frame for all temporal measurements) was superseded when Einstein declared that time is meaningful only in association with space. He introduced an infinity of times, each linked to one of an infinity of spaces. In quantum mechanics the concept is equally odd, linking time to energy through the uncertainty principle and then abandoning what little remains of these mental constructs in the abyss of complementarity, a theory that defies rational apprehension [2].

Video-makers are not concerned with explicating the large questions that preoccupy scientists. In their handling of time, artists rework commonly held notions at least as often as they incorporate scientists' radical ideas. Rarely do these domains intersect as effectively as in the art initiated by video technology.

#### Shock of the Present

In *Corridor Installation* (1970), Bruce Nauman lined up six long corridors, as if offering a traveler a choice of realms to explore. Three of the corridors are only wide enough to peer into, and the others so narrow that they are barely passable. One of these corridors has two identical monitors at the far end, stacked one on top of the other. On each screen is an image of that empty corridor. The simplicity of the arrangement is curious, enticing. Entering the confining space forces one to proceed in small steps, elbows pressed tight against the body. Suddenly one's picture, shot from behind, appears on one of the two monitors. This monitor is live, in the present. When turning about to find the camera, which is positioned above the entrance, one's face appears on the monitor; but

Barbara London, Museum of Modern Art, 11 W. 53rd St., New York, NY 10019, U.S.A. Received May 1, 1995 because one is looking backwards at the camera, the image on the monitor is not accessible. Spinning between camera and monitor, the visitor cannot capture the instant when his or her visage is on the monitor. These two events—a viewer looking at the monitor, and the shot of his or her face on the monitor—cannot occur simultaneously in the present.

The other monitor, not connected to a camera, shows a tape of the empty corridor. The unchanging picture on this monitor mocks the efforts of the viewer to alter the order of events on the live monitor. Installation art often completely surrounds the viewer. For someone immersed in such an installation, the word "participant" portrays the relationship to the work more accurately-or perhaps "victim" is more appropriate in the case of Corridor Installation. The experience is somatic. The spectator's body feels trapped, hemmed in by walls as well as by the inflexible nature of the present moment.

#### A Video Koan

In Nam June Paik's installation TV Buddha (1974; Fig. 1), a video camera captures a sculpture of the Buddha and transmits the live image to a monitor. The Buddha, gazing knowingly at his image on the screen, evokes an obvious question, a video koan: What is the difference between the Buddha staring at a live (present time) image of himself and the Buddha confronted with a replay of a videotaped (past time) representation? For a viewer studying the Buddha on the monitor, clearly there is no difference. An image on television does not carry a time signature. As Eastern philosophy teaches, "Time is an illusion"; among Western philosophers, "Time is a human construct" expresses a similar conviction.

The monitor, housed in an ovoid plastic enclosure, is attractive, and the sculpture of the Buddha is particularly beautiful. Asia, in its timeless wisdom, appears adequate to the challenge of modern technology. The confrontation is

balanced and contemplative but also suggests conflict. After all, Zen koans do have answers, often dispensed by a traveling monk who wishes to supplant the reigning master of the monastery. To Paik's koan, the sojourner might respond by leaping into action and placing a hand over the camera lens. This gesture accentuates the difference between a live connection to a camera and a prerecorded tape, but as with many koans, the rejoinder only launches other mind twisters.

# Reflections in Space and Time

Monet's famous paintings of water lilies put multiple spaces in the same place. At least three distinct spaces can be discerned: the surface of the water on which the lily pads float, the shallow space below the surface of the water where the stems of the water lilies are visible, and the sky of clouds reflected from the pond's surface. Monet intends that the three milieus be seen concurrently. Though this spatial



Fig.1. Nam June Paik, TV Buddha (1974). Installation with closed-circuit video camera, monitor, and sculpture. (Photo courtesy of the Museum of Modern Art, New York.)

illusionism is not uncommon in Western painting, the notion of many spaces within the same space clashes with normal experiences of space.

Einstein's recognition of multiple spaces is also enigmatic. He asks us to imagine a small box s situated, relatively at rest, inside the hollow space of a large box S. Then the hollow space s is part of the hollow space of S, and the same small space that contains both of them belongs to each of the boxes. When s is in motion with respect to S, however, the concept is less simple. One is then inclined to think that s encloses always the same space, but a variable part of the space S. It then becomes necessary to apportion to each box its particular space, not thought of as bounded, and to assume that these two spaces are in motion with respect to each other. Einstein elaborated this notion in his theory of special relativity, which proposes that at every place, there are an infinite number of spaces, each in motion with respect to one another [3].

The multiplicity of spaces understood in Einstein's conception and perceived in Monet's painting can be experienced in Dan Graham's Present Continuous Past(s) (1974; Fig. 2). The installation consists of a room with mirrored walls and a monitor inset into the middle of one wall. Reflections of everything within the room stretch as if reaching toward a distant horizon. Usually people within a multi-mirrored enclosure, such as a hall of mirrors in an amusement park, are seduced by the myriad reflections of themselves. They notice only their own solid body repeated many times, not the space they inhabit. However, the effect is different in Graham's environment because of the image on the monitor. Captured by a hidden camera, the mirrored space of the room is depicted on the monitor and thus forms part of the endless reflections. Consequently, the room is the focus of attention. It appears as an infinity of spaces that are reflections of a single space—the mirrored chamber.

In the theory of special relativity, the conceptions of space and time are bound to one another: Time has meaning only in reference to an associated space. Furthermore, each place in space-

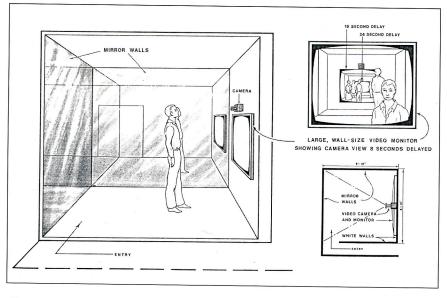


Fig. 2. Dan Graham, *Present Continuous Past(s)* (1974). Diagram of installation with mirrored room, video monitor, and hidden camera. (Figure courtesy of the artist.)

time encompasses an infinity of space-times in relative motion. These ideas are difficult to fathom. Perhaps they are beyond comprehension, but Graham's *Present Continuous Past(s)* is able to unite space and time by introducing a time delay of several seconds between the camera and the monitor. Each of the myriad reflections encompasses two space-times—the *present* of the enclosure, and the *past* of the monitor. Though not an exact analogue of special relativity, the reflections challenge traditional ideas about space and time.

The images on the monitor inset in the wall correspond to the experience of a memory, which has two distinguishing qualities: the impressions of a memory exist in the present, and they are remembered to have existed in the past. These elements are explicit in the German expression for memory: ist geschehen, which translates literally as "is happened": a memory "is" in the present as well as has "happened" in the past. Within Present Continuous Past(s), the knowledge that the current moment will appear as a memory after a short time delay adds an element of consciousness of the present instant. Viewers flail their arms in order to distinguish clearly the difference between the live image and the delay. In the normal course of events, people are rarely aware that now is the present instant.

#### The Specious Present

Time, as a phenomenon of human experience, is universally recognized. But the origin and properties of a sense of time remain themes of philosophical disputation. The Phenomenology of Internal Time Consciousness, Edmund Husserl's philosophical tome published in 1905—the same year Einstein proclaimed the theory of special relativity—proposes that time is not divisible. In his analysis, he allows "starting points" because an awareness of events beginning (and ending) exists, but he insists that duration cannot be divided into the instants of its existence [4].

The philosopher William James, writing in the late nineteenth century, expounds contradictory views. For James, time consciousness is stitched together from pieces of time; long times are conceived by combining shorter segments. He attributes the original intuition of time to "a constantly conscious duration," lasting from a few seconds to not more than a minute, which he terms "the specious present."

In *Decay Time* (1974), Bill Viola isolates a unit of time, and impresses it on a viewer's consciousness. The installation consists of a darkened room, intermittently illuminated by a strobe. Only for an instant does a camera aimed at a viewer have enough light to form a likeness, which appears as a life-size projection on a wall. In Viola's words, "The image is

born, flashes before the viewer's eyes, then dies in blackness, enduring only in memory" [5]. The remembrance, William James would claim, is the experience at the foundation of time consciousness. The blinding flash of the strobe suitably represents the knife-edge between past and future. The record of that instant, appearing on a screen and slowly fading, is in keeping with William James's characterization of the present: "Where is it, this present?" he asks. "It has melted in our grasp, fled ere we could touch it, gone in the instant of becoming" [6].

#### A Time-Space System

Gary Hill's Suspension of Disbelief (for Marinne) (1992) comprises 30 rasters (monitors stripped of their outer casings) set horizontally side by side in an I-beam. Images flash from one cluster of screens to another, in shifting patterns reminiscent of a musical composition. Two young and slender nudes, a man and a woman, stretch across several monitors, fitting within the narrow frame. They are in repose, yet their images are propelled rapidly across the screens, at times slowly and sometimes wildly as in a flamenco dance. In an unusual effect, a figure, restricted to only two screens, appears to fold back onto itself, hovering in place like a hummingbird. Or briskly shuttling, the personage may suddenly stop, suspended in a nervous stasis. For a moment the body becomes statuesque, as if carved in marble and laid to rest atop a medieval tomb.

The full figure displayed across several screens in *Suspension of Disbelief* is an illusion. The original footage was a pan shot of the person. If the clip were played back normally on a video deck, only a segment of the body would appear on a monitor at any instant. The phantasm is generated by time-shifting discrete frames—consecutive frames are lined up and then played at the same time so as to portray a complete entity.

Suspension of Disbelief implements a different sort of shift to engender motion. A computer-controlled device hurtles images across the rasters by directing one frame of video to a monitor and steering subsequent frames of the series to adjacent screens. The 30 frames in 1

second of video played at standard speed matches the 30 frames in the I-beam. In effect, duration has acquired spatial representation.

Although Hill uses only recorded images, the present is manifest through a system of "switching" individual video frames. The computerized electronic "deranger" slices duration finely, concurrently reconstituting the visual sequences in a elaborate manner. The orderly flow of time has been transformed into a multidirectional torrent.

As the end of the millennium approaches, and with recent books proclaiming the end of history and the end of art, an essay that treats time in the twentieth century would be remiss if it did not proclaim the end of time. Clearly the arrow of time is bent. The assurance that time flows in an unending regular manner no longer applies. Time must now conform to a menu of future events. Doctors, for example, herald the advent of immortality: some children born in the coming century will not die (although time inflation may make their endless life seem bounded). The final coup de grâce, relegating time to the overflowing dustbin of history, will occur when Einstein's theory of relativity comes to life and an astronaut returns from a space voyage to discover that his or her child is older in appearance as well as in . . . what should it be called, Einstein time? Of course appointments will still be made at a certain hour, and there will be time for coffee breaks, but a widespread awareness will exist that we don't really know what time is.

#### References and Notes

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