

ELECTRONIC

VISIONS



The media of video and computer technology are still sufficiently new to enable an interesting failure to constitute a milestone. Yet there are many artists who have accomplished much in the short time given them. The fusion between art and technology, when guided by a sensitivity to both, is the art of the future, near and far.

The Exhibition

The artists in *Electronic Visions* have bridged the gap between technician and artist, technology and art. They represent a variety of ways in which recent technological breakthroughs have merged with artistic sensibilities.

Machine Vision makes no use of computer technology but relies instead on an electro-mechanical device upon which are mounted live video cameras. The use here of video as an external perceptual system constantly makes us aware of the ways in which our sense of space and our sense of our presence in that space may be transformed in wholly new and different ways. In formal terms, Vasulka's *Machine Vision* is self-observing, for the cameras view themselves and their surroundings in a mirrored ball, and reflexive, for it is about the act of looking at oneself. It is also, as the title suggests, about a self-contained, non-human system that once started, is untouched by human hands.

Steina Vasulka

Imposing as this may sound, we nevertheless interact with the piece because the images that are displayed on the monitors include us, the viewers. We are forced to perceive ourselves as we never have before, and may never again. We discover the relationship between the "normal" sense of the space which our eyes immediately perceive and a disjunctive, everchanging, and thus *new* sense of space reflected through the use of video. The relationship established is symbiotic, for visitors are both observers and participants. The viewfinders of the cameras enable us to see ourselves as others might never and to make a new environment of the gallery in our minds. *Machine Vision* presents a unique, disorienting and elating mode of seeing the world, and thereby frees us from the limitations of our most common experience of visual perception.

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EXHIBITION

In conjunction with David Jones and others at the Experimental Television Center in Owego, New York, Ralph Hocking and Sherry Miller have designed a "homebuilt" computerized system for drawing on paper images initially recorded on videotape. Their series of digital renderings of the female nude recall a centuries-long fascination of artists with the human form. These sensuous and compelling pieces remind us that the graphic plotter may be considered as viable a means of expressive visualization as the brush or the hammer and chisel.

Ralph Hocking and
Sherry Miller

A series of static wall panels by Woody Vasulka illustrates the stages in the process of electronic manipulation of video camera imagery. Unapologetically didactic, his study of image transformation is accompanied by a series of videotapes produced on the Vasulka Image Articulator. This series exhibits the extraordinary power of this personalized, self-designed technological system and demonstrates the control of the artist operating in an exploratory mode. The exquisite beauty of the images that may be produced by use of digital computer video processing is especially apparent in Vasulka's work.

Woody Vasulka

Hill began to work in video in 1973, creating sequences of electronically processed camera images unaccompanied by text. More recently, his interest has been in the interaction of synthesized imagery and language, as both *Glass Onion*, a multi-layered installation, and Hill's tape *Happstance*, a part of the continuously-running tape program, affirm. *Glass Onion* is subtitled, "A Topographical Mapping," and has been best described by the poet and critic George Quasha:

Gary Hill

"Physically the installation consists of 4 rectangles: on the "outside," the 4 monitors; next, 4 speakers; next, 4 more speakers; next, in the center, a single monitor.

— The central monitor and 8 speakers are on the floor, facing up. — Facing down from the ceiling, a camera with automated zoom ranges from all the way "in" ... and all the way "out." The central monitor ... shows successive embeddings and transformations of electronically generated rectangles. ... These expanding and shrinking recorded rectangles ... expand and shrink in general sync with the sound tracks. — These tracks are measured according to the slow and deliberate 'vocoded' enunciation of the 3 syllables of *rec/tan/gle*. Is it helpful to know these things in advance and in this way (and, if so, helpful for what)? ... The more I tell you the more confusing it may get ..."

To this it should be added that the viewer would do best to peek, and then peer through, and finally peel away those layers of image and sound and in the process develop personal ways of discovering the richness of *Glass Onion*.

One of the innovators of electronic image-processing and the recipient of a Guggenheim Fellowship to create a Digital Image Processor, Dan Sandin has recently been designing computer-produced *holograms*. Simply stated, a hologram is a three-dimensional image created by a process known as "wave-front reconstruction" in which light waves from lasers or white light sources are bounced off an "object" and onto a photographic plate. The photographic plate captures the interference or diffraction patterns created by the intersection of these light waves and records, to quote Gene Youngblood, "all the properties that a viewer would see if he were looking at the real object through a window the size of the photograph." Unlike 3-D movies, which create and illusion of depth with the aid of polarized glasses, holograms exhibit properties of true three-dimensionality. A shift in the viewer's position offers an accordingly realistic shift in perspective such as one might experience when viewing the original object.

Since their invention in 1947, most holograms have been of static objects recorded through a careful and painstaking process. Recently a number of moving holograms have been made, including one of a woman blowing a kiss to the viewer as he walks by a cylindrical screen. Full-scale holographic movies, although they have been in the works for over a decade, remain only a possibility for the future. In the meantime, Dan Sandin's contribution to the field of holography resides in the creation of images which exhibit all the properties of three-dimensional objects but which have been created by the totally synthetic means of computer technology.

Electronic Visions is by no means exhaustive of the vast and compelling array of works being done today by visual artists working with video, computers, and other advanced technologies. It is but a sampling, the proverbial tip of the iceberg, but one which, it is hoped, will entertain and enlighten even as it challenges our traditional notions of art and the ways in which it is, and will be, created.

John Minkowsky
Guest Curator

Dan Sandin

Modern electronic technology offers us a means of perception never before possible with the human eye, and has inspired a social and artistic revolution the end result of which no one can adequately predict. Beginning in the mid 1940's, commercial television co-opted the models, forms, and talents of commercial radio and soon enjoyed unchallenged dominance in the field of home entertainment. Two decades later a variety of circumstances also brought television into the hands of artists and into the art gallery.

Among the factors which contributed to the growth of television as an artist's medium were the introduction of small-format, inexpensive, portable video equipment that was the forerunner of today's home BETA or VHS machine; a general upheaval in the art world which tended to devalue the "unique" art object and to focus instead on artmaking as process; and a renewed emphasis on the sort of innovation for which artists have traditionally been valued. Many creative individuals embraced video as a new form with which they could reorganize and resensitize our perceptions of the commonplace and create heretofore inconceivable new visions and ways of interacting with the world.

Like television, the digital computer is for the most part a post-war phenomenon. At first, the sheer speed with which it was capable of complex mathematical calculations emphasized its value as an efficient means of eliminating countless hours of human drudgery. Soon, however, the digital computer became much more. As the video camera mimics the human eye, so does the computer the human brain and, in the hands of artists, the human imagination. A machine originally conceived largely as a labor-saving device also became a powerful tool for controlling the arts of sound and image making.

Sonic and visual artists grappled with this electronic monster even at its earliest stages, when the most powerful computers literally filled large rooms in laboratories and universities. But as computer technology grew more powerful, it also became more compact; as a result, the popular awareness of the vast capabilities computers offered for changing our notions of communications, art, and culture in general became more commonplace. The home computing system — which often fulfills utilitarian and entertainment needs simultaneously — has grown increasingly smaller, cheaper, and more accessible. The day may well arrive when, as theorist Gene Youngblood has suggested, "our major task as a global society will not be to create *new tools* but, rather, *new desires* which increasing-

ly sophisticated electronic communication systems can help us to realize." As we move rapidly into a society in which the transmission of information is ever more prominent, imagination — the very thing for which we prize our best artists — may become *the* major "commodity."

Video and the computer to date have shared a somewhat sublime, yet troublesome relationship. By virtue of their access to and understanding of computer technology, many designer/technicians have produced graphic works for which they have been heralded as artists. Often their visions have focused largely on the large capacities of the machine in question. Needless to say, the resultant products have been more demonstrative of a playful naivete with new, albeit powerful and engaging toys than of important works of art. By the same token, many visionary artists in other media have failed in their attempts to use the computer and other new technologies as a result either of skepticism or an impatience with learning the skills required to attain the abilities for a free and natural expression with these new tools.

The Hudson River Museum

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Wednesday-Fridays
10:00 a.m. until 5:30 p.m.
Thursdays until 9:00 p.m.
Saturdays and Sundays
12:00 noon until 7:00 p.m.

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The Hudson River Museum invites your participation in Interactions: Manipulating Technology, a panel discussion with the artists represented in *Electronic Visions* on Thursday evening, July 28, 1983, at 8:00 p.m.