VIDEO FEEDBACK

With Audio Input Modulation and CVI Data Camera*

SKIP SWEENEY was born 1946 in Burlingame, California. BA in Theater Arts 1968 University of Santa Clara, California. Founded Electric Eye 1969 a group for video performances and experiments. Co-founded 1970 with Arthur Ginsberg Video Free America. Selected Group Exhibitions: 1971 Video Show Whitney Museum of American Art, New York. 1973 Video as Art Paris. Works: Philo T. Farnsworth Video Obelisk San Francisco. 1971 Video for Heathcote Williams's AC/DC Chelsea Theater Center, New York (with Arthur Ginsburg. 1972 Visual effects for Allen Ginsberg's Kaddish Chelsea Theater Center, New York (with Arthur Ginsberg). 1975 Video Art Institute of Contemporary Art, University of Pennsylvania, Philadelphia. Events and Performances 1971 University Art Museum, University of California, Berkeley. 1972 Video Free America Studio, San Francisco. 1973 The Kitchen, New York; Repertory Dance Theater, University of Utah, Salt Lake City. 1974 Avant-garde Festival New York. Lives in San Francisco.

VIDEO FEEDBACK is a dynamic flow of imagery created by the camera looking at its own monitor. It was often (and still is) the first phenomena that seduced users of video by its sheer beauty. Although everyone who discovered feedback was transfixed by it, feedback seemed an uncontrollable, roiling effluent byproduct of technology - one of those natural mysteries, appreciated but untamable. The acknowledged master of feedback was Skip Sweeney, organizer of the first video festivals and founder of Video Free America in San Francisco. To Sweeney feedback was"a religion - a wave to ride." Throughout his video work Sweeney has approached video as a real-time tool with an on-going involvement in video as live performance.

Included in this catalogue is a thorough scientific explanation "Space-Time Dynamics in Video Feedback" published in 1984 by Dr. James P. Crutchfield, Physics Department University of California, Berkeley. Sweeney, of course, was working with feedback in the late 1960's, and coaxed to life the complex images later technically described by Crutchfield.

Following are excerpts from an interview(1978) of Skip Sweeney by Woody Vasulka about his early experiments.

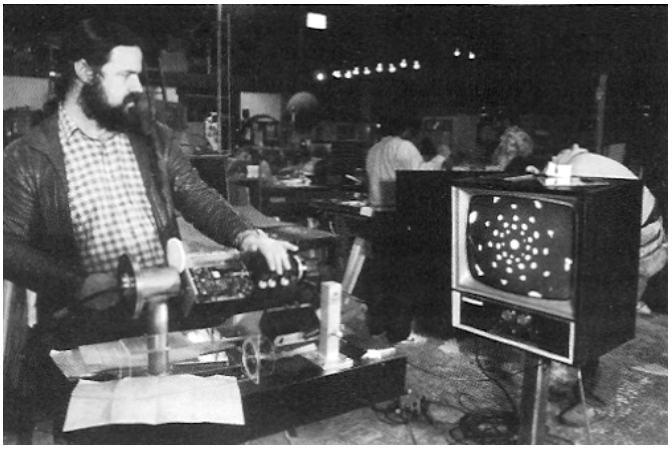
Skip: The first tools that I had were just a CV studio camera. I would leave a set-up in my basement back room. A camera shooting into a monitor, just the simplest camera and a monitor at an angle. And, the first tool was my finger on the contrast and brightness knobs - that drastically affected the response of the feedback . . . and, playing with the zoom, focus and tripod with its angle.

In my first explorations I set it up at almost 180 degrees, shooting at almost the same angle as the screen. Position became critical. Generally, I ended up wanting to be perfectly centered, finding the true axis in the tube. I was also playing with the termination switch. Using termination gave me increased gain. The next step - almost automatic - was trying to record some of this stuff, and I instantly discovered that a different affect was gotten by trading off contrast and video gain and super video gain with low iris and low contrast.

Woody: So, would you go into a much more precise description of how you actually achieved control, because feedback is normally very hard to control.

Patience . . . I also found something early that gave me a tremendous amount of control that other people don't get when they start playing with feedback - the use of a mirror. By placing a mirror that was angled, and by its angle creating a circle. In other words, if the angle was more than 30 percent the image was circular. For example, if I brought a hand between the camera and the screen, I would see hands from above and from below but, if I put a mirror up, the image was repeated and kaleidoscopic.

The mirror was generally angled below the camera, balanced on piles of something. How far up you moved the mirror, how far down you moved the camera - all those relationships completely changed the image. In fact I discovered you didn't need a mirror, a piece of glass at that angle had so much reflective capability. But, by using the mirror I instantly got feedback where the range was amplified . . . you had to practically knock the camera over



Skip Sweeney, ca. 1983, with feedback set up at the Exploratorium, San Francisco, California. HW: Setchell-Carlson Television. Photo by Susan Schwartzenberg.

FRAME 196 step through next 5 frames

NANO C frame 23666 to 504000

NANO C frame 11731 to 18452

STEP BACK

STEP FORWARD

to lose an image.

. . . There was a whole other discovery - the Setchell-Carlson camera with a detail knob. I ruined three cameras fiddling with them, not knowing how to get them back into a legitimate signal. My tape JONAS' FAVORITE was a combination of finding that you could get tremendous detail on the Setchell Carlson. Everyone else always had the contrast and brightness set high, and I got into turning them in low ranges and playing with the internal controls - the gain and the beams. I started getting the ability to control the speed of the images. One of the first corollaries I developed was the more you turned up the target voltage and the lower you turned the iris in combination, the slower the image got until you could really get it to crawl like slow motion. And then, by removal of the pedestal, by dropping the pedestal down, the blacks became completely black. Pushing the beams high I got the waterfall effect, where things would roll off as if they were rolling off the edge of a cliff. I could get feedback that was either pouring into itself, pouring out of itself or floating.

I know you have been involved with Bill Hearn's VIDIUM.

A the time my interest in the VIDIUM was its ability to generate an image. I didn't do the VIDIUM any justice at all because I didn't care for the kind of complicated images the VIDIUM could create. I cared only for the very simplest images. That's something I struggled with from the very beginning: to try to achieve an image completely isolated from anything else. In other words, I wanted a simple black image where the white was keyed through and the image was simple kinds of circles that pulsed or waved to the sound of the music.

I guess the MOOG VIDIUM started to whet my appetite for keying and colorizing.

. . . I knew what I wanted to be able to do. I was very frustrated by not being able to turn something that was light, e.g. the white image of the MOOG VIDIUM to look dark. I couldn't do it because the George Brown Colorizer had no effect on the gray level. I think I developed an aesthetic of reversing what I was given, making brighter images dark and darker images bright, having the gray level be the heart of the colors I got.

To what degree do you feel that you have influenced those particular elements.

Those elements of Bill Hearn's colorizer? I feel like I'm the conceptual architect . . . because it is exactly what I asked for. I asked for gray level control, separatable key levels and gray level and chroma and hue. I wanted control over each separately. Alan Shulman deserves a certain amount of credit. Alan was always working with Hearn when that first colorizer was built.

*Please refer to pages on the CVI DATA CAMERA in the Audio/Video Instruments section.