

VIDEO SYNTHESIS at the Experimental Television Center

(above): Self Portrait by Mary Ross

At first glance, Ansel Adams seems an unlikely advocate of electronic imaging and all the mixing, layering and manipulation it has come to mean. As a master of straight photography, he achieved phenomenal commercial success representing the classic traditions of black and white photography. To his credit, Adams recognized the need to address a broad range of photographic activity. Adams compared his own negatives to a musical score, of which his prints

by Mary Ross

"I actually feel that in the next few years-it won't be very long-the electronic image is really going to be the medium in photography".

-ANSEL ADAMS, 1980

were the actual performance. He saw technology providing the means for others to perform and interpret his negatives in new media, rather than locking them away in an archive.

I began exploring the intersection of photography and early electronic tools during the 1970's. My work provides a representative example of how photography, video and computer technology converged and eventually evolved into digital photography. While technical mastery and fine print quality remained a powerful force in creative photography during the 1960's and 70's, many photographers were experimenting with mixed media, photo sculpture, non-camera and "appropriated" imagery from a variety of sources. Older photographic processes like gum bichromate, cyanotype and platinum printing were rediscovered and employed in new contexts. With experimentation in the arts so characteristic of the times, it was inevitable that photography and new technologies would soon converge.

New technologies typically evolve from the needs of government and industry then eventually spread to the rest of society. Pioneering artists working with photocopiers, medical and electronic imaging, communications, video and computer technology were often able to access equipment before it became available to the general public. In 1965, SONY Corporation introduced the first portable videotape recorder and camera. While this new technology made personal, portable video recording possible on a limited scale, it was still expensive for most individuals. By the early 1970's, pioneering video artists had set up a number of independent, not-for-profit media centers around the United States. These media centers (and a few PBS stations) provided artists with access to video technology and a showcase for their work. Designer/technicians and artists affiliated with these media centers built low-cost versions of broadcast video equipment or created new video tools specifically for artists. One invention, the video synthesizer, was a limited edition, hand-built machine that used electronic circuits and devices to manipulate the TV signal. The style of video art that resulted was called "electronic image processing" or "video synthesis."

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While many artists were exploring video's time-based characteristics in the early 1970's, I began using the video synthesizer at the Experimental Television Center in upstate New York to produce still images on film. The video synthesizer functioned as a kind of electronic darkroom. My own slides, negatives and photographic prints provided source material. "Scanning" was accomplished by projecting slides and negatives with a slide projector, and focusing one or two black and white TV cameras on the projected image. Connected to the video synthesizer, the TV cameras converted the projected image to an electronic signal displayed on a TV screen. Positive and negative images could be made instantly by