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FUNDING / RESEARCH & DEVELOP. PROGRAM HISTORY

1971-72

NYSCA funding to the Center for construction of Paik/Abe Video Synthesizer. System was designed and built at the Center by Shuya Abe and Nam June Paik for eventual placement at the TV Lab at WNET-TV. This system was used while still at the Center to produce a portion of Paik's "The Selling of New York", included in the PBS series "Carousel". A second system was built for the Artist in Residency program at the Center and used in 1972 by artists such as Ernie Gehr, Hollis Frampton, Jackson MacLow and Nick Ray, and also included in an exhibition at the Everson Museum. A raster scan manipulation devise was also constructed, the principles of which were defined by Paik's early tv experiments such as Dancing Patterns.

1972-73

The Residency Program continued; the system was used by artists such as Tom DeWitt and Bill Jones and Arnie Zane, John Reilly and Rudi Stern and Peer Bode. Walter Wright was an Artist in Residence, attached to the Center through funding from the NYSCA. Workshops in image processing were conducted for the New York State Art Teachers Annual Conference, and at the Everson Museum and The Kitchen. Community produced tapes as well as artists' tapes were cablecast weekly in the series "Access", produced by the Center.

Cloud Music for David Behrman, by Bob Diamond???

1973-74

David Jones became technician at the Center. Artists participating in the Residency program included Taka Iimura, Doris Chase, and Michael Butler. Workshops in imaging were held regularly at the Center, and also at Global Village and at York University in Toronto. Oscillators were designed for use as signal inputs to the Synthesizer. Initial research into the Jones gray level keyer and production of a black and white keyer. Modification of an existing SEG for direct sync interface with the Paik/Abe, with provision for external wipe signal input.

1974-75

Workshops and performances based on image processing were conducted at The Kitchen, Anthology Film Archives and the Contemporary Art Museum in Montreal. NYSCA supported a series of travelling performances by Walter Wright on the video synthesizer. Over ten organizations throughout New York State and Canada took part. The workshop program at the Center continued. NYSCA provided funding for the development of the Jones Colorizer, a four channel voltage controllable colorizer with gray level keyers. The oscillator bank was completed and installed. The SAID (Spatial and Intensity Digitizer) was developed by Dr. Don McArthur, as an outgrowth of research on time base correction. Work was begun by David Jones, Don McArthur and Walter Wright on a project to explore computer-based imaging, and the interface of a computer with a video processing system. Artists in Residence included Neil Zusman and Gary Hill.

1975-76

The Residency Program included artists Nam June Paik, Phil Jones, Ken Marsh and Ken Jacobs. The NEA in 1975 provided support for initial research into the computer-video processing project, which was expanded by Jones, McArthur, Wright and Brewster to incorporate parallel research efforts by

Woody and Steina Vasulka and Jeffrey Schier. The LSI-11 computer was chosen as the standard. Jones developed hard and soft edged keyers and a sequential switcher, which along with the Jones Colorizer was incorporated into the processing system. A commercially available SEG was modified to incorporate these keyers. A 64 point switching push button switching matrix was designed and built. We began to write a manual, developed initially to be used as a operator's guide to 1/2" reel to reel equipment, porta paks, editing equipment and the like. The concept was later broadened to include step-by-step construction information on a Paik Raster Control Unit. By 1985, the information was expanded to include systems structure and theory of electronic signals and processing techniques. These manuals have been distributed to many individuals and organizations over the years.

1976-77

Artists such as Barbara Buckner, Aldo Tambellini, Ken Jacobs, Nam June Paik and the ADA continued to participate in the Residency Program. The computer project continued. The exhibition series, Video by Videomakers, was begun, introducing to this region video works by Beryl Korot and Barbara Buckner. The computer was installed as part of the system and made available to artists; software research began. For the second year, we conducted a series of workshops in school districts throughout the region, in collaboration with Binghamton's major arts center, the Roberson Center.

1977-78

NYSCA funding helped support the development by Jones and Richard Brewster of the Analog Control Box, allowing the production of electronic sounds and also signals which controlled parameters of the video signal. The computer project proceeded, assisted by Paul Davis, then director of the student computer lab at the School for Advanced Technology at SUNY-Binghamton. Artists in Residence included Shalom Gorewitz, Sara Hornbacher, Hank C. Linhart and Hank Rudolph. We conduct workshops for the City of Binghamton, Headstart, Tri Cities Opera, 4H Program and Center for Media Studies.

1979-80

The processing system computer is the Z-2, an 8 bit system with an S-100 bus, and dual floppy drives. A CAT digital frame buffer is interfaced to the computer; at the time this is one of the only commercially available "low-cost" digital devices which has incorporated concepts of video, and recordable signal output. The Z-80 is interfaced also with the analog box. Software begins to be developed for specific video uses. Artists include Alan Powell and Connie Coleman, Charles Atlas, Victor Velt, Jud Yalkut and Ren Weidenaar. "The Electronic Workshop" was a series of lecture/demonstrations concerning image processing for 17 organizations around New York State

1980-81

The need for artist-oriented software increases. The Print Program is developed by Jones, allowing artists to develop videographic still frames, captured on disk, then printed out with variable gray level control. Additional software is developed by graduate-level interns under the direction of Davis and Ralph Hocking. Artists include Dan Reeves and Jon Hilton, Celia Shapiro and Peter D'Agostino.

1981-82
Artists include Frank Dietrich, Thierry Kuntzel, Alex Roshuk and Matt Schlanger.

1982-83

NYSCA provides funding for a General Purpose Interface Board, which interfaces analog imaging equipment with an 8 bit computer, allowing manually-changed knob settings to be "remembered". Jones and Peer Bode collaborated on the initial research for a real-time frame buffer, which digitizes in real time analog video images, with a resolution of 256x256, 16 shades of gray. The Pattern Program, a software project, is designed an an internship project by Master's candidates at SUNY. Patterns or textures can be drawn and then stored and used as movable matts or windows.Artists include Nancy Buchanan, Amy Greenfield, George Stoney, Barbara Sykes and Ann Wooster.

1983-84

Along with Matt Schlanger, Jones continues work on the Four Board Project, a four channel colorizer, keyers, multi-channel programmable sequencer, and oscillators. One intention of the project, in addition to providing equipment for the Residency Program, is to define a comprehensive, low-cost imaging system and to then help artists to acquire or to build the tools. We begin to study the newly available Amiga computer. Artists include Shigeko Kubota and Paul Garrin, and Arthur Tsuchiya.

1984-85

The Four Board Project is completed and the devises are installed at the Center. Jones and Schlanger begin work on the documentation, later assisted by Coleman and Powell. The equipment manual is revised to include the new tools, and to explicate such processes as keying, colorization, switching. Artists include Merrill Aldighieri and Joe Tripician, David Blair, Peter Rose and Kathy High.

1985-86

The Four Board Project is premiered at the Media Alliance Annual Conference at The Kitchen. NYSCA funds the development of a black and white frame buffer by Jones and Peer Bode to be interfaced to the Amiga computer. Artists include Linda Gibson, Lee Eiferman, Richard Kostelanetz and Roberts and Ghirardo.

1986-87

The Print Program is revised for the Amiga. Customized software is devised to allow the computer to control the frame buffer. With support from the NYSCA, the Amiga is expanded with gen-lock and additional memory. Artists include Irit Batsry, Jon Burris, Phil Edelstein, Alex Hahn, Michael Schell, Mary Ann Toman and Charlie Woodman.

1987-88

We work on devising educational strategies to help artists to become fluent on the computer and digital devises as quickly as possible. A second Amiga is added to the system, one dedicated to buffer control, and one for videographics and audio software and control. Artists include Shu Lea Cheang, Bob Doyle, Ernie Gusella and Barbara Hammer.

1988-89

The audio section of the system is expanded to include a Mirage and mixing capacity. We begin work on MIDI and control voltage exchange boxes. Artists include Laurie Beth Clark, Peter Callas, Vanalyne Green, Jon Knecht and Sherry Millner.

1989-90

The audio system continues to be expanded. With NYSCA support Megan Roberts and Ray Ghirardo design a digital interface to allow a computer to control multiple audio and video playback sources in three dimensional arrays. Artists include Benton Bainbridge, Kevin Cook, Francis James, Bianca Miller and Eva Schicker.

1990-91

With assistance from the NYSCA, a third Amiga is to be added, along with the Toaster, to further expand the digital imaging potential of the system.

R&D Program Concepts:

1. Modification of existing equipment: to expand its capabilities; to bring out all possible controls to the artist.

2. Design and construction of image processing equipment: to expand the Center's system; to make equipment and/or information available to individual artists.

3. Development of print information and educational strategies to teach artists and others the principles of image processing; to encourage artists to approach video as a directly mediated art practice; to encourage artists to use tools themselves in art-making; to encourage artists to build or purchase equipment for their personal studios.

Design Considerations:

Flexibility; low cost; ease of use; greatest number of possibilities for image and sound generation, manipulation and control.