

ELECTRONIC ZEN:

The Alternate Video Generation

By Jud Yalkut

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"The light-flower of heaven and earth fills all the thousand spaces. But also the light-flower of the individual body passes through heaven and covers the earth. Therefore, as soon as the light is circulating, heaven and earth, mountains and rivers, are all circulating with it at the same time. To concentrate the seed-flower of the human body above in the eyes, that is the great key of the human body."

- THE SECRET OF THE GOLDEN FLOWER.

"Zen Meditation is purely a subjective experience completed by a concentration which holds the inner mind calm, pure and serene. And yet Zen meditation produces a special psychological state based on the changes in the electroencephalogram. Therefore, Zen meditation influences not only the psychic life but also the physiology of the brain."

- AKIRA KASAMATSU AND TOMIO HIRAI ("An Electroencephalographic Study on the Zen Meditation (Zazen)") in ALTERED STATES OF CONSCIOUSNESS (Charles Tart, editor).

"We are not yet aware that telepathy is conveyed through the resonance factors of the mind... The electromagnetic vibration of the head might lead the way to Electronic Zen."

- NAM JUNE PAIK.

## ELECTRONIC ZEN: THE ALTERNATE VIDEO GENERATION

### PREFACE

Although the medium of television has existed in the American home since the post-war period, it has only been since the advent of portable video recorders in the late sixties that a meaningful dissemination of electronics communication technology has permitted the two-way interflow of information and vision exchange.

This predominantly half-inch video technology engendered the emergence of alternate video innovators who have gradually mastered the parameters and circuitry of equipment woefully unstable as compared to the hardware used daily by the vast television broadcasting networks. An alternate network of electronic experimenters, artists seeking an analog output for their creative flow, and radical communicators pointing their lenses and microphones at previously tabooed data, now freely exchange and exhibit videotapes of recorded and instructional data, sociological documents, inner visionings, and the conceptual processes of a new breed of logic merged with metaphysics.

As P.D. Ouspensky has elucidated, the human being requires three external materials for survival: "the food he eats, the air he inhales and the impressions he receives." This latter vibratory food, as has become evident to any conscious being existing within society today, has become as polluted, in this paradoxically ecologically-minded half-century, as the air replete with noxious fumes and once fresh water now unfit for living sustenance.

ELECTRONIC ZEN is an attempt to enumerate the probings of the first Cybernauts using the tools of new video technology. Leaving the trails of their progress across the face of countless miles of magnetic tape, these young pioneers have formulated the life styles and state of the art needs so powerfully that the communications superstructures that predominate can no longer disregard their inherent role in the survival of humanity.

New York City became from the beginning a magnetic center for many of the explorers in the new video realm. As an early practitioner of the electronic visual arts himself, the author seemed also to be one of the few concerned with periodically recording and publishing aspects of the history of this new medium and its adherents. Starting as early as 1967 and running continuously through 1973, these documents, either previously published, broadcast or heretofore unpublished in any form, are collected for the first time in ELECTRONIC ZEN.

Through the devices of projective essay and direct discourse with a number of outstanding members of the first generation of cybernetic landing parties, ELECTRONIC ZEN attempts to trace the historical, aesthetic, technical and conceptual interweavings which form the fabric of the new vibratory exoskeleton of a global community now pulsating with ever more resonant frequencies.

By exploring the grassroots of video art and technology, the emergence of teledynamic environments, video as a meditation and encounter tool, the evolution of a new breed of visionary abstractionist, and the development of a new cybernetic syntax concerned with hardware interfacing and software reticulation, ELECTRONIC ZEN is a record on the moving temporal tape of these attempts to "concentrate the seed-flower of the human body above in the eyes" (- THE SECRET OF THE GOLDEN FLOWER).

## ACKNOWLEDGEMENTS

Portions of ELECTRONIC ZEN: The Alternate Video Generation have previously appeared in print in sometimes altered form in the following publications:

- "Electronic Zen", THE WEST SIDE NEWS, N.Y., August 10, 1967.
- "Television As A Creative Medium", ARTS MAGAZINE, N.Y., September/October 1969.
- "NAM JUNE PAIK, PART ONE: Cathode Ray Tube Will Replace Canvas" as "The Art And Technology of Nam June Paik", ARTS MAGAZINE, N.Y., April 1968.
- "NAM JUNE PAIK, PART TWO: We Are In Open Circuits" as "NAM JUNE PAIK", published only in Japanese translation, BIJITSU TECHO, Tokyo, Japan, May 1969.
- "The Archtetron of Thomas Tadlock", THE EAST VILLAGE OTHER, N.Y., July 2, 1969.
- "FRANK GILLETTE AND IRA SCHNEIDER: An Attempt to Reshuffle One's Temporal Experience" as "Rap With Ira Schneider And Frank Gillette" in two parts in THE EAST VILLAGE OTHER, N.Y., July 30, 1969 and August 6, 1969, and in its entirety in RADICAL SOFTWARE, Volume One, Number One, N.Y., Summer 1970.
- "ERIC SIEGEL: Television Is The Last Communication Link We Have To Change This Country" as "Interview With Eric Siegel", RADICAL SOFTWARE, Volume One, Number One, N.Y., 1970.
- "STAN VANDERBEEK: The Violence Sonata", THE EAST VILLAGE OTHER, N.Y., February 18, 1970.
- "DAVID CORT: The Video Body Easel Mach I", OHIO MEDIA, Volume One, Double Number Two And Three, Dayton, Ohio, December 1977 and January 1978.
- "ERIC SIEGEL: The Electronic Video Synthesizer" and "Dan Sandin's Image Processor", OHIO MEDIA, Volume One, Double Number Two And Three, Dayton, Ohio, December 1977 and January 1978.
- "CYBERNETIC SERENDIPITY: The Hippie And The Computer", THE EAST VILLAGE OTHER, N.Y., August 20, 1969.

## ACKNOWLEDGEMENTS

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The author wishes to acknowledge with gratitude the willing participation of the many pioneering practitioners of the video medium who shared with him their histories and insights in so many of the pieces in ELECTRONIC ZEN. As friends and colleagues in an emerging field of incalculable possibilities, they spurred on the never-ending sense of adventure and constant discovery.

Time and energy permitted the completion of only a relatively limited number of such exchanges for this book, and the author here also wishes to acknowledge the presence and work of many other individuals and groups who contributed greatly to the consolidation of video as a vital and viable medium. Mention should also be made of the large group of so-called "gallery video artists" who produced much influential work which was covered extensively by writers for art magazines and journals, at a time when other video practitioners existed without an adequate body of coverage and criticism. ELECTRONIC ZEN is an attempt to fill this gap. Many video practitioners not covered in length are referred to within the body of these exchanges.

I wish to express my gratitude to the Experimental Television Center in Owego, New York for many things, including its establishment of a unique laboratory for the generation of electronic images in which I continue to take great joy in the sharing of, and to Peer Bode and Hank Rudolph who help maintain those facilities, and David Jones who created parts of it. I am indebted to Ralph Hocking and Sherry Miller, who administrate the many successes of the Experimental Television Center, and under whose auspices a grant for Writing in Media was obtained from the New York State Council On The Arts, which assisted immeasurably in the completion of this manuscript. Thanks also to Arthur Tsuchiya and John Giancola of the Media Program of the New York State Council On The Arts, and to the Ohio Arts Council for an Individual Artist Fellowship in video, permitting the completion of new personal video works simultaneous with the completion of this project. Gratitude also to Gerd Stern and the other former members of the USCO group, and to Nam June Paik, Charlotte Moorman and Frank Pileggi for many shared collaborations over the years, and for her undying support and patience during the completion of this project, and many other things, to Peg Lovas, to whom I wish to dedicate this completed work.

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ELECTRONIC ZEN

The Grassroots of Video Art

## ELECTRONIC ZEN

"The TV image offers some four million dots per second to the receiver..the viewer of the TV mosaic, with technical control of the image, unconsciously reconfigures the dots into an abstract work of art on the pattern of a Seurat or Roualt.. The mosaic form of the TV image demands participation and involvement of depth of the whole being..The TV image requires each instant that we 'close' the spaces in the mesh by a convulsive sensuous participation that is profoundly kinetic and tactile, because tactility is the interplay of the sense.. The beatnik reaching out for Zen is only carrying the mandate of the TV mosaic out into the world of words and perceptions.. TV can illustrate the interplays of process and the growth of forms of all kinds as nothing else can." - MARSHALL MCLUHAN

The first approaches towards a cathode ray art have naturally originated with avant garde artists and their increasing concern with the interaction of art and technology. David Tudor in "Bandoneon", the most unfairly neglected piece in the Experiments in Art and Technology "Nine Evening" Armory show, generated with his "electronic accordion" all the impulses feeding both the music synthesizing equipment and the complex television projections, oscilloscopically abstract, producing one of the most organic fusions of multiple media yet seen.

Ken Dewey's Action Theater juxtaposed, in the New York Film Festival's lobby, videotapes of the Selma, Alabama civil rights protests with delayed closed-circuit playback of the viewers reactions to both channels. Closed circuit TV projection integrated the audience's entry into the visual mesh of Robert Whitman's film-oriented "Theater Piece", and fused into total participation the images of live dancers and musicians with multiple projection USCO films and slides at the "World" discotheque. Marta Minujin's "Minuphone", the intermedia telephone booth at Howard Wise, obliged the caller inside to stand on the television floor image of his own face, from an in-booth closed circuit camera, later offering him a Polaroid snapshot of this monitor image.

Emory Menefee of Canyon Cinema in San Francisco describes filmmaker Earl Bodien's television film "Nocturnal Emission", made "by colorfilming a multiple series of images with such devices as a concave mirror in the center of the TV image, reflecting an irregularly flashing hypnotic red spot." Bodien is quoted: "People who watch, creatively alter, and totally involve themselves in TV images, form a kind of communications system which exists outside of the regular channels. That is, there is some sort of unexplored force field which is capable of transmitting a personal bonding kind of message back through the TV medium... A McLuhanistic alteration of consciousness through tampering with the medium itself, can be achieved partially by a series of films which induce people to turn off (their sets) and turn on (themselves)."

An Off-Off-Broadway "videotape theater" Channel One, purports to be "providing Heads with their own CBS". "We concentrate on humor, psychedelic satire", they explain. Three video monitor screens face three sections of seats above a Japanese-pebbled floor. Erotic breathing is heard, the TV snow fades into extreme closeups of an undressing couple, repeated unsuccessful attempts to unclasp a brassiere are punctuated by male sighs and groans, and the final unclasping reveals a second undergarment beneath.

Wagnerian theme music heralds several hours of skits in a revue format, ranging from forays against current TV fare like the "Consolidated Monopoly" Weather Report and the pure sadism of "Meet Mr. Science", to the fantasies of a pornography-reading children's clown and a "psychedelic" variety show called "Manifestations" with ads for morning-glory seeds (remember them?) and Zig-Zag papers. "Channel One" remains a theatrical experience translated to a small-screen living room experience, with the CONTENT (exclusively) of TV programming stressed through satirization, in the guise of Underground Television.

"Very, very very high-frequency oscillation of lasers will enable us to afford thousands of large and small TV stations. This will free us from the monopoly of a few commercial TV channels", wrote Nam June Paik, Korean electronic artist and composer, in 1965, who then proceeded to program a 24-hour broadcasting day for his "Utopian Laser TV station...to be telecast March 1, 1996 A.D."

"My experimental TV is not always interesting but not always uninteresting, like Nature, which is beautiful, not because it changes beautifully, but simply because it changes", wrote Paik of his circuit-modified and magnetically distorted TV "light machines", first shown in Germany in 1963.

"You cannot exclude anyone from TV", declares Paik, "so really delicate important subjects like politics, philosophy, sex, and avant garde activity are not shown. But videotape can supplant commercial broadcasting with highly selective programming to be played back anytime at all. When you have a videotape recorder, you can make a videotape magazine. When you have a big screen 3-D color videotape recorder, it will kill LIFE magazine just as LIFE killed COLLIER'S."

"Like radio ham operators, we will have amateur TV. Combinations of Xerox with videotape will print everyone's newspaper at home. The video-record will become cheaper and easier than videotape for mass production, with no threading and instant playback. As the collage technique replaced oil paint, the cathode ray tube will replace the canvas."

"Medical electronics and art are still widely apart, but these two fields can also change each other's fruits, e.g. various signals can be fed to many parts of the head, brain and body, aiming to establish a completely new genre of DIRECT-CONTACT-ACT. The electromagnetic vibration of the head might lead the way to Electronic Zen."

## TV AS A CREATIVE MEDIUM

"It was the funeral of President Kennedy that most strongly proved the power of television to invest an occasion with the character of corporate participation. It involved an entire population in a ritual process...In television, images are projected at you. You are the screen. The images wrap around you. You are the vanishing point. This creates a sort of inwardness, a sort of reverse perspective which has much in common with Oriental Art."

-Marshall McLuhan

Since the introduction of the home television receiver in the U.S. in 1946, several generations of millions of viewers have been bombarded daily by streams of electrons, at the rate of 3 million information bits per second. Television viewing became a daily ritual, a family's life centering around their 16 to 21 inch monocular picture tube within its monolithic (shades of "2001") console. As receiving sets became smaller and more portable, the assimilation of the TV mosaic into the corporate bloodstream of vibratory inputs became established fact, as commonplace as transistor radios and corner telephone booths.

Early television broadcasting formats mimicked ancient radio iconography, giving meat to the disembodied familiar voices, and visualization to the fantasy patterns of the sound airwaves.

TV created its own figureheads, gargoyles, and abominations, spewing forth neverending inundations of encapsulated information, exploding frenetically like time seeds within the tribal psyche. The rate of bombardment was accelerated by the vanguard of television marketing demands, the repetitive imprinting process synchronized with the electromagnetic beat of cerebral brainwaves. It was only natural that the counterreaction to this data spoonfeeding ad nauseam would eventually take the form of individual dietary control, with the emergence of television artists engaged in the articulation and reprogramming of the vital electronic emanations.

"Why has not art been affected by this all-pervading influence? Perhaps quite simply, because, up until now the time was not right. Perhaps it had to await the maturing of the generation who were in their sub-teens in the 1950's, those who were brought up on TV... As in every generation, some were artists...working with TV because they were fascinated with the results they were able to achieve, and because they sensed the potential of TV as the medium for their expression."

-Howard Wise

Spectroscopically probing the television art spectrum, the Howard Wise Gallery issued invitations to several artists, those already known for their video explorations and those ready to leap into TV from a neighboring art and technology promontory. The conglomerate of these individual electronic visionings, a kaleidoscopic mosaicing of an already mosaiced medium, was exhibited at the gallery from May 17 through June 14 of 1969.

"This route to novelty depends not so much upon the novelty of the object as much as upon the novelty of perceptions available when people are allowed and encouraged to invent such perceptions. Since there is no reason to think that human perceptions are not infinitely various, there is no reason to believe that the novelty available from the object-library of the museum is not infinitely extendable."

-Serge Boutourline, "The Concept of Environmental Management".

Serge Boutourline's "Telediscretion" presented "four mini-TV's with a device for fingertip selection of sound channels. Presentation will include three broadcast channels and one channel playing 'A Commercial for Life', a videotape conceived and executed by Wynn Chamberlain and Serge Boutourline".

The interaction and selection of the TV soectator with the transmitted and preprogrammed channels generated levels of feedback, the simultaneous realization of one's ability to program modulate one's own perceptual inputs, the self-perception of the self as perceiver, in the process of perceiving.

"PARTICIPATION TV comprises 3 or 4 color TV sets which show multi-color echoes, or fog, or clouds which are electronically produced. Sometimes you can see yourself floating in air, dissolving in deep water."

-Nam June Paik

Paik, a pioneer of the TV movement, modulates incoming broadcast transmissions with electromagnetic distortions and circuitry modifications, abstracting iconographic popular cliches beyond all limits of symbological recognition, creating neon colored moires of electronic interference patterns, fields of cognitive and nonfigurative imagery interweaving an unfolding Persian carpet of delight.

"Although the piano has only 88 keys, now we have in color TV, 12 million dots per second, which I have somehow to control for my work. It is like composing a piano concerto using a piano equipped with 12 million keys. How can you deal with that vast quantity of possibilities without the painstaking study of your materials

and instruments?"

-Nam June Paik

Sound modulations, hand clapping, singing, screeching, yelling, whispering, the ringing of a bell, all activate the neon tangles of fluorescent tracers, expanding and contracting the frequency modulations within involuted vortexes of electric color. Three TV cameras, red, green, and blue electronic eyes, survey the infinity of movements possible to the spectator-performer. Color-separated ghost shadows mirror and re-echo one's gestures, one's dance with light, with visual toys, with silence. In total feedback loop, a color monitor facets and fragments the closed circuit images of Charlotte Moorman's cello improvisations.

"In this case, the sound of the cello she plays will change, modulate, regenerate the picture of her TV-BRA...one sharp example to humanize electronics...and technology. By using TV as bra...the most intimate belonging of the human being, we will demonstrate the human use of technology, and also stimulate viewers NOT for something mean but stimulate their phantasy to look for the new, imaginative and humanistic ways of using our technology."

-Nam June Paik

Earl Reiback, a former Nuclear engineer from MIT since engaged in the generation of luminal art works, contributed "Three Experiments Within the TV Tube", his first TV work, "with the cooperation of RCA tube laboratories, working within the depth of the TV tube, painting the walls of the tube with color phosphors". One called "Electron Beam" omitted the phosphors "off the front face of the tube, and added neon gas to the partial vacuum. With an external magnet, the viewer can bend the beams of electrons" in the slow moving waves of concentric black-lighted galaxies. "Thrust" mounted a phosphor-coated screen perpendicularly to the face of the tube to produce "shooting images in color...as the electron beam scan sweeps across the inner screen". In the third peice, a phosphor screen circumscribed and suspended within the perimeters of the picture tube receives the image streams of football games and horror movies, while the phosphor painted inner tube background reflects iridescent reflected energy.

TV art imagery engenders multitudinous means of presenting itself upon whatever closen monitor system; the presentation of a complete closed circuit system loop as a gallery piece, the modulation and distortion of received transmissions, the inclusion of the spectator as a visual link in the cybernated chain, and the eventual broadcast, through the air or via cable, of articulated and composed video imagery.

"A Moebius strip is a one-sided surface made by taking a long rectangle of paper, giving it a half-twist, and joining its ends...The outside

is the inside. The inside is the outside. Here the power of Video Tape Recorder (VTR) is used to take in your own outside. When you see yourself on tape, you see the image you are presenting to the world. When you see yourself watching yourself on tape, you are seeing your real self, your 'inside'."

-Paul Ryan

You are sitting in a curtained booth, on a stool, a TV aperture hangs before you like a surrealistic picture frame, beyond which the portable video camera sits and observes, as you are prodded ever so gently by calculatedly stimulating questions: "React to the following people: Nixon, your mother, Eldridge Cleaver, Teddy Kennedy, you...for the next ten seconds, do what you want...Now, let your face be sad...let your face grow sad...turn away from the camera...now turn back...press the stop button...thank you." You then watch yourself in full audio-picture recap of your "interview", erasing all but the fewest frames of the previous tape, just as your tape will be almost totally obliterated by the next. Naturally, the final tape is a total montage of every participant-spectator.

Said Paul of "Everyman's Moebius Strip": "I feel it's only a very crude kind of beginning. I've been talking about the Moebius strip model and the videotape machine lately as an extension of man as a cybernator; communicating with himself about his behaviour, he enlarges his control over his behaviour. The machine is almost the reverse of what he is doing; what he puts out it

takes in, processes, and then feeds back. Then a person can take that in, process it, and feed that back. It's a matter of self-cybernating and self-processing, co-cybernating and co-processing studying one another's videotape playbacks in slow motion and imitating, or trading, body languages. That has a whole set of implications towards what I conceive of as bordering body languages. My hope is that we can avoid the professional, the professional who understands everything, and barter on a lateral basis with friends. The electrical circuitry in the home and the video tape are really a beginning of a kind of elastic information environment in the home. The electric possibilities of communes are just beginning."

Former painter Frank Gillette and former filmmaker Ira Schneider joined forces to produce "Wipe Cycle", a nine screen TV mural that served as the entrance and opening piece to the "TV As A Creative Medium" show. Facing the elevator doors opening into the gallery, the closed circuit cameras of "Wipe Cycle: instantly integrated the spectators' images in the immediate present and in delayed playback, switching with cyclic patterns of broadcast transmission and pre-programmed videotape, delay change cycles and alternations activating the nine screen matrix.

"Every 4 seconds the live feedback image exchanged places with the broadcast image for 4 seconds--in an 8 second cycle, 4 seconds

is taken up by a live feedback of You in the Now, alternating with broadcast in the central monitor. The 4 external monitors (corners) exchange images every 8 seconds, and these are the tape programs. The 4 inner monitors exchange places every 4 seconds between the 8 and 16 second delays of the live image. So what you see phenomenally, is your image at 3 points in time fluctuating in the center of the mural, while at the extremities extraneous collage information is switching locations in its own pattern flux. Overlaid on all this is a 'light' pulse pattern every 2 seconds, going around counter-clockwise, and taking 16 seconds for a complete cycle. So the piece is based on a 2-4-8-16 second basis."

-Frank Gillette

Added Ira Schneider: "The most important thing was the notion of information presentation, and the notion of the integration of the audience into the information. One sees oneself exiting from the elevator. If one stands there for 8 seconds, one sees oneself entering the gallery from the elevator again. Now at the same time one is apt to be seeing oneself standing there watching 'Wipe Cycle'. You can watch yourself live watching yourself 8 seconds ago, watching yourself 16 seconds ago, eventually feeling free enough to interact with this matrix, realizing one's own potential as

an actor."

"The embedment of a TV in clear plastic so that it is totally viewable, seals it from all human contact except for plugging and unplugging it. It is a relic of this civilization. When the TV stops functioning the work is complete."

-John Seery

John Serry's "TV Time Capsule" was the shorest-lived piece in the show, the color TV receiver completely sealed in a plastic cube, fusing and burning itself out by the end of the first week. It was replaced to run for the last week of the show. "It was conceived in a factory, modified by the artist, until its programmed death; its death is its great creative act-the change of state."

"Art is sometimes called the 'transmission ecstasy'. Because TV is transmission with ecstatic potentials...why can't the viewer, after a trying day, sit down at his TV set and listen to music while watching the screen burst with beautiful color displays? These visual fantasies would relax you better than any tranquilizer and at the same time give your spirit a wonderful lift."

-Eric Siegel

Eric Siegel, an ex-prodigy from New York, who home-constructed a closed circuit TV camera at the age of 15, contributed "Psychedelelevision in Color", a reprogrammed color videotape within which the image of Albert Einstein gives birth to swirling continuums,

four-dimensional whirlpools and sweeping electronic auroras, the two-dimensional phosphor screen transformed into a trip beyond vanishing points.

"In these years I developed devices with patterns, sequences, motion, color, programmed to make the viewer get involved in the unfolding composition, to relax and want more, to develop a new way of seeing. As the requirements of this new art revealed themselves, a need for an instantaneous, flowing, comprehensive device for expressing these images arose. This vacuum was filled by the use of the color television tube as the readout device for the program apparatus."

-Thomas Tadlock

Tadlock's ARCHETRON, a monumental electronic console with one black and white monitor displaying the source material such as a baseball game, two smaller black and white monitors recording the stepped segmentation of the permutated image, all crowned by a large color tube radiating an infinite complexity of vibrant radial reflections, pulsing, unfolding, merging towards and surging from the meditational mandalic center.

"A pie-shaped triangular section of the broadcast image is removed", explained Tadlock, "and repeated 8 times in a reverse repeat around a symmetrical axis. The colors originate in the peice itself, reading out as the sums and differences of black and white areas of different parts of the same signal. The TV

call stations are the only patterns that repeat themselves, if the machine is left at the same setting--So you get a complete set of things that are never the same and things that are always the same." During the brief moments when the TV image is blank except for small interference dots, the kaleidoscopic translation ripples gently in concentric waves upon the phosphored pool.

"Black Spiral" by Aldo Tambellini, of the Black Gate Electromedia Theater, resulted from a collaboration with Tracy Kinsel and Hank Reinhold of Bell Laboratories. A high contrast spiralling white light shimmers, radiates, contracts, twists in orgasmic ecstasy, dwindles to nothing, and blazes forth again on the black video field. "Black Spiral" was the only piece remaining on after the others retired for the day, a beacon of hidden forces.

"I wanted to convert the TV lines into spiral forms", commented Tambellini, "using live TV transmission through the circuitry of the set itself. I had been working in slides and film before TV, painting on film as a direct medium, and eventually scratching and drawing lines on the film similar to TV lines. This related to the rapid pacing and abstract black and whites of my films, drew me to television as the most powerful hypnotic medium."

The primeval permutations of TV as an artist's medium stagger the senses with the potentials of programming on a global scale and within the inner sanctities of the private home. Joe Weintraub sees his AC/TV ("Audio-Controlled Television") as a machine "translating music into a complex kinetic image on the screen of any color TV. The brightness is controlled by the volume of the music.

The colors are controlled by the pitch. The patterns are dependent are both. Installation is simple, as the AC/TV clips onto the antenna terminals of any color TV. Patents pending... The AC/TV is radical art because it allows the viewer to turn off the endless stream of garbage and use his color TV in a personal aesthetically satisfying way". Radical, and marketable, Art!

Paik early predicted that "the cathode ray tube will replace the canvass."

Tadlock hopes for a relaxing of the holds upon TV as a medium by government regulatory agencies: "TV has been out for ee years and only now are artists able to use it. And even a show as comprehensive as TV AS A CREATIVE MEDIUM may never be presented on TV itself except within the confines of a building."

"Eventually, speculates Ira Schneider, "I'd like one monitor at the North Pole, one at the South, and two at the equator, big monitors switching and trading images back and forth."

We are witnessing the intermeshing of our global electromagnetic exoskeleton, one day to unite all in one glorious terrestrial aura.

THOMAS TADLOCK: THE ARCHETRON

"By means of a console with innumerable knobs, switches, dials and other mysterious looking controls, three small TV monitors and a system of mirrors and color filters, Tadlock is able to compose on a TV screen constantly moving and changing colorful kaleidoscopic images. In accomplishing this, Tadlock uses all or parts of three separate live broadcasts. It is now possible for this artist (or any other using the Archetron) in effect to create simultaneously works of art on TV screens in countless homes, thus making Nam June Paik's 'Silent TV Station' possible. All that is needed is for a broadcasting organization, a closed circuit TV company or a cable TV company to avail itself of this remarkable development."

- from the notes for TELEVISION AS A CREATIVE MEDIUM.

JUD: How did the conception of the Archetron first come about?

THOMAS TADLOCK: Several years ago, before I ever came to New York, maybe five years ago, I was working as a light sculptor with light bulbs in Providence, Rhode Island, where I studied at the Rhode Island School of Design. I started watching television, kaleidoscoping it, and screwing up TV- just something fascinating, like games. I'd never even heard of Nam June Paik at that point. The first kinetic art show that I think was ever held in this country was ART TURNED ON in Boston where I saw one of his pieces, so I first saw Paik's work which then showed even greater possibilities of television. I still continued to work with the electric pieces and finally got into TV with the actual commission- by Dorothea Weitzner, a collector- for this machine.

JUD: Is this the only machine built thusfar?

TADLOCK: Using television, yes.

JUD: Is it a patented machine- similar to the one for Richard Aldcroft's Infinity Projector? Would you build any others?

TADLOCK: Miss Weitzner wants to do it to protect herself. From the building of this, many ideas have come- of how to expand this, make

TADLOCK

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several others. In fact, this is really a basic experiment anyway in what I could do with TV. It's not everything I can do with TV- because of the expense. Nobody can really afford it- it's hard to find people somehow, to get the money to experiment with this.

JUD: Have you considered the idea of projecting the images?

TADLOCK: This machine can drive a TV projector as well as a direct monitor. A color projector costs \$186,000 (Note.- in 1969). I could make this machine more complex and show much more. There's many more things that I'm ready to do with TV- I only need the means to implement the ideas.

JUD: How is the image transformed through the Archetron?

TADLOCK: The broadcast signal is received in black and white, and a section of the entire picture is removed- a triangular section- and repeated in a reverse repeat around a symmetrical axis, to make the pattern that you see. That's a basic process- there are three units in the machine- there could be any number of these devoces to convert the picture over and over.

JUD: Similar to the triangle repeated kaleidoscopically eight-fold in computer random dot patterns.

TADLOCK: From one given picture, you can make two or three of these symmetries, because I could take the upper left, or the lower right, and another in the middle. That's what's going on here- there are three now- maybe there would be ten, 17, or 22- all feeding in.

JUD: That would make the image more complex.

TADLOCK: Yes. Those three black and white images are then fed as sum and differences of the gray scale- different areas are superimposed, each one given a color which is designated by the nine color controls and the three percentage controls on the electronic palette board- or color mixer. For each of the signals coming in, there are knobs for the three primary colors of light- red, blue, and green. By adjusting the combination of these, you can make each image any particular color- for instance, if the red and green knobs are both on and the blue knob is off, it'll be yellow; and if the red and blue knobs are on, it'll be violet; and if all of them are on, it'll be white.

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You can take each converted image and make it any color you want, and combine those three colors by the percentage knob to make it, say, 50% the yellow image, 30% the orange, and 20% the blue image, or whatever. And you can also change those while you're watching them, but I prefer to set them and then leave them. And you can set them up to show in a primary system, a tertiary system, or you can set for pastels, or Tibetan colors. I don't know; everybody likes different colors to play with. I'd like to make that programmable, instead of by knobs being adjusted, by filling out cards of different positions and what they mean. I can see it start to fall into patterns that have to be explored- and instead of positions on knobs, it can be run on sequences like they use in electronic music synthesizers- to synthesize color patterns going right down.

JUD: What do you envision working on after this piece?

TADLOCK: There are many avenues of approach that have been opened up in the making of this piece, and I'm waiting to see just what I'm going to do. I mean, I work mediumistically. I don't set out to do anything- I just do whatever comes up. I want to further extend my idea of processing the existing information that they're throwing into the air.

JUD: How did your earlier light machines compare with the present work?

TADLOCK: I still want to work in light but it's frustrating because the image producing apparatus isn't as complex as I want it. In other words, the most advanced light source we have is the television tube.

JUD: The two to four million information bits with which to play around with.

TADLOCK: Before I got into processing imagery this way, I was processing random information through a triangular rotary repeat. There might be six lights in each triangle that were wired all around so that a random pattern fed in would be a changing kaleidoscopic turning star effect. Before I really knew what I was doing, it was similar to reprocessing TV- which is like random garbage. I was reprocessing random information coming out of countdown circuits, etc.- into this kind of pattern.

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JUD: Did you know Richard Aldcroft?

TADLOCK: Yes, I met him at my studio. The people next door were trying to make pirate copies of his Infinity Machine- and somehow he came to see me. I was working on this machine at the time and he flipped. Yousee, the people next door had wanted me to run one of their pirate machine copies to see if it would work. And there's some secret to the process that Aldcroft knows how to do that would keep it from blowing up from the heat- the plexiglass cylinders in all the pirate copies would blow up in three hours and the mineral oil would all come out. They lost about \$6000 trying to make those phony copies.

JUD: That secret was not included in the patent.

TADLOCK: Right. So he thought that was pretty funny. And he was talking about the same thing that I wanted to do.

JUD: The beautiful thing about his machine, and the Archetron, is that the same pattern is never repeated. That's been a dream for a long time.

TADLOCK: Plus the information that keeps coming in here. Like my patron was watching this machine when it was broadcast on TV (on the PBS "THE MEDIUM IS THE MEDIUM"). She watched it on TV on itself. And during the opening there were psychedelic TV shows on TV we were watching on it- reprocessed, and so it goes on and on.

JUD: Did you ever talk to Aldcroft about his design concepts?

TADLOCK: We talked a lot. He wasn't interested in his machines at all when he was in Providence- he was interested in making floating environmental structures...

JUD: Yes, floating spherical cities on the ocean...

TADLOCK: Which had to do with what I wanted to do- and we were both more interested in that than art at that point, so that's what we talked about. I listened mostly to his theories which were all very radical, but he was able to convince me of the sensibility of every one of them. Since then I've thought more and more about it and I'm working on something on a smaller scale, a more personal sized environment. (NOTE: Since this interview, Tadlock had been in California completing a huge ferrocement boat, lighter than water yet virtually indestructable, upon which he planned to live and to transport the Archetron.)

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JUD: I've believed for some time that one of the few possible salvations for this country would be if more of the technology here were made immediately accessible to artists, rather than into the hands of...

TADLOCK: Business. As soon as an advance comes along that's powerful enough to be of use to the artist, it is usually snapped up and kept in tow by advertising- and government. For example the controls that are put on TV. It's been out now for some 33 years and only now are artists being able to- allowed to use it. I think I'm being too pessimistic about all this- but maybe being like that will get them to loosen up.

JUD: What do you think of TV as a medium for spiritual enlightenment or education? I can see something like the Archetron doing something to loosen up people's sensibilities.

TADLOCK: I've noticed that to be true- because making this kind of meditation pattern and then feeding it with the programming that exists- (the time base patterns that they feed into commercials that they've discovered make you want to watch, make you want to buy, make you just want to want)- just those subliminal countdowns they put in and things like that are reprocessed through the machine, and sometime you can simplify it, and that makes the possibility come to the front.

JUD: Paik has been taking popular images, and completely transforming them beyond all proportions into the abstract. Our society, inversely, takes good things and turns them into cliches, and Paik's work and your work retransforms these cliches into pure energy concept- pure visualization.

TADLOCK: Right. That's exactly the purpose of the work.

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ADDENDUM TO: THOMAS TADLOCK: The Archetron

July 21, 1969

Dear Mr. Yalkut:

Concerning ARCHETRON:

I enjoyed your article in EVO of July 2 last, but since Mr. Howard Wise mentioned to me that you might be writing about ARCHETRON again, ---please note that I am Miss Weitzner (rather than Mrs. as printed incorrectly), also that I am an inventor holding over 30 U.S. & foreign patents, that I introduced Thomas Tadlock to the possibilities of the kaleidoscope (I had been working on a MSS. since 1959 with color illustrations, text, and applications to all sorts of different types of machines, sonic as well), that it was I who decided that ARCHETRON should be in COLOR rather than move into our own closed-circuit programming after we had completed its black-and-white model.

Very Best Regards Anyway,

Dorothea Weitzner.

RAP WITH IRA SCHNEIDER AND FRANK GILLETTE:  
An Attempt to Reshuffle One's Temporal Experience.

Ira Schneider is, or was, a filmmaker who previously had studied art history and research psychology, and had begun making films in 1963. In the winter of 1968-9, he joined forces with Frank Gillette, a former painter who since 1965 had experimented with communications and videotape programming. As a case study of why a number of filmmakers and other artists have migrated into the realm of television and videotape, the following rap with Ira and Frank may prove extremely useful in understanding this shift in perspective towards the broadening spectrum of media and intermedia.

FRANK: Film people come to videotape as an extension of film; it's a relief for them. They see videotape in a large part as a means of making film easy, whereas tape is an entirely different realm, having many more bogus similarities to film than genuine ones.

IRA: Of course you're saying that as a painter. (Laughter)

JUD: How do painters and filmmakers get into videotape--how did you both get into it?

FRANK: I got into it when Fordham University--Marshall McLuhan's Media Center, or whatever it was called--laid some equipment on me a year ago last June. Basically the unit was two studio cameras, two portable cameras, two playback decks, and two monitors, and about \$300 worth of tape--that, plus some minimal editing equipment, various microphones, cords and addendum things was the unit--the package. I had this equipment for three months

with which to do whatever I wanted. It was like using the artist-in-residence concept in reverse--in other words, you take the residence out to the artist and give it to him to work with. So I had four TV units for three months and I produced a few programs with it--That was my introduction to tape.

IRA: I got into videotape when I found that the type of filming I wanted to do required particular ease and little stress on production--whereas in filming it was always difficult to get sync sound without the use of a crew. What I wanted to do was environmental and very loose, and I found it much easier to work with videotape equipment than with film equipment because basically you got everything down, and with sync sound, and you could do whatever you wanted to it afterwards. I've always had difficulty in working with low budgets, using film equipment and having to depend on people to help me. Videotape cuts down the size of the crew and provides sync sound from the word "go". Another advantage to videotape is that it fosters a life quality which I didn't always get on Film. Somehow the media are different.

JUD: The immediacy of the television medium.

FRANK: The immediacy is conveyed through a sense of tactility that film lacks. There's a sense of touch--volume--the way volume is defined on videotape is more enhancing to the volume quality--it emphasizes volume.

JUD: What about the image resolution differences between film and tape?

FRANK: Well, half-inch tape was a technological compromise in a way. It comprised image definition for portability. You can make a portable videotape reasonable if you put the information on half-inch tape. It's the other side of the equation being

equalled out. In terms of the television definition of resolution, 230 lines is a high-resolution picture. It's only a low resolution picture when it's compared with, say, 525 lines.

IRA: When we talk of 525 lines, which is American standard broadcast television, we're talking about 525 at the point of transmission. By the time it's received by a set it's down to 320 lines. So there's not too much actual difference between that and the, say, 220 line capability of a portable system.

FRANK: The potential of cable television (CATV) is that with adaptation you can send any signal over the line--the cable line--without having to go to two inch quadraplex. You can essentially produce a cable TV station with facilities built around portable equipment. You eliminate the interface problem by transmitting through cable as opposed to throwing it out into the air. The FCC requires 525 lines when throwing signals into the air because of the chances of break-up, interference, and all kinds of electronic pollution.

IRA: It's a difference in rationale because with cable you're getting no loss. When you're passing a signal from a video amplifier through cable you're getting basically what your output is at the reception site.

FRANK: The only existing problem with cables is that they have to be insulated because signals can transfer and pollute each other.

JUD: Like crosstalk on magnetic tape.

FRANK: Exactly. So with some minor adaptations, the essential attribute of videotape when it connects with CATV is that it uses

already existing systems. Now, television is usually understood in terms of a receiver. Our idea is to render that void. Television is something you feedback with as much as you receive with--which is a symbiosis--which works both ways. That's the vast potential of cable TV hooking up with portable equipment. You can have everybody running around with portable TVs like people run around now with Bolex cameras, and by eliminating the interface with that and transmitting, using cable.

IRA: Perhaps we should quickly run through these different television notions, CATV, CCTV (Closed Circuit TV), and UHF. The notion of closed circuit TV being akin to cable is that closed circuit, if we're talking about videotape or storage of information and playback, plays back from the recorder into a wire that runs into the monitor. CATV is an extension of this in that the wire--cable--between the playback and the monitor is much longer. The longer the cable, the more you have to generate the signal so that it can travel that far--it needs amplification.

FRANK: Closed circuit TV is best understood in terms of a stereo system. A few years ago there were no stereo systems, and no software to play on stereo systems. Likewise, in 5 or 10 years, closed circuit systems will probably be as popular as stereo systems are now, and as you have stereo albums for stereo systems, you'll have videotape albums for video systems.

IRA: Although EVR (Electronic Video Recording) that CBS is coming out with may interfere with that. I think EVR is another hype.

FRANK: It's a reactionary technological move.

IRA: EVR is not videotape but a combination of magnetic sound strips and film to be played back through a special apparatus

on your receiver or monitor. I think their main interest in investing in this system is that it is basically like Super-8 film, and they expect to be putting out entertainment albums on EVR, and unlike videotape it will be difficult to copy, so that they can control the market.

FRANK: It's going against the current of the nature of television. Television has ubiquitous access. If you let the system run wild, everyone can get in on it, and it's not held by selected hands.

JUD: You were going to mention UHF (Ultra-High-Frequency)?

IRA: UHF is simply a means of putting more channels out for broadcast--thrown through the air. However it suffers the same limitations as standard broadcast in the sense that it's regulated immediately by the FCC--through not as rigorously and commercially compelling as standard broadcast--but still forzen to a certain number of channels.

FRANK: On the other hand, UHF will probably serve as the first show for the Pacifica radio kind of experiment when it reaches television--it'll probably not be CATV. UHF is now serving some function in the sense of sub-cultural TV serving the minority communities.

IRA: But UHF now has severe limitations because it is mostly set-up by people who are committed to the standard format of broadcast TV--limited like standard broadcast in the sense of what they can deliver or what they can see is necessary in terms of information transmission to people. For the most part now I see TV as a dehumanized media.

FRANK: At the present time. But that's not intrinsic to the system that television is. We're interested in exhausting the potentials of what television is as a total system.

JUD: Frank, what was your first work in television?

FRANK: Well. I had been doing monochromist minimalist painting, dealing with concrete concepts, and I had reached a hiatus in painting. Along came the contact with Fordham, and I first produced a 5½ hour documentary on Saint Marks Place. I spent three weeks standing on Gem's Spa corner interviewing the locals. The documentary's conception was that it focused from the inside out--these people defining themselves, and not my going in and extracting information of which they're only an element. They basically gave their raps on videotape.

IRA: And during this period Frank existed on egg creams and marshmallow candies.

FRANK: That lasted 3 weeks. Then I experimented through the Village Project with the effects of videotape on kids with bad trips--15 to 19 years old--burnt-out acid cases--let them use the camera on me, themselves, as a means of expression as opposed to a means of recording their expression. They were alienated from their shrinks who came in periodically to extract information from them on the St. Marks scene. Videotape was a new, favorable means of feedback for them; they dug it. I also used videotape like a canvass, specifically about four hours of what I call a self-portrait on videotape, that used four cameras with two feedback systems. There are points in the self-portrait where you see on tape me looking at myself on tape, looking at myself on tape. There were generations of feedback, and the gradual alienation from one's previously considered image into

an entirely redefined image of myself. At a point in December, I met Ira, we discussed working together, and we went out to Antioch College in January and February.

IRA: We were invited out by David Brooks, who was teaching in the film department and who managed to get us access to their TV studio equipment. We brought our own Sony portable equipment, and completed about 20 hours of taping there, combining many approaches, in the studio and in the streets. The basic notion was that we were going out to meet an American sub-culture, without any preconceptions, and to work through interaction.

JUD: You had been filming and not working in television prior to this?

IRA: No. I stopped that summer when a film project fell through because of lack of funds. I was filming this British painter painting the SALVATION building in Sheridan Square and his interaction with the indigenous people, from him alone painting to over fifty people dancing in the streets and decorating the phonebooths. I won't mention the cameraman's name, but he was an inveterate zoomer, which made cutting the shots very difficult. Again with film you have to spread out production among many people, and if you don't have an organized group, it becomes impossible.

(Ira Schneider's previous films include THE FRANTIC PEDANTIC SEMANTIC ANTIC, THE GHOST OF WITTGENSTEIN, and LOST IN CUDIHY a prizewinner of the 1966 National Student Association Film Contest.)

JUD: What happened after that?

IRA: Well, let's see--four months of depression (Laughter), thinking about what I was going to do next, and then I woke up one morning saying, "Television, television, that's how to communicate quickly". And then I met Frank. I decided videotape would be the next move, grabbed a knapsack full of money, some videotape equipment, a car, forty pounds of salt pork, cans of baked beans, and we split for Antioch--where we did some lecturing and involved the students as actors in our studio and non-studio work. One technique was to introduce four to six people into a studio with only chairs facing cameras, leaving them there and working the cameras from outside.

FRANK: We gave them minimal instructions--like you can't communicate with each other unless you communicate through the camera. Under each camera was a mirror--they sat in the chairs, could do anything they wanted, but only through the media--the camera, and they could use the mirror to facilitate their actions.

IRA: Sometimes the rules were more and sometimes less restrictive--like the restriction being not to destroy the cameras. We also taped at David Brook's countryhouse with actors--loose plots--an actor peeling potatoes, and suddenly he was a farmer who had lived there forty years.

FRANK: We also picked up the town, a strike at a book-bindery, interviews with farmers, children, and the locals at the doughnut bakery there in Xenia, Ohio.

IRA: And then we had the Cincinnati jugband in the basement.

FRANK: And a vain attempt at a skin-flick on tape.

IRA: We canned that but we got a lot of beautiful bathtub footage.

JUD: Some of the bathtub scenes were included in your WIPE CYCLE television mural at the Howard Wise Gallery TELEVISION AS A CREATIVE MEDIUM SHOW?

IRA: Yes, we seem to have a facility to abstract small sections of material-

FRANK: Which is an important point. Videotape lends itself to collage more easily than film because of the accessibility of the image.

IRA: One thing we succeeded in doing at Antioch was turning the kids on to using videotape in their own work, and then we split back to New York, and shortly thereafter fell into WIPE CYCLE.

"WIPE CYCLE is a television mural designed to engage and integrate the viewer's television 'image' at three separate points in time and five exchanging points in space. Synchronized cycle patterns consisting of live delayed feedback, broadcast television, and taped programming are developed through four programmed pulse-signals every two, four, eight, and sixteen seconds. Separately, each of the cycles acts as a layer of video information while the four levels of information in concert determine the overall

composition of the work at a given moment. The intent of this overloading (something like a play within a play within a play) is to escape the automatic 'information' experience of commercial television without totally divesting it of its usual content. Thus, the information on the programmed tapes juggles and recombines elements within the Gallery and its immediate environment with portraits, landscapes, montages, and video distortions." --FRANK GILLETTE

FRANK: The original proposal was to distribute the tape delay systems throughout the gallery, but because that would have interfered with other exhibits it was shelved, and the mural conception with the delay mechanisms on one wall was introduced.

IRA: I guess we just designed for the space provided for us an entrance piece, or opening piece, facing the Gallery elevator and picking up people as they came in.

FRANK: To emphasize this point we taped our co-exhibitors while the show was being set-up and programmed these bits into WIPE CYCLE to give it an interesting internal feedback quality. You saw the show being put together as you entered the gallery, and the rest of the show was how it had been put together.

IRA: The most important facet of WIPE CYCLE was the notion of information presentation, and the integration of the audience into the information.

FRANK: It was an attempt to demonstrate that you're as much a piece of information as tomorrow morning's headlines--as a viewer

you take a satellite relationship to the information. And the satellite which is you is incorporated into the thing which is being sent back to the satellite--in other words, rearranging one's experience of information reception.

IRA: WIPE CYCLE'S physical makeup is a television mural consisting of nine monitors.

FRANK: It's a prototype model--

IRA: A live feedback system that enables a viewer standing in his environment to see himself not only NOW in time and space, but also 8 seconds ago and sixteen seconds ago, and these are in juxtaposition and flux. In addition he sees standard broadcast images which come on at periods alternating with his live image, and also two programmed shows which are collage-like, ranging from a shot of the earth from outer space, to cows grazing, to 57th street. Somehow there's a juxtaposition between the now of the person, and the individual, with other elements of information about the Universe and America, and so the general reaction seems to have been a somewhat objectifying experience, and also a somewhat integrating experience in terms of one's place in the Universe.

FRANK: It's an attempt to reshuffle one's temporal experience--one's sense of time and space.

JUD: What possibilities do you see for the integration of abstract television effects and electronic distorting devices, such as Paik uses, in your TV work?

FRANK: I'm not as much interested in my work in pure abstraction as with the potential of TV for collage abstraction, that is to say, the taking of real elements which read as real--or live on

videotape--and juxtaposing them in abstract formulas to create a "living" abstraction. People see videotape and what they read in their skulls is "real"--it seems live and has an unstored quality--like the live immediacy of even Walter Cronkite on the 7 o'clock News. I see television as a potential for using that "live" effect via abstraction, as a vehicle for an abstract statement from another angle, but I see it as no less than that.

IRA: I would add that the notion of abstraction also includes the notion of the abstraction of information, and the juxtaposition of information, which can be further spaced out by the integration of distortion circuitry effects. But basically, I think we look for a point from which to take off for abstraction on a level of content, or of information, and then into something like notions of successive auras, which by the way come up on videotape once in a while. I won't say it's an aura but there's electromagnetic interference of different kinds that enter into videotaping. Somehow it's picking up vibes.

FRANK: A videotape freak argued that the image on his viewfinder in a portable camera had been bettered by his feeding the camera good vibes.

IRA: In fact, we looked through it and it seemed that he was right. It was better.

FRANK: It was certainly the best viewfinder image I've ever seen in a videotape camera, and his claim was that he broke the camera in by sending it good vibes, by loving it, by psyching out the media and changing the image. An ideology can be built for

better electronics through metaphysics.

To demonstrate the poignancy of tape, people have seen themselves feedback on film and feedback on tape, and invariably they say that tape is a much more eerie experience, particularly the initial witnessing; the first time you see yourself back on tape, it's the first genuine view from the outside of what the inside is like. A mirror is like an extension of the inside because you have to keep your eyes focused on it, and you're always looking at your eyes focused into a mirror. But with tape, you see yourself in every gesture, your kinetics are revealed. It's all suddenly outside, and it's the first time you've ever met that outside. Videotape sends a quality of the whole, and it's that poignant sense of the real whole that gives it strength. It sends a volume and tactility--a sense of touch, the texture of the volume.

IRA: In film I always get the feeling that my image is in a two-dimensional space; somehow I don't relate it to myself immediately. Whereas, in videotape, I tend to see my movements and my behaviors, the way I carry myself, much more vividly. I haven't felt any satisfactory definition of the differences in systems; I think it will continue to evolve.

FRANK: Film imitated theater, videotape imitates film. It's just beginning to develop. It's like the first automobiles with the engines in the front, because that's where the horse was.

IRA: Or like the television media's news presentation coming off of a concept of "sound" news--as per radio.

FRANK: Or attempting to distribute TV's as they once distributed radios. Well, that's ignoring the potential of the system. The mentality that went into the distribution of the TV system is remarkably low--it was surrendered over to marketing. Television, from its inception, with the slightest adaptations, had the potential of doing what it's doing now in terms of its flexibility and availability of access. Some CATV stations are delivering nothing but commercials--they're total marketing experiments. How to market your product more efficiently: show them pictures of it with singsong, and send a program along with that to which they get narcotically addicted, and sell soap; it's a potpourri of ailments being solved. That's what TV is about now.

JUD: Korzybski talked about plants being chemically binding, animals adding spatial binding, and man time-binding; the fact that we can look at and interpret artifacts by an Egyptian.

FRANK: Yes, we are complex modes of all sorts of messages and signals, and one of these defines endurance. What videotape does is to dip into that; you can demonstrate an individual's sense of his own past with tape much clearer than anything I can think of, unless you add the even further dimensionality of holography where you can further articulate the three-dimensionality of the image. You can qualify it by getting a better space understanding of it but you can't qualify it anymore in terms of your temporal understanding of the tape. The delay system that we had in WIPE CYCLE is only an embryonic form of this. You can establish an entire

environment where you're constantly tracking yourself every two seconds--at two seconds intervals every point going back add infinitum is somewhere being fed back to you.

IRA: A delayed strobe.

FRANK: Only it's an informational strobe, not merely a light strobe. Which is one of the ideas that freaks me out and which I'd like to do. In other words, how many generations of self-feedback can you keep track of without totally losing the sense of yourself; literally, through electronic techniques, setting yourself up outside of your body. You don't have to sell the Hindu trip anymore, you sell the television set.

I foresee in the future that it'll be largely a matter of how much information you hold--information replaces capital in the economy. That cultural switchoff is not that far away. The revolution in America is not going to result from the clash of political ideologies; it's going to result from the saturation of information and the modes of information dissemination being entirely different, and at that point you'll have the American Revolution; and the only violence will be done to its own history, or its own sense of history.

IRA: Media violence, that's all.

FRANK: Paik is the George Washington of the movement, which has yet to encounter its Warren G. Harding.

The name of the game in this number--the entire videotape media number--is being in the position of outthinking yourself, constantly expanding parameters, dropping previous boundaries, instituting new boundaries! it's constant reorientation because

the volume of the information is so incredibly high, and the exhaustion and obsolescence with which the media information is used is very high rate. So you're constantly faced with the situation that if you're holding an idea for longer than "x" period amount of time, two weeks perhaps, the idea is incorporated into the space and is obsolete. So the ideas have to be constantly generated in terms of always out-thinking the ideas that were previously generated--it's a spiralling process, leading to who knows where, and it's a direct result of the electronic process. It's like electronic foreplay, you can record and know what the cat on the other side of the world is thinking about as fast as you can know what you're thinking about; practically speaking it's about the same speed. And that changes the nature of the way information interacts and the way people take advantage of information.

IRA: Frank, I think, is in charge of generating vocabulary.

JUD: What's your feeling about the televising of the moon landing?

FRANK: The idea that everyone who has a television receiver will be capable of seeing the first step on the moon is a gigantic, universal confirmation of experience. Columbus didn't have that luxury. The entire world is with him literally, he's having his experience confirmed like nobody else has had their experience confirmed before--he's going to be stoned, just be mere vibration feedback his experience will be confirmed. Like the first motherfucker who hit the North

Pole, or Mount Everest, he says oh shit, this is his thing, that he's doing, he's all alone by himself, he's got to come back and rap about it.

IRA: These guys don't have to hold it in. They can rap while it's happening. But I wish it didn't sound like a football game.

FRANK: One of the environmental TV projects we're in the process of designing for "X" is a complete system in which the room would be the experienced core of the television environment, with one wall that would entail color. A third of the system would be direct color tape, and two thirds of the system would be black and white adapted to color through the use of filters, and so on, and the elements would be around 18 monitors and a videotape projection system, using retrieval, delay units, projection mechanisms for matting one image over another image (where you get three or four overlays).

IRA: Let's say, integration of the live audience onto pretaped material.

FRANK: It would probably use six cameras, some rotating, some stationary, and all serving the different functions of throwing the witness to the experience into the feedback of the experience. It's more than merely putting together TV environments (teledynamic environments)--we'll be dealing with software concepts also.

IRA: We'll be dealing with media-ecology.

FRANK: One of the ideas for which we haven't found backing yet, would be a video chamber with a plexiglass core, so

one would actually enter the chamber physically--and 360 degrees around, the chamber structure would be a system of monitors feeding back your own image integrated with programmed material.

IRA: From many different angles.

FRANK: For example, if you were standing in this chamber, the camera may be shooting from underneath and feeding back the image of shooting you from underneath overhead, and this would be switching with other positions. And the manifestation of this would be that you would enter the chamber and experience the total TV environment, where you would have contact with a contiguous environment, and that would be the maximum TV experience given the current state of the technology. Besides using separate monitors, we're looking into the possibility of having a circular or chamber shaped video-receptive screen for projection--

IRA: Which is not yet available commercially, but will be in the next few years. I think content is by and large the most important thing, and particularly its applications in helping people to better realize the objectifying experience. In other words, seeing themselves from outside themselves, which potentially can lead to the realization that we are all actors--or that we are not realizing our potential, that much of our energy is relegated to our habit patterns and the behavior that's carried us through to this point. When you can see yourself on TV, and the back of yourself simultaneously--something that we seldom if ever get a chance to do--if we extend further into the notion of an environment, one can

see oneself in a social, or spatial environment. This offers a potential of, say, liberation.

FRANK: Another dimension possible to varieties of abstract programming is literally using videotapes or the TV screen as a temporal canvas. It's like a canvas, only the other dimension of time is introduced; and all the implications which this realm opens up, as far as total environment constructions, or constructing environments which are in their totality THAT feedback which we want to explore.

IRA: In addition, there's a further idea of entertainment, and the individual becoming his own entertainment. More and more, I see people laying out, and boredom creeping in on the scene, or simply lack of initiative. Now, seeing this over a period of time being mediaized or seeing yourself in front of a TV camera--seeing the feedback--breeds the notion that we're all potential actors--effectors of the environment--that we can do amazing things. It's a matter of reshaping ourselves perhaps.

NAM JUNE PAIK, PART ONE: Cathode Ray Tube Will Replace Canvas

When John Cage saw the electronic TV experiments of Nam June Paik in 1965, he said: "I always thought that someone would do this. The next step will be pocket-sized videotape recorders."

"Art and TV are no longer two different things. They're equally redious. The geometry of the one's devitalized the other ('find out what kind of bad habits you have'); TV's vibrating field's shaken our arts to pieces. No use to pick them up. Get with it: 'Someday artists will work with capacitors, resistors & semi-conductors as they work today with brushes, violins, and junk.'"

- JOHN CAGE in "Nam June Paik: A Diary" in A YEAR FROM MONDAY

Born in Seoul, Korea in 1932, educated in Tokyo, Munich and Cologne, and having worked in the studio for Electronic Music of Radio Cologne, Paik first exhibited his electronically altered television "light machines" at the Galerie Parnass in Wuppertal, Germany in 1963. In 1965, his television work was shown in New York at the Galeria Bonino, as well as his 20 channel radio-controlled Robot K-456, now resident in Cologne.

JUD: John Gruen has called "the embodiment of the Combine Generation compulsion to be a latter-day Renaissance man of the arts" by being at once a kinetic sculptor, a composer, an actor and a theoretician. What new roles have you assimilated?

PAIK: I am the greatest Haiku poet of all periods since 1967, and it is scientifically provable. 17<sup>111</sup> is a magic number. Haiku poems consist of 17 syllables and there are no more than 111 syllables in the Japanese language; therefore 17<sup>111</sup> is the total possibility of all Haiku poems including the best and the worst. When I let the computer write out all these possibilities, which is pretty easy, thereafter no one can write any more Haiku poems. Whatever they might write, however they might sweat, the result will be one of my Haiku poems. The best Haiku poet from now on will be at best the editor of my poems.

JUD: And what are your views on the possibilities of the laser?

PAIK: In 1965, Billy Kluver asked the question, "If you could have unlimited money to use technical means for artistic uses, how would you do it?" One of my answers was to make many, many laser TV

and radio stations, so we could have, for example, a Cage only station, a Brakhage only station, etc.

Color has been the biggest problem in 20th century life, but color will be the biggest problem to death in the 22nd century. Because of the laser gun, we will have not only the luxury of life or death, but the choice of the color of death, violet death, pink suicide, transparent nirvana, tricolor Harakiri, etc. I think it will be the biggest invention after the electric knife.

JUD: As a communication specialist, what role do you envision for the artist?

PAIK: 80% of the family planning job in India is the publicity job for which artists are best talented. The only way to reach an Indian villager is through the mixed-media language, which is the avant garde artist's own language. Meanwhile, a first class Ad-man would never go to India to live, and probably third-class talents are getting paid in India at first class rates and are doing third-class jobs. Bizarre vision, unorthodox approach, rich imagination and, most importantly, a genuine love for India and a will to study and admire Indian culture- all these make the artist a qualified publicity worker for family planning, and probably more talent for this work will be gathered among artists than any other group.

JUD: What is your contribution to the C.I.A.?

PAIK: A great deal: A) Most of my electronic TV work is a scanning variation. I think I have more scientific data on the scanning pattern than any lab on earth, and this is something for the C.I.A. For example, if the Republic of Tanganyika sent their moon ship to the Moon and wanted to send their picture back to Earth in a way that the Republic of Uganda or Katanga could not see its content, then they could scramble the picture according to one of my 1000 scanning patterns and send it back to Earth. In this way the balance of power in Africa would be stable forever.

B) The use of the "Synthetic Face" for police identification and beauty surgery will enable us to construct any kind of face on a TV screen: e.g. a suspect who has the long contour of John Wayne, the melancholy eyes of James Mason plus Chou En-Lai, half bald as Yul Brynner, oriental flat nose, but with the sensual mouth of, say, Oscar Wilde, but wearing glasses like James Joyce's,

and the sex appeal of Henri Vidal.

"I suggest to build a 7 channel video signal mixer, in which each camera shoots the separate parts of various faces, enabling us to compose one face out of 7 men's characteristics.

- a) eyes weep, while mouth smiles.
- b) only eyes come out of face and fly away (negative feedback of eyes will erase out original eyes electronically.)
- c) a face with slowly shrinking mouth.
- d) a face with two mouths and three eyes.
- e) whole face shakes, but only nose stays unmoved.
- f) put dog's eyes and cat's mouth to Adenauer's face."

- NAM JUNE PAIK.

JUD: What is your main concern as of now?

PAIK: As a responsible citizen, I am very worried about the moral consequences of the picture telephone. First of all, the picturephone will undoubtedly soar the sales and spur the designs of gorgeous negligees. When you get a telephone call at night, you will want to be seen in your best pajamas.

This has its positive aspect for society. Say, a businessman goes to a convention in the Midwest and wants to make a goodnight picturephone call to his beloved wife in New York, in the eastside brownstone house. They talk to each other, a bit of escalation, and kiss through the picture, a bit more escalation, they try to hug through the picture, in vain, frustration, and a bit more escalation. Then, maybe a daring wife might talk to her husband topless, but that's still okay.

But what happens if there is a professional good night answering service, which has a staff of buxomy blondes, doing picturephone answering service, how will this affect the whole Park Avenue call girl business? And what if micro-boppers get that telephone number? I urge, as a responsible citizen, to set up a special committee in Congress for this attack on morality. John Cage expressed similar concern already a few years ago.

JUD: What do you think of the urging of J.J. Akston in ARTS magazine for an art and business collaboration?

PAIK: I urge that the top 500 businesses create an "Artist-In-Residence" position to advise in marketing advertisement and the research of new products on the top level. so that their unorthodox fresh sense can vitalize a big corporation hierarchy. For example, John Cage as Artist-In-Residence of I.B.M., Allan Kaprow in the Chase Manhattan Bank. Mary Baumeister in Helena Rubinstein, Christo in the United Packing Company, Otto Piene in Polaroid, USCO in General Motors, Nam June Paik in the Something Else Concern.

JUD: Whom do you recommend to Dow Chemical?

PAIK: Franz Schubert.

JUD: Now even Ray Johnson is going out with a petite computeress. What have been your results with the computer itches?

PAIK: Max Mathews of Bell Labs has quoted John Cage, who said that if you are surprised with the result, then the machine composed the piece. If you are not surprised, then you have composed it.

I found out, however, that no matter how genial a computer might be, "he" has no common sense. For example, instead of just saying "Walk", you have to break it down to logical steps, that is, give the weight to the left half of your body, give the strength to the muscles below the knee, put the energy to the vector pointing to the sky, making 90 degrees to the earth, move the vector to 160 degrees to the earth, using also universal gravitation, stop the movement as soon as the distance between your leg and the earth comes to zero, repeat the above process for your right leg, the right leg meaning your leg on the right side of your body, then repeat the entire process 100 times.

"Weiner's main theme was 'control and communication in animal and machine' (note: animal comes first), which he put as the subtitle of his main work, 'Cybernetics'. He reached to the automatic control of the anti-aircraft gun, an earliest model of today's huge computer, through the study of feed-backs in the animal's nerve system. Also the binary code of today's computer has its origin in the 'all or nothing' character of our Neuron synapses, which are either simply 'ON', or simply 'OFF'."

- NAM JUNE PAIK.

PAIK, ONE

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PAIK: I decided to title all my computer pieces in French, to protest the lack of common sense in the computer. Verlain wrote: "It rains in my heart, as it rains in the city." I say: "It rains in my computer, as it rains in my heart"- "Il pluit dance mon ordinateur" will be my first piece. It is the mix of real rain and simulated rain in the computer. My second piece will be called "La Computer Sentimentale", and the third piece "Aimez-vous FORTRAN programming?"

The more it deals with the character of randomness and repetition, the more efficient is the computer. These are the two poles of human artistic materials. Total repetition means total indeterminism. Both are mathematically simply explicable. The problem is how to use these two characters effectively. Therein lies the secret for the successful usage of the computer in the creative arts.

"Indeterminism, a core in the thought of the twentieth century from Heisenberg via Satre to Cage, reflected also in Wiener and McLuhan. For Wiener indeterminism was entropy, a classical terminology of statistics, and for McLuhan indeterminism was the 'cool media with low definition'...'it is possible to interpret the information carried by a message as essentially the negative of its entropy and the negative logarithm of its probability. That is, the more probable the message, the less information it gives. Cliches, for examples, are less illuminating than the great poems.' (Norbert Wiener: The Human Use Of Human Beings. p. 21) White noise has the maximum quantity of information." - NAM JUNE PAIK.

JUD: You have worked with electronic music since 1958 and with electronic painting since 1960. What is your opinion on the current stage of the art and technology boom?

PAIK: If revolution meant electrification for the Russians of 1920; and for the Americans of 1940, wall-to-wall carpeting; then revolution in 1960 means electronification, from mind to mind and from planet to planet.

"McLuhan's famous phrase 'the medium is the message' also existed implicitly in the science of communication since the 1940's. Norbert Wiener wrote that the information, in which a message was sent, plays the same role as the information, in which a message is not sent. It sounds almost Cagean.... Cage might say, 'a notation, with which music is playable, plays the same role as the notation, with which music is not playable'. I titled several of my pieces as 'playable music', since most of my musical compositions are not playable." - NAM JUNE PAIK.

PAIK: But even McLuhan misuses and mixes up the words "electric" and "electronic", which have as much difference as "tonal" and "atonal". In the electronic trade jargon, we distinguish roughly two sort of processes: 1) peripheral units, that is, various input-output units and gate circuits, and 2) central processing units, that is, various data-storage and data-processing units, which have some similarity with organic unity, the animal and human machines. Many art works using electronics up to now have been in the first stage. Whether you use a capacitor switch, a photo-cell switch, or wireless control, it is still the peripheral unit and does not reach the central processing units. Data PROCESSING is the superior meaning. Some of my color TV works have this kind of data processing unit, because they have some discontrol elements among the three constituents, the creator-artwork-and-viewer. They are moving independently, this is, affecting each other, but not determining each other.

"The systematic study of SCANNING in symmetric and assymetric, geometric and ageometric, deterministic-prababalistic-indeterministic, periodic and aperiodic ways.

The main reason for the quick success of my electronic art was that I gave up very early the production of video-signals (information quantity: 4 million bits per second) in order to concentrate my efforts on the creation of unusual scanning patterns (very manageable information quantity: 15,000 and 50

bits per second). Especially the addition of a third deflection yoke and triple modulation was a breakthrough. The quick switching of various deflection patterns (e.g. spiral, oval, triangle, etc.) with adequate gate circuit as in chromatron color TV will enrich the variability by far. I am confident that the introduction of the computer to this already well proven area will bring immediate success."

- NAM JUNE PAIK.

PAIK: I also envisage the day when the collaboration of artist and engineer will progress into the **integration** of artist and engineer into ONE person. According to my past experience, the best results were achieved through accidents and error. As you see, the transistor was discovered by accident. This means that the present computer age was the product of chance to a high degree. Therefore, if I give an order to an engineer, and if I don't go through all the experiments myself, (that is the complicated process of trial and error) I will lose all those precious errors, I will only get what I want, and miss all the disappointments and surprises. I have found that the by-product is often more valuable than the first envisioned aim.

"But if all arts merge into one, as the recent movement of Multimedia shows, then the study of various arts should merge too into one by the qualified investigator, who, if I may simulate Wiener, is 'a specialist in his own field but possesses a thoroughly sound and trained acquaintance with the fields of his neighbors. " - NAM JUNE PAIK.

PAIK: And, to look back to the classics, Leonardo's scientific study of perspectives was inseparable from his artistic achievement, Chopin's and Debussy's piano virtuosity was inseparable from their compositional imagination. Although the piano has only 88 keys, now we have in color TV 12 million dots per second, which I have somehow to control for my work. It is like composing a piano concerto using a piano equipped with 12 million keys. How can you deal with that vast quantity of possibility without the painstaking study of your materials and instruments?

"Anyway, if you see my TV, please, set it more than 30 minutes.

'the perpetual evolution is the perpetual UN-satisfaction. It is the only merit of Hegelian dialectic.'

(R. AKUTAGAWA)

'the perpetual UNSatisfaction is the perpetual evolution. It is the main merit of my experimental TV.' (N.J.P.)  
The frustration remains as the frustration. There is no catharsis." - NAM JUNE PAIK.

JUD: Can you comment on some of your "composite" pieces at the second Bonino gallery exhibition (1968)?

PAIK: One element was electronic antique art. I used some first class Japanese art works and combined with the new electric media, without harming the original antique work. Thus the buyer is sure to own at least one authentic and secure investment, even if Nam June Paik is completely forgotten by the year 2000; and if my reputation does survive until then, then they will own two authentic works. It is a game in which the buyer never loses.

One more new idea was the collaboration of two artists, like Cage and Tudor in the performance of music, but never done quite this way in the visual arts. Mary Baumeister, Ayo, Robert Breer, Christo, Ray Johnson, made the exterior housings of my TV as their own composition. In serious art, becoming a celebrity is only a passage to anonymity and these collaborations are a modest but beautiful stepping-stone to the utopian republic of anonymity.

"McKuhan sees only the good side of TV culture. David Reisman was more pessimistic about mass communication sociologically because of monopoly manipulation by continual headlining and simplification of news. Norbert Wiener, who contributed to the electronic age, was pessimistic, 'scared of his creation.' Cage expressed an opinion to the effect that in a way McLuhan was only describing today's phenomenon. It was important for a diagnosis of the age, but he made no value judgment."

- NAM JUNE PAIK.

NAM JUNE PAIK, PART TWO: We Are In Open Circuits.

"Many mystics are interested to spring out from ONE-ROW-TIME, ONE-WAY-TIME, in order to GRASP the eternity.

aa) To stop at the consummated or steril Zero-point is a classical method to grasp the eternity.

bb) To perceive SIMULTANEOUSLY the parallel flows of many independent movements is another classical way for it.

But poor Joyce was compelled to write the parallelly advancing stories in one book with one-way direction, because of the orthology of the book. The simultaneous perception of the parallel flows of 13 independent TV movements can perhaps realize this old dream of mystics, although the problem is left unresolved, whether this is possible with our normal physiognomy (we have only one heart, one breath, one focus of eye,) without some mystical training, and IF WELL TRAINED.....he needs neither 13 TVs, nor TV, nor electronics, nor music, nor art.....the happiest suicide of art.....the most difficult anti-art, that ever existed....." - NAM JUNE PAIK in "afterlude to the EXPOSITION OF EXPERIMENTAL TELEVISION, 1963, March, Galerie Parnass.

Eating grapes and talking to Paik in his New York studio (Canal Street), I asked him about his work with computers and computer-generated images at Bell Laboratories. "Oh, my work with computers; grapes are better than computers. The computer has never had an irresistible attraction for me, but grapes do."

"Cyberated art is very important, but art for cyberated life is more important, and the latter need not be cyberated." - Nam June Paik.

PAIK: For the MACHINE show at the Museum of Modern Art in 1968-9, I first made all my color TV playable by the viewer; now I can do much better using the computer.

"I have treated cathode ray tube (TV screen) as a canvas, and proved that it can be a superior canvas. From now on, I will treat the cathode ray as a paper and pen....

If Joyce lived today, surely he would have written 'Finnegan's Wake' on videotape, because of the vast possibility of manipulation in magnetic storage information."

- NAM JUNE PAIK FROM "RONDO ELECTRONIQUE", 1965, printed finally in the MACHINE show catalog.

PAIK: There are three ways:

- 1) using the Calcomp plotter which makes all the information bits into one graphic sheet, but this is very slow;
2. using the Stromberg-Carlson 4020 microfilm plotter which is now standard equipment for computer-based movies and graphics. This machine is very versatile but it has for me one very grave mistake: the end result will be recorded on film rather than communicated directly on the cathode ray tube. (NOTE: Since this time in 1969, Bell Labs has since developed direct read-out on CRTs. Others were to follow.) If you work with it for a short time, it costs hundreds of dollars because of computer time-sharing, and the results are always fixed and determinable, not indeterminate or changeable. The result must be projected and you lose the burning effect of looking directly at the cathode ray tube. Watching a direct source and indeterminacy are my main interests. The 4020 has a scanning of 1000 X 1000 (X and Y) which is pretty good, but one month rental of the machine is \$8000 which is godamn expensive. I don't think it will be the machine of the future;
- 3) The third means seems most promising: feeding computer-generated signals directly into the various inputs of the cathode ray.

"Professor K.O. Goetz of the Kunstakademie in Duesseldorf, Germany has published since 1960 on the idea of feeding the Kathode of the TV picture tube with a computer. This idea has not been realized, because he could not get a computer and our largest computer is still too slow to send 4 million points in each one 50th second. Although this idea and my method is completely different, I want to pay due respect."

- NAM JUNE PAIK, Winter, 1964, in NEW SCHOOL concert program.

PAIK: This is a good symbolization of the human body which has seven inputs from ears to mouth to genitals. The cathode ray has eight inputs and is comparable to the human body. Computer generation is best for abstract patterns and the input signals can be directly computer generated or generated by the philosophical programs obtained through the use of a computer. When pictures are sent by wire from place to place, this process is reproductive but never changeable, giving the same picture at the other end. If we can translate the picture through computers into mathematical equations, the results can then be changeable. Once you make an equation it is very easy to manipulate.

"The painful gap existing between TV video signal (4 meg c/s) and the output speed of computer (eg. IBM 7090: 400,000 bits per second) requires an unusual solution, One way would be to record the program in slow speed and speed it up in play-back. But still astronomical quantity of information bit in single frame and its sequence requires enormously time consuming program work, and just this shortcoming demands an original programming system, with many short cut ways and artistic phantasies, for which I may say myself, I have often been credited. As the first step I will establish many machine independent subroutines, which may be used by other programmers like twelve tone rows or raga in Indian music. Eg:

- a) Subroutines of various basic forms, ranging from geometric to irregular form like bacteria.
- b) Subroutine of place inside a frame.
- c) Subroutine of size.
- d) Division of raster to many fields and its interchangability.
- e) Stretch and shrink each field in various directions.
- f) Subroutine of combination of all 5 subroutine and the superimposition with realistic images. As human laughter and dog's bark is superimposed in Vocoder, so Picasso's face is scanned into the face of gnawing cat.

Among vast application of this method in art, science

and technology, one interesting example would be the imitation of the statistical movements of virus, bacteria, fishes, and mass people."

- NAM JUNE PAIK, 1966.

I asked Paik about his experiences in Japan:

PAIK: I was in Tokyo from July 1950 to October 1956, and then in 1964 again. I met two great Japanese engineers there. Stockhausen has worked in Japan and said the best engineering staff he has ever had was with the NHK radio. The two engineers I met were Shuya Abe and Hideo Uchida. They changed my weltenschang. They understood that science contains more beauty than logic.

"....From 1969 to 1970, I have collaborated with Shuya Abe (a great engineer-artist) to make a video-synthesizer, which would accumulate all my past experiments into one playable console. It was generously supported by WGBH Boston, a leading public television station in U.S. This can grow to a video-piano ay every household in the post-video cassette age. People can create their own art and send it to their friends through video-telephone lines and elevate their mood by watching or attaching certain medical electronic gadgets and control their own brainwaves in order to achieve an instant Nirvana."

- NAM JUNE PAIK, 1971, Sonsbeek, Holland catalog.

PAIK: Hideo Uchida discovered the transistor much earlier than the Americans, but no one believed him when he said that certain crystals can amplify signals. He is now researching the electronic basis of telepathy. For example, when an elevated train passes under high-voltage wires, the people in the train change their subjects of conversation or the pitch of their voices unconsciously, and it is possible for people to pick up or tune in on the resonance of each others' brain waves. He believes that every radio has electronic resonance factors (The coil has a factor which responds to some frequencies more violently than others). We are not yet aware that telepathy is conveyed through the resonance factors of the mind or the environment of the surrounding house. (NOTE: Excerpts from articles by Hideo Uchida, provided in English version by Paik. appear as appendices to ELECTRONIC ZEN.)

"Resonance.... If one has a circuit that oscillates, an oscillator, one can feed energy from that circuit into spatially distributed circuits, such as wires running in parallel, as in cables, and then to tuned structures, such as a large antenna at the other end of the parallel wires or cable.... The antenna itself must be tuned, that is, it must be adjusted in the length and its distance from the ground in such a way that one achieves a standing wave pattern on the antenna.... When standing waves exist on the antenna, the oscillating field distributed over the antenna excites traveling waves in the surrounding space, which we call radio waves. The antenna then radiates.... We can also tune our brains and bodies to transmit those energies.... It may very well be that our atmosphere over the whole planet is part of an intelligence network whose code we have failed to break and whose transmissions are outside our present knowledge."

- JOHN C. LILLY, in Chapter 9 of THE CENTER OF THE CYCLONE.

PAIK: Medical relectronic research using computer analysis of human brain waves is rapidly advancing. Professor Kasamatsu of Tokyo University and others have been charting the alpha waves of Zen monks to observe the physiological-electrical changes when Satori is reached or not, and also experimented with LSD and other psychedelics likewise. The effect of the alpha wave on a graph is unmistakable. I found myself, I receive certain frequencies very low which I can receive normally when I perform my ONE FOR VIOLIN solo. I do not crash the violin until I can perceive certain frequencies of the surroundings that I cannot perceive normally.

"But how can one arrive at variability without losing intensity. Unifying variability and intensity has been one of the most important problems. Is intensity (tension, high voltage) essential to life? Perhaps one has to substitute this physical dimension rather by a spiritual or ideological dimension, e.g. ambiguity, depth, etc., if there is such a dimension.

Everyone can experience this consciousness through love for a while. The Zen priest also aims at a kind of calmness

or calm ecstasy, but an external extended one, without crescendo, climax, catharsis,- the causes for delusion, illusion, error and deception and self-deception. Therefore they say that love is as bad as hatred.

They train themselves to diminish, level and balance the amplitudes and frequencies of their love, hatred and life.- Zen requires hard training.... Who is trained, can better endure the tediousness. I admire the MUSIC OF CHANGES most of all because it is Cage's most tedious composition." - NAM JUNE PAIK.

Paik has performed his ONE FOR VIOLIN and many other compositions in Europe and America with cellist Charlotte Moorman, known for a while to many in America as the Topless Cellist since she was stopped by police during her performance of Paik's OPERA SEXTRONIQUE at the Filmmakers' Cinematheque in New York in 1967.

Commented Paik: I have wanted to combine sex and music for a long time. It's a simple fact that two such beautiful things should go together. Popular music is aware of this, but Brahms leider, for example, is usually sung by ugly women. I have been looking in Japan and Germany for a woman who was a serious musician who would take her clothes off. I couldn't find anyone. Charlotte was the first and I am eternally grateful to her and her energy and graciousness. With Charlotte, the amplitude of the signal is more important than the frequency of the signal. In the next century, cello performers will be examined not for their finger skill but for their breast size. Historians of 60s culture cannot be historian who has no insight into psychedelic experience. Art critics who are bisexual can understand something of both cultures.

"TV is as mass media as Sex.

Before Kinsey beautiful lady used to whisper to her neighbor, 'My husband plays only one finger on piano...and always with one finger...' Kinsey wiped out this frustration and made the heresy to the authodoxy. TV-culture is in the pre-Kinsey satge at this moment. As wife was just a sex-machin for her husband (before). public is just the Pavlovian dog for the network (presently). The infinite potentials of TV, such as: two-way communication, audience participation,

'electronic democracy through instant referendum' (John Cage)....is by far ignored or delicately suppressed."

- NAM JUNE PAIK, 1968-1970.

Paik and I discussed the recent activity in Art and Technology. PAIK: One of the grave dangers of Art and Technology is the high cost of production which have a minus effect on the artist's freedom. Allen Ginsberg needs only rice and 'pot' and can say anything. Norman Mailer speaks to a vast middle class, but the Art Market has been diminated by the very rich.

Visual art is getting more and more like performing art. All art using sophisticated engineering techniques tends not to be permanent, breaks down, etc. the notion of the permanency of art. In economics, the inflation hedge of buying real estate and art works to keep property values in the face of currency devaluation each year is common. Technological art breaks down the notion of permanency, and is the last great blow to gallery art which was already shaken up by happenings and intermedia.

The production of art work using engineering is so expensive that it is over financing the capability of private galleries. The minus side is that the high cost of production will have minus effect on artist's freedom. If the artist needs industrial help for artistic production, he loses his most supreme function as the last social critic of the social defense industrial complex. Some compromise will be necessary if he is receiving money from industrial complexes.

The more art depends on industry, the more the artist loses his function as social critic. This has to be true. Hollywood has already long ago lost complete freedom with its movie industrialization. Going with the tide and romantic resistance neither work. We have to find a third way. Perhaps smoking 'pot' is art and engineering: art and chemistry.

"Generally speaking 'art' consists of three different parties. (1) Creator (active transmitter); (2) Audience (passive receiver); (3) Critics (judge or carrier-band)....

But in the drug experience, all three parties are united into one. A kid who smokes a joint or so is at the same time creator, audience and critic. There is no room for comparison and grading, such as 'first class drug taker' or 'second rated

pot smoker' etc... This ontological analysis demonstrates to us once again that drug is short cut to recover the sense of participation...and basic cause lies in our passive state of mind, such as TV watching, etc.

Can we transplant this strange 'ontology' of drug experience to 'safer' and more 'authentic' art medium, without transplanting the inherent danger of drug overdose???

Participation TV (the one-ness of creator, audience, and critic) is surely one probable way for this goal... and it is not a small virtue...not at all."

- NAM JUNE PAIK, 1970, "Video Synthesizer Plus".

## THE MEDIUM IS THE MEDIUM: The First Video Art Broadcast

The present standards of television programming have driven those home television owners not already desensitized totally by the Big Brother, violence-not-sex soporifics, into the exploration of educational and ultra-high frequency broadcast cables.

Artist engaged in the probing of the electronic medis have generally worked with closed circuit TV systems, or by modifying and totally distorting the overflow of network cliché iconography, and have moved into portable video equipment and the creation of alternate or environmental videotape theaters. Eventually laser communications and the possibility of transmitting thousands of individual frequencies within a single beam may permit a separate channel for each living human being.

In the interim, creative workers in video are seeking openings for collaboration with educational networks, and encouraging and initiating the possibility of cable television systems and listener subscriber support. The National Educational Television Network has instituted several television stations in this country as experimental center, KQED in San Francisco, WGBH in Allston, Massachusetts near Boston, and recently WNET in New York City has instituted an Experimental Television Laboratory. (NOTE: This original piece was written in 1969.)

"As far as the equipment goes, you have to define it in terms of what the other two centers have in Boston and San Francisco. The WGBH experiments were primarily oriented to see what happens when you take existing broadcast equipment, existing cameras, an existing studio, and see how far you can push standard equipment into rather extraordinary effects. In San Francisco at the NCET, the center went very much in the opposite direction; they never really had access to a studio but totally developed a non-studio environment, working almost only with the synthesizers. What our TV Lab has is a combination of both of these. (NOTE: A Paik/Abe synthesizer was built for WGBH in 1969-1970; the TV Lab installed a Paik/Abe in 1973, as well as a Rutt/Etra synthesizer, developed by Bill Etra and Steve Rutt, a modular full-scan system synthesizer; and the NCET in San Francisco

facilitated the completion of Stephen Beck's Direct Video Synthesizer in 1971.)

- DAVID LOXTON, Director of the NET TV-Lab, in the VISION NEWS, August 1973.

The following conversation was recorded with Fred Barzyck, a producer-director in the experimental program at WGBH, and Olivia Tappan, his production assistant and assistant producer.

(Our primary vehicle for experimenting with new forms and new ways of handling subject matter was the weekly series, WHAT'S HAPPENING MR. SILVER, (with David Silver who later also worked at the TV Lab), which in 1969 came to the end of a full year's run. Incorporating a youthful style and a sense of concern, it developed a framework that might be called television collage and, among other things, illustrated how much life and imagination can be put into television through manipulation of electronic equipment."

- from the EGBH Annual Report, 1968.

FRED BARZYCK: Silver, young guy, 22, Tufts University, tried to create if at all possible a collage program, each of the 30 weeks having something different involved with it- in other words, the format changed- one week we'd have the Vietnam War, and another week would be on drugs. It was a young show, and one program won the NET award for the best cultural program.

We used John Cage's theory of random selection. We had about 32 different inputs including audio and video, and we had about 20 people in the control room, and when they got bored, they yelled out and so there was a kind of a plot back there, but it was executed on the spur of the moment, and we'll see how it looks when we get there. That was 30 weeks of that kind of thing, and it was in that process that we started dealing with McLuhan's term THE MEDIUM IS THE MEDIUM, because lots of times we really didn't have much content but what we could do were a lot of electronic things. We were turned on to that stuff- the weird stuff- and it got into the process of getting into the crew, and into the engineers, so that certain engineers were turning on to doing certain effects and things in the process where normally in a television station you're dealing with people who are trying to give you the most accurate lifelike picture possible. It turned

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into giving you things that were abstractions and patterns, and this was '67-'68, and out of that came a request by PBS (Public Broadcasting System) to do a show called THE MEDIUM IS THE MEDIUM, and that's how we got in touch with artists like Nam June Paik and Thomas Tadlock.

PBL contracted WGBH to provide facilities and Olivia and myself, and six artists that they would choose. Now they were chosen by two producers out of New York- Pat Marx, who has a radio show, and Ann Dresser, a sculptress and part-time worker for the Kaplan Foundation. They had a lot of friends who were artists, and whose desires ran towards television, so they became like mothers to the artists and we became the source of getting it on to tape.

Because of money considerations, we had to limit each artist to a half-day in the studio, though some went over, and some almost a full day. So we took two artists and gave them a Saturday and a Sunday- six hours in the studio for each one, and we took three weekends at WGBH. We brought them up and showed them all the equipment, the videotapes, the switching, and the panels, and their minds generated. We showed them some of our old tape (The Silver tapes, and MIXED BAG, a jazz show with Charles Lloyd). The switcher who was working on the Silver show was the director of the Lloyd thing, and of course we had gone through so many processes that, doing this jazz show live, we started manipulating some of the effects, and we had a light show going on with cameras on that, and it was beamed one on top of the other, matting it. His name was David Atwood, who came on as the co-director of THE MEDIUM IS THE MEDIUM. Really the three of us worked as a team on the Silver thing and we try to carry on that continuity. That way you don't have to say so many things- it just happens. So each weekend we brought two artists up.

(DEEP VOICE FROM TV: What happens when artists take control of television?

ABSTRACT SOUNDS.

UP VOICE FROM TV: PBL invited six artists to collaborate with television technicians in search for new ways to use the tools of television as an electronic art form. Each artist has experimented with sophisticated technology in his own work, mechanical and electronic devices, optic

machines, kinetics, and multimedia. They all see television as an immediate way of reaching a vast audience, and creating a museum for millions. Here they use the medium as THEIR medium.

Aldo Tambellini, born Syracuse, New York, 1930, mixed media pioneer and co-founder of New York's Black Gate Theater. His work explored the philosophy and social concept of blackness. He uses 1000 slides, 16 films, TV monitors, and 30 children in his piece titled BLACK.

TV SOUND: Tiny children's voices, playing. Diesel sound comes in and crescendoes... )

BARZYCK: Aldo Tambellini. He brought his slides, his films. He asked us to go out and grab 30 kids, and set up an environment inside the studio where they could see themselves, and hear themselves, and just play around and have fun.

We took three cameras- Aldo wanted to do everything black and white- so there was no color in there at all. We put up the cameras, one camera shooting slides, another camera shooting his films, and the third camera on the kids running around. And we started the tape, said: "Kids, go to it- play around here, dance around here for a while, you other kids sit on a rug for a while, and we just went for a half an hour, with the three cameras going.

Sometimes Aldo would run out into the studio, and so "No, No- do it this way" and run back in, and sometimes he was switching it, and most of the time he just watched the process go. The sound was being created at the same time this was going on. Aldo brought some sound sources, and we had others, and he talked to the audio man and everything kind of happened at once.

JUD: What kind of sound did he use?

BARZYCK: These were basically feedbacks and loops, and plugging into the audio console board itself, and tape rewinds, and that kind of material. Everything was just happening and really going by Aldo- with everyone sitting there, and Aldo was like the piston in the machine, and he was going: "Oh, that's beautiful, that's terrible, that's good, why don't you give me some more of that, that's awful". So this sort of went on, and we were all like up and down. So we had a half-hour of Aldo on tape.

The second was Thomas Tadlock, who brought in his Archetron kaleidoscopic video machine, and there was very little we had to do. We got him a source of I SPY, brought it to his machine. We tried to take it directly out of the machine so we wouldn't have to shoot the monitor- but couldn't do it- he was working with what is called industrial sync and we had broadcast sync and the pictures would never generate properly. He blew a part while trying to insert into our system, and we all had to wait a day. He left the machine here and eventually we came to the conclusion that the only thing was to shoot the monitor. So we ran Tadlock for an hour and a half, and he left the studio sometimes, and sometimes had on headsets coming out to him with the Beatles, and other records and tapes, which were also being recorded on the video tape as well as the sounds of the television shows we were using. And we just recorded a lot and that was the raw material for him.

(TV VOICE: Allan Kaprow. What's happening here. He uses four locations in Massachusetts, 5 cameras, 2 television monitors, and people trying to get in touch. Title: HELLO.

FIRST LADY: I see you, Harriet.

SECOND LADY: I see you, too. Hi. There you are. Who are you?

MAN: Hello, hello That's my daughter. If I could only talk to her through all this machinery, it'd be great. Helen, Helen.

LITTLE GIRL: Hi.

MAN: Hello, this is Daddy. Do you see me?

LITTLE GIRL: I saw you already.

MAN: Do you see me now?

SMALL BOY: Hi. MAN: Hi, Peter.

HELEN'S FATHER: Hello, Helen. I can see you.

HELEN: I see you.

MAN: Take the microphone out of your mouth.

HELEN'S FATHER: Hi there. Do you hear me, Helen? Say hello to the man on your left.

LITTLE GIRL: Hi, man. I see the moon.

RECORDED VOICES: Boy and girl, distorted, saying hello back and forth.)

BARZYCK: For Allan Kaprow, we set up four locations in Boston, which

we have feeding into WGBH from other areas for other purposes- a line to MIT which feeds us programs which we record for them, and other lines from EDC (Education Development Corps) which also does special educational shows. We also have a Mobile Unit which was set out in the parking lot, and we also used a studio. So those were the four sources. Allan said, these are the rules of the game- at each place about eight people, and the only thing they're supposed to say to each other is "Hello, I see you." The switcher is to work out a plan of how he's going to edit it. The people at each location will have a monitor, and what they see will be determined by somebody else who works it out independently of what might be taking place on the video tape, and the audio man has worked out a situation so each location would hear a certain other location, independent of anything else that was going on. The people who were experiencing the happening had other things going on besides what was on the show. Al had to make the compromise of cutting down a half-hour happening into five or six minutes. We had to come up with a final product, so we recorded a half-hour with black and white lines coming in.

(TV VOICE: James Seawright, born Jackson, Mississippi, 1936. Technical Supervisor of the Columbia-Princeton Electronic Music Center. Here, Seawright uses two dancers, videotape delay, positive and negative color, and the electronic composition CAPRICCIO by Bulent Arel.)

BARZYCK: Seawright brought with him his wife and another dancer. We constructed a totally black environment for them with very hard cross lights, and put the dancers in white against the black, and then put three cameras next to each. Each camera was working only on one of its color tubes, camera one shooting red, two green, and three blue. There were three sections. The first part used just a black background, and the three cameras next to each other shooting the two dancers, each shooting its separate color, and the video man adding the blue and then the red background electronically into the picture.

The second had the same three cameras exactly the same except in negative, so that the black became white and the white took on the almost plastic aspect of Warhol's pinks and purples. The three cameras started to move when more gyration came to each camera on a different plane- they reversed scans on one of the cameras so it gave

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some cross reference of balance. When it was negative, the video man switched the colors a number of times in the most vibrant parts, and simply colored in some of the effects.

The third element of the Seawright piece was a kind of Norman McLaren body-catching thing, sort of a Duchamp's NUDE DESCENDING A STAIRCASE, with one camera and the two dancers. Each of the three color tubes inside the camera were run to an individual tape machine, so when a dancer moved, three machines were running, one picking up the red image, one green, and one blue. After they had finished the dance, we stopped, set up each of the tapes with a quarter second delay after the other, and we ran the three tapes into a final mastertape, so when the three color images stop and catch up with each other they turn into a black and white image, and when they move they return to color.

(TV VOICE: Otto Piene, born Westphalen, Germany, 1928. Exhibited first smoke paintings, programmed light sculptures and hot air balloon demonstrations. Piene here uses 800 feet of polyethylene tubing, 22 tanks of helium, searchlights, and one 95 pound girl, in his ELECTRONIC LIGHT BALLET.

TV SOUND: Internal, shimmering, echoing sounds.)

BARZYCK: Otto Piene came in twice and constructed one aspect which was a happening out in the parking lot at night, when we used all these balloons to float a girl 40 feet into the air, with searchlights on her. We recorded this 20 minute happening, and the other effects were with stencilled cardboard circles with holes and patterns punched into them. We put very strong light behind them and manipulated the circles around, while the video man was manipulating the colors. So the light patterns were burned in, smearing with a "de-beaming" effect.

(TV VOICE: Nam June Paik, born Seoul, Korea, 1932, composer of electronic music and experiments in mixed media. His tools- magnets and junk television sets; his images- three hippies, a nude dancing model, and national political figures. Title: ELECTRONIC OPERA NO. 1.

sound; A fugue being played on the xylophone.

VOICE: This is Participation TV. Please follow instructions.

SOUND: The Moonlight Sonata.

PAIK'S VOICE COMES IN: Close your eyes... open your eyes...  
three quarters close your eyes... two thirds open your eyes..

RICHARD NIXON'S VOICE: ... Being one of the top experts in  
defense appropriations...

VOICE: I'm getting awfully bored.

PAIK: Thank god, it's the last one.

VOICE: Well, what do we do now?

PAIK: Well, let's start it over again from the beginning.

VOICE: This is Participation TV. Please follow instructions.

VOICE: Turn off your television sets.)

BARZYCK: Paik. A dancer, three cameras, again red, green, blue, and then he fed those images into a monitor and it was shot from the monitor- the monitor shot itself with another camera so that in fact what you get is the whole feedback of the hand and the girl twisting and turning, and we adjusted the amount of contrast, brightness, and the amount of the image that was going into the monitor to give it some flexibility. All the effects when he said "Close your eyes" were his old TV sets with the magnets in front, and we added the color. He brought four sets in, and he had also recorded on helical scan the President and those other people, and we shot the helical scan monitor, and put the magnets in front of that and turned it around. We added the red, green and blue dots. The hippies were standing in the same place the nude was; they were shot in negative, three cameras, red, green and blue.

All these artists came here and recorded more than was seen on the air. We thought we'd better keep them short and keep them moving. Everyone agreed to four to six minute sections.

We brought each artist back for an eight hour day in electronic editing, viewed the material, decided what we wanted, put it together. Aldo's was very simple- it was just hard edits all the way through. We took perhaps 6 or 7 big areas, added a little volume to the kids' "Black, I'm proud" which we recorded in the studio. Tadlock looked at his whole thing and said he just wanted this one section with the Beatles' sound.

Allan Kaprow and we hard edited the half hour happening, except for the last bit which I felt should make more clear man's relationship to the machine, and Allan and I came up with the suggestion that

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we have the moon and the earth, and the Hello, a surrealistic ending with the machine last. Allan wasn't particularly happy about all this but it was the strongest ending we could find for something which in its original form had a flow which was hard to describe. James Seawright's was the simplest in many ways because, in effect, he had brought us a piece of music, so everything was timed to that. We knew his piece was going to be six minutes long, and we just recorded the same piece over and over again, so we were able to take the best section from each.

With Otto Piene's, we had to superimpose one thing on top of the other after he had picked out the best sections, six minutes in length of the moving colors and dots, and of the happening, and we simply dissolved back and forth between the two. Audio was added by the audio man right out of the board- whatever noise was in the system was added- whatever sound came through from the recording of the happening- "Hello, are the lights all set? Lucy, are you all alright? Etc."

Nam June Paik's was the hardest because we had nearly two hours of his, and he realized he was to be the last one to edit, and the last one on the show. So he tried to work against what everybody else had done, put a little humor into it, and we sort of created it on the spot. He had tons of stuff we never even got to- we composed an almost piece-meal thing, music was added, a touch of corn, a touch of sentimentality. He's a very disparate human being- he was very flexible and probably got shortchanged more than anyone in this whole thing because his time was cut very short.

We did the opening with the PBL device, and the flag- The flag was a regular flag, and we matted into the white of it a slide of moire patterns. And the PBL twirling, swirling device was a steal from the Silver show- we cut a piece of aluminum foil to fit the front of the lens, and cut out the shape of the PBL letters- it could have been anything, tree, human, PBL- physically put it right over the lens, and placed a very bright object, like aluminum foil or a Christmas ornament with a lot of light on it, put it out of focus so we were just picking up the dots of light- So you have a multitude of the same thing; PBL popping up all over the place, and the colors were added by the video man.

It's very interesting because what we're seeing here was, for many years, considered to be mistakes by engineers, and now we're dealing with extremes, looking for mistakes that we can have fun with now. For years engineers have had as their highest aim to reproduce exactly what the skin tone was, etc.- but there are always a variety of extremes in colorization and in beam roll-off- which is what they call the saturation of color into it. We were now looking for mistakes, and mistakes were something with which we are now having fun. JUD: Yes. Paik has always maintained that there are certain imperfections and limitations built into the medium, and these exist, and should be taken advantage of by the artist. What do you feel about the limitations of the TV medium?

BARZYCK: I see them from an interesting aspect because I'm really talking about a system that I'm working with constantly all the time- I'm faced with these kinds of restrictions and limitations and attitudes. Let me say that I think this show, and the Silver show, and the Mixed Bag show, and things like that have been training for the people who manipulate the idea. When you walk into the studio with an idea, when you're an artist like Paik, you have a machine and you mess with it. It's a one-to-one relationship, and you get what you want. When you walk into a television facility and get it on tape, there are fifteen people who touch your product before it even gets to the tape.

There are two or three ways you could do it: either you set up schools and standards to say this is what everybody's got to do to get it into the system properly, or you say, each one of you guys is an artist, or at least handling the thing as an art. I don't know, I can't tell you what to do with it, I'll just tell you simply these are the kinds of effects that I want, you do it- which just destroys the whole relationship that most engineers and production types have towards doing a TV show. You know, if there's going to be a shot here, there's going to be a shot there, period- there's no such thing as what would you like to do with it, kind of attitude. So this is where we turn the tables on them, and we started saying how far can you go, and what can you do- You tell me what you can do. All of a sudden they were starting to look at their mistakes as a possible way of getting effects. Lots of times we practically destroyed machinery- but there was this great aspect of it, I remember, and I'll

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tell you a little story.

An engineer in his fifties, out of New York, during the Silver episodes, actually shut down one of the machines, and said I will not record what you're sending me because I don't think it meets specifications- "specs". After he shut it down we had to go and talk to him for a few minutes, to try to convince him that it was alright and he finally recorded it, because we were only going to use a small section on the air. Two years later, this engineer, when he had finished work, put on his coat and was leaving to go home and go fishing, took the time to come into the control room where I'd just finished a show, and said: "Hey, I've got these three ideas that you might be able to use" and he took the tape machine and started to show me three technical ways to screw up the picture.

So, all of a sudden, you release the pressure of the system because the establishment of this studio said that crazy pictures are just as valid as absolutely perfect pictures.

ERIC SIEGEL: Television Is The Last Communication Link We Have  
To Change This Country

One of the youngest proponents of the video revolution, Eric Siegel, born in 1944, won Second Prize in the New York City Science Fair at the age of fifteen for his home-made closed circuit TV. The next year he won an Honorable Award in the same competition for "Color through Black and White TV." After high school, he was employed by several concerns in closed circuit television, and in 1966, worked in the Educational TV Department of the University of London.

In 1968, Siegel produced the PSYCHEDELEVISION videotape program for the closed circuit TV theatre, Channel One, and designed and built the special effects TV components for Serge Boutourlin and Susan Buirge's TELEVANILLA at the Martinique Theatre, all in New York City. He exhibited his PSYCHEDELEVISION IN COLOR in the Howard Wise Gallery's TELEVISION AS A CREATIVE MEDIUM, and his BODY, MIND AND VIDEO at Brandeis University's VISION AND TELEVISION in 1970.

JUD: You entered television at fifteen?

ERIC: At 15 I did the first outward thing with television, building my first TV camera, and it continued from then on, building more and more equipment.

JUD: What had you been doing before that time?

ERIC: Electronics. Pure electronics.

JUD: So you entered into television through an interest in electronics quite directly- no other art form?

ERIC: Yes, it was electronics, and then I got turned on to TV through electronics by getting hold of TV equipment, and playing with it. And since I built the first camera I've continuously been interested in it, and still am.

JUD: When did you actually first get to work with videotape?

ERIC: About two years ago (NOTE: The date of this interview is 1970.) somebody gave me an old videotape recorder in pieces-

JUD: A Sony tape deck?

ERIC: No, a big two inch Ampex helical scan. And they said, if you can make it work, you can have it. Then I spent six months making it work.

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After which, I took the camera I had built and I started to make some tapes which you've seen at Howard Wise.

JUD: That was a color machine?

ERIC: No, it was black and white. The Howard Wise tapes were black and white and I made them into color with another electronic circuit.

JUD: Which you built yourself?

ERIC: Yes, the first circuit was built inside of the color set, but now it's been expanded so that it's a separate thing which connects to the back of a color monitor, and it should be out on the market soon. I don't know who's going to market it, yet.

JUD: When did you first show your videotapes?

ERIC: The first showing was just one day at the Channel One Theater-- a preview, and the second showing was continuously at Howard Wise's.

JUD: How did you get involved in the Wise show?

ERIC: Tom Tadlock told me about the show, and Howard Wise called up and said that he'd heard about me through Tadlock, came up and saw the tapes, and said please be in the show.

JUD: Did you know the work of other people in the field, like Nam June Paik, at that time?

ERIC: I saw some of Paik's work at MOMA's MACHINE show, and it turned me on-- I liked it. I'd already had some of my tapes completed then, but I didn't meet Paik until the Wise show, didn't even know what he looked like, until someone said "that's Paik."

JUD: Would you say anything influenced your approach to TV-- anything from people working in the field to McLuhan?

ERIC: No, I was doing the work before I read or even knew of McLuhan. I found out afterwards. No, I wouldn't say there were really any external influences. It was just watching TV itself, what the stations were doing, saying "Oh, forget it," and just trying to do completely different things. Basically, I was making videotapes that I enjoyed watching myself, and my friends enjoyed watching, and at the same time trying to make the tapes so I was expressing myself through them, on a certain level. And that's what I'm going to continue to try and do.

JUD: Were the Channel One tapes the same as the Howard Wise material?

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ERIC: No, the Wise tapes were different material. The Channel One tapes were meant to be paid to see, and portions of the tape were straight video- you know, a camera pointed at a person talking and performing, and you have to have this straight kind of video if you're expecting regular people to pay, because they're not going to pay to watch abstract patterns for an hour- you have to give them something else. But things are changing, and there are ways of making TV programs now where reality and abstraction can be intermixed in the right proportions so that you can hold the attention span, and keep a rhythm going so that just when you feel like you're getting bored, it changes, and the change comes just at the right time, if you feel it out as you go. But the Wise tapes were all abstraction- music and abstraction.

JUD: What was the music on that again? There was a section reminiscent of "2001."

ERIC: THE SYMPHONY OF THE PLANETS, the last piece, had music vaguely similar to "2001," but I must stress that I made the tape before seeing "2001." It must have been in the air, or something. The Wise tapes were edited so that the EINSTEIN section came first; then the Beatles section, TOMORROW NEVER KNOWS, and the SYMPHONY OF THE PLANETS.

(ERIC: Naturally, I had started experimenting in making a number of tapes, but it has all been filtered down now. Of all those tapes that I was making, it has filtered down to EINSTEIN, TOMORROW NEVER KNOWS, and SYMPHONY OF THE PLANETS as one tape- all those three things have been put onto one tape. Then there's another tape called WAR TRIP which not too many people have seen- and so, an hour has been distilled out of all those two hours of two-inch experiments I was doing at that time. And actually, that was the first time that I was actually doing video- making tapes and so forth. So a very low ratio of things were kept, too much taping was being done. Now, in 1/2" work, the ratio is a little bit more even.

JUD: All the early tapes originally constituted part of the PSYCHEDELEVISION show at Channel One.

ERIC: Yes. That was one showing. In other words, it was the first and only- just one.

JUD: You showed the major tapes again at the Kitchen, together

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with a live piece. (NOTE: A showing in 1973.)

ERIC: Right. At the Kitchen, what I did was- I got hold of one of the better copies of EINSTEIN that was still on two inch helical scan and made a redub of it. So that the people who have just seen it recently at the Kitchen, not only have they seen it in better quality than the last time, whenever they saw it the last time, but they saw it through this new colorizer that I'm now marketing in New York.)

JUD: How would you characterize your basic orientation to videotape?

ERIC: It's a way I express myself as an individual.

JUD: What of its relationship to other people?

ERIC: Well, that's not with the videotapes- only vaguely, but not really- that's with the other experiments that I do, like the Brandeis piece. Rather than a direct expression of myself, that's more an expression of how people should perceive themselves, so in that piece they see themselves in color, delayed, and there's music playing. The music is supposed to trigger them off to move, to dance- and they're supposed to watch themselves moving and dancing. Usually, this is a mind-blowing experience, if they've never seen it happen before- watching themselves delayed a few seconds. But this is another kind of statement. I'm not saying anything about myself- not giving anything of myself in this kind of thing. It's really like letting people get high on themselves, you know, get all involved with themselves, because that's what they want to do anyway.

JUD: It's a feedback situation.

ERIC: Right. The videotape is myself into tape. Right now, I'm getting ready to design a video synthesizer, which will enable me to do live video- like in the old days there would be a concert with a piano, not there'll be a concert with a video synthesizer. And this is something that Paik is into also. And it's the next step of video. They're making new video devices, or getting ready to, in Japan, with large displays in color, possibly flat non-projected.

JUD: Flat tube.

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ERIC: Yes, that you hang up on the wall. So that, everyone knows that TV is going to change into something new- into an expanded medium, and a few people are getting ready for it, by making the hardware that will enable the new kind of programming, the new kind of video communications that's going to happen.

JUD: Do you think flat tube will make TV Projection obsolete?

ERIC: Oh yes, if they perfect it.

JUD: What about holographic television?

ERIC: That's so far away, so I'm not tied up in that right now. As far as I know, you won't be able to get three-dimensions out of the flat screen thing, so if people get more turned on to three-dimensions than a large flat picture, then holograms will become popular in TV. But I'm more tied up in what will be a possibility in the next year.

JUD: In Truffaut's film FAHRENHEIT 451, people have wallsize color television in their homes, during an era of bookburning.

ERIC: Well, video will become like books with the advent of cassettes, so if they'd be burning books, they'd be burning videocassettes.

JUD: You don't think there would be Instamatic video cameras?

ERIC: Yes, it's getting close to it already. Video will become like 8mm film is now. They'll have minature plumbicon tubes inside minature video cameras, with videocassettes you just throw in. However, I don't think the film industry should worry yet, because video quality is still lacking. But that's the fault of the equipment manufacturers- they're only interested in making money, not in making something right. So perhaps one company will make some equipment right, and when that happens, people will find out, and the other companies will have to follow or go down. Right now, they're all making crap.

JUD: Do you think the better equipment will be made by the Japanese?

ERIC: Possibly. But they'll have to get feedback from us. We have to write the Japanese companies, telling them what kind of equipment we want them to manufacture, instead of just taking what's given us.

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We have to tell them what is needed on the American market, what kind of new technology is needed, because the American technology is just not going to keep up with it. The Japanese are giving us all our media, supplying us with the media tools, so we have to let them know what we want in the future.

JUD: How did you find the video situation in Sweden when you were there?

ERIC: Video is state controlled there- state controlled television. They have some experimental programming, however it was quite boring- what I would call low-key. I don't know if they plan it or not, but it's meant to keep the people tranquilized. They don't want to excite the people for some reason. So all TV is lowkeyed- it's boring.

JUD: More boring than American television?

ERIC: In general, Swedish TV is boring, but it's more informative than American television. American television is just insane. The first priority with American television is that the commercials must go. Commercial television must end.

JUD: Do you think pay TV or cable is the answer?

ERIC: Some kind of alternate system where you don't have to be bombarded, buy this, buy that, every fifteen minutes. This whole consumer crap must go.

JUD: That first step is pretty far-reaching.

ERIC: At least let's get people talking about it. First let's just say, advertising must be stopped- let's get it around. Then, once it gets around, the momentum will carry through to the end. But a lot of people aren't even thinking about it.

JUD: Do you think a show like Brandeis or Howard Wise's can help change people's consciousness about the concept of television?

ERIC: It does have an effect, but not much of an effect, because not that many people come. A very small minority of people are getting exposed to what's going on. Nobody knows what's happening with TV. Nobody even knows that there's television art already- they don't know the alternatives of what they're watching at home. The only effective way is getting on the networks. There has to be a network consisting of television artists, which is broadcast across the country, so it reaches the backwoods of Arkansas. Television is the last communication

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link we have to change this country. The whole country is tied together with television. The only way to effect a real change in this country, to get it together, is through television. One of the major network chiefs admitted to the fact that he's broadcasting shit, and said that's what the public wants. What television artists are doing right now, is fanning the fire, trying desperately to let it be known that TV art exists, that it's a real thing, that there are people who are turned on to TV and know what it is and what to do with it. And when the word gets out, people will start clamoring to see it on their home TV screen. However, if they don't, there are alternatives, because the videocassette recorders will be out in about two years or less, so you won't need the networks after a while- you could rip out the tuner from your TV.

JUD: It would have to be quite a different kind of network to implement what you're talking about.

ERIC: Right- control rooms with pillows on the floor. We have to get onto a network, not work FOR a network, because there's a certain atmosphere in network TV stations. If you come in and your mind is okay, you'll find it gets messed up somewhere along the line. Right now, we have to take the technology that exists, and exploit it, use it, for our own benefit, not for the benefit of the advertisers. I don't think there's enough time to start making a new technology. After we've gotten rid of the evils, and can sit back, relax, and have a smoke. THEN we can start making the new fantastic Aquarian age technology- the pleasure technology. But we can't do that yet.

JUD: One of the lessons I think we've learned from the Art and Technology collaborations is that the artist has to learn some of the technology himself. As Paik says, you have to make your own mistakes so you can make your own discoveries.

ERIC: It's true. I admit that I've had it easy. But, probably, individuals artists will find technical people to work with them. That's an immediate solution.

JUD: That's happening right now. Perhaps eventually the engineers will become artists themselves.

ERIC: The future trends will be art and science and technology all coming to a point at some- point. It's all going to become one- all headed

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in that direction. And if the scientists would realize that now, and the engineers, and the people controlling the whole formation of what's happening on this planet- if they would all wake up and say, it's going to come together anyway so we might as well come together right now, then we could really start correcting a lot of the shit that's fucking us all up.

JUD: What are your immediate plans?

ERIC: To build the video synthesizer, which will be the preparation, the new instrument for television. In the future there will be people who will learn to play it very well, like any instrument, and talk through it.

JUD: Do you see the video synthesizer making television a performing art?

ERIC: I see it doing several things. It'll enable live performances because no sets are needed, you don't have to control actors- you can present abstract visions, images, with music. It'll work especially well with music, with live groups. And then, for making videotapes, there are two kinds of tapes you can make: the documentary which gets dated, and the other kind which doesn't get dated. For making non-documentary tapes, it'll be very useful- for things which don't have to do with time. Actually they do, but they don't become dated because they're not anchored to one year.

JUD: Are you more interested in color than in black and white?

ERIC: I want to go to color, and then to three dimensions, and then, whatever comes after that. But color for now. Black and white is over.

JUD: Do you feel any affiliation with the movement right now?

ERIC: No, I feel as an individual. I feel totally alienated from all movements. JUD: Apolitical.

ERIC: Completely. I'm just concerned about the planet that I live on. The major concern that I have is mind pollution. Aside from the noise we hear on the streets, when you go home and turn on your TV set, you're getting mind pollution, and your brain is being screwed up and fucked around with- the commercials are the biggest culprits. They have scientists, psychologists, psychiatrists, all working on the staffs of the major advertising companies, knowing all the tricks, how to influence people's minds, so that they can make their millions. If I can get into TV, I'd like to try and clean up some of that pollution.

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Some TV programs could consist of a beautiful abstract trip for an hour, with the right kind of music. And that too can trigger off thoughts, but you're not triggering off any specific thoughts. You're triggering off a flow, a pattern of thoughts.

JUD: In which each individual's thought patterns can take their own form.

ERIC: Right. And one of the things that will get the country back together is when people get their minds back.

PART TWO:

PARTICIPATION TV:

Teledynamic Interplay  
And Social Interaction

TELEVANILLA: SUSAN BUIRGE AND SERGE BOUTOURLINE:

The Human Use of Television

One of the first video/dance performances ever held, in a one night performance at the Martinique Theatre on Broadway in New York City, on April 22, 1968, was TELEVANILLA. It was presented as an "improvisational theatre dance piece choreographed and performed by Susan Buirge" in which various television devices were "used to extend and change the scale and scope of an event."

Susan Buirge is a dancer who has performed extensively with the Alwin Nikolais and Murray Louis dance companies, also presenting her own choreography at the Henry Street Playhouse. Her Collaborators on TELEVANILLA included: Serge Boutourline, a theoretician and inventor in the field of human communications, who is best known for his behavioral studies involving man's uses of the spaces he moves in, and for his television device VIDEOSKETCH which was shown at the Howard Wise Gallery; Wynn Chamberlain, a painter whose works involving the human figure are widely known, and who was producer of the Playhouse of the Ridiculous Repertory Club's extravaganza THE CONQUEST OF THE UNIVERSE; Eric Siegel, the creator of PSYCHEDELEVISION as an outlet for his experiments in television, assisted by Peter Sorensen, lumokineticist, presently working with colored television and polarized light; and Phil Glass, a well-known composer who has been recipient of two Ford Foundation grants.

As described by the VILLAGE VOICE: "The evening consisted of three very short experimental works- in effect a demonstration of the effects of television devices on an event. Miss Buirge roun-

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ded out the evening by turning it into a sort of children's party for dancegoers. The ushers were pretty dancers, and they gave out daisies with the programs. The programs were stuck in white envelopes sealed with a butterfly. Also in the envelope: colored gel papers strung on white yarn, to look through. Colored felt squares stapled neatly to the cartons that served as stands for the TV sets. Free coke and ice cream in intermission I; magic markers, paper, and a bulletin board in intermission II; and invitation to play with Videosketch afterwards."

Technically, the pieces involved several (seven) video monitors by Shibaden, a three-sided theatre-in-the-round, one motion picture projector, a closed circuit ITV video camera, and one custom video special effects generator.

The first piece FLAVORS had Susan in white playing with her hands before the video camera, with finger motions, in and out of focus, with the video operator then following her feet, meandering up to her face, in and out, in more increasingly rapid circles, to a jazz organ soundtrack. Video solarization, feet whirling, to high contrast, flashing out to an oscilloscope-like trace, the paths of mutually interacting moving camera and moving feet, into a swirling arc trace, like a fluttering black and white butterfly. Then, an intermission, where the audience was invited "to make an ice cream soda."

The second piece EXTENSION NO. 1 used the dancer, in a nearly transparent leotard, against a film of herself by Wynn Chamberlain on a suspended screen, of her legs and feet performing the same dance in almost eurhythmic movements, knee against knee, sounds of rain falling, sea birds, croaking, deep throated to great echoey chor-

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uses, one foot leaping, "flying," a sudden surge of distant birds, neck muscles closeup into a slow spinning vortex, and fade.

The third piece utilized the VIDEOSKETCH with Ms. Buirge dancing, lights on each hand and ankle, and one on her head, with the VIDEO-SKETCH's receiving eye transferring her lights to the screen "in the form of green blobs, squiggles, fat and thin lines," to the music of Phil Glass. Video images like alpha particles traces in a cloud chamber, the dancer playing against her traces on the screen, like sumi painting strokes, amorphic streaks overlaid, opposing, merging into time passages, with sound arcs surging and bursting about each other, play against play, vision against television.

These preceding notes from the original performance and here followed by an interview with Susan Buirge about TELEVANILLA and its implications, done in 1968, and previously unpublished.

SUSAN BUIRGE: Man must necessarily move to stay alive. This involves the element of choice within a theatre situation, rather than sitting in a proscenium situation (even there everyone has a somewhat different point of view). We are magnifying the premise of the multiplicity of points of view: a stable TV monitor point of view, live action from three sides, and a large screen. It's where you wish to look.

We tried to design the show in black and white, but we gave people colored gels to allow them to make their own overlays. This puts the audience members in the position of making their own designs. Even the variety of intermissions being situations of interest for the audience, playing the danceable music of today. You can dance, but you don't have to dance.

There's a choice of roles if wanted, more contact with the performer, and no gods and goddesses. It's a space we can share, and the involvement we can share. If you can walk around in the event's space, you have the ability to have an attachment with what the performer is doing, a common bond of understanding between communicator and with those being communicated. One of my personal feelings, and I feel this particularly, is: media, no; theatre, no; there must be a word somewhere for this particular area of "intermedia", that is to be personal.

One thing I feel "technology" has done to the "arts" is to kind of take "personalization" away from the audience-performer bonds, except in certain "intermedia" pieces. I'm trying to extend a personal strain or stream toward the audience, not something idiosyncratic, but personalizations that take place in small squares, or small areas of focus; like looking closely at one part of a person, and all of a sudden you've zeroed in on a small square, like a movie zoon. TV monitors are small squares. In a larger space, I would use more monitors, but the same size screens.

We've stopped going horizontally; things now come vertically. We can look at the history of music that way. Now you have a chunk, a verticality, not necessarily following some path, but making its own sense. We had "not merely horizontal" intermissions; why should only the "art event" have the right to that verticality? Every person has the right to that verticality. Why go flat?

JUD: Everyone has been leaping into that problem, in intermedia performance, from many individual vantage points.

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SUSAN: Being a dancer for the sum total of eight years, five being with Nikolais, I discovered dance as a sophomore in college; instead of badminton, I thought modern dance. I went to it like a fish to water, instead of law school, and went to Juilliard. Working in a form of "intermedia" with Nikolais, the kind of craftsman that he is, taught me to be "all" to the situation. But what I did creatively seemed to be creatively opposite to what most people at Henry Street were doing. What evolved was simplicity. I, of course, was immediately criticized for being uninterested. I knew the formula; it's far easier to join; everyone wants to be accepted, especially when existing in a parental organization.

I had the good fortune to rupture a disc in my back, which made me stop and reevaluate where and who I was. The realization that I had been stuck resulted, and shortly after that time I met Serge Boutourline. Group 212 in Woodstock, New York, had an event happening on something like Monday, April 7th. But April 7th was a Wednesday, and everyone went on the date instead of the day, but we went on the day; that's how we met.

Serge was doing this thing with a TV camera and lights that moved. Next thing I knew, I was figuring out new possibilities with it. Besides teaching at the Playhouse and NYU, I started doing small parlor-like performances, almost in pre-20th century style, for people like Paul Sills who started Second City, potential investors, and interested people. It was nice having intimate contact with people in intimate situations; the immediate elements, questions and concerns. The element of production becomes something that you play out of and off of. I decided that much of this concert would have to be improvised. And you have to have artist technicians who are also performers.

I would never have reached this kind of conception if I personally did not know how the mechanical, technical elements operated. That started about a year ago, when I was introduced to the possibilities of TV in such a situation. I can see the day when TV reaches out to touch me and I the screen. I feel in many ways that TV went from black and white into color before it was ready. The possibilities of black and white are mostly unexplored.

This is one baby, mini-aspect of interaction events. Eventually, I want no camera, no intermediary in intermedia; directly between performer and audience, totally humanizing the technology, with the performer capable of being in total control of what is seen and how it is seen as each moment is happening.

(Sections of a later conversation follow, with Susan Buirge, and with her collaborator, Serge Boutourline, at the 42nd Street offices of Serge's company, INTERACTION SIGNAL, INC. INTERACTION SIGNAL is described as a company which develops environments and devices that increase man's capacity to control his own surroundings by direct "feedback" into the many systems which are aimed at him.)

"Environment is a specific set of measurable physical phenomena existing during a specified period of time at a specified location point. These physical events may be light rays, sound vibrations, chemical particles in the air, measured temperature, measured pressure or any of a number of physical events which are measurable. A room can be thought to be a three dimensional grid consisting of a finite set of points each with its own unique inventory of physical events which change over time. . .

. . . If one wanted to decide where to place a spotlight, one might think only in terms of the structure of light rays existing at a set of points in a room. If one wanted to decide where to place a computer, one might think only of the strength and direction of magnetic fields at that same set of points. . . If an exhibit manager moves a spotlight in an open room then every point in that room will experience an altered structure of light rays. This, in itself, would not be significant if people did not respond to sets of events rather than to isolated events. Thus, the ability to introduce what may seem to be relatively minor changes in existing environmental systems can change the meaning of the entire environment for people. One of the central activities of environmental management is to introduce such changes so that people will have experiences which are more valuable for them."

- Serge Boutourline, THE CONCEPT OF ENVIRONMENTAL MANAGEMENT.

SUSAN: Originally we wanted a TV projector, and Wynn Chamberlain has this old one, except that you need such a high level to light the figure to get it to project, so you wash out all the projected images, and you end up with nothing. Rear-projected, it would have worked, but we had no space to rear project, only about five feet.

SERGE: It would be nice to do several evenings, of various things. Basically, this format has to be developed, with the whole image, TV and live, and the intimacy that comes out of that, rather than the de-personalization.

JUD: Ideally, each person perhaps should have his own receiving set.

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Actually we all do, but that's a different communication system.

SUSAN: It's a series of perceptions. You can get one and not another. Or you get your own, and then you have another one magnifying your own. Not only each member of the audience with his own receiver, but each performer should have total control of the work. Originally, when I started on this, I had developed some things to a point but not to a proficiency, whereby the performer was in ultimate control of everything- the camera, lights, sound, what was seen and not seen. In other words, literally lowering myself in a little box, with no cables, and a battery sticking in it.

JUD: That's about as big as all hardware ideally should be.

SUSAN: Yes. It sits right in your hand, and you control the lights, and the sound, etc. And it's all in your hand.

SERGE: You should have done one thing that you were totally in control of; VIDEOSKETCH was the closest you came.

SUSAN: But it seemed just as valuable just to do it.

SERGE: It's like being behind the camera while you control the set, which is really a highly personal scene. And all this is really putting someone in charge of what happens. It's changing the vantage point.

JUD: In the Gurdjieffian dances, each dancer had his part which seemed to have no relation to anything, but all the parts together related in a highly charged manner.

SUSAN: That's like a piece of choreography that Laban did, when he was in Germany developing his system of dance notation. They had this huge festival, and every opera house and every little village sent out their chorus of dancers, and there was all Germany dancing on this field. And Laban sent out these scores of translating notes to the little groups:

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where they were supposed to be and what they were supposed to do, and of course, nobody knew what the other guy was doing, except that Laban knew. And they all met on this field for the big day of the concert, took their places and did this thing, and the whole thing was beautiful. But it was like that giving out of parts.

SERGE: Which your idea is not into. That's where this TV thing, or even film, becomes really personal, because it's one person, one dancer handheld.

JUD: The camera is and can be a performer. There's no question of that.

SERGE: Ultimately we have to move both the camera and the performer.

VIDEOSKETCH was the one situation where the camera was stable, and an analogy to that is when you want to give a performance opportunity to someone who is a guest, one way of doing it is by freezing your camera, rendering yourself impassive, so then all the movements the other person is making are showcased. So Susan's been working with the frozen camera, so essentially all the motion on the screen would be in fact created by her. It is then like painting or drawing. In fact, VIDEOSKETCH came from a drawing idea, where you have a stable field, like a stage which is a stable field, and any motion created is that of the performer.

SUSAN: But also to take and put things at different points in space, in relationship to the viewer. Even in a proscenium, you have that to a small degree. You bring people closer to the situation when you bring them and monitors closer to each other; you get that kind of three dimensional multi-level visual fields.

JUD: Or one big field. With many levels.

SERGE: The Martinique has very special characteristics. One of them is that you're so close that even moving your head from side to side can change the field. One characteristic of signal fields is that the closer

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you are to the source, the more control the receiver can exercise over content and structure. From real close, by moving very little, there's a considerable difference in background created perspective. With the same motion, from twenty feet away, it's a barely imperceptible difference that I can create in my own location, and as you get farther and farther away, there's the point where that is an absolutely unmalleable visual array.

SUSAN: If I can gain more control of the situation, I would know how it's happening, rather than relying on another person.

SERGE: Susan's been working with still cameras, and one thing about that is that it has a reflexive character. In effect, the only thing that's happening on the screen is the result of one person's actions. What that creates, as a technical question relating to signal theory really, is that there are characteristics to joint motion where the field is moving and the receiver is moving. It's weird, but two things moving independently of each other create an interaction signal. If we could have had more performances, the whole relationship to the audience could have been done more. On the marquee outside, we had real flowers and christmas lights all around, and that care and handling of the audience, putting things on their seats, having local lighting instead of house lighting, created an intimate situation.

JUD: A beautiful thing that happened, when I arrived around 9 o'clock, there was a small queue of people waiting for tickets outside, and one woman said, "They're all standing out there, this must be part of it." "This is part of the happening" was her exact terminology.

SUSAN: The New York Times review of the piece: headlined "TELEVANILLA DANCE OFFERS FREE DAISIES. They gave away daisies at the Martinique Theatre last evening. The occasion was a performance of TELEVANILLA,

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a theatre-dance piece in which Susan Buirge, a dancer/designer, was assisted on stage by seven small television sets and a camera with operator. Considering the battery of equipment and the host of backstage collaborators including Serge Boutourline, a communications theoretician, and Wynn Chamberlain, painter, Miss Buirge's effort to 'explore new dimensions in the dance experience' were definitely disappointing. With the camera aimed sometimes at her torso, sometimes at her feet, there was Miss Buirge in person, Miss Buirge in part, Miss Buirge entire, as flashed on the television screens. EXTENSION NO. 1, the second section of TELEVANILLA also saw here dimly particularized on a vertical screen to the rear of the dance space, and for her finale tricks out a flashing light bulb, she pranced delicately before a machine, the program identified as VIDEOSKETCH, making little blobs of light play leapfrog on its screen." There's something so beautiful about that comment. "Whatever cohesion of image Miss Buirge wished to impart, being in three places at once, was never realized."

JUD: That's classic. SUSAN: They came to see dance.

SERGE: But the whole idea of giving something to the audience, of having a giving relationship; I just like that so much.

SUSAN: It's assumed on the part of a performer that the performer gives when he's performing, but when you can extend that into immediate personal things, it just becomes more beautiful.

JUD: The concept of working with an audience and the notion of receptivity, then the idea is to increase that receptivity to its fullest extent. Then receptivity becomes giving.

SERGE: In a signal oriented frame, as opposed to object language geneology, you get into the myriad sets of signals which exist. This has to do with the theoretical framework of what I've been working with so far,

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which has to do basically with the question of defining the physical world, or defining human environment. Ultimately you get to the question of how do you define even the physical world. One tends to get interested in that question because one is interested in perception, and this has been true throughout the history of psychology, where the fundamental issue is how do you explain or account for the fact that people perceive something so differently. The traditional explanation has been essentially that there is a world out there and you perceive it differently than I do, because there's something different in my head than your head- which I'm sure is the case.

JUD: At least a different filtering system.

SERGE: Yes, the notion of a filter. And then you get that thing of breaking down the filter so that more comes through. While I can't say that I'm against that position, I've been evolving another position- the fact that whatever I point to out there is in point of fact different for me than it is for you, physically, in all the perspectives. Like, you can see into the next room, I can't, etc., etc. Add on to that the tactile sensations that you're creating for yourself, the fact you're wearing different clothes, that your feet are in a different configuration than mine, that you're moving your head up and down and I'm shaking my head- you are creating at your retina a fast splice cut.

JUD: It has to do with the multiplicity of a moment, the infinite multiplicity which moves vertically through time as well as horizontally.

SERGE: The point of fact is that the physical, raw world you're exposed to is so different from the physical, raw world I'm exposed to. That comes from an accounting system which defines the world as that set of events which happens at one's sensors. If you take that definition of

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what the world is, what's happening here cannot be explained by this, because now we're dealing with a set of signals or events, and this is tricky, which exist both because of what I do and because of the "character" of what is out there, again created by what I do because I am selecting "what part" of out there, this rather than this. Like the character of this chair is really the character of a small group of spots that I choose to touch at that moment, which is hardly the chair. That subset of spots is itself defined by what I do. It then becomes hard to postulate that external, extensive object Newtonian reality which is essentially the common conception of us all. It is at that point where the deepest agreements in our society take place, that after all, sir, there's the real world out there. This has been prostituted by the perceptualists who say, yes, it's out there but we all have a different filter. I'm essentially taking it another step. I'm saying that nobody ever knew the real world, and nobody can help but create a world for themselves, therefore the idea of a world is a fiction in that sense, that's unrealizable in human experience. It's even unmeasurable by any scientific theory. It has to do with the INTERACTION SIGNAL company in that this company purports to relate to the process which is the process of living, in a funny way. That is what an interaction signal is, that set of signals which one develops over a period of time in interaction with one's milieu. But it is not the milieu, because to describe environment, you see, is back into object language.

Fundamentally, my position carried to its utmost says Susan is designing her environment now, I'm designing my environment, you are designing yours- but that I did not design this environment because in fact, my position taken to its ultimate, there is no such thing as this environment. You can think then now of this three dimensional space as a

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sea of points, or a matrix of points. At each point there is a unique subset of signals including light, electrical signals, magnetic, electrostatic, sound, chemical particles in the air- in other words, physical events which are occurring at that point. Using that model, then in a naive sense, say a naked man or woman moving through this room is in fact bathed in a sea, in a subset of such points. And by true movement, movement that is interpreted not by having significance with me as an object having a relationship with other objects, but as creating at my own, and each new location, a new subset of points. At each point of which is another new subset of events.

JUD: The complexity, of course, is infinite.

SERGE: It's staggering, but what it's similar to is in fact swimming, or as if we are all walking in water. And the only other thing is to speed up that people to people contact. That's what we're really trying to do. I, personally, am thinking in terms of what will be the next step. And, beyond the multi-sensory multi-media experience, I feel that it's going to do more with direct involvement with the making and doing of things than with consumption; but maybe not. Anyway, it's clear that a sensorium like the Electric Circus, which literally sells half hour experiences for five dollars, is playing upon crowds of zillions of people who literally have never had that experience, even once.

SUSAN: And it's something we live with, and work with.

JUD: It's happening all the time, every moment.

STAN VANDERBEEK: THE VIOLENCE SONATA

Stan Vanderbeek has become perhaps one of the best known independent filmmakers in this country, winning festival prizes for such animation films as MANKINDA, SCIENCE FRICTION and SUMMIT, and has been recipient of both the Ford Foundation grant for experimental films and the Rockefeller grant for films and studies in non-verbal communication. His particular collage approach to animation techniques has brought him into experiments with the latest image-creating technologies, including computer generated graphics with Ken Knowlton at Bell Laboratories, and the creation of video collages for CBS Television. During 1969, he was Film Artist-In-Residence at WGBH-TV in Boston, concurrent with a fellowship at the Advanced Visual Studies Center of the Massachusetts Institute of Technology.

On January 12, 1970, the VIOLENCE SONATA, a PRE-THEATRE-NON-VERBAL-ELECTRIC-COLLAGE, an evening of experimental television realized by S. VanDerBeek, was broadcast by the two channels, Channel 2 (VHF carrying the primary material- a mono-video form understandable to viewers with one set), and the UHF Channel 44 (carrying a collection of thematic comments on the primary material of the other channel) of WGBH-Television. The home viewer could best participate in VIOLENCE SONATA by watching two sets at once. It was composed of three double-screen collage videotapes, each lasting about fifteen minutes.

"The titles of the three videotapes are MAN, MAN TO WOMAN, and MAN TO MAN. They are mixtures of parts of VanDerBeek's past films, films from the archives and newsreel footage from around the globe, films and live-action videotapes shot in Boston especially for the show, and slides and photographs superimposed on the final tapes by matting... Between each of the three screenacts of this collision-collage, questions will be put to home viewers and they will be able to telephone comments to the three studio panelists. Meanwhile, in Studio A at WGBH, the same images going into local homes will be tele-projected for viewing by a special audience of 100 invited participants. In front of the screens, as well as behind them in a kind of shadow drama, masked live actors will perform a play which VanDerBeek has written... with the intent of gradually involving the in-station audience in TV-play. After the show, the studio audience will conduct a 'thrash-out' of the issues which it has raised, and this live-action will be carried to the home aud-

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iences on both channels. The home viewers can again join the discussion by phoning in at any point."

("Our violence is the digestive act of our inability to communicate. Man's frustration at not being able to communicate with words leads him to violence. Centuries of words have meant centuries of violence. We Must explore all other ways to communicate if we hope to live non-violent lives... By moving from the screen and stage presentation out to the studio audience and then to all viewers in the community, I'm hoping to find new ways to confront the issues but to cool the violence." - STAN VANDERBEEK)

The following discussion was taped at WGBH one week after the VIOLENCE SONATA broadcast, when VanDerBeek, staff members of WGBH, some studio participants and other guests watched a dual-monitor playback of the broadcast tapes, and then rapped. This was the first time that Stan had seen the show as a TV-spectator, having been active in the studio during the broadcast.

STAN: What we basically did was take all these variables at the same time and stick them together. And I frankly don't know what you think. It really went into something and, very curiously, came out someplace, and I really, at this moment, don't exactly know myself.

QUESTION: Do you have any feedback from people about whether they did adjust their sets at home?

STAN: The little bit I have is that most everybody just let it slide out untaillored, just come out and fall over them, and the ones that I did speak to, that I had any insight to, all felt they were perfectly capable of privately editing in their head. They said, well, I'm so used to TV commercials anyway, turning the kids off or on in their room, that it didn't matter; they swung right with it. And I was really trying to evoke certain particular parts that had more substance, more literate substance, if you will. I wanted to hear that, and so I was playing for that, and I found it interesting that the responses I've gotten were basically to edit in real time.

Q: I want to get some feeling reaction to this thing. I'm all fucked up in my feelings right now about the piece, and I want to get some community feeling.

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Q: I wonder if that wasn't the way a lot of people in the audience felt- particularly since it was such a crowded mass, a really tense situation- I would not have wanted to be sitting in there.

STAN: What we were riding with is an invisible third element of theatre that evening, and that was a live-action performance piece going on which had a dimensionality to it, and in fact I had taken the studio here as literal space and had set up a lot of evocative, or evocational, similes- references- to the whole idea of violence, so that the audience here had a very high emotional pressure when they came in just to see what was going to happen. So that had been done quite deliberately. You're right, I'm also rensed and puzzled, because I think that actually I evoked the basic body-mind-sense that I was looking for, which is really a state of confusion, or questioning, out of which I wanted to evoke something that you would get emotionally to some level- where if there was any insight or oversight that you might have, was to get you to that point. In other words, is there something that happens to you at some level of new emotional awareness or wherever, kind of crudely put- a sensitizing process, by overstimulation or overloading, you then see something new or some new reference point?

The basic theory behind it is that rather than work out your physical acts of aggression in one way or another, either on a home level or a street level, or on a nation-wide level, you do it in some form of play. One of the audience came up with something about the rational play- there was no such form of rational play that was not harmful to us- and I was looking for a form of theater act that did lead us to that so that we acted it out in that situation physically there, rather than go out and do it in the street. That was the basic motive for the thing. One of the problems about the form I put it in, and one of the whole points about metaphor, is that I don't think we really have an innate talent to confront issues directly- we mus always make them off to one side- and I would even make a bet at this point that it will be hard for anyone to volunteer their literal feeling about it. Is that possible to ask?

FRED BARZYK (Producer): Overall, I think I would have to say that the whole show had a rather inhuman aspect, except for what existed inside the studio, and the shift between those two elements was a difficult one, but an enjoyable one when I finally got with the audience because I

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somehow felt that I was back in some state that I understood.

When the three pieces were working well, it communicated best when it had your absurd sense of humor involved with it because it touched again on a humanity note. It worked effectively when there was a simple image, for me, like the knife moving back and forth; that had all the essence of what you were saying very clearly, yet still with the same vision that you have. And there were many times in the whole show when I really felt no particular thing at those moments because I'd been saturated with so much that I'd been turned off. And maybe when I joined the group again, I got turned on again.

STAN: You came in and out of it.

Q: I never really got into it- there were points where I could view the thing sarcastically, but I think I'm very much like one of the guys in the audience pointed out- the sort of person who'll just sit back and watch it and then go home and go to bed. I don't know, maybe it's a subliminal sort of thing, and six months from now, I'll wake up and be acting totally different.

Q: Stan, would you like to elaborate on what you what trying to do, because we talked a lot about that, and obviously you weren't trying to incite violence. You were talking about sensitizing people to violence.

STAN: The problem about an artist making something is that I really shouldn't have to legitimatize it with theory and surround it with a verbal package with a list of instructions. It really should, in some way, come through. I was really trying to do something that was closer to non-verbal forces. A lot of the material was essentially meant to be visual, so my first premise was that I wanted to explore non-verbal ideas, if I could, and then explore the media. And there are so many ingredients in the media, we had to sort of take inventory of it, and then I was looking in the large mainly for a myth-orientated form of evoking something without having the actual thing itself to be done.

Q: On that last point, Stan, should we have looked for the gratification of violence without committing it?

STAN: Yes- and no, aha!

Q: Should this be for violence what pornography is for sexual desire?

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STAN: It may well be- that's an interesting and curious point. It strikes me you may very well have something there which I wasn't even aware of- that wasn't my plan. I didn't know frankly how it would end up. What I was looking for, which is a kind of reverse of non-verbal communication, and one of the things by the way which I got interested in as a result of this, is that the audience, whom I had no idea how they would respond afterwards, seemed to me to be really ready to verbalize, to plunge in. It was a problem selecting one out of maybe seven or eight people, volunteering, all wanting to talk. I found that a very interesting by-product, that possibly such a heavy audio-visual load leads you to talking it out, which may or may not be a point, but I suspect that it is.

I don't know- it's like a fun-house, where it does and doesn't work, but in the large sense it does work. Now in our society, we have an incredible amount of pressures and forces that are not really legitimized, like pornography which isn't and is in everybody's mind, and violence. Two large thoughts came out on the violence basis, it seems to me, that, one: violence in many is a fairly natural phenomenon. I guess we don't escape it, or else we invent some sort of play that relieves us of it- if you let that energy go on out of control, it becomes violent.

Q: Was this to be a model of a new kind of play, then, that would take the place of violence?

STAN: Yes, in effect it could be, and I hope to look at it in that light.

Q: Well, then, isn't one of the tests of whether or not it worked for us, is if it did the job, vicariously, or if you were in the studio talking, whether we felt expressed... You see, there wasn't really that much violence in the pieces to experience; that many of the pieces were metaphorical or expressive of other kinds of human behavior or traits. When every so often, you'd get a glimpse of something that looked like genuine violence, like the World War II footage, that can out stunningly different from the rest. Gee, I didn't find that much violence in it to really get that out of it...

STAN: I know that that was quite deliberately done. I really only wanted to make oblique references to it. For one of many reasons, it's not easy to get that strong footage without a lot of trouble, and I also didn't want to do it- I wanted to stylize it so that it was only an afterimage of what it really was.

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I think that would be more involving and you had to read into it what you would. In fact, one of the things that was said in the post-mortem period in the studio itself is that they'd seen it all before- it was all TV stuff, which is true. And all I'm saying is that it's all part of the mythic structure that we have- that it is the fabric of our contemporary myths. Seven million people watch these football games each week, and that's really woven into us, so we don't tend to think of it in its counterpoint way.

Q: Tell us about VIOLENCE TWO. (Laughter). Q: More to come.

STAN: Yes, phase two. What I had in mind originally was to explore a form of portable theatre that was also, in the large sense, a scale and a media interpretation. We have many medias in our society; most of them don't give us a responsive situation, and we have a scale problem in our society where basically the individual is isolated from his overall community, and there are only a few ways he can identify with it.

The real problem is that our society has a physicality that we must explore in some way, and I'm particularly interested in penetrating and rebuilding what is our physical scale, in some way, so that we as individuals both function better as individuals as we as groups function better as groups. So what I'm really addressing myself to is the role of television as a new form of theatre, or whatever you want to call it, which works in real time, and works in all these dangerously balanced medias which we have at our disposal now, but which none of us quite knows how to orchestrate or use.

(TV VOICES: 1) AM I ON THE AIR OR NOT. (LAUGHTER) 2) GO AHEAD.

1) WE'RE GOING TO HAVE PEOPLE THERE, NOT ON FILM, BUT BLACK PANTHERS AND WELFARE MOTHERS AND MOTORCYCLE KIDS AND KIDS WHO JOHN HOLT SAYS ARE BEING MURDERED BY A SCHOOL SYSTEM. JOHN HOLT IS A CONSERVATIVE. HE TELLS US OUR KIDS ARE BEING MURDERED IN OUR SCHOOLS. (APPLAUSE) 3) THE VIOLENCE THAT WE SEE PERPETRATED ON OUR SOCIETY, DOMESTICALLY AT LEAST, IS MAN TO MAN, AND MOSTLY WITHIN FAMILIES AND NOT OUTSIDE. NOW HOW DO YOU ANSWER THAT IT TERMS OF INSTITUTIONAL VIOLENCE. YOUNG LADY) THE FAMILY IS ONE OF THE MAJOR INSTITUTIONS IN OUR SOCIETY THAT PERPETRATES THE BASIC VALUES OF THE SOCIETY, ONE OF THE MOST IMPORTANT OF WHICH IS THE EXPLOTATION

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AND DEGRADATION OF WOMEN. (LAUGHTER) ALSO IT TREATS A WOMAN AS IF SHE WAS THE PROPERTY OF THE MAN, AND CHILDREN AS THOUGH THEY WERE THE PROPERTY OF THEIR PARENTS. THAT'S THE BASIS OF CANNIBALISM WHICH IS THE BASIS OF VIOLENCE IN THE WORLD TODAY. MAN) HOW DO YOU REDESIGN? I FAIL TO SEE ANY RELATIONSHIP BETWEEN THE FAMILY STRUCTURE AND CAPITALIST STRUCTURE. BUT THAT MAY BE YOUR BAG. YOUNG LADY) THE FAMILY STRUCTURE TODAY TRAINS PEOPLE TO ACCEPT THEIR ROLES, BUT NOT THEIR HUMANITY, WITHIN THE CONTEXT OF AMERICAN CAPITALISM. WHEN WE FREE OURSELVES, WHICH MEANS TO FIGHT AGAINST AMERICAN SOCIETY, WE FREE OURSELVES FROM THESE OPPRESSIVE INSTITUTIONS, WHICH MEANS THAT WE ESTABLISH REAL COMMUNITY WHERE PEOPLE RELATE TO ONE ANOTHER IN A SOCIALIST WAY, BECAUSE THAT'S HOW YOU COMMUNICATE. YOU BREAK DOWN THE FAMILY AND CREATE COMMUNAL LIVING. MAN) AND YOU REALLY BELIEVE THAT WE HAVE TO REDO THE WHOLE SOCIETY IN ORDER TO RID OURSELVES OF VIOLENCE. YOUNG LADY) OF COURSE.)

TOP VALUE TELEVISION (TDTV): PRIME TIME: Post-Broadcast TV

"The purpose of TDTV was to demonstrate that portable video equipment can be used professionally to create a different style from conventional TV; and that there is a market for such work. Moreover, we wanted to demonstrate that we could work efficiently without a rigid hierarchy."  
- TDTV, PRIME TIME, 1973.

MEGAN WILLIAMS: I guess there are about ten of us that work together, in San Francisco. Michael Shamberg and I came from Raindance in New York, Allen Rucker who co-founded Media Access Center in Menlo Park, California, Tom Weinberg from the 1/2" video INSTANT REPLAY group in Chicago, Chip Lord, Doug Michels, Hudson Marquez and Curtis Schreier from Ant Farm (into inflatables, alterante structures and graphics), and Betsy Guignon and Michael Couzens.

Right now, we're basically working on this ADLAND tape, a documentary, and this equipment thing, testing out equipment. We're trying to push the state of the equipment, and push the state of the art and see what the best production facilities would be, and the best place place to be. Because we couldn't call for the equipment ourselves, these prototype pieces of video equipment, because we didn't have the clout to deal with the manufacturers that way, we're doing it through KQED here in San Francisco. There's no money being exchanged. It's of benefit to both of us because KQED is really interested in exploring alternate television type programs, 1/2" programs, and they'll be really hot into it when we're in color- then they'll be really interested. And it's of benefit to them to know what they need, and it's a real benefit to us to know what you can get for the money, what would be the best, the most stable, the cleanest, and have the best color- so we're doing it. We're just testing it out- they're not buying it. And it's also important because we're doing a survey on hardware and we're going to publish it in the fall. (THE PRIME TIME SURVEY BY TDTV, 1974.) It'll be a good model, a separate little thing, like a magazine saying, here's hardware, what kind is it and how can you modify it. It'll be more along the lines of the equipment stuff that's been in RADICAL SOFTWARE. It'll have model numbers and prices, and what the good and bad aspects are, and that'll be a good model for groups who want to

see a price for that kind of equipment. The cable systems have already bought expensive stuff, and a lot of people are bringing in 1/2" tape, so that's a big thing.

Then, we've got this project called PRIME TIME which is a ninety minute pilot program. It's more a sassy type thing as opposed to a documentary- it's not the coverage of an event. It's sort of a look into what the future of TV is and it'll utilize all of this equipment to show what the flexibility of the equipment is, and the light equipment and the recording equipment. We want to trace out the history of the tech development in television- people might be putting in people watching the TV of the '60s, and as the program progresses, it will involve getting into color and using all of the equipment.

"PRIME TIME will be publicized as an alternate future for television. Future models themselves are part of the American tradition. The 'car of the future' often draws consumers to auto shows. Science fiction imagery paved the way for acceptance of the space program... The PRIME TIME project will be a non-institutional way to develop new video formats and hardware. The project will serve both as a context for showcasing the work of alternate video producers, and as a prototype operating structure through which alternate programs could be financed and distributed."

We're also working on a book, sort of a profile on electronic communications now and in the near future- not a futuristic thing, not a real forecast for the year 2000, but something like the next five years- what the interfaces are between computers and video, and what kinds of regulations would be in control. The way we work is that we all sort of work on everything. The people who are working on the book are basically Michael Shamberg, myself and Blair, who'll probably help us, and people doing some of the graphics. There are a few people who aren't part of TUTV working out of Chicago, and a woman in Japan. She translated GUERRILLA TELEVISION (By Michael Shamberg and Raindance Corporation, 1971) into Japanese, and it's really important, and it's really weird, I mean, that's so old.

JUD: How did TUTV come about in the first place?

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MEGAN: TVTV started being formed around the conventions of 1972. We decided we wanted to do the conventions so we came up with the name TVTV, and it was sort of a fantasy to cover this media event, and then it became a reality and we got commitments from Sterling and Teleprompter Cable and Cypress Communications and Continental Cable. A few cable companies gave us money commitments and we also got press credentials, so that we were on the status of any other independent press people down there in Miami, independent meaning other than the networks. So we started hustling grants for it and figuring out how we were going to it, and how many people, and that's really how the people got together. We sent out flyers to a lot of people, and some really responded "Yeah, I'd really like to work on this gig," so in the beginning there were about twenty of us who went down, and we got help with the money from small foundations. Andy Mann, the Videofreex, Tom Weinberg from Chicago, the Ant Farm, Ira Schneider, and the video people from Antioch College in Ohio: Steve Christiansen and Martha Miller- everyone was coming from a different group, so we had this ad-hoc structure to do this production.

We had about ten portapaks..In the beginning, we had absolutely no focus- we were running around and shooting what we thought was important, and then we starting following stories and themes, and deciding what was really important. Like, we got a sense of it after a while but it was just such a kick to be there. The place (The Democratic Convention) was like the biggest television studio you've been in, THE WORLD'S LARGEST TV STUDIO (the title of the production)- and the media was a big part of it too- it was real interesting to hang out with those guys and see how they operated, and to see what they think is important in relation to what we think is important. So what happened is that we did this programming, two hours on each convention (FOUR MORE YEARS was the Republican Convention.) which were edited at the Egg Store in New York City, on the Sony 320F-

JUD: Dubbed up to one inch video and then back down to 1/2".

MEGAN: And Parry Teasdale and Chuck Kennedy of the Videofreex did all the tech work, and they're really fine- they really checked it out. Then we had no idea if it was even broadcastable- we hadn't even thought about broadcasting it. We figured it was just fro cable, and we then took it to Westinghouse and they said they'd like to show it. So it was

really a test- I know it's been done- but we transferred it to quad using the AMPEX AD01 and it was exquisite. The first time we transferred we did it optically at KQED, and you know what that looks like, just shooting it off the monitor, and then Westinghouse put up their time and their AD01- it took a lot of time but the technicians got into it, and it transferred really well.

So then, we were out in San Francisco, Michael and myself and Allen Rucker and Tom Weinberg, and we decided that we really wanted to do more productions, really wanted to start making tape, but we had to figure out some distribution, some sort of outlet, because otherwise it's this thing here and this thing there. So the next thing we did was a piece on ROLLING STONE MAGAZINE called BEHIND THE LINES which was on WNET in New York, and that was a sort of little number- it was about sixteen minutes which they chopped up before broadcast. We spent time hanging out with Jan Wenner, time in the offices and talked to all the people. Wenner has a very successful enterprise going, providing some kind of service, some sort of communication, or he picked up on the music which is the communication for that culture, and capitalized on it. He started when he was about 23, and he's 26 now, and it's very interesting to see that it's a very traditional straight sort of business- and also to see where it's going from there, because you can't really make it just on music anymore, so he's become a pretty good journalist.

JUD: You say there isn't a structure being put together for the sake of this operation. How is this being arranged now- who does what?

MEGAN: That's pretty arbitrary though- we all have offices and things, but that doesn't really mean anything. It doesn't mean that anyone has any more pull than anyone else, and we haven't worked out any sort of equity right now- it's all being held by one person- it hasn't been divided up but it's a tool. Like we need a structure to do what we want to do with this new pamphlet, and make it as efficient as possible, and it's a tool to help us raise money, but it doesn't necessarily determine the kind of work we do.

JUD: Are you all sharing one space in San Francisco?

MEGAN: No- in fact, our space is not determined. We have an office and our studio, and the apartment that Michael and I and Chip Lord from the Ant Farm have, and then everyone else sort has their own apartments. I guess we need a much bigger space, and it's just a matter of money.

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JUD: A question of what used to be called media ecology. What's your terminology now?

MEGAN: Post broadcast- that's the terminology we've been using. It's a function of the future- small and cheap, light and functional. That's our term. It's working in post-broadcast format, with post-broadcast equipment, and post-broadcast distribution systems. It doesn't mean anything; it's just another funky video operation. (Laughter)

Just trying to get it together, seeing themselves, and traveling around a little bit, and doing what they want to do.

JUD: The basic materials you've been doing, the Convention tapes, Ad-land, et al, seem to take a look at certain cultural manifestations in a kind of both observational and satirical point of view.

MEGAN: Well, in a sense, I guess that's satirical, and cynical, but-

MICHAEL COUZENS: It takes a staged event and displays the process behind the stage upfront. And some things, when you do that, look ludicrous.

The Republicans go through all that trouble to stage an event, and when you show the staging, and you show the kids being rehearsed before they go out to the hotel to greet the celebrities, and so on, the whole thing looks like a contrivance, and it creates a different perspective. I guess that's common to all the tapes thusfar, isn't it?

MEGAN: I'm not sure that satirical is the right word. It's documenting the culture, and this is part of the culture; these people are very real these are the lives they lead and the things that are important to them, and that's part of America. And they're part of the whole civic scene they live and work in, and sometimes it's just important to get a scan on who those people are because they have a lot of power in this country We're not on a heavy political number, but that kind of information doesn't get transmitted, and a lot of us are not even aware of it because we're pretty inbred, and pretty closed and pretty isolated.

MICHAEL COUZENS: If you did a tape on Disneyworld- they go to a lot of trouble to hide their technology, to make it unobtrusive so that the fantasy atmosphere is maintained. But the place would probably give you the impression of being impressed with their technology; you'd be impressed with their ingenuity-

MEGAN: Which they don't want people to know about, you know. Like at the Democratic Convention, when we hung around with the news media, they really didn't think that it was important that people understood how they got their story together, or what kind of equipment they used,

and what that process was- and these are the guys who are giving you the news every night, and telling America what they're doing, what's going on. But they're not accessible. It's like turning the tables on some of these people and exploring. I mean, if a bunch of South Carolina Republicans walked in here with a film crew to check out our scene, who are these videotape people, what do they do, what kind of places do they live in, down here on St. Marks Place and Vallejo Street in San Francisco, and Thompson Street in New York, and up in Woodstock?- that'd be pretty weird. It's not just picking up our lifestyle, but it's putting our lifestyle into perspective so people know what what're doing

JUD: It's a kind of uncovering, in a sense.

MEGAN: But it's sort of an exchange, too, because at the same time we're uncovering, we're really exposing ourselves to them too- like they're having some sort of experience themselves as well.

JUD: What do you think they're getting out of it?

MICHAEL COUZENS: Well, it makes them stop and think about what's relevant and what's important, and they find out what other people have a different view about.

MEGAN: Or it makes them think about their own lives when they find out that other people are curious about their lives, and most people don't think about their lives a whole lot.

JUD: They're not self-reflective.

MEGAN: So, maybe it makes them think it makes them think that if these guys with their Sony packs thinks we're important, or something we're doing is valid- I mean, Walter Cronkite doesn't give a shit about us, what we are doing, but maybe it does that. I don't know; it would be pretentious to say that we had an effect on their lives. I'm sure we probably don't.

JUD: Do they get a chance to see the stuff? Do you get direct feedback from them?

MEGAN: Yes. Moreso, with ADLAND. With the Conventions, it was pretty hard, and it was a momentary thing- two weeks in Miami Beach. But with ADLAND, we can go back to the people and show them the tape. We haven't done any of that two-way sort of feedback- unless they pick it up and see themselves on TV.

JUD: Do you get comments from them while viewing the tapes?

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megan; They're unusually more impressed by the technology than considering the tape, and then it's all pretty usual, as would expect, "that's my image- that's me on TV"- they get into that head. There was the Wallace delegate, who was on the tape, and saw the tape which we taped, but Walter Cronkite didn't see the tape we shot of him because he didn't have the time.

JUD: There would have been a chance for him to see it?

MEGAN: Yes, CBS has a copy of it, and he could just get it out of the Archives, although I'm sure he has no idea.

JUD: There was a tape of yours that was shown on David Silver's WNET television show in New York-

MEGAN: That was a tape of our loft-

JUD: It was autobiographical-

MEGAN: I haven't seen the playback, so I don't know exactly what they used. The original was about five minutes. David Loxton just asked us to do an introduction to who we were, and at that time we were living and working out of a much smaller space; and we just took people around through our space, introduced ourselves and showed them what we were doing- who we were basically. I was really to serve as an introduction, I would say.

JUD: David played it at the Kitchen, as well as the broadcast.

MEGAN: They cut the gallery at the end of it- we had a gallery of art, with glossies we got from the PR department. So we had a gallery of all the movement, and some guys who are well-known like Cronkite and Fred Friendly, and some were a bit more obscure, and some were local, so the game was that you had to go around and name them, and see how fast you could name them off, if you remembered their name from television- how memorable they are. But that wasn't a particularly heavy piece of tape.

Another thing that we're sort of interested in doing, and are pursuing right now, which may happen, is a similar tape on the Guru Maharaj Ji, the 16-year old guru and his following. He's doing a tour of the country now, and the upshot of the tour is called MILLENIUM 73 in the Houston Astrodome in November. It's supposed to be a really big number, hundreds of thousands of kids, followers of the guru; and we'd like to travel with him, and they're having a thing called the Soul Rush, and they're coming from Boston and New York. Those guys are very weird.

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JUD: They're all around in the East Village.

MEGAN: And he's around. He's plastered all over the place, and he's really into the technology, this little kid. He's got all his Divine Missions hooked up with Telex; he's into computers; he has a 747 on which he's got cassette recorders, and he really understands linking people together through media.

JUD: How have the arrangements for ou the tour gone?

MEGAN: We're not going to do the whole tour. We're mainly going to do the Astrodome thing, and then pick him up in Denver, and Detroit.

JUD: A few lead-ins.

MEGAN: We contacted them, and it's still in negotiations, but they said they'd be interested. They sent us all their material. Right now we're trying to get some money from PBS to do it, through KUHT in Houston, and they're interested in it. So right now it's in Washington with the Corporation for Public Broadcasting (CPB) to give a little grant to PBS Houston. The guru is probably into it because it would just be a little more media, right? We talked to two of his people. What do you think of his scene?

JUD: I've been avoiding any impressions of him.

MEGAN: Maybe you should work on this program. (Laughter) We decided that the upshot of the gig would really be if one of us is converted, that would be the final point. I don't know how long his following is going to last, or if it's as big as he claims it is, but if it, then it really is an important event, and it's really important to figure out who these kids are, believing in him, and turning everything they have over to him. There are a lot of them.

"MILLENIUM 73 was described by the Guru himslef as 'the most holy and significant event in human history.' In retrospect (and on tape) it was one of the silliest, but being in Houston was something of a mindfuck as at times we felt like aliens who had stumbled into 'The Invasion of the Body Snatchers' with our porta-paks... The event itself was visually outrageous, with the Guru sitting atop a 50-foot plastic throne wearing a gold crown while Biblical sayings and G-O-D flashed on-and-off on the Astrolite scoreboard behind him. Capping the madness was a 56-piece rock band led by the Guru's brother in a silver sequined suit." - TVTV.

JUD: You believe in going into each of these projects being as open as possible.

MEGAN: Yeah, we try to. The thing we learned at the Convention the most was that you just let them talk; I mean, the Republicans just said what they believed, and what they wanted to say, and I think that's really the way to do it. It seems to be a lot more interesting for people watching the tapes if you let them make their own decisions about it, but it's not in a way that you can't say it's objective.

JUD: You try to go without any preconceptions except for saying that something is worthwhile to cover.

MEGAN, Well, I say we have preconceptions and it probably gets across, the way we frame the camera, or the way we cut the tape, but in the actual shooting process, we're thinking about how we're framing, and about how we might cut it, but we try to just let them communicate what they think is important. Because that's what we want to know; that's what we're curious about.

JUD: You've been working mainly with Sony 1/2" technology?

MEGAN: Yes. But we're not dedicated to Sony. We'd certainly work with anything that came along that was good enough.

JUD: Where do you see the idea of 1/2" broadcast from this point?

MEGAN: For the near future, the next year, it's really hard because it's partially a technical problem, those technical hangups with helical scan- but the time base corrector might have a lot to do with it. No one has yet worked with it long enough to see the limitations- but the problem seems to be in the engineering studios, because they're still unwilling to deal with it. To them, it's trash, it's a toy, and we sort of feel it's crappy ourselves, but we push it and cajole. The thing that's happening KQED is nice because it's the first time that KQED engineers are concerned, and Zeff Putterman, the program manager, understands what we're doing and cares about it. That seems to be the way it's going- to find people within the industry who are sympathetic to what our goals are. It's the same with cable; the problem with cable is that their whole economics is so fucked up that they haven't made any commitment to programming- they've got no software commitment at all but for a few exceptions, but in general-

J: Some of the exceptions you've found yourselves.

MEGAN: Yes, but that's unusual, and it's not an ongoing thing. It still like, every time you have a program, you have to go back and do the

whole number all over again. But Couzens heard a rap on satellites and microwave today, which really doesn't apply to the next year, maybe the next five. It would be so easy and relatively cheap, so perhaps with people subscribing to satellite services, and many little networks formed around those services, then TVTV or Jud Yalkut could lease an hour on the satellite for \$1000 and just hit all the people who subscribe to that service.

MICHAEL COUZENS: That means that the cable station could become instantly a network, but for a specific purpose- like for a particular sports program that has regional interest, or for TVTV- if TVTV puts up a tape and a network is formed instantly for the purpose of pulling that in in perhaps a dozen places. And, with predictions for more cable stations with more subscribers, there might be money for programming, which could be accessed by satellite.

MEGAN: There would be new forms of distribution coupled with better equipment, which would bring about new formats of programming, and that's what we're really into. We're into producing television in a new way, and I guess we're not doing community video; we're not doing art video; we're producing. We want to make TV, and we want to make it different, but I don't know if it will be better.

JUD: It's actually alternative programming that you're interested in.

MEGAN: Yes. In California things are a lot different than in New York because there's not that concentration of video people; they never had a New York Council On The Arts, or the same cable thing, the public access thing, the unique rapport between cable and video. So, in San Francisco we're not affiliated with any cable system, or any broadcast out, or any community thing- we're pretty independent. We wanted to leave New York, a lot of people on the scene were leaving, going upstate, and Raindance was in flux, and people we wanted to work with were out in California.

JUD: There are other people working with 1/2" video in California.

MEGAN: Actually, there are lots- women's groups, community groups; there's Mission Media Arts, a black group, Fillmore Media, and then there's Video Free America, Art Ginsberg, and Optic Nerve. Optic Nerve is a group that works out of Project One, a sort of urban community of freaks who are interested in different media, and they've taken over a warehouse and broken it down, into many groups. There's a video group, a print group, an architectural, ecology group, and the funds of Project One

TVTV

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work out of that space, which is into the alternate use of computers, of which they have a couple down there. In a sense, they're doing similar video to what we are, their tape on a rodea (PSYCHOLOGICAL BULL-RIDER) and they covered the Miss California Pageant. Again, though, it's very small and there's not much communication between all those groups.

JUD: Is there any interest among TVTV in image-processed video?

MEGAN: For myself, I think it's real important; some of it is really fine, and really exquisite. One of our people, Curtis Schreier, this crazy technoid from Ant Farm- it's really hard for me to describe Curtis- started out working with Larry Halprin, the architect for awhile, did a lot of design work then, and then joined up with the Ant Farm. He worked with them on the whole inflatables thing and the INFLATOCOOK-BOOK, and he's been teaching himself electronics. His little apartment- all of a sudden the fans and plastic bags are gone- and it's filled with ICs, resistors and capacitors all over the place, and little blinking lights. He put together something which generated geometric patterns; not a synthesizer, not very sophisticated; very crude, in a little box. But if anyone is actually pursuing it actively, it would be him. I think the techniques are very important, and things that come out of it, like the whole colorizing thing, would really apply to our PRIME TIME production. It would be applicable in our own context, because there are a lot of other things that we want to do- we're really into entertaining too.

JUD: And information.

MEGAN: Right, information. And we're into producing things that people would be into sitting down and watching- maybe they'll learn something, but it seems that information should be sort of entertaining in itself. Television, broadcast television, just tries to create entertainment, and put all the shit in to make it fun, and they just add all this gingerbread to it. I think that if you make it a little bit more pure, and get into the pure information of it, you can get away from the jive entertainment interest. That's probably the difference between what we're doing and what broadcast people are doing. We're not really competing with CBS, ABC or NBC.

JUD: Who want to?

MEGAN: Yeah, why? What difference would it make? But, in some ways, we are definitely cognizant of an audience.

JUD: You've also been doing raps with shows, and raps on equipment. Have you tried incorporating material on the equipment itself into tapes?

MEGAN: We tried that, to show the difference between the equipment that we're using and the equipment that CBS used at the Conventions. We try to give people a sense of our space and our editing process, and sometimes we bring ourselves into the tape. That seems to be important to us. A lot of people don't think so and call it self-indulgent, but it seems important to us to communicate that- the soul of TVTV.

MICHAEL COUZENS: I've been noticing the amount of time the networks waste on Washington procedures and Caucus room transitions. It has struck me that while they're down there, they could explain to people what Senators are doing, what kind of sordid deals are being hammered out in committees, what they're voting on when they go to the floor. The closest I've seen is when ABC followed some senator through the sub-wat over to the Senate, over to the Capitol building, and then followed him back- but the process of which this is a part continues to be veiled because they define the news as just what goes on in the Caucus room. I don't know why they make the assumption that that's relevant and nothing else is. It's a struggle to proceed with other assumptions, until those situations arise and start to do it.

JUD: You're encouraging those situations?

MICHAEL COUZENS: Well, perhaps create situations and discover situations. Maybe it's the same thing.

JUD: What would be the fulfillment of your greatest working fantasy?

MEGAN: To work in the context of broadcast television- and it seems really important that we be able to do things on a regular basis. Not necessarily a series, or an old format or time slots, but even a five minute series as a signoff is unique, and they don't do that.

So, instead of having a piece sixteen minutes long appear on NET once every three months, or once every six months, we'd either like to do a whole night's worth of television, and PRIME TIME is the prototype form which is total fantasy- a whole evening of PRIME TIME in the prime time hours from 7 to 11, and just have it broadcast.

So that we'd be in control of the content, and either do that or some new kind of series thing. It's really frustrating to see your work get mashed and mutated by broadcast heads. We're working on a series now called FREE LUNCH, where we find people we want to talk to who we think are important- I guess that might be a sort of talk show format-- and the deal is that they pick the restaurant and we pick up the tab, and

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make a tape. A lot of it has to do with the environment of a place they would pick to eat at, and the food, and the waitresses, and that whole scene, and it's also them and their friends, whoever comes along; and it's much looser, more casual, much more comfortable, and everyone's eating, sitting around and talking, and it's not a studio. Not bringing someone into a studio and making him sweat and feel all uptight. So that's one idea we have in mind.

And, for PRIME TIME, we think it would be real nice just to be able to do our own commercials, if there are going to be commercials in the broadcast time- then we'd like to do the commercials too.

JUD: For specific sponsors? Or for yourselves?

MEGAN: For the sponsors, if there were sponsors. This could be educational television, but even if it were broadcast television, or on independent VHF, wouldn't it be nice to do the whole night- everything? That's sort of a fantasy. That would be a major product. That'd be so fun. This is Megan Williams, signing off for TDTV.

"The original PRIME TIME project was planned as an entire evening of alternate TV programming. Prior to that, however, we plan a 90-minute pilot on TV-of-the-future as an education/entertainment/consciousness raising vehicle. The working title for the program is TV2000.

TV2000 will be hosted by a personality whose television career spans from 1939 to 2000. TV personalities of the future will be electronically generated by super-sophisticated video synthesizers. These characters--called Animatons--will have no real life counterparts but will have physical characteristics selected through audience surveys and pieced together like police composite sketches... Production technology in the year 2000 will be the tiniest of mini-cams: retina receptors which chemically translate what the eyes of the cameraman sees into electronic impulses... The airwaves, of course, will no longer be limited to three networks, but will be paperback television with virtually unlimited channels to choose from, most of them boring. The existing networks will have merged into one national conglomerate and will compete with other nation stations (ArabTel, Japanco, Brasitell, Sovstation, and MAOVISION) for rights to global events... Another new form will be correspondence television where viewers are invited to send tapes."

## THE VIDEOFREEX: Maple Tree Farm And Beyond

"The FREEX are the most production oriented of the video groups. They've developed a high expertise with television hardware which is their strength because they demand respect (even from people put off by their life-style and viewpoint) simply because they know their tools... They have also the most collective life-style, sharing expenses and space for living. This is in no small part due to the nature of the videotape process and the FREEX claim to get it off most when they're all plugged in together through an elaborate camera mixing system and taping collectively. They also, of course, make tapes individually using the collective support system." - MICHAEL SHAMBERG, in "A Personal History" in GUERRILLA TELEVISION (Holy, Rinehart and Winston, 1971).

The Videofreex has long consisted of a working core group, who have also collaborated with other video groups, as well as producing individual tapes by its members. David Cort initiated and moved off into his own interactive video situations; Davidson Gigliotti developed an expressive multi-monitor configuration head for videotape installations; and other members were more concerned with documentary and community interactive television systems. Other members of the Freex include: Nancy Cain, Nelson Becker, Chuck Kennedy (the ace hardware technician), Curtis Ratcliff, Allan Scholom, Carol Vontobel, Ann Woodward, and the other three who are involved in the following extended interview, Skip Blumberg, Parry Teasdale, and Bart Friedman.

JUD: How did the Videofreex come about?

PARRY TEASDALE: There are two things to say about that, and one is that we try to stay way from defining that period of internal history where we came together, and the second thing is the reason for that is that everyone has a different opinion, because it's a historical thing that we don't understand, which tends to create an image that we don't necessarily want to create- a mythology or a legend.

Chronologically, it can be run down as far as what we've been involved with, which was essentially the Woodstock Festival concert, and doing video there. Some people got together at that point.

### OUT OF WOODSTOCK

JUD: Was it basically gathering information video at Woodstock?

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PARRY: That's a good point. At Woodstock, there was no Videofreex; there was just people with video. Actually, there were two of us who got together- (NOTE: David Cort and Parry Teasdale) and later editing the tapes, three people became involved. But more and more people came; but it started as an information system. There were ~~actually~~ several video people at Woodstock.

JUD: I know that, including Ira Schneider and Carl Goldberg. And I was shooting 16mm film myself.

PARRY: So the whole thing started as an information system, in trying to play the tapes back to the people who were there at Woodstock, and there wasn't any concept of cable or anything. It was simply replay, at a central location in Movement City at that point. The attempt was not to make some sort of documentary of the thing, but to relay information, but it just so happens that we used the tapes in the city later. It turned out that we felt there was a basis of information to put together, and actually, these tapes may be of historical interest, but there were not too many people at the time who were interested in what the state of the Porta-johns was. The hard information had very little relevance immediately, except for some people to feel the ambiance, which is valid, but the commercial potential is very limited. So there were those tapes.

SKIP BLUMBERG: You'd already been working in video for a while.

JUD: So, at the Festival, it was essentially David Cort and you.

PARRY: As far as we got together at Woodstock, we both had equipment. David had a portapak.

SKIP: David was traveling with some teenagers.

PARRY: Yes, he was with some Movement people, and I was with some friends.

SKIP: High school radicals, and they did a lot of the shooting.

PARRY: And then Curtis Ratcliff, which whom David shared a loft in the city, was involved in the editing of the tapes.

JUD: You'd been shooting tape for a while before that?

PARRY: I'd been involved in it for less than a year. I didn't have a portapak; I just had a studio deck; I got some equipment from a guy in Washington, D.C., Grayson Mattingly.

JUD: I know his book, with Welby Smith, "Introducing The Single Camera VTR System." (NOTE: 1971, Smith-Mattingly Productions, Ltd.)

PARRY: He's a fascinating guy, because he's been in video from the beginning, and the most startlingly beautiful thing about Grayson is that,

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in many ways, he takes himself less seriously, and has more impact on, more video people than a lot of people recognize. He's had an effect because of the clarity of his original book and pamphlet. He turned me on to video, and some other people that I know, and he's been in Washington, and not in New York, so its' made a difference- because he started in video in 1966 or 1967. There wasn't anything happening in video, and you had to sell equipment to the government. But, anyway, Videofreex got its name sometime after that. It was a friend of ours who put the name up on the door, and we thought it was funny, and used it.

JUD: That was the original spelling?

PARRY: Yeah, - EEX. So, we were doing other things. We were trying to relate to radical groups, and women's groups. We were just using the equipment, you know. There was a musician, Buzzy Linhart, who live upstairs and we made a lot of tapes with him, and just tried to do different things.

THE CBS EXPERIENCE: "SUBJECT TO CHANGE"

PARRY: In the midst of trying to figure out what we were going to do with the equipment we had, and the energy we had, which was pretty high, along came Nancy Cain, who was working with an executive at CBS, and they were trying to put together a show. They saw video-

SHIP: They saw half inch-

PARRY: Yes, half inch, and like a people, whether involved in television or not, when they see half inch, they get immediately turned on, at how easy it is to make a television show. They had visions of using it as the new medium for pilots, I guess. And the portapak had been around for a very short time.

SKIP: You couldn't play back with the portapak (NOTE: Sony CV, the first produced.) and the resolution was awful.

JUD: It was an unstable picture.

PARRY: And it was impossible to edit essentially.

SKIP: Anyway, they got real turned on, and we met Nancy, and somehow managed to get a lot of money from CBS.

PARRY: This executive had access to the highest echelons at CBS as far as funding was concerned.

SKIP: He was an experimenter. They considered him, at least after he left, to be a freak, really, and crazy, because he had dealt with long-hair people.

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PARRY: Traditionally, CBS had been very conservative, professionally as far as style, and we just totally broke the rule, for which he was duely penalized at the end, by being fired.

JUD: Nothing ever got to broadcast?

PARRY: Well, they finally transferred some things to two inch. The process was that not only did he have money, but he spent it very liberally; some of it on us. Practically everyone who's here now, came in either during the CBS thing, when there was lots of money and a tremendous amount of energy- nothing to stop it because there were no financial barriers- or they came in the immediate aftermath of that when there was still this highness about what had gone on. We did a lot of traveling, and a lot of shooting.

SKIP: There were probably a hundred hours of tape, during that project. Or close to it, because it was not just the Videofreex, but other people shooting too.

JUD: What kind of material was that?

PARRY: I don't know what everybody shot, but we went to Chicago and dealt with the Yippies, and the Weathermen, but not so much the Weathermen as the SDS people, during the conspiracy trial. Tom Hayden, probably the most foresighting person there as far as straight political radicalism was concerned, made us erase all the tapes we made of him when he found out that we had dealings with people affiliated with CBS. You see, this executive had his own company, and he was getting money from CBS; it was one of those quasi-strange deals.

We went to Chicago, taped Fred Hampton before his assassination, and dealt with the Yippies, who were very much media-conscious and didn't care, in many senses, what we did with the tape as long as it got exposed. We traveled to California, tried to relate to LA which was impossible, and tried to bring New York to Big Sur, which was impossible, and ended up in San Francisco relating to some people at a school in Palo Alto, the Pacific School, who were really beautiful, and we've maintained a relationship with those people.

SKIP: We sort of did short documentaries.

PARRY: We dealt with celebrities, too, like Dr. Hippocrates, who was writing a column for the Berekeley Barb.

SKIP: So, in many ways, it was a bad experience, because it led us astray, and brought us into a reality that we weren't ready to deal with.

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On the other hand. it really taught us a lot about CBS and the broadcast industry, and now we're really beginning to understand what we went through. With CBS, we were really loners there. At CBS, in the offices at that time, maybe it's still the same, you couldn't change furniture around unless you had the maintenance men come in, and they had specific spots where you could move the furniture. We wanted to show some films, and they have viewing rooms, and we wanted to turn some light off, and there are no light switches to turn the lights off. It took us a week or two to get them to come in and turn off the lights. PARRY: You couldn't even have things on your desk, unless it's approved. SKIP: And there we were, in the midst of this, playing harmonica down the hall, and stuff-

PARRY: And just getting crazy.

SKIP: Right next door, between Andre Kostelanetz and the room where you sit and watch TV shows, and have a red button in one hand and a green button in the other.

PARRY: It's weird; like people would disappear in that building. It was a whole thing where we were the radicals, or whatever they classified us as, and then there'd be offices where one day there'd be one name on the door, and the next day there'd be another name, and nobody would know what happened to the guy who'd been there the day before. It was a frightening thing; and it created in us a take-what-you-can-get-and-run attitude, which in retrospect was bad because it hurt our chances for getting something on the air. But, it was probably good, because it kept us arrogant enough not to be co-opted totally, so that when we finally got ripped off, we could say, "Oh, those schmucks, those pigs."

SKIP: We probably cared more about the tapes than about getting them on the air. We figured CBS would be worrying about getting it on the air.

PARRY: Now, if we had gotten involved with that later, it's impossible to speculate how things would have changed, but our attitudes were different. But the end result was that we presented a program to an executive, Michael Dann, then director of programming-

SKIP: And several guys from his department.

PARRY: He had an entourage; they surrounded him. We presented it in our loft, and he didn't sit, wasn't allowed to sit, or didn't want to sit with the people involved in the show.

JUD: This happened at the Prince Street loft?

PARRY: Yes. It turned out that he had to sit in another room, and couldn

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relate to the show at all, and got very drunk and conducted himself terribly, and then came out and gave a little lecture-

SKIP: He was responsible for things on the air like the Beverly Hillbillies.

PARRY: But he said, if you have to produce a show once a week for 20 or 30 weeks out of the year, you'll learn that it's a little bit different; and he was right, if you're dealing with their structure of presenting television. There's no other way to do it other than to be a media fascist. That was an interesting experience for us, and the last thing was that they took the tapes and kept them for themselves. We managed to get some of them back, just by going in and taking them-

JUD: There were no dub?

PARRY: No, they took all the original footage. We got a copy of the edit of the show, which we used as our main tape for a long time; (Laughter) which we never look at now. We had edited this whole show, and we had inherited a tremendous amount of equipment, which had created in us, not only arrogance, but this air of "we certainly hit the top; now we're the big guys in video." And we'd been supported by a network for four months, and then, all of a sudden, they totally withdrew their support, asked for a lot of the equipment back, only a little bit of which they got, because they had given us a lot of it. You know, they called us up and said "Wouldn't you like to give this back, even though we gave it to you."

SKIP: And the guy who produced the show left CBS.

PARRY: His desk was locked one day, just like that.

SKIP: And he went back to be managing editor of BROADCASTING MAGAZINE, which is what he'd been doing before.

PARRY: AND, in a way, for CBS he really was a crazy man, you know; he was really far out.

JUD: I find that's been a pattern, that people who get projects initiated which are more far out in broadcast TV, even at one time in NET, often are the ones who leave, or have to leave, quite soon after.

PARRY: I don't think he wanted to leave, definitely. He liked his position there, but he was pushed out. But then, not happened; they had transferred the thing to quad, and they tried to sell it for awhile. So, we decided to keep on going, to keep doing whatever we could.

SKIP: Some of the people who had been working, like me, had really been hired by CBS, and I stayed with the group.

FREEEX

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JUD: How did you get in involved in video before CBS?

SKIP: Basically, I wasn't doing anything that I was interested in anymore, and Carol Vontobel and Nancy Cain had been working for CBS, and needed some help; so I started working with them. It's just that I was open to do it.

JUD: You hadn't been working with video before.

PARRY: But you'd been working with super-8mm film.

SKIP: Yes, fooling around with stuff like that, and light shows, in psychedelic dance halls. At that moment, I was on my way to Europe with money I had saved up, which dissipated itself right after the CBS gig because we left that and had no thoughts of the futures, really, and only had these vague projections. Originally, we were going to make \$90,000 within six months. We were a hot item. So, somehow, we managed to keep getting along; no one really knew how- there were seven to nine of us- and we just kept going on, getting involved with some nice people and making tapes.

"VISION AND TELEVISION" AND PRINCE STREET

SKIP: We did the television show at Brandeis, VISION AND TELEVISION (1970), setting up an Eidophor video projector.

"FREEEX OUT- in addition to videotape documentaries, the Videofreex will bring a full production unit to campus (3 cameras, special effects generator, TV projector, etc.) and electronically relate the exhibition to student activities on campus." VIDEOFREEX in catalogue to VISION AND TELEVISION.

JUD: Can you talk about the project for the VISION AND TELEVISION show?

PARRY: It was a kind of participatory thing. Because there were a lot of different events happening around us, what we brought was production equipment and we tried to tie it together to give a feed out. We had the projector on one floor, and then below was the little studio setup with plexiglass around it. You could see into it.

SKIP: And three or four camera cables coming out. You could go up to the second floor or come down to watch.

PARRY: So we sent a feed out to Ira Schneider's matrix (NOTE: "RANDOM INTERLACE (Content Electronics): an integration of video and audio information both within the Rose Art Museum and from other spatio-temporal points in the universal matrix."- Ira Schneider). We recorded things including Charlotte Moorman's performance.

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JUD: I remember David falling into the pool during the panel discussion.

PARRY: Right, while he was shooting. He was on the panel discussion and shooting at the same time. So, we were making tapes, otherwise, and showing them around; with two or three groups working.

SKIP: We built our loft, a lot of that- the studio on Prince Street in Soho, with money from our savings, and little gigs, like music things.

JUD: But everything went right back into getting the loft together.

SKIP: Right, but it was all very unconsciously done. We didn't say we're going to get our loft together.

PARRY: We just thought we needed this big production studio; we thought we'd be following people through right and left, and we had the production equipment.

SKIP: Television of the alternate culture.

PARRY: And we somehow managed to pay the rent, through varying gigs, and then sometime in the spring of that year, we got involved with two things-

JUD: That was 1970.

PARRY: We got involved with Earth Day, and through Earth Day met someone involved with the New York State Council On The Arts. But Earth Day never really happened much as far as video was concerned.

JUD: The event in Union Square.

PARRY: There were supposed to be twelve big video projectors around the Square, and they were going to drop people by parachutes, but nothing grandiose happened. But we made contact with this fellow from NYSCA, and also bought a piece of heavy hardware, our first major purchase aside from keeping the loft going, a one inch editing machine which we thought would really reap in the business.

JUD: What kind of editing deck?

PARRY: An IVC. (NOTE: Similar to the equipment at NET's Television Lab.) We had really been turned on by editing when working at CBS- we had used Sony then, and we really wanted to continue it. There was no way to edit CV tapes except by going to one inch- there was no 1/2" editing equipment then- so we got that, and put ourselves deeply in debt- just incredibly. It's crazy when we think about it now.

JUD: Up until that time, what was the complement of your equipment?

PARRY: We had a four camera system, an SEG, and we had about three portapaks, the old CVs, and a bunch of CV table decks, and an old Panasonic 1/2"

SKIP: We have some pictures of the old studio.

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PARRY: And so we built in a shop and a studio-

SKIP: Shooting space.

PARRY: And a control room, a little office, and a kitchen space, and some people lived in the middle of that chaos, and some people lived uptown in a little less chaos.

SKIP: So we started living together, slowly get rid of the apartments that spread out over Manhattan, moving into what was eventually two spaces in the city.

PARRY: And at that time, Carol and Nancy were supporting the space uptown, the apartment, and they were getting ready to go back to work because there was no way the Videofreex could support anybody. So they went back to work, put a lot of bread into Videofreex, and the apartment Skip put his money in, and we all put in what we had.

SKIP: Money we had from straight jobs, savings from previous lifetimes.

PARRY: Or we paid rent on places that were used communally, like Rivington Street. There wasn't much in the way of jobs, but we started to get involved with the Council On The Arts-

SKIP: And developed a grant proposal to be able to do this thing called MEDIA BUS, one of the programs we've evolved into, which was basically to go to Rochester and work with community video, to go into a community where there was no video, and no cable TV, or very little participation in television of any sort, and set up an equipment pool, and find people from the community who could maintain that equipment pool. To learn to teach other people how to use the equipment.

PARRY: That's what we did the next year.

SKIP: And we tried to develop systems among ourselves that would allow us to deal more effectively and efficiently between ourselves, and that was a problem because the group fluctuated, some leaving for short periods of time, and others just left, not wanting to be involved. There was a nucleus; there are about nine of us who have been together- it's the fall of 1973 now, so it's been 3½ years, or almost 4 for the group. But the thing is, even though there are nine important people, lots of people have worked with us, either lived with us, or just come for a week and stayed, or people that we've known for the whole time, like Ira Schneider and Beryl Korot, people who worked with us and who we worked with like Eric Siegel, and people today like Joseph Paul Ferraro. And we've in turn worked with lots of other groups, too. It's definitely not a closed thing.

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JUD: There's a kind of magnetic center to the group.

PARRY: For us, for the the nucleus of people, it seems to be a magnetic center. Certainly a lot of people would say that if it's magnetic, it's the same pole and it repels them. (Laughter) And I'm sure we turn off as many people as those who come to work with us.

JUD: That's part of the process too.

PARRY: And it's not the way that everyone wants to live. But we've found it most effective for us.

SKIP: I'm not talking about so much about living together, as about working together-

PARRY: Sometimes, I not so much confuse them, as use the words interchangeably. For us, because if for no other reason, our living space and our working space are so totally interchangeable, intermingled.

SKIP: And also, in my life, I feel strongly that they're intermingled too, and I feel that living and working are the same thing because I don't know when I stop working, really.

JUD: Even the thought and conceptual processes, and all things that happen during the relaxation periods-

SKIP: Right. They all contribute to my tape making and to my working in the community.

PARRY: Like Carol and Nancy, who are both working to a point because in some senses they were asked to be part of and to help support the group, and yet they have this very strong distinction between their 9 to 5 type job and this other thing. It was a tremendous strain on them, and finally Videofreex was able to support us all.

SKIP: Or they got sick and tired of working, in a way too. That's partly why we moved up here to the country, because of the strains or the inequities, and also the expense of living in the city which turned us off. Like, we really got turned to the competitive attitudes in the city like trying to make it in the art world, or in the music business, or trying to make it in video- and so, we moved up to the country.

PARRY: Although, again, what we're saying is what we got turned off to, two people right here, who are simply in a sense sharing a space with seven other people- actually, at this point, it's nine other people, because of the baby and someone we have to help out with her.

#### MAPLE TREE FARM AND BEYOND

SKIP: Some people didn't want to leave the city; they thrived on that

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kind of energy.

JUD: New York addicts.

SKIP: Right. I think everybody really enjoys the space here. Some people never leave, and some people are occasionally going to the city. And some people have just been in the city for long periods of time since we've been up here. We're not representing a group view because there is no group view.

JUD: It's a similar situations to a great many other group collectives, particularly in the field of media.

PARRY: We've been pretty much here, for a little over two years, and we're finally starting to do things outside of just video, as far as having facilities here, like the darkroom hopefully soon, and to put together some print things, and work out of here. We do travel a lot. And we've been making a lot of tape.

JUD: You're leasing the farm? Do you see it as your permanent location?

PARRY: I think nobody would agree to that. Maybe it's because nobody wants to commit to a place, or more likely because this is not what any of us would consider the ideal spot. It's simply a better location than separate places in the city.

JUD: Sometimes the city seems to fragment things and make it more difficult to pull things together.

SKIP: The proximity to the city has been an advantage here, because we do need services from the city, and some of the facilities, and much of our money is derived in various ways by contact with the city. And then there's keeping in touch with city activities, museum scenes- just keeping contact and knowing what's going on.

PARRY: But, also, on the other hand, we'd like to get farther away from the city, because it's crowded in this area-

SKIP: Not only with people, but with video people. Harvey Cahill has a house just over here for the summer, and he runs Media Resource Equipment Center in the city, and there's a guy down the road who started the first traveling video repair service-

PARRY: And the people in Bearsville, Woodstock and Downsville.

SKIP: Not everybody would like to move; it's a big group, this many people with this much equipment would be a big task, and it would take away from actually doing our work.

PARRY: And it also takes time to relate to a new community.

SKIP: But that in a way would also be fun.

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PARRY: The thing is finding a new community, a community that might have cable with a station that would open to us working with them, and the kind of cultural institutions nearby that we could get work from.

SKIP: If we could find something like that, I think we'd move.

PARRY: We found that moving up here, for most of us anyway, gave us a certain perspective we hadn't had before. The city tends to narrow your perceptions, because they're all directed toward New York. I don't know if it was just our naturing as a group, or as individuals more likely, but we have greater contact in the fact that more video is happening over the country-

SKIP: And all over the world too.

PARRY: And we started to travel more. In the city, you travel uptown and you're in a different world. But out here, you really have to travel to see new things, in some senses, and it got us involved: David was in Israel, Skip and Carol and I were in Europe for a while, and David came up there too, and Skip and Bart and Nancy went to California-

SKIP: We went to the Caribbean and to Florida, and the funny thing is that you have to go to the city to get to the airport.

PARRY: And as a result of our traveling, and I guess also of our notoriety, a lot of people travel through here too. Many people in the state come here, use our facilities, work with us, and also a lot of people from all over the world come up here.

SKIP: You don't see as many people, visitors, in the city because it's harder to deal with visitors in the city. You don't encourage people to come. It gets crazy here sometimes, in the summer; the month of August and the last two weeks of July are usually just insane. You get forty people here on a weekend. It's a nuthouse. But, it's also fascinating, because things happen-

PARRY: Things evolve. We have facilities and people who are competent in doing things, and they have the energy to stimulate us and we stimulate them, and so we get tapes, and not even tape, interactions. And we, in turn, need it because of being out of the city. It's a long winter.

#### LANEVILLE TV

JUD: How have the relationships been working out with the community in Lanesville Television?

PARRY: Well, it's been slow. A little bit about the community is that we're nestled up in the mountains, and pretty much cut off from what a

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lot of people really consider the Catskills, because of the topography. There's no farmland around here and no recreation in this particular valley. There are about 200 people who live in the village of Lanesvilly, and some have been living her, I've heard, as long as 250 years.

JUD: Whole families.

PARRY: Very large families. And when we first came up here, we were really new, and still only have been here two years as compared to 250. Slowly, we started makin' friends and making our resources available to the community.

JUD: In what ways was that done?

PARRY: Initially, we would meet and tape people, and they would come up to visit us.

JUD: And watch tape.

PARRY: Yes. And slowly, it's not an organized program, or anything-

SKIP: We were the first initiators of that, and they were curious. They came and they couldn't believe that we didn't wear underwear, and they were curious. And after that, they saw that we're not ogres.

PARRY: And not only that, they have a good time coming over here. There's a lot of weird stuff with which to play around, and we'll let anybody who's interested, use it. That's one of the things we really like to do - not to hold the equipment ourselves, but to teach people, or let people learn that they can make TV programs themselves. And then, when the kids have a good time, they bring their parents, or their parents come to pict them up-

SKIP: Because they want to see, too; the parents really want to see the most.

PARRY: Understanerably so; there are a lot of people who are just weekenders, and there's no community that way: The families who have been living here a while, who are the indigenous population, and the retired people who have moved up from the city and bought large pieces of land, and they're different, and then there are the weekenders. And there are young people, like ourselves, who've moved up out of the city, some of whom are weekenders, and some of whom are people who plan on staying a certain amount of time, and relating to the community. But there are so many divergent groups that it creates a certain amount of tension, and certainly causes a problem in creating any kind of community outside the problems that arise simply within a very isolated group of

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people, of internal feuds.

SKIP: We can't isolate Lanesville from the community because we relate to the community, and video is part of the way we relate; we relate primarily through ourselves, and video is a resource that we make available to the community. If they want to use it, they can use it; if they just want to come up for a cup of coffee, they can do that.

PARRY: As long as we've been up here, the thing that happened last night was the first sense of community the people got, and even then the old tensions and problems flared up- so it was actually a very interesting experience. And maybe Lanesville TV can play a part in perhaps continuing to create that sense of community, because it doesn't exist naturally.

JUD: What exactly is Lanesville TV? At the present time?

SKIP: From that very informal way of just being in the community and having video equipment, it evolved into playing back once a week, or a few times a week.

PARRY: Now it's Saturday evenings, at seven o'clock.

SKIP: It used to be Sundays and Wednesdays.

PARRY: And Saturday afternoons was the Buckeroo Bart Show, and people came up to watch it in our house, and now we have a few houses attached to ours by cable. We're a cable station for three families.

SKIP: Four families, actually.

PARRY: Right now, there's very little participation for many reasons. It's summer, so less people are liable to be inside watching TV. And also, in the beginning, it was just very novel.

SKIP: We reach more people than the cable station, which is supposed to reach houses up and down the valley and has a sloppy signal, and we've taken advantage of that by informing people that we're doing programming, so they get programming a mile or two down the road.

PARRY: This is an electronically isolated area. They hardly get any AM radio; FM is just about unheard of here, and the television signal they get is like Alaska in December. It's just a blizzard over the picture, and yet people watch TV.

SKIP: It's not as if they didn't have TV, and didn't watch it, but just the quality of the signal technically is abysmal.

PARRY: And so we come through a little bit stronger, and even if it's bad, they'll watch it because it's no worse than what they're getting now.

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JUD: You transmit through the cables via RF (radio frequency)?

PARRY: Yes, because they get the regular channels. We just unplug the regular channels and put our programming on Channel 3-

SKIP: And people have the opportunity, we have a phone line, so they can call in at any point to tell us if they don't like what's going on, or have suggestions or comments- and it goes out over the air too.

PARRY: We get a representative response from as many as thirty people during a show, not 30 calls during a show, but five people here in one place, some there, and we figure, even when that's infrequent, that it represents a sizable audience-

SKIP: Even if we get 10 people watching, that's a tremendous percentage of the available audience.

PARRY: The potential audience is probably 200 at most. We used to have shows at the loft in Soho every week, and it was a discipline and very experimental, much more experimental than what we do now, because we'd do just anything. It was a very closed audience and we could put in sex and drugs-

SKIP: All the accoutrements of hippiedom. (Laughter) And up here, that's not frowned upon, but they don't understand and wouldn't be able to relate to it. It would be frightening to them.

PARRY: Anyway, it's still a kind of discipline putting on a show every week that keeps us productive, and we've gone through periods where we've been very productive. Like, for three and four months in the city, we would get up at 10 o'clock and do calisthenics with the cameras, and discuss things, what we want to do with it, and it was kind of mandatory; and now, Lanesville TV and the Saturday night thing is the only thing really that forces us to be together. We don't have meetings, or anything like that, and our projects are very variable. Many projects are just totally individual; one person has a concept and actualizes it; some things are about two or three people, and some things involve us all, and more people as well. But Lanesville TV is a regular thing that people can participate in.

JUD: How do you correlate all these projects, if someone comes up with one?

SKIP: It's all through individual interaction. No scheduled meetings. We haven't done that since we wanted to remodel the equipment; that was Thanksgiving of 1972- the last meeting we had.

PARRY: Was it that long?

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SKIP: Yeah, remember? Chuck didn't come; he was too chicken because it was about technology-

PARRY: It's more effective not having meetings on any regular schedule. Some people don't care. If people are interested in a project, they find out about it, because if they're interested, the person who's initiating the project will contact those people, and pretty much know who's interested in what and who's not- it's hard to explain-

SKIP: We know each other well enough, and we also know other people, either video people, or those who might be interested in a project- one person dealing with a concept, and sharing it, or just keeping it to himself, and it gets together.

PARRY: And, of course, the system is not efficient in all senses, or effective in every way. People do get left out of things, and some projects don't get completed as well as possible. But. it's hard to explain those situations, and the only way to understand it is to live with a group of people and have that experience. To explain how things get done in a group, you tend to categorize it, and it becomes codified.

SKIP: And then, if you try to repeat it, it just won't work, because so many things change.

PARRY: There are nine individuals going through nine individual trips, and the conglomerate is a tenth entity, which is the group, which nobody really tends to understand; so you can't repeat things.

JUD: What about any kind of role playing, like tech people?

PARRY: Some of the things like that, change as well.

SKIP: That come down to most superficial way of looking at things, because other people are always the ones who come up with the joke; some people are the ones who get down on others for leaving a mess. It changes as well, but we have evolved into various roles, I guess, in terms of job functions.

PARRY: The most important thing is that any group of people makes the most important thing being aware that you're falling into a certain role; if you can deal with that, and the other people can deal with that, then it's fine; if not, then you'd better get out of the role, or you're going to get forced out of it, or into it. (Laughter) The idea of using the word "group" is such a nebulous idea; really, it's just individuals, all of whom have their own opinions on projects, their own ideas on energy flows; and we're able to present, because we live together,

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the front of being some sort of group because we do projects together. We appear as a group. But I don't think that any of necessarily feels that we're so much a group as simply we've found, again using the words effective and efficient, ways of getting our ideas done.

SKIP: Learning how to work well individually and with other people.

PARRY: That seems to be the nature of video. I don't know of any other idea, thing, or movement that's caused so many people to come together around a particular thing- video. You really have to go back to the idea of Utopian community.

SKIP: Film never caused that to happen. It was mostly individuals.

JUD: Individuals, or industry.

PARRY: And what else is there that's caused this, other than peace and love-

SKIP: Theater groups are one of the few other things.

JUD: Like the Living Theatre and the Performance Group.

PARRY: It causes people to immediately gravitate towards groups.

SKIP: Well, it certainly caused us to do it. (laughter)

#### SPAGHETTI CITY VIDEO MANUAL

JUD: The hardware end; who's most involved in it?

SKIP: Well, Chuck of course comes from the experience of working with that fro awhile. He worked with Sony, with a company that sold hardware called GBC (NOTE: A large closed-circuit specialist.) for a while, and he was inside the guts of the equipment in the 60s, and pretty much continued along that road. He makes tapes occasionally, works the switcher, and the audio- and everybody has the opportunity to move around , but he's pretty much stayed in that, building us things like black and white keyers, and switching systems that make it more convenient to work with complicated systems. Because Chuck was around, Parry had the opportunity to get involved in the equipment, without going to Sony school, or working for Sony for ten years- it gave him the opportunity to do what he's doing now, and he's become very technically competent. As a result of our experience, and his experience of how to deal with the equipment, we wrote a book and he did diagrams that's coming this fall, THE SPAGHETTI CITY VIDEO MANUAL.

"Way back when, on the old Tonite show, Jack Paar showed a film of 'the happy Italian peasants harvesting spaghetti from

the Spaghetti Tree.' Many of the viewers found the film informative but they couldn't figure out what made so many people in the audience crach up with laughter. Even though those viewers are spaghetti, the technology of spaghetti was unfamiliar to them. Most people now working with portable low-cost equipment are also faced with the unfamiliar technology of spaghetti. Video spaghetti- the wires, cables, connectors and hardware- is only unfamiliar because the 'how' and 'why' of it hasn't been available in any comprehensive form. Hopefully, this manual will help change that situation."

- from the Introduction to THE SPAGHETTI CITY VIDEO MANUAL.

Chuck and Parry pretty much handle the technical end, although to varying degrees, the rest of us have learned how to maintain the equipment when we go out on the road, so we don't have to run to some dealer 200 miles away to get things fixed. Of course, we've gotten into the production techniques, into form and structure. In the beginning, many of us didn'y ever really have the opportunity to work with this kind of visual medium. That's a problem, in a way, that you have to deal with; there are a lot of boring videotapes, and a lot of them are boring because people don't know when to turn the camera on and off, and we didn't, or how to hold the camera steady when you're in a crowd, or in a boat, or wherever. The way we're set up, we have a lot of time to shoot, and make tapes. We have our own facilities, equipment, editing facilities, and it's given us a freedom to never have any limitation on the amount of tape that we can use. We've taken away salaries, lights have been turned off, but we always have tape.

PARRY: Did you tell him about the book?

SKIP: Yes, I told him about the book. I told him that you were very smart, and that you wrote a great book. (Laughter)

PARRY: THE SPAGHETTI CITY VIDEO MANUAL, to be published by Praegers in October (NOTE: October 1973.) is divided into 3 or 4 parts. There's an introduction to how thw hardware works, not specifically for the portapak, but essentially ½" tape machines, type 1 standard helical scan, how mics work, and how monitors work, and how the camera tube works, in terms of allowing people to understand the basics of the tools in order to maintain them and to work with them most effectively.

Then there's a section on systems; how to plug sections of existing video equipment together, again not working specifically, but working

with general concepts, of cables and things together; what is involved in the editing system, with some specifics of how to rig up certain cable that you need, like 8-pins; just again trying to give a practical overview on the equipment and how to use it. Then, there's a section on specific maintenance procedures, and some of them involve specific tools and things that you need to do any maintenance procedure; some of them are involved with specific procedures for the Sony portapak, or other Sony pieces, because that was the most prevalent equipment when the book was written. And the last section is an introduction to not so basic maintenance, which again is an introduction to what you would need to go on in terms of getting more self-sufficient when involved with this technology. Not again geared to how to read schematics, but how to approach it, what information you can get from highly technical data without being a highly technical person. I suppose, in general, it's an attempt to try to make the information more human and less intimidating.

JUD: A very basic problem with any new technology.

PARRY: Right. And to see what humans get away with without engineers or technicians, and to put it down on a level that makes it a little more egalitarian for everyone, a technology that everybody should be able to deal with. And then there's the last part which simply runs down some of the available equipment, some of the ways to interface with cable and broadcast; and then some conclusions dealing with the idea in general, and where the technology is going.

"TV will soon be a tubeless technology. But defining the future of TV as tubeless is like talking about the car as 'horseless'- what it won't be instead of what it will... Solid state camera the size of a transistor radio are already in production... Flat screen, solid state monitors can also be made... Eventually, most VTRs will use some sort of cassette. Video discs will probably be the most popular form of home playback equipment- if such a market exists... This technology has provided us with tools that are at the same time exciting and frightening. If we are to use these tools it is essential that we understand their very nature."

- THE FUTURE from the THE SPAGHETTI CITY VIDEO MANUAL.

VIDEO FORMS AND VIDEO FARMS

SKIP: There are a few things that we all, I think, feel commonly about- jus the fact that learning to work together, when we do work together with love, and when we haven't worked together well, it's been quite an experience and taught us a great deal about working with other people. Learning to work with each other is also, I think, learning to work with other people.

There are alot of interesting formal tapes, technically competent as far as camera work, but there are a lot of art tapes which are so boring because there's nothing to say. With many of us, both things have evolved, content and form. With me, I guess it's been very strong because I always really wanted to be a cameraman, and to be able to work by myself, to go into a situation and figure out what's going on, and to be able to shoot it so that an audience knows also. Some of our people are also more into the conceptual art uses of video.

JUD: Like Davidson (Gigliotti) and David.

SKIP: Other things we've had to get together, as a business thing, and to be able to deal with grant people, and not only be able to perform what we do well, but to be able to keep records of it, on paper as well as videotape, and to keep track of our spending. It's a small business, in a way, it's a small town. The major thing I've gotten out of it all has been personal growth, and that's really what keeps me going, that I have the opportunity to learn the most, expand and to go more towards the way I want to be and what I want to do.

For the past two weeks, I've been working on very wide ranging projects, that I think will yield some tapes, but I'll go through periods where I'm doing nothing as far as tape production. Anything I'm working on: grant proposals, reading, or working in the garden; people are pretty much as effective as they can be. They do what they want and have to do.

JUD: What's your feeling about tape production as opposed to the kind of process video thing that David is talking about these days?

SKIP: Well, Laneville TV is a very process oriented thing, because it's live television. To me, that's like mainlining video. It's the highest video experience in my mind- live television. I like to make tapes that are seen; I like to do things where people enjoy themselves. I think the most effective use of video is when it's played back to the people who were actually there. When you're there, and you see playback, you

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go through changes. I've seen myself on TV hundreds of hours and I still go through changes when I see myself on it.

JUD: Have you shown any pre-recorded tapes on Lanesville TV?

SKIP: Yes, it's a mix of live TV and talking and tapes.

JUD: And live switching and mixing-

SKIP: Right. I don't know what it would be like to deal with the country as far as live television, like they do the news every night.

JUD: That would of course remove most of the process feedback.

SKIP: I don't know how I would deal with it on a national level, or a regional level, but I'd love to do it. I think many of us would like to be able to continue dealing with live TV, and in a way that might be what's sustaining us in the future. And showing it to larger audiences, rather than getting bigger grants. Of course, we're constantly struggling to survive.

JUD: There's a gigantic tape library in there.

SKIP: Yes, we probably have three or four hundred tapes in there, and we've shown in lots of museums, on several TV stations around the country, cable stations, but we never really had something that's been able to sustain us, like the TVTV people, who are starting to work on productions that will be able to sustain them, and that's their approach.

Our approach is as a production company, but we also deal with the community, and do workshops and try to teach people how to do their own television; and we also do a lot of technical research. So we have three things that we're heavily into, that somehow we manage to do, and somehow manage to support, and hopefully we'll get each of those things to sustain themselves. There's still a lot of magic involved in it, but we still have a lot of things to figure out.

#### COOPERSTOWN TV IS A MUSEUM

SKIP: There are a lot of concepts you can talk about video as an art-form, but as far as I'm concerned, I'd rather not talk about them. These concepts can be best communicated to people by seeing our tapes and, bang, they've got them. It's a sort of zen understanding.

But, as far as other things we do, about doing community workshops and teaching people how to do television, we do and have done lots of workshops, less now but more arranged and calculated. What we do often is to go into a town and have a community contact, like a museum or his-

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torical society or a community center, any community organization that has a way of dealing with their community. We go in and set up our equipment, publicize that we're resourcing and available, and people come in and learn how to use the equipment, and we try to show it on cable. One of the best workshops that we've ever had really was the Cooperstown TV Workshop. The official title was A VIDEO METHODOLOGY FOR HISTORIANS.

What we did was in a way a more specific kind of discipline. We dealt with this New York State Historical Association, on the premise that video would be helpful for local historians around the state. We invited historians from around New York State, and from around the country as well as museum personnel, the Smithsonian, and through our workshop, the idea was to teach people what could be the application of video to a historical society, and to the processes dealt with by a historian. People were talking, made displays, saw a few tapes, and a number of people had experience hands-on with video and showed each other tapes, and we taped that and audio recorded it, and played that back; and people talked about film versus video, slides versus video, and local problems, and we outlined what was going to happen for the next two days.

This all took place in Cooperstown, New York, in the Farmers' Museum, this whole complex of museums there, which made it a perfect location, in a very old beautifully preserved town.

So the next day we set up a few production systems, three or four, and one or two of us were the staff for that, and the only difference between use and the others was that we had a little more expertise in video and they had a little more expertise in history. And we went around to different places, to the high school, and to an old blacksmith, and they made tapes- they'd never made video before- and they learned in a short period of time, made a couple of hours of tape. Then we came back that night, looked at their tapes, talked about them and their experience, had dinner and a cocktail party that night; and the next day, the tapes were edited and we had already set up with the cable station. We helped and the production crews pretty much edited their own tapes. The cable station was very cooperative, had never originated any programming before, and we had a well-publicized- with signs all over town- showing. We pulled into the Fish And Game Club that morning, set up all the hardware and played back tapes, with probably 50 or 75 people, at

least 30 participants with their families, and the people who had worked with us at the Museum- and we couldn't stop the phone calls. People watched the tapes and they'd seen tapes of Main Street and they'd seen themselves on tape, and somebody who had watched the show came down and showed some aerial photographs he had taken of Cooperstown. He saw it on Tv and he just rushed down with them. And, as a result of all this, they are sustaining a portapak at the Historical Society, everyone left with some kind of expertise. I haven't kept track of it; it was pretty much David's gig, but we all worked on it. Also the Cooperstown people have sustained the idea and continued doing some programming.

JUD: You also got some community video activity happening in Rochester.

SKIP: We had quite a sizable grant to deal with that community, and they got equipment, and we had workshops and found people- sort of following them along for a year- to sustain an equipment pool and a video resource center for the city; and they started working with many groups, women's groups, the black community, old people, people interested in ecology, people interested in the performing arts. And they really got themselves together. Now they're an independent group dealing with the community- as a model- and that's kind of a model too, a video resource center dealing with the community, not only making lots of tapes with them and showing them closed circuit at their own facilities, but now dealing with the Educational TV station to produce a twice monthly show called **HOMEMADE TELEVISION**, which is an outlet for the tapes that they've made with different community groups. And they go on live and explain a bit about who they worked with, what the process was like, show the tape, and they're dealing with broadcast TV.

It's a good example of how community people, how the man on the street, can have an input into his TV station. And it also proves that ½" videotape can be broadcast, which the broadcast people have always resisted.

JUD: Particularly in metropolitan areas.

SKIP: These people at Portable Channel in Rochester are a good example. After having gotten along with those people and gotten through those interpersonal problems, in order to cope with the technical problems, they are regularly shows their tapes on the air.

JUD: I wonder if this is still an isolated example of alternate video production coexisting in the same facilities as regular broadcasting.

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SKIP: I just finished a study, that we initiated here, and did with Ira Schneider and Beryl Korot, with the cooperation of many video people around the state; a study of how  $\frac{1}{2}$ " was being used, as far as playing tapes back and, incidentally, where equipment was available. We found very few places in the state that were regularly dealing with video, but it's just the beginning. We found that NET has occasionally broadcast thing on Free Time-

JUD: Jackie Cassen pioneered that attempt.

SKIP: When we go into the broadcast situation now, or with cable, we've evolved from where we were when dealing with CBS.

JUD: That was basic training.

SKIP: We've evolved from that point of view of trying to get as much as we can from these people. Now we've found people are more cooperative if we can understand them a little bit better, if we can deal with them on a human level. You'll find people pretty open, cable TV stations, and broadcast TV, and I think there will be more of an outlet for these tapes, mainly because broadcast people are looking for cheap programming. And cable stations have so much time, and also cassettes. Those three things could be outlets; the main problem in video in freeing up the time. I think there are more interesting tapes. I used to think that video was brand new, just totally uncharted territory. Now, I'm starting to understand more that we're dealing with the same old problems that filmmakers have been dealing with for so long, that broadcast TV has been dealing with for so long-

JUD: Production, distribution, and maintaining yourself in the process.

SKIP: Right. But making good tapes. Our advantage is that we have portable equipment that's a bit more inconspicuous, and because of that our attitudes might be different from other people in that we haven't involved ourselves in heavy role games like they do in film, the director and stuff like that. But we're dealing with the same old problems of trying to produce good television. Or a good cable show, or a good museum show.

There are several ways. One is that Bart and the rest of us are interested in producing specifically for children, things that they find interesting and also might be able to participate in. Bart produces a series of shows for Lanesville TV with many of the community members as part of the show. The star of the show is an eight year old child, one of the Benjamins who live down the road, and with some of us in it.

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both roles, and interchanging them and trying to merge them. And also the people who are kind of inside the camera screwing around with the technical thing, but just trying to get involved in the whole process physically and spiritually. A couple of tapes have evolved out of that process: one called FACES which is just rapid switching between people's faces so that they merge into one face, and another tape called an ORIENTAL MAGIC SHOW starring a man in a box and a barbarian which is a kind of electronic magic, very simple to do; it just sort of happened. And we do a lot of experimentation and rarely, occasionally, it results in a tape, which may our best tapes by far because they're timeless and have a meaning beyond what we intended them to be. So there's that kind of tape, and again that's getting into the art part of it.

And the other tapes; we do documentaries and David's working on a tape now; he does biblical epics and some theatrical thing too. Nancy's been working on a tape with the women in the valley called PORTRAIT OF A MOUNTAIN WOMAN or a MOUNTAIN FAMILY which she's done completely on her own. She worked very closely with one of neighbors who's become part of the Benjamin valley who've been here for 200 years, and she's really become close to here, and in the course of living here for 2½ years and working on this tape for the last six or eight months, it's developed into a tape portrait of this woman, which is being edited now.

Things come along. We don't make plans for them. We just have the equipment available and in shape, so if something interesting comes along we can do something. The way the circus happened was that we were making tapes of carnivals and found that the circus was coming to Phoenixia, the next large town over from us, and we just decided to pick up the circus for about 3 or 4 days, and we didn't make any arrangements; we didn't plan on it; it happened, and next month something else will happen. I enjoy that; I like to live like that; It's not always that I can. I'm very high now because I just came off shooting for the last four days; there's so much action in the circus, and so much going on in a very action oriented way, entertainment and magic and extraordinary things.

FREEEX

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It's called the Buckaroo Bart Show. I guess Bart was the star, but he was pretty low-key; he was like Mr. Good Guy, and there was a character named Horrible Howard, and then there was the Sheriff who was always trying to put Horrible Howard in jail, and the Sheriff was the little eight year old Benjamin boy; Bart was always the voice of reason, trying to make the compromise between the two, but the Sheriff always made the final decision because he was the one in charge. And there were other people in the community, and Howard was a neighbor of ours, and it's great as far as dramas and other theatrical things go-

PARRY: March 31st, Chapter Two, in the afternoon. Another tape project: we followed the circus around for about four days and got pretty friendly with those people; they were real nice and open with us, and we taped about five or six hours of TV which we're going to edit down to about a 15-20 minute tape. And the thing about TV is that you can act really fast with it; you don't have to wait for the labs, for things to get synced up, so we're very prolific.

There are nine people, and when we're producing- and this is the summer which is a high point for us- there are nine producers programming. Carol's now editing a tape of her own; Nancy just finished a tape on a lady wrestler; Bart was shooting tapes of midget wrestlers at the same time; Davidson's been doing multi-channel pieces with waterfalls, three monitors sitting on top of each other, to extend the image. And we're doing lots of things besides video also: Bart and a friend of ours, Pedro Lujan made a rope bridge down there just as an architectural exercise, and we have a whole graphics studio in the house so we're getting into multimedia and other areas, and also working with other people. There's a book of the Cooperstown Workshop called COOPERSTOWN TV IS A MUSEUM, as well as other kinds of smaller print projects. I think we're going to be doing books and pamphlets here as well as videotapes. There were about three progress reports (NOTE: MAPLE TREE FARM REPORT) which was just an effort by us to keep in touch with friends, and that was effective while it was going on, and we just put out things occasionally, like we get lots of letters from people so we print them up once in a while, because that seems to answer the common questions.

SKIP: We did some kinds of experimental work here, delving into the relationship between the people who are behind the cameras and the people who are in front of the cameras, with our friends and us performing

PEOPLE'S VIDEO THEATER AND WOODSTOCK COMMUNITY VIDEO: Video Villages

"The media person of 1/2" video can now discern between ideology and the 'real'- the day-to-day process of taped programming to an audience within a provincial environment with a homespun consciousness. Settling into a community, accepting day-to-day realities of it and ourselves, bridging gaps of miscomprehension around and within us will serve eventual user rehabilitation and that 'revolution' of electronic media technology. This will depend on the willingness, patience and perserverance of media activists."  
- Woodstock Community Video, in "Radical Software."

KEN MARSH: My head starts moving in realms of the theoretical, which happened a lot in terms of being in New York City. The possibilities in Woodstock are more real, I think. The initial ideas that were involved in People's Video Theater were community video oriented. We had six objectives, which one way or another said: service of community, with a studio program providing the means for advertising all that stuff. But it never got off the ground in New York because-  
JUD: Because there are only limited communities there.

KEN: At least, they're not geographical- but in Woodstock it's become very possible.

JUD: There's much more of a sense of community here.

KEN: Yes, but it seems to be primarily a geographical definition that defines the community- maybe it's just a way of dealing with communication, limiting it to the hardware-

JUD: All those words that share the same root: commune, community, communications. How do your getting involved in video start?

KEN: That was with David Cort. He was the director of something called Operation Discovery, a kind of community cultural enrichment program, tha came out of the Brooklyn Museum, and then he broke away and got community support. I came along to work with him the summer before we got into video, with a small artists' grant to work with kids. They had a small budget, which was silly in a way because I got one of the largest grants for working with five kids for six weeks- I got something like \$600, which was on of the larger grants, and was supposed to include supplies and everything. I had been into light machines at the time. Anyway, we didn't get refunded enough, but David and I hit it off, so I went to work in a sort of adminstration slot.

The program was only summertime, and we started working with a group of black artists to develop a stronger base in the community to get more money. We had some from the City Parks Department and we hit on the Mayor, and we went to Washington with a large proposal for a black cultural plant, with all sorts of crafts and arts and kids' training. Towards the end of that, we met Eric Siegel.

JUD: When was that about?

KEN: Probably the spring of 1968. I forget the actual pretext of meeting, but we were trying to reach out to artists all over the city and we ran an ad in the VILLAGE VOICE about "possible grants to artist working with kids", and we had a lot of applicants. So we met a lot of people that way. I think that's how we met Eric. Anyway, he turned us on to video, and we decided to make an effort to get it working with this black group. We got a show guaranteed at the Brooklyn Museum in the new Community Gallery. Because of what we were doing, and other groups were doing, the pressure was put on them to accommodate the action, and the group of black artist we were working with got the first show.

With those credentials, some of the people in the Parks Department talked to the Rockefeller Fund with a small proposal for a mobile video unit using community kids, and they came through with \$7500. Eric, at the time, and he's always concerned with technical things, advised us to get one inch rather than 1/2 inch equipment; so we did that and we ended up with this big cumbersome Ampex 1700 and those big Concord cameras- not very mobile at all, except that you could put them in a truck and carry them around. So we thought of producing tapes with some of the black artists, with the kids working with us.

JUD: What kinds of artists were they?

KEN: Some interesting things- there were three groups of artists and different affiliations had brought them together. One group had a museum with an Afro-American name, near Pratt Institute, and they had a nice backyard there. For a couple of weeks, we invited artists, both graphic painters and a lot of musicians, including, in fact, Sun Ra. He came down and rapped with this black woman for an hour, which we shot. We had these fantastic artists, and we did the lighting; with Sun Ra, we did it at night and lit the thing eerily, and this black woman was kind of kooky, so the interaction between the two of them was kind of crazy. And others were interviews with the artists, talking about their work and showing it, and some musical stuff.

Actually, Sun Ra didn't play anything, but some other cats did. Most of the stuff was shown in that Brooklyn Museum show, in September 1968.

COMMEDIATION

KEN: Someone else who was working with us on the perimeter was Howie Gutstadt, who's now with People's Video Theater in the city. He was peripherally working with us, and ran into Frank on the street-

JUD: Frank Gillette, on St. Marks Place?

KEN: Yeah, and we all got together. There was something happening at the time called the East Village Project which was one of the first street therapy things- everyone could come in and rap- and this free clinic type thing was set up by Jewish Family Services. There was some video there and Frank was sort of hanging around doing things. That was around the time of the St. Marks tapes by Frank and Harvey Simons. So, we all got together, and I was leaving the Brooklyn scene, and David was ready to leave the Brooklyn scene, and we had reached the point where we felt the blacks should do it, since we had become, as I got to feel, an advocate for someone else's way of life.

Anyway, we got together, and through Nanine Bilski, who used to work for an industrial program developer, and is now with the New York State Council (Beryl Korot used to be her assistant) working in special projects. She was interested in the whole cultural thing, and of course in video, so she really put together what became the reason for working together, which was a job. That was for the Center of Urban Education during the fall school strike of 1968. (These tapes were of the school decentralization crisis around the Oceanhill-Brownsville school district. NOTE.) This program was put together, to send artists into some ghetto schools in Brooklyn, to teach whatever they do, at a good time because the strike was on and yet classes were still being held. So that was COMMEDIATION. The people who made up COMMEDIATION were Harvey Simons, Howie Gutstadt, Frank Gillette, David Cort, and myself, with Paul Ryan on the periphery. Vic Goscia related to it also; he saw the potential of using a group like us with the Village Project and other things he was getting into; he's still at Roosevelt Hospital. But that never came off.

JUD: That led to the video magazine idea?

KEN: What really got to it first was when People's Video Theater opened. In terms of what we wanted to do as the group COMMEDIATION, we talked about started to put out products- tape packages- that idea of a video magazine, taking the idea of translating the format of a print magazine, with columns and features and advertising. It was an idea that emerged in a lot of people's heads, because it is the nature of videotape that it can't be that topical- so a magazine rather than a newspaper idea.

So we did try this travelogue on New York, with a piece that David did on Orchard Street, about a ten minute segment, of some old fish man, talking about how Orchard Street was; and Howie and I did a sort of visual abstraction of the Brooklyn Bridge, playing around with mirrors in front of the lens; and another piece was done on the Clositers, I think that was finished, that Frank and David worked on. We showed this all to Manhattan Cable at the time, and they politely sloughed us off. They thought they did enough of that stuff on their own. They didn't totally dismiss us but made it obvious that we were in the wrong market place. But, after that, COMMEDIATION split up. It lasted about two months, and everyone went their own way. Frank met up with Ira Schneider about then. JUD: And began the Antioch thing that ended in WIPE CYCLE.

KEN: Howie and I were working on other things together, like silkscreens, and David got a job with some outfit doing super market trainign stuff and put together enough money to get his own 1/2" equipment, and that took him to Woodstock with the Videofreex. And that's where they've been.

I myself didn't really do anything until about the following spring. I met Thea Sklover, then at Fordham University, also with Paul Ryan. She was in Two Bridges, trying to turn them on to the video possibility, since it was an experimental school board. It had an interesting hub and she was trying to sell them on a cable package. She had this idea, which may have been in "Radical Software", that if the community could get together, go to the cable company and ask for an installation, and guarantee so many subscriptions, they could in turn demand certain things, like a studio, and that the school be wired up. So I worked with her on a sample tape, to show around the community.

Then, an interesting trip that summer- a couple who had spent five years in Paris, she was French, came back with this very French intellectual, philosophical, psychological French structuralist thinking, and got very turned on to video. And he took \$500 out of his pocket and wanted to

rent equipment using my loft. We had people up, getting into social raps with the tape running, and he was always playing provocateur, stirring things up in a very kind of sexual way, towards an orgy by the end of the night. So that was a funny trip. Like all video trips- my video trips.

The next thing was back in the Two Bridges area, but with Nanine Bilski, who wanted to give a workshop to kids on video. So we did this short run thing, three weeks, with kids in the classroom. We played some video games, trying to use the camera as a sort of hot seat, where kids moved around chairs and when they got in front of the camera, they had to act something out. It worked well with the kids, aged 8 to 12. And then we got them to do their own news thing, which Raindance got into also, but here they sort of made up the stuff. There was a racecar drive, a report on a blimp going over- silly little things. A nice experience with kids.

#### PEOPLE'S VIDEO THEATER

KEN: The next thing was again a long lapse, as far as immediately being with video, and then I got together with Elliott Glass, who had been to one of the summer sessions and gotten truned on to video. He was a Spanish instructor out in Queensboro College. He got money together by the Christmas 1969, bought equipment and started using it in school. He was going out to El Barrio, taping it and bringing these tapes back to the class; and then the Department got a little uptight and asked him not to do it, so his equipment was laying around doing nothing. Summer was coming on, and he would be free, so that's when People's Video Theater was formed, and that was June of 1970. And we got dragged into the big New York State grant battle. (Laughter) In the summer there, and we got supported- we all got rewarded.

JUD: How did People's Video Theater basically function?

KEN: There were two people; Elliott had the equipment, I had the space. We went out shooting the magazine type of thing, and we really chose the name to show what was on our minds, our intent- the idea of theater. We felt we should have a showplace- we needed a place, and right off the bat, it should be a showplace. There was just the idea of producing and the market place was one and the same.

First, we tried to go four days a week, Thursday through Sunday. We opened up from 6 to 11 P.M. just any day, free-flowing, for the first couple of weekends anyway. Then we decided it was silly- we should be asking people to give something, so we did, starting at a dollar. By September it went up to \$1,50. There were occasions where we asked more for a special thing. After the first magazine, when we got into it, we started covering things happening. I guess, for our aesthetic and political sense of the time, this was what was happening in the streets. And we got involved with the Young Lords, partly because of Elliott's spanish thing and that interest in the political and activist thing- with good demonstrations and marches on the street. So we did a lot of that, and got involved with Gay Lib, Women's Lib, the Puerto Ricans- all that liber stuff.

One of our most heartfelt first statements was that people are part of the information. We felt that going out on the street, asking people and getting them to be THE people on television, rather than always relating to the television and the people on it as something special, as some unique group. Break that down by saying "you're the information."

JUD: Breaking down the TV structure.

KEN: If we were going to be something different, it had to be that- the other way around. We also had these video polls- did two or three of them. The first one was: "Do you think the US should get out of Southeast Asia?" We parked ourselves in front of Bloomingdale's, and we got pushed around, yelled at a few times. But most people stopped and said what they thought. What I was saying before about Woodstock, that kind of geographical limitation really expedites all this- because the same people you got to shoot are really going to see themselves. In New York, in front of Bloomingdale's, we're going to show this stuff in a loft on Sixth Avenue with very little advertising. And I don't think any of those people ever saw themselves.

We also did a business survey on 14th Street, preparing questionnaires, one for shoppers and one for merchants. We went out and questioned them both and asked them to come around the corner to our loft. We took one block on 14th between Fifth and Sixth Avenues- to come around the corner and look at these things, and one merchant showed up- no one else. Some Israeli merchant wanted to see himself- he brought a couple of his friends. So we took it out on the street. We didn't give up. And then another name emerged- Jackie Cassen- she had just met us.

She had that grant to document what people using tape were doing. She came along with us and we went out to play that business survey back-and that worked nicely. But, then again, very few businessmen stepped away from their business and looked- I can't remember any of them who saw themselves. So the whole thing was good in principle, but wasn't working in that city context.

Up here, in Woodstock, we got together and did this thing with Bob Dacey around the elections. We asked the candidates to give us a minute or so, then showed in on street and got reactions. In fact, one of the candidates who didn't participate, about a month or so later, said he was really sorry he didn't go along with us- he really thinks it made a difference.

JUD: Did he get elected?

KEN: No, he didn't. Actually, two of the other guys who didn't go along with us got elected. Well, we didn't reach that many people, on the streets.

JUD: With video monitors on the garbage cans, turned-over garbage cans.

BOB DACEY: Our alternative to cablevision. Closed circuit TV on the street

JUD: Where did you place those?

KEN: In the supermarker, the Grand Union; that was a good one. On the street in front of the hardware store, in front of the leather shop- and once at the Espresso Shop- we just used there patio there, not inside

JUD: Patiovision.

KEN: That was the day of the election that we showed there.

JUD: That's not too far from the polls.

KEN: No, right. About 115 feet. We were electioneering.

JUD: For everybody.

KEN: Right. Except the three who wouldn't, two of whom won.

So, one last trip with People's Video Theater was with the Indians. We got a hot tip- somebody said the American Indians were going to be demonstrating up at Plymouth Rock on Thanksgiving, so we went up there, as a lark, and a way to get out of the city. And they pulled off a real nice action. At Plymouth Rock where there is a kind of creek or pit, they went down in the pit and covered the rock and held a death prayer service over it. Then they went to the Mayflower and took it over, took down the British flag that hanging on it- nothing destructive, but just good energy. They weren't violent or disruptive. They were trying to

make a point. They talk about the Indian way, and I really learned what an Indian way is in terms of those things. A person who would go to bury a rock, say a prayer, yell that "another Hitler is coming" and then go take over the ship. And when the cops come, they just walk off. They're done- they've made their point.

JUD: Any particular tribe?

KEN: This was mixed tribes. In fact, at that time, this one of the first cross country actions, because the guys from Alcatraz were there, and the group based in Milwaukee, the American Indian Movement, AIM. Even the more conservative Northeastern group- there are some very highly placed Indians in the Northeast- who were insulted by the Governor in Bosotn were participating too.

Another thing that happened, the Plymouth Plantation, a sort of Disneyland Plymouthtown in the area, had invited some 250 Indians because it was the 250th anniversary, and were asked "what if 500 Indians come." They said, well, this is only the 250th anniversary. So the Indians went there with 500, came in and sat down. And when these people dressed as pilgrims put out all these turkies and beautiful food, the Indians walked out, saying "We're having our dinner, let's go." A couple of the more radical ones turned over a table and stuck a knife through one of the turkies. What was nice in the whole experience was that we could connect with them. They saw us and what we were doing and said "Hey, stay with us. Our next move is to the Plymouth Plantation." So we went with them and got that scene. The lighting was bad, so it's weak, but we got it. It was really heartrending to see this woman empty this one overturned table, and people just shaking their heads. And then the Indians had this conference at their own dinner. So we talked to some of them, and got a little rap from the guy from Alcatraz- beautiful, articulate people with a sense of what they're into.

So we ran a couple of specials on that at our theater back in New York a couple of weeks later. We threw together about an hour edit. The first night we got a hold of some of the Indians in New York through someone, and about 15 Indians were there- that was nice. We tried something like that with the Young Lords on the jails.

We had these, as we called them, video forums. Part of our thing was that a live forum was part of our show, in the idea of having a theater, a place to show. We came up with always wanting to have audience participation. After showing stuff, we'd get the camera out and

talk with people.

JUD: Put it on tape. Did you monitor it at the same time?

KEN: Most of the time we played it back after. People who came really dug the whole experience, but some were in a sense rightfully critical of our handling of the information, not so much in content, but with editing. We were handcutting tape, and that was murder, and we couldn't do too much of it either.

JUD: That was all on the old Sony CV equipment?

KEN: Yeah, we didn't get an AV unit until the following January of 1971. That fortunately happened because we got a job. It was one of those elementary supplementary education programs, with money administered by the Board of Education. It was supplementary educational programs, and they had something like ten programs, and this was an umbrella administration that kept the groups together and helped each one. It was called Umbrella Four- there were apparently six umbrellas in New York City. They would only relate to geographical areas and they would overlap. They were coming up for new monies and thought of putting together a videotape, rather than any other presentation. They called us, Raindance and Global Village, and we all did our thing. I think Raindance didn't want to do it- they didn't go down; and Global Village tried. Anyway, we got the job which brought in enough money to go AV. That was an interesting job too. The whole videotape trip, at least for me, is getting intimate with people and going on their trip- the whole documenting process, the witnessing process.

JUD: The empathy bit.

KEN: Yes, but sometimes that's hard though, because it's demanding. Like we were dealing with eleven different programs, with eleven different locations, with so many different people behind it who we had to deal with. That was done in a relatively short period of time, about a month.

At People's Video Theater, the other principal was Duffy Glass, the Spanish professor, Elliott Glass. He came down with some bad lung disease had some heavy tests, and after about three months, they found he had diabetes, and told him to get out of the East, get his health back and to go Southwest and cool it. This took him out of it, out of People's Video Theater.

Money was beginning to come down from the State Council. Elaine Milosh had just come into the scene about that January, so she was worki

a lot with me. It was she and I with Elliott going further and further away. Howie Gutstadt had been working with Elliott and I, and after a little conflict split off, but with this new money coming in, we had the potential of really expanding. Howie and a couple of people recently got together- a lot of them tend to start more or less a commune- there was that kind of thinking there. It would have turned out that way if it had gone all the way. It was tighter than just a working group. Which just didn't work out, not at all- but it was people using the same resources.

JUD: Not necessarily living together.

KEN: Yes, in a sense. We had a country house not too far from here. That was for weekends. In my mind there was that sort of intention eventually- the work was going to be the basic nucleus motive. Maybe that's why it broke down, because other demands were being expressed too. Or not expressed, but felt. But in that process, anyway, we did get this house up in Westkill and started to work in this area. We weren't necessarily thinking of Woodstock specifically, until we got up here and spent some time. Then, Elaine and I really latched on to that idea, and Howie and Ben Levine are the other two who are left. They're still really into the city thing. Howie's on very much of a health trip, and Ben had just gotten to the city, hadn't spent much time there, so he's still excited about it. He'd been on a boat in the Caribbean, originally from Boston, and he came to New York; he's a psychologist. The history of the movement compiled in Michael Shamberg's book GUERRILLA TELEVISION, those little note things, spell it out pretty well. I'll subscribe to that history.

#### WOODSTOCK COMMUNITY VIDEO

"WCV is a public enterprise capable of providing the town with community message-making facilities via closed-circuit equipment on the streets and in meeting places and with cable the expertise and programming for a Woodstock Community Channel. WCV can provide low-cost advertising for local businesses. WCV can be a way for sponsors to support low-cost production of programs for schools, churches, social groups, etc... WCV can market valuable Woodstock information to other

community cable channels throughout the country and abroad. WCV can be an economically self-sustaining enterprise bringing 21st Century media potentials to Woodstock."

- WOODSTOCK COMMUNITY VIDEO, in RADICAL SOFTWARE.

JUD: Woodstock.

ELAINE: An epic poem.

KEN: Where we all are now. Woodstock was a little bit of a problem at first; it was getting out of New York so the beginning was half being reborn, half dying. There's a point between, where you're half and half. It was a strain to get out of New York, I mean, our funds weren't that great that this whole separate thing could go on.

The first thing Elaine and I did was trying to connect with this group thing, Family in Woodstock. They asked us to run a video workshop, so we did- it ran once a week for four or five sessions. That's how we met Bob Dacey. We were doing some music things with them, and they said, "Oh, we have this audio engineer." So, for the workshops, we made a training tape on how to use the equipment, and showed it. I think we showed it that first day.

BOB DACEY: In fact, I walked into Family one day, into Ken's workshop where that tape was showing, and I was so impressed with that, thinking "someone's one the ball here." And he offered anyone who wanted to use the equipment to use it, if they had anything in mind to do. So I kept that in the back of my mind. The next day I was talking to Billy Fair, about three weeks before the elections in Woodstock, and Billy said, "What are you doing politically?" I said: "I don't know. I don't even know who the politicians are. In fact, I don't care. What do I do?" And he said, "Talk to people." I thought in the back of my mind, that's all I've been doing, talking to people, and anybody who has any legal right to do anything never seems to do what you wanted them to do anyway. But, after seeing Ken's workshop, I said: "I know, I'll videotape the whole gaud of them, all the politicians, the Republicans, the Democrats and the Independents. Billy said, "Let's just do the Independents." Personally, I figured the Democrats haven't had a chance here in forty years, so maybe I can at least get the Democrats down. So, I went to Ken and he said, "Let's do the Republicans too." A couple of days later, we got permission from the Democrats and Independents to tape them, and with a little finagling from the Republicans- they never respond fast on

on anything. To talk things over took us a week or two.

KEN: It took a public meeting. We went to one, and during the questioning period, the last question was "Why won't the Republicans participate?"

BOB: We told them we had the Democrats and the Independents, and they hemmed and haed around and conceded eventually. Now after we had videotaped them, I said "where do you we show it?"- the next question. Then the idea came to throw it on a grabage can and have it centrally located in town, which drew a lot people to look at it.

JUD: First, out of curiosity.

BOB: Then it snowballed.

KEN: We started talking to them to and taping it.

BOB: We got people's reactions, and we came up with a very comprehensive study of the political system and how people really felt about it. Of course, we realized we couldn't do it an a garbage can all year, because it gets too cold to stand outside and watch. After the outdoor locations, we had to get indoors, so Ron Merians who owned the Joyous Lake Restaurant in town gave us a little spot. Since then, the town has been dictating to us that they'd really like their own TV station, along with us planting the idea that it would be a better community, and a better communication device to tighten up a small community. We're now trying to fugyre out ways to fund this thing, through the state, or the town, or perhaps the merchants.

KEN: The cable system here now has about 1000 subscribers and is part of Kingston Cabelevision, owned by NBC. NBC is not supposed to own it, under present FCC rulings, though they could be changed. The service we get in Woodstock is not the same as in Kingston, even though it's the same system. They can't get over the hill, so they built a separate antenna in town on Mean Mountain. You get all the New York stations and Channel 3 out of Hartford, connecticut. We don't get any of their local programming from Kingston. Bob and I want to get this whole town turned on to the potential of cable. We've written a pamphlet we get around as much as we can, and we've started shows at the Woodstock Artists Association which, in my mind, demonstrates the use of the medium for the public in terms of local issues. There are twelve done so far- one night a week.

The first night we're dealing with community video cable, with a few sample programs, including the political thing, and a little piece

that's a rap with the program director of the cable company, and there will be about an hour of tape. I also asked Tom O' Keefe, the station manger, and this Mike fisher, to come that night, and we'll make a special effort to get the town council people there. After we show the tape, we'll turn the camera around- again this live forum idea- and get a public meeting with all the principals involved. We've been editing and re-editing the political piece, to about twenty minutes.

We're also doing a storefront theater that was donated by Ron and Valma Merians. Once we got donw with the election, we wanted to keep the energy going, so we got the storefront and went and taped with the Family and reports from the Town Clerk-

BOB: The store dealt with, how can we encompass the community and one way to do that was to have three monitors there. One is called SCOOP-SCOPE which deals with any scoop you have, you lost the cat, you're selling your car, you lost your husband, or whatever- you could come and rap on tape for SCOOPSCOPE; another monitor is NEGA-POSI-TUBE which deals with the social, ecological talk show show issue thing; and the third monitor is CHANNEL ARTS which takes care of the artistic community.

JUD: That was the Third Programme.

KEN: It was a total programming concept. We envisioned having three monitors going but, in reality, it ended up that we were producing about a half hour of tape a week, so we had one monitor with various program types together. We got into the Free Store which another Family thing. But the problem is getting people to decide which tape to watch.

BOB: It's either cablevision or garbage can video. Our original idea was to have a walkin situation like a Newshop, which would be a video newspaper, with different programs, and we still envision that if we get cablevision. This is a town with many people in transit and it could tighten up communication with people who come here, where they can go swimming, where they can sleep, where are the motels, and other general information that we could service. In spring, we'd like a store right in the middle of town where people can walk off the street, and we may still keep the three monitor idea. Also, any visitors who come here with portapaks would be happy to show, because where do you show?

KEN: We're making the software. One idea with the cable is perhaps we can get a kickback from the cableowners on the subscriptions, perhaps \$1.50 per subscriber per month, and that could be sizable; and the other thing would be to get advertising, even in the Newshop idea, with all the people coming in, for vital information and merchant's information, which when you're new to a town are the same thing, so those are ads.

JUD: Could they possibly transmit from the antenna here?

KEN: They don't have a headend in town; it's master cable, that's all it is now. You need just a few amplifiers for a headend, and it depends where you locate your headend studio. We'd like to have it in the Town Hall; that means two amplifiers up to that headend point, and then distribution amplifiers come down.

BOB: We're about a mile and a half from the antenna if we decide to put a headend studio in town. We'd need a mile and a half of cable.

KEN: We're trying to make a real proposal to the town, because the Town Council should get involved. Apparently, we heard that the present cable franchise is going to up next year. We'd like to get something sooner, by making a pitch to NBC and Kingston Cablevision. We would probably need extra money. The pitch has to made that they should set up the headend and pay at least 50 cents back to WCV as the program directors of the community channel that they could add to the system. From there, we'd pick it up. If they don't want to pay for the headend- we got some figures on that and it's about \$15,000- maybe that's where private money could come in. What we're really talking about is a funny kind of social transition, the question here, from free TV to Pay TV. It has to be Pay TV, if people are going to get what they want, and be able to participate.

JUD: A viewer sponsorship concept.

BOB: A town like this is a classic example of small communities across the United States. The governemtn can't handle it anymore, and small communities are getting bigger. The population is doubling every ten years. It also happens to be an artistic community, and if anyone should get their communications together, it should be them, and perhaps we can show other communities how to do it, through our own experiment.

KEN; The transition from free to pay TV is poised on some realistic precipice. It could happen, but the problem of running something like that is a whole new area- the maintenance, the regularity, the delivery. If you think of programming three to five hours a day, it ends up being 20 to 25 hours a week. That's a lot of programming, so perhaps that's why

you repeat things.

BOB: What's nice about an area like this is that a rock group can come in and play. We can always bail out along the line. If we're missing a program, a group can come in and wail. A lot of people have certainly offered their services once it's a reality, and they'll come walking in, someone with a puppet show, a doctor talking on the VD problem intown, and I'm sure a lot of people would use up on it when it's real.

"For us, the video programmer, once pursuing the allusions of our rhetoric about alternate media ideals, the task has now become tedious, sometimes monotonous, but always and consistently satisfying. Day-to-day programming is not the sort of thing conceived by rhetoricians. Weekly taped programming is no celebrated task for media revolutionaries. The only models to look to for direction are the rhetorically defined enemy-the networks- who also are the models for the audience. The changes seem more in the revolutionary than in the establishment." - WOODSTOCK COMMUNITY VIDEO, in RADICAL SOFTWARE.

KEN: Hopefully, one could book up the time a lot. A great many artists would be interested. There's almost an ego sense about Woodstock-

JUD: It's a community of individuals.

KEN: That's a good way to express it.

JUD: Even the straight people are very individualists, in the classic American entrepreneur style.

KEN: A number of the straight people are IBMers. There are old Huguenot Dutch who have been here for generations.

JUD: Some are landed aristocracy, in a sense. And then you have the arts and crafts and the fine arts syndromes, with the original splintering between original Byrdcliffe group and the Maverick artists colony.

BOB: I heard that Herbie White had a falling out with Peter Whitehead's wife after they'd been here about a year, and built all those fantastic million dollar buildings on Byrdcliffe to house artist and craft centers. So when Herbie got pissed off, he went down the mountain to Maverick Road and brought all the artists with him and they built their own houses, little shacks and cabins on dirt roads, and that's where the Woodstock artists community actually got started and off the ground. For 60 years now, the houses and cabins up in Byrdcliffe have still been rented to artists for reasonable rates, to this day.

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We're not so far away in this town from having its own TV and radio stations.

JUD: Have you put any of the alternate health and spiritual trips up here on video?

KEN: In my mind, one has to use categories in a very general way, saying, for example, Health issues rather than getting into any particular youth culture trips. Let it embrace more. I'd like to get it in a way where more people could view it less threateningly than some of the social attachments some of these things have, for both old and young. We we're talking about health, we'll go to the health food stores and we'll also talk to the most conservative Republican doctor- I mean, it's the same sphere. We'd see the fabric of the community, programming the issue of the way the community is built- a self-defining process.

BOB: People move up here for many reasons. For artists, they isolate themselves to work; others come up for their health. As a result, the thing is like a vortex, which can obviously show up on video, perhaps better than a newspaper. We can express the feeling of the community.

KEN: Like the thing we did with Ken's Esso, a local mechanic, who's thought of very highly because he's reasonable and honest. He's a local resource for how to live with a car.

BOB: "How to Winterize Your Car" is a program we did with him.

KEB: All the things everyone is, the roles they've elected to play, and the things they are just as people; these are all resources for somebody else. This is talking about the non-material exchange that people do- the data thing. Family is a real work group in that whole concept.

BOB: One thing we did with Family was when this lady from New Paltz came up to explain how to get the food stamp program and how to apply.

KEN: The person-to-person contact, which Family is doing, is limited, so again video comes into that, probably extending people further than they can go. It puts a little pressure on the confrontation, which is good.

BOB: There's also a Town Board meeting and we videotape so people who couldn't make see it the same day.

KEN: It would be nice to have a community talk show. What really turned me on was the variety of people running for office, like this old Republican judge, who had been school principal, and people tell you stories about him really embezzling money or something.

BOB: And his son being the Chief of Police, and his cousin being a

policeman, all while he's a judge.

KEN: There are all kinds of stories like that. There was Alfie, our town idiot savant-

BOB: He's not the town idiot, he's a town problem, but he's a poet who tends to get out of hand occasionally.

KEN: But he ran for office too as a write-in candidate.

BOB: We're always bailing him once a week from jail, for drunkenness. He's very talent; he can take on another character; he's an actor.

KEN: And another polarity is the IBM people, 40ish, 50ish executives who are active in the community- like the Town Supervisor. And Underhill, the local cleaner owner, the one small business in town that's polluting the creek. He lost the election. And John Gardner, who's Albert Grossman's head audio engineer. He won. He's on the Town Council.

BOB: In fact, two Democrats won in the election for the first time in fifteen years.

KEN: Another who won in Ken Sweeney, the Justice of the Peace, who owns a business called Simulates which makes plastic models for nurses to study, gruesome wounds and stuff.

BOB: The intention with WCV is to, for example, videotape a day in the life of a fireman, a day in the life of a policeman, to get a comprehensive look at a community.

KEN: They're not really police; it's a second class town. They're a constabulary. But they're really nice, really open. They have a communication system. They have to be nice. They have to be nice; they've been living with long hairs, young people and artists for years.

(NOTE: May 18, 1972, Kingston Cablevision confirmed "the non-commercial use on a non-exclusive basis of an unused channel of Kingston Cablevision's Woodstock CATV system for the presentation of programming produced by Woodstock Community Video." "The above agreement with Kingston Cablevision marked a first in this town. On May 29, 1972 the first 2 hour program went out to some 1800 cabled homes. Every week about 2 hours of locally produced documentaries about the town can be seen on Wednesday nights from 7:30 to 9:30." WCV- in RADICAL SOFTWARE.

DOUG DAVIS: Open A channel For Every Mind

"Open a channel for every mind.  
Let every mind communicate  
with every other mind. Let  
the communication be visual  
and sensory as well as aural  
and written. Expand sight and site.  
Create the world/universal mind."

- DOUG DAVIS for the ELECTRONIC HOKKADIM I.

DOUG DAVIS: I remember my experiences with early television when there was Captain Video, and on another channel you could get Kukla, Fran and Ollie, and that was big competition. I remember when I was in college, to make some money, I worked for a surveying team that was surveying viewers on the audience ratings, and I was a great fan of Kukla, Fran and Ollie, and I hated Tom Corbett, Space Cadet and Captain Video, so I put down extra marks for Kukla, Fran and Ollie, and I falsified; I lied, sir. In hindsight, I can see that I did the wrong thing, but at that time (Laughter) the pressure was such that I wanted Kukla, Fran and Ollie to win. I was a bit overzealous, so I added votes and Kukla, Fran and Ollie stayed on the air.

JUD: And Tom Corbett folded?

DOUG: I can't remember. Tom Corbett was actually a better show than Captain Video; everybody remembered Captain Video because of the name. They would do Captain Video live on the set, and Captain Video would say: "We must go to Mars; into the rocket, men," and there would be a long pause while you were waiting for them to get the film looping, the same film of the rocket out in space which you would see wherever they would go.

#### THE ELECTRONIC HOKKADIM

DOUG: Anyway, when I did the Electronic Hokkadim (NOTE: at the Corcoran Gallery of Art, Washington, D.C. on June 12, 1971.) I had a very simple idea of what participation involved, and there were also many reasons for it being simple; one of the main ones was practical. It's very difficult to find a television station that would do it; also, I had a lot of social and political idealism at the time, and I had the feeling that if I didn't do it in prime time, in a very big way, that I couldn't really change the structure.

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I had a notion that I could change the television structure, very naive, you know. And that wasn't easy. It took years to find a television station; I just didn't want to do it on public television which didn't have a very big audience at that time. Now it does but it's been only three years since, but in that three years it's changed a lot. And I didn't want to do it on cable, or in any small way because I thought I thought that the idea of viewer participation in a TV program, if it could be done in a large way and the notion of it disseminated all over the world, that that would really change people's ideas about what television could be. Having that wish in mind meant that the participation had to be very simple because I wouldn't have that much time on the air; you can't be on prime time on a major TV station for very long, and it wasn't so much the problem of communicating with the viewers and getting them to join in any complex or difficult way, but it was the problem of convincing the people who had control over the TV station; that people could be relied upon to understand and join in a complex participation scheme. Because the broadcasters don't believe that and, in one way or another, like all television people, they're absolutely convinced of the stupidity of the audience.

So right away, I was limited. They wouldn't let me get to the viewers in anything other than a simple way, and the simple way proved to be phoning in sounds, to make the song of the city. Another reason why it was simple was that, I guess, I had very simple notions about it too, that somehow or another it didn't matter what people did as long as they did it together. So it was a combination of where my head was and also the restrictions placed upon me by the TV station, and by my naive desire to really change things, to make big structural changes.

And so, we did this thing. The really beautiful part of it was the way the viewers responded; it was just amazing. I still have the tapes, of all the different sounds and all the different things that people chanted, the noises they made, and putting their pets on, and their children; it's unbelievable, how imaginative it was and how they understood exactly what it was about, with not very much told to them. We began about two or three days before the program with these 15 to 30 minute spots which simply said "Electronic Hokkadim, Saturday Night, 8:30 PM, add your sound to the song of the city" for a long time that was all you saw, and there was press the day before, and the day before we began flashing the telephone number because it was only then that

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we had the number. And the phones started ringing and these beautiful, beautiful sounds came in. Right away they all understood it; you could tell from listening to the sounds; old people, middle-aged people, kids- and it really gave the lie to all that the television people were saying that only a few people would understand, the university people, the art world people, all that shit they always say to you. The General Manager of the station had a saying, which he kept saying to me: "I want to improve your program so lots of people will like it" and I said: "Like, you're killing the idea" and he said "You don't understand the difference between masturbation and copulation- I don't like sitting alone by myself and masturbating, and that's what you're really into, and you want a few of your friends to come in and masturbate with you; but I want to have other people around and I want to fuck." That's what he said, in fact, he kept saying that; it was one of his favorite metaphors, because we went through lots of meetings with him, and he kept charging me with that.

So they changed the script about five minutes before we went on the air, and did just unbelievable things. It was the end of my naivety about television, about being able to change political and social strictures. I realized that you can't do it that way. But, I felt from the beginning that you could count on the people, I could count on the viewers, not absolutely sure, but listening to those sounds I realized that people are really much further out then even they realized. And that led to the TALK-OUT because the Hokkadim made me feel that if you gave people more of a chance to talk, more time, and get to them in a deeper way, you'd get a new kind of participation, a deeper and more meaningful dialogue. Hokkadim really changed everything; it was the most traumatic thing I've ever been through, and I can't tell you how awful it was for me. It was six months before I even physically got over it, and the worst thing is that no one understood how awful it was; even today. some of the people who went through it with me, said it was such a great thing, "you managed to get on the air, you actually had a two-way thing, you got prime time; what are you complaining about?" Very few people understand how much I hated what happened, and how it has changed everything I've done since the Hokkadim, which is all very different from anything I did before, and all much less naive.

JUD: What was the original idea of the Hokkadim?

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DOUG: I can't remember when I started to think that television would be the medium for something I could work in, but it somewhere around to late 60s to very early 70s, but one of the first thought I had was about making television a participative medium, and that came out of the happening events, all those things I did in Washington in the mid-late 60s. It was the first thing I thought of; I didn't think of the television set as a place to make pretty pictures, but how could I use it as a link between viewers and myself. It was how to make the television set active; how could one make a live experience in which people would join. And, once having thought of that, it was trying to find a television station that would help, or finding a museum that would help because I knew a museum would be one of the few who could persuade a television station. So it was really that simple, and to do it a big was, to actually confront the structure and change it. Very naive.

"MANIFESTO FOR A NEW TELEVISION: The world's first participative telecast live while it is happening the viewers create what they watch and hear at home. People phone in any sounds they wish to make: shout sing grunt growl whistle play an instrument talk at the TV studio children drench live camera picture of operators taking all the calls with colors of their own choosing at the museum. Artists and public make live electronic images on Paik-Abe and Eric Siegel video synthesizers. At first each sound and image takes over the screen by itself. Slowly they are mixed together. At the end the city makes what it sees. Electronics revives the participative music of ancient Africa."

- DOUG DAVIS on the ELECTRONIC HOKKADIM I.

#### THE EARLY HAPPENING EVENTS

JUD: Describe the early happening events.

DOUG: God, there were so many of them. It dates back to Rutgers when Allan Kaprow was there. I was living in Washington, and it was a very dead scene, like being out in the provinces. I wanted to change the scene, and I didn't have any notions of being an artist, of making any events or happenings myself at all, but I knew Allan, and I thought of bringing him to Washington and getting him involved in some kind of

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event, and got everybody there, that it might change things. So, in order make something happen, I created an event that I decided to dedicate to Allan, that he would come down and be in it, and hopefully that would change people. And that's what happened; there were a lot of people involved in it, as many as possible; it took place all over the city, with friends in it, and other artists, but it turned out that the person who was changed the most was me. I didn't change anybody else; I changed myself. It was very complicated and took place over several days all over the city, and ended very late at night with a flare event in 5 or 6 different parts of the city, and there was a lot of silence involved in it. A swimming pool event was structured into it, with people falling into the pool. (NOTE: SWIMQUIP: A Week-long happening, Washington, D.C., July 15, 1967.)

And I kept doing pieces after that, and there was a group of about five or six artists in Washington who all sort worked together and did things together, Juan Downey was part of that, and Ed McGowin, the Berkowitz' from time to time, and Jim Harithas-  
JUD: When he was at the Corcoran.

DOUG: Yes. We did so many things. Gene Davis was involved. The last event before I left Washington was kind of related to television. It was call GIVEAWAY (NOTE: Washington D.C., May 22, 1969). It was an event whereby Ed McGowin, Gene Davis and I made fifty paintings; we took one of Gene's paintings and made fifty copies, whatever they were, I don't know if they were copies or not, and held a big lottery in the Grand Ballroom of the Mayflower Hotel. And all the paintings were up there, and they were given away, 50 Gene Davis Paintings, absolutely beautiful paintings; they were better than the original, 6 by 6 feet, on stretchers. Incredible, a thousand people there, black-tie, a mind-blowing event, and nobody could figure out whether they were Gene Davis paintings or what they were. We were very happy about that, because that was the intent of it all, to confuse the whole idea of art, and what a signature is, and what is the relationship between the work of art and the name.

"What is obvious about this Event is that it celebrates the end of one era in Washington art and the beginning of another. Beyond that the meanings fragment, like color in a prism, depending on the perceptions brought to it. There are at

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least three possibilities: a free Gene Davis is priceless; the acts of conception, selection, and reproduction are equal to the first act of making; a painting, since it is now being given away, like a free balloon, really is an object, and ought to take an appropriate form; conversely, we are free now not only to return to expressionism but to landscape and portraiture; art is common, rather than individual property; the entire Event, from its origin in a chance kitchen conversation to now approaches both art and ritual, by formalizing life. This last is more than a possibility to me: it is real; it is why I join in giving Gene Davis away." - DOUGLAS M. DAVIS.

DOUG: We all made statements in connection with it. The sentence which I like a lot: "It's common, not individual property" relates to video obviously too, because video is about dissemination, no one owning it. Videotape is almost an organic thing. Dealers have great trouble with videotapes. It's very easy to copy. There's no way you can tie it down to personal property. The moment I heard about videotape and had a camera in my hands, it was almost as much thinking about that dissemination possibility, and the immediacy thing about it, rather than any actual physical thing. It was much more philosophical or conceptual. That's what turned me on about video.

GIVEAWAY was 1969 and I moved to New York in 1969, but my children were still in Washington so I spent a lot of time of there, and as a result of that did an event there in 1970 called LOOK-OUT!, and the idea was to get people to look out at the world, and it was a 24 hour look-out. We asked the city to look out, and every person to stop thinking about himself and just look outside of himself, or outside of his house, or outside into the world; the whole thing was turning people outside

"LOOK-OUT lasted for 24 hours and the camera goes...poking into streets and neighborhoods everywhere, outside the museum (where the Event only finished, late at night), asking people strange questions and receiving stranger answers."

- DOUGLAS DAVIS.

That was also Earth Year, and it got misinterpreted as an Earth event, not that that bothered me. I sort of liked that, but it wasn't what I had in mind. It was OK because it was involved with that notion too

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that we're destroying the environment because we're not looking at it. We're not looking at what's happening. When a lot of politicians heard about the event, they sent telegrams in support of it because they thought it was connected with the Earth, McGovern, Muskie, the Mayor of Washington, and once this got out to the city, everybody thought: "Oh, yes, this is an Earth Event." There was just huge participation. At the end of the 24-hour meditation, people were to come to the Museum and bring some symbol or statement of what they'd seen or thought about as a result of that meditation. It just so happened that a friend who has helping me with the event, who I think is very important in the history of alternate video, although I think unfair things have been said about him, but that's another story, the famous Don West, who had been fired from CBS, he had a CV portable deck and he heard about the event and wanted to be a part of it. So he came to Washington with me and we decided to videotape the event, the first time I really had a camera extensively in my hands for a long time, and we videotaped everything that happened all around the city, leading up to a meditation that night, and the tapes were there in the atrium of the Corcoran while people were coming in. They were on monitors, so people could see what had happened, the course of the meditation during the day, and there was also a monitor showing what was in the atrium at that moment.

I still have an installation photograph with this big canvas and the videotapes hanging in front of it. And after the canvas was made, the next morning when we installed it in the atrium, I felt very strongly that the videotapes were as much a part of the record as the canvas itself. And another thing I liked about it was that it depicted the making of the canvas so it was a work of art that showed its own creation. Those were the things about video that attracted me; it was never the hardware, though it was there, of course, the portapak, and beginning to get some access to television stations, but the central thing was the dissemination and the immediacy. They're still the things that count the most for me about it.

JUD: Describe the making of the canvas.

DOUG: The canvas was treated with a solution, not unlike the solution that Man Ray used to make his canvases photosensitive.

JUD: How was it developed?

DOUG: The canvas was stretched out on the floor of the atrium, and the process of development is very slow, even in sunlight it takes quite a while. And people came and put their objects and statements on it;

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some brought branches, some flowers, one man brought a silkscreen that said "Peace" on it, other people lay on the canvas themselves- that was their statement- and these hundreds of objects were spread on top of this photo-sensitive canvas. There were giant arc lights from the top of the atrium and around the side, ineffect standing for the sun, exposing the area around the objects, but not too precisely, as in a Rayogram. There are all kinds of ways that light gets through and around objects, so it's not a perfect silhouette in any sense, but a very complicated, mysterious silhouette. And they lay there for about two hours to make that exposure. Actually, it probably should have gone on for another hour. We weren't sure; nobody had ever made a photosensitive anything that large before, so we guessed how long it would take. When we washed off the solution, leaving the images imprinted in white against the exposed area, which was dark blue, it was in many cases vague and murky- you couldn't make out exactly what it was- and in other cases, the image printed through very clearly, but it was a beautiful canvas. I still think it's a beautiful canvas. I have no idea where it is now. The Museum has it up for a couple of weeks longer than I expected.

#### HELIOGRAPHY

Doug: The slowness of the development made it possible for us to make a three foot direct print of the Sun, because in Arizona, there's a telescope, near Tucson, which costs millions of dollars, and its huge design and machinery is designed to bring a direct image of the sun which is 3 feet in diameter, going underground through a complex of mirrors, to a table deep down in the earth- here's the sun. You can see the sun exactly, sunspots and everything. Sun scientists from all over the world come there to study the sun. And we managed to persuade them to let us come with this process, because they wanted to see if it could be done also, because nobody had ever made a direct print of the sun'd image, you see, because there's no other method of exposure that moves as slow as this one does.

So we went there with three treated canvases, and the first one we made was a perfect image. None of the others worked out. We guessed that it would take one minute for the exposure time. That's how strong the sun's rays are. It was on display for about a year at the Museum of Science and Technology. I felt at the time very strongly that that the

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sun was participating with us in making that canvas. That was about 1971.

JUD: This was a collaboration with whom?

DOUG: Fred Pitts. We did a lot of things. We called that Heliography, and it was mostly Heliography that we collaborated on. But, when I moved to New York, it was much more difficult to collaborate. Slowly, slowly, I got more involved in video, and Fred was in Washington, more interested in Heliography and we just going our own ways.

JUD: What was your next development, post-Heliography? In terms of the electronic media.

DOUG: The work in Heliography ran alongside the beginning of actually working in video. It was one thing I was doing at that time, which was, as the world sees it, I was doing many different things. In other words, I was working in Heliography, I was creating events, and I was beginning to work in videotape, and they seem like different things, but they weren't, they were all just ways to work out a certain interest I had at that time which was probably best and most clearly seen as the idea of participation, or the creation of a work that has many sources, or inputs. That was really behind Heliography too, as far as I was concerned. And it was behind the early work in video too. My feelings about media as materials or forms was that they weren't and aren't important, but that they're just ways in which to express a central concern-

JUD: Vehicles or channels.

DOUG: Yes. Opening all the channels. Heliography had its basis, or so I felt, in participating with many elements, some of them random, but the final image was always impossible to predict. It would depend on the intensity of the sunlight; it would involve air currents, weather, the shadows of people passing by depending upon where the canvas, the photosensitive object, was. We could never be sure when to stop the exposure. I remember when we made the great sun image that's absolutely crystal clear, perfect, it was our first try, and we made three canvases that day and the other two were absolutely awful. What we found was that we made the first canvas at around 10:15 in the morning. By the time we washed it off and put it away, saturated another canvas and stretched it down on the table again, it was about 1 o'clock in the afternoon. By that time, the difference in the atmosphere, the position of the sun, the rotation of the earth, and the exposure time were completely different. By setting it by the first exposure, we were totally wrong. Now, the miracle is, that we got our first exposure absolutely right.

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JUD: It's one of the largest camera obscuras.

DOUG: Right, though it's hardly obscure. Except in foggy days. But there was that kind of idea in it, which was really interesting to me at that time, which was to make something that involved a great many inputs, not all of which you could control, and I was much more interested in that whole process than in the final form of anything. So I was delighted that we got the sun image, and that everyone liked it, but that was the least interesting thing for me about going there.

And the same thing of the events, at least in the beginning, was that I was much more interested in the process, in how many people participated, whether they really responded to what the event was about, than about the final form of the event. And when I first started working in video, the first idea was to make it work in two ways, which involved bringing in other people's inputs, and when I finally moved into a television station for the first time.

JUD: At WGBH.

DOUG: Right, the thing I was most interested in was getting together many different kinds of visual inputs, and I really didn't care or think at all about what it would like at the end at all, until we finally got into the control room. So, it was a kind of period, obviously based upon my early meeting with Allan Kaprow, and thinking about happenings, and the idea gestating, that came out in all this stuff. I was attracted to the media for certain reasons: conceptual, philosophical, but it had nothing to do with the mechanics or physicality of any of those media, or the final form that would come out of your interaction, and I guess that's a statement that's true of almost everything I did between 1967 and maybe into my first year in New York, after which it ended, which would bring it to about 1971.

#### ALWAYS IN YOUR MIND

JUD: How would you relate the influence of Kaprow?

DOUG: All that work, the work in eventd, the early work in video and the heliography, and various techniques of graphics, had it very strong, and Allan was really the first person I met or heard of who got me interested in a bag of ideas, now pinned pretty accurately and correctly on the Fluxus movement and John Cage. It was through Allan that I thought about all this.

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JUD: Any writings or concepts of his in particular?

DOUG: The obvious thing is, a lot of it comes from literature, as you know. I was a graduate student in English at Rutgers, and was very interested in Burroughs, hearing about his snipping off bits of audiotape and building cutups. And certain things in literature I think of being very much affected by, readings in Existentialism, at that time. I don't know how that relates to Allan, but it was there. I always thought there was something about existentialism which tended to increase or heighten your value of the present tense, or the immediate experience. I was reading in Satre, a lot of him, and Camus, nothing systematic about it, during that time, and it was Allan and what I learned through the investigations about him that really launched me with the other thinking and doing about other reading. I was more a part of the written arts than the visual arts at that time. My thinking and reading about existentialism, my coming into contact with a body of ideas we normally associate with fluxus, and what interested me most was the importance of the present tense which related to Kaprow because of what he was saying, and what Cage was saying, was that we don't live in any other time but the present tense, which relates to Eastern thought and philosophy.

JUD: There are quite of number of Orientals in the Fluxus movement.

DOUG: Yes. And, that every moment is really magic or divine, because that's the only moment you ever really live in. And so with Kaprow's happenings; I remember one that took place at Stony Brook on Long Island which I was in, and it concluded one night with a huge bonfire, an incredible bonfire with hundreds of students around and everybody singing, in this wild garbage dump, and people began to make sculptures out of garbage cans and trash cans and stuff like that- it was just an amazing moment. And I remember one student said to Allan: "This is incredible, but no one will ever know about it; there's no way it can be reported, we can't put it in a museum, a photograph won't do it, and it's going to go away, and disappear." And Allan said: "Yes, but it will always be in your mind."

There's some kind of link in all that body of ideas, and it has an effect in the way you think about art, because art has traditionally, in the last several hundred years, been identified with permanenece; and the more I began to think about it, the more I realized that I was living in a society which was dedicated to the past and to the future, and

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not to the present. and the art produced in it tended to re-enforce that notion. And when I actually began making art, and I think I've described the origins, it was all together there; how it ended didn't make any difference. All that counted was a heightened kind of experience.

JUD: How about the process of videotape, and the fact that we have here one of the most process-oriented arts that we know, and at the same time we have videotapes? How do you feel about that? It's a process which nevertheless sometimes ends up with a product.

DOUG: That is no longer a problem for me. That was a problem when my head was set back in the way that I described before. I was frustrated at the time with the the kind of work, but I believed so much in the underlying ethic though that it didn't bother me. I kept working at those things, always unhappy with it. After all, it turned out that the really clear heliograph was the heliograph I loved the most and, that after all, when I thought about my various frustrations, when I thought back on the events, I realized that the ones I liked the most were the ones that I had made come out right in the end.

### NUMBERS

DOUG: Making NUMBERS was an important part of that process because when I got into the control room at WGBH, I almost didn't care how it would work out, the process of making the tape, gathering all the inputs, but then I found myself really loving going over and over those images and making them come out right. So that problem I had, and there had been a problem about video at the time, began to erode and the conflict wasn't there anymore, that no process is going to work unless the goal is right. I mean, the means do not justify the ends. It was necessary that the end be the right kind of end, that the final form be right, and if that wasn't right, it didn't make any difference how you got there. So that stopped being a problem.

The only thing I would like to say about that issue, the issue of the conflict between process and videotape is, that videotape is much closer to process than most other media; it's so instantaneous. That made it easier for me to get into it. But that has actually nothing to do with what I'm working with in video now, I mean, it's important, I wouldn't still be into it if I didn't feel right about the values involved, the moral and political values.

JUD: But the real reasons and values are now what?

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DOUG: That has to do with another change of mind, because everything that I'm really talking about comes from the inside rather than the outside. The major turning point was doing the ELECTRONIC HOKKADIM, and how I talked about it being so awful.

JUD: We talked about the negative and the positive.

DOUG: There were some positive things. The HOKKADIM came after WGBH; I made NUMBERS in 1970, and the HOKKADIM was 1971, and WGBH was the first time in a television studio. It was just wild, just far out; I loved it, felt like a kid in a candy store, and I loved having all these people around who would do anything that I wanted to do. I said I wanted 300 kids painting numbers out in the parking lot, and we had 300 kids. I said I wanted a computer printout, and they got me a computer. I mean, it was just like a kid with a toy. I'd say to them, look, I want to try to layer images on top of each other, and they'd do it. I wanted to turn that purple and they'd do it for me. I don't know how to describe it' it was being Merlin or something, the Magician. And there's a lot of exuberance in that piece which comes because it was just wild, and I wanted to do everything that I could think of, get every image I could think of, and put them all together, and I didn't care how they came out- but I thought I didn't care about how they came out, but I really did care. And the whole process of finding out what really made me happy, what really made me fulfilled in making a work, started to gestate at that time and was really heightened by the HOKKADIM trauma, which was a real trauma: what they did with that whole idea of participation, and the layering, and the synergy, they just cheapened it all is what they did. It was a long time before I could even think about trying to do anything like that again.

Let me tell you a story which illustrates the frustration of it all. About three months ago, I gave a lecture in Washington and Walter Hopps came, and we were talking about the HOKKADIM, and I said that I knew it was a step in history, or something like that, that it was important to get it done and that 1000's of people had participated in and enjoyed it, but that I still thought that it failed, because it didn't fit together aesthetically. And Walter said to me: "I'm surprised; you should know that participation and aesthetics don't have any relationship." And what I came to realize at the end of that period, of trying all that work and seeing the HOKKADIM just become formless

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and shapeless and a mess, and corrupted, etc., was that it does have a relationship, and it does matter how the event ends and how it is put together; and the simple act of participation, the fact that 5000 people, or that a million come, or that 85% of the people there seem to be smiling and fulfilled is not enough. That the form's got to be right, and if the form isn't right, it doesn't make any difference what the level of participation is. I know this sounds terribly vague and metaphysical, but the practical effect is that now I really work my balls off to make things come out right, because it pleases me to do that, and you don't want to make anything sloppy, anything that's less than you best, or do anything that you think is wrong for any reason aesthetically, because if it's wrong at the core, then it's no good.

JUD: It's the move to perfectionism.

DOUG: Yes. Kids, incidentally, are perfectionists. But it's something deep in human nature, not anything that's layered on you. It's not something you get because you're sophisticated; it's like a carpenter in the woods, or a bricklayer, or anybody who feels good about making it come out right, and when it comes out right, then everyone is going to participate in it on the right level. In other words, the kind of participation that I'm really interested in right now is getting people to participate in the work that I make, and that can be intellectual, cerebral, or you can be there; you don't have to be doing anything.

#### SEQUENCES and STUDIES IN BLACK AND WHITE VIDEOTAPE

"SEQUENCES was made with a video camera, equipped with a Tivicon tube, extraordinarily sensitive to heat and light, which can 'see in the night'- a quality unique to video. The performance was a silent ritual- the participants moving through the darkness with sources of light of their own choosing. All the images- sight and sound- were made by those who came in the order of their coming. The sound track was implemented by an Electrocomp Synthesizer." - DOUGLAS DAVIS.

JUD: What was the next stage after the HOKKADIM?

DOUG: There were several months when I did nothing, lay fallow, and tried to figure out what went wrong, and started to reach the conclusions we've been discussing. I was part of the Finch College Museum's show of TEN VIDEOTAPE PERFORMANCES in the fall of 1971, and the work I got together for that was called SEQUENCES/NIGHT VIDEO, with lots of people coming and bringing light sources and directing them into a tivicon camera,

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which I think was the first time a tivicon camera was used, but again what interested me was the way the tape looked after it was all over, and also in that tape, I made a statement about immediacy. It was the conclusion of the program; I wanted the viewers to realize that they were watching a non-edited tape, and it had been made in real time, your time, so the ideas about the importance of immediacy began to complicate and develop.

"This is a real-time  
videotape.  
The performance you are  
watching  
has occurred  
is occurring  
in real time your time  
no editing."

- SEQUENCE STATEMENT, 1971, DOUGLAS DAVIS.

DOUG: The next group of tapes were made at C.T. Lui's Egg Store in New York early in 1972 and those were the black and white studies. But, a significant thing happened in the fall of 1971. After the HOK-KADIM, I'd had this image in my head of a backward television set, I don't know why- the only source that I can specifically remember is a party that I went to where a guy had a television in the middle of the party, and we were all sitting around watching the back of it and we all thought it was quite beautiful. But, it's been in my head for a long time, so I put a television set in the Reese Paley Gallery; they had a backroom which they said they'd give me, and I put it there, turned off the lights, turned on the TV set with its face to the wall, turned it on to white noise, no station, and it just hissed softly like that all day. And I guess that the first non-participative work, the first construction. It was created by a lot of participative forces, like the magnetism, outer space, the causes of the snow which you see on the television set, but it was specifically set up as an image for people to come and see, and it really worked.

JUD: Don't you think more than an image, perhaps an icon?

DOUG: Yes, yes. It certainly has become that. That wasn't the reason I put there but it certainly became that.

JUD: But it's a recurring icon, coming at the end of TALKOUT also.

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DOUG: If I started talking about the icon, there's so much that could be said about it. That IMAGES FROM THE PRESENT TENSE I, the backward television set occurre about the same time as the last participation piece, the Finch College SEQUENCES, which was just a sequence of light images. I'd seen the tivicon camera at Lui's store, and while watching it in the monitor I saw somebody light a cigarette and it really flared up, and it was a wild thing, and thought it's got to be interewting if you trun off all the lights and have people direct light sources into it. Until the event happened, I had no idea what it was actually going to look like, but I really like the images that came from it. It was a further step in freeing myself from that notion that only process counted. The images at Reese Paley occurred at about the same time, but I didn't do any more work until February 1972, when I did the four black and white studies at the Egg Store, and that was really a total break into something new.

JUD: Since you've experienced gattting everything to come out the way you visualized it, that's something artists try to manifest of themselfe

DOUG: Yes, it's more than being a perfectionist; it's more that there's some concept, or some feeling, or some images iside you. It's got to come out right, and that's what it's all about, and that's the most democratic thing you can do, the most effective thing you can do in terms of affecting the world game. There's actually a terrible snobbery or elitism that's hidden in this whole notion of letting the people do it or pretending that you don't care about certain thins that you do care about. It's like some upper class white person going into the ghetto, handing people a camera but not telling them anything about it or how to organize a television show, because somehow or other he thinks what they might want to do is not serious or sophisticated.

JUD: It's like the positive or negative use of anything. Channels can flow one way or another, and one way you can get pollution, poisoning.

DOUG: Before I did the black and white studies, I also did VIDEO CARNIVAL(NOTE: with help from a New York State CAPS grant, Open Channel and assistance from the Museum of Modern Art). This was another step in these realizations because the notion of VIDEO CARNIVAL was that children should be permitted to make their own television show, and I wanted this to be a working metaphor. So we took this barrage of equipment, an audio synthesizer, colorizers, and cameras to a school in Harlem, and if you

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watch what the children did, they were very interested in abstraction. They got over very quickly the whole notion that video is about seeing yourself on television. They would take pictures of their friends and themselves, but lasted about five minutes. Then they were into doing very radical abstract things. It was another realization of the idea I was trying express earlier, and another important experience too. As I said, it finally got expressed in STUDIES IN BLACK AND WHITE VIDEOTAPE which is all about making the image or concept become clear, and I really felt good about those tapes, the same way I felt good about the image of the backward TV set.

JUD: And the image of the sun. The backward TV image is, I think, kind of corona-like.

DOUG: That's true, that's true. In addition to seeing that image, just to look it, it was really in my mind as an elegaic piece, because I was thinking about the Judson Three at the time and what had happened to them, and I wanted to do some kind of work for them, as I felt what was happening to them was indicative of what seemed to be happening to the country. So it grew out of that, a political work mixed with this animal, or iconic feeling about the image, but once it got in there, I saw it didn't have a thing to do with the Judson Three; it was not an elegaic work. It had it's own integrity which was that it was about itself.

JUD: The elegaic concept came about as a way for it to reveal its true nature. In literature, the form of the elegy has often rather revealed more of the nature of the maker than the subject.

DOUG: Yes. That's true. I don't think Hendriks and Toche would have felt it had anything to with them, and they'd be right. It was about itself. The first poster announcing it was filled with stuff about the Judson 3, but it's taken over now. And it's taken over my life. It keeps coming up in all sorts of things. People keep telling me what they think about it, and what it reminds them of, and that's gotten mixed up why it has been hanging around in my mind for so long. Someone told me that it reminded him of his childhood when his mother would feed him and then place him on the floor, and he would crawl around the television set, and when he sees that image, he thinks of food. So it just blows your mind.

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JUD: Getting back to STUDIES IN B&W, and the elements in part of it used two people, two chairs, and what equipment?

DOUG: It's a four tape series. The first tape was a straight documentation of the images. It begins out on the street. I put the camera on a dolly because I wanted to have the viewer feel that he was kind of rolling into it, and you move across the street into the gallery all the way to the back. You sit, and you watch it, and you come back out, withdraw the same way you came, and that's a very mysterious tape, and very slow. It takes a long time to develop, and a long time to get into the image, and then you pull back out again. That tape was made with a portapak camera.

The other three tapes were made in the Egg Store, which had just gotten set up and hadn't been announced publicly yet. I struck a deal with Lui, if he'd let me go in there for a day, for 24 hours, and make anything I could. I didn't have much money at the time, and they were interested in finding out what their equipment could do, so I got this cut-rate chance, in a ½" video studio, and we made three tapes in 24 hours. We were up almost 24 hours really, night and day, and it was very intense, and the tapes are very complicated, and none of us was an engineer. Frank Cavestani assisted, and John Brumage, C.T.'s engineer at the time came in to help, but to this day I don't know how we did it, because you know, even to work at NET, to get one tape made in one day is really something.

One of the ways we were able to get it done, quantitatively, was that I had a notion that I wanted to start making all tapes in real time with no editing. So, once we got everything set up, we just let the tapes go, and in that sense were able to do them quickly. But getting set up, as you know, is such a- well, they're very complicated tapes technically speaking.

JUD: Why don't you talk about the technical configuration and then segue into the concept?

DOUG: Right. The second tape is about two people sitting side by side, a blonde girl who happens to be my wife, Jane, with the blackest guy I could find- it happened to work around that, and it's about split-screening; it's about black against white; it's about keying, and it's about reversing colors.

JUD: Color here meaning black and white.

DOUG: And it proceeds in a very strict and logical sequence, all done in

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real time, no editing, and I knew exactly what I was going to do every minute. The editing was live-switching. The cameras were all b&w studio cameras, with friends working them. Actually the tape about the two people is the third tape. Interestingly enough, I've blocked out the 2nd tape in my mind, because it's related to the backward television set. In the second tape, what you see- in the first tape you look at it from the back in the dark room- in the second tape, five television sets are lying on their backs so you see only their tops, and the camera sees them from above, and the light dims. The room is very bright in the beginning, and then the light diminishes slowly, so that in the end all you see is five little globs of light in a black sea. And everything is seen from a camera above; again, that was very rigorously planned. I knew exactly where I wanted the cameraman to move the camera, every step of the way.

The fourth tape was by all means the most complex. I don't think any one of knows how we set it up. The idea was, with the console, with all the cameras from above and around me, and monitors, to allow me to sit in the middle of all this image-making equipment, and learn how to use it in front of you. We wanted to provide me with so many options, of seeing the same thing, which was always me just sitting there doing this thing, right in front of you, that it had something to do with infinity. And it also has to do with you looking at what I'm doing while I'm doing it, like living through the whole learning process, and while you're watching it. The most interesting image for me is that from time to time I manipulate the keyer so that the image becomes whitened against a dark sea, and you see the tape itself that you're now watching turning around. A complex of all those immediacies. When you start thinking about that, it becomes infinite. That's what that tape was about.

So, the four tapes work together. You should see them all at once. They were made to be played together, but they can be seen separately. For example, if you see No. 4 by itself, as some people have, they think it's a very high-tech tape, that it's involved with working out the equipment; but when you see it in connection with all the others, you understand that it's really about something else.

JUD: It's also a tape about the process of making a tape.

DOUG: Yes. Someone said that last tape shows you how the other three were made, as though it's going to explain them. (Laughter)

JUD: A summation.

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DOUG: Right. You see all the techniques; you see how to make a split-screen. Well, I couldn't care less about that, in the sense that it's not what the tape was made for, though I care about learning how to do those things right and work them out.

STUDIES IN COLOR VIDEOTAPE

DOUG: Then in 1972 I started working at WNET Television Laboratory. Then their open access plan began and I had a chance to go there.

JUD: That was the series in color.

DOUG: The STUDIES IN COLOR VIDEOTAPE I and II, and they're very different. You helped me with No. 1. That piece was about time too, but it was also about infinite possibilities of seeing the same thing. It's very complicated, with lots of layering, not very pretty, but I wasn't trying to make it pretty. I was trying to get out certain layerings in physical fact, and also in a time sense, because you see the same tape over and over and over, in many different permutations. It's being played on three decks; you're seeing it from above the camera, and you're watching from cameras moving in on it. At one point, you break into the tape itself, into the electronics of the tape itself. It's a hard feed of the basic tape onto the tape.

The second color study was made three times, and wasn't right until the last time. The first two times I tried it near the Egg Store on a street downtown. From the beginning, my notion was, if you took a color camera out on the street, and began the tape thirty minutes before sunset, at the time supplied for that day by the New York Times, that if I stood in front of that camera with a TVmonitor and a light, that the tape would begin in a realistic setting, but the image you would be looking at would very strange.

JUD: It's also a static camera.

DOUG: Yes. A man standing alone on a street with a television set. But it would still have the sense of being part of the real world. Then, as darkness began to fall, this image would become less and less real, in the conventional sense, and really be somewhere out in space.

JUD: Even though paradoxically being a real image. Though it does play around with the phantom effect and the decay rate of the phosphors which are very much a part of it- a ghostly aspect.

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DOUG: I knew that I had seen light smears that move across video cameras and very strange things happen on that monitor. And it stood to reason that if I got a color camera out on the street in darkness, that whatever the light would be doing would be very far out. But the concept of what the tape is about is not that simple. So we made it twice the first time and that's important, and we'd start the camera rolling 30 minutes before sunset, and twice something happened that ruined the tape. The first time maybe something didn't record correctly, and the 2nd time, as we got towards the end of the tape, night was falling, it was beautiful, absolutely perfect, and a man came and mugged in front of the camera, jumped up and down and totally ruined it. I could have edited that out, but during that whole period of work, and to some extent it's still true, the idea of turning the camera on and letting it go in real time, without going back to edit it, was very important, and still is.

I still want people to have the sense of occupying the same time, being present tense, being right there, in the middle of it. And so, the third time I made the tape, it was very hasty. I'd been telling David Loxton at NET about the tape, and he called me one day and said: "I think we can do it" because they'd gotten permission to get the camera on the street, and I got there, and it was about 50 minutes before sunset. David and John Godfrey were sitting around, and Jane had come with me, and I said "Well, can you get it on the street in 20 minutes?" (Laughter) and he said "Well, we'll try", and we got very close to it, set up the tape, and it was on 46th Street now, mid-town Manhattan, not way downtown.

JUD: Facing the UN. The Un was actually between the camera and the sun.

DOUG: Right. And I thought, if it failed downtown, it would fail for sure here, because people would mime, but as you know, there isn't any. People went back and forth, looking, seeing something strange, but they don't get in the way. There's a point just at the end of the tape where you notice a dog coming up the street.

JUD: Maybe that area has a more restrained, almost architectural presence

DOUG: I don't know. But, anyway, we made it, we got through. We didn't get the total abstraction at the end that I wanted. It's not an abstract image which happened the first two times- it was like you saw nothing-

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it was total black with just two little circles of light moving.

JUD: What kind of a light were you using?

DOUG: A work light, like in a gas station.

JUD: Why did you choose that particular kind of light?

DOUG: Danger. Red means danger- and what happens is that the television, while you're watching the tape there is regular television fare on- I must say there are several moments which are incredible, for instance, the replay of Booby Thompson's homerun, all those things that just came across when I was turning the TV set on. You watch all this stuff, and then, suddenly, it's off; I reach down and turn the TV set into a monitor, and the next thing you know is that you see the red light on it, and it's suddenly very quiet. The light level starts dropping down, and what was a link to the real world suddenly drifts out, and it's part of another world. And the red light means danger; there's danger there. I have something in mind that should be the recipient of that danger, (Laughter) but it's not us, it's not you and me.

After that tape, there was more work at the TV LAB, all leading to the November-December 1972 exhibition at the Everson Museum in Syracuse. Including the piece TALK-OUT:A TELETHON. All work for the exhibition, but work that I would have done anyway.

"We went on at 11 P.M. and didn't stop until 2:30 A.M. It was the first art telethon. Calls from everywhere ... all over the country ...Some of the New York City callers seeing the same tapes we were playing on Sterling Manhattan Cable, public access channel... phones backed up all the time ... getting some calls and statements printed out on character generator, the words floating across the botton of the screen ... radio stations plugging in, passing out the number to their listeners ... very complex and dense layering of communication, live from start to finish." - TALK-OUT, from RADICAL SOFTWARE.

SHIRLEY CLARKE: THE VIDEO TEEPEE

"Via the medium of Video, time and space are again taling on new dimension. I am very happy and excited to discover that I have become the Dancer again. The ability to see what my camera is taping on a monitor across the room has changed for me my fear of the camera. I can see what I am doing as I do it and therefore I enjoy it. I have relaxed. I have almost lost the bad habit of having to play director and editor because of my need to produce a finished work. The act of doing it is now enough. The process for the time being is the message and so I never made a 'documentary film (honored critics withstanding). I think tonight I may be starting on my first."

- Notes for a Video Experience with Shirley Clarke, 1971, at the Museum of Modern Art.

Shirley Clarke: Video and me and baby makes three. It's the same trip as the dance trip, and any other one, only it's closer to dance. I should never have quit dancing. I was a nice person once- I smiled, I didn't scream, I had physical release. Ever since then, the machine has come between me and physical release. When I get angry, it's over the dumbness of everybody, including myself. It's because the machine is in the way. Now, video has almost helped, but now you have to know electronics, and I spent two and a half years learning to ask the right questions to ask.

JUD: The "why doesn't it work?" syndrome.

SHIRLEY: I tried that in the beginning, and I would nod when people said something, like I knew. Like, I'm talking long distance on the phone to Paik in California, and Jackie Cassen is here, and I say, "Paik, I've got a video thing here," and he says "We are honored to have you; What are you going to do?" I answer: "How about color? I hear you have a terrific color synthesizer", and he says "You need a color camera; goodbye, see you soon." What I needed was a way to make color without a color camera. Fortunately, he's going to invent the Paik non-color synthesizer soon to take the color out, and all will be well; back to normal. I tried to new Akai color camera (NOTE: out in 1973.) and it's really a synthesizer, and not as good as Eric Siegel's which

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I can do more with; you don't get enough light with it, and it's green, not even a nice green. Can you do something with the halations? Maybe you use the flaws in it as something artistic. I tried it out two months ago, to finish that ANGELS OF LIGHT tape that I started at the NEW Television Laboratory, determined to the end that I would do it. So I got the camera; hustled Camera Mart into thinking that I might buy it. I'd try it with my equipment, and something would go wrong and I'd keep it another day. So I had it for a week and shot, titles and stuff; some were nice and some were terrible; the camera was a pain in the neck. Particularly since I wanted to shoot off monitors in color and that was impossible. Some of the stuff that I've like the best is when I mixed synthesizer color with real color, in some of the best things I did at Channel 13 with that.

"THE ANGELS OF LIGHT- (by Shirley Clarke, Hibiscus, and Angel Jack)- Some mad, merry, musical moments from tapes made at the Experimental TV Lab designed to reveal how that favorite form of American entertainment- the musical comedy- can be given a new and unique form when it is interfaced in a 'live' video mix with the possibilities of electronic color, chroma key, etc., to create some extraordinary, beautiful visual images."

Maybe we'll get better color when the 3/4" cassette is perfected. Until then, what's the matter with black and white: Daumier, even Goya, Durer, Kathe Kollwitz, what's the matter with black and white? It's like a song. Black exploitation films. "THE COOL WORLD." How to be ten years ahead of your time because you don't know it. If we made the COOL WORLD now, it would make money, because it didn't have enough evil chases; it didn't have glamor is what it didn't have. It was so damn nitty-gritty, ich, realistic. I'm very affected by Rossellini; he's the only filmmaker who had any influence on what I saw. When I saw OPEN CITY, never having seen anything but Hollywood before, I just flipped, "My god, is that what it could be?" and by then there had been this whole 16mm movement going on for about ten years. Yes, we met doing one of these things, at Gideon Bachman's house, for German TV, our sponsor German TV. I used to get my print costs everytime by selling it to German TV; they bought everything. Fabulous, the COOL WORLD dubbed into German.

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JUD: How did they translate some of the vernacular?

SHIRLEY: I don't know; I didn't see it. I translated the CONNECTION into French, with Noel Burch, and tried to get some of the drug words into French, and though let's go for content; but how do you say: "This is my pad"? "C'est chez moi" doesn't have the flavor; it really doesn't feel right. So we got a combination, and the French told me later they were the worst subtitles they ever saw in their lives, not good or bad.

The time we showed THE CONNECTION at the White House was not to be believed. In the Kennedy days, there was something called the Arthur Schlesinger Film Society; Schlesinger had a film critic job for a magazine, so while in Washington, he would send for films for Friday night screenings. Jackie and Jack, and all the big brass, would show, sitting in these little gilded chairs and look at movies. And who would believe that one day Schlesinger asked to review THE CONNECTION, and I invited and Jack Gelber and I go down. We don't believe it; first of all, I'm so ashamed of the film, with Leach picking his nose and saying "This is America; we're free here" in the White House. And who's sitting in all those chairs, right, and Schlesinger says "Miss Clarke will be happy to answer questions afterwards."

Nobody laughed at any point in the film, a lot of heavy rustling of the squeaky seats, and now it's over, light applause. I stand up-question, first row, Mrs. Harriman: "How many pads are there in New York?" It's unreal- I'm not sure how many, "Forty" I said. Now the rest of the questions are equally stupid. And sitting in that room are the guys who are the big drug experts of the government, and there's about to be a big change in the drug laws, and I'm up there, saying "I think we should legalize heroin," in front of the braintrust; really out of place. And I think they should take us for a coke afterwards, at least, but, no, they all split, and I'm leaving by myself with Kack, like, we're lost-you know, whwre's the party?

We're in the elevator with Harriman and he taps me on the shoulder, "Beautiful picture, dear, beautiful." And then I watch the richest man in the world get into a rotten little car, with a chauffeur and drive off. And he's so rich, he has a shitty car. Perfect. Lovely picture, dear. So that's the experience of showing THE CONNECTION at the White House.

"...it does use many documentary techniques in the shooting, a technique known as ciname verite. These new techniques allow the director to probe the inner being of people, because you can not only see them but hear them speak. This new 'documentary' technique can be used in THE COOL WORLD to make it possible to tell a story on social, psychological and emotional levels. I like to call this kind of film 'new realism,' not documentary. But we do have in common the use of new mobile equipment that allows us freedom of camera movement and location sound of real people, not only actors."

- SHIRLEY CLARKE, 1966, interviewed in the SAN JUAN REVIEW.

At the White House, I tried to look for a john for a half hour during the screening, because I couldn't look at the film with that audience, as you can well imagine, I had to pee quick. I wander around and get into the private quarters, because the guards can't figure out who I am wandering around in the wrong part of the White House, and then this guard found me, a nice fellow, and led me back to the right section. And Arthur Schlesinger gave it a good review, which I also thought was rather funny. You see, there's a happy ending to every story.

JUD: And now you're with video.

SHIRLEY: Video; it's a new art form. It's not like any previous one. It's not mini-movies or theater; I don't know what it is yet, except game playing. We screened Melies tonight, which are some of the earliest films made. Have any films ever been made better than those? The tapes you're looking at now are the best that you're ever going to see. The art form has reached its height at the beginning apparently. It's finished; what am I doing? Getting myself stomache aches, for what? It's true; all of the early films, Griffith, Lumiere, Melies; can GENTLEMEN PREFER BLONDES compare to a Griffith movie, really? The greatest Egyptian art was the early, not the later; the early Greek stuff, not the corruption. Let's not do any more; we're corrupt already. Look at Giotto compared to Michelangelo, you know, Giotto's great; Michelangelo is corruption.

But what's interesting here, if you give it a moment's thought, I see, maybe, video has just about to begin. There's a funny transition that's happened with electronics that Paik and you represent, very clearly, because of the film/video connection, that you do both together. Like you've used Paik's electronics in your films, and he's used your

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film in his tape; you have that crossover. Which must be some form of making yourself comfortable for the transition to the next thing. Since video is not only going to be on tape, and will only exist in its own lifetime, real time. I think we're just about to begin. To do it, we're really going to need that two-way connection from Peking to New York, to do video, and until we have that, we're marking time. We're doing lecture demonstrations. That's what my Videospace Troupe is doing; we're pretending the future is here already, just acting like it is.

"INTERFACE-INTERPLAY: A VIDEOTAPE GAME- (By Shirley Clarke, David Cort and the Tepee video troupe)- First of a series of videotape games designed to interface with a live audience. Basic set-up: 2 1/2 hour tapes each into separate decks into separate monitors placed side by side, played back together. Then as tape A plays back on tape B the same amount of space has been left blank to record a 'live' camera interface with the playback. Cues to go into playback to record mode have been laid along with prerecorded material and blank space on both tape A and tape B so that you can play the inter-face-play game and the tapes are in a sense left unfinished in a manner unique and reflective of the imagination and ability of the people present."

JUD: How is the Videospace Troupe doing that?

SHIRLEY: With different space: inside this room here, in the garden, upstairs, in the bathroom, and I pretend that one's Peking, one's New York, one's Paris, one's Ohio, right. Now I can do two other things now: I can send you video letters because you have the same deck that I have, so we can do that now; that's video, that ain't nothing else. And we can do these autobiographical, what I call Proustian novel, video; you can track your life. Like the junk I've got, the 200,000 tapes which, if you look at it, say, a hundred years from now, is as good an historical image of the time as anything; and it's done by doing nothing- every once in a while turning on something, but not looking at it, god forbid, because then you might do somethign about it. Now, if we could get these real short; a half hour is too long; get them down to fifteen minutes, we could cut out a lot of junk, like editing whcih has nothing to do with video- switching, yes, editing, no- that should be our slogan.

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Because the switching in video is fabulous; it's a performance art. We're all getting to be actors; we're all directors. I was never the film I ever made, I never would be, but I get it out of those tapes. One of my dogs is a movie dog, and the other is a video dog, but the funniest thing is the other night when this girl came here- I do these tapes where everybody who comes through here does a half hour by themselves staring into a monitor, alone, and they take them home, and I call them Totem Tapes, and it's quite interesting how we all do the same thing; so they're in sync. So this girl is sitting there doing her's and we're watching, and she has two cats, and she's called "Malcolm-Bobo" and Max and Morris rush up to her and kiss her. They don't know their names; they know the sounds. They don't see dogs; they hear- like they'll answer any dog they hear on any videotape that plays- when they bark on a videotape, they bark back. So, I'm disappointed because I thought for four years that Max knew his name, but he knew the sound. Here, Malcolm, here, Malcolm- Oh, he just went away. Gee- we just disproved it. We won't worry about that- it doesn't mean anything. These scientific experimtns are never to be trusted. Just make a brash statement and stick by it. Say it often enough and people will believe it. Do you think differently then you did two years ago about video? Because you're one of the very earliest people to ever deal with it, so I'm very curious.

JUD: It's rather like the stage where images or ideas occur to one and they materialize at one time as drawing, or a painting, or a poem- and now they are realized as, this is film, this is video-

SHIRLEY: But what about this thought- that all the other arts at this moment are all trying to do something that is really only suitable to video. In theater, for instance, Peter Brooks is involving the audience at the end of THE TEMPEST; they get up from their seats and join in the marriage celebration. We've seen dance try to do this, and painting- and yet the only art right for it is video. It's built into the medium, into its reality. What's known as audience participation is always a fake I put it into every film of mine, and it was wrong, because I tried to cross a proscenium that existed. There is none, any longer; there is no theater space. We don't all have to sit in one space together to see it- it can be a big group, or one person, and all at the same time have the experience. Now that opening of the world that way is a very beautiful concept- and all the arts are going for it- as in Bucky Fuller's thing-

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and yet video is the one that has it.

JUD: Multimedia tried it.

SHIRLEY: Multimedia was an input you had to have to get to the head of it; you couldn't have gotten here without multimedia. Now, multimedia will come back shortly as we get different size video images, such as a video projector that really works, when we have the flat screens, the round, the triangle, the mosaic screen- and then multimedia, and every input that we have, that we learned from the multimedia days, will make sense. Because, remember how hard it was to get a multimedia show together. I mean, you never got each of those things to work.

JUD: Schlepamedia. It's somewhat true in video still. Especially with cabling.

SHIRLEY: Yes, but it's getting less, and less. When I had that show at the Kitchen and we started at the beginning and ended at the end- that's pretty close to getting it together. Compared to what it had been at the Museum of Modern Art- that was pure chaos, beautiful, but chaos. I meant it to make a statement; I didn't realize the significance of the statement- I was intuitively right- that was organized, bad chaos. But it was good for the Museum- they needed it. But now we are more together, and I have done shows- with just Bruce, Andy, and myself, just three of us- and just blew it apart- it was beautiful to watch it happen. We took that film festival, and that night when it was over, it was like they had gone to the greatest party they'd ever been to- they talked to each other; they hadn't been talking to each other for a whole week- they were all friends from that night on. The thing really ended well. And it had been raining the whole time until then, and usually we do a rain dance, but I said "Let's do a sun dance tonight" and the sun came out the next day- "Look, you need more proof than that, for God's sake" I said. We went around in a circle, and I said it's a sun dance. I gave them a rope and they pulled- a tug-of-war- and one pulled the other over; they played dragon games, until 4:30 in the morning, and then, when it was over, they said "What was it about?" "whatever happened to Shirley Clarke; she used to make such good serious films. What was she doing. So, it's fun, but what does it mean?" And I had to stay an extra two days to tell them it didn't mean anything- It was fun. About time we had it.

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Like the first winter I had video here, people came by and instead of having parties, we did video with each other, and they used to go home high. We had a really good time, looking at ourselves. We turned the camera upside down, and "My God, it's ups ide down." And I remember the day when I was wearing black, and you could through me to you on the screen, and we went througha whole freak thing of how you can see through in video.

"SHIRLEY: We're going to have to change many habits and we've got to understand that most audiences see their role as observers. They are used to sitting back and waiting to be entertained. There's going to be a learning period and I see nothing wrong with helping them... If we see video as a 'process' art, we can use the process of learning in life as a good guide. We need very much as adults to play. To understand that playing is art and art is playing- what's the difference? We've separated these things too long. We've lost the tribal culture and we've lost shamans and the campfire and the group energy that's needed if the rain dance is to produce rain. We have separated the artist from the group. We've gotten to the point now where there are these freaky people called artists and then there's everybody else- we are changing that, and Video is the tool that will let the artists connect back, by interacting with the group- that is, if we can learn to use video properly."

- SHIRLEY CLARKE, interviewed by Antioch's Videoball in  
RADICAL SOFTWARE.

JUD: What's happening now with the Video Tepee?

SHIRLEY: I'm going to move out; I'm leaving it, but I'm going to let it stay here. I can't stand living with people on top of me all the time, you know, I've been squashed into this corner on the floor on a mattress, and everything else is video, and I can't squeeze myself any further over. So, instead of going insane, I'm leaving. I've got this terrific room across the roof in the Hotel (Chelsea) to which I'm moving, which can be latched into here, if I want, but I can close the door and just go away. And the Troupe people are going to have to help to keep this together; I can't do it myself anymore. They're going to give workshops, Synergetic Workshops, and we'll charge for eight sessions, only eight people allowed in each session for two months, for \$110 and lab fees.

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It's cheap, right? The ad in the VILLAGE VOICE is going to cost \$60, but the Troupe will have to meet the rent each month, plus any salaries they get for themselves. I'll teach one or two of the workshops, and my daughter Wendy will do some, and the group are very interesting people, one's a painter, one's a photographer, one's an actress, and one's sort of a psychiatrist. They were in the last workshop thing that I did. The people I'm getting to know are improving. My sister was in the workshop, fabulous, she's a fantastic actress- and it was a mental health trip for her from a deep depression into a whole video thing of her own, out into some kind of socialist education thing that she's into. We didn't talk to each other for years, and I invited her when she was really down, and she was marvelous. It was such a delight to meet her again, and that was a nice experience. So video does good. It's a good art; it's not a mean one. It actually has the potential for doing more good things than any other art form since primitive man sat around the campfire and danced from rain. In exactly the same way, video can act- not separating the artist from the community. They're all together now- one and the same. And the ones with more talent, dance, and the ones who can sing, sing, and them that video, video- but everybody's needed for their energy input. So it's called the Tepee. That's about where it's at.

And then, I'll go away. Shigeko Kubota and I have one thing to do- the Shirley Clarke Accupuncture Festival in Japan, to get our trip paid by the USIA, with accupuncture free. I heard from Shigeko's friends that the Japanese kids really don't have access to video because it's so expensive for them, and that was disappointing because I thought it would be like half price in Japan. But they're made for American and Canadian consumption. You have to be really rich to get it in Japan. The country that's making it, doesn't have it. That's really capitalism at work. The olive oil thing in Spain, no cognac in France, no Scotch in Scotland.

My grandfather, who was Russian really looked like a Tartar- physically, cheekbones and everything. He was an inventor, and always had an interesting East-West connection.

JUD: What did he invent?

SHIRLEY: He invented the self-threading screw- the Phillips head. They're made in Japan now instead of America. That was a big discussion- should he sell the rights to Japan, and he said: "It's cheap labor, not the

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same standards." But grandpa sold out. And we live to get the screws back from Japan in our video machines. I wish he had cleaned up so I could be independently wealthy, but the Stock Market broke- it's too late. I sold the family jewels already- I have nothing left. I should buy land with what little I have left and try to see if I can survive off the land. That's what he'd do. And whatever happens, you can eat.

JUD: Do you think there's any hope for the video funding scene?

SHIRLEY: Not if they don't listen to me, (Laughter) and take my advice and stop spreading it thin and giving a a few people instead enough to get it together once. It's not really a good plan in funding to take a small amount, a few hundred thousand dollars, and spread over 400 people, for the sake of geography, because you can't make up your mind as to what might be good or bad- instead of giving it to three or four people so they could get it together and get it to work. Meaning that we all suffer from being violently underfunded. You know what it takes to get something together, for Paik to do that penis piece. It's very expensive- you have to get this guy, get him undressed, put the camera on his penis on the monitor, and then playback- that's not cheap. But that's video- that's real video. The audience was free, and the guy was fabulous; he stood there absolutely for hours. You couldn't tell if he had an erection or not because the monitor was the wrong was the wrong way- a very smart piece. One of my favorite Paik pieces- Paik's penis piece. It was alliterative besides. And I consider that to be a video experience. Howard Wise ogt a 'poppa' grant for four or five artists; they're going to share \$15,000, including Paik, Woody and Steina Vasulka, and for Charlotte Moorman to do her Avant Garde Festival thing once more. I think it's too much for her, but a work of genius- how she gets that fantastically complicated thing together. Like the video people- more and more, the images are cancelling each other out electronically. Poor Bill Etra couldn't get any of his equipment to work there. We were alright because we were way up on the top, doing the video oracle piece, but only a few people came- they couldn't find us. It was fabulous. Now I hear this year she's going to take over an airplane hangar. The last one is going to be the world- the Charlotte Moorman World Avant Garde Festival, location: The World. I should have put up my Video Ferriswheel on the top of the Chelsea instead of for twelve hours at the Avant Garde Festival at the Armory. I never got to

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see it; I was so busy putting it up. It took 84 hours to put it together, and it ran for two hours, or something. That's not quite the right rate of returns. I keep telling Charlotte, it's too hard- if only I could think of something simple.

"THE VID-E-ORACL- (By Shirley Clarke and Don Snyder) a kit comes with each order for the Vid-e-oracl. The kit contains: 2 20 minute fortunetelling tapes, a set of instructions with helpful hints for would-be oracles; also 100 magic collage cards, chimes and bells, plus a headdress and robe for the oracle."

I've got a terrific one for this year, you know- the Video Portraits, where you draw yourself in videospace- you draw by seeing yourself. You have one person on one camera- they could be anywhere, in Europe- or right next to you- and on the vertical monitor you put a piece of paper and you give them the ink and brush and they do a portait only looking at video, and it's marvelous. You can send people through in a row and you'd get all these marvelous funny drawings. You use shelf paper and you get these video portraits that go on and on, and what's fascinating is that when you put the camera on them, the reality is different from the distortion. The things look right on video, but incorrect in reality, because of what the camera and the lens have done. I have rolls of these things, and you could get them to go around the world. What I thought was that it could be put up in the Museum with monitors and cameras on, so you could see the difference and people could do it themselves, and we could cross the coutry with long, long shelf paper, one long roll with video portraits.

I must say, frankly, that my interests have changed. What it took, the input of making a film, and so many false things in it: the editing period, the showing period, are all separated from each other in a way that's maybe valid in theater for a playwright but, even then, I'm not sure.

JUD: Once again, it's the process, not the product.

SHIRLEY: How right you are. The Living Theatre should have taught us that; how soon we forget. I sometimes remember the image of someone better than they themselves.

## DAVID CORT: THE VIDEO BODY EASEL

David Cort is a video artist working with interactive participation and game forms, and a pioneer member of the VIDEOFREEX group. In 1975, he was invited to be artist-in-residence by then faculty member Jud Yalkut at Wright State University in Dayton, Ohio, and produced an interactive video installation called VIDEO BODY EASEL MACH I as phase one of a two-part video and projection art show, LUMINOUS REALITIES, CURATED BY Yalkut. Following are excerpts for Cort's biographical sketch and his description of the VIDEO BODY EASEL as told to Yalkut.

DAVID CORT: I was born in Boston, Massachusetts on July 3, 1935 and graduated from Brandeis University in 1957.

After traveling in Europe, I was involved in the theater for a while and directed a short Pirandello play called CHEE CHEE at a small off-off Broadway house in New York City in 1964. From Pirandello, my interests started to focus onto interactive environments and I began some processes at the Brooklyn Children's Museum and the Brooklyn Museum, which culminated in two exhibitions : A CHILD'S VIEW OF THE WORLD'S FAIR at the Children's Museum in 1966 and the first community exhibition at the Brooklyn Museum in 1967 which was organized through a community cultural project called OPERATION DISCOVERY.

During this period, I began to involve video in these processes. In 1969, after doing AN INFORMATION PIECE at the Woodstock Festival, I and a few of my fellow artists came together to form the Videofreex, a group devoted to exploring communication processes. We created a non-profit corporation called MEDIA BUS, INC., a media center called MAPLE TREE FARM, and an experimental TV station in the Catskill Mountains also called LANESVILLE TV, devoted to a very small rural audience in Lanesville, New York...

After this, my work became more personal and I did an exhibition called VIDEOGAMES at the Kirkland Art Center in Clinton, New York at the end of 1973. I then did a one-man show at the Kitchen in New York in 1974 called DAVID CORT WITH HIS FRIENDS... In 1975, at the Everson Museum in Syracuse I did TIME PROCESSING SYSTEMS. I have also taught through these years at the Rochester Visual Studies Workshop and Goddard College, Vermont.

My tapes have been commissioned and/or played by the Jewish Museum and the Metropolitan Museum in New York. I have been artist-in-

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residence at the Film Section at MIT in Cambridge, Massachusetts in 1976.

#### VIDEO BODY EASEL MACH I

DAVID CORT: This is it. This is the Video Body Easel Mach I. The piece is essentially a process in which the basic premise is that, in the system, there is no difference between up and down and right and left. Normally we watch television in a specific way- it's set up with a bottom pointed toward the ground and the top is up, and the right is right and left and left. That's what most people think. But in actual fact, there is a mirror which has a completely different right and left. Then a TV is right and left, because in order to read print, you have to have an image which is turned as if you were looking at it from the back, rather than looking into a mirror which reverses the image. But, in order to perceive that, we have to turn a TV monitor on its side (and there are two sides to it) which will show us there is no right and left. And we could also turn a monitor upside down, and then within this system there would be no real difference in directions. We could watch it any way.

Because the videospace is now right above the trampoline, and the trampoline has above it a raised projection screen, so as you're lying flat looking up at the screen, you can obviously see that there is no up and down, or right and left. You could turn around in a complete circle and the up and down would be changed. If you changed from North to South to South to North, you would have effectively changed the direction of the system because you've changed your sense of gravity. We're working in a different gravity system than is normal in TV.

There are two cameras, and then the trampoline which will rise up about three feet, and those two cameras will intersect; a line between the two cameras will intersect a center point in the trampoline, and one camera will be facing from the back, and that's a normal camera, and the camera up top is reversed (it's a mirror image)- and both of these matted against each other will give an exact duplication of each other. That is, one is a front camera and the other is a shadow camera. And, as you move away from the surface of the trampoline, the shadow enlarges and changes proportions; it bursts out.

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The lights are at a very deep angle; they run 3 by 4, all the way through the space. So, as you move away, because of the angles of the lights, there is a shift in the image coming from the bottom (shadow) camera; in other words, it goes far beyond the space. When you're flat on, then the shadow is perfectly matched to your body; but as you move away from it, as you get angles and light, the shadow takes on different proportions, so that by moving your body in that space you change the relationship of the top camera to the bottom camera; that is, the shadow changes in relationship to your body, so that you can then theoretically control the imagery, and both cameras are of course mixed through certain circuitries.

You can change the imagery you're watching up there, and on the sides (through several monitor displays) which will explore the upness and downness, and rightness and leftness of the system (they'll be tipped over and turned upside down in different configurations). So there will be a burst of imagery essentially as you move your body, an illumination of imagery because the shadows will have changed sufficiently as you move to create another image which will be recorded as a "cut-through," like a matte, from a third piece of information which the students and myself will bring in, textural information which will be fed into the system by a videotape recorder, and then the sync from that VTR will support the system, that stuff coming in from the outside, being plugged into the system; so that by moving your body in these textures, you create distortions because of the shadow in these textures, and your body in relationship to those textures, and then hopefully we'll be able to get some sense of space, and the order and form that this particular space is defining.

It's a different sense of space. It's not normal space. It's video-space- it has different rules. Up and down aren't up and down; right isn't right and left isn't left. It's a space in which the figure and the shadow are interconnected, and it's an access space; it's a space into which people can feed information and physically participate in the image-making and the image control.

This is a basic aesthetic in which I'm involved. I believe that people should participate in image-making in TV, and not be manipulated by the images, but actually manipulate the images themselves, that is,

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the non-technoid person, the person who doesn't have any knowledge of equipment should be able to walk into the system and participate in image-making, and the porta-pak knowledgeable person can participate on that level, but essentially all my systems should be able to be participated in by non-technoids, and they should be able to have an experience of image control.

It's a destruction of that broadcast format in both the physical sense and the psychological sense, that is, we're destroying the format of a single channel piece (why can't the monitor be upside down?), and why do we have to watch TV and be hypnotized by it rather than doing something to it? Those are two questions that we're confronting here. And why can't I have a sensual kinesthetic experience with television? Hopefully, the piece will come to the point where people who walk into the gallery can have that experience and come away with it.

It's all using available equipment. We had to mount the video projector so we built a very simple structure to hold it. The room is very important. This space is being used- the piece is conforming to the space. As a matter of fact, this gallery is making the piece as well as the people who are involved. And the process of building the piece is, as far as I'm concerned, just the same part as when the public comes in. It's no different; there will be no change. It will be continuous movement. This piece is not a piece; it's not a work.

It started to work when I started to think about it when Jud and I talked about it several months ago. And it's continuing. At one point, we'll destroy it, pull it apart, and there'll probably be just papers and videotapes left of it, and it will go on that way whenever anyone plays it. But it's a continuous experience- a continuous process. And, right now, it's also in process. You can experience it in a special pass into the space. The best way to get physically involved in it, if you're interested, we have lots of physical tasks.

It's an orthicon projector- Schmidt optic projector. It's got a very bright tube which shines on a lens which then goes out- it's very low luminescence, and that's one of the problems we'll have to face here, and that's why it's almost imperative, you see, how the space forms the piece.

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There is no way out. There is a logic which this space puts on the piece which is unavoidable- that is, the equipment and the space. They make it so that there is no other way out. The projector must be put up into the ceiling because there's a darkness in the ceiling because of the balcony, and there'll be no light up there- the lights will be down here. We're going to get maximum darkness for the lights that shine down here. We need light because it's a live piece- you have to have light for the cameras, so what we've done essentially is to create a light lock on this level and a dark lock on that level, so that there's no other way but to put the screen up there and the stuff down here; unless we reverse the whole thing and put the projector down on the floor. But then we'd have the trampoline hanging from the ceiling. And there's the gravity problem- that's one standard that you can't change. We're trying to change that; we're trying to do away with it, if we possibly can. Another type of decision might be the flying machine. So, from a point, this whole process is inevitable.

When I make a concept, I don't know sometimes what's going to happen because I set into motion a process which then takes over. And I'm out of control, in a sense. The control factors are in the space and the equipment that's available. That's where the control function comes in. And I'm very interested in the way the piece is built because that's where it's at. It's a process.

This is a denial of the product, a denial of the marketplace, a denial of the gallery people, not these gallery people, but the gallery people on Madison Avenue who try to put prices on it, and rip artists off, and make commodities of art rather than it being an experience, in which people, if it's successful, will get insight into something- about space and time.

Also, if anyone wants to input into this system in terms of videotape, and get involved in the system, there's no reason in the world you can't do that also, and make tapes for it. Make a tape to put into the system, and if you stick with it, you begin to see what the rules of the system are, to understand what kind of tape would fit in. It's a different kind of videotape, of course, because it goes into this system, not a regular broadcast system. We have to make a tape that doesn't have an up, a down, a right, and a left. And it's constantly changing and shifting and moving, through these spaces- a different videotape.

PART THREE:

OPEN CIRCUITS:

The New Video Abstractionists

## ERIC SIEGEL: The Electronic Video Synthesizer

Eric Siegel, one of the early adventurers into the realm of video entering via electronics, invented the PCS (Process Chrominance Synthesizer) in 1968 which permits controlled colorizing of black and white videotapes and the EVS (Electronic Video Synthesizer) in 1970, by means of which abstract forms, mostly geometrical, can be created at will in color on a TV screen without the use of a camera. His EINSTEIN tape (1968) uses feedback to produce its psychedelics effects and was one of the first video art tapes to use this technique. Following are extracts from the description of the EVS by Eric Siegel, and from an interview with Siegel by Jud Yalkut, taped by Jackie Cassen in 1970 in conjunction with the FREE TIME WNET-TV, channel 13 broadcast series, the first screenings of experimental and portable video work on New York Broadcast television, supplemented by extracts from a radio interview for WBAI-FM in 1973.

"The Electronic Video Synthesizer (EVS) is an instrument for the creation of visual color information in the medium of video. This information is seen on the screen of a color TV monitor similar in appearance to a home TV screen. The instrument itself consists of a keyboard and a panel on which are mounted a number of knobs and switches. By manipulating the knobs and switches a wide variety of patterns in controlled color and motion may be created.

The colors may be produced in an almost unbelievable intensity and richness. This is possible because the instrument activates the phosphors on the TV tube directly without the intervention of a video camera, and in this manner is able to utilize the full potential of the tube, which the camera does not.

The patterns are geometric formations, either symmetrical or asymmetrical, as the player chooses. These may be held steady on the screen and the colors of the various elements changed at will; or the patterns set in motion and the colors held steady; or both patterns and colors may be changed in rapid succession as the player desires and is capable of producing. The latter procedure may be used to produce a visual accompaniment to mus-

ic, though considerable practice and manual dexterity is required to produce satisfying results, particularly if the music has a fast beat such as rock.

Though the instrument does not require camera signals to produce the patterns and colors, nevertheless camera signals may be combined with the electronically-generated abstractions if the player so desires.

Technically the EVS is quite sophisticated. For example, most video signals are AC plus DC. On the other hand, most home TV receivers are AC coupled, and, therefore, produce signals that are highly inaccurate and result in incorrect brightness level on the TV screen. This video inaccuracy is termed B.L.D. (Brightness Level Distortion). All video signals in the EVS are DC coupled, thereby insuring a complete range from dense black to intense white, as well as accurate color range, provided the monitor is capable of handling such a perfect signal.

The EVS is the instrument of the New Television. Where conventional television is used to inform and entertain, the New Television will be used as a means of self-expression and a way for constructive meditation, of a person communicating with his own inner self.

Because the colors are so intense and the motion so hypnotizing, the EVS helps to expand the viewer's consciousness and brings up feelings and emotions which he did not know he was capable of experiencing. The viewer may be launched on a 'trip' which is controlled by the person playing the EVS, whether he be yourself or another." - ERIC SIEGEL.

JUD: A few words about the colorizer, and also the video synthesizer.

ERIC: For the last two years, out of necessity, I've been into a hardware trip, and in this time I've developed two pieces of video equipment, both of which were developed in San Francisco. I thought I would that I would work better out there. The main project was the Electronic Video Synthesizer, that's like the video equivalent of a music synthesizer, where you have a program board and you can start to set up a whole series of visual geometric happenings in color on the video signals- the screen- and this is designed for video compositions. At the Kitchen last week (NOTE: In 1973), I did a piece called YANTRA MANTRA with it, which was quite favorably received.

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JUD: Yes, I would say so.

ERIC: And the other piece of equipment is the colorizer. There have been, by the way, business and technical snags to getting out the EVS, but it is something that people should be able to go out and get.

JUD: The EVS operates predominantly with electronic input?

ERIC: On the EVS, you just have to put in sync, and everything is composed right inside of the synthesizer. But you can put in live cameras too, and do things that involve pictures and synthesizer images.

JUD: It could be used with a music synthesizer as well so you could synthesize both image and sound.

ERIC: Yes, I suppose that's the ultimate next step. But I'm not going to take it. (Laughter)- would be a total synthesizer- a synthesizer that is a video and a music synthesizer all in one box, and is built to compose totally.

JUD: That could be a one-to-one relationship between sound and visual?

ERIC: What's exciting visually, if you listen to it through an amplifier, is not always very exciting to listen to at all. And so, to make a total synthesizer would involve a whole interfacing system that interpreted the video signals into an audio signal that would have the same equivalent feel to it, but it would have to be changed.

JUD: And use that as source material for composing.

ERIC: Right. So that's the EVS, and the other piece of equipment I've been developing parallel to this is the Color Synthesizer, or Video Colorizer, as people tend to want to call it. That takes black and white video signals, from 1/2" tape, like people who have been shooting with their portapaks, and it allows them to synthetically color the picture. This doesn't work out well for interviews or straight types of photography, but it does work out extremely well when you move into the more visual and abstract things.

JUD: More video process imagery.

ERIC: Right. And I found it also works out well with shots of natural mountains, sky, water, trees, nature, things like that colorize very well. So that's the second piece of equipment.

JUD: What do you think can be done to improve video as a healing technique? To improve the vibrational food that people get from it?

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ERIC: I think that depends wholly on the particular video artist who produced the video, that they have to expand themselves- they have to go to the top of the mountain first, and then through their tapes show everyone else the top of the mountain. And I haven't met too many who have gotten to the top at all yet.

JUD: And also, as they say in Zen, when one goes to the top of the mountain, after achieving nothing, one must return to the marketplace.

(Laughter) Wasn't there, by the way, an earlier version of the colorizer?

ERIC: There were a few earlier versions, as a matter of fact. I would put it another way- it has been under constant development and has gotten to a stage now where I am totally satisfied with the way it works. You see, all the previous ones that I made and that other people have made have many problem areas; you couldn't get the colors clean, within the areas and the borders; they would always bleed into the next thing and smear and oscillate.

JUD: Some people did like that effect, and still do.

ERIC: Yes, there are some people who want this wild type of smeary effect, but I don't. I don't dig it at all, and electronically, it's totally inaccurate, and I don't even agree with the aesthetics of it. So, the way mine is right now, the colors are very clean and totally within their borders and areas. At times it looks like chromakey, where you see two pictures cut in so neatly and cleanly that you're convinced that it is one picture.

JUD: We can consider the synthesizer as a tool for the transmission of energy.

ERIC: Karma energy.

JUD: Karma energy, in what sense?

ERIC: In the logic sense. I think the synthesizer will enable Western man to take advantage of the technology that he has created and only put it to the use of pro-life, pro-spiritual powers. I think that the synthesizer, used by people who have advanced to higher levels of consciousness, whatever you wish to call them, can be used in that way so that this can rub off to an extent onto the people at home watching it.

JUD: We mentioned earlier the possibility of having an interface between "electronic gurus," as we'll call them, who can speak through this transmission to each other, creating perhaps an energy field which is capable of enveloping a larger number of people.

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ERIC: Hopefully, yes. If this should continue, perhaps with the energy that is transmitted being **received** by other video gurus, so to speak, they would pick up on that and send a new flow of more concentrated energy back out into the airwaves once again, and start not an atomic chain reaction, but a psychic chain reaction.

JUD: A psychic chain reaction which in this case is being initiated totally by electronic means, by the direct electronic interpolation of the performer-guru in reaction to his external and internal environments.

ERIC: Right. In other words, video, because there is this portable equipment, because it is being used to make this segment which will go out on the air now. Because there is this equipment, it means that you don't have to make videotapes in the environment that we're making them in now, and we're only isolated from the horror city by hundreds of feet (NOTE: This interview was taped in Central Park.) and so the karma of New York City is still upon us, and we can't escape that, and it will come through on this tape. But this recorder that we're using can be taken out where there is good karma to make recordings, and then the tapes can be sent to places like New York where there's bad karms, and good karms can be transmitted through the airwaves.

JUD: The synthesizer, too, is also basically a portable piece of equipment and can be used to broadcast quality transmission, or for 1/2", or for any type of equipment.

ERIC: Yes, and as a matter of fact, it can be worked on batteries. You can have a battery-powered tape recorder, a sync generator, and a video synthesizer, go up to the top of a mountain and do it.

JUD: Right. That seems to be the type of environment that it might well find a home in.

ERIC: I think that technology is finally going to go into its second phase of existence. To help mankind, not for war.

JUD: This is a very vital aspect of what we're talking about, because basically the use of technology up till now has been only one small percentage towards the beneficial use of mankind, as per atomic energy. The comparison of budgets of the amounts spent on defense as against the amounts spent for the equivalent types of technology in beneficial aspects has always been one of the problems. More of the technology in

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the hand of the military and business should reach the hands of the creative aspects of society like the artists and the spiritual teachers.

ERIC: Right. As a matter of fact, there doesn't seem to be any let-up in this state of affairs. It seems that there's a great apathy that is over all of us now, kind of a feeling that it's not going to work, that we're getting nowhere, and it's not true. This television broadcast is proof of the fact that we're going ahead.

JUD: Now to talk about the nature of the synthesizer itself. It works through the generation of the three basic colors of the video system—red, green, and blue.

ERIC: With the addition of magenta if you want it.

JUD: Is that magenta, cyan, and yellow, in terms of pure color light mixing?

ERIC: Right. In other words, you have four colors that you can work with, and the harmonics thereof, or you can choose to work with the three television primary colors. It's a positive color mixing in that when you have two colors mixed over, you get a lighter brighter color where the crossing occurs.

JUD: In terms of the generation of forms, there are some circular forms, but a great many tend towards the diamond. They seem very much related, in a sense as we've seen them today, to the form of the video mask as we see it. Can you make some comment on the range of form. We've seen differences in tempo and oscillation also, but what range of form is possible? For example, could the machine generate a completely circular mandala? We've seen other types of mandalic images today

ERIC: Not in its present state, but the machine is in its infancy now. It was born just a few months ago and conceived a year ago. When it grows up it will be the machine that everyone has been waiting for. And the most important thing about it is that it will be that machine, and it will go directly onto the airwaves, and it will transmit out of those 50,000 watt transmitters, and it will go out and reach everyone.

JUD: The machine has several oscillators in it. Is that correct?

ERIC: It has a limited number of oscillators right now and I have ideas in my head about what the new circuitry should consist of, plus a new way of interfacing that I have been thinking about for a long time is the direct electrode system of picking off the EEG, electrical impulses from the brain, so having an individual just sit down and think and the

machine shows it up. But I'm not working on that now.

JUD: They've taken EEG, for example, of Zen monks in meditation, or of yogis in samadhi, and they've found a direct correlation with particularly alpha waves, and also in terms of the visualization process, the theta rhythms have figured in. Of course the alpha range is between eight and thirteen cycles per second, and four to seven for theta.

ERIC: They have found that when they're in a state of meditation that they go right into alpha and stay there constantly. But alpha is nothing more than a sine wave going up and down, and it has to be interfaced in a certain way so that picture-wise it comes through with some intensity as to what alpha is, that state of consciousness. So there has to be another interface made. That's part of the reason I'm not working on it yet.

JUD: The oscillators in the synthesizer are basically capable of generating which waves- sine, square or sawtooth, or the whole range of electronic waves?

ERIC: A limited number of electronic waves right now, but it has the capability of accommodating far more circuits and waveforms and so forth. It has been designed to be expandable to no end.

JUD: It can be expandable in the sense that Moog, Arp, and Putney synthesizers in music are, modular, and you can add so many more components, and generate so many more harmonics, perhaps.

ERIC: Yes. Like I'm studying biochemistry now and there are parallels to things that the synthesizer does.

"The Electronic Video Synthesizer was created to enhance the interface between the Video artist and the people. Each human being is enshelled in his own perception of reality. Rational logical communications have their severe limitations. The communications which take place on the Aesthetic Abstract level- deal with the inner tune of a being. It's like the DNA code of the artist speaking to the world- Since we all perceive different worlds, in the same world- it becomes our necessity to find witnesses- when we find the ultimate witness...we find love. The current trend towards Religion and god is in a way a frustrated attempt to find the ultimate witness. One can not do without a witness. What you see on the screen is my attempt to get a witness deeper into your being."

## DREW BROWNING: THE DAN SANDIN IMAGE PROCESSOR

Dan sandin, a physicist and designer who teaches and practices art at the University of Illinois's Chicago Circle Campus (UICC), is the designer of the Image Processor, an analog video processing system. The modules of the Image processor, analgous to a modular electronic music synthesizer, separate, contour, extract edges, do separation effects, fade, superimpose and colorize electronic video signals, and in effect simulate the combined functions of a video switcher, keyer, colorizer and special effects generator, complete with its own sync generator. Used by Sandin, and other Chicago video artists like Phil Morton and Jane Veeder, in conjunction with the digital computer image transformation abilities of the GRASS (Graphics Symbiosis System) computer language developed by Tom DeFanti, a Phd. in computer program designer also teaching at UICC, a humanly useable digital/analog image generation system has been effected, for video image modulation and use in live interactive performance situations.

"The Image Processor may be copied by individuals and not-for profit institutions without charge. For-profit institutions will have to negotiate for permission to copy. I think culture has to learn to use high-tek machines for personal aesthetic, religious, intuitive, comprehensive, exploratory growth. The development of machines like the Image Processor is part of this evolution. . . . in brief, the Image Processor accepts signals =  $\pm$  .5 volts 75 ohm including video signals. These signals (images) are distributed into (usually) a number of processing modules and then (usually) mixed out into a standard color encoder (output module). Since most of the processing modules are voltage controllable and control voltages and images are interchangeable, fantastic combinatorial power is possible."

- DAN SANDIN.

Working at the so-called Circle Graphics Habitat and Newspace at UICC, a close knit group of young Chicago video artists, who have both studied with and worked with Sandin and DeFanti has evolved, including Drew Browning, who has toured with interactive shows utilizing the Image Processor. The following interview with Drew was recorded during one of

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these events in 1977, and is concerned with the Image Processor itself.

JUD: How long have you been working with Image Processors (IPs)?

DREW: Since late 1971, or early 1972.

JUD: Soon after the design of them?

DREW: Right. I actually was around when Dan Sandin was designing them. I helped him build modules as he was designing them.

JUD: It might be interesting to talk about the early history and genesis of the design of the IP.

DREW: Well, I can give you my point of view of it. Dan would be the real person to tell it. But I can tell you the story that Dan tells of how he conceived of it. It goes something like- He was waiting for a friend to come in on a train, and sitting in the station, and he came up with the idea of a video machine that would have the same kind of properties that a Moog synthesizer had, meaning a video synthesizer, and he set about to teach himself the electronics to do that.

I'm totally amazed by the design intelligence, the decisions he's made, now that I'm in the position to do design stuff for this new system in the works. Thinking about doing my own IP, I've thought about control structure a lot, and how I would do it if I were to start from scratch, and it allows me to go through the same process that Dan did, and I realize that Dan really thought it out very well. It's a wonderful machine. As soon as he started building it, he incorporated it into student use because he felt the need that students could use it. So he constantly got feedback from students on what they thought and how they could use it. So that had a big influence on how it was designed, and then it was incorporated into a class.

JUD: How do you think incorporating the designing and learning process affected the total design, rather than if he had designed it as an instrument for himself, and then disseminated the information?

DREW: He had the advantage of coming in it from watching artists use it, and seeing what kinds of biases they have built in, such as how they're used to controlling color, in a mixing way. One way to work with color in video is to have, instead of the red, green, blue system where you mix amounts of these, or amounts of the primaries, a different system where you control color by controlling hue, saturation, and luminance

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or brightness, which is something foreign to artists who are used to mixing pigments to get those variables. So I'm sure that had some part in his decision. Also he had a lot of things in mind about using it as a performance instrument.

JUD: Right from the top.

DREW: Right. So that things would be readily identifiable without labels. That had a lot to do with the patterns that the knobs and connectors created. Those configurations were very important for going to the right knob without the delay of having to read it, because generally in performance you're operating in low light levels and you couldn't read it anyway. So the color coding and the size of the knob are important.

JUD: It's rather similar to a musical instrument.

DREW: Right. He had that in mind. Once you get to know a music synthesizer you rarely use the labels. It's one of the first criticisms of people who haven't used the machine: "There's no labels, how can I use it?" And yet that same person, after they've used it, says: "It doesn't need labels."

JUD: What about the design design to use patch cords instead of a matrix switching system?

DREW: I've thought that out too. Patch programming has the advantage of maximizing the number of possibilities. As soon as you go into a matrix system, you have to limit, you have to figure out how many possible interconnections you're going to allow for, and you can't get all of them. But with patch programming, you can go from any point to any other point. You can take outputs to inputs, inputs to outputs; even if they might not do anything, there is that potential to do it. It's things like that that create effects that I've never seen before. Students are constantly playing around, plugging in cables and coming up with effects that blow me away, because I wouldn't have thought about it, because it doesn't make sense conceptually. The disadvantage of patch programming is that you have to reach through all of these cables to get at any of the knobs.

JUD: That relates to the earlier video concept of Spaghetti City.

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DREW: So my personal approach to it is that when I put up a patch, and I usually put up a rather complex patch and that means a lot of cables, I usually don't use the face of my machine for the control. I usually externalize control, so that I can become more intimate with my controls rather than worrying about where the knob is, and what the position is; I put the controls on joysticks and put them in my loft, and just sit there in front of the monitor so that I can become very personal or intimate with the monitor image. It's a kind of human interfacing which I think is very important in this kind of work. So things like joysticks and voltage control capabilities allow for that, and other interfacing devices.

JUD: More remote control.

DREW: Exactly. All you need is the remote control device and the monitor. Though the machine is here, I could be down at the other end controlling it. Things like that interest me very much- some kind of external control that will control the image. In the case now (NOTE: A Video Sketchpad Interactive piece.) the line of a pen is changing the image, or perhaps a person's voice, and all that kind of control stuff, including biofeedback.

JUD: What about concepts of videospace? Many artists are working at defining it in many different ways: game patterns, formalistic patterns, videospaces that expand the environment, or videospaces confined to the monitor frame. How do you approach it?

DREW: It's very hard to describe. I usually tell my students that you have to feel it before you really understand it. No matter what you say, it doesn't come across until you really feel it. So many people don't understand it.

JUD: But how do you approach the sense of videospace particularly in real time performance?

DREW: OK. It's very close to the idea of real time, that it's a space that affects you in real time. What your actions are, are due to the monitor. Without that image, without that feedback, you wouldn't be able to do what you're doing. Real time is very important and a lot of people don't emphasize that enough. The IP allows you to do that.

JUD: Of course, video is the original real time medium. The electron gun of the tube shooting out through the screen being a direct neurological link between the electron-photon conversion and the eye-brain.

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DREW: And that can't help but influence what you do right now. I think it's very close to music. It's very similar to other kinds of space with which you get intimate. But I think that the fact that you can make a mistake and feed off of that is very much accentuated.

JUD: That's the sense of discovery.

DREW: Definitely. And you can get very complex with the mistakes, you know. There are so many mistakes, that it becomes the whole piece- a number of mistakes that work very well.

JUD: What do you think of the new sense of the artist becoming his or her own technician?

DREW: That's very important. It's something that I try to emphasize when I teach. The phrase, independent video producer, requires one to be both an artist and a technician. Meaning that you don't rely on somebody else to maintain your tech, and I see that happening all over the place. The more you know about the tech, the more intimate you become with it, and it influences your art. Now, it's also very easy to get too involved with the tech.

JUD: You realize that there are a lot of people who are very counter to the idea of the artist working with technology.

DREW: Oh yes, I realize that. I knew nothing about electronics before I started working with video, and it's something I taught myself.

JUD: With video you can also someone like Eric Siegel who came into video from electronics.

DREW: And it's a different attitude.

JUD: Well, it's different in certain senses. Eric is like the chief engineer, I feel, of the video underground, in many respects. He's always tellign people how to get up to specifications and how to improve the quality of their signal. I think that's very important. But he's also aware of the artistic end. He just entered video that way. So many people enter from so many ways. Video art is just ten years old.

DREW: I agree with all that. It's working very well with the pattern of art. It's very exciting.

PART FOUR:

SEEING AND SOFTWARE

I. THE FILMMAKER  
AS VIDEO ARTIST

THE FILMMAKER AS VIDEO ARTIST: 1. SCOTT BARTLETT

"Television sort of found me. I had been superficially exposed to it, as my friend Tom DeWitt was in the TV Department at school. That summer, another friend, Michael MacNamee of Washington State University, said he could set up a TV studio situation for me at a station in Sacramento. I didn't know what would come of it, but OFFON came of it. And now MOON has come of that. Going into television doesn't mean that I've abandoned cinema. It's a matter of expanding my technical vocabulary. I'm still doing METANOMEN things, and I'm still doing OFFON things. But it's all adding up; I'm creating a new vocabulary."  
- SCOTT BARTLETT in Gene Youngblood's EXPANDED CINEMA.

JUD: How did you first start working with video in relation to your filmwork?

SCOTT: The first experience that I had was making OFFON in 1967, and that was one of those magical occurrences where I met Michael MacNamee of Washington State University, who had been working at a television station in Sacramento, and he was on his way there to do some experiments at midnight, and he saw my light show material and wanted me to come along and plug in.

JUD: You'd been working in light shows and multiple projections-

SCOTT: For about a year before that I'd been setting up light shows.

JUD: Using self-matting images with black backgrounds and high-contrast films. How about liquid projections?

SCOTT: I would usually commission someone to do the liquids for shows.

JUD: Yes, liquids take quite a bit of devotion.

SCOTT: And also one must be attached to that process all the way through, including the presentation. Whereas I can make the film material for a show and not be involved in the show itself, except to see it set up. So, I was thinking that I would bring a collection of some of the film loops I had made, as a promotion piece for some of my loops. It wasn't quite clear that light shows were going to drop dead a month later.

JUD: Nobody could foresee that.

SCOTT: Nobody knew. It seemed like it was going all the way, whatever that was. So we went to this television station with the idea that we

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would fill out and electro-vdieograph this material, and then make a film. That was at Channel 3 in Sacramento; it was the only time we went there. Typically, we weren't invited back, not because of any particular reason. It was just that our material wasn't the sort of thing that the station was able to use.

JUD: Or didn't know what to do with at that time.

SCOTT: Curiously, what they did in the end was to super our materials that they had on tape over people toasting with chanpagne glasses for a New Year's Eve midnight show. So they were able to use it, but in a very curious way.

JUD: What kinds of things did you actually get done there, in the process of working in a studio? What discoveries were made at that point?

SCOTT: One discovery was that it was a great advantage in having the material in loops, a loop being a film strip that's connected from its head to its tail. That's how we would present the films in light shows. We would have a section for each song, and load the projectors with a particular set of loops to match a particular set of slides, and matte some overheads and liquids and everything. So, in a way, we were making mini-movies to each song. It turned out that it was great to have the films on loops because we could set up the film chain, which is a projector and a video camera watching the image, those two instruments bounce together.

JUD: Usually with a multiplexer which can also switch between slides.

SCOTT: Exactly. And live cameras in the studio. We could then make all of our adjustments on the control board while the loop was playing until we got a thing set up in a very precise way, thanks to the fact that it was a loop going on and on and on, until we had it balanced the way we wanted it. We weren't really trying to catch up with the images as they were changing.

JUD: Were you adding color electronically at the time?

SCOTT: Exactly. Our only real color source was the liquids projected on a rear screen. I don't think I mentioned that that was Glenn MacKay doing that. He had HEADLIGHTS with Jerry Abrams at the time.

JUD: And then later he toured with the Jefferson Ariplane.

SCOTT: Right. Then he came to New York and worked at the Fillmore East.

JUD: And was also at the Woodstock Festival for that matter.

SCOTT: That's right. So our sources were these: we had filmloops, which

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were black and white, on the film chains; most of them pulsed also which meant that when two or more images were being fed through the special effects generator, one image would want to take precedence over the others, because we were using the key as opposed to the super of the images.

JUD: Was that a black and white keyer?

SCOTT: It was color keying in the sense that we had boosted the color source all the way to the point that it was interpreting white over black in terms of color.

JUD: And levels in between, the gray scale.

SCOTT: So that was making it color, but we also had liquids as another color source which gave a range to the colors. Maybe the liquids wouldn't be in focus, but it would bring some other variations in color, because one loop, for example, would be alternating frames with black and white, with an image on it, and say for two frames where it was black, the other image was going to come in stronger, and when it was white it would take precedence. But that would happen 12 times per second (at 24 FPS). So that was a major electronic battle with all those sources, fighting for space on the screen. So an awful lot of the effects that were those little electronic dead bodies along the edges and fringes of the image, where the really heavy action was going on. We did feedback which is filming the monitor with a TV camera, and then by putting the information back on the same monitor which was being filmed, and since the image that's put back is likely to be smaller or larger, so that the camera's now seeing two such images, but of course now the information is fed back, and that goes on infinitely-

JUD: Like a tunnel of mirrors.

SCOTT: And I happened to have some loops that were already set up perfectly for that. I had a loop which was made of two halves of a face, that were supered out of sync, and I was zooming on the face as the face was rocking, and I was also panning with the rocking. So this face, if it can be described verbally, was the left side of a face rocking and zooming towards the camera and then back again, with the right side of the face catching up to the left side of the face, just out of sync, and going back. So the feeling of that film was compounded-

JUD: With feedback added-

SCOTT: So that this face then had a trail like a snake trail, going off-

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JUD: Which also uses the decay rate of the video phosphors, the beam lag

SCOTT: That whole experience was a total of about four hours, running until four or five in the morning.

JUD: That's par for the course in terms of studio time, in a professional quad studio-

SCOTT: And also par for the course in terms of the time of day, when that kind of stuff can happen. (Laughter) I didn't have any exposure to video again for a long time.

JUD: The end result was on tape, and became OFFON.

SCOTT: It was on tape, but we also kinescoped it on the spot-

JUD: While it was happening-

SCOTT: We rented a camera, a modified Auricon-

JUD: With a TVT shutter to correct for the 30 frames per second of video

SCOTT: Right. And filmed it right off the monitor.

JUD: So they kept the tape and you were able to have the film-

SCOTT: And they taped everything, but we only filmed when we got the thing set up the way we wanted it. And we had a zoom lens on the kine camera, so we were able to compound the zooms that were happening with the studio cameras-

JUD: Did you have the union cameramen?

SCOTT: No, we didn't have the union cameramen, but that's a secret.

(Laughter) There was only one person there who was employed by the station, who was taking care of what was going out on the air, the engineer, and somehow, there was never any communication between us. And I think as the night went on, he grew to resent us, and our freakiness and our enthusiasm, that perhaps we would spawn a kind of enthusiasm that would mean the end of his job.

JUD: Which is still prevalent in some studios.

SCOTT: Now and then, he would write his commercials in over the film, so I saved a bit of that. In OFFON, there's a place where a motorcycle occurs, and people ask me: "What's that about?" And the reason it's there is that the film, even as abstract as it is, is like all my other films; it's finally personal and it's like a little scrap of a diary, and I like to take a bit of the good and the bad, all the flukes, and keep them.

JUD: The motorcycle comes in towards the camera, shot from a low angle.

SCOTT: It's actually a nice image. It does not though really fit; it's not quite as outer-spacey.

JUD: But that was from a commercial-

SCOTT: Yes. A real time insert.

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JUD: You didn't formulate the entire form of OFFON there, but reworked the material afterwards?

SCOTT: Yes, but not so much. Actually, when you analyze the film, it does pretty much like a catalog of film loops.

JUD: Yes, I think it is one of the more episodic of your films. You started to unify the structure more in the later films.

SCOTT: Actually, I had the idea that I was going to make that film be the vision sequence of another film about a woman who goes to the beach and meets herself, based on an acid vision that I had at this particular beach. And two things happened. One's an interesting story: one of the things that happened was the film itself took off, under the label OFFON. It won some awards and it was recognized, and I really didn't want to tamper with it after that.

JUD: That was your second completed film.

SCOTT: Right. But the second thing that happened was that I took this woman to the beach, thinking we would discuss the film and plan out the sequences for the woman who meets herself at the beach movie, and she and I really didn't vibrationally mesh so well. It was coming to me that I wasn't going to enjoy working with her so much, and I gave up the idea in the process of going to the beach. Once we got there, it was all fogged over; we really couldn't see it, and we thought of scouting some other beaches. So we drove down the road and came to a Ranger station in a gate and there was a guy sitting on the Ranger station steps and he was dressed exactly as I was, all jean clothes and boots, and he had blonde curly hair, and we both noticed that we looked an awful lot alike. (Laughter) And I asked him what his name was, and his name was Scott; same as mine. So I felt the real life story sufficed.

I have another story with a similar feel. There was a movie I was making called THE END, and it was about technology run rampant. I had collected footage from old British newsreels, mostly long Industrial Revolution shots of corridors of people working on machines as far as you can see, that very heavy Second World War black and white, ugly, sooty Industrial Revolution stuff. That in a way was the bulk of it, but it started out abstractly, and went through that phase and came back to an abstraction. I had never made a workprint of that film; I had been working on the original and carrying the footage around, especially footage of pulleys, cogwheels and wheels, doing a video feedback re-interpretation of that footage. Then I finally had it all together, the final THE END movie, and

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I sent it to the lab to have them put it through their scratch removal machine-

JUD: The liquid gage process-

SCOTT: Yes. Because the bulk of the materials was from old prints, and they put it through the scratch removal machine and immediately washed it, and washed off all the emulsion. When I heard about that, it was a shock, but it was mitigated by the irony of the fact that the theme of the film was precisely what had happened to the film. And, in that same way, both of those movies were lost. But, at the same time, on a more invisible level, they're always there.

JUD: Right. What was your next encounter with the video medium?

SCOTT: The next thing that happened was that I got teamed up with some people to make a show called TOGETHER. We were making the pilot first for a series, and the pilot was an hour and a half long-

JUD: Was this in San Francisco?

SCOTT: This is now a station in San Jose. This is another destruction story, (Laughter) We worked four months; there were six of us, and the show included OFFON and a rap discussion- a talking panel- with some of the known folks around during the Psychedelic time. They were talking about the I-Ching and astrology, and the idea was to express our culture to the larger culture, and we filmed that in a particular way, so that their faces would be talking, one within the other, or lip to lip, or eye to eye-

JUD: Through the video switcher-

SCOTT: And then there were little vignettes that I made as well, with the musical background that would ride in and out of that. The talking thing took about a half hour of the whole show. The Grateful Dead were there with their whole family. We had a kind of party that we filmed and little poems using them, and we had a nice show. The sponsors had approved it, and it was going on the air, and one night, the master for that show and the originals for that master, and the originals for subsequent shows, which were all stacked neatly in the manager's office, and someone took them one by one and erased them-

JUD: Totally deguassed them-

SCOTT: And not by accident. I mean, it couldn't have been by accident. They were put back carefully in place the way they were, but they were all erased. We think we know who it was, one of those technicians who was always strangely not there at crucial moments. Again, one of those subtle battles that go on between different kinds of people.

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JUD: Most often between union and non-union people-

SCOTT: That's what it often boils down to, just that. So that was the end of that show, except for the fact that I had kinescoped that rap part, so that I could edit it more tightly than was possible on the equipment at the station.

JUD: Did that become A TRIP TO THE MOON?

SCOTT: Yes, that became A TRIP TO THE MOON.

"A TRIP TO THE MOON (1969), 16mm, 29 min., B&W, sound.

A discussion of possibilities for man's release. - Stan Brakhage. 'Seven young men, each of them involved in one of the arts, talk for the greater part of this film. They are involved in a discussion of mystical processes important to them. Their conversation is edited so that ultimately the discussion becomes a mantra, evolving around the nature of these young men & the mysteries of their universe.

There are three distinct episodes in the film that are apart from the discussion and which belong to the private world of the filmmakers, Scott Bartlett, and Tom DeWitt. There is no dialogue, just rock music...Filmic collages (composed of almost totally abstract imagery) translate the mystical implications of the discussion into contemporary iconic language: the external world used as metaphor for the internal world...One of the more spiritual aspects of electronic manipulation of this film are the 'accidents' which occur in the process and which reveal an electronic meaning in harmony with a universal one..." - MISS PEACHUM.

JUD: What did you do further to it?

SCOTT: First, I released it as my next movie-

JUD: As it was?

SCOTT: Yes. It was ponderous. And it was a lot of movie, being a half hour, and it really didn't have the intensity that I wanted it to have. So then I spent about a year, at that point I got a grant, so I traveled up and down the coast. I went to several stations on the West Coast, using that material in different ways, making loops out of it, which I had done with OFFON, and finally coming up with MOON 1969, which was by then in color, and half the length, and full of a lot more voyage potential.

JUD: How much of the material from A TRIP TO THE MOON was actually incor-

porated into MOON 1969?

SCOTT: Probably about five minutes worth-

JUD: That's around the middle section, the control room and talking sequence. And there was an I'Ching section also in MOON 1969.

SCOTT: That's the stuff. And it was different from A TRIP TO THE MOON mainly in the balance of the space versus the words. In A TRIP TO THE MOON, there were lots and lots of words. Little vignettes would attempt to illustrate that which was being spoken about. But MOON was the other way around; it used passages to complement the images and the voyage that you were in, so that when these people were talking about their various personalities, as if they were in layers, their face would be, while they were talking, in feedback across a seascape, or timelessness, or time and space. All those things were played with, visually.

JUD: There's an image in MOON 1969 with a little figure that goes plummeting down through the void of the clouds which resembles computer animation.

SCOTT: It is the Computer man, Mr. Computer Man, the one that was developed by Boeing, I think-

JUD: You got hold of a print of it.

SCOTT: I got it from Boeing when I was in Seattle. That was part of the trip up the coast. And he represents himself in the film, our projected illustration of a man, based on the Leonardo DaVinci drawing-

JUD: Right. The man in the divine geometry.

SCOTT: Right. That's our twentieth century equivalent.

"The magic of the film is its totally undefined meaning, the purely visceral message. The message could be called a code that we're trying to learn about, a code for connections to new space and new consciousness, a code for making it to the moon metaphysically, paths for your mind to get out where you can reach anything: the stop-frame action means mechanically defined space and time and the feedback layers are like accordion time- all the times stacking up on top of one another... Your mind goes from one understood state to another understood state and you realize that you've voyaged in that process."

- SCOTT BARTLETT in Gene Youngblood's EXPANDED CINEMA.

JUD: What happened next in the video odyssey?

SCOTT: That might be coming close to the end of it.

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JUD: You never worked at KQED's Center for Experimental Television?

SCOTT: Well, I hung around there a little bit, but I never did use their facilities there. Most of the rest of that work, I did some work with a Slo-Mo in New York at Videotronics.

JUD: That's a disc recorder-

SCOTT: It takes 30 seconds at a time, and you can slow it down, or speed it up to whatever speed you want. It's quite complicated for that effect

JUD: And also a very expensive piece of equipment-

SCOTT: Yes, very expensive. They're not many of them in the country.

JUD: These use them for instant replays of sporting events.

SCOTT: And that 30 seconds is probably the limitation of the replay. Some of that stuff shows up in SERPENT, but I had already done slowed down things on the material in film, and it came out crisper, using an optical printer and step-framing it.

Also, I did another tricky thing, which was to hold a single frame such as of a flame, which appears in SERPENT; hold that frame, reprinting it enough so that I could dissolve from one frame to the rest, so that you don't get the jump but you get a slow metamorphic change from one flame frame to another.

JUD: How many frames was each frame held?

SCOTT: Well, 50 which gave me a 16 frame dissolve at each end, and enough space in between for the printer to switch.

JUD: Which images in SERPENT were done on the Slo-Mo? The video images?

SCOTT: Yes, the stuff on the little box, though to tell you the truth I can't think of any shot in that film that I'm sure I did on the SLO-MO. I think maybe just a little burst of the color horses that are right over the flames. That's about all.

JUD: Are the video images in the little box drawn from newsreels?

SCOTT: They're from broadcast television-

JUD: There are Nazi soldiers marching-

SCOTT: Right. And every Western and Italian Steeve Reeves movie spectacular that came through my tube during a three month period. (Laughter)

JUD: You filmed directly off the tube?

SCOTT: Yes, and I also recorded it in black and white on one small B&W recorder-

JUD: A table deck.

SCOTT: That was actually not a good experience, and I wouldn't recommend it, except as time goes on I can conceive of getting back to such a thing again.

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"SERPENT (1971), 16mm, 15 ,im., color/sound, Sponsored by the Guggenheim Foundation. The serpent embodies the primal chaotic life force in mythic symbology. SERPENT uses natural and electronic imagery to particularize this creative force. The visceral impact of this marriage of metaphors brings about a union of irreconcilables, fire and water, nature and civilization, extremes of hot and cold." - SCOTT BARTLETT.

SCOTT: But there's something insidious and unhealthy, I think, about broadcast television on the whole, and when you get intensely connected to it, as I was then, then it seems there's bad chemistry, whatever the poison is-

JUD: That might seem to be inherent in the system.

SCOTT: I don't know. I just have the idea; my own personal use of video has been as a fine art; I just used it aesthetically, and I've used the grain as an element itself, and I've used the technical possibilities for themselves, for their own sake and what they mean, what they can be used for. There's still a long way to go there. There's an electronic truth, I think, if I can find the right harmonic connection to that system, I think we can probably develop more elements of a visual language.

JUD: There are a good many video workers who feel that the video scanning pattern is very much a teleological extension of the whole neurological system of human beings.

SCOTT: Well, I would agree, especially if it were the spiral-

JUD: And helical scan-

SCOTT: Yes, I think that's closer, both to electronics and our internal systems, than the left to right which is the Western book fixation. I think the helical scan could be applied to any scale or any grain, and any number of dots.

JUD: What differences do you see in your experience in the tactility between film and video images? And also the interfaces that come from the brushing of the two, and combining them?

SCOTT: The main thing that happens, it seems, is that the grain and the shape of the screen carries a connotation of technology, so I've used it that way, in juxtaposition to more natural images, and it heightens the clarity of the background, or the next scene, or however I'm putting one against the other.

JUD: Like the moving landscape image in SERPENT.

SCOTT: Right.

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JUD: With the sunspots coming almost through the image-

SCOTT: So when that grainy image appears, the crispness around of that space is accentuated. It becomes more real and anatural. And it's that contrast that I was working towards for a long time, ever since OFFON, ever since I had wanted that to be the vision movie. And for myself, I think that I'm going away from, at least temporarily, from using video, since it has come down to such a fine thing. I've made by statements about technology, it seems, and there are a lot of other thingd for me to explore, and I would finally rather be tripping over vines in a forest than coaxial cables in a studio. (Laughter)

JUD: Have you worked with ½" technology much yourself. You said you recorded some things off the air.

SCOTT: Sitting down in one place was the bulk of that. I did have a portapak for a while, but that's the other branch of television, it seems, that's immediate media-

JUD: Video as opposed to television-

SCOTT: I think so, and that's totally valid. I just never got into that myself. It's not refinable enough, and not clear enough for the kinds of things that I do-

JUD: Like your most recently finished films, the 1970 film, and also the film that was shot in North Africa-

SCOTT: MEDINA-

JUD: These depart very strongly from the whole technological aspect of the earlier films, into a much more personal thing. Is that the area you're most interested right now?

SCOTT: When you say personal, that two has gone in two directions: "1970" is an autobiographical film, and multiply personal in that sense. Within the film there are comments on the idea of making a film. It's about yourself, and not consciously about yourself, and the complications you have while trying to do that. You can't tell all. You can't show your whole being. You can't really give an accurate picture. You can only hope to focus on an aspect of yourself, especially perhaps one that involves a problem, or a blind spot that you're trying to see around. And film, for me, has been a tool for that kind of self-exploration. In fact, when I first made films I didn't realize that that was what I was doing until later when I saw the film and saw that I had been telling myself things.

"1970 (1972), 16mm, 30 min., color/sound. Sponsored by the

American Film Institute. 1970- the year of the moon shot; the year of the Bartlett's only son, Adam; the year Scott's life peaked in high harmony and discord with the American culture. This autobiographical film presented so thorough a summation of Bartlett's personal work that it rendered him harmless for years to come." - SCOTT BARTLETT.

JUD: At which point did that self-exploratory revelation occur?

SCOTT: Maybe after a couple of years. Maybe during the time of MOON, making MOON, but it still hadn't sunk in- still I use my intuition rather than my intellect in making my films, until that very last film. When the two things were together, the intuition and the intellect were both there battling, the intuition saying: "I want to use this particular shot" and the intellect saying: "Well, it has to be justified in terms of what you're saying." "You have to know now because you're conscious at this point. You have to know why you're using it, what you're saying." Whereas, before I could always fall back on the fact that it would have a cohesion and a dramatic structure of internal integrity, abstract as it was, that would hold it together, and I could find that later on, after lots of reflection, just what it was that I was saying, what I meant. And most of my films have grown organically that way, and taken a long time to make. None of them have been pre-scripted. The closest I've come to prescribing anything was really in the situation of shooting the film in Morocco- MEDINA. Again, that wasn't a script, but I had a strong limitation. I couldn't go back and shoot anything else again. I had to work with what I'd collected.

JUD: You had to know what you needed on the spot.

SCOTT: Yes. And the subject matter had to be tightened down on the spot, to something. It was finally the Medina, rather than using the footage I had shot on the roads there with the camels, I stuck to the two cities, Fez and Marrakesh, and events that went on there, and the spiritual look of the place involved, the mosques and the praying in there. And also their process, closely connected to the earth and survival, so that those cities, especially Fez, looked, really looked like organs from a body, with a river that ran through it which was clearly the digestive tract, the intestinal tract, and you could smell it; that it was.

"A documentary about the old cities of Morocco. Bartlett sleptwalked into an awakening culture."

JUD: What are you working on now?

SCOTT: I haven't really made a movie for over a year. I guess I'm re-searching or something. I've been playing kalimba, which is my first experience with music. I've been learning about sound, and just picking up small things and trying to do them well, but no grand plans for movies at this point. I know the direction I'm moving but I don't see the means at this point. I'd like to make a film that's a poem about nature. I can't describe it very well, but it would be somehow transcending just the documentation of nature and the things that occur, and using certain screens to establish patterns, so that it's really the patterns that you're seeing rather than the nature, but using nature as the elements of the patterns. It would take a long time to collect the material, probably a couple of years, and I have to figure out some scheme to support that financially, and I haven't done that.

What I've been into, where I seem to be drifting at this point is closer and closer to academic institutions. I've been doing more teaching, and planning all sorts of workshops, and hanging in tightly with folks who would sponsor things through government money or something, so that maybe at some point I can channel it directly into what I do personally, but for the time being I'm just getting it channeled into certain educational programs.

"MAKING OFFON (1981), 16mm, 18 min., color/sound. In the summer of 1967, Mike MacNamee, Glen McKay and Scott Bartlett met for America's first electrovidographic jamb. Bartlett's film loops and McKay's light show liquids were mixed through a video effects bank and the results were filmed by MacManee directly off the studio monitor with a rented kinescope camera.

Bartlett edited a portion of this material and then built sound track with the help of Tom DeWitt, who had also supplied many of the original film loops, and Manny Meyer, electronic sound composer. The finished film was called OFFON.

In 1980, Bartlett recreated the event in a video production class at UCLA. With his students' help he composed a video primer: MAKING OFFON. Wipes, keying, feedback- all of the standard functions of a studio switcher- are first illustrated and named, then woven into a sound and puzzle picture of the 60's."

- SCOTT BARTLETT.

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SCOTT: The idea of serendipity, the idea of letting an idea grow; that becomes the unique part of what I have to teach, and I'm trying to set up courses around letting a film find itself, and of course there are a lot of problems when you have the limitation time, just a short six or eight weeks, and students have to tune in to several people. In other word, several people have to tune in the same vibration, but so far there's been some signs of success, and ultimately I think we'll have a film, and a book, and a rap, and a film theory, you know, that could be used at schools as a new cirriculum, because so far most production is patterned after the industry, and I'd like to see that changed a bit. So that's where I'm going now.

THE FILMMAKER AS VIDEO ARTIST: 2. STAN VANDERBEEK

"I propose the following:

That immediate research begin on the possibility of an international picture-language using fundamentally motion pictures. That we research immediately existing audio-visual devices, to combine these devices into an educational tool, that I shall call an 'experience machine' or a 'culture-intercom'...

The establishment of audio-visual centers...preferably on an international scale...

These centers to explore the existing audio-visual hardware...  
The development of new image-making devices...

(the storage and transfer of image materials, motion pictures, television, computers, video-tape, etc...)

In short, a complete examination of all audio-visual devices and procedures, with the idea in mind to find the best combination of such machines for non-verbal inter-change."

- STAN VANDERBEEK, "CULTURE:INTERCOM" AND EXPANDED CINEMA.

JUD: Stan, you've been involved as a filmmaker, computer artist, video artist, and numerous other technological excursions in the visual media.

STAN: Excursions, indeed. Illusions. Visions and exclusions.

JUD: I want to really concentrate on how you first got into video art.

STAN: It's tough to remember exactly how that began-

JUD: It didn't have something to do with CBS-

STAN: Basically, it did. It came about because I had built the Movie-Drome in upstate New York, and CBS was doing some kind of documentary- I'm not sure if this was the right title- HOLLYWOOD ON THE HUDSON- a kind of review of the film scene around New York. I know they did one and then another; I'm not syre which one it was then. And knowing that they intended to reproduce the multimedia effects of projecting on the dome screen, which was impossible- that was no way you could filmically recreate it- I thought it would be more successful if I came into the studio and manipulated the images through electronic combinations.

Prior to working with video, I had had a projected dream of what was going on with video. I said here's a fantastically obvious technique, a great collage technique, let's explore it. Actually, before the show was produced, I had written William S. Paley of CBS a brief somewhat

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cryptic little message; I said, this was about 1965 : "Dear Mr. Paley, it was time you made me artist-in-residence at CBS, yours truly" and so on, and that went into a whole series of various strange maneuvers between different people, producers, and he answered me back, saying yes, and he referred me to a whole bunch of people; but that's background material. I'm flashing back.

Let me flash up to the moment we just got into: They were doing the show, and I said: "You can't reproduce the multiscreen effects that I was trying to do with the planetarium situation." So, I said: "Let me come in and play with your system" and they said, fine, and they agreed to it. I did this work called PANELS FOR THE WALLS OF THE WORLD. I worked in a studio for about two hours, mixing images. It was the first such work I could do; that was about 1966.

JUD: Was that a hands-on equipment scene?

STAN: Yes, but I had to tell people what to do. It was a marvelously ludicrous situation, because they were standard engineers in the middle of their afternoon, from 2 to 4 p.m. with no idea what they were being thrown together with, or into. So I walked in with six film chain lengths of edited films that I had in mind, plus a bunch of slides that I had prepared, and a soundtrack. The soundtrack was the only measured element that I had brought in. I knew exactly its length and I had edited the picture more or less so that they ran in an A,B,C,D,E,F roll sequence. I stuck them all on film chains, six film chains, and we ran everything all at once, and watched the monitors, and I was calling the shots.

JUD: It was rather like using the studio as a rather gigantic optical bench.

STAN: Precisely. I had already anticipated that that's what it essentially was, in real time; fascinating because you saw exactly what you were getting as you got it. And then I added colors- not in this particular experiment- but you can add colors to the black and white, and stuck this whole thing together, in a two hour recording session in which we did three takes. And it was fascinating because these guys really began to swing with it finally because they had to get out of their chairs because I was calling the takes so fast. I said: "Matte A into B with a circle wipe, and put that into this." And so they were really going hysterical because it was trying to catch up to the sound/image relation-

ship I was interested in. So, it was fun and I got something that came out approximating the idea of what could be done with sticking images together. It was the most literate of the video experiments I probably got over a couple of years period, and I love the idea because I essentially then saw what was possible with the thing; it just knocked me out. I mean, you take six strands of film, and one particular strand of sound, which is consistent except that the combination of picture would be different depending upon how fast you switched, or what choice of editing; so it was like a coda; you came up with a form of images stuck together in innumerable combinations. It just drove me nuts; I could have made probably fifty variations of the concept PANELS FOR THE WALLS OF THE WORLD just dealing with these six rolls, or six minutes of film each. It's a lovely concept, and it seemed like it could go on forever, which is the attitude, the real premise that I have for the work. I'd like it literally to go on forever, making variations on it.

JUD: I know that you use certain material quite often over and over. reworked in different contexts.

STAN: Basically, I'm fascinated with certain images, and I just refer to them again and again, and they become, like musical chords, you get to know them, you like them, and the other half is practical; I don't have enough money fro striking off new inputs all the time. So, I walked into CBS and said: "You have to let me into your stick footage." Their vaults were just groaning with all this old junk newsreel stuff that they had going way back, and it's beautiful, fantastic stuff, outrageous parades through New York and everything. So all the stuff I pulled out was CBS footage that was in their junk film collection. Now that was my first hands-on situation, and it was mock hands-on because I had to talk it into place through all the engineers, but they were very nice.

JUD: It was a real time experience, a real television experience, because that's what it's usually about, with a director coming in, and a technical director who will then do what the director tells and give instructions to the other personnel. It's a very real kind of broadcast situation.

STAN: It was, and it was very cheap too because they didn't want me to use the studio. They said: "If you just use the control room." That cuts your whole cost down; there were no cameras, no lights.

JUD: Well, it was quite incredible that you had as many as six film chains at your disposal.

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STAN: Well, that facility exists, literally just lies there. They have that, no problem at all.

"PANELS FOR THE WALLS OF THE WORLD, 16mm, 8 min. An experiment in video tape control, an electric collage that mixes the images by way of electronic mattes, superimpositions, and other electronic means of integrating as many as eight separate images onto one screen. A film commissioned by CBS for TV, it is the first such attempt to examine the almost unlimited graphic and visual possibilities of videotape intermix."

- STAN VANDERBEEK.

JUD: I find it interesting that the first PANELS FOR THE WALLS OF THE WORLD first video realization came about as a direct result of trying to emulate your multimedia work in the Movie-Drome.

STAN: Right. I also struck a theoretical position for myself, knowing that ideally if you want to have many images simultaneously, it's ideal to put it all on one carrier, like one piece of film, in some simpler container. It's tedious to have twelve projectors, which is the problem I discovered in the Movie-Drome. It was very difficult.

JUD: With possibly inter-lock systems, rethreading and rewinding-

STAN: And personal operators that you need to have because these machines are meat-grinders essentially; the projector runs a little bit off and- pop- one perforation is off and it's across the room, and you want to keep a subtle level of activity in the room so that people get into the films and don't have operators walking all around. It's very tedious to handle.

JUD: Of course, you need things like headsets and intercoms.

STAN: Sure. It's a very difficult situation.

JUD: Which are daily routines in the broadcast TV situation.

STAN: Yes. Ideally, I would like to have that kind of technical backup, with operators, and keep all of that in a way where nobody has to see it, to encapsulate it. It's true, I was emulating the whole idea of the planetarium dome screen, sticking it all into one little, tiny image which is at the end of your room, and it's a nice idea. It's a way to go actually. I would like to figure out other ways of solving the squeezing of images together.

JUD: Like high-density information content.

STAN: Yes. So, I had written this letter within the same period of time

to Paley: "Please let me into your workshop." And he was interested, and sent me back a note: "Let's talk about it." and I was surprised about that because it wasn't a complete turndown. And then I met him- my favorite story about the whole thing- at the CBS building, on I can't remember what floor, like the 70th or 80th, and I had this first meeting. I came into the room and he was watching four screens across from his desk and I had a fifteen minute conversation with him never taking his eyes away from the TV sets, which is incredibly interesting; I had this extended conversation with this man who was watching multimedia in his own way at the end of his room, simultaneously carrying on a relatively coherent conversation with me, without ever once looking in my direction. He stopped me for one second once to turn up the volume- there had been no sound, just picture, and he stopped with one of those silent change commands- a space commander- and turned up the sound on one of them that he had to catch something that he was in charge of, I guess, and he stopped me with his hand silently, and turned up this thing instantaneously. He listened to it for about 30 seconds and clicked it back so it was silent again, and he resumed the conversation without a ripple.

JUD: That was a DR. STRANGELOVE interview, in Strategic Air Command.

STAN: Sure, it was a joke. So then I went down to subsequent meetings, went down about ten floors at a time, each to the next meeting. After about seven meetings, at about the 20th floor, I got the message that it was hopeless. We had a lot of meetings but no one was interested in doing anything about it. But they wanted something to be done with the dance scene on video; they were very bothered about how the dancers just zoom into the lenses, running right into the lenses and just darting around them. That was about it, the concept of video choreography for about ten years.

JUD: In film, it was even worse for a longer time. Simply recreations of stage performances, until people like Shirley Clarke.

STAN: Yes, it was a very static concept of choreography, and they were concerned about it and hoping that someone would come up with an interesting concept about how to do something with it. They referred to dance on television as literally "dead wood," the exact expression this producer gave me. And would I be interested in doing something about this "dead wood" and working with it, and I said of course. Like I would love to do some experiments with Merce Cunningham in video, and some such thoughts like that. That's what we were talking about.

JUD: But that never came about.

STAN: Never. And that was another whole concept, that Merce Cunningham conducts these classes and nobody has bothered to put a camera on him for all these years. It's an outstanding waste of potential, an excess of talent wasted away.

JUD: What was the next step of your experiments with video?

STAN: Well, I carved out any opportunities wherever I could and even had to construct them. I would get Artist-in-Residencies for different schools which I knew had a public TV station connected with the school.

JUD: Many of which are only used for recording lectures.

STAN: Yes. And I would say that part of the deal was that I would come and do a work with the station, and I did about three or four of these, in various places, the University of Illinois, the University of Southern California, and often working in fairly small studios in these incredibly minimized spaces, and again just getting used to the media because it just takes a while to adjust-

JUD: Were any of those studios professional quad-?

STAN: Well, not really broadcast quality, but some two, inch. 2 inch low band equipment, and in some cases one inch things. There were actually four schools, and I went and took a crack at it each time I could get to it, and it was a wearing process, because you'd come in and find new crews, people who'd you'd have to get interested in the visual effort which you had in mind. It was a fun way to learn, but not an ideal way.

JUD: Were there any pieces that emerged from work at those schools?

STAN: I did a series of pieces, which have never been shown, or much seen. One, I made a kinescope of, and then added color to the B&W through contact printing in a standard film sense with color filters called FILM FORM NO. ONE which is a little study of dancers.

"FILM FORM NO. 1 (1970), 16mm, 10 min., color. A hypnotic dance film of colors, dancers, forms and music all sweeping through the T.V. tube eye, mixed together into a flow of female bodies and colors, a brilliant study of color printing from black and white. Collaboration of the project by Brown/Olvey." - STAN VANDERBEEK.

STAN: I did a whole series of dance pieces, quite a number of them, maybe two or three hours worth of little works, each about 7 or 8 minutes long.

JUD: Using a couple of cameras and a switcher?

STAN: Yes. With supers and dissolves and wipes, combinations and feed-back studies. I didn't have chromakey. There were low-level light systems in black and white, with some matting, not always so good, and a lot of tearing of the image, but it was the basic kind of hardware. What I was particularly drawn to was exploring kinescopes. I liked making films of the tapes, so then I could project the images quite large, and I was working with a lot of the dancers again. You'd videotape them, and then do a live performance with the dancers, projecting the videotape kine over the dancers, so you had two scales. I got very involved in that idea of size and scale and movement and penetrating images. That went on for about three years, I guess. I did a whole thing, image after image, called DANCE WORKS which I designed as a three-screen piece. I did a lot of three-screen works then. Basically the idea of the kinescopes and editing them so that they would lock together on a three-screen basis. Again with references to environments, again thinking of the dome. A lot of the work I did for the last ten years, in many ways, refers to domes, or to simultaneous projection.

JUD: Or things which could be used as raw materials for the dome.

"The 'movie-drome' would operate as follows...

In a sperical dome, simultaneous images of all sorts would be projected on the entire dome-screen...the audience lies down at the outer edge of the dome with their feet towards the center, thus almost the complete field of view is the dome-screen. ..this image-flow could be compared to the 'collage' form of the newspaper, or the three ring circus...the audience takes what it can or wants from the presentation...and makes its own conclusions." - STAN VANDERBEEK.

STAN: Oh, yes, everything was raw material for the dome. That's sort of stunning, you know. I could go crazy; there isn't anything that isn't raw material for it, because it really got outrageously encyclopedic-

JUD: You talked about the information bank thing-

STAN: Yes, that's very much the point. The concept for the Movie-Drome was to build this very dense audio-visual environment with multi-sound systems, in the circular format of the dome, where you could rotate sounds, spin the room around basically by sound. And the basic acoustics in a dome are insane to begin with; there are real focal points in sound and sound carries all the way across a curve. It does very interesting things acoustically, very distracting until you get into it. And then

again, the image thing is very distracting because you don't have any reference points- with the little 31 foot planetarium that I built in Stony Point, New York, you can lie down about 25 people, so you're lying in a circle and you turn stuff on. Several very strange experiences grew out of that, when I became aware after a while that what I considered as an information concert- about which I had many ideas, the flow of images, the content of an energy flow- and how many images would do certain things to you, and where you placed them in the space, and how you would distract people by different sounds and images in certain areas, and so on, so the whole thing was like a spinning, unfolding river of images. Curiously enough, one of the big problems was that a number of people went to sleep very soon, after lying down about 20 minutes to a half hour of this heavy overload stuff, and being comfortable lying down, and of course the dome itself immediately sent you into another state, a psycho-physical state that is transcendent. Immediately, you don't know quite where you are. It feels very comfortable, very warm-

JUD: Spaceless-

STAN: Yes. Comfortable, womb-like-

JUD: Womb- tomb- dome- home- all analogous.

STAN: Sure. Tomb-home-womb- a universal replica of the universe. That kind of breast- interior brain skull- molecule situation; a very important image for me, and an important physical image. So, you come and you fall asleep, but that led me into the new work that I've been doing now for the last two years which is the fascination with the idea of sleep and dreams, and theater that puts people to sleep is anti-theater, in a sense.

The major works are called CINEDREAMS which is the eight-hour version cycle, where you go to sleep, coming at 11 P.M. and you're invited to go to sleep or stay awake, whatever you choose, and the work runs all night. And the shorter version is called CINENAPS (Laughter) and runs for 10 hours. That was the funny thing; out of all this work that I put in to build the dome and to make the works to show in it, which was ten years of scraping around and a terrific physical effort, handbuilding the dome and handbuilding the projectors and wiring the place up, and then all these people went to sleep. That really put me into a state of shock for about a year. I just couldn't handle it.

"NEWSREEL OF DREAMS NOS. 1 and 2, 16mm, 8 and 10 min. Color.

A video/graphic collage of old newsreel footage synthesized with color and superimpositions to produce vision of history as dream-events that look like history but disappear inside each other. Each film is part of an endless series of newsreels and dreams to include any found film and present newsreel footage." - STAN VANDERBEEK.

STAN: I lost my whole attitude about it; I lost the total sense of what I had done. Eventually, of course, I realized that what I had done was to stumble by accident onto a whole genetic form of theater that's essentially designed to put people to sleep. I've laughed and called the dome a decompression chamber, because I thought there would be very important ways to suggest non-verbal confrontations. I really convey in terms of complex social thinking, but I don't quite know how to solve the problems yet, but there are ways to make an audio-visual performance that gets through to people in a certain way. So I had that in mind right from the beginning. I was prodding in the direction of finding the solution of how to make new social visual rituals. And this was clearly one way to go, and when I discovered that people could come and go to sleep, as a communal experience, and then wake up and talk about it in the morning, then you found out what images perhaps they recalled from their dreams, and what possible combinations of things you could do for people's dream states. That's now opened what is pretty clearly to me a life's work now, and I don't know quite how to handle it.

JUD: What type of imagery is involved? Is it related to the older work?

STAN: The interesting thing to me is the experience of what I've been doing with my life. Fifteen years of making little films, 6, and 7 and 12 minutes, so that a 15 minute film was feature length to me. I don't understand why I'm driven towards these short episodic works, but it's a life compulsion. I just can't stop them, and I work on multiples at the same time, at least 5 or 6 films and some of them are 6 years old, and being pulled forward at the same time that I'm moving forward. A funny process. I'm sort of dragging all these pieces together.

Then I suddenly discovered that what I've been doing is making episodic dream sections, and when I take all these little films I've made and put them all together, they become 4 to 8 hours long, whatever length I want them to be. They are now linked together in a larger collage. And I've taken little pieces of my collages, stuck them together in a kind of larger collage which now suffuses the entire dome screen and becomes a

metaphor for the whole idea of continuity and dream flow, for the whole sense of a dream cycle. It's a bit more than that actually because no one hardly ever dreams that much in a night's cycle. So all the films that I made before are now part of that constant package, constantly changing and constantly shifting package of material. Of course, new things keep coming along, and developing. I show abstract things and of course the computer work all fits in. I'm into an encyclopedic kind of interest. I love computer stuff, I love live action stuff, I like junk footage, I like home movies. I'm intrigued with stylized works and videographic stuff; so it all fits very neatly together.

JUD: Now, in terms of mentioning theater before, have you been thinking about any actual correlation with brain wave activity?

STAN: Sure. The theater is not an accident, because the whole idea of the dream theater is that part of the dream state is everybody's portable theater. I haven't worked with direct biofeedback, only a few preliminary studies, but nothing serious yet. That's another study that has to be done. What I really need, of course, is a total support system, like psychologists and some sort of research center, a really very carefully equipped research center to find my way methodically through it. I'm just doing this now very intuitively. Sure, we could work out whole kinds of concepts for whole groups of people, and knowing when they were in their dream state, of doing something through the acoustics of the room at that exact moment which would slowly get into their dream state, without waking them, and to do it as a group experience.

JUD: You've been turning a lot of video work directly into kinescopes for film projection. What about work which survives only in the state of videotapes themselves?

STAN: Oh, I've tons of that. The work I've done so far (NOTE: This was 1973.) is on mainly two inch low band black and white helical scan, which is sometimes hard to find now-

JUD: Right. The machines are now obsolete.

STAN: And they're out-dated. I'm stuck with hours and hours of stuff that I've done like that. I've got to find ways to convert that back down to  $\frac{1}{2}$ ".

JUD: Of course, one way is kinescope all of that and feed it back through a regular video system through the filmchain, rather than go through time base correctors. Anything you put on 16mm film is workable in video.

STAN: Right, and that's also the tedious way to do it, and it takes a lot of money. All of the kinescopes I've done, by the way, are all

home-made; I've shot all my own.

JUD: Using an Aurocrn 16mm with a TVT shutter.

STAN: Yes. Renting a camera with a special shutter. You can actually do it with an Arriflex if you're careful, but it's a bit of a bore.

JUD: Yes, you can do it with any mirror reflex camera where as you change the speed, you can see the change in drift lines in the video image that you're trying to avoid.

STAN: You can just shade it down a little but underneath that 24th of a second speed; you can cheat it. But it's obviously not an ideal way.

JUD: Have you ever had a chance to work with ½" equipment itself, like with portapaks?

STAN: I've done a fair amount of portapak stuff. I'm not too fond of it as a straight system. That kind of image stuff I would just as soon shoot with film as the portapak if I'm shooting just everyday scenes.

JUD: Are you interested at all in sync sound?

STAN: Not much. I have almost no speech in my films, so I'm not interested in people's lip sync; voice over occasionally interests me, but almost nothing that has to have effective use of sync speech. And portapaks are nasty; they break down a lot. I find them cranky as technical pieces of equipment. The Bolex which I've had for ten years, which I repaired once, and give it a couple of drops of oil regularly, and the damn thing has run thousands of feet of film. It's lovely.

JUD: A good many filmmakers feel that way about their Bolexes.

STAN: Yes. And those other things; the batteries are already half dead, they're very wispy and sentimental to temperature changes, like, they just flicker off.

JUD: Well, even digital multimeters, they've been discovering, the latest thing in test equipment, are responsive to changes in humidity and temperature, and not always accurate because of that.

STAN: Too much of the equipment now is not resolved, as compared to a \$10 regular 8mm movie camera made back in 1937, which is practically indestructible and incredibly reliable.

JUD: As they say, they don't make them like they used to.

STAN: That's it exactly. The project that I'm interested in now has to do with working with satellites. I have one project that I'm trying get through Canada which has two lovely satellites floating around, 225 miles up in the air.

JUD: Stationary types?

STAN: Yes, and they uplink to them if you get the cooperation of the CBC, and that dish is so designed that it can spread out the entirety of Canada and 2/3rds of the United States, so now I'm exploring one little test pilot to run up from Toronto; the little computer-made film that I ran there, running up to that satellite and down to around 200 people in Atlanta, Georgia.

JUD: Is that the MAN AND HIS WORLD FILM made for Expo '67?

STAN: No, it's a new film I've got up there. For about a year, I've been involved with a concept of making an entirely computer-made film by remote control, just dealing with phone calls and letters and programming cards, back and forth between a bunch of programmers at the University of Toronto and myself. It's about 50% effective. It's really hard to work without seeing each other and talking directly. But I was trying it out.

JUD: It reminds me of Moholy-Nagy's phone experiment of doing an enamel painting.

STAN: Yes. Over the telephone, back in 1920. I was intrigued with that idea and tried to do it that way. But it was very difficult to get the people up there to follow their momentum. I wrote a lot of ideas and sent it to them, and by the time it got talked over, they would lose interest or get distracted, and it was hard. But I finally went there to finish the project. Then, it worked beautifully. We spent four hours together and made a whole film, a ten minute film. It's called TRANSFORMS, and it's just a little drawing on one of those systems where you can draw into the computer-

JUD: With a lightpen.

STAN: Yes. The stylus system, and it has nice distortion qualities and makes for an artificial 3-D effect.

"TRANSFORMS, 16mm, 3 min. Silent (24 FPS). Computer animation tricks the eye to believe space and 3D. This film was made at the University of Toronto as an experiment in remote-control filmmaking. Made in cooperation with a Canadian Council grant and the programming help of Les Mezi and Tom Britton." - S.V.

STAN: But I'm intrigued with this situation of beaming up from Toronto with a satellite and then beaming down to a planetarium on the outskirts of Atlanta. And the system there in Canada is essentially designed for the eskimos, who don't get good TV coverage in the removed areas. So they're sitting in their little igloos, and I'm beaming down to this

little planetarium in the US. I think it's gorgeous as a concept and it's been unbelievably difficult to organize. I have to deal with the FCC and the CBC and Telstat and the University of Toronto and another outfit in Atlanta called Scientific Atlanta that's going to pick up a mobile dish they can aim at this thing, pick up the signal and amplify it and pipe it over a mountain to this little planetarium for 20 minutes. It's a fantastic effort. But it intrigues me because it fulfills lots of thoughts I've had; it's clearly the transmission process. I don't think we should mail around films anymore. I think we'll be able to do it this way. It's very close to telepathic communications.

JUD: Which will eventually be the next step image-making will move into.

STAN: 1965 was an interesting year for me. I really prophesized all these things for myself and sat down to figure out how I could help get it going that way. I wanted to get into video, into computers, and that's when I really jumped into computer programming.

JUD: That happened at Bell Laboratories in New Jersey.

STAN: Yes, and Ken Knowlton was terrific to work with; he really gave me lots of insight into programming and how to deal with this pretty complex process.

"The series of films called POEM FIELD is also known as the Computer Art Series, and is comprised of animated computer/graphic films. All of these films explore variations of poems, computer graphics and, in some cases, combine live-action images with animation collage- all are geometric and fast-moving. As samples of the art of the future, all the films explore variations of abstract geometric forms and words. In effect, these works could be compared to the illuminated manuscripts of an earlier age. Now typography and design are created at speeds of 100,000 decisions per second, set in motion a step away from 'mental movies.'" - STAN VANDERBEEK.

STAN: So, at that time, I said we're clearly going to be telecommunicating in the not-too-distant future down to what I call memory banks or image banks where we can store this stuff and then individual artists could perform with it. Like, what's lying in the vaults a couple of blocks away at CBS is an immense amount of fantastic visual material, which would just lie there until somebody throws it away. So, I would be intrigued if people in different parts of the world would be sending

each other material that was not necessarily finished material, but additive material, which you could then manipulate and put together, or it could be finished too, obviously. The possibilities for handling it and working with it and then sending back to them, and then they could do something with it and send it back to you. It's a visual dialogue, a totally non-verbal system of just feeling out how images can really be used for each other.

JUD: The computer work with Ken Knowlton was mostly frame-by-frame animation using digital means for generating the images, and I was wondering now if you were interested in analog real time techniques, because you have to wait longer for the results right now in digital.

STAN: They're both nice. I love the lightpen system but that involves a terrific amount of hardware that you have to sit at, so you have to be there where it is, and I like the technique of the digital stuff because I can sit at home, even in the bathtub, and write it out on a piece of paper that could eventually be punched up into cards, as so there are a couple of ways of doing it, and I'm interested in both. One is a kind of removed and interior process where you're thinking about it- the digital- and the other is a spontaneous real time dialogue that you have with some piece of equipment, and you're thinking about things and sketching it out. They're both very beautiful ideas.

"SYMMETRICKS, 16mm, 6½ min. A computer-created animation film of high-speed stroboscopic mandalas with molecular-like energy. The surprise of this film is the color produced from the strobing black and white symmetrical images. Done with an electronic stylus on a special computer at MIT. This film demonstrates the possible use of the computer interacting with the graphic artist." - STAN VANDERBEEK.

STAN: Of course, I like the analog thing because I have a natural interest in drawing, and the other digital thing is harder to do; you have to really concentrate and extract yourself more from where you are and meditate on the ideas of what the forms could be like. At this point, I'm favoring the drawing thing because it really is more immediately rewarding. You can see it right there and you've got it. It's like the theory that you can write the music and one day, sooner or later, you'll write this great computer electronically-animated work that sits on paper, and some day or another, an orchestra will come along and play it, you think

The Toronto project is drawing on a stylus, distorting the images and manipulating them. It's a nice program, at the Computer Research Department at the University of Toronto.

JUD: You're no longer working at WGBH-TV in Boston?

STAN: No, that's ended. I had a Video Artist in Television Rockefeller grant for a couple of years while I was up in the Boston area at MIT, and it actually only lasted for one year at WGBH. That was a nice concept. I think that it's unfortunate that that project ended, or folded. It was a really unique way to get people to play with the stuff.

JUD: They didn't get any more funding?

STAN: No. And there's a real problem that a big functioning studio like that hasn't really got the empty time to let people come in and play. So the other little workshops like KQED and the WNET TV Lab are temporarily the answer, but there should be a lot more of those. I'm trying to do that now in Florida while I'm going down there next year at the University of Southern Florida. I'm going to try to encourage a local setting up of a video workshop to get the regional centers functioning, rather than just the 2 or 3 we have now in this country. I'm fascinated with this idea of non-verbal communication and I think the video synthesizer systems are one of the best ways to get non-verbal systems going around the world. If you check out the kinds of images being turned out, everyone invariably produces semi-abstract works, and the audio synthesizers almost always produced simple qualified sound profiled which are similar.

JUD: There's a new universal vocabulary and a new visual syntax.

STAN: Like the Japanese work sounds very much like the French work, and the same is true of the Italian stuff, and the video synthesizer stuff I glanced at from the ORTF in Paris looked a lot like the stuff I've seen coming out Ron Hays' workshop at WGBH. I'm quite convinced that there's going to be an accidental community of image that's the same for almost everywhere around the world, which I think will be a stumbling into a process of abstract iconography that's global.

"Mankind faces the immediate future with doubt on one hand  
and molecular energy on the other...

He must move quickly and surely to preserve his future...

he must realize the present...

the here and now...right now.

An international picture-language is a tool to build that  
future." - S.V. in "CULTURE:INTERCOM" AND EXPANDED CINEMA.

THE FILMMAKER AS VIDEO ARTIST: 3. ED EMSHWILLER

JUD: I'd like to talk to you about video, your relationship to it, and how it has interfaced with your film work.

ED: What I've been trying to do, I guess all along, ever since I was a little kid, is to make images. I really think of myself as an image-maker. When I started out, I tried as a kid doing 3-D color drawings with red and green glasses-

JUD: Anaglyphic stereo-

ED: And making little animated movies for a 16mm projector back then, but I basically started out drawing, and eventually I got a movie camera.

JUD: How old were you then?

ED: My first effort to get a movie camera was when I was 14 years old, and I was a paper boy and saved up. In those days, Revere had just come out with the 8mm movie camera and it was advertised all over, and I was very excited to get an 8mm camera. I could afford that, and I saved up to get one, because I had this paper route. But my parents talked me out of it. They said, well, you don't have a projector and that will be more money, and you'll have to buy film, and you like music, so why don't you buy a radio, a fairly small radio, a little battery powered job, and that that was a good thing to do. So I bought a radio, but I still wanted to make movies.

The first time I got a chance to use a movie camera was when I was going with Carol, and I was a student at the University of Michigan. Her father had a 16mm movie camera, from back in the early 30s when they first came out. It was an old Bell and Howell Filmo. And he had left that in Europe just before the Second World War with a friend, and he bought another one a little later on, a 16mm magazine job and I borrowed that when I was going to school in Michigan, studying painting there. I made a kind of little record, playing around with things at school, shooting pictures of us down at the park, sort of home movie type things. Then we went to study painting and graphics over in Paris, and we rescued his old movie camera that he had left there, so that was the first one I had, that old Filmo. I still have it.

JUD: They were great cameras, very well built.

ED: Oh, yes. It's gone on forever. In fact, I used that camera in SCRAM-

EMSHWILLER

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BLES with a chest pack for a ride on a motorcycle. I figured it would hold up better than I would if I took a spill. (NOTE: SCRAMBLES, made in 1964 is "a picture of motorcyclists in action...an impressionistic film.") I had that movie camera during the 50s when I was doing a lot of painting. It was hard to do single framing with it; it's not designed for that, and I was always excited by what were called experimental movies. That kind was of more interest to me than any other kind and I went to Cinema 16 in New York for screenings. I don't remember when I bought my first Bolex, but it must have been around the mid-50s, because I wanted to do some things I couldn't do with this old camera. I started doing single framing. I made a lot of records of my paintings and I did animated things.

JUD: You did paintings in progress.

ED: Right. Like the flower blooms in stop motion. I've got quite a few of those old things. Eventually, since I was always talking about what was then called experimental movies, why didn't I do one. So, in 1958, I started thinking about that, and making arrangements for it, and in early 1959, I finished it.

JUD: That was DANCE CHROMATIC.

"DANCE CHROMATIC (1959), 16mm, 7 min., color. A fusion of dance, abstract painting, and a percussive score (NOTE: by Lou Harrison) achieving a hypnotic and strongly rhythmic synthesis." - ED EMSHWILLER.

ED: Then, for the next five years, I was doing painting and filmmaking, and also a lot of illustration and that financed the filmmaking. Then when I got a grant from the Ford Foundation to do RELATIVITY, and I got a commission for a documentary, I quit illustration for a year, figuring I'd take a year off from that, but it became permanent and I never did go back to illustration. That was 1964, and from then on it was straight movies, until I got involved with videotape.

"RELATIVITY (1966), 16mm, 38 min., color. A man wonders, measures, views relationships, people, places, things, time, himself. A sensual journey through a series of subjective relationships." - ED EMSHWILLER.

JUD: Why do you think the transition took place around 1964-1965? There was that period in 1965, when the Expanded Cinema Festival took place at

the Filmmakers' Cinematheque in New York, and we were all there, and the fruits of that transitional period are still with us.

ED: That's true. And then I did IMAGES, the videotape from Brooklyn College, which was the first tape that I designed. I had done something for CBS CAMERA THREE some years before. I was a kind of visual consultant and suggested a number of things, but I didn't structure the thing or direct it in any sense-

JUD: There were sequences that ran through it-

ED: Right. Those were concepts of mine. It was largely graphics in various kinds of visual treatments, painting and so forth, that I wanted to try to do, combining the film chain material with the live camera. It was a program on the composer, Harold Farberman, who had done scores for certain movies.

For the Brooklyn thing, Charles Levine asked me if I would discuss some of my movies for a cable TV series in Manhattan, and I asked if it would be possible to do a color videotape to show along with my stuff. He said he had a friend at Brooklyn College, a graduate student, who then made all the arrangements. His name is Dave Davis, and we worked together. I described the kind of thing I wanted to do, and he, in a production sense, arranged for it and directed it in the control room, while I sat outside as the interviewee, and Charles was the interviewer, which was the original concept that the whole thing started off with. And we took off and did a parody on that idea. There were all sorts of things that we could play with, and I had a little portapak that was live and plugged into a delay system that was included in the studio. I threw in everything we could play with, including one of the studio cameras and a monitor, with a 15 second delay image with the studio camera.

JUD: Using the delay of videotape stretched between a couple of decks.

ED: Right. And then we had two film chains with a lot of my movies on them, and we had the soundtracks from those plus Carol reading a semi-autobiographical story based on an interview that she had with me, made some time before related to filmmaking. So here was a videotape which was a kind of summary of various things and activities. The film material I had included pictures of my studio, and paintings I had done, and the movies I had done, so in itself that little take of images really had a record of a lot of activity, bringing things literally up to that

date. It's very textural.

JUD: A kind of summation mix.

ED: Yes. I think the weakest part of the tape, as it turned out, was the fact that we didn't have the means at the time to do several track recordings, and man who had to the mix had to do it live, and had never done anything like that before. Had there been the chance to rebalance some of the many different inputs, it could have been a stronger work.

And that tape sort of led to the Whitney show that they had on video, led to my entree into the WNET Television Laboratory, because on the basis of that, as with a lot of people, I was invited to suggest doing something there, and I did something called COMPUTER GRAPHICS NO. ONE, which was partly relaized one day at the Dolphin Scanimate studio.

JUD: Was that done in the off-hours at Dolphin?

ED: No, we got a date there through the Television Lab, one full day, and I edited it in one inch, and had a dub made which was sent out to Minneapolis and was well received in the National American Videotape Festival, the first one they held there, and it won some award there. Then, I got a grant from the National Endowment for the Arts through the Television Lab to do another tape on videographics, and I did SCAPE-MATES with that, which came out well. I had had real doubts about all that initially; I had handled portapak; I had one myself for a little over a year, but not for long.

"THERMOGENESIS (assembly #2 of COMPUTER GRAPHICS #1)(1972), 16mm, 12 min., color. A film version of a videotape. In it my drawings are animated and colorized by using computers. Walter Wright and Richard Froman were on the computers. John Godfrey helped with the video editing. Robert Moog and Jeff Slotnick worked with me in making the electronic sound score on Moog synthesizers." - ED EMSHWILLER.

JUD: When did you first start working with portapaks occasionally?

ED: I think I held them, not really working with them, a couple of years before that. I wasn't a person who in 1968 really got into them-

JUD: The real video freaks-

ED: No, I was still very much involved with filmmaking, and I still have some of the prejudices that a lot of filmmakers have about the image quality. I was also interested in color, the idea of being able to filter through the mind and come out with combinations that are not reproductions of that which you see outside, in the so-called real world.

I am really more interested basically in depicting the subjective world. A view of the real world is so subjective anyway, but to filter it more than that-

JUD: A kind of internal keying-

ED: Exactly. That's always fascinated me because my own sense is, in terms of arbitrary definitions, that I think people really live in fantasy worlds, if that's what you want to call the subjective world, with either thinking about what they're going to do, or what they did do, at least as much of the time as they're being occupied with what is right now. You're living both in the past and the future an enormous amount of the time, which is, to get right down to it, a form of fantasy in that direction, of projection, however it's defined.

JUD: It's an analogy to the dream state.

ED: Absolutely. And I think that's the big world, the dominant thing to deal with, that's the area to try to express. I felt that if I could get access to and do works with high-tech video, the kind of things you can do with keyers and synthesizers which transform images in ways that approximate or reveal senses of those perspectives, that would really appeal to me. And the little rundown that I gave you of my little times of experiences is really a history of how I became to be involved, and that's pretty much the way it is now.

I have a whole bunch of feelings about film and video; I can't define it that well. I have a little portapak and a couple of Bolexes, and I use one for one kind of thing, and I use the other for another kind of thing. I haven't been able to rationalize it that much, except that obviously the portapak will run for a half hour with sync sound and will give me a black and white picture which is capable of video modification, and so forth, in a very direct way. Whereas the Bolex gives me 28 seconds of windup playback time, and it's noisy if I try to do something sync, but it gives me a nice color picture. It's more portable than the portapak. I equate somewhat to when you go to the restaurant, what do you want to eat? There are lots of menus, and lots of tastes, and you don't expect the same thing from each meal. They both are nourishing, in terms of your own inner needs, but they satisfy those needs in different ways. And I like those differences, even though I haven't come to theoretical reasons why this one works in one side better. In the course of discussions, sometimes my real feelings about these differences come out. In our exchange, I'm sure the response is very similar.

JUD: In terms of the tactilities of the two media, there's a very different sense in lines making up an image and variations of voltages within those lines, and the grains of an emulsion bouncing around. Do you find any kind of analogy between visions that want to express themselves becoming associated with one of these tactilities so that it is directed towards one medium or another?

ED: I'm sure that happens, but it tends to be something that I don't rationalize at the time. It's a series of intuitive things. You just say "Ah, this kind of concept I want to do in film" or even if it works the other way, we have this chunk of equipment which says "Handle me this way; I feel good when I'm handled this way" and you say "I want to handle that this way because it seems to be calling for it, because it is what it is, because it makes a mark; it makes it's own record."

JUD: How do you feel about symmetry in design in relation to organic form? It seems to come up strongly in the graphic aspects of your work.

ED: Yes. I was noticing just very recently that my doodles, my graphic doodles, and I use a whole battery of pencils, and frequently, sitting in conferences and discussions, I like to doodle and I've noticed that I have two modes, and one is absolutely symmetrical, and the other one is absolutely asymmetrical. If I were to put it down to almost a ratio, I would say that I have a fairly higher ratio today, in my doodles, of symmetry than I had in the past, a higher degree of it. The asymmetry is perhaps bolder than it used to be, which means I'm able to extend myself further than I could in the past; that the polarities within me are being emphasized and extended in definition. That's my own sense of it.

JUD: Analogously, the entry of film from painting, through the tradition of Eggeling and Hans Richter, came from the desire to animate the paintings in serial time senses. In Richter's case, there was the concern between automatic painting and writing, and the almost constructive concern for symmetry and tight structure- the concern with chance and control- and the need to constantly try to resolve that in his work.

ED: It's been a concern of mine, and what's really fascinating is that years ago, around 1960, I was doing a series of what I called VARIABLE STUDIES, and then around four or five years ago, I saw a little B&W film by Eggeling (NOTE: SYMPHONIE DIAGONALE, 1924.) and I was really amazed at this film done in the twenties and in B&W. I felt like anybody who had seen VARIABLE STUDIES would say: "Well, he studied this

old movie, and did a color version of it."- An updated version of it. But so many of the concerns that I was interested in had come to me out of a mix of all the things that I had experiences, and they seem to be interesting things to probe, in terms of my own inner response to certain fluctuations and spatial, compositional and temporal transformations. And I saw this old movie, and he was doing the same thing, only he was doing it 40 years before. (Laughter)

JUD: Of course, Eggeling was working heavily on developing a whole syntax and language in terms of forms, textures, values and shades, which was his major project when Richter and he encountered each other. They developed a whole dialectical approach to image making, which oftens leads to abstraction from reality. In SCAPEMEATES, for example, there seems to be a concern between the symmetrical and the organic, and that is almost what the tape is about.

ED: Absolutely, it is, and space and the visual depiction of space, and the various forms of it; that surface kind of space and the concept of deep space, and the concept of the illusion of it, and the contradiction of the evolution and the negation of it.

JUD: Michal Snow, talking about WAVELENGTH, calls that fictional space, which many films are about much of the time, and which has been dealt with in the past few years in concerns with illusion and anti-illusion. In SCAPEMATES, how did you approach confluences in the generation of the tape, the back and forth feedback between the different levels of computer graphics, working with the live studio situation, and with human beings within that space? It must have been a continual process, with one thing generated by another; I think that's an interesting process.

ED: Whew- I guess it started with the fact that I wanted to do an extended piece which would use the equipment over at Dolphin, and that was the first thing: "I'll do something there." The next thing was, having made COMPUTER GRAPHICS NO. ONE, where I had all kinds of organic shapes, flowing shapes, my sense was that most of the signals generated were portrayed on the raster through a synthesizer tended to be sine waves, of one sort or another, or transformations of that. I wanted to do something where the pace was more leisurely than the way most computer graphics seem to go- very fast paced like in television commercial computer graphics a lot- and I wanted something that would be leisurely in musical terms. And I wanted something that would have straight edges, and I knew I had five gray levels, and I wanted to utilize those five gray levels

for color purposes, and I wanted to deal with illusions of space. These are the types of things I knew I wanted to deal with in this work, those being the ingredients in the kind of cake I was going to bake. I'm going to use this stuff, and I'm going to make a mix, and these are the elements I want to consider.

Another thing, the first tape that I had done in those terms did not involve a studio with dancers and so forth, and from very early on, I've always been interested in integrating different elements; I wanted rectilinear and straight-edge lines, and I wanted to combine and explore the paradoxes of space, which you can do very well, it seems to me, on a flat screen thing. I wanted to deal with time; I wanted to do an extended piece, and I started doing these drawings. The drawings actually defined what sort of narrative it would be, and the narrative going from a kind of box defining a space to a landscapey thing to an attention to symbolic forms and the ways in which the people related to the environments, whether they were the monolith statue, symbols of the city, or that birth-like sequence, the coming out and the manifestations of energy, the alienation of the confinements within the maze-like city, and so forth. They were never conscious at all. In the process of making, they were all obviously working, but each thing developed out of another thing. And a consideration, because I knew that this was terribly expensive to do and I had an enormous amount of work to do in a short time, I prepared the artwork carefully, made sure that it would function, and I worked out a sequence or series of these things roughly. After I had made them, I found out what the series was going to be, and then made transformations on each stage, so that when I went to the computers and transformed and colorized and animated these still drawings in B&W- of which I had made 22 of them- I would have maximum flexibility in how I could relate to them. In very simple terms, because I didn't want it to be, at least as an overall work, as highly textured and complex as the Brooklyn IMAGES tape, I wanted to have a certain clarity to it, because what I like to do from one work to another is to oscillate. I like to do a long piece and a short piece, not that it's so regular, but if I've done something that's very dense, I want to do something that's very pure very simple. And if I've done something that's very controlled, I want to do something that's very loose. And sometimes that will be a work in its own self. And then there are other times when I really feel that I want to make it as complicated as I can, and other times it's just plain, super simple.

JUD: The antipodes of complexity and simplicity.

"All of the computer stuff I've seen was so flat in appearance that I wanted to try electronically to convey depth. I was also challenged to use the computer for rectilinear forms as opposed to the curved forms which have predominated in previous computer video... The dancers couldn't really see what was happening on the tape as they were doing it, so they pretty much had to take my direction, but they were familiar with the tape before they tried dancing for it."

- ED EMSHWILLER in the TV LAB AT WNET/13 NEWS, August, 1973.

ED: In the case of SCAPEMATES, this is the form, the mix that came out, but the next one was very different when you think about it: PILOBOLUS AND JOAN. There is a different set of concerns in that one. Now, I'm sure if you look at all the stuff that I've truned out, all the images that I've drawn, you would find certain core concerns that are an expression of a really deep statement of who I am in terms of my interests, concerns, and the manifestation of those interests and concerns, what actions I take, and that you can find all kinds of forms. But I reall like to do something different, and the idea of doing something narrative like PILOBOLUS AND JOAN was really a story type thing, still not done with a script, even though Carol had written a story-

JUD: There was a literary model for the piece-

ED: That's right. And the images I took very often were simply images that I has preplanned even before she wrote her story; I mean, they are the images of relationships bewteen Joan and Pilobolus, Pilobolus and its needs and expression, which were dance, and Joan's means of expression which were song-writing and singing. These things were the givens with which I had to deal and find some way to put them together.

"Carol turned out METAMORPHOSED, a story of a common cockroach which waked up to find it self transformed into a man (NOTE: the inverse of Franz Kafka's famous METAMORPHOSIS)- struggling for survival in a man's contemporary world. The man-insect is portrayed by the four members of the Pilobolus Dance Theatre (Robby Barnett, Jonathan Wolken, Moses Pendleton, and Lee Harris) who move in carefully choreographed unison throughout the program, doing everything together from reading a newspaper,

to visiting art galleries, to playing a furious game of frisbee with Joan. Joan is Joan McDermott, a singer-composer-actress whom Ed has worked with before."

- from the TV LAB AT WNET/13 NEWS, May, 1974.

JUD: There were completely visual things which generated relationships in SCAPEMATES, and here there was a literary model.

ED: Right. And then the following one, CROSSINGS AND MEETINGS is more of a structural work than the other two, when you get right down to it, even though it's a development through the various stages of the way one relates to an image as being quite abstract and not so abstract depictions of, say, a person. But it goes through it's own musical structure which becomes more complex and technically more colorful. That's the only way I'd use the term. Some of the things that were done in it are as difficult to do technically as some of the later developments; but in terms of the visual presentation, they look simpler. It's like a dancer doing some incredibly difficult thing and nobody realizes how damn difficult it is, and then they do some sort of spin and they go on with it for 5 or 10 seconds, and everybody gives them a whopping big hand. It's silly.

JUD: In CROSSINGS AND MEETINGS, the confrontations with this technological piece of equipment, the video disc recorder, dictated the explorations which become structural.

ED: Absolutely.

JUD: Or did you also find the need for something structural and then the equipment available to realize it?

ED: It worked basically out of my interest in the tool itself, like, here's an interesting piece of chalk, and what can I do with this piece of chalk? And the chalk has a certain kind of hardness, marked capabilities, and I have a certain surface to work on, and I want to see what kinds of marks this surfaces lends itself to. Obviously, you're only going to barely touch the possibilities, because most of the possibilities are locked in; they're only accessible through imagination, and how much imagination you're able to release during the process of a given work. That's determined by who you are and your characteristics.

I simply said, I have access to a video disc, and I would like to explore some of the ways that I see this as an expressive tool. So, in abstract terms, there were a number of things I wanted to deal with, and I wanted to emphasize how you could take a very simple image, which

people have been doing in structural terms all along, and through various modifications and technical manipulations of the material, play with it. Basically you first take one image, this guy going across the frame, that's about 5½ seconds, and that's used over and over and over again hundreds of times. It's just the same stuff going over and over, but treated differently, and it's all treated with this marking contraption, the video disc; and I'm saying that you can use it for skip frames and for freeze framing, and the beauty of it is that it's computer controlled, and you can set it up so that it will run full speed, at half speed, or 200 frames, or freeze frame, for X frames or seconds, and then it would go on to other things, and this is programmable. And the person who runs it has to know how to program a computer; that's really what it amounts to. So what I would do is to define a number of kinds of problems, and would try to establish that with John Godfrey, the chief engineer and Phil Falcon, who was the one who ran the computer, and John ran one of the editing machines, and we used the three editing machines a lot, for many hours and hours. You know, the amount of stuff on tape that was originally shot is relatively little, but the amounts of hours that were spent in editing was enormous, and then an enormous amount of tape was spent to do that simple-looking piece. That's another place where the appearance is very deceptive; it just looks so simple, but that piece probably took as much time or more than PILOBOLUS AND JOAN, which runs a lot longer and is itself very complicated. There are shots in CROSSINGS AND MEETINGS that took a full day to edit, with 3 or 4 VTRs going, and a bunch of people running around; just because you have to go through so many generations to build up that stuff. But the thing is that it's really a mix of seeing something happening and saying: "I've changed my mind about what we're going to do next; let's take this thing and go on with that, and see where that leads, and then plug it back into the structure we've already got."

JUD: It's the performance aspect of pastic creation.

ED: Absolutely. Absolutely. And that's the exciting part about it. If you know what's going to happen, like I've been asked a number of times to direct feature films and be sent scripts- but they don't that much anymore now because I guess they've given up on me (Laughter)- but they would ask me if I'd like to make that into a movie, and the thing is that they're defining the making of the movie, so that it would be like building a house from someone else's blueprints, and having it all pre-defined.

And, simply, if you're good at it, you can build a beautiful house, with your own feeling about it, but the whole process and the excitement of finding out how forms relate to one another in the conceptual sense, is lost. And that, to me, is the process of discovery and learning which is probably the central thing in my involvement; the most important thing. So, to spend a lot of time making something that already exists, that's complete and ready, is just visualizing something that's virtually all contained in those words that are written. That's the way most of those movies are built. And that, to me, has no real appeal

What's really appealing is to be doing something that stretches you, both in terms of trying to perceive ahead, so that you can plan and do some intricate difficult things, but also be loose enough to say, right in the midst of it, "Hey, I never thought of that; let's go over and look at that for a while, and go down that alley for a while, up that branch." I made that movie BRANCHES with the whole idea that you go along and you have all these possibilities, in the alternate universe kind of concept, and it's very appealing: the appeal of not knowing where you're going. That's excitement, where the real adventure is.

"BRANCHES, 1970, 16mm, 44 min., color. Featuring Bill Weidner and Connie Brady, BRANCHES was made in a filmmaking workshop at Cornell University during the summer of 1970. The film was improvised around the theme of Branches of Possibilities real or imagined in Bill's pursuit of Connie. It is an attempt to structure a film out of the concerns of the time, using the college environment and student sexual drives as the principal focus." - ED EMSHWILLER.

JUD: That exploration idea is also related to the performance aspect of the sense of choreography in your work- the choreography with the camera- and a mutual choreography with the subject, which seems to be a longstanding thing with you.

ED: Yes. When you put it in those terms, that's right. Right from the very beginning, when I started making movies with other people, the fact that there was another set, or another person with whom we are dancing is really what it amounts to, with whom you're dancing in a physical sense with your camera, and the person, or persons, with their bodies. There is also the feeling of getting informed of things related to dance, like guidance and response, and another's needs in those terms- what are

their capabilities and needs and desires, and what moves them- so that you work in harmony, and have a maximum amount of interplay that makes it exciting and interesting for both of you. And that's always been the way in all the dance type films that I've been involved with. I like to keep the relationship between how the dance comes into being in front of the camera very varied; I don't define it, except occasionally I'll say: "Move your arm from here to here at this rate," and they'll do it, and that's one extreme. And another extreme, like in FILM WITH THREE DANCERS, I'd tell you to do a dance and I want you to tell me how you would like it shot, and what it is that you want done with it. And say I've got a feeling for doing something in the snow- it's a nice snow day and it got too cold for us- and we did slow motion, and some of it was used and 90% wasn't; and anything that occurred to them, or to me; so it's really important to have people that you're working with who are not only skillful in expressing themselves, by training their bodies like maybe I've trained my hand, or through practice. A baby doesn't dance an elaborate dance; a baby does baby things, and it usually takes time to develop skills, whether it's talking or writing or dancing. And I really like to work with people who are exciting, in that they have some skills they've been able to develop, that they project out of their natural characteristics. And they bring things that add so much to what I'm doing, beyond what I would be able to bring to it, beyond what my imagination and my scope might be, and they add to that, and it sometimes becomes more than the sum of its parts.

JUD: A collaboration between navigators in space and time.

ED: Yes, absolutely.

JUD: In the video work, you're working with the interfaces between yourself as an image-maker and technical equipment, the analog computer, the instant replay machine, and working with relational things that are like intelligent spirits, and relating that within the space which is the videospace and space within the studio.

ED: And the psychic space between people, and their own needs in terms of interpersonal relationships and their social roles; the patterns of behavior and its logistics. That's right.

JUS: Seeking out that continuity each time in each work and each experience.

ED: Yes, I am. Somehow that's become very important to me and I've be-

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come conscious of it. I think that it's true in some degree even reasonably early in my work, that I wasn't necessarily with any conscious awareness of it. Which brings up an interesting thing, whether or not being conscious of something is a positive or not a positive feature. Because being self-conscious sometimes means self-consciousness, and that can backfire.

JUD: It's a series of plateaus of consciousness, where one reaches a certain awareness of a characteristic, or how one works with certain mechanisms, and that becomes part of one's autonomous learning vocabulary, and then you jump off into new things.

ED: That's another thing. I have a strong feeling that not only the uncertainty and the pleasure of going off into the unknown, and not simply staying where you what's going on all the time- or where you think you know what's going on all the time- (Laughter) but along with Einstein, in terms of relativity, in terms of physics, and with Heisenberg, in terms of probability and chance, not only do we see things from different perspectives, but as far as our perceptions of things are, things are gambles. There is an enormous amount of uncertainty; the uncertainty principle is very large. And whether or not, on an ultimate fundamental basis that's true or not, to a great degree part of the joy of art or of working is just the fact that you don't know what's going to happen next.

JUD: Sure. Otherwise, you'd be bored as hell. (Laughter)

ED: That's definitely a consideration.

JUD: How was it when you first sat down and started feeling out the controls of, say, the Dolphin machine?

ED: I felt as I think I've felt at other times, when I first held my first movie camera in my hands, and I checked out the F-stops turning and the viewfinder, and there's a feeling about dealing with ways of what was out there with what was in my head through this particular manifestation. That happened to be a mechanical, optical structure, but on a fundamental level, it's an energy complex, and this was just another manifestation of that in terms of boxes, with pots and sliders; it was the same fundamental response of the person with the charcoal. That's really my feeling about it: the stick that enables me to do that which I can't do with my finger, which is to make a kind of mark, which is a way of physically extending myself, with the nature of tools as extensions of our muscles and of our mind. And it's a sensual pleasure, a sensual and

intellectual pleasure. It works on the right half and the left half of the brain simultaneously, and that's beautiful. I think that's how I get my highest satisfaction, when I can be analyzing and trying to define my range of possible actions, the parameters of my next few steps, with a bodily, intuitive feeling of going through transformations. That is the dance. And they're equally important; you do them together, and it's a good feeling.

There's always fear involved, incidentally; fear involved in many subtle ways, that you might be able to learn important things that are right there, or that somehow you don't have, for one reason or another, the ability to grasp at that potential, at that point that would open things to you enormously, right then and there, because of a kind of myopia, or blindness, like the blind spot in your eye. If you have one eye closed, it's not apparent that it's there, but it's always there.

JUD: The immediate analog translation of controls on video equipment is a direct analogy to the process of inner visioning and trying to close the gap, the relational time between the possible and the practical.

ED: It's a return to painting in those terms, and the dance. It's the immediacy and the sensuality of it, which filming can be also. It's an interesting thing, when I spoke before about the intellectual aspect of it, and the physical and sensual aspects of it, and the intuitive, there's a funny thing when you think about filmmaking, you're dancing with the Bolex, you're dancing with the forest, or with another person; anyhow your body is moving and you're shifting your camera which is an extension of your body and your eye at that point, relative to the space which is out beyond you, that you're capturing through the lens, or involving through your lens, and that can be very sensual.

The peculiar thing that happens there too is the delayed sense that you know that it is not only a pleasure to do it but there is also a form of fear and anxiety that occurs because you have no final assurance that all the certain things you feel at that moment is really what you are getting down. It isn't, with film, until you see it projected, that you have the feeling that it really did get down, or not. Whereas, when you do it with video, you can literally watch it happening at the time, monitoring it, and if you're too preoccupied with the process, the moment you're done, while the blood is still boiling. You can say: "Let's do it now this way, and let's go from there to this." Whereas if it's a

day later, or whatever-

JUD: You build up that response pattern. It's another kind of time delay pattern. In video, many filmmakers who jump in see the film cabin as the main point of entry in relating to the complex of equipment. It's finding a little opening for them into this new continuum. Video-space becomes the cybernetic model of the neurological changes we're going through. Originally, I found film to be the synthesis of the multiple aspects of things I was interested in, bringing it all together. Video does it on another level, but with immediacy.

ED: I have the same feeling about it. I always like to bring together that kind of synthesis and at least, if nothing else, simply the confrontation of different kinds of images and different meanings within my own mind, and to express those coming together, those collisions, those confrontations in a medium, and you've got a tremendous ability to do that in film, and I think even more so in video.

JUD: It demands the immediacy of your responses because you're working in a multi-dimensional activity, with the human, visual auditory elements, and the technical parameters, with manipulations going on all the time and the creative responses which have to be triggered off each time. In order to do that, one has to integrate the ability to function on all of those levels simultaneously.

ED: Right. And, in those terms, like an analog responding to whole series of different levels, pressures, and intensities, you find some sort of waveform with which you respond to all of these inputs, and that is the nature of not only the life you go through, but the trace of it, like in this case, a live whirlpool, perhaps a record, like a tape, of that experience.

JUD: The brain/nerve complex with which we function, the direct digital/analog convergence system, the model for all the relatively primitive analogs we've generated, and the constant assimilation of the environment and the responses to it, the backlog of all one's experiences, all this results in actions taking place in microseconds.

ED: In fact, in many ways, the slowest part of it is between the eye and the mid-brain, in terms of the actual process, and then the response to that from the musculature, that definitely, but the psychological end of it is the slowest sequential segment of the whole part.

JUD: And the physiological analog in the studio, at the cybernetic console, is the space between you in your seat and the machine controls, no

matter how close you are, no matter how infinitesimal it may be in relation to the larger cosmos, it is still infinite.

ED: Right. (Laughter)

"Computers are a terrific way to choreograph visual material. It gives an artist access to dimensions that previously could not be visually expressed... There's something about the sharpness and the potential for electronic control of the picture which you just can't do with film, that makes me feel that I want to work with video for the time being."

- ED EMSHWILLER, in the TV LAB AT WNET/13 NEWS, August, 1973.

PART FOUR

SEEING AND SOFTWARE

II. CYBERNETIC VISIONS

## CYBERNETIC SERENDIPITY: The Hippie And The Computer

"...society can only be understood through a study of the messages and the communication facilities which belong to it; and that in the future development of these messages and communication facilities, messages between man and machines, between machines and men, and between machine and machine, are destined to play an ever increasing part."

- NORBERT WIENER, in "THE HUMAN USE OF HUMAN BEINGS".

The moon landing was pershpa, and we know the hardcore US administration hopes, the boosting hit into the technological edication mainline. Outside of the plethora of ENGINEERS AND TECHNICIANS WANTED ads and posters, the attractions of a hidebound technical or engineering education has proven less and less enticing to a revived younger generation. Perhaps no greater dichotomy can be drawn than an attempt to relate an IBM complex with a hippie commune. Certainly artists, increasingly more active as sociologically motivating beacons, have transmuted their endeavors into the zealous mating of Art and Technology, awkward bedfellows uncertain of their intial approaches. Undoubtedly, the true American Revolution will be forged with the tools of communication, the free exchange of ideas, and the trading of information, of spiritual and pragmatic information not dualistically divorced.

Wiener defined "cybernetics" in his first book by that title as "control and communication in the animal and machine." Certainly, the questions of control of information communication are not unapparent to any devotee of the free media channels. As electronic technology proves more and more to be the gross externalization of our collective nervous system, the sources of stricture and obstruction become as painfully obvious as any bundle of frayed nerve endings. As hopeless and self-destructive as it would be to amputate any infected appendage, the greater hope lies in the generalization of newer and more numerous channels through which the information "bits" can flow.

Cybernetic art is one aspect of the humanizing of electromechanical processes, the reminder that all energy flow systems depend upon the same cosmic electromagnetic forces. Kinetic sculpture has transmuted

# CYBERNETIC SERENDIPITY

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smoothly into cybernetic sculpture, "the cathode ray tube has supplanted the canvas" (PAIK), films and graphic images are computer generated, and more art "pieces" and "events" (the definitions grow cloudy as the common urges reveal themselves simultaneous and synchronous) concern themselves increasingly with concept exchanges and the revealing of invisible energies as prime movers through their omnipresence.

In the autumn of 1965, the seeds of a comprehensive cybernetic art exhibition were nurtured by Jasia Reichardt of the Institute of Contemporary Art in London, England, and was finally held there from August through October of 1968, eliciting great interest with science fiction-like abstractions and turn-on-yourself mind blowers. Called CYBERNETIC SEREBDIPITY (Serendipidity being "the faculty of making happy chance discoveries"), this show became resident at the Dupont Center of the Corcoran Gallery of Art in Washington, D.C. from July 15th to the end of August 1969.

"SERENDIPITY AND INDETERMINANCY. Art's a way we have for throwing out ideas- ones we've picked up in or out of our heads. What's marvelous is that as we throw them out- they generate others, ones that weren't even in our heads to begin with." - JOHN CAGE from A YEAR FROM MONDAY, excerpted in the catalog for CYBERNETIC SERENDIPITY.

Only several blocks from Dupont Circle, the Tompkins Square equivalent in Washington, the Dupont Center (formerly the Washington Gallery of Modern Art before its acquisition by the mammoth Corcoran) now housed three floors of alternately involving and alienating cybernetic games and probings; the brilliant pebbles of Isaac Newton's child on the shore of an immense unknown sea. Upon entering, it was very likely to see school children improvising sounds on David Tucker's ELECTRIC MUSIC BOX, twirling potentiometer dials to create "sound patterns which are totally random dependent upon the position of the knobs." Ultimate feedback was generated by the view of a computer generated portrait of Norbert Wiener, whose gray scale was composed of the density of two-digit number "bits," a digital Norbert Wiener by H. Philip Peterson of the Control Data Corporation Digigraphics Laboratories, Burlington, Massachusetts.

The early relation of metaphysics to pre-cybernetic systems was presaged by the Spanish visionary theologian Raymond Lull in the 1270s

and his LOGIC MACHINE equated 136 combinations of the "attributes of God, states of the soul, and the seven virtues and the seven deadly sins," a primal binary, digital "either/or" machine. The French physicist Lissajous really started something with his discovery of "the series of plane curves traced by an object executing two mutually perpendicular harmonic motions," familiar to any modern oscilloscope practitioner, and further inspired innumerable automatic "drawing machines" like the toy spirograph, and several included in Cybernetic Serendipity, the Pendulum-Harmonigraph of Ivan Moscovitch, the Meccano (English Erector Set equivalent) constructed MECHANICAL PATTERNMAKER of Roy E. Allen, and the gigantic PENDULUM DRAWING MACHINE designed by John Ravillious, originally conceived to generate all-over repeat pattern wallpapers, consisting of a paper-holding swinging board and a pencil-holding swinging bar.

"The machine consisted of a swinging board (heavily weighted) on which the paper is placed, and a separate swing bar (solenoid operated) with the pencil. The board swings with two motions: 1. a basic circular motion, and 2. another rotary swing at double the frequency. The pen swings over the small distance at four times this frequency...to do large designs of variable complexity which might be suitable for framing as decorative works of art." - JOHN RAVILIOUS.

A full spectrum of audio-visual and tactile experiences awaited the visitor to CYBERNETIC SERENDIPITY, free to interpolate the manifold manifestations of "switched-on" wizardry on any of the innumerable levels of physical and metaphysical understanding, from sophisticated playtoys to completely operating closed information systems.

"Don't forget that a poem, even though it is composed in the language of information, is not used in the language-game of giving information." - LUDWIG WITGENSTEIN in ZETTEL.

Experiences accessible at CYBERNETIC SERENDIPITY ranged from copious graphics and texts (many of which were available in the printed catalogue, CYBERNETIC SERENDIPITY: The Computer And The Arts, Praeger, an invaluable reference work on the present state of cybernated art) to mind shattering programmed experiences such as English cyberneticist Christopher Evan's CYBERNETIC INTROSPECTIVE PATTERN-CLASSIFIER,

or CIPC, in which people looking in were "given a brief, bright flash of a pattern which plants an image on the retina in such a way that it can be seen after with eyes closed, for one or two minutes... The pattern can be seen to fragment and change its form, and these forms are probably the basic perceptual units used by the brain in recognizing the pattern... watch one's own cerebral processes actually in action." Imprint a floating peace sign in your sign.

The CIPC typifies the basic conceptual unity of the show, which was primarily predominant over the purely visual and sensual at the highest level of cognition. Dupont Center's Arian curator, Renato Danese, thought the show existed on many levels, as compared with the New York Museum of Arts and Crafts cybernetic show which was more cerebral and less fun perhaps, with a lot of reading matter. "What we've done here," added Renato, "is to allow you, if you're compulsive that way, to read all the material. If not, there's enough visually reinforcing graphics whose images you can go away with, plus the fun that the machines might give you."

Embodying the intangible apperception of hidden meanings and forces, Juan Downer, a 29 year old Chilean technological artist, resident at that time in Washington and one of the local supplements to the international show, presented a purely phenomenological experience in his ENERGY FROM BEYOND THESE WALLS. "Sculpture No. 1 is sensitive to 4 kinds of outer energy: atomic disintegration or cosmic rays, radio waves in the neighborhood, aircraft radio waves, and radar waves. It is also sensitive to one inner form of energy, its own heat. Any one of these forms of energy when present will activate a distant tone in an electronic organ."

"All this," added Downer, "is an input that the sculpture possesses to produce an output that we never hear- it's a little system in itself- it doesn't allow the public to participate in it at all. The sculpture transmits the input of each signal to another Sculpture No. 2 upstairs, which complains when it doesn't receive a signal, and transmits a radio signal to No. 1 which plays the electronic organ. It's actually a game between two little electronic brains- very primary ones- but it's a game between the two of them activated by outer energies. An earlier piece of mine had formica shapes that would rock back and forth (at Downer's extensive One-Man show at the Corcoran last January) because of the repulsion in electromagnets when certain fre-

quency radio waves were received by it: citizen's band channels 23 and 10, which are used by the police and fire departments. So these types of people were activating the sculpture without knowing it, and that was part of the fun- making people work for you. I guess at some point people will become sensitive enough so we'll be able to start playing with them, but at a new level- They will start producing waves or something that activate machines and make other people play. These are simple games- perhaps we can get into a higher game with energy in the future. I guess eventually the main direction will be imitating mental processes with systems of machines- like the way people think or feel." (NOTE: Juan Downey began to integrate closed circuit video into environmental installation pieces frequently after this, with LIFE CYCLE at the electric Gallery in Toronto, INVISIBLE ENERGY DICTATES A DANCE CONCERT at the New York Filmmakers' Cinematheque in 1970, PLATO NOW (utilizing alpha-wave detectors, 9 performers, 9 video-channels and 9 audio-recordings of quotations from Plato's Dialogues) at the Everson Museum in Syracuse in 1973. His VIDEO TRANS AMERICA and trips with video equipment to the Amazon and other regions in South America propelled him into prolific videotape production to this day.) Making people aware of the invisible and the intangible is a new aspect of contemporary art, casting a lingering ear and eye on subtle surational phenomena. Buckminster Fuller has long been fond of pointing out that the majority of Human experiences occur "within the invisible realms of the electromagnetic spectrum."

"One can observe the duration of a phenomenon by **uninterrupted** observation or by trials. The observation of duration may be continuous or intermittent." - LUDWIG WITGENSTEIN.

"The name I put on my piece for the show is KINETIC PRESSURE PAIN- TING," stated Mexican-born artist Arturo Cuetara, whose work was seen in the seminal Experiments In Art and Technology show at the Brooklyn Museum. "Pressure creates the actual color in the plexiglass piece by affecting the molecular structure of the material with 6000 lbs. of pressure on four points from an automatic hydraulic jack, the stress patterns made visible by polarization and modulated by the spectator's

own foot. I realized that this piece is a self-portrait of when I was an expressionist painter, painting my head off to the point where it was about to crack. One paints to survive and most of the time one doesn't succeed. Who says Van Gogh is dead? I think plexiglass **works can be seen** as a building for light in a scale for the eye to enter and the mind to move within. You cannot exhaust it, and you can spend a lifetime trying to look and look, and you can always find new experiences. It's like my encyclopedia."

"An elaboration of the Lissajous oscillographic technique" was utilized in Hugh Riddle's and Anthony Pritchett's **SIDEBANDS** 1968, where "surfaces have been substituted for the lines of the classic Lissajous figure," using a complex of high frequency sideband signals (above and below the unmodulated carrier put out by a transmitter). The system was originally designed to generate a Moebius strip for a BBC-TV science fiction title sequence. One could once again program one's head electronically, lotus-positioned before a 10 by 12 inch CRT.

On the third floor, tripping past Wen Ying Tsai's organically undulating **CYBERNETIC SCULPTURE** whose vibrating rods are "in constant harmonic motion in an electronically activated environment" altered by modulating high frequency strobe flashes, one then encountered Nam June Paik's multifarious **PARTICIPATION** TVs with kaleidoscopic ghost images of oneself, sound-modulated neon color triangles and meditationally monotonous (in the most intense mantras manifestation sense) mandalas. Downstairs, on Thursdays, Charloote Moorman played Paik's **TV BRA NO. 2**, activated by the live cello performances and incidental magnetic articulations. Twice daily, the gallery showed computer generated films by Stan Vanderbeek, John Whitney, Bell Labs computer scientists, and English experiments in a workshop back of Paik's room.

Simultaneously freneticizing the high energy discharge of **CYBERNETIC SERENDIPITY**'s total display was the resignation of the Corcoran Gallery's Director, James Harithas two weeks before the show's opening, uncurred by his indignation at the stultifying conservatism of bureaucratic administration. "With 50 or 60 people, including a Board of Trustees, dictating over the Director, how can a museum program be free and open-minded," Harithas pointed out. Washington area artists united in sympathy, and Barnett Newman removed his **OBELISK** sculpture, by that time an established landmark before the Corcoran main building, refusing an offer by the institution to buy the painted sculpture for

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an estimated sum of \$150,000. "An era ends," moaned the Washington Post: "The resignation... of the man who put Washington on the national map artistically... left the art community stunned and discouraged."

"It's the same everywhere," remarked Harithas: "There's a whole conservative ethic that makes it very difficult to move freely, people interfering with the program and what I consider my own creative academic freedom to show things that I like. In the large Corcoran building, we had Black Power militants sponsoring events, concerts by Sun Ra and Pharoah Sanders; we showed anti-war films three years ago to shocked audiences, and we now have 30 ghetto projects going on, and we brought the first set of rock-and-roll groups into a museum context, also stressing the interaction between museums and artists, known and unknown. With Black theater, commune events and inexpensive community interchanges, the best compliment that was ever paid me was from one of the most militant guys I've ever met, who told me: 'You changed things for me; I'm still militant, but I don't feel that nad anymore, baby.' We've had big scale exhibitions where when the artist ran out of studio space or had ambitious ideas, I would turn a gallery in the building complex over to him for a studio. One worked for four months, produced a whole show, and then put it up directly on the walls surrounding him, and there it was- very simple. The museum becomes a kind of open forum, so you don't have this incredible one year gap between the actual germination of the idea and its presentation. But I found checks and balances at every point here."

(NOTE: Shortly after his resignation from the Corcoran, James Harithas became Director of the Everson Museum of Art, which then pioneered the first Video Art department, bringing in David Ross as curator in that area, and instituting the first extensive video art touring show CIRCUITS in 1973 and a number of important video installations exhibitions including Frank Gillette and Douglas Davis.)

"Harithas was instrumental in getting CYBERNETIC SERENDIPITY into the Dupont Center," reflected Renato Danese: "The Smithsonian had been interested in importing the show from London, and it arrived in lousy shape, with crates broken and transistors scattered. They estimated a repair and the conversion to a 110 electrical system to be \$50,000, shopped around for another taker, and there we were. With the help of two paid , and two honoraria technicians, we patched it up and opened

it, working day and night for a month at the Smithsonian, a week assembling it here, artists working with technicians to get it together, for about \$5,000. Now it's in shape for any museum to take it over inexpensively, to have an operable show with minimum budget, instead of a hassle."

"We're trying to get backing for a Media Center proposal, hoping for grants from the Justice Department and Health, Education and Welfare. We're thinking more and more about the museum's responsibility beyond it's walls, it's extension into the community, and the responsibility that's implicit, being responsive to various community groups ranging from black to white," continued Danese. "We believe that a brick through a window is somehow akin to a paintbrush in somebody's hand. We want to initiate a Media Center where people can work it out through media, from the traditional ways to more sophisticated devices, and provide a constructive alternative to socially unacceptable behavior. Film, TV and videotape would all be involved in the Center, to direct that kind of self-awareness and learning about your environment by seeing it in front of you graphically. The 12th & Oxford gang in Philadelphia, which has a high juvenile delinquency rate, were given filming equipment by YOU (Youth Organizations United) and produced a film called JUNGLE. During and after the production, the crime rate in Philadelphia went down considerably. That's a constructive alternative to what those kids were doing before; they've learned a hell of a lot. That's akin to one aspect of what we want to do here. Hanging paintings on the wall is fine, but maybe we can accomplish something else."

FRANK GILLETTE: Proces And Meta-Process

"As you investigate videotape you enter into another reality. You investigate taped reality in a way which is peculiar to itself. No other medium quite gives you the advantages. What I'm trying to do it to develop a grammar, a syntax. A way of relating evolves from this probing, this experimentation with the media in terms of holistic phenomena. In terms of the language of television, one assembles some kind of aesthetic that is intrinsic to television." - FRANK GILLETTE from A VIDEOVIEW OF FRANK GILLETTE BY WILLOUGHBY SHARP.

FRANK GILLETTE: My Joycean tapes were done in 1971, under the group title EYESORE THE END AS SHE DANCED UPON MY FLAW: 1. IF YOU WIN YOU LOSE THE BALL, 2. FIXED LICKS, 3. YOU FOIL THE MOIL, 4. A PRETENDER TO THE GROAN- done as a four channel composition of 120 minutes (four 30 minute segments) in AV B&W standard. These four tapes were designed to be seen simultaneously on a matrix of four monitors; an advanced version of that was shown on eight screens, two screens per track, at the Avant Garde Festival in New York in 1971-

JUD: At the Park Avenue Armory.

FRANK: At that point, I was mixing it live. The Joycean tapes were done basically between 1970 and 1971, started in the fall of 1970. I was living on Charles Street, and they were done over that winter, and finished in the spring of 1971. The first two were finished relatively quickly. What I was working with was something I given a considerable amount of thought to since, but very little work with. I've chosen to work among another set of problems. Videotape has a peculiar sense, in that it seems somehow more accountable for reality than other media. Every new medium has always claimed this, so it's nothing new that videotape has claimed this. That being true, it in no way diminishes that fact that somehow or another you can't distinguish between live and taped TV, if the tape is functioning properly. There's no distinction in the image of a live tape, of a live performance and a videotape. It's identical. So that phenomenon in and of itself is considerable.

So what happens when you begin operating on that aspect of its sense of reality, in terms of a highly discontinuous mosaic of ideas? Because reality as seen through television is highly sequential, and almost linear; it has all the linear attributes, you know; one idea follows from another, and the continuity of image establishes a certain flow in time, and 99% of television you see is like that. So what I was involved in was fragmenting that sense of time, in the way that Joyce fragmented the literary genre, by introducing personal mythology with more objective circumstances, and the immediate environment that I was living in-

JUD: The telescopic metaphor.

FRANK: But metaphors which are also very classic in the thing that video does, and very much involved with still-life, the idea that still-life is something that you point at and frame, as opposed to paint.

JUD: This derives from the original compositional sense that you've had in the past.

FRANK: Completely. In a way, they were a levelling off of it. There's another tape for single screen entitled HARK HORK in a similar vein, similar but not identical. HARK HORK is from FINNEGAN'S WAKE; it's a line in it, and it's also Joycean in the sense that it deals with a mosaic, not in the original sense of a mosaic, but in the diffuseness.

JUD: McLuhanistic?

FRANK: McLuhanistic in the sense that all television is a mosaic. I'm saying that in television there is an attitude that tend to produce short bits of discrete time as compositional elements. I take these short bits of discrete elements and rearrange them such that they form discontinuous shifts in your experience of the thing being experienced. They're reinforced in a very diffuse way, not reinforced through the redundancy of the image or the continuity of the image. They're reinforced in another way which is much more diffuse. And that's what I mean by mosaic, not what McLuhan means. You can call all television a mosaic, and also iconographic, which he does, although it's probably more iconographic than it is mosaic. It's a mosaic, but you don't see the parts on TV. Mosaic implies that you see parts as well as the total effect. The total effect of television is never the parts; it's always a whole, a sensuous, continuous whole, like life, in a way.

GILLETTE

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JUD: Print matter as it's used today is often in a mosaic form.

FRANK: Right. The front page of THE NEW YORK TIMES is a mosaic of information. The four-part Joycean tape was all shot with a portapak and edited, and all shot in New York, mostly on Charles Street. I was living uptown on 57th Street for a short while where I shot most of the still-life work. The tape was actually 25 minutes, 4 parts times 25. There are three specific portraits in the tape: Marco Vassi, one is of Harvey Simmons, and the third is Constance Abernathy, but the portraits again are just taking snatches, and the qualifying aspect of any snatch that's chosen to enter into the total composition is somehow or another representative of their sensibility, and their force. I mean, it may not make discrete sense with what was said prior to it, but in a sense I'm trying to establish an energy flow and the fragmentary or mosaic aspect of it, which was the discontinuity of what they were talking about, and what they were referring to. What made them consistent in your head, or what reinforced their image on you, was not the content of what they were saying, but it was in their manner, or their gait, and at times also what they said, in their rap, which is another Joycean parallel.

JUD: There were other tapes in that cycle.

FRANK; Yes, I consider them a cycle. They, and one single other tape: TORTOISE TEMPLATES (1971-2) represent the work being done, a four part and a single part.

JUD: Which all relate to the I'Ching.

FRANK: Right, the I'Ching, and it's also all still-life. TORTOISE TEMPLATES is the tape that's reproduced in the book BETWEEN PARADIGMS. Those stills are from it, and it was like the culmination of those four tapes. It was work done as a result of having spent six months doing that four part tape, and once I had done it, it all came to me in one tape for a single screen. It's the same, only more purified, more distilled, in a way.

JUD: What determined the choice of stills as it's laid out in BETWEEN PARADIGMS?

FRANK: The idea behind putting them in the book is that they were done simultaneous with most of that work. I wanted to put something that I was doing on tape while I was writing the book. I wanted a kind of

stratified simultaneity. I was doing these drawings, I was writing these ideas, and these are examples of what I was doing from the tape, all about the same time, same period, same cycle. I didn't want to take bits from each tape. I didn't want to give anything that would give any sense of collecting a history, so it's all from one tape, which is basically a collection of very, very dense still-lives shot with a tivicon in the dark with a strobe, complete darkness and a completely bright image alternating. And still-lives with mirrors and flowers and shell life. And all that work ended in the spring of 1971.

JUD: I felt that they were some of the finest examples of editing in the production of videotape up to that point.

FRANK: It was the first time I ever say edits which were less than a second; I was working with third of a second edits, and that was due to the facilities of Andy Mann. Andy can play the virtuous at the wheel.

JUD: Can you say something about the cooperation with Andy Mann? How that came about?

FRANK: I met Andy at Antioch College in 1969 when Ira Schneider and I were doing the residency at Antioch-

JUD: Which we discussed at length in an earlier piece-

FRANK: (Laughter) Right. To excessive lengths. And then Andy disappeared for a few years and he emerged in New York to work for Global Village, and Andy became quite adept at psyching out video hardware. Somewhere Rauschenberg says: "I never learned to weave canvas either" and I have the same attitude; I see it as an equivalent. If you want to get into the engineering aspects of the medium, if that's your bag, alright, but there's no requirement, I don't think. I think you can do video, in the same relationship that a painter has to canvas which he doesn't weave. He works on it, he works with it; it comes weaved, and that's how I see the engineer function in video. And Andy happened to be the most capable weaver, and also willing and able to work with the erratic nature of what I was thinking about it.

JUD: Erratic, but progressive nature.

FRANK: Right. We learned a whole new language, a language which was as much a mutual phenomenon as it was mine.

JUD: In terms of language, I know that Paul Ryan has been getting away from the use of language and thinking more in terms of form. I wonder

how you relate to the way, for example that he sees the dyadic nature of language in the subject and predicate, because you're very strongly into language.

FRANK: I think life is breath and words are shaped breath. Language is the shape of life. There's an instinct to put language down. Where it emerges from, I really don't know. It strikes me as an idiotic one. I'm not saying that any critique of language is idiotic; I'm saying that this notion that somehow the facility with words or a degree of articulation is somehow thought of as being glib, or verbose-

JUD: Certain conceptualists see words as conveyances which are necessary for full expression, for communication.

FRANK: I don't think you solve anything moving away from language, unless you enter into total silence. If you agree to talk at all, then you go all the way, and you speak with as much subtlety-

JUD: Right. Go the whole hog.

FRANK: Precisely. Which is not to say that shutting up for two years- I wouldn't go as far as Meher Baba- but I would try it, and at some point hang up, which would be a good thing if I could commit myself to living in circumstances in which that would not be an encumbrance. Then I would do it.

JUD: Well, you have called yourself an excessivist.

FRANK: An excessiveist. That's true. (Laughter)

JUD: Feeling the need for communication of a certain caliber.

FRANK: That's true. I wouldn't say as much communication of a certain caliber as a certain kind of interaction of a certain caliber.

JUD: How would you distinguish between communication and interaction?

FRANK: I wouldn't. I agree with you there. They're identical. Communication is a bit more explicit, in terms of nuance. But words have short spans. It's strange. They have to be resurrected and reinsisted. Some mystic said that about the biggest barrier to truth is the over familiar word; that was Gareth Knight.

JUD: Words in language have to mutate.

FRANK: Sure. They not only mutate, but they're cycled and recycled, and you've got two periods of issuing disorienting references into very familiar references to issuing the same word, mind you. It's introduction into context in the beginning is a disorienting phenomenon. You say "ecology" and this is like ten years ago when Rachel

Carson wrote her book; you say "ecology" and it had to be grafted onto your sense of that word and its attendant complexes; you realize that it's become a buzzword, and that it's over. It slips in too easily and is dismissed as well, because conceptions of it have been so diluted and forced to conform with the lowest standards of its usage. All words are somehow subject to this. Some never get past the initial stage, but those that do suffer this cycle, this evolution of buzzing, this evolution of the value and the introduction of the word in terms of what it does to your total sensibility when it's used. If it simply reinforces everything there already, there are no new differences, and it's useless, in my opinion. The language should always be used as a heuristic device, as well as not only a device for the organic monitor between us as a species, the infrastructure of our species' special content. It should be used also as a heuristic device, a device with which you discover new connections through the introduction of concepts and new ideas. Even in a random way, this has held true, in a sense.

JUD: You see the videotape process as an analgous way.

FRANK: Yes, I do. You can think about them in terms which are the same.

JUD: Some ideas might manifest one way and some another.

FRANK: Completely.

JUD: And also in the graphic sense-

FRANK: For my own work, it does-

JUD: Would you say those were the three predominant outputs, aside from the projection of ideas through extensions of personality and actuality, like rapping or teaching?

FRANK: Teaching. I do a lot of seminar work. Those are very different because the people I have contact with there are usually fresh; I've never had contact with them before. The whole thing just starts over again in a new way, and I like that feeling.

JUD: It's an introduction to morphology.

FRANK: Yes, and it's more basic than what we're rapping about. You and I more or less understand each other, some sense of connection. Oh, I've also been working with shells a lot, as you can see around here-

JUD: And horseshoe crabs-

FRANK: And vetebrae, feathers, and those are sea-water eel skulls, not frsh water eels; they're larger.

JUD: One piece here has the progression of size diminishing upwards, in a totemic form- of different sized horseshoe crabs.

FRANK: There are 14 of them, which was how many I discovered in Wainscot over the summer. It was an effort to find them; I went to the beach every day. It's like a record, if you live on the beach for a summer, collecting those and using that as material for a piece. The one behind you I collected last summer-

JUD: That's a large horseshoe crab surrounded by a necklace of the eel skulls-

FRANK: Which is surrounded by pheasant feathers found in the potato fields, which come up to the sea in that part of Long Island. Not even by looking, but just by keeping your eye open for a serendipitous connect, and that's how it came to 14. Until the last day at the beach, I had 13; I would have had 13 to work with, and the significance of that, but 14 in the I-Ching is probably the most favorable of the Chings, POSSESSION IN GREAT MEASURE; it's the simplest and the most straight forward. It just says "Sublime success, supreme success" and gives no qualification whatsoever. I like that correspondence.

JUD: How do you relate your continuing interest in the usage of the I-Ching as an adjunct or part of process of the progression of your work?

FRANK: It's part of the ground out of which the work can be seen as a figure, or as different figures.

JUD: You've been doing it for how long now?

FRANK: Every day for about four years.

JUD: And sometimes more frequently.

FRANK: Right. Under certain circumstances, but there are days I've skipped, but they're exceptions. When I have a lot of traveling, I just don't get around to it; it's not fortuitous at all then, but basically daily. And it's an excuse for reading it, which is basically where it's at.

JUD: Of course, it's the process way of reading the book. The earliest process book known to mankind.

FRANK: Returning to the term interactive, all books, in a sense, are communicative. The Ching is interactive. I like its relationship between the general and the specific. It always refers to the general in

the most specific way, which is exactly what it's about. It establishes your specificity every day with the general, in the bigger context. And it does that in an unfailing way for me.

JUD: One of the aims of your work is to achieve that kind of specificity-

FRANK: And generality at the same time. I've never thought of myself as having a name, I must say.

JUD: I know that at one point you called yourself an experimental epistemologist, a term from Warren McCullough.

FRANK: That was half tongue-in-cheek, not quite all the way. And I would say still that my work is epistemological. The show at the Everson is evidence of that. It's about knowing processes as much as it is about anything else. I mean, the medium I'm involved in, the feedback pieces, the biological pieces, are in a sense epistemological. And I did take the term from McCullough, with whom I was infatuated at the time I said it probably, and with whom I'm still infatuated, as a matter of fact, who has continued to blow my mind.

JUD: What particular aspects of his work?

FRANK: His sense of neurological models. I'm told, for example, now that all of the McCullough-Pitts models are no longer operable in neuro-physiological labs, but that doesn't make any difference. It was the elegance with which these models were corrected and assembled by McCullough, and the kind of thinking he through is exemplary. It's not that the specificity he wound up with is still applicable; that's not the issue; the issue is the model which he dealt with, data and structure and reformed structure by new data and reinforced data by applying old structure to it, and linking ideas in a very, very beautiful way. He'd work everything from metaphysical concepts and the relationships of those to actualities, yes-no sparks that travel through a synapse, zero/one, on/off-

JUD: He was very conscious of the forms of the process-

FRANK: He was a poet basically, as well as anything else. So, in a slight tongue-in-cheek deference to McCullough, I called myself an experimental epistemologist, which doesn't mean that I didn't mean it; I still am, I think. But I don't know what I'd call myself no. I have no name. I have a sense of what I'm doing-

JUD: The experimental period has ended?

FRANK: Sent out of use. discontinued. (Laughter)

JUD: What about Gregory Bateson?

FRANK: Bateson's influence on my thinking is enormous. All my modeling concepts come from Bateson and McCullough and Wittgenstein, in my opinion. I accepted those ideas in such a way that I built from that.

JUD: That's your foundation.

FRANK: Right. They share in my thinking the groundwork, the basework, and since I still maintain a relationship with Bateson, both in reading and writing, and seeing him on occasion, it's strong. The concept in THE ECOLOGY OF MIND is enormous; it has an enormous effect on you if you really link all its parts. I think his concept of learning, as of evolution as a huge learning device basically- which is what the universe does- the universe evolves and what evolution is is just a learning process. So the thing is always not what it was. It's always in the state of becoming, and now we've got to get the hang of what that is and to understand how the stratifications work within that process, again going from degrees of specificity to generality. There's really a great beauty and extraordinary clarity to his thought; he's just very, very lucid. Make it as lucid as possible.

JUD: Do you value the additive process?-

FRANK: I think both approaches work. I think you accumulate and then edit. You accumulate and then reorganize.

JUD: And in some Zen moments you work from the source-

FRANK: Between those two. Sometimes you edit as you collect or accumulate. Shells are an example of that.

JUD: And the tapes are put together with that sensibility.

FRANK: It depends upon which tape. Let's talk about that later work at the Everson show (of 1973).

"Floor plan: thirty monitors positioned equidistant around a circle in three sets of ten. Each set of ten arranged in an equilateral triangle, programming over two a & b channels simultaneously (a total of six channels over thirty monitors, each channel a video track, 25 min.)" - FRANK GILLETTE.

FRANK: The tapes that were programmed into the 30 monitor piece, the three equilateral triangles in a circle, there were six tapes to be seen simultaneously over 30 monitors, so it's a four to six ratio; three of the tracks were on six screens, and three of the tracks were

on four screens, arranged in three equilateral triangles. I had a specific sense of what I wanted to do and that was determined by the hardware that was available.

JUD: I believe it was a perfectly square room.

FRANK: Yes. And it was largest room in the musuem. And the piece was a cicrle with about a 25 foot diameter around which it was built. I began working on those tapes, those six tapes; each tapês of a different ecological or geographical phenomenon: the first is the ocean, and the second is a pasture, and the third is the ocean as well, only played in the other direction, its dunes, and there's one of a lake and a pond, there's one of a stream, and one of a glen. And each of these serves as a base of interaction, and on top of each of the six tapes the thing is enfolded upon itself, the material is made denser and denseer through editing. When the six tracks are played together, they are interlocking and their references are as much to their differences and selections on rhythms of changes, as they are for the ecological processes concerned; like the ocean is one, the ocean beach, dune, and then a glen and the stream, and then all four seasons, a waterfall in the pit of winter, a pond in the spring, the beach in the summer. I was trying to establish an informational process which emulated the actual ecological processes of inter-relation, and then at the same time, the content being those very processes in the sense of seascapes, landscapes, using a very traditional form.

JUD: How do you feel that formation piece related to its title?

FRANK: TETRAGRAMMATON, from the Talmud-

JUD: Or the Kabala.

FRANK: I got it out of the Kabala, but it's a Talmudic concept.

(NOTE: The tetragrammaton YHVH, "the explicit name' or "the complete name" which gives the possibility of the direct actualization of the divine presence.)

"Re-networking the associations thru vectors of temporal reference. Translating the data into inforseen mytho-poetic contexts. Renewing shapes. Thus:

a  
b b  
b a b  
a b b a

DESCRIPTION: An equilateral matrix of ten monitors compos-

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ing two channels of simultaneous material.

- FRANK GILLETTE in BETWEEN PARADIGMS.

JUD: There is a real sense of sculpture as a basic tool in the crystallization of the concept of lucidity as manifested in that piece. The sense of lucidity and crystallization seem generally important to your work.

FRANK: Yes. Someone called it lean and stark, stark but sensual. That was the synthesized response I got from people who were willing to talk about their reactions to the show, and also prior to the show.

JUD: Perhaps a kind of sensual austerity.

FRANK: Yes. Stark indulgence. And I don't know if it's a conscious effort, but it's always been in my work even before I got into videotape. The paintings are painted very stark, but sensual-

JUD: They do have a sense of tactility-

FRANK: And monotone color. A tactility that can be recognized and read.

JUD: In other words, you limit the aperture of the tactility, at which point it becomes infinite.

FRANK: Through the eye of the needle. (Laughter) It's very nice to talk about your own work that way. I mean, I have no idea what the ultimate response or the value of the work will be, no way of determining that except for the satisfactions of one's own vanity, of which I have a considerable wealth. I wish my divinity was equal to my vanity. I'm holding my own. Vanity has not been vanquished yet.

JUD: What about the preparation of some of the other Everson pieces?

FRANK: We can talk about the entrance piece TRACK/TRACE, which had 15 monitors, again a triangle-

JUD: In stacks on steps.

FRANK: Precisely. It had three cameras, and a four level time base. That is to say, the audience walked into a room and they were picked up by a camera and fed back in real time, in the present tense, into the apex monitor, and 3 seconds later their image appeared twice on the next level, simultaneously with appearing on two monitors, and then on three monitors on the next level six seconds later, on four monitors on the next level nine seconds later, and twelve seconds later of the five monitors of the bottom level; and then the image on the screen is fed in from three different cameras every 8 seconds. One of the camera shots included the piece itself, so the piece was in the piece. The notion behind all this is that it is an attempt to incor-

porate one's physical sense of space and time into the phenomenon contemplated, so it becomes a dimensionalized contemplation of self. What you're seeing going on is your image being relocated every 8 seconds spatially, while it's being relocated temporally every 3 seconds, and it's multiplying in direct relationship to the advancement in the past. You see the present 3 seconds, 6, 9 and 12, and you have an electronic trail, so to speak, of your image in time and space, a constantly changing composition, and this is the phenomenon contemplated. JUD: Information decay.

FRANK: It's entropy, in a way, and the redundancy which emphasizes entropy, acquired in time, maintaining fidelity to do something, and it's diminishing. It's either more redundancy or less noise. In fact, it can be the same thing, generating less noise and repetition.

"TRACK/TRACE incorporates the audience as content. The viewer becomes the information, which he receives both in real time and in four layers of delayed time, so that he experiences 'self' at five different periods in time, simultaneously; and from three different points in space, sequentially." - FRANK GILLETTE

FRANK: There's nothing much else to say about that piece except that it's a distillation of other work; I've worked with this image concept before-

JUD: First with WIPE CYCLE-

FRANK: WIPE CYCLE and AMPS WATTS AND VOLTS are the two pieces that it's most closely related to, first at the Howard Wise show and then at the 1970 Brandeis VISION AND TELEVISION show.

JUD: Would you call it a further sophistication-

FRANK: Yes, and it's also a distillation.

JUD: In what way exactly would you say?

FRANK: In the earlier pieces, the time delay function, the time scrambling, was mixed with extraneous material, tape material and off-air material. It's a question of selecting out one cycle and working with that single cycle, as opposed to mixing 3 cycles, or 4 cycles, or whatever, with an accent on the distillation, I wanted to work on that alone and this was the idea that I came up with. And I wanted to disturb also the concept of it being a physical thing, dealing with its physicality in a way I hadn't dealt with before. Probably AMPS WATTS AND VOLTS was

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the first time I dealt with that physicality, trying to do something about its physical extension in space which was different.

"AMPS, VOLTS AND WATTS is an exploration of the interface-space existing between two rows of five monitors, face to face, parallel to the floor and separated by a distance of 14 inches. The viewers 'live image' interacts with a spectrum of video data on tape through feedback from the monitors. An accompanying audio collage and score completes the loop... Two sequences (cycles) operate continuously and simultaneously:

Cycle A- Monitors 1,2,3,4,5: Camera A alternates with the tape deck #1 every ten seconds.

Cycle B- Monitors 6,7,8,9,10: Camera B alternates with tape deck #2 every ten seconds. - FRANK GILLETTE.

(NOTE: Camera A and B face each other on either end of the horizontal matrix, and the monitors are alternated with odd numbers on one level and even on the other: 1,7,3,9,5 and 6,2,8,4,10.)"

FRANK: AMPS, VOLTS AND WATTS was built for the VISION AND TELEVISION show, done in January 1970; the hardware was from the Carpenter Center at Harvard, and it was a ten monitor piece with 5 monitors facing downward, and 5 monitors facing upward, perpendicular to you and parallel to the ground, creating a corridor of imagery. The two cameras at either end picked up the audience and interacted with 2 pretaped materials, and switched back and forth over the ten monitors going up and down. You looked down the corridor and you saw your image of you looking down the corridor, switching from location back and forth over the ten monitors, and mixed with pre-taped material. I think TRACK/TRACE is a distillation of that.

JUD: Also, TRACK/TRACE was integrated into the other works at the Everson show.

FRANK: Right. It had a feed out from the live time which fed into a ten part matrix in the third gallery, which mixed it with material from gallery 4 and gallery 3, and it was of all different life processes at different stages of development with different commentaries on their growths. Gallery 3 was a large ecological piece, the first one I've

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ever built, the large TERRAQUAE, and in it I built two 10 by 6 by 9 foot cases, terrariums basically.

JUD: Going back to TRACK/TRACE, can you relate your experiences in relation to the viewers?

FRANK: Well, I never have had quite such an experience before or since. I had a glimpse of it at the Howard Wise Gallery. But because the Everson was a museum, they had tours every day before museum hours, preplanned tours of grade school children; practically every day there was a mass of children who came through the museum before hours were officially open, and that's when I was usually there, getting my shit together or giving a seminar or hanging out or fixing something. So, I saw a lot of interaction between these kids and that piece, and what struck me was that it released a kind of activity in them that I had never anticipated; and it certainly didn't do an equivalent mode with adults. Adults tried to play it cool in front of it, like they tried to psych it out, but the kids, as soon as they got into it, they began dancing and actively interacting with it and with each other, mostly by dancing, moving their arms about, with incredible screeching laughter all the time. Enormous self-enjoyment. Some kids stayed with the piece a very long time. I found this oddly reassuring, for someone who's been accused of being such a goddamned snob. (Laughter) I had almost begun to believe that, by the way. But it was good to dig these children. I found I was satisfied by the fact that the kids were turned on by it. They were fascinated with the rest of the show, especially the ecological pieces, but they were really turned on by that experience of themselves.

JUD: The 3rd and 4th galleries were the ecological pieces.

FRANK: Yes. They were essentially the same piece. The chicken gestation piece was like an addendum piece. But it's more of a system than a piece. It's a system of discrete parts and discrete processes, all integrated- a systemic piece.

JUD: The entire show was designed as a system.

FRANK: Yes. It was designed as one piece, hence the point of linking gallery 1 and 3. When you get to gallery 1 you see the point at which you started.

JUD: And then there was the linkage between gallery 3 and 4.

FRANK: Yes. There are two images from gallery 4, one from the gest-

ation and one from the growth of the chickens-

JUD: On the ten monitor piece in gallery 3-

FRANK: Precisely. It's two images from gallery 4, the gestation was from over the incubator, and the growth of the chickens was inside the geodesic dome-

JUD: On either end of the ten monitor matrix-

FRANK: Exactly. They function as parathenses. The ten cases going down the side of gallery 3, and one large flat case on the other side were all different biological processes going on. In some cases, it's symbiotic, and other cases represent a parasitic relationship, and they also represent the relationship between decay and growth, between growth and stress, and another case, between decay and death. All those were played out, and I chose them not to make a didactic point about biology at all, but purely on aesthetic grounds, and hence they have this arbitrarily determined sense about them. You don't include red in a painting because you're making a didactic point about about the function and all the aspects of red; you choose it because it's an intuitive process that tells you to choose it, that provides you with why you choose it. That's why I chose it. I chose examples from each of the processes, as I understood them. The flat case had two colonies of termites living in, what for them, is a sea of wood, a cherry wood veneer-

JUD: A plane of veneer-

FRANK: At a 35 degree angle off the wall, 6 feet by 8 feet and a  $\frac{1}{2}$  inch wide, filled with cherry veneer and 10,000 subterranean Eastern termites, and this is picked up by a scanning camera which takes a meta-view of it. You can't expect the camera to pick up the activity of a single termite because it's always scanning, so the attitude of the camera is one of a meta-level, and then these meta-levels are brought together to form a continuous pattern, integrating all the various choices of biological interaction as becoming one continuous flow of information, patterned together, with all these scanning cameras, except for the one in the middle and the end, the camera over the incubator and the camera in gallery one are not scanning. All the other cameras move; they scan automatically.

JUD: The geodesic dome used a scanning camera.

FRANK: The dome camera moved 360 degrees, and there's a camera over each of the cases, of course, and there's a camera facing the aud-

ience which is looking at the matrix, and including it.

JUD: What determined the sequence of events within the ten matrix monitors? In terms of their structural placement?

FRANK: It was determined independent of anything inherent in the structure of the thing being conveyed. There are two views of the audience: one is from gallery one and the second is in the third gallery.

JUD: Why were those chosen to be the central images?

FRANK: Because there's a certain symmetry to the gestation and growth pieces, and that's where that symmetry best fit.

JUD: What determined the placement of the other six monitors?

FRANK: Each monitor conveyed what each camera picked up and sent to the matrix, a scanning image of what was going on. You saw live, from an eye view level, and you saw many levels of the informational process which is gleaned from what you've seen at eye level, from the top level, bird's eye view, which is scanning. There's no intention to improve on the screen what you saw in the flesh at all. It was like a means of commentary as much as a visual representation. It was a commentary on the process. It was taking technology and giving it the function of making a commentary on biological and ecological processes.

JUD: Was there any attempt to control the scanning rates of the cameras?

FRANK: It was controlled. I didn't try to make it slower or faster than they could go; there were all variable setting possible, but they moved at the same speed.

JUD: What determined that particular speed?

FRANK: The degree to which the image on the screen, just before it would blur, to move as fast as possible without distorting the image.

JUD: Which turned out to be what speed?

FRANK: Pretty fast. Full scan was 15 seconds.

JUD: And a return-

FRANK: So it was 15-15. It was just fast enough so that the material wasn't distorted by speed, but still nothing was restive.

JUD: An illusion of the video sense of momentum.

FRANK: Precisely. That's what determined it.

JUD: It might be interesting if you could interpolate any relations between these particular configurations and any combinations engendered or chosen.

FRANK: The things I chose I have an inherent fascination with, for some reason or another. I instinctually chose them over others. I knew I wanted to work with tarantulas and turtles and iguanas and horseshoe crabs. I wanted to work with old biological forms. The horseshoe crab is about 350 million years old without any substantial change. Arthropods represent a very rare offshoot wing; their phylum is an exceptionally different phylum from the insects, and the tarantula is the largest example available. And the idea of working with that kind of strange form has an intrinsic fascination for me.

I have a personal mythology with turtles which I picked up from the I' Ching, the tortoise shell pattern being the source for the I-Ching, and the iguana is another mystical beast that struck me. I've always had a fascination for iguanas, and some things came about just because of sheer practicality. I wanted to do one life process of gestation and birth and the best thing, in terms of convenience and availability of expertise, was with chickens. It was a question of chickens or ducks. I could have done it with doves- that was my original idea- but doves were out of the question; they're too delicate, which would have provided a problem, that delicacy, and chickens are the most reliable. So I got into learning how to gestate a chicken, and I had to do it from scratch. I'm not exactly a framboy. I learned gestation from the beginning. So the piece hatched six or eight chicks every day, and then they entered the dome, and at the end of the piece, you had 30 different levels of chicken, each separated by a day, which introduced strange hierarchy problems.

JUD: In the pecking order.

FRANK: It was very close, and always unstable, since new materials are always changing the stability. However, they had a sense of community, I was fascinated by it.

JUD: It was involved in the sociological pattern of chickens.

FRANK: Yes. It was the socio-biology of chickens. I think chickens have been bred to be a certain way because they produce eggs and they are good food, and all the selection and genetic manipulation has been in that direction, and the socio-biology is a byproduct of that. So they're like a school of fish, more or less in unison, but not quite as compact as a school of fish, and they break up into small units. But inside the small units, all acts will be commanded from the large male chicken and

sent down to the lowliest chick and it moves in unison. That's when they're moving. When they're just randomly eating, a certain kind of anarchy takes over. Control is less evident. But once you clap your hands, or get into the piece, you can see it. Which really struck me; I had no expectations- rats or chickens, any kind of Skinnerian simplicity will do.

In describing the parts of the TERRAQUAE "system" or complex, I hesitate to call it a piece. The five cases, nine feet high, six feet long, and 2½ feet wide had, in the first case, dead and decaying horseshoe crabs laying in a field of brine with agar and spores, very beautiful really- it was fresh water in a field of chipped rock and the chipped rock dissolved in the fresh water producing a chemical reaction, which interacted with the decay of the horseshoe crabs to produce a milieu in which growth was encouraged in the spores through agar pasted on the glass walls of the case. It was a nutritive context with a growth. The decay interaction between the stone and the water and the crab which was the nutritive for the growth of the mold on the surface of the glass.

JUD: Which affected the visibility of the interior.

FRANK: Yes. It was opaque at a certain point in the growth. And this was of course scanned from the top with a camera.

JUD: In a sense, in that piece, you relied more on the view of the scanning camera.

FRANK: In that piece, opacity took over. The next piece was hermit crabs, which represent a kind of parasitic relationship because they crawl into other shells; hermit crabs living in fresh water and sand, and fresh water snails in the water.

JUD: In the original shells in which they were found?

FRANK: At one point in the show, we put in a shell, and one of the hermit crabs exchanged shells. There, the ecology was the relationship between the hermit crab and its shell and actual shells; they're called mystery snails, medium, black, and they look like the kind the French eat. They settled around the water, and around them was the form of life that uses the shell. So there was that kind of commentary, with a scanning camera above.

The next case was supposed to be grasshoppers, and wound up with crickets, and the piece opened with 10,000 crickets, and they were lay-

ing eggs and burying the eggs in the soil of the piece, and eating the rest of the piece which was leaves and green vegetable matter.

JUD: What kind of leaves?

FRANK: Maple. A whole branch of tree was placed in. It was consumed in the course of the exhibition. I also put in chicken feed to supplement their diet, which they can live on as well and was recommended to feed them, and there were tens of thousands of eggs laid in the piece. The piece never reached maturity- that's when a noticeable degree began hatching. The eggs were buried in the soil, and at some point there were so many buried there they began to emerge to the surface.

Just the image of a glass containing 10,000 crickets.

JUD: How long would it have taken for that piece to mature?

FRAN: Maybe another week, or week and a half.

JUD: There were also crickets dying.

FRANK: Yes. After they lay the eggs, they die. So you had live crickets, crickets dying, and crickets laying eggs; crickets in three stages. The next piece was tortoises and tarantulas. What I wanted to demonstrate there was two completely impervious systems. Tortoises and turtles will not eat tarantulas, and tarantulas have no interest at all in tortoises. They're impervious to each other's ecologies, immune to each other's necessities, although they can coexist. And I was involved in the aesthetics of that mix, in putting tarantulas in with turtles in a very comfortable space, and watching these two phenomena coexist in terms of space. The habits of tarantulas are intensely territorial and the female will hunt out all males within its range and attempt to kill them after having sex with them. It's a characteristic of all tarantulas.

JUD: And other spiders also.

FRANK: But tarantulas are the most fierce, I think. And to see two tarantulas in a death grip is a remarkable sight-

JUD: Which occurred at the exhibition?

FRANK: It occurred at the opening. That was quite a cue, the timing they had. There was this major battle between two of the most dominating females on the back of a large wood turtle. They basically staked out territory on the back of this turtle who was completely going about his business of burrowing in the mud and eating and kind of being with the other turtles, carrying them on his back with a world

in fierce conflict on it. In the last case there were two varieties of iguanas, a larger and a smaller variety-

JUD: The smaller ones appeared to be the larger one's children-

FRANK: Indeed. In fact, they lived on its back, and the iguanas lived on the top of a bed of geraniums which they ate, which they consumed.

JUD: That's one of their natural foods?

FRANK: Right, a delicacy which they like.

JUD: Probably something they don't get very often, but appreciate.

FRANK: Quite well. The blossoms basically. They also like bananas, and we supplement their diet with bananas and insects- meal worms- so I would sprinkle in meal worms at the end of every day I was there, or someone else would.

JUD: All of the cases were maintained this way?

FRANK: They had to be. The piece was not conceived in terms of a David Smith sculpture in which you have all this steel and the only maintenance required is that you throw an oily towel over it for a millenia or two, if you're going to stash it away. When you're dealing with a process, you're dealing with all the contingencies that maintain that process; dealing with living phenomena like animal life increases these necessary contingencies. You have feed them and maintain the atmosphere in which they thrive. So each of the pieces had to be dealt with in some way.

JUD: Do you feel that some of the ecological pieces were more successful matings or demonstrations than others?

FRANK: I think it sinks or swims as a piece, as a system. You can talk in terms of parts of the system, but that was simply the vicissitudes of what was available and the available expertise and my own wit. I would never build the piece again; I wasn't asked to build an ecological piece, so it was, strictly speaking, a piece confined to the time and to the state of the art, with which it became synonymous.

"The processes occurring in the systems evolve and exchange at different rates. The television cameras/monitors depict these systems as information. The audience's participation of both levels produces a third, or meta-level." - F.G.

JUD: Are you anticipating the execution of any ecological or related pieces on the scale of this exhibition?

FRANK: I've been thinking about a piece since last winter, since I began thinking about and working on computer games. I started consid-

ering games which would utilize ecological processes on a vast scale, for example, getting into the hypothesis that you can take select data from satellite surveillance and other ecological modeling systems, and take those results and somehow or another interact with them, producing a new synthesis of interaction, in a game format. Now, this would be working indirectly with real ecological phenomena. So I've been thinking about that. I've not been thinking about building a physical plan as I built at the Everson. I'm beginning to design a matrix, an environmental matrix, for the Walker Art Center in Minneapolis, which will probably not include biological material, taped biological material, but not live biological material, I don't think. If there's a sufficient budget, I might consider it, but I'm thinking about that now.

JUD: But there would be human input? In real time?

FRANK: There would be human input, a real time input, in a way that I have not yet used. I'm just beginning to think about it.

JUD: Are you in a position to discuss the line that you're pursuing?

FRANK: I'm talking about a feedback space which would be determined by the variability of the positions of camera in the environment. Most camera angles are expected, hence all the feedback imagery has an anticipated look, a kind of half-life of anticipation, and that half-living can be reworked. I'm trying to work out camera arrangements, and feedback arrangements which would sustain a degree of mystery about the feedback, although the content of the feedback is the audience itself, in a way I've never used before. I've always used cameras in a feedback environment in order to clarify and simplify one's orientation. I want to get into making that a much more complex area of interaction. Low, light level cameras, high cameras, different sets of angles, working with different territories being picked up by a whole new definition of the ways cameras are arranged and information is feedback.

JUD: Where the cameras are arranged spatially-

FRANK: Spatially, and also in the feedback relationships, in terms of the multiplicity of images, the closeness of image, the arrangements of images and juxtapositions. So I'm thinking in much more different direction again than the pieces which were built at the Everson. At the Everson, everything was concentrated; it was the culmination of that

wing of thought, at least as I've been entertaining it for the last few years. It was the culmination of one direction. Now I'm working in the other direction.

"PROPOSAL: MAZE, a circular network of intercommunicating paths, 120 ft. in diameter, placed in a field of high grass or dense brush. A congruent, corresponding network of twenty two scanning cameras and twenty three monitors positioned at varying intervals along the paths. Feed from the cameras is relayed to a twelve level time-delay loop, such that a participant in the maze always encounters an earlier image of himself as he moves to the center of the network."

- FRANK GILLETTE (1972-73) in RADICAL SOFTWARE.

JUD: How do you feel that the structure of your pieces relates to divine geometry?

FRANK: I think they do relate, but I'm not playing out the axioms. I'm interacting with them, and referring to the Kabalah and the use of the triangle.

JUD: What about magic squares?

FRANK: I've never worked with magic squares as a form, but I've worked with the concepts that derive from and around it. For example, a triangle of triangles within a circle, as in TETRAGRAMMATON, and the implied space around a circle, producing in effect, parabolic shapes. I play with those senses of geometry. I've never tried to institute an ideology that reflects these in any way whatsoever. I take them for the same elemental reasons, compositional reasons, that a painter would choose a color or a specific shape, or a specific setup of juxtapositions in textures and form on a canvas. I just simply choose technological or biological arrangements and produce compositions with them, as opposed to colors and shapes.

What I'm trying to do is infrom the arrangements with a greater range of reference, as much as I possibly can, without overdoing it. Obviously, there's a point of didacticism which is reached, where a thing sinks in its own sense of reference. It should be free of them, as well as connected to them, at the same time, to somehow embody that complex. So, I'm not trying to introduce any ideology of numbers, or anything. I'm saying that everything is fair game compositionally when you deal with information as a process. The compositional elements of whatever you're dealing with, technological, biological, or ecolog-

ical, whatever material, whatever is within my wit or reach, I'm willing to use. Nothing is sacred, including my own experience of myself. JUD: How do you relate to work shown in galleries and museums predominantly as opposed to the way video is considered in different types of structural systems for displaying the information?

FRANK: Why have I done it the way I've done it? I don't think I have any choice. In the kinds of things I wanted to do, and did, there's no sympathy for financing, or even thinking about financing, in any other context but the art world. Most of the money went for videotape, and most of the impetus for ½ inch videotape went into an immediate quasi-sociological bag, and also small entrepreneurship. Some of the things in that bag, I'm also interested in; I'm not saying that I discount them. I had an original interest in it, in the beginning. Raindance is an example; however, the shape of Raindance has changed considerably since the idea of the turn-on in videotape, so that none of what I really wanted to do fit into that milieu, that paradigm. And the only place that would entertain what I wanted to do were people like Howard Wise, Russell Connor, and James Harithas, people whose connections and whose power base are in what we refer to as the art world. And that's basically where the audience is as well. I don't have much of an audience outside that.

JUD: They are people in the alternate sociological end of video who look askance at the so-called art video piece.

FRANK: I know. I'm aware of that. My name has been used in vain in some circles. (Laughter) So what?

JUD: But, in terms of the modifications of perceptions and levels of consciousness, which I think video is capable of, how do you relate to the progression in that direction?

FRANK: Talking about the direction of my own work, my initial experience with videotape sent me into the street and it was intensely socio and intensely psychological. I turned the tape on myself and I began doing what might be called videotape therapy-

JUD: In the street, and then into yourself-

FRANK: Precisely. And both at the same time, done simultaneously. Recording your own behavior and then watching it, videotape therapy, watching my response and recording my response, and so on, ad infinitum, up to six or seven levels. And doing this under the influence of psychedelic drugs, and this was the 60s, six years ago. And then my

interest left that aspect of videotape. I was more impressed by the limitations of that world than I was by its opportunities. I felt that it was harder, too sensitive, and highly subject to political manipulation, and various kinds of skullduggery.

JUD: Which is inherent in the economics of the current communications scen.

FRANK: With the granting systems, and the way people had to scramble for money, the whole thing just turned me off, and I retreated, as you may know. I split the scene entirely and wrote a book. And emerged from that with no interest at all in rejoining that attitude, that evangelistic attitude to tape: "I want to turn the world onto videotape" attitude. It's a good social tool and a great therapeutic device, but the parallels can be strained to the point where they don't mean anything. And the relationship between this attitude to videotape and mine is about as far apart as you can get, and still have work in the same medium.

I'm more interested in seeing how far we can soar with it as oppose to what ways we turn ourselves on to manipulating information with it. Even if the way you want to manipulate information is for the good of everyone, as far as social good- I'm not against social good, as a way for people who wish to improve things. I'm saying that an intensive and restrictive isolated focus on that aspect of the medium is simply a gross distortion of the range, potential, sophistication and solvency of the medium, and I'm more interested in that. Because that's where you soar. I want to soar with it; I want to take off with it. Do it in a way that emphasizes the differences and not the similarities. Deal with it as a highly mutable medium, which it is, and not become lock-synced or glued to one attitude about it. I'm afraid that a lot of people have that missionary zeal, the social fallout of the ½ inch video systems- missionary zeal is the word. They go and establish colonies, which is fine with me. Good luck to them. But I have no interest in it.

I think the strength of fantasy is the degree with which it can be translated into a medium which strengthens the concept of the fantasy, which strengthens the imagery, which brings it into a medium out of the world of imagination alone and establishes it as a testing of your world, in a sense.

JUD: Like the American pragmatists.

FRANK: Yes. I'm a pragmatist. A measure of it is a certain realness of the state of the art. Your sense of imagery, or sense of system and process changes as the availability changes in relationship to state of the art in the milieu in which you work. If you choose electronics as a medium, you've got a constant change of the art within years; I think every 2 or 3 years a new element enters which changes the configuration of the medium, the structure of the medium you're working with. So you have to be aware of these changes and the implications which carry forth from them, the kinds of inferences which are generated by the fact that these things are changing, and the way they're changing. The availability of screens, of multi-monitor systems, the availability of cable, all of these are constantly evolving, changing, switching back and forth, affecting each other. You've got to evolve an attitude towards those changes. In terms of the spiritual question, our spiritual evolution is a project which is our own, and the way we can affect or facilitate someone else's is by the byproducts of our art, by indirection, not direction. If videotape becomes a medium in which people directly influence and manipulate other people's spiritual development, I think that's going to be to its detriment. It's like Soviet realist painting, in a way a direct parallel between that and the stricture that you can only paint tractor and healthy workers smiling and singing the Internationale in the wheat fields. I'm obviously making it very one dimensional to emphasize the manipulative rigidity which is involved in seeing it as the medium in which you can spread ideas to make people better, and to conform the use of the medium to that attitude. So they would probably accuse me of doing something which doesn't mean anything to everybody. And I would dissent. (Laughter)

There are other people involved in the same frequency that I am. They're just tracking a different trip. The work of Ira Schneider, Andy Mann and Peter Campus, to name a few to whom I consider my head close to, many of them are involved in using videotape systems as environmental phenomena as a premise, and working off the variables from there. I'm interested in getting into computers, as I mentioned. I've been playing games with IBM computer game players. I'm interested in designing my own, and that's where in the state of the art I'd like to place my interest. But again it's a question of access, how

much access do you have to making those ideas real. I wouldn't entertain them if I didn't have a chance of making them real. I'm not designing pieces which need a Titan rocket because I have no access to Titan rockets. You have to anticipate the availability. In fact, in basic pragmatism, because the work requires it, you have to have a realistic view of the world if you want to see things done. Whereas a painter doesn't have that; there's always stretched canvas to work your art, which is another attitude entirely about aesthetic form.

JUD: Would you relate to Taoism as a pragmatic form?

FRANK: Definitely. In a sense, since I read the I'Ching everyday, I'm a Taoist. I guess, if I really think about it, I'm a practicing Taoist. I read the major holy book of Taoism every day.

JUD: In a ritual way.

FRANK: Right. And I consider it a very practical experience.

JUD: Which it is.

FRANK: Hard to take sometimes, but goddamn if it isn't something to get involved in. Some Zen theorists, not all of course, in my opinion, over-emphasize the getting into of ordinary day-to-day existence. I think that's too weighty a pragmatism. I'm saying that one should be as pragmatic as is required to fulfill the fantasies to which your imagination has brought you. The level at which those fantasies operate in the equivalent level of reality, and the bringing together of the two requires a pragmatic state of mind. It requires being able to figure out how you can do it, and then doing what it's necessary to do.

JUD: You've spoken of the relevance of ecstasy to your experience in work.

FRANK: I mentioned the Irish god, Angus. I'm working on a sequel book, actually the second of three, the first already published being BEYOND PARADIGMS, and this book has the working title of ANGUS, who is the old Irish god of ecstasy and beauty and eloquence, the Irish god of poetry. And the nature of the book has elegance in the mathematical sense, which is poetry in the mathematical sense- they fuse together somewhere- and the nature of the work is to provide a record of proposals or suggestions, diagrams, ideas, attitudes, etc. which attempt to utilize communication technologies and computer systems to TV to purely ideational matters, like diagrams, scales and heuristic devices which are purely ideational, and to assemble them in a way which evolves an overall, infrastructural attitude toward technology as a

contemporary medium, and my readout on the kinds of ideas possible to an artist who has chosen it as a medium. What's really possible and how do you begin thinking about it.

It's a cliché to mention that if the 19th century imposed anything on contemporary technology, it was its grim vision of the process itself, the mechanical, mechanistic, protestant thic, laborist view of the function of and potential interaction one can have with a technological system. And ecstasy is certainly not going to come out of that, except in the most pathetic form.

I'm also involved in actively, not as a religious or theological experience, but as an aesthetic one, developing a ritualistic context, or doxologies, using different technologies, and the interacting players would engage in a kind of theater. That's what a computer game would be; it would be a heuristic theatrical context. People relate to data that comes in from the computer, and then relate to the reaction that the computer has to what they did to it, and all the variabilities on that, and then having criteria or figures of merit to judge the variable values of what is done in such a way that you have a kind of heuristic competition, a heuristic interaction where ideas are generated out of new contacts which were impossible before the game structure was imposed on the data. And that can, in a sense, become ritualistic, not in the sense of repetition and redundancy, but ritualistic in the sense of plugging in your sense of awe with the limits of your communicational technology. Which is all that ecstasy is, really. It's to take the entire system and utilize it in such a way that it turns you on to a whole new structure on what's possible.

" 'Trouble arise' writes Gregory Bateson, 'precisely because the "logic" of adaptation is a different 'logic' from that of the survival and evolution of the ecological system.' The purpose (goal, object, context) of the game is one of simulating ecologic and behavioral complexity...of distinguishing the sets of relationships between, and the channels of influence exchanged by conceptions of the world and their subsequent control over behavior in the world.

2. The game is played by 3,6,9,12,15 or 18 people with a computer system which provides the constantly evolving context within which conceptual models are created and embodied

in a range of media, from diagramatic print-out to holo-graphic simulation. The system also provides the criteria by which models are tested.

3. A primary function of the game is the development of a variety of world-process orientations articulated or embodied in more and more encompassing contexts."

- FRANK GILLETTE, excerpted from NOTES FOR A PROPOSAL ON CONCEPTUAL GAMING in RADICAL SOFTWARE, Volume II Number 5.

JUD: Do you conceive of all formalistic structures as games in a sense?

FRANK: No. Games are explicit forms, specific cases of that. The game metaphor is useless for a lot of life; it leaves off at a certain point and it's not useful at all after that point is left off. But, within a certain range, it's a very useful metaphor. It leaves off when it comes to the inexpressible. There's no way of applying a game metaphor to the inexpressible.

JUD: It's a threshold, the inexpressible.

FRANK: That's in a certain range; it leads up to that, and beyond there's no game structure that explains anything. Game structure explains basically human interaction. It's anthropocentric though it's usually imposed upon the rest of life. You can see the games of evolution, in a sense. The thing that makes a game a game is a degree of explicitness and rules, and the problem is that those ruled in effect become the game. There are certain contingencies in life which have no explicitness of rules. The day the game metaphor goes away, the inexpressible takes over, in a sense, and you play strictly by fine tuned ear, you hope, at least what you to believe is a finely tuned ear, and you may develop explicitness from that experience, but you don't go into it with it. It doesn't function as a game. I think too many find themselves suffering from all the problems of reductionism in a singular clue, if it's the only thing you see social existence as. There should be several models with which you understand social interaction as existence, and game theory shouldn't be seen as the only one. The model is the epistemological tool.

JUD: So, in what relationship would you place your work to the immediate future state of the art of video as it's progressing. What do you see happening in the overall scene and your relationship to it?

FRANK: I think there's a basic healthiness to some of the people involved. At the risk of sounding Prussian, I would say there's a certain wheat/chaff separation that is always taking place, but things become clear when perspective is gained, and certain ideas will suffer in application the way television suffers in the overwhelming exposure it has. And there's an inverse ratio at work in the degree of intrinsic interest over the amount of hours exposed to a given audience. The audience, however limited, for the products of television laboratories on NET and cable systems may not be necessarily the audience that my work attracted, but I don't isolate myself from those people. It's just not my focus because it's a basically one screen situation in a living room where people see all other kinds of television.

I'm much more interested in creating environments which are completely distinct from that experience of television. It requires a different attitude entirely towards the medium, and subsequently a different audience is attracted and a different criteria establishes its value as to what is or is not successful. So that's how I see my work in relationship to those people who work in TV Labs with synthesizers and the like.

JUD: What about the new interest in satellites?

FRANK: I would have to have a more pragmatic understanding of how time, for example, is purchased and maintained on a satellite and utilized. Ira Scheider has developed a piece which would put video input from locations all around the globe simultaneously in one place and then they would be pointed in metaphorically parallel relationship to where they are around the globe, so you would be surrounded in real time by inputs from satellites from the different Time zones.

"REAL TIME (a Video Environment for the USA Bicentennial Exhibition)- It is now technologically feasible to monitor aspects of the whole earth. In fact it is being done. However, the real time information thus generated is not generally made available to the public. The following is a proposal for an exhibition which permits the public to sense the simultaneity of micro-cultural events on planet earth.

Eighteen 25" monitors suspended seven feet above the floor and 6.28 feet apart circumscribe a space eighteen feet in diameter. Eighteen images are presented. Each is a real

time telecommunication (via satellite) from eighteen major cultural centers around the planet. At each of these centers three camera positions are selected revealing macro- to micro-perspectives of the cultural environment by day or night... Flexible pre-programmed automated switching allows for the selection of the eighteen single camera views to be transmitted to the exhibition hall."

- IRA SCHNEIDER, 1973 in RADICAL SOFTWARE.

("ONE LOOK, MANY POINTS OFVIEW, ONE WORLD")- I.S.

FRANK: That's one attitude that I found extremely interesting, that's just the beginning of everything, because you can also do variables on that theme. I'm interested in the potential of two-way cable systems. I think at some point the following hardware will be available: you will have a console in your room, and anywhere from 9 to 20 screens, and with this console you would receive and program for yourself via telephone or xerox machine or whatever, a catalog of what's available in each computer bank, a constantly updated catalog. And you would dial into the computer bank to get any one of your screens, and any number in conjunction. And that's hoe you would experience television.

You would have your nornal broadcast schedule at the same time, but basically you would have this facility in which you could access many resources as you could reach banks of computers through a dialing system, and you would be charged for the amount of time, or whatever, or for whatever materail you used. I'm extremely interested in experimenting with the potential of a system like I just described, which I think is capable of becoming reality at the end of the decade or so. And then we can begin to think out larger and larger complexes of informational process, and more and more permutations will develop, where you could enter into any one of those banks your material as well as take from it, and what you enter into the bank is put into the catalog and becomes available to everyone else. So you could have the whole world plugged into a practical infinity of banks. You wouldn't need any one master bank. That's the old way and it's a stupidity we're going to wind up with if we don't watch out. We could have an infinite variety of banks and you could plug into any one at will.

And when television reaches that kind of technological state, you'll have an equivalent software opening, and the state of the art

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will change exponentially. And I'm keenly interested in that development and the possibility of working with it.

JUD: Your book, BETWEEN PARADIGMS, can be read in sequence, or out of sequence, except perhaps for the continuity of the videotape stills, and I find that a valuable format for a book, with individual pages and pieces-

FRANK: More discrete entities.

JUD: And yet somehow bound together very closely, like nodules in a network.

FRANK: I would say explicitly, it's the language I use, it's the language in which I think, and it's the language in which I formulate ideas. That is to say, I need a language which postulates networks and modes and paradigms, nodules, feedback operations, and so on. Reality in the language of cybernetics. I seem to formulate all my ideas in the same terms. And this somehow or another emerges in my book as well as in my show. I'm not surprised.

"As the evolution of stellar mass and energy yields life, an initial apperceptive enigma evolves radially into complexifying equilibrium. From its consequences teleologies are inferred and description holds forth. Described within its own context, life traces its intuitive dynamic into art. As art is the successful communion of a variety, life's paradox is identical with art's: Affinities for opposites changing into one. In seeking the more perfect illusion, art seeks life."

- FRANK GILLETTE IN "BETWEEN PARADIGMS".

PAUL RYAN: Self-Correction Through Cybernetics

"Regarding black and white videotape we make the following assumptions:

-Videotape records a person's genetically determined uniqueness, that is, their firstness.

-Videotape records the way of a person's firstness, that is, the mode in which they have learned to segment the continuum of their experience.

-Through videotape feedback a person can learn to enhance their way and learn new ways.

-Through imitation of another on videotape, one can learn another's way.

-Videotape can record the given pattern of differentiation of many natural and man made forms in such a manner as they can be understood structurally by man.

-Videotape feedback opens up channels of communication in a triad of people sufficient to enable them to stabilize a threefold relationship in a self corrective manner."

- PAUL RYAN from EARTHSCORE (For an intentional community using videotape).

JUD: Jargon?

PAUL: Jargon. (Laughter) Vocabulary. Yes, I've had to develop a peculiar jargon, because when you talk about tape you develop a new vocabulary on top of tape that has to be different. So, what words come to your mind? I have a friend who used to say: "Think of your five favorite words, and you'll know pretty much where you're at."

JUD: Well, let's start out with Kleinform, and the differentiation between Kleinform and Klein bottle.

PAUL: The Klein bottle is a mathematical curiosity developed by a mathematician named Klein in Germany (NOTE: Felix Klein- 1849-1925), and what I did with it was to transform it into a form. I'll talk about it and then come to a tighter definition.

JUD: Right.

PAUL: A bottle gets its stability from gravity. So just by naming it a bottle the cat precluded thinking about it, but when you take the part contained through and come out again, and go back through and

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then link up again, you've got a different systemic, a different relationship, and the stability comes from the inter-relationship of the parts and not from it being named a bottle. The Klein bottle itself, if you try to use it as a model of thought, allows a kind of inspin. You can go from the part that's contained to the part containing, and back and forth, with a kind of an oscillation. With the Kleinform you can't do that.

"The Klein bottle outline passes continuously from part contained to part containing that part, and vice versa, without formation of a part uncontained. In kleinformation such a passage is not possible. This is the essential difference... This two part pattern of thinking we call inspin. It is like a dog chasing his tail unto exhaustion. Inspining is not thinking kleinform. Kleinform maintains a threefold differentiation of part containing, part uncontained and part contained. If you have less than three self differentiating parts, you are not kleinforming."

- PAUL RYAN in EARTHSCORE.

JUD: You would equate oscillations with the inspinning process. A pendulum.

RYAN: Yes, a pendulum form. Any back and forth, dyadic type of motion, that simply by that motion can become so symmetrically related as to lose context. If you work into a triadic system, you're insisting upon context. That was McCullough's idea; towards the end of his life what he got into was triadic logic, because if you have a triadic system, you necessitate thinking about context. I mean, if you stay within that mapping context you're insisting on context. And it's a form. I thought it was a language at first; I made that mistake in the last chapter of the book I wrote (NOTE: BIRTH AND DEATH AND CYBERNATION, an Interface Book, Gordon And Breach, 1973.). I took the mathematician Rene Thom uncritically, but it seems that language structure is subject-predicate, and that's the dominant mode of the way we think-

JUD: With modifiers-

PAUL: And qualifiers, and so forth. A Kleinform is a different structure for intelligence, and a lot of the struggle that I've been in is trying to get this non-verbal form accessible to people in words, so that they can understand it. It'll come. I'm developing a language

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that will do that. It's much more important. People who work with tape understand it quite easily, and dancers have come to understand it by working in the form.

JUD: You can't think of any semantic equivalents?

PAUL: Not structural equivalents, not semantic structural equivalents. It's not a language. I thought it was a language, I called it a language, but it's not a language. It's a form. Spencer Brown's LAWS OF FORM was helpful in thinking about it, though I disagree entirely with his basic distinction of dyadics which he works from. I think that's acontextual and I think it's bullshit of a kind, even though it's elegant.

JUD: It's extremely elegant.

PAUL: Yes, and the elegance has an enormous strength, but he and John Lilly are both on a kind of attenuated trip from what I can see. I mean they've thinned out their thinking for the sake of elegance, but it loses context. The structure involved loses context. That's my sense of it; I'm sure there are other readings.

So, that's Kleinform. Firstness is another word that I've been using. It comes from the Stoics, and also Charles S. Pierce. Pierce was very fond of it. And I liked it because it precluded a hierarchy. If everybody's got firstness, then there's nobody that's first.

JUD: As we used to say in the USCO group: "You don't have to be first to be on top."

PAUL: Right. That kind of thing. And it also speaks of uniqueness, like if you record it on tape, you can't imitate it; it's like a fingerprint. When somebody's on tape, the firstness is apparent, and you can't argue with it, nor can they really. (Laughter) You've got to come to some relation to it. And I think it's a genetically determined reality, and the first reality to accept. It's the first limit system you deal with, your genetic coding, and if you move outside your firstness, or develop ways of behaving that are contrary to your firstness, you wind up schizophrenic. And the culture's pushed us that way.

JUD: Into developed secondness, in a sense.

PAUL: Right. I've come to use the phrase "departures from firstness," related to the conceptualization of the community that works by electric tape, or electric metaphors, basically tape, and there will others, like holograms. Basically non-print media. Departure from

firstness seems to be the mistake, the error which can be made if you push somebody so that they're forced into a contradictory relationship with their firstness, or if they push themselves, and then a contradiction is created, and so on. Foistness. (Laughter)

Other vocabulary? Chreod is another one. Chreod is a term developed by Waddington. That is another thing in the book that I didn't get entirely clear. What Waddington was after was a necessary path of development, and Thom picked it up and generalized it. It comes from two greek words: Od, meaning path or way, and cre, meaning when it is necessary. There are certain structures, or certain models, that support and describe a process, like the tape I made with the Klein-form on the floor which described and supported the process that was going on. Waddington was working in genetics and embryology and developed this notion that are certain patterns, necessary pathways, that if a process is developing there is a necessary pathway that you can describe, and that if it's disturbed, it will return to this pathway. What I tried to do with the notion of sacred chreod was to say that in our evolutionary schemae, there are necessary pathways that evolution has taken which, if we disrupt them, or destroy them, we destroy ourselves. Bateson's rap is that the species that destroys its environment, destroys itself. So that's what the EARTHSCORE text is about in terms of chreod cells, the attempt to discover those given patterns of differentiation in the evolutionary ecological scheme, which if we destroy we destroy ourselves. And by fixing the word sacred to it, the intent is to release and bring to bear man's religious traditions and religious sensitivities in relation to the life support system that he has. It's a very rich notion. Thom and Waddington also go in for the notion of homeorhesis, rather than homeostasis, "rhesis" being "over time," because they say that homeostasis is death. It's a spatial metaphor, whereas homeorhesis is a developmental process.

JUD: What about the terms, cell and chreche?

PAUL: Creche-cell. I like the sense of the word. It's like a crib, in French, and it has the sense of child, and care and tenderness. It's like the family cell in a sense. You see, the structure of EARTHSCORE is entirely mathematical; it's a rigorous mathematical metaphor. The words could be changed. The notion is basically a self-corrective cell of three, and then three different orders of

cells, which were names creches. The business of the chreche cell is taking care of firstness; that's its basic function. Chreod cells being cells that decode the given pattern, the differentiation, the ecology, and organize behavior in relation to respecting those patterns. And the work cell would be the cell that interlaced with the society-at-large and maintained whatever was necessary. With the notion of three being self-corrective, you can work exponentially, just increasing, so you go from three to twelve, and then three sets of twelve, three different orders. Once you get to Kleinform, as opposed to Bateson's work, which is based on the theory of logical types, no class can be a member of itself which assumes a discontinuity between a class and its members. If you accept the conceptualization of logical types, which I think is basically a print metaphor, you're inevitably caught in a class society, which is what Marx was decoding and was riled against. We've got to get to a classless society, and if you work in Kleinform you can have a society with no class, because you assume that people are discrete, such as bits of alphabet on a page. You don't class people according to discretion; you accept that they're part of a continuum, which has very large philosophical ramifications. When I read Pierce and saw what hw was trying to do with a triadic system, it's enormously rich, enormously strong, and also his sense of the continuum. But the understanding of a continuum has always been linked up with a unity, a unifying kind of principle. In other words, if it's continuous it's unified. You cannot differentiate.

Once you pass the continuum back into itself, you have the capacity of the mind to differentiate without severance, without discretion, without cutting off. So you never lose that you're part of the whole. I don't know how far it can go as a form. My sense of it is that as a form it will take habit in an evolutionary sense; that we've had a period, by my calculations, of the 60s and so forth as a period of trial and error, which was random, and the cybernetic metaphor was used randomly. I sort of came to that through McLuhan, through the use of video, and became dissatisfied with the randomness, in terms of using something like video, and out of the video work, that form came to my mind. It seems now that that form can take habit, that it's possible for that form to take habit. I used to use the metaphor of guerilla warfare in a random way. For me, anyway, that phase is over. The random is not a coherent metaphor. It was useful at the end of the 60s, but not that useful now, although it was rich. There's a more formalized

possibility that I can see now, using the conceptualization that I've come to, or the composition of EARTHSCORE, but the Kleinform is basically that which can take habit. What I'm up against now is trying to find the proper context for that to take habit, and I'm still not sure yet, at this point, what that is.

"In English, the verbal formulation that best insures the mind of staying within the rigorous mapping of relationships possible in kleinform is the injunction, 'never less than three.'" This we call the Canon of Self Correction... That which cannot be decoded or commanded according to the Canon of Self Correction must be accepted in its given pattern of differentiation. Any non-self corrective process gives rise to a fixed morphology definable once and for all by a model of that process, a creed that reveals its self stabilized structure. For example, the breaking of a wave cannot be commanded to happen in Kleinform. Similarly, the Canon of Self Correction cannot command triplets, a tri-sexual species, or undo our bilateral symmetry. Births as given, species sexual differentiation, and bilateral symmetry must be decoded and accepted as given restraints on kleininformation. Similarly, non kleinformed self corrective processes must be related to with respect to their form."

- PAUL RYAN from EARTHSCORE.

JUD: How do you feel that this form relates to the content that might fulfill part of it?

PAUL: Well, it has a bias. Any form will have a bias for a certain content.

JUD: Yes, that's the light in which I'm asking that.

PAUL: Yes, and I'm not really sure at this point. On the basis of the last weekend's work and other work I've done, that behavior is the proper content for this form, as opposed to the Skinnerian stimulus-response kind of thing. I think that this form provides a shape that's kind of minimal, very minimal, within which behavior can be invneted, so that it's in a self corrective way.

Individualized behavior, like the metaphor of the circle, and everybody finding center, like the Sufi tape you showed me, which is a strong and good process, does not allow a differentiation of roles, or a differentiation of relationship, and I have this sense that any kind of religious form, center- the same with Buddhism and Yoga and

Christianity, any of them that use that centering metaphor- because it can be used acontexturally is a kind of proto-fascistic structuring of consciousness of which I'm fearful. For example, in the name of ecology, a lot of ugly shit is going to come down. And people now have a sense of the ecology and so forth, but if you define a circle where you're inside and somebody else is outside, you're back into a kind of tribal warfare syndrome, even at a religious level. Perhaps that's an over-reaction on my part, and an attempt to differentiate a new form from the old, but I sort of keep that flag in my head when I see a circle. (Laughter) So behavior is a proper content, but verbalization, I don't think so.

I don't think that the structure of language, unless you get into a Joycean usage where language is more on the auditory channel and is a flow of mechanism, then perhaps verbal form can be found, or the verbal content of this form. Thom, the mathematician I've been using a lot, is now trying to decode the structure of language using his topology, along with the notion of chords and attractors. I talked to him about a year and a half ago (NOTE: This rap was in 1973.) but I expect that out of his work I'll be able to find some way to understand the relation of language to the kleinform, whether it can be proper content or it needs to stay in a non-verbal realm. Language has been so dominated by print, and print structure, that language is in such bad shape in this country. I found that in the VIDEO WAKE FOR MY FATHER (NOTE: Twelve hours of tape presented by invitation only in an apartment in New York City) that what I was doing was pure command. I was using raw sentences, complex sentences, which don't work somehow. It was John Lennon's Primal Scream album, with very simple language relationships. It reminds me of the context that George Steiner set up for trying to understand what happened to the German language in the 30s.

The language itself has somehow become depleted of meaning, and I think that the habit of public life that we've gotten from advertising and politics has sucked, whoosh, language of meaning. Nobody's publishing anything that makes any sense. Mailer is straining at movies, Marilyn Monroe, and you meet people all the time who are closet writers, doing very fine things that never see the light of day. So language is in bad shape. So I don't really work to get language into a kleinform. I'd be content in a community for a while where nobody did anything but quote FINNEGAN'S WAKE. (Laughter) Then maybe we'd

get some sense of the richness of language back.

JUD: How do you feel that your earlier involvement with the concept of infolding through the medium of tape has evolved into the kleinforming through tape?

PAUL: Infolding was a vague tag on the sense of what could happen, coming of de Chardin and the business of matter being lined with consciousness, and the noospheric concept of earth infolding on itself. William Blake used the word as well. My mind, and I guess a lot of other's minds work this way: you have an intuition and then you tag it with a word like infolding which is unusual, that stores it in your mind until you can develop it another way. So, the infolding was a vaguery, and the kleinform is a very rigorous mathematical, diagrammatical structure, and you really don't need to use the word "infolding" once you've approached Kleinform, because the kleinform goes through; it's not just an infolding. I remember explaining infolding to a college kid about two years ago, and then explaining kleinform, and said: "But it's not infolding anymore, because in and out are not valid, not viable." That's pretty much the relationship. Of course, videotape was the metaphor through which I got this form. Simply by doing a lot of tape with yourself and not accepting a discontinuity in replay. I suppose film and the time delay precluded this kind of thinking, because of the laboratory, but when you're using tape you're in the same time-space situation, and you begin to weave it. You can do that with a kleinform.

"The process of getting to tape was really a transition from aural culture to electric culture.

JUD: Through your work with McLuhan at Frodham.

PAUL: So it was easy to dig what he was saying. It wasn't a question for me of writing criticism of McLuhan pro and con, but let's do it. So it was obvious to get your hands on the media, so I started looking around for something that nobody had touched; too many people are into film and that medium just didn't turn me on that much; it was like a different space, so I went to videotape. So I went to the library and found that nobody knew anything. The only guy around was Paik.

I had a chance to get onto the portably Sony stuff and I started working in the Montessori school. I worked with

the kids one day a week and I took the equipment home. It was the old Sony 2000 studio deck. I just approached it from a kind of McLuhan head: what is the grounding of this, how is it different from print and different from film, and what distinguishes it. The most obvious thing was the control of time and feedback, but it was a closed loop, especially with the kids, so I started making it available to them in another room.

Two things are important: one was the business of so much feedback with yourself, and what that does to you, and getting yourself beyond the behavioral constraints of the society so that you're not dependent so much on a mirror, or somebody else, to get yourself back, because you can get yourself back. Like I know how I look when I jump, and I'm not going to be afraid to jump because somebody else is watching, because I've seen myself jumping already. So, doing a lot of tape with yourself creates that kind of behavioral head. That's why it's important that more people learn how to do that, so if enough people do that you can do something else, whatever that something else is that you want to do.

It's taking in your own soul from outside, and it's powerful shit. Picture two medieval cats sitting across from each other at a table, or two Japanese cats, or two Americans, or two chimpanzees, and when you examine the picture it becomes apparent that this behavior is at least 3000 years old. So one of the questions we're up against is not so much the good intentions or the good feelings. I think we've learned that a lot through rock music. We can do that now. We know those circuits, right?

The problem is that once you awaken these feelings, how do you not behave like chimpanzees, when it comes to something like interpersonal relationships and the whole range of ways we've been programmed to behave. So that it really offers you an opportunity to do a behavioral jump. And it's important that a lot of people are doing it, so you're not doing it alone.

JUD: We're talking about the necessity for sheer ecstasy.

PAUL: Exactly. Because if you do it by yourself, you're crazy, but that's cool.

JUD: Like Zorba the Greek was crazy-

PAUL: Exactly. Or like Neitzche was crazy with Zarathustra. Like I let out my tape to anybody I thought was anything; I didn't care if I'd only seen them once; let them have it, shake it and do it, get it out. If it doesn't work, where can we go for the code of behavior and have ecstasy together, because without a little shared ecstasy, this planet just isn't going to make it. A lot of people are really dying, because we've programmed them to dollars as a tribal rite. We need some objective correlative for our ecstasy, and I think that's the function of ritual. The ritual is right when you know the ecstasy is there; then you've got it. OK, we'll do the dishes. Because with the planet in such a delicate balance, the ritual really has to be right because the homeostasis is so delicate. It's never been so delicate. That's a heavy thing, because we've always had one big macrostructure. They came screaming across Europe killing the Canaanites and reading the Bible. Insane, like destroying people like the Hopi Indians. Look what they're doing!

There are some guys who are really just making trash out of consciousness. They're conspiring with entropy, can you imagine? Glory, the technical meaning is clear knowledge, and praise, but people want that cheap. Cybernetics is a transform with a difference, and that's what McLuhan said: every media is different. Doesn't it seem that there has to be some essential referencing system, if we're going to have a homeostasis to balance this one out, if we're going to have the ecstasy."

- PAUL RYAN, from an unpublished rap with Jud Yalkut, 1971.

PAUL: I've been working with dancers lately. A lot of people seem to be, in film and tape, going to dancers and beginning to work with them. And it makes sense, as probably the richest resource we have out of which to invent behavior, given the traditions of dance. I was very lucku up here in New Paltz to have Brenda Buffalino, who knows what she's doing with dance and has a dance class and a small dance group, and I've been working with her over the summer, being able to solidify

a lot of ideas and notions that were worked out in the weekends to get the sense of dance as opposed to linguistic structures.

JUD: And very paradoxially, of course, dance is one of the things for which there's been tremendous difficulty in developing a notation.

PAUL: Exactly, and it hasn't worked on television. There are very few dance pieces on television. Nobody has quite figured out the proper way to move in an electronic context. The Sufi seems quite close, the Tai Chi seems quite close, those forms of movement.

JUD: Perhaps, in recent electronic work, some of things that Ed Emshwiller has tried begin to get at it.

PAUL: Dance is a behavioral resource. As opposed to Albert Scheflen's work (NOTE: A psycholinguist, author of HOW BEHAVIOR MEANS and BODY LANGUAGE AND SOCIAL ORDER)- you know Scheflen tries to describe behavior in terms of the theory of logical types. HOW BEHAVIOR MEANS is based on using the theory of logical types to describe behavior, and to me, it's an exercise in labelling and it's useless for life. I don't mean to put Scheflen down; he's done an enormous amount of work on perspective space in behavior, but you don't behave in perspective space. You examine it and write about it from perspective space, but if you're going to behave, you've got to be part of the behavior, you know.

JUD: You've talked a great deal about necessary redundancy and how that determines the givens in modes of behavior.

PAUL: Yes. Redundancy is a great word. It comes from unda, meaning wave. That's the same word that abundant came from. So redundancy- the image I have of it is of a wave breaking back on itself. These are generalizations that Bateson has pushed to a very useful level, like a redundancy pattern. The word, in our culture, is equated with repetition. I'd try to differentiate and save the word "redundancy." It has such richness. But, in terms of behavior, there are certain recurrent patterns, some of which you can't avoid; they're part of it. McCullough talked about it on the level of the reticular core. They said there's about an inventory of a dozen things that require the commitment of the whole organism: birth, death, making love, not making love, fleeing or fighting, crapping, and all sorts of bodily functions- and his hypothesis was that all that was governed by the reticular core, which he intuited worked triadically. And for that work, there had to be what he called the redundancy of potential command,

meaning that anytime a particular situation came up, the organism could decide that this was the time to go to sleep, but it would know that from having built up a habit of sleep. That would be the redundancy pattern, and in the behavioral invention that we've tried what gives us the flexibility to differentiate roles is that the stronger the redundancy pattern that's created, the more flexibility there can be for role differentiation. Seeing the Sufi tape next to the behavioral tape made that point very strongly.

during that weekend of work, we started from nothing and created minimal redundancy patterns. Also, the notion of chreods accepts the notion of redundancy in the ecology system, and the using of that from the culture as the coding system rather than any we invent, to take the state of grace, the state which is given and to decode that and abide by that. What I understand of astrology, that's very much the strength of it, is that it works on a given pattern that no man can control; it's out of the control of man, and indecoding and abiding it, you free the species of interspecies dominance. Waddington has this notion where he said the human organism, or the human species, has developed an authority bearing species; the father bears authority and he controls other people. Well, we've reached a point where fathers and sons are no longer viable as a control mechanism. We can't presume to control each other.

We have to allow the species to behave within it's own context. So, if you're going to take away the authority from within the species, if you're going to take away master-slave relations, if you're going to take away dominance relations, how then is the culture going to stabilize? How is it find control unless it accepts a pattern larger than the species and integrates that into its way of life. So you're beyond the notion of a nation state; you're beyond the notion of family even as we've known it, the patriarchal or the matriarchal family. You're into the notion of a species in context.

Peter Berge, with whom I spent a weekend on the West coast in marathon discussion, has an extraordinarily strong vision of what he calls geomorphic identity. It's got a vocabulary where he talks about the Pacific Lake, and people of the mountains, people of the plains, people of the coast, no longer Canadians or Americans, or the nation state rap which has devided up the earth for exploitation, and not for life. And the nation state, as McLuhan describes it, is structured by print

and structured by the metaphor. And that metaphor of print goes back to the Egyptians who were the first ones in the West to really code things in an arbitrary kind of script, arbitrary in the sense that you could understand it without context. They were the first ones to have a hierarchy, as I understand it, with a priestly caste. So you started a class structure. In terms of print, as long as you work with print, you're going to have a class society.

JUD: This is characterized by the idea of literates and illiterates in reference to people who are not cognizant of the sophistications and elegances of a particular system as illiterates, and it's used in a derogatory sense.

PAUL: Right. And the literati think other people are stupid. (Laughter) And it's only 2/5s of the world that's literate, you know, and they're trying to pump out the SESAME STREET stuff to keep people literate. It's ridiculous. I understand there are blacks now who are saying: "Don't learn to read, just don't learn to read" and that creates a vacuum, and once that vacuum is there, you either revert to an oral culture, which seems impossible to me now, and probably not desirable, or you try to develop electric forms, and I think that Kleinform is one such circuitry, or one circuit design that's generalizable. I'm sure there are others that people are working on, other forms that will work electronically. Well, you've got to ground that.

What I've been doing for the past two years in this valley is trying to decode the system with a Sony portable camera, the ecology. So I go out and spend a year and a half by a stream where water goes over rock, up by Smitty's, trying to learn how to decode how water goes over rock. I finally did a half hour tape that I feel is a respectable attempt (Laughter) at decoding water over rock. There's a tree out here, where I've been for three months, and last week I had the courage to go out there with a camera, and I haven't even looked at that tape. I don't know how well the portapak decodes a tree. It requires a sense of meditation. It requires a whole different kind of Zen head, You do it right the first time. You don't presume to edit.

You don't presume to scramble up someone's time sense. You offer them your perceptions, that's all. So I've got 36 tapes, after I sketched out about a hundred tapes, three non-living, three living plant, three animals, and three technologies, and some of it is what people would call boring tapes. It doesn't get them excited. (Laughter)

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Well, if you're going to understand what lichen are, non-verbally, you go out with a video camera and a micro-lens and you look at lichen for a half an hour, OK. It doesn't tell you a hell of a lot. Maybe we need different instrumentation. Maybe we need Kirlian photography to understand plant life. Maybe we need holographic shapes to understand animal behavior, rather than me running around with the monkies and a camera, although you can do fairly well with a camera and monkies and fish.

JUD: And also direct electronic feedback with plant life.

PAUL: That's right. But we don't know; we don't know the Earth. We've been reacting to it. We cut down the trees and then made paper and made marks on it. (Laughter) And we presume to know. And it goes on and on. You know, I've got a half hour tape of the library, and when you speed it up to fast speed, it's extraordinary; you can begin to decode structure, the way McLuhan's mind worked at decoding the structures of print, and trees are a really rich resource for doing tape because you're after it non-verbally. And you show three of these continuous tapes at one time, and you begin to work at understanding the differences between them. That's as far as I can go by myself.

After this, to really develop a way of decoding the ecology, you need a functioning community that's self corrective. EARTHSCORE is in some ways analgous to the Monastic rules of St. Benedict that were written in the 16th century. It's tricky territory. I don't know how dominant my monastic experience is in the kind of thing I've been doing; it may be too dominant. I want to get away for a while and think differently. But, just as Benedict was into: "To labor is to pray," well, to move information in this culture is the most sacred of tasks, because we need to understand the way things are working.

The computer industry now, the people working within it, discover that they're basically a working class. They hopped them up and told them that they were professionals, flooded the market, and now they're working their asses off with the digital system. The digital system is the one-to-one correspondence; what's characteristic of the digital system is a quantized model, and it's part of the difficulty of the cycle we're in. We're into understanding money, and everything gets quantized in terms of value. Well, you can't quantize vale when you've got a multi-value system. So the digital computers that IBM has developed has spread over this planet and they're horrendous in an eco-

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gical sense. They're extraordinarily stupid; they're acontextural. On and off. Yes or no. You amass wealth and you exploit, and you make money, and you're in big trouble.

The Kleinform itself cannot be digitized. There are ways to translate it from kleinform back to quantity, but you cannot digitize a kleinform. I think that's where McCullough couldn't make the triadic logic that he wanted, because of his preoccupation with number. "What is a number that a man may know it, and a man, that he may know a number." A number is a one-to-one correspondence, again a discrete. It goes back to Russell and Whitehead. And Thom begins a new direction in mathematics that's qualitative. He says: "I don't care how much the bridge weighs; I want to know if it's going to stay up or not when I go over it." And that's the situation we're in ecologically. You can't quantize it and expect to make any sense of it. That's why the extraordinary resistance to capitalism that the alternate culture has developed has been a very healthy thing. And those that have gone the way of capitalism have gone that way; they're divorced from whatever vitality there was. Because once you start evaluating things in terms of one scale, money, money, money, you're in trouble. You can't keep a balanced system- how to finance these things. (Laughter) That's another problem. But they've got to wake up that you don't that much money to do it. It's a way of thinking that's necessary, that can interface with a capital economy. We don't even have the time for revolution. There's no sense in doing that.

JUD: We need some self-regenerative process whereby as software is produced, raw stock is made available. Just as when you cut down a tree, you should put one in its place.

PAUL: Yes. There has to be some sort of regenerative process. Cybernetics has been tooted and the way it's presented is not right. It's the whiz kids with the computers who figured out what to do in Vietnam and were on government payrolls.

JUD: How do you feel the analog model holds up as opposed to the digital?

PAUL: I'm not sure. Bateson makes extensive use of that, the analog and the digital, and it seems to work for him.

JUD: It's also been used in video thought, especially in the age of video synthesizers.

PAUL: It's not very useful for me. A kleinform is a logic; it's not an analogic. It's not something that happens on top of logic.

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JUD: But it's also a real time thing.

PAUL: Oh, yes, there has to be a time factor in a Kleinform. It's not a space model; there is a different time if you pass through the form. You're in each part at a different time, and time has to be considered in a Kleinform.

You see, I think Cage and Paik picked up on the cybernetic model and they did extraordinary things with the random phase of it, and they, or the tradition of which I think think of them as being most characteristic, have put us in a position to do more, but I think we have to get beyond the random/analog which seems to me a groping beyond, a random kind of groping. But I could be wrong.

JUD: Of course, the analog has importance in the effectiveness with which it bring the intuitive realms into play, and that is possibly the key where it may transcend the purely random.

PAUL: I resist the notion of transcendence right at this time. Bateson's rap is that we can answer the question whether the mind is imminent or transcendent; that the mind is, in fact, imminent, and those traditions that seek to transcend the ecology of mind we're in work against that ecology ultimately.

There's one monk that I keep in touch with who runs down the extraordinary scam of the history of human spirituality, in basically three phases, before our own, and he does it on the basis of alienation, tracing the notion of alienation. The first business is that when man woke to consciousness, he realized that it was meaningless, utterly meaningless and, in his terror, he threw up a vast network of symbolic structures in order to create meaning.

JUD: As Adam supposedly named all the creatures.

PAUL: Exactly. And we had birth, death and mythology. We had the paradise mythology. The Hero. All these things to create some meaning, because it was out of our mind, probably men out of their minds who created these symbol structures that worked. Well, in Indian and the East, and in China, there arose a dissatisfaction with this logical structure, and they sought by very deep interiority to transcend the human condition, to jump out of it- the yoga discipline is the most characteristic- and they sought to basically deny the human condition and in some way to transcend it. In the West, and that transcendence metaphor depended on space, it was a spatial metaphor, the centering image, the insistence on the denial of time, in a sense.

JUD: Timelessness.

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PAUL: The insistence on timelessness. The West was seized with this biblical linear sense of time: this social system is unjust, what are we going to do about it; well, we're going to utopia; how long does it take; 200 years; it doesn't matter.

JUD: It's based on a very strong cause and effect head.

PAUL: Right, and that created an idea of time in the West, so the Western man's identity has to do with locating himself in history and the fragmentation that comes from that, that kind of conflict. So, now we're in a phase where there's a lot of attraction for the East from the West, which is very healthy, but it's not all. We still have to deal with the birth/death reality. We have to deal with the fact that we're now an endangered species. So the whole business of birth/death shifts enormously. Your life has no meaning. I mean the gift of your life has no meaning unless there's somebody around to accept it. And if the whole species is gone. And to create a meaning system can't be done unless some other species is found to accept the gift of life. And spiritual transcendence doesn't, for me, ground in the birth/death mythology.

JUD: Of course, grounding is one form of harnessing therapeutic energy, an area of exploration in healing.

PAUL: I'm in a place now where I feel that I'm growing new connections in my brain, according to kleininformation patterns. I feel I'm playing that out now. But we've got to do some very fine work now. What I've done so far is a sketch, the last rough piece of work that I want to do; it's a conceptual thing. It's what I fill out as one person in the time that's left. And I wonder about the definition of artist. Money from the state seems to go to artists and mental institutions and criminality. That seems to be the definition of deviants that the state is arriving at, so I think we'll see in the future an extraordinary debate: how do you differentiate a madman from an artist? You know, it's all one mind. Art seems to be the one place where there's flexibility left.

I was thinking of trying to get together a conference on art and ecology, if an intelligent ecological base could be found that related to art process. It's a very difficult problem, because you know when you get a grant- I know you and you know him- it becomes a political football.

JUD: Why don't we return to the structure of EARTHSORE?

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PAUL: It's a conceptualization of an intentional community. In other words, where people would intentionally meet non-compulsively, and it's a method whereby people would agree to behave in a certain way, or agree to agree in a certain way. It's designed to be a leaderless culture, a non-hierarchical culture.

The minimum amount of people needed are 36. It's based on self corrective cells of three. Each person would be a member of three different cells: a cfeche cell which was concerned with the care the persons involved, analgous to a family, or actual family; a chreod cell which would be concerned with decoding the ecological situation, and every month would be producing a record, or an explication, a document of the ecological situation, taking testimony from the earth; and a work cell which would be concerned with things like transportation, whatever interface there was with the money economy, keeping the place working, whatever had to be done-

JUD: The dirty work.

PAUL: Well, there's a way to make any part of the whole meaningful.

JUD: Like who washes the dishes and who takes out the garbage.

PAUL: Right. So there are three orders of cells. A person is part of a self-corrective cell in each of those three orders, and because there are four cells to an order, or a group of twelve people as one self corrective cell, if it's in its self corrective process and goes off, there are three other cells that can gather around and correct that cell. So there are always three in your creche family, and your chreod family that can correct the activity of that one cell. The coding is all designed in kleinform, and the basic redundancy or the basic command form is "never less than three." That is the Canon of Self Correction. It's not being tied by a rope to two other people, but it's a description of a redundancy pattern. And there's a certain threshold, that if the redundancy pattern was maintained above that threshold, I'm quite sure the community would work, whether it was in an urban or a rural environment, or any environment. If a certain threshold of redundancy were maintained, the community could survive, maintain itslef, and a lot of variation would be possible. I'ts a society premised on the notion of using tape, although the tape is designed to get behavior.

"The formula for such stabilization is as follows. Three people do continuous tape without talking and without leaving the scanning field of the camera or cameras. This can

be done with one camera on a tripod, or ideally, with three camera in the hands of skilled cameramen who care about the people involved. Tapes are played back simultaneously. This process is repeated with appropriate time intervals, unto stabilization...

The invention of a stabilized repertoire of triadic behavioral patterns must precede the formation of this intended community. This repertoire can be assumed to be secure when these patterns can be carried on without the presence of video equipment." - PAUL RYAN from EARTHSCORE.

JUD: At a point in EARTHSCORE, you reach the point of not using tape.  
PAUL: Right. Because to create a determinate dependency, I think, would be a mistake. However, the community itself would need some record-keeping to keep its time base stability. If you're located in a geographic region, and you're keeping testimony, records of the development of the ecology, there's no legitimate authority other than to take testimony in this land. So how are you going to ground testimony? Will you ground in patterns that are larger than yourself? If I do a tape of a tree, there's nothing to stop a man from doing another tape of the tree with a \$1500 portapak, and saying, no, he's got it wrong. It's not working that way. All this is public information, and any one of those twelve ecological continuums can be monitored by the other ones: the effect of automobiles on lichens, for example; those 3 people rapping with those 3 people, monitored by people who are concerned with television, and any one of those 12 continuums can shift and change according to the different **technologies that are there** and they'll shift and change over time, like I started here with technologies like the automobile, television and airplanes. Well, it's possible to combine planes and autos, since it's internal combustion engines, and shift over and watch nuclear power, since they seem to be building a nuclear power plant in the next town. So it's a flexible kind of system, and it's a way of life. I think there's a difficulty with it in terms of sexual behavior, since human sex is dyadic, but if the sexual dyad could be broken down, it would be possible in a chreche family, but not necessary. But the sexual relationship could be regulated the way they wanted it. The cell is an information cell based on self correcting behavior. Insofar as that includes sexual behavior, the concern of the community would be with the care of

children, so being responsible for the care of children is accompanied with some right to regulate the birth of children, and in that context, sexual behavior that had childbirth as an issue. The community, by using those cells, would find some way to self correct. People who have tried sexual triads find they break down, if you've got two of one sex and one of the other, it's not going to work for very long. Whereas, if you've got six people, one cell can be self correcting the other, or if you've got nine, or twelve, those things might self-correct. Sometimes I think that's all a crock of bullshit (Laughter) and just a decadent impulse to attempt that, and at other times, I think it's a critical problem, and if it could be broken down in people, it would release such freedom that a lot of things could happen. It's a mapping; triadic logic is a mapping of the kinship system. We've always had to stumble along with the kinship system, and we've never seen really how it's worked and known how it's worked.

I think the kleinform is a mapping of the way the kinship system in fact works, so you could return to family in an electric culture with this kind of kleininformation. The family is a natural ecological unit. Split the men and send them off to war, and you wind up with prostitutes. Split the men off and send them to work, and you wind up with frustrated housewives, and librium and valium. The extraordinarily sharp definitions of male and female in this culture are ridiculous, much too important. The natural family unit has been double-binded by literacy, and by industrialization. Perhaps, that double-bind can be broken and we can get back to a natural, organic family situation.

"Let this endangered species have part in the coding of its experience of trial and error for other life forms that may survive its own, both terrestrial and extra terrestrial.

Let us code this experience, in so far as it is possible, in a logic of triadic relationships, so as to provide the possible recipients of this gift of human life with optimal fail safe as learners.

Let this coding process be part of a way of life that is a ritual of readiness forming a budget of flexibility that will optimize all chances for our survival.

Let us engage in the process as part of our bond with our

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own kind, our dead and our unborn.

If survival is not possible, let us die gracefully."

- PAUL RYAN from EARTHSCORE.

TALKING HEADS IN VIDEOSPACE: A Video Meta-Panel With Shirley Clarke, Bill Etra, Nam June Paik, Walter Wright and Jud Yalkut.

The following Meta-Panel, so-called because it represents an attempt at an overview of the alternate video scene as of the time of the discussion with a glance into the video future, was one of two hour-long radio discussion panel shows, hosted by Jud Yalkut, for the Pacifica radio station in New York City, WBAI-FM. The shows were part of a weekly series called ARTISTS AND CRITICS, each week dealing with a different art form. During the life of the series, one a month was on the media arts of film or video. The other video panel show, included in this book, was the discussion on the Kitchen, An Electronic Image And Sound Laboratory. This video panel, called now TALKING HEADS IN VIDEOSPACE, was originally recorded for broadcast on February 4, 1973, and its guests were four of the foremost practitioners of video art explorations: Shirley Clarke, proponent of ultimate participation video; Nam June Paik, video pioneer, avant garde performance artist and co-creator of the Paik-Abe Video Synthesizer; Bill Etra, video artist and co-designer of the Rutt-Etra Video Synthesizer; and Walter Wright, working with computer generated images since 1965, former computer animator for Dolphin, Computer Image Corporation, and designer of his own video synthesizer system.

JUD: Since we have four practitioners of what is called alternate video here, or video art, terms to be defined, we can start out by discussing what do we mean by alternate video at the present time?

WALTER WRIGHT: I'll start by telling you what I do. I've been exploring the use of something that might be called a video synthesizer, and it has the possibilities of transforming or building an abstract image, or changing a real image into something more abstract. The process means that I can take a real video image in, or generate one with oscillators, and then add to it electronic color. Nam June Paik has in fact built one of these machines, being the grand-daddy of this.

NAM JUNE PAIK: Thank you for mentioning, sir. (Laughter)

SHIRLEY CLARKE: Which he sells for a pittance.

WALTER: And Bill and I are going to rebuild Nam June's.

PAIK: Thank you very much. I think this should be in good solid hands, who know every institution, and how to do things. Distribution is much more important than production. A guy who can start from the distribution end on, that guy will be really good for it. I like what you, Bill, and you, Walter, are doing because we are a small, small stone in a vast sea, and the problem is how to face that vast sea, you know. And it will benefit everyone, and then the video synthesizer can be a solid media, alright. If they made video into a medium, then we can sell video synthesizers as a medium, because this is much more interesting this way. It can be sold eventually for a few hundred dollars. So it will be much cheaper than a portapak, because it has no mechanical moving parts. So, theoretically, the video synthesizer, from all professional technical points of view, should be, if we make as many as portapaks, which is not too many, we should be able to go 1/3rd price of portapak.

SHIRLEY: I have to interrupt you now to ask, does this make an image? What is it, live process?

BILL: It will do either.

SHIRLEY: But, I mean as against the portapak which records, as sort of a pseudo mini-movie camera?

BILL: Carried to its ultimate extreme (Laughter) which is- oh, I don't know what it would cost to build one now. We're in the process now of getting together and building one which would go to the ultimate extreme. Television is recorded in a matrix of 526 by 600 and something lines, vertically and horizontally, and we would be able to put a different color and intensity dot into any one of these points and move it around at will, so it wouldn't necessarily have to have a camera to generate an image. We would be able to actually paint it.

SHIRLEY: Like painting.

BILL: That's one of the possibilities. Now you can also take a live image and process it. You could take a person's face and roll it up into a little ball.

SHIRLEY: But does it replace a camera and a recording device?

PAIK: I think we can always use camera.

BILL: You would need a recording device to record it.

SHIRLEY: My first suggestion would be, since you're going to work in that area, that you give us, into our hands, an object that would be like a little ball that would actually be a lens similar in a way to a microphone in an audio system, that you can squeeze closed-  
JUD: An image collector.

SHIRLEY: Right. An image collector, and you would squeeze it closed to zoom in, and open your hand to zoom out, and through a wire or whatever, send a signal to a recording apparatus so we could free ourselves finally from the nonsense of looking at video as if it were film, and thus messing up our heads further, (Laughter) since we already see a great many electronic movies, and we don't see a great many electronic videospaces.

PAIK: Yeah, yeah. I agree completely. I completely agree.

SHIRLEY: And you really have to change some of our physical devices. There's no reason any longer to have a camera, right? That was something necessary for movie-making; you had to look through the lens in order to see what you were going to shoot. In film, this was fine, but in video, where the finished product is seen in videospace, i.e. a TV monitor or a video projector-

PAIK: That's it. There is no finished product, because, like your room at the Hotel Chelsea, Shirley, I think that is the most ideal, supreme creation of video so far, because there you feel the space, and there is no product and it's more interesting.

SHIRLEY: To me, there is no product.

PAIK: Because that's the process of a living room. You have integrated videospace with living space.

SHIRLEY: I think I'm ready now for when we have the two-way cable access, or even first cable, and then two-way access. No, my image is: I'm up in my Tepee, you know, the roof, and all of you are with me, and various other artists in New York, in China, in Paris, and Tennessee, altogether into a live mix. That, to me, is the essence of video-

PAIK: I think that is really a very good use of video, in constant video living.

SHIRLEY: Every event that I have seen that fits into the live action process use of video does the thing that no art in front of it ever did before, that makes you understand video, and not fall into the traps of video is like film. It is, but video is also like theater; it's also like dance; it's also like music.

PAIK: Video is video.

BILL: Conceptually, it's beautiful, Shirley, but structurally nearly impossible. My phone doesn't work half the time.

SHIRLEY: I don't think that's important.

BILL: No, it's not important to the concept. It's important to the reality.

SHIRLEY: Our minds go faster than the technological manufacturing keeps up.

JUD: That's been one of the problems with film for ages, that you can't splice as fast as you can think.

SHIRLEY: Yes. I got into film in the mid-50s, and we all went in and spent the next 15 years trying to develop a hand-held sound camera. Now, when I left film a few years ago, we had the great accomplishment of an Auricon which was there before any of us came and separated the sound system so you could record sound separately, meaning that the manufacturing people have never kept up with the artist, and never kept up with the fantasy and mind of man. But, I think it's going to get progressively less so. Time feeds everything. And our job is just what we're doing right now, which is to talk to people, get them to understand some of the possibilities so they want them. Then they'll make sure we get them. Because manufacturers in a free enterprise system produce to the demand.

JUD: Eric Siegel's been pushing very much for the manufacturers to come up with new developments which would meet the needs of the practitioners.

SHIRLEY: We never succeeded-

BILL: Everyone in this room has done it. I've seen Shirley's remodeling of the Sony camera.

WALTER: Manufacture our own.

SHIRLEY: That was one of the better moments-

BILL: The glove camera. (Laughter) (Nam June can't buy a synthesizer-

SHIRLEY: So he made one-

PAIK: And went into making synthesizers. Walter is redesigning synthesizers. Walter's worked with computers and he's redesigning them. I, as an artist, found an electronics engineer who's building a synthesizer because I couldn't get a synthesizer, or at least I couldn't get anything that approached what I wanted. It would have cost me a half million dollars.

JUD: It's an exact analogy to the old days of light shows. You could never go out and buy a machine to produce the effect you wanted to produce. You would end up having to get the components and building from scratch for every single image you wanted to produce.

PAIK: Video is very fast, but it's supposed to be a cool media.

SHIRLEY: What I find fabulous is that I'm basically a very impatient person. I'm amazed that I have managed to survive two years of constant mechanical hangups. I have yet myself to participate in or attend any event where the equipment worked. I remember spending 72 hours to get that ferris wheel set up to enjoy it for ten minutes, and the show was over. It's endless, endless-

PAIK: That's what I gave as an answer when somebody, the LONG ISLAND NEWSDAY, interviewed me about what I thought of Art and Technology's Nine Evenings. I said: It's marvelous, because it showed how technology is fragile. (Laughter) And this is a great accomplishment so that art does blind words for technology. So I think that's a great achievement and I'm airing some part of that for my Cage show, because it's a tribute. And number two is that when the last issue of the 1960s came out of Newsweek, which I read in Tokyo while building that synthesizer, and was fighting with those machines, I read what the editor in-chief of NEWSWEEK said the 1960s did, that two things happened: you had ended on the moon, in which all technology worked perfectly; and number two, you had a great blackout where all technology failed, and he had much more fun in the blackout when everything failed than on the moon landing where everything worked. I think that's a brilliant observation.

SHIRLEY: It is. I think one of the talents that all of us have developed, I know I certainly have, as performers, is that we fill in when the machine fails.

BILL: A basic survival tactic.

SHIRLEY: Communicating person to person with an audience, which is in a way a marvelous thing, because we can assure ourselves, whereas for awhile electronic music had the problem of bringing the human being back into it, the performance. We've got the human being in there always.

PAIK: When you had that very difficult session at NET, I think they should have filmed you, then they could have made a wonderful documentary on Shirley Clarke. The greatest show.

SHIRLEY: The artist versus the engineer, or something against women. Are there any lady engineers around here. (NOTE: The radio station.)

JUD: There are several who work the night shifts quite a bit.

SHIRLEY: Oh, good. Because there were none at NET.

BILL: It never works, the equipment doesn't work.

SHIRLEY: That's true, but sometimes it does.

BILL: I went to see a friend of mine, Steve Rutt, who's the inventor who's working on the machine we're building, and for a week I got him interested in video. He was into other fields of electronics, and Steve walked around for a week, looking at his scopes around the plant shaking his head: "It doesn't work." None of it works, and he would play it back on the ½" machine and the playback would change from time to time, and "it doesn't work," and he would look at the broadcast signal, and say: "That's not what it's supposed to look like; that's lousy." And the fact is that television is one of these non-perfected media, which get very soft-

JUD: Low definition.

WALTER: Yes, low definition.

SHIRLEY: I don't mind that, because I personally think the aesthetic of the 8mm camera is way beyond the aesthetic of the 35mm camera, you know that heavy monster that sits and watches is not really as beautiful as something that can be held by a human being in your hands. And that's certainly important here. It's just that sometimes when it doesn't work at all- (Laughter) I went recently to see an experience by a young artist from Baltimore who came to New York, and it was interesting because he did it over a period of seven performances, one each night for 15 minutes. He gradually got all his equipment together by the end of the week. (Laughter) But, meanwhile he learned a lot. I went to all of thme. Unfortunately, not everybody had the time to do that.

PAIK: Actually, the VISION AND TELEVISION show at Brandeis, the opening was 7:30, and nothing was working in my part, and I had half a floor. (Laughter) Oh, nothing, and one of Charlotte's TV bras broke, O.

SHIRLEY: TV bras?

WALTER: In Boston?

PAIK: In Boston, and at 6 o'clock everything closes, all the TV stores.

SHIRLEY: Did you have to buy brasseires or TV sets though?

PAIK: And then, suddenly, miraculously, 15 minutes after the opening, two sets worked, and then I had a great performance as if two sets were all, you see. Always, man is more interesting than machine. So, if amn gets turned on, it's much easier than machines.

SHIRLEY: Of course, since you've been to my place, more things work. I'm learning more about wires every day. I spent my first year crawling on the floor, looking for which wire to attach. Now I've got a little patch thing, and I hit it, and sometimes it works.

BILL: It's the artist developing into a technician. Sometimes you have to.

SHIRLEY: Ugh. (Laughter)

BILL: You get entrapped by this wonderful stuff that you see you can do if you have a laser, or a video camera, and I took all this stuff to the Avant Garde Festival this year, and it broke, including the tape. The tape came apart. (Laughter)

SHIRLEY: But mine worked this year. The thing I did with Don Snyder, the Oracle, really worked. It's true we spent 5 to 6 times as long putting it up as we enjoyed it, but there was an atmosphere that was created that was very, very exciting. What I found, by the way, is the most successful thing to do, is what I call game playing, using video to play games, because the human element is built into game playing, and there is that built-in exchange, and if you can find setups that that becomes part of. The thing of Paik's that I've enjoyed are always where there is the live human element being faced with the audience. Sometimes it's a reaction to a man standing there nude, and on his intimate parts is a little TV monitor. It's much better for me than watching tapes, that's for sure.

PAIK: There is a clear distinction between video art and videotaped art, that we cannot enough emphasize this difference.

SHIRLEY: For me, what I do, maybe I'm wrong, I refer to something called videofilm, which uses electronic computers, and all sorts of things, to enhance the ability to put onto a single strand, or many strands, images that are recorded; but then I see next to it a live process, which is an interaction with things which are prerecorded, and basically they imply some kind of a mix of different elements, of people, of prerecorded tapes and cameras, and to me I guess that's more video.

JUD: And the videofilm can be released as a film or a videotape. There's an interchange between the two.

SHIRLEY: Right. Is that, by the way, the same as reversing the procedure, where film can be put onto video, i.e. television, cable, or whatever, and therefore will hold up, or do you think that the tape which has been made for a tape holds up better in its original form?

TALKING HEADS IN VIDEOSPACE

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Is that an issue about it? My suspicion is that, in the long run, it's not.

JUD: The interchangeability between the two is rapidly being discovered in terms of syntax-

PAIK: Of course. That is important.

SHIRLEY: When our screen sizes change, that will also make a difference

PAIK: I think the difference between broadcasting and non-broadcasting is in the main technical.

SHIRLEY: It makes a great difference-

PAIK: How we think of it. If communication should be complete, alright then, communication is practically a feedback loop. You go and come back.

BILL: Absolutely. It's a feedback loop whether it's a delay line or a few microseconds.

SHIRLEY: Are there lots of friends of ours outside who are waiting? If everybody comes to the Kitchen this Sunday- Paik, who won't even be physically there, he'll be in Boston, right?- What's going on right now, you're at the Kitchen, seeing us right now, and what Paik suggested was, why don't we play back the audio through a radio when it's broadcast, and each of us bring some kind of image feed, so that while this is going over the air, the images could be watched, whatever they might be-

PAIK: Actually, you have time to come over to 240 Mercer Street- the Kitchen, alright- then watch and see this program with us-

SHIRLEY: They can do just what we're talking about; they can leave their houses, dash over to Mercer Street, and watch what's happening now. This is video.

BILL: If we're doing a commercial for the Kitchen, I have to say that we're supported by the New York State Council On The Arts.

SHIRLEY: No, you're not doing a commercial.

JUD: In other words, you're listening to the conception of a piece which will be realized when you're hearing it and watching it at the Kitchen-

WALTER: And Nam June will be phoning in from Boston-

SHIRLEY: And if we're really very good at miming, we could mouth our own words.

PAIK: Anyway, 240 Mercer Street, and you can reach through subway to E. 8th Street, or Bleecker Street-

SHIRLEY: Ok, everybody has arrived. The audience is here, and we say hello. Now we start.

JUD: What's the picture of the video movement at the present time?

SHIRLEY: Right now.

BILL: No, I have a different outlook than Shirley on what video art is, or what videotape is. The difference between tape and live performance: now this will probably make it so that we're all going to be screaming at each other, and nobody will be able to understand what's going on-

SHIRLEY: They're having a hard enough time already. (Laughter)

PAIK: It's a good talk show. Better than most talk shows you see.

BILL: You see, I work with electronic image, and I'd rather work, for the most part, without people-

SHIRLEY: You're lazy-

BILL: No. I've done several things with people, and you've seen them.

SHIRLEY: I never saw you do anything with people, except help me.

BILL: The Billy Graham tape. I didn't direct him. I did the thing with the San Francisco Cockettes. You saw that. You liked that.

SHIRLEY: If you ask me whether I like tapes I've seen, if you ask if I've liked film tapes I've seen, sure, I have.

BILL: I did a live show with a strobe at the Kitchen, but that's besides the point. I would prefer to use a medium without people because as soon as I involve people in the medium, I lose some of the control, and for a lot of pieces I would prefer to have total control. I would like the interaction with the audience to come, not on a cerebral level where you sit there, watch the tape and think of what I meant, but where they sit back, relax and think of other things, and then have the tape affect them in such a way that they're carried along, and they can think their own thoughts and add their own input into it on a highly personal level, on an individual level.

SHIRLEY: You're misunderstanding, though, the role of the video director. You're confusing him with the videomaker, let's call him. The videomaker can control, is the one in charge of, the situation, and he sends out broadcasts out over the air, or across the room, to himself, whatever he wants, and when you want to control a situation, fine. But I don't see the process as being of that short a duration. First of all, I see it as constantly continuing. Already in the United State, the American people go to sleep, go to work, and watch video. If you ask them what they do, most Americans watch TV, and that's

their occupation.

BILL: I guess so. I don't watch TV.

SHIRLEY: So what I'm suggesting, in the six hour day that the average person puts in, there's a great deal more time to explore many things in relationship to any input, any process, any kind of back and forth thing. So, I'll give you my great fantasy, what I call the Pleasure Palace Theater of the Future. And it's something like Mercer Street, but instead of being a bunch of separate people who have come in and rented space, this is one big overall space, a kind of labyrinth maze, and that as you go from room to room, you can go through many experiences, from dance, to music, you can eat, you can take a sauna bath, you can play chess to Mozart, you can see live theater. Jud and Paik know this well because several years back (Laughter) we described the same event. I haven't yet found that 200,000 dollars to even get the first thing, but it's an architectural space, something that would certainly get anybody out of the house. Otherwise, I, for one, plan to stay right smack in my house and watch TV, until you send me something else over the cable so I can turn on the cable, or else I may stay in my house and play bingo- via the cable. But, other than that, I don't think we're in any disagreement. I think you either don't understand, or just don't accept the implications of what I'm describing, something very big that will include watching tapes made electronically or however. I personally would like to feed film inputs to my tapes because they give me certain images I cannot get otherwise.

BILL: It's just the average artist's inability to communicate with anybody else. (Laughter) I agree with what you're saying perfectly. And I didn't understand it, right? So there's a communications gap, which I find happens a lot between people who are always striving to communicate.

SHIRLEY: No, I think it's very important for us to exaggerate what we say. In other words, I will not stand publicly for electronic films versus video as a live process art form, because unless I scream loud and clear for process-

BILL: You would never get it.

SHIRLEY: We won't get it at all.

BILL: I feel the same way about electronic image. Unless you sit there

and shout: "You need this machine which will do this," people look at you like: "What do you do?" "Well, I do videotapes." "What sort of people do you tape." "I don't tape people at all; I deal with electronic images." They say: "What does it look like?" and unless I have my portable video playback unit there, or my studio, I can't even begin to show them. It's become totally strange. Walter must have the same experience-

JUD: For years, it's been: "What kind of films do you make?"

SHIRLEY: Thank you. Jud. I was just going to say, I make films about people and I never make films about abstract objects. That was not my thing, that's all.

WALTER: The FCC says there something wrong with the television; they'r going crazy when they see things like that.

SHIRLEY: I like them fine. But then, I usually admire what I don't do. As do we all. But I think Jud is a very good example. Jud's been in and around the video scene since its very conection, way before I even knew it existed, and yet he has remained very faithful, no matter what he uses as input, to the kind of filmmaking that he believes in, that he's been doing for many, many years. And Paik's work resembles Paik's work, whether it's music, or whether it's his tapes-

WALTER: Or whether it's an interview. (Laughter)

SHIRLEY: Why would it be anything else? And I remeber seeing Walter's things the first time, and flipping out because he was playing around with TV with images we would get all the time with a TV screen, even though we all admit that the problem with things keeping themselves together technically is tough, and it isn't going to be much longer before we see large groups of people, across the city, across the world, all different kinds of art imagery produced, using this medium for distribution.

JUD: That's for sure.

SHIRLEY: And that's why you compared it earlier WBAI, because the whole thing with why Gene Youngblood feels so strongly about it, and when I met him at Paik's house last fall, I suddenly got the impact of the meaning of it, what access to this medium is going to mean, because he described himself sitting in California, a film critic, not being able to see films, which is, of course, insane.

JUD: When we're talking in terms of opening up channels, it's like gradually being able to feel more and more different parts that we never knew existed of our nervous system.

SHIRLEY: That's indeed true.

JUD: And what perhaps has to happen culturally at this point, and what we are talking about now, is just like the first injection of stimulant into this mass nervous system.

SHIRLEY: One of the things, of course, that's fantastic is this idea: we're having a conversation now that's really marvelous. We're really imputting a great many ideas. Now, unless people sit at home with a cassette and record it for themselves, they won't be able to play it back and at their own leisure re-examine it. And this is, of course definitely true with images. You go to the movies, and you've got to look back each time. Let's just think for a moment of the videocassette and what that's going to do. We can have these things just like we have books and records, and that's going to make a big difference too. I'm busy right now trying to write, which is not my thing at all, and I realize that in the few moments we're spoken here, the next year's worth of articles have been written.

WALTER: Ah, maybe I ought to start writing.

SHIRLEY: No, I think we should do more ways of talking actually, because it's a good way of communication.

JUD: As you get more in non-verbal communication, you discover that words have an entirely other importance.

PAIK: And hire a professional editor to edit it, so it will be as good as anything.

BILL: You'd have to get someone who's literate. Like Shamberg came to guest lecture at one of my classes at NYU, and he asked me to write down something, and I asked him how to spell every word because I never learned spelling.

SHIRLEY: You talk alright, like I do.

BILL: Alright, but not well. And I said to Michael, I'm sorry, you'll have to write it down yourself. I'm illiterate. And he said, post-literate. (Laughter)

SHIRLEY: Well, that's a nice compliment.

BILL: There's an interesting thing that hinges on what we're talking about. It was a sort of scary talk I had with Paul Kaufman, who's the Executive Director at the National Center For Experiments In Television at KQED on the West coast- actually there are three of them- and he's the director of that one. I asked what he thought was going to happen in terms of abstract and strange video art forms in the next

few years. And it was, of course, the summer before the election, and he said: "I think Nixon will be re-elected; everybody will feel sort of suppressed and stop a lot of their protesting, and we're going to be the Soma producers. We're going to produce pretty patterns and nice television so people can sit at home and not go out and protest, and sit back and get high and watch tape." Now, I see it differently too, otherwise, I'd be totally scared; but it is a scary thought.

SHIRLEY: But I see something much more exciting going on now.

BILL: Opening sensory, new tactile, new sensory, orgasmic feelings, through image and sound, electronic image and electronic sound, added in with old art forms which you can now put in a cassette and review paintings or old pictures frame by frame, and do intense study. It does imply something of going more into yourself, and getting out of politics, and that's sort of a frightening though, in some ways.

SHIRLEY: Up until that very last sentence, I was absolutely with you. And then, I will just take this deviation here. If you look at a very interesting phenomenon, which is all the people, many of them violently anti-Chinese, anti-Mao, who returned from their first visits to China and their first reaction to it, you get a very interesting phenomenon because all they report is that there is a group of people now in the world who are happy at the moment doing what they're doing because they see a positive future based on the best parts of their past. And, here, we all feel kind of floaty lost. This is a very political statement I'm making now, that if we saw our roles as having to learn these new skills we're talking about, so that the technology makes possible the communication web, to really start to cross, we too can become part of what the Chinese are going through, without or with the kind of revolutions they had to go through to attain what they did. It might be possible in the future, just through communication, through information passed to people, and it doesn't matter if it's Nixon in the White House or who it is, because the power of the people stopped that bombing in North Vietnam, no matter what anyone says. There's no question about that. It didn't stop the fighting.

WALTER: Maybe we'll get the communications web then.

SHIRLEY: But when we get it, we better jolly well have used this period perfecting some of the techniques. I, for one, find it difficult

to do something that was never asked of me before, though it's been asked of jazz musicians for years: the fact that a jazz musician can play and improvise within a group. He hears what he plays, and at the same time he hears what other people are playing. What do we do with our eyes and our bodies? Dancers know something about it with their bodies. We don't know anything about that with our eyes. Now this is a skill we're going to have to learn, a totally new skill for the human being. There was no other way he ever needed it before.

PAIK: That's very true.

SHIRLEY: And it's a very important thing to look at this period as practice time, or getting together time. It's true; our heads are in front of the reality of things, but our skills aren't.

PAIK: For instance, from that moment of time that man-monkey stood up and we had man, until the time we could draw, first, say the painting of 5000 B.C. good painting in a way- it was a million years we took just to learn how to use it. OK, we even use cave painting still a lot of times, and from 5000 B.C. to now is a very short time still.

SHIRLEY: Because you have to look at it not just as passive input, Bill.

PAIK: I think it is very important that we got a new hand, telecommunications-

SHIRLEY: Right, a new tool is going to make man-

PAIK: This new tool takes a very long time, and now the smart way of many, many experiments should be done because we cannot say that this is video, and this is video art, now, you know. We cannot say that.

SHIRLEY: No one's ever defined for us what painting is either.

PAIK: Art is a very elusive concept.

SHIRLEY: I think that's something we all have to do, busying ourselves perfecting our talents to create electronic images, a skill that we're all going to need.

PAIK: That's very important.

SHIRLEY: I am busy learning things having to do with movement, fine. That's what we need. We need all our different inputs.

JUD: It's rather like studying the zen of electronics.

WALTER: Yes, zen electronics.

BILL: Jud knows me and I think he may be poking fun at me. Jud and I teach a course together and Jud knows that the only book I require in the course in how to use a half-inch portapak is the book ZEN IN THE

THE ART OF ARCHERY (NOTE: by Eugen Herrigel.). People then look at the equipment in a different way. Instead of saying, in the standard Western approach: "This is a machine that I'm going to battle it out with," they should look at it and say "This is something that I'm going to have to incorporate into myself in order to be able to use it."

SHIRLEY: I agree with you, but I'm very curious about what Paik wants to say now, because I wonder about how he felt about being able to be part of something like the Experimental Television Lab.

PAIK: My position from the beginning was, though I'll do all that I can do, that I thought the best thing I can do is not to exercise any of my personal influence, so that it can be as open as possible, and then, I thought of doing as Lao Tzu said, the doing of not-doing.

SHIRLEY: By giving people access to what you have developed.

PAIK: Yeah, yeah. Of course, it was a very hard decision first, like in 1970, the various things I had already developed for ten years, and then to make a machine, and to liberate it or not to liberate it. I thought many, many nights. And one day, I knew it, that I should go off, and that day I said I will practically not use it. I made one whole year of movies with Jud Yalkut, so that I don't play video synthesizer. It should be an open thing. Therefore, video art should be as open as possible, and also therefore all environment and all non-videotapable art.

For instance, in a panel discussion with George Stoney, Gene Younblood and Russell Connor in Minneapolis during the first video art competition, I said: "You are supposed to be video art competition, but what you are doing is single channel videotape art competition." (To WALTER) I'm sorry, you won, and it was a very good tape. It was a good thing they discovered Walter. It was all a good thing, but the name was at fault, and I didn't submit anything. And the thing is that video art and videotaped art are different, and we are also thinking of environment, and that is also different. I always think about the profound meaning of Paul Ryan's thing which very few people know. Paul Ryan has this time-delay line and self-analysis. I think that's very important.

"YES AND NO is an experience in one's own balancing of positive and negative feedback.

Set up two videotape machines with a single tape. The first

machine records you and the second plays the recording back on a five-second delay. According to how you feel, start with saying YES or NO into the camera.

If you start with YES, when that comes back on the monitor five seconds later, you can either switch to saying NO to your YES- and so on and so on. All manner of ambivalence can be explored in this way....(Piece at Brandeis show)...

"VT is not TV. Videotape is TV flipped into itself. Television, as the root of the word implies, has to do with transmitting information over a distance. Videotape has to do with infolding information. Instant replay offers a living feedback that creates a topology of awareness other than the tic-tac-toe grid." - PAUL RYAN.

SHIRLEY: My daughter, Wendy, is involved in something that's fascinating-

PAIK: Psychological-

SHIRLEY: Yes, of self-analysis with video which could end up being something like a Proustian novel, and that's a whole other possible thing.

PAIK: What I'm quite interested in what we are doing now with Jud is freezing time. Why are we, why suddenly, take a portrait of a great man? It used to be a job for a painter, and the painter's job was how to make it better. Then they invented photography, and that became the job of a professional photographer, and when it became very cheap, it became everybody's job, you know. So Paul Ryan's portapak is the same thing, all beginning with "P".

SHIRLEY: How about a film I once made called PORTRAIT OF JASON, which, by the way, I thought was a videotape. I thought when I finished it I thought, when I finished it, I could hire myself out as the modern-day portrait painter. You know, for \$1000, I'll come to your home and do your film on you.

BILL: One of my first revelations in video, when I started working with electronic image, I would keep the camera on myself as I was playing with the thing, because I wanted a live image to input into this mess. Afterawile I realized that I had the bad habit of picking my nose.

SHIRLEY: Self-improvement.

BILL: You discover it. But after awhile, you're watching all this tape- I decided it didn't matter anymore.

PAIK: Actually, George Stoney said the same thing. That's really interesting.

SHIRLEY: What I've done is, I set up my first equipment so that the monitors and the camera were right there together. From then on, no one ever looked through a lens or a viewfinder in my house. We looked in the monitor. But then Viva said: "Aren't you going to make people self-conscious?" The answer was: "Of course. They go through a period of self-consciousness, of enjoyment, of vanity, and then they go beyond it." And it's fabulous. I have finally gotten where I will let people take still pictures of me, which I never could do before, because I was really insecure about my image.

JUD: It's like the Gurdjieffian idea of self-remembering, and video feedback is making us more able to do that instantaneously, to train ourselves to do it-

SHIRLEY: Simultaneously-

JUD: Yes, simultaneously, because we can train ourselves to do as things are happening, to be aware of what we're doing at the moment that we're doing it, and be right on top of it-

PAIK: Yes, like Paul Ryan.

SHIRLEY: It will change how people who go out with videotape deal with themselves, let's say, everybody wants to show everyone else in the world something of themselves. We've given them the means to do it themselves. No longer do we have the interpreter; we're that for ourselves now. There's this dating game at Antioch College they're into- the kids- it's perfect; it's a very good video symbol. You come and for x number of dollars, you make a ten minute tape of yourself, and then you want a date with somebody, you can come in and look through all those tapes and see what the different people look like, and you choose somebody to go out with. It's a very good idea.

PAIK: It's much better than a computer.

BILL: We must have that at the Kitchen.

WALTER: That's the kind of thing the TV LAB should be doing, and broadcasting it, too.

SHIRLEY: We could do it at the Kitchen, and pay for the tape because a person would pay, say, ten dollars to be put into-

WALTER: The video data bank.

SHIRLEY: Video Date Data. (Laughter) Dada. D-A-D-A.

BILL: This is where you could get your \$200,000 for your Pleasure Dome.

SHIRLEY: Oh, you mean I could gradually take \$2 off of everybody as they came in, out of the \$10-

BILL: And it goes to a good cause, the Pleasure Dome.

SHIRLEY: Bingo in my house is cheaper. I run a bingo game on the cable. Why not? They do it in Chicago.

WALTER: Which cable?

SHIRLEY: They have apartment buildings which have been wired up for cable in Chicago, and there are young kids sitting there making quite a mint of money running bingo games for the apartment houses. Fine, why not?

WALTER: That's right. The cablestations in Canada play bingo too

SHIRLEY: I want the money to come to us so we can continue doing our thing.

PAIK: Actually, the latent, sleeping demand or use for video is so much-

SHIRLEY: It blows your mind.

PAIK: For instance, the reason I am not I is because when I started working at Binghampton Community TV Center- Binghampton is a sleepy small town-

BILL: Was- (Laughter)

PAIK: In upstate New York. Actually, there were university and then town people. There were three Binghamptons: one was university, which is quite far; another is IBM people; and another part is old Binghampton which is centered on Johnson's Shoe factory. There are three completely different types of people on income. And when you see a house, you know where they belong. Anyway there was hardly an introduction, just sleepy town. Then Ralph Hocking set up the TV Center, with seven portapaks, and nobody came to rent it out. His job was to rent it out free, and nobody comes. First week, one guy; second week, two guys, and then, in two months, people just kept coming, all kinds of people, firemen, policemen, and of course, young people, and the poets, and clergymen. For instance, they still had hula- hoop competitions going on. An now, they really have a waiting list for ten portapaks a month.

JUD: That happened with public access in New York City, too.

PAIK: And then we made a video synthesizer and, of course, nobody used it. For months, nobody, and I had a very bad conscience to make that, to spend so much money, with nobody using. Then, slowly, slowly, two week waiting period, even the video synthesizer.

SHIRLEY: Well, you know, that was the history of the portapak.

Remember, three a month, now 33,000 a month.

JUD: And how many people per portapak-

SHIRELY: Yes, one portapak goes to many people. It's not a little home toy quite yet. The implications are extraordinary.

PAIK: That Binghampton case-

SHIRLEY: Jus think, that community that's sitting there, all sleepy and separate, where one person didn;t get to know another, and I don't know if they have cable or not, but if they did those tapes would go out over cable, and what a different change.

PAIK: Because it happened in Binghampton. I lived in Freiburg, a small German town, a university town. The only sexy thing in town was the undergarment advertisement-

SHIRLEY: That was the big turn-on.

PAIK: That was the most sexy thing, you know. Martin Heidigger lived there, and Edmund Husserl. It's like the birthplace of existentialism, Frieburg, near Switzerland. And Binghampton was on that level, you see

BILL: They will never talk to you again, Nam June.

SHIRLEY: Why? Well, it's changed the sex habits of the world. Put your own portapak up and make your own porno.

BILL: That's right. They have them in Tokyo.

SHIRLEY: I see it as a live action thing, frankly.

BILL: I have trouble lighting the set. (Laughter) I know it's a skill you have to perfect; that's waht I say.

PAIK: Very interesting. You just talked about how we have to learn to use our senses. So, there are three classical visions: Plato said that the word "conception" is the most important thing; St. Augustine said that sound is the most profound; and Sinoza said that vision is the most profound. Now, TV commercial has everything. (Laughter) But still, another interesting thing: when Doug Davis videotaped his honeymoon with Jane, in some motel in Vermont, and then on the bed. They showed it silently, and I told them: "Turn on the sound" and they didn't turn on the sound.

SHIRLEY: That's interesting. It made it personal when the sound went or

PAIK: So sound is profound, no?

SHIRLEY: There's no doubt that all the inputs make it. Anytime you have a medium with something missing, like on radio now, people can't see our funny faces, so they're missing part of the fun.

JUD: But they can run around doing something else.

SHIRLEY: Yeah, right.

TALKING HEADS IN VIDEOSPACE

Twenty

PAIK: That audience is so important.

SHIRLEY: By the way, one of the things that's struck me so much about video; in theater, you have to go to the place, and in film, in order to see it. But with video, the place is something we have to start to question. Where do you see it? It can be both ways.

PAIK: It can be anywhere.

SHIRLEY: It's quite a different thing when something comes into your home.

PAIK: The most interesting thing about NET's two-channel production, which I saw, the most interesting part was when Bob and Ray intercepted and met in the middle. That was fantastic.

SHIRLEY: That was the whole trip. And when they took the rope to pull, and they got it wrong in the tug-of-war, so that instead of being out of one monitor into the other, they got it a little mixed up so they were both in the same monitor on the edge, and suddenly you understood that's what integration is.

PAIK: And also, both disappeared- in the middle. That is a genius idea. That's what the video medium is- silence.

SHIRLEY: I once discovered something very funny. I was doing what I call Sculpture Tapes, where you take three cameras and you put the monitors one on top of the other, say, like a body is, head, torso, feet. And the people watched while they were being taped, and what was interesting was that, in the playback, the bottom monitor, which was the feet, had nothing much happening, and that's where your eyes went all the time. Not up to the busy tops, and all the moving around, but to these dumb feet which just stood there, or just sat. That's what I've learned actually very much from oriental art.

Once, when Paik came to my house and we were playing with my stuff, he took a live camera and set it up so that it had one of those absolutely perfect kind of Japanese etching qualities, just the edge of something, the edge of a monitor showed, a little frame, and suddenly your eye can't go into all my fancy images. It kept going back to this quiet-

JUD: The quiet center.

SHIRLEY: The power of observing quietly while action goes on around is another thing that only video input can do, because you need the live feed to the present moment.

PAIK: My thing is that the future, because I am now studying radio quite much, the degree of freedom we will have in the future-

SHIRLEY: Yes, we have to do something about that.

PAIK: Freedom need not be first amendment. Medium free. When you go to movie, you are prisoner of time.

SHIRLEY: Absolutely.

PAIK: Alright. Ther's no other thing there.

WALTER: A physical prisoner.

PAIK: On television, you have half freedom, because you turn on the lights a certain amount, and you can do a certain amount of your things, read some books-

SHIRLEY: And also, the commercials were a good tought-

PAIK: Right, so you can leave the room. Or you don't watch it. You come only for the commercials. And number three, radio gives you more freedom, because you can all information while you type a letter, and doing things, and even watching TV. Therefore, if in the future we can have one silent TV station, where you can get all the information through visuals, while we can choose our own audio source, from records, radio-

JUD: That could be aided, of course, by having a larger visual screen.

SHIRLEY: The day of the mosaic screen, where you have many inputs on a wall.

PAIK: When you stop broadcast, there's more inportant information-

SHIRLEY: But the reverse of what you're talking about, too, where the sound is played for you on the video, and you can make your own image.

PAIK: Of course-

SHIRLEY: And all the variations that come from understanding that.

PAIK: I have the feeling that all talk shows, including TONIGHT show and Dick Cavett, will eventually go back to radio, because there is no reason to see Johnny Carson every night.

SHIRLEY: What I find though is this; I like to get a look at how somebody behaves-

PAIK: Sometimes-

SHIRLEY: There' something interesting about personal behavior. Let's take an aging movie star; that's very interesting to watch. There are all sorts of strange possibilities. But there are ways of doing it that don't demand so much, for instance, when there's a talk show on, I find myself more listening to it-

PAIK: And you do other things.

SHIRLEY: I now live alone, and find something very interesting. In the old days, I used to turn on my record player when I came into the house. Now, I turn on my TV set, because in many ways I can deal with it merely as sound input, and busy myself. Not too often do I turn to look, and the soap operas are fine with just sound. They really don't need much image, and game shows too. But, where I see the major difference in what we're talking about, is having access. At the same as we have access to all of this to the fact that if you are living in Korea, and you are living in San Francisco, and you are living in Brooklyn; and I'm in New York, and you're in Minnesota-

WALTER: Why me in Minnesota?

SHIRLEY: I don't know; you won the prize there. Then we can, also at will, use what used to be called the videophone. We can also plug into each other.

WALTER: That's the thing to be able to get back to-

SHIRLEY: That we get back and forth.

WALTER: Sometimes we've got to talk back to the television set.

SHIRLEY: You can send video images. You can say: "Shirley, shut up for a while; I'm sending you for the next half hour beautiful images; enjoy them."

BILL: Why are we restricting ourselves to one screen? I used to sit at home and have two air programs on simultaneously, or I would flip dials. I'm a very big one for sitting there and zooming around. The information needed really to digest two or three prime time shows isn't very much. You can flip the dial and have them all laid out.

SHIRLEY: That's true of television. It isn't, I don't think, quite so true of the kind of concentration that some of us expect with other things. In other words, I think then that the skill we were talking about developing, is that we have to learn to integrate images so that multi-images can be played, and that they can connect in a way that makes it possible to watch.

BILL: Like Nam June's last show at the Kitchen-

WALTER: Or Shigeiko Kubota's RIVERS-

SHIRLEY: Shigeiko's RIVERS was a very good example.

BILL: This is all, I think, important. As Nam June said in his show: "You can allow your eye to do the editing."

SHIRLEY: Well, it does what life does-

BILL: To some extent. You can have a four-wall screen, or a six-wall screen. You can have the floor and ceiling. You can be inside a cube where there's something different everywhere-

PAIK: Like quadrasonics, we'll have quadravideo.

BILL: I think this is the next step.

SHIRLEY: The average living room, twenty years from now, has screens of many sizes on the wall, the way they have paintings. And they can still hang paintings on the opposite wall.

SHIRLEY: Do we still have more time.

JUD: I'm going to over-record, so we can edit.

WALTER: This is edited. This is what should be left on.

BILL: This is process radio.

(NOTE: The program was broadcast exactly as it was.)

SHIRLEY: Still a real filmmaker.

PAIK: One thing- let me say one thing-

SHIRLEY: Last word.

PAIK: No, not last word, but one word. Everybody says one last word. Like in court. (Laughter) Finally, Harvard University, with many hundreds of years of history, and many thousands of scholars, you know, finally got one guy, and of course Harvard man has to research books to get degree, so he got research-

SHIRLEY: Grant.

PAIK: Of course. They always get better than we do. (Laughter) He did all research about what was written about the telephone and, for the last hundred years, or 110 years, that the telephone was existing, only two essays had been written about the telephone.

SHIRLEY: Oh, that's not nice.

PAIK: One is McLuhan; another is another guy. In a hundred years! When-television-

SHIRLEY: Unbelievable.

PAIK: Yes, telephone changed our lives, and only two guys wrote about it.

SHIRLEY: You know what's very interesting. There's this old Don Ameche movie about how he discovered the telephone; Don Ameche was the actor who played Bell, right, so there he is discovering the telephone, and finally when he and his partner have gotten it together, and they're going to have a big show to get money so that they produce telephones- what they do is- it's an absolutely perfect example of what

our lives have been like- One of them is in Springfield on one end of the phone, and in Boston, all these rich people are watching, right and guess what he sends out, the first telephone message: "Hello, hello, you there? and you get there, and then a group of barbershop singers do a little number, there's a cornet solo (Laughter) and then it's all interrupted because the landlady, who they own rent to, interrupts them, saying: "You have to get out. Sorry, you can't do this." She kicks them out, and everybody looks and says: "Well, it's a nice toy, but really what is it? Who in the world would ever want to use it." And that's exactly the state we're in now. It's a good analogy.

JUD: There must be a tape of that somewhere.

WALTER: We'll hire a Harvard man to research it.

SHIRLEY: I find my survival now, which is in a way very nice, by thinking of all this, as in the beginning of any new art form, as something one plays with. You must look at it more as a toy. Don't take it too seriously. Enjoy it. Because it's in that enjoyment that the significance of the thing is finally revealed. We don't really know yet all the possibilities.

BILL: And we won't, for several million years.

SHIRLEY: Ta-daaa.

ELECTRONIC ZEN: The Alternate Video Generation

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